

# NOAA Technical Memorandum NMFS



SEPTEMBER 1999

## ICHTHYOPLANKTON AND STATION DATA FOR CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS SURVEY CRUISES IN 1992

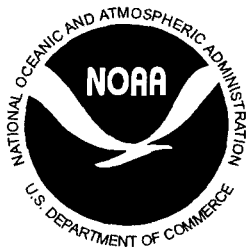
William Watson  
Richard L. Charter  
H. Geoffrey Moser

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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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## **NOAA Technical Memorandum NMFS**

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**SEPTEMBER 1999**

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William Watson  
Richard L. Charter  
H. Geoffrey Moser

National Marine Fisheries Service, NOAA  
Southwest Fisheries Science Center  
La Jolla Laboratory  
P.O. Box 271  
La Jolla, California 92038-0271

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**U.S. DEPARTMENT OF COMMERCE**  
William M. Daley, Secretary  
**National Oceanic and Atmospheric Administration**  
D. James Baker, Under Secretary for Oceans and Atmosphere  
**National Marine Fisheries Service**  
Penelope Dalton, Assistant Administrator for Fisheries

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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 1992. It is the 32<sup>nd</sup> report in a series that presents these data for all biological-oceanographic CalCOFI surveys from 1951 to the present. A total of 258 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 146 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 32<sup>nd</sup> 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 1992. 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 CalCOFI historical sampling effort).

Hydrographic and biological data from the 1992 CalCOFI survey have been published by the Scripps Institution of Oceanography (Univ. of Calif., SIO 1992, 1993). All available records for the 1992 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 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. 1999    |
| 1963   | Ambrose et al. 1988a  | 1989   | Ambrose et al. 1999b  |
| 1964   | Sandknop et al. 1988b | 1990   | Charter et al. 1999b  |
| 1965   | Stevens et al. 1988a  | 1991   | Sandknop et al. 1999b |
| 1966   | Sumida et al. 1988b   |        |                       |

#### SAMPLING AREA AND PATTERN

A total of 258 standard CalCOFI survey stations was occupied on four cruises in 1992, employing two research vessels:

9202, RV *David Starr Jordan*, 62 stations, January 28–February 11;

9204, RV *David Starr Jordan*, 66 stations, April 13–28;

9207, RV *David Starr Jordan*, 66 stations, July 2–15;

9210, RV *New Horizon*, 64 stations, September 26–October 9.

The survey area extended from Avila Beach to San Diego, California and seaward on six survey lines to approximately 120–330 n. mi. (Figures 1 and 2).<sup>1</sup> The most seaward station, 90.0 120.0, was approximately 400 n. mi. west of Punta Baja, Baja California, Mexico. Stations on CalCOFI lines 76.7 and 80.0 extended seaward to station 100.0, stations on lines 83.3 and 86.7 extended seaward to station 110.0, and stations on

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<sup>1</sup> 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 the 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 1992, 1993).

lines 90.0 and 93.3 extended seaward to station 120.0 on all cruises. At its shoreward end, line 76.7 began at station 70.0 on cruise 9202, and at station 49.0 on all other cruises (Figures 1 and 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 1992 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<sup>3</sup>/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 ~ 210 m 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:

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

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<sup>3</sup>) 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<sup>2</sup>) 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 1992. 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 1992 surveys could be identified to species. A total of 146 larval fish categories (including unidentified and disintegrated) was identified for 1992: 120 to species, 17 to genus, 6 to family, and 1 to order. Identifications were done in the Ichthyoplankton Ecology Laboratory of the Coastal Fisheries Resources Division by William Isham and Ernesto Calix of 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, mostly *C. acclinidens* and/or *C. pseudopallida* lacking diagnostic characters.

*Cyclothone acclinidens*, *C. pseudopallida* – Larger larvae (primarily postflexion stage) having diagnostic pigmentation 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 *Nannobranchium*; 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").

*Lepidopsetta bilineata* – see comment for Pleuronectidae.

*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).

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 encountered rarely, usually only at the most seaward CalCOFI stations; a small percentage of *V. poweriae* larvae may have been included in the *V. lucetia* category because of the difficulty in separating early larvae which often are virtually identical.

## SPECIES SUMMARY

Of the five most abundant larvae in 1992, the Pacific hake (*Merluccius productus*) ranked first in abundance with 33.4% of the total larvae but ranked only 15<sup>th</sup> in occurrence with 19% positive stations (Tables 2 and 3). The Panama lightfish (*Vinciguerria lucetia*) ranked second in abundance with 17.5% of the total larvae and was fifth in occurrence (33% of the samples). The northern anchovy (*Engraulis mordax*) ranked third with 14.6% of the larvae and ranked fourth in occurrence (35% of the stations). The rockfish genus *Sebastes* was the fourth most abundant taxon with 5.6% of the total larvae and ranked eighth in frequency of occurrence (29% of the samples). The northern lampfish (*Stenobranchius leucopsarus*) ranked fifth in abundance (4.2% of total larvae) and third in occurrence (37% of the samples). The next five most abundant taxa were the California smoothtongue *Leuroglossus stilbius* (2.0% of the total larvae), the shortbelly rockfish *Sebastes jordani* (1.5%), the showy bristlemouth *Cyclothone signata* (1.5%), the Pacific sardine *Sardinops sagax* (1.4%), and the popeye blacksmelt *Bathylagus ochotensis* (1.2%). These species ranked 13<sup>th</sup>, 21<sup>st</sup>, 6<sup>th</sup>, 18<sup>th</sup>, and 7<sup>th</sup> in frequency of occurrence, respectively. The 10 most abundant taxa comprised 83% of all the larvae collected on CalCOFI cruises in 1992. The remaining 17% was distributed among 136 other taxa (including the "disintegrated" and "unidentified" categories). Of the ten most abundant taxa, three 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 the 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<sup>3</sup> 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 1 and 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 1992 listed in rank order.

Table 3. Pooled counts of all larval fish taxa taken on CalCOFI survey cruises in 1992 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. The orders are listed in phylogenetic sequence (Eschmeyer 1998).

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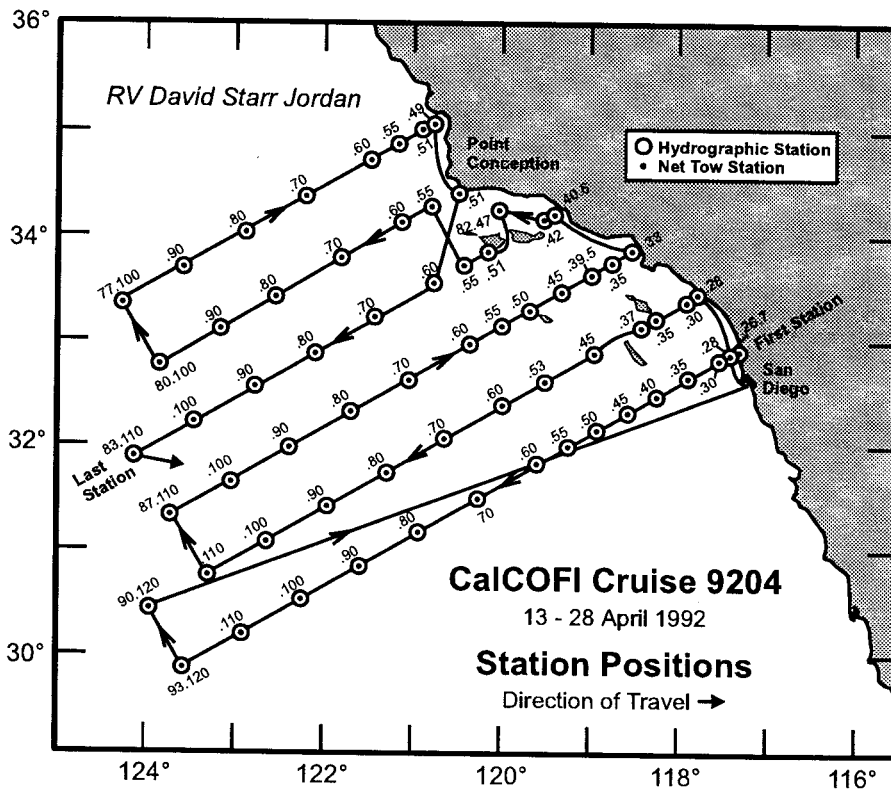
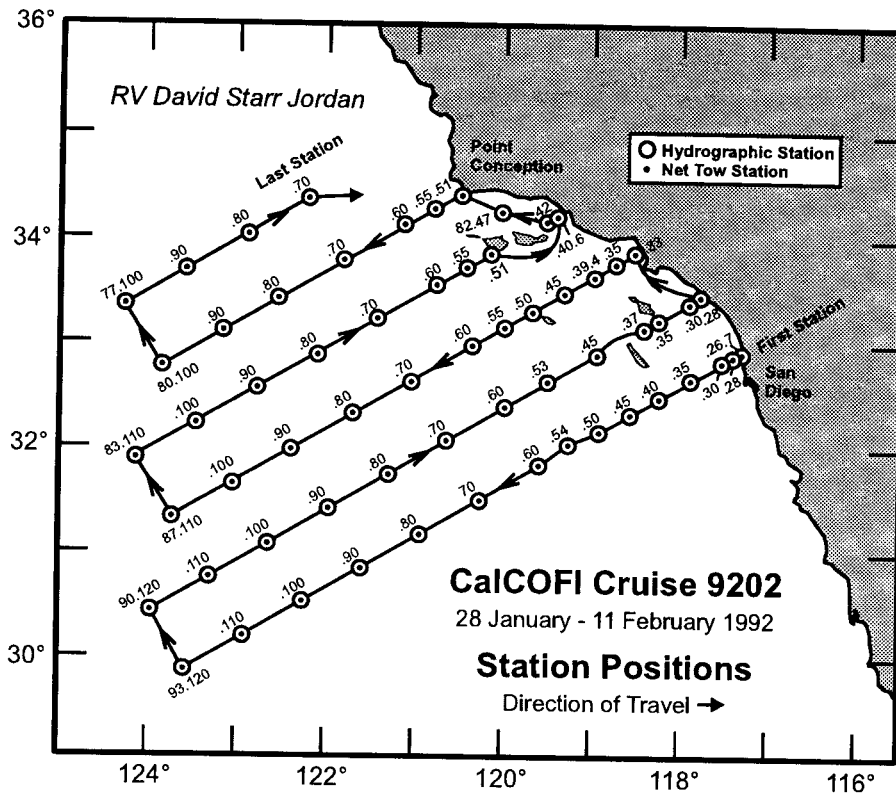


Figure 1. Stations and cruise tracks for CalCOFI cruises 9202 (above) and 9204 (below). Circles indicate hydrographic stations; dots indicate net tow stations.



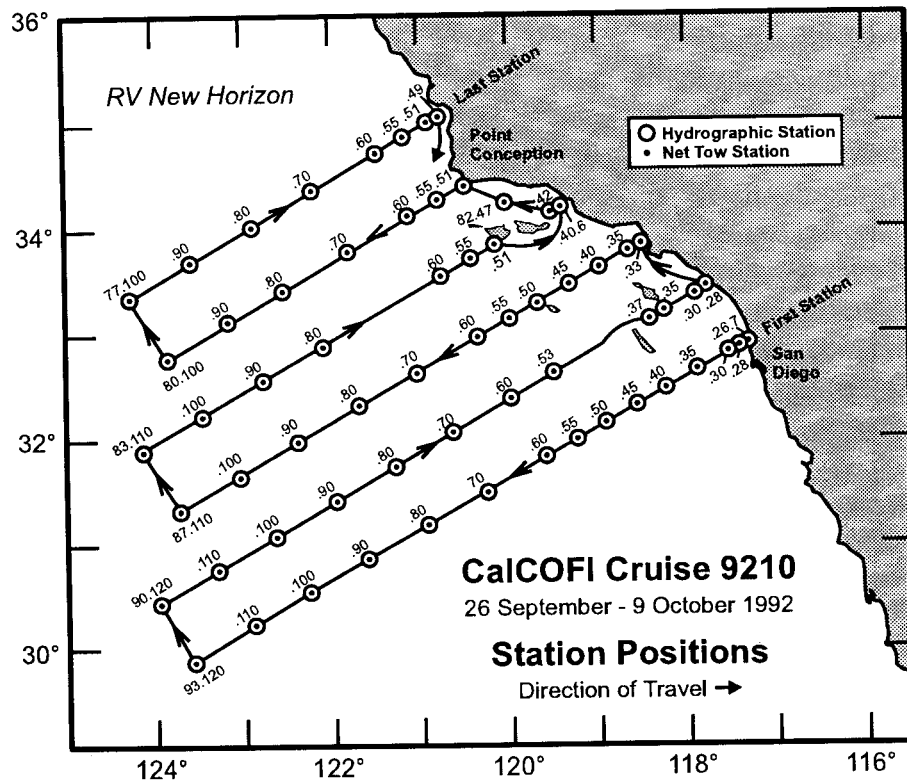
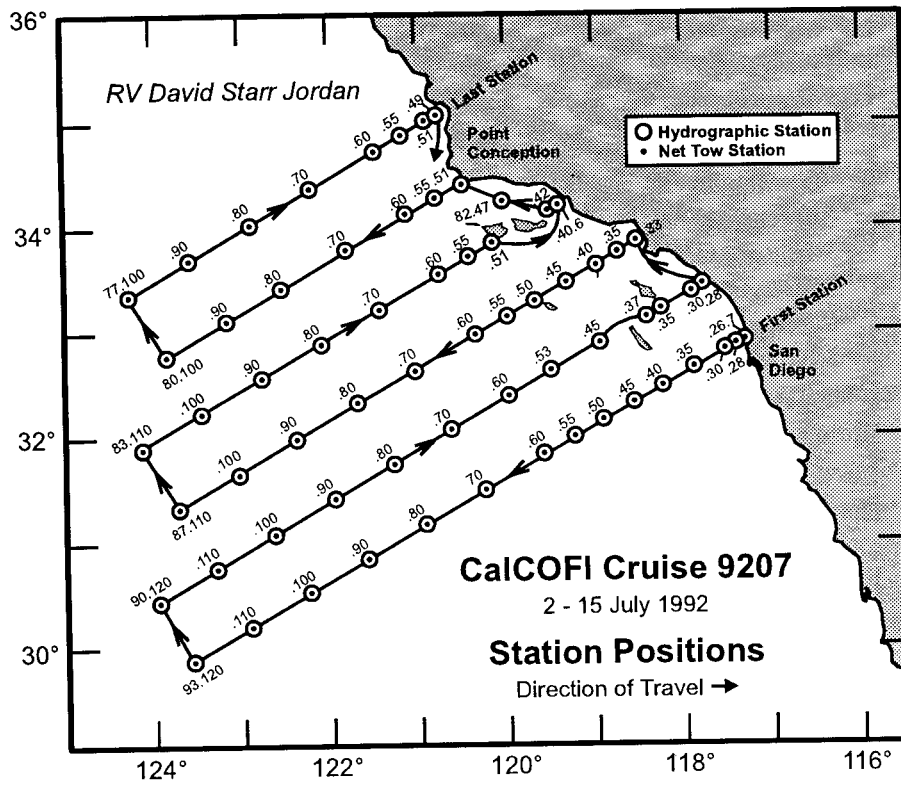


Figure 2. Stations and cruise tracks for CalCOFI cruises 9207 (above) and 9210 (below). Symbols as in Figure 1.

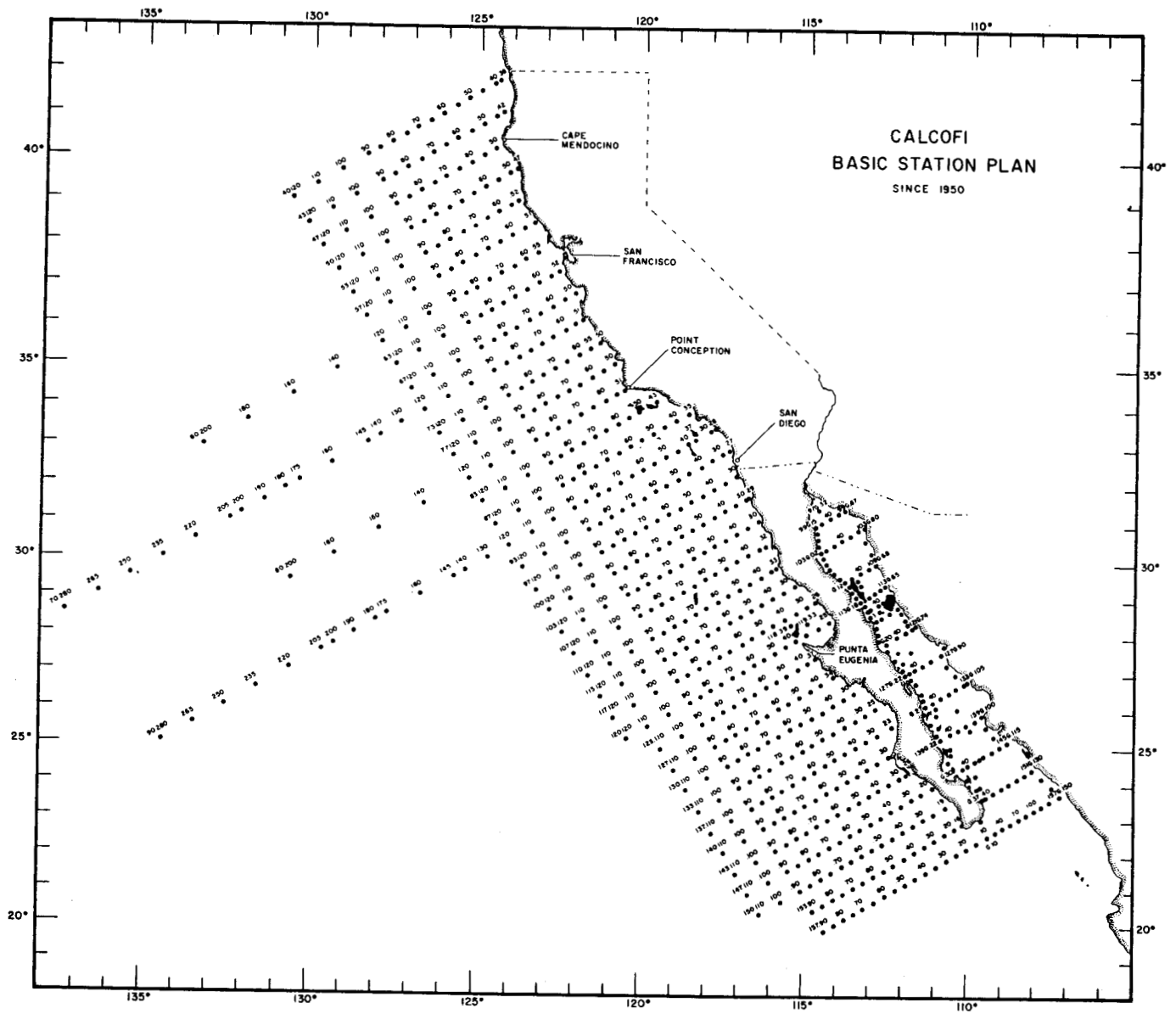


Figure 3. Basic station plan for CalCOFI Cruises.

TABLE 1. Station and plankton tow data for CalCOFI cruises in 1992. 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 9202 |         |                           |                            |              |                         |                |                     |                             |                            |                    |                   |                 |               |
|---------------------|---------|---------------------------|----------------------------|--------------|-------------------------|----------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| Line                | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>((PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
| 76.7                | 70.0    | 34 23.3                   | 122 14.8                   | JD           | 92 02 11                | 1305           | 198                 | 457                         | 4.34                       | 28                 | 100.0             | 554             | 175           |
| 76.7                | 80.0    | 34 03.3                   | 122 56.4                   | JD           | 92 02 11                | 0659           | 212                 | 447                         | 4.74                       | 40                 | 100.0             | 25              | 51            |
| 76.7                | 90.0    | 33 43.2                   | 123 38.0                   | JD           | 92 02 11                | 0129           | 200                 | 475                         | 4.22                       | 59                 | 100.0             | 45              | 49            |
| 76.7                | 100.0   | 33 23.2                   | 124 19.4                   | JD           | 92 02 10                | 1940           | 210                 | 451                         | 4.65                       | 22                 | 100.0             | 12              | 10            |
| 80.0                | 51.0    | 34 27.0                   | 120 31.4                   | JD           | 92 02 09                | 0321           | 47                  | 108                         | 4.36                       | 93                 | 100.0             | 450             | 211           |
| 80.0                | 55.0    | 34 19.0                   | 120 48.1                   | JD           | 92 02 09                | 0639           | 203                 | 436                         | 4.66                       | 48                 | 100.0             | 168             | 149           |
| 80.0                | 60.0    | 34 09.0                   | 121 09.0                   | JD           | 92 02 09                | 1111           | 218                 | 446                         | 4.89                       | 40                 | 100.0             | 151             | 210           |
| 80.0                | 70.0    | 33 49.0                   | 121 50.5                   | JD           | 92 02 09                | 1801           | 209                 | 453                         | 4.60                       | 60                 | 100.0             | 562             | 108           |
| 80.0                | 80.0    | 33 29.0                   | 122 31.9                   | JD           | 92 02 10                | 0016           | 209                 | 454                         | 4.59                       | 1160               | 50.5              | 2351            | 149           |
| 80.0                | 90.0    | 33 09.0                   | 123 13.2                   | JD           | 92 02 10                | 0622           | 220                 | 460                         | 4.78                       | 59                 | 100.0             | 9               | 13            |
| 80.0                | 100.0   | 32 49.0                   | 123 54.3                   | JD           | 92 02 10                | 1330           | 207                 | 494                         | 4.18                       | 28                 | 100.0             | 14              | 32            |
| 81.8                | 46.9    | 34 16.5                   | 120 01.5                   | JD           | 92 02 08                | 2314           | 209                 | 404                         | 5.18                       | 47                 | 100.0             | 232             | 548           |
| 83.3                | 40.6    | 34 13.5                   | 119 24.6                   | JD           | 92 02 08                | 1829           | 27                  | 74                          | 3.69                       | 54                 | 100.0             | 6               | 1329          |
| 83.3                | 42.0    | 34 10.7                   | 119 30.5                   | JD           | 92 02 08                | 1631           | 179                 | 318                         | 5.64                       | 22                 | 100.0             | 71              | 577           |
| 83.3                | 51.0    | 33 52.7                   | 120 07.9                   | JD           | 92 02 08                | 1007           | 69                  | 143                         | 4.86                       | 63                 | 100.0             | 47              | 103           |
| 83.3                | 55.0    | 33 44.7                   | 120 24.5                   | JD           | 92 02 08                | 0713           | 212                 | 424                         | 5.01                       | 31                 | 100.0             | 4               | 87            |
| 83.3                | 60.0    | 33 34.7                   | 120 45.3                   | JD           | 92 02 08                | 0331           | 213                 | 419                         | 5.09                       | 122                | 47.1              | 259             | 967           |
| 83.3                | 70.0    | 33 14.7                   | 121 26.5                   | JD           | 92 02 07                | 2157           | 208                 | 411                         | 5.07                       | 146                | 53.3              | 107             | 4773          |
| 83.3                | 80.0    | 32 54.7                   | 122 07.7                   | JD           | 92 02 07                | 1620           | 214                 | 404                         | 5.29                       | 35                 | 100.0             | 6               | 42            |
| 83.3                | 90.0    | 32 34.7                   | 122 48.7                   | JD           | 92 02 07                | 1100           | 213                 | 415                         | 5.14                       | 39                 | 100.0             | 12              | 18            |
| 83.3                | 100.0   | 32 14.7                   | 123 29.4                   | JD           | 92 02 07                | 0439           | 209                 | 431                         | 4.85                       | 95                 | 100.0             | 15              | 24            |
| 83.3                | 110.0   | 31 54.7                   | 124 10.2                   | JD           | 92 02 06                | 2252           | 202                 | 465                         | 4.35                       | 60                 | 100.0             | 55              | 40            |
| 86.7                | 33.0    | 33 53.4                   | 118 29.4                   | JD           | 92 02 04                | 0824           | 40                  | 85                          | 4.72                       | 59                 | 100.0             | 298             | 975           |
| 86.7                | 35.0    | 33 49.4                   | 118 37.7                   | JD           | 92 02 04                | 1118           | 211                 | 405                         | 5.20                       | 30                 | 100.0             | 149             | 116           |
| 86.7                | 39.5    | 33 41.0                   | 118 56.0                   | JD           | 92 02 04                | 1602           | 210                 | 431                         | 4.88                       | 28                 | 100.0             | 59              | 142           |
| 86.7                | 45.0    | 33 29.4                   | 119 19.1                   | JD           | 92 02 04                | 2030           | 209                 | 418                         | 5.00                       | 45                 | 100.0             | 131             | 367           |
| 86.7                | 50.0    | 33 19.4                   | 119 39.8                   | JD           | 92 02 05                | 0013           | 65                  | 135                         | 4.80                       | 30                 | 100.0             | 366             | 25            |
| 86.7                | 55.0    | 33 09.4                   | 120 00.4                   | JD           | 92 02 05                | 0338           | 214                 | 418                         | 5.12                       | 72                 | 46.7              | 57              | 99            |
| 86.7                | 60.0    | 32 59.3                   | 120 21.0                   | JD           | 92 02 05                | 0809           | 218                 | 402                         | 5.43                       | 10                 | 100.0             | 10              | 17            |

Table 1. (cont.)

## CalCOFI Cruise 9202

| Line | Station | Latitude (N) |           | Longitude (W) |           | Ship Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|--------------|-----------|---------------|-----------|-----------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
|      |         | deg. min.    | deg. min. | deg. min.     | deg. min. |           |                         |               |                     |                             |                            |                    |                   |                 |               |
| 86.7 | 70.0    | 32           | 39.5      | 121           | 02.0      | JD        | 92 02 05                | 1610          | 196                 | 467                         | 4.20                       | 43                 | 100.0             | 6               | 7             |
| 86.7 | 80.0    | 32           | 19.4      | 121           | 42.9      | JD        | 92 02 05                | 2222          | 233                 | 433                         | 5.38                       | 46                 | 100.0             | 19              | 10            |
| 86.7 | 90.0    | 31           | 59.4      | 122           | 23.5      | JD        | 92 02 06                | 0426          | 218                 | 427                         | 5.10                       | 42                 | 100.0             | 34              | 21            |
| 86.7 | 100.0   | 31           | 39.3      | 123           | 04.2      | JD        | 92 02 06                | 0955          | 205                 | 447                         | 4.58                       | 34                 | 100.0             | 18              | 18            |
| 86.7 | 110.0   | 31           | 19.4      | 123           | 44.6      | JD        | 92 02 06                | 1647          | 213                 | 421                         | 5.05                       | 19                 | 100.0             | 16              | 24            |
| 90.0 | 28.0    | 33           | 29.1      | 117           | 46.0      | JD        | 92 02 04                | 0216          | 69                  | 152                         | 4.56                       | 79                 | 100.0             | 37              | 6             |
| 90.0 | 30.0    | 33           | 25.0      | 117           | 54.3      | JD        | 92 02 03                | 2355          | 209                 | 415                         | 5.05                       | 31                 | 100.0             | 19              | 42            |
| 90.0 | 35.0    | 33           | 15.0      | 118           | 15.0      | JD        | 92 02 03                | 2021          | 207                 | 422                         | 4.92                       | 88                 | 51.4              | 44              | 82            |
| 90.0 | 37.0    | 33           | 11.1      | 118           | 23.2      | JD        | 92 02 03                | 1722          | 211                 | 427                         | 4.94                       | 33                 | 100.0             | 19              | 274           |
| 90.0 | 45.0    | 32           | 55.1      | 118           | 56.0      | JD        | 92 02 03                | 1217          | 214                 | 428                         | 5.00                       | 49                 | 100.0             | 83              | 531           |
| 90.0 | 53.0    | 32           | 39.2      | 119           | 28.8      | JD        | 92 02 03                | 0630          | 212                 | 428                         | 4.96                       | 30                 | 100.0             | 464             | 619           |
| 90.0 | 60.0    | 32           | 25.1      | 119           | 57.6      | JD        | 92 02 03                | 0132          | 220                 | 439                         | 5.01                       | 48                 | 100.0             | 122             | 182           |
| 90.0 | 70.0    | 32           | 05.1      | 120           | 38.3      | JD        | 92 02 01                | 2304          | 208                 | 448                         | 4.64                       | 65                 | 100.0             | 0               | 13            |
| 90.0 | 80.0    | 31           | 45.0      | 121           | 18.9      | JD        | 92 02 01                | 1707          | 210                 | 434                         | 4.83                       | 41                 | 100.0             | 2               | 14            |
| 90.0 | 90.0    | 31           | 25.2      | 121           | 59.3      | JD        | 92 02 01                | 0909          | 228                 | 444                         | 5.13                       | 38                 | 100.0             | 5               | 20            |
| 90.0 | 100.0   | 31           | 05.1      | 122           | 39.7      | JD        | 92 02 01                | 0350          | 216                 | 433                         | 4.98                       | 30                 | 100.0             | 35              | 30            |
| 90.0 | 110.0   | 30           | 44.9      | 123           | 20.1      | JD        | 92 01 31                | 2234          | 211                 | 443                         | 4.76                       | 27                 | 100.0             | 33              | 31            |
| 90.0 | 120.0   | 30           | 25.0      | 123           | 59.9      | JD        | 92 01 31                | 1656          | 218                 | 441                         | 4.95                       | 20                 | 100.0             | 23              | 30            |
| 92.8 | 54.1    | 32           | 08.0      | 119           | 14.0      | JD        | 92 01 29                | 1705          | 219                 | 424                         | 5.16                       | 52                 | 100.0             | 18              | 167           |
| 93.3 | 26.7    | 32           | 57.5      | 117           | 18.3      | JD        | 92 01 28                | 1325          | 34                  | 90                          | 3.77                       | 22                 | 100.0             | 7               | 5             |
| 93.3 | 28.0    | 32           | 54.8      | 117           | 23.6      | JD        | 92 01 28                | 1600          | 214                 | 418                         | 5.12                       | 19                 | 100.0             | 115             | 52            |
| 93.3 | 30.0    | 32           | 50.8      | 117           | 31.9      | JD        | 92 01 28                | 1903          | 211                 | 423                         | 5.00                       | 38                 | 100.0             | 24              | 122           |
| 93.3 | 35.0    | 32           | 40.8      | 117           | 52.6      | JD        | 92 01 28                | 2335          | 210                 | 430                         | 4.89                       | 56                 | 100.0             | 40              | 283           |
| 93.3 | 40.0    | 32           | 30.8      | 118           | 12.8      | JD        | 92 01 29                | 0317          | 214                 | 414                         | 5.16                       | 63                 | 100.0             | 19              | 24            |
| 93.3 | 45.0    | 32           | 20.7      | 118           | 33.3      | JD        | 92 01 29                | 0712          | 210                 | 423                         | 4.97                       | 33                 | 100.0             | 23              | 234           |
| 93.3 | 50.0    | 32           | 10.8      | 118           | 53.6      | JD        | 92 01 29                | 1245          | 216                 | 420                         | 5.15                       | 31                 | 100.0             | 140             | 168           |
| 93.3 | 60.0    | 31           | 50.8      | 119           | 34.3      | JD        | 92 01 29                | 2135          | 212                 | 429                         | 4.93                       | 44                 | 100.0             | 19              | 9             |
| 93.3 | 70.0    | 31           | 30.8      | 120           | 14.8      | JD        | 92 01 30                | 0332          | 216                 | 421                         | 5.14                       | 52                 | 100.0             | 17              | 15            |
| 93.3 | 80.0    | 31           | 10.8      | 120           | 55.2      | JD        | 92 01 30                | 0914          | 212                 | 421                         | 5.03                       | 33                 | 100.0             | 9               | 5             |
| 93.3 | 90.0    | 30           | 50.8      | 121           | 35.4      | JD        | 92 01 30                | 1555          | 212                 | 409                         | 5.18                       | 24                 | 100.0             | 5               | 3             |
| 93.3 | 100.0   | 30           | 30.8      | 122           | 15.5      | JD        | 92 01 30                | 2124          | 213                 | 410                         | 5.19                       | 41                 | 100.0             | 58              | 26            |
| 93.3 | 110.0   | 30           | 10.8      | 122           | 55.4      | JD        | 92 01 31                | 0237          | 213                 | 427                         | 4.98                       | 33                 | 100.0             | 65              | 22            |
| 93.3 | 120.0   | 29           | 50.7      | 123           | 35.2      | JD        | 92 01 31                | 0753          | 209                 | 430                         | 4.87                       | 16                 | 100.0             | 30              | 16            |

## CalCOFI Cruise 9204

Table 1. (cont.)

| Line | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|---------------------------|----------------------------|--------------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| 76.7 | 49.0    | 35 05.3                   | 120 46.5                   | JD           | 92 04 27                | 0736          | 48                  | 104                         | 4.68                       | 125                | 100.0             | 60              | 17            |
| 76.7 | 51.0    | 35 01.3                   | 120 55.0                   | JD           | 92 04 27                | 0515          | 206                 | 434                         | 4.74                       | 154                | 100.0             | 57              | 117           |
| 76.7 | 55.0    | 34 53.3                   | 121 11.9                   | JD           | 92 04 27                | 0159          | 219                 | 415                         | 5.28                       | 70                 | 100.0             | 55              | 34            |
| 76.7 | 60.0    | 34 43.2                   | 121 33.1                   | JD           | 92 04 26                | 2148          | 211                 | 436                         | 4.85                       | 55                 | 100.0             | 22              | 27            |
| 76.7 | 70.0    | 34 23.3                   | 122 14.8                   | JD           | 92 04 26                | 1546          | 218                 | 422                         | 5.16                       | 38                 | 100.0             | 14              | 4             |
| 76.7 | 80.0    | 34 03.3                   | 122 56.4                   | JD           | 92 04 26                | 0833          | 221                 | 415                         | 5.31                       | 48                 | 100.0             | 51              | 5             |
| 76.7 | 90.0    | 33 43.3                   | 123 38.0                   | JD           | 92 04 26                | 0221          | 219                 | 420                         | 5.22                       | 40                 | 100.0             | 44              | 5             |
| 76.7 | 100.0   | 33 23.3                   | 124 19.5                   | JD           | 92 04 25                | 2055          | 209                 | 427                         | 4.90                       | 45                 | 100.0             | 122             | 33            |
| 80.0 | 51.0    | 34 27.1                   | 120 31.4                   | JD           | 92 04 27                | 1253          | 64                  | 164                         | 3.91                       | 49                 | 100.0             | 7               | 5             |
| 80.0 | 55.0    | 34 19.0                   | 120 48.1                   | JD           | 92 04 24                | 1145          | 209                 | 418                         | 5.01                       | 33                 | 100.0             | 49              | 15            |
| 80.0 | 60.0    | 34 09.0                   | 121 09.0                   | JD           | 92 04 24                | 1535          | 221                 | 398                         | 5.55                       | 55                 | 100.0             | 53              | 105           |
| 80.0 | 70.0    | 33 49.1                   | 121 50.6                   | JD           | 92 04 24                | 2138          | 204                 | 426                         | 4.78                       | 66                 | 100.0             | 21              | 1             |
| 80.0 | 80.0    | 33 29.0                   | 122 32.0                   | JD           | 92 04 25                | 0331          | 216                 | 411                         | 5.27                       | 49                 | 100.0             | 15              | 4             |
| 80.0 | 90.0    | 33 09.1                   | 123 13.3                   | JD           | 92 04 25                | 0903          | 218                 | 422                         | 5.16                       | 43                 | 100.0             | 14              | 22            |
| 80.0 | 100.0   | 32 49.0                   | 123 54.5                   | JD           | 92 04 25                | 1535          | 211                 | 438                         | 4.83                       | 43                 | 100.0             | 22              | 57            |
| 81.8 | 46.9    | 34 16.5                   | 120 01.5                   | JD           | 92 04 23                | 1903          | 213                 | 435                         | 4.91                       | 51                 | 100.0             | 35              | 16            |
| 83.3 | 40.6    | 34 13.4                   | 119 24.7                   | JD           | 92 04 23                | 1228          | 28                  | 64                          | 4.36                       | 109                | 100.0             | 17              | 3578          |
| 83.3 | 42.0    | 34 10.7                   | 119 30.5                   | JD           | 92 04 23                | 1405          | 170                 | 322                         | 5.30                       | 59                 | 100.0             | 20              | 173           |
| 83.3 | 51.0    | 33 52.8                   | 120 08.0                   | JD           | 92 04 23                | 2338          | 83                  | 155                         | 5.39                       | 123                | 100.0             | 53              | 137           |
| 83.3 | 55.0    | 33 44.7                   | 120 24.6                   | JD           | 92 04 24                | 0300          | 214                 | 432                         | 4.95                       | 74                 | 100.0             | 90              | 13            |
| 83.3 | 60.0    | 33 34.6                   | 120 45.3                   | JD           | 92 04 27                | 1923          | 201                 | 465                         | 4.33                       | 69                 | 100.0             | 51              | 72            |
| 83.3 | 70.0    | 33 14.7                   | 121 26.5                   | JD           | 92 04 28                | 0059          | 212                 | 424                         | 5.00                       | 59                 | 100.0             | 28              | 35            |
| 83.3 | 80.0    | 32 54.7                   | 122 07.7                   | JD           | 92 04 28                | 0642          | 208                 | 445                         | 4.67                       | 27                 | 100.0             | 6               | 15            |
| 83.3 | 90.0    | 32 34.8                   | 122 48.6                   | JD           | 92 04 28                | 1230          | 215                 | 404                         | 5.31                       | 32                 | 100.0             | 11              | 16            |
| 83.3 | 100.0   | 32 14.7                   | 123 29.5                   | JD           | 92 04 28                | 1745          | 213                 | 427                         | 4.99                       | 30                 | 100.0             | 15              | 259           |
| 83.3 | 110.0   | 31 54.7                   | 124 10.2                   | JD           | 92 04 28                | 2255          | 214                 | 431                         | 4.96                       | 70                 | 100.0             | 20              | 16            |
| 86.7 | 33.0    | 33 53.4                   | 118 29.4                   | JD           | 92 04 23                | 0610          | 43                  | 96                          | 4.46                       | 73                 | 100.0             | 42              | 201           |
| 86.7 | 35.0    | 33 49.4                   | 118 37.7                   | JD           | 92 04 23                | 0344          | 209                 | 436                         | 4.80                       | 55                 | 100.0             | 566             | 91            |
| 86.7 | 39.5    | 33 41.0                   | 118 56.1                   | JD           | 92 04 22                | 2340          | 212                 | 427                         | 4.97                       | 42                 | 100.0             | 69              | 39            |
| 86.7 | 45.0    | 33 29.4                   | 119 19.1                   | JD           | 92 04 22                | 1830          | 215                 | 430                         | 5.01                       | 35                 | 100.0             | 13              | 21            |
| 86.7 | 50.0    | 33 19.4                   | 119 39.8                   | JD           | 92 04 22                | 1500          | 69                  | 156                         | 4.44                       | 64                 | 100.0             | 124             | 118           |
| 86.7 | 55.0    | 33 09.4                   | 120 00.5                   | JD           | 92 04 22                | 1014          | 205                 | 500                         | 4.09                       | 36                 | 100.0             | 70              | 52            |
| 86.7 | 60.0    | 32 59.4                   | 120 21.0                   | JD           | 92 04 22                | 0532          | 215                 | 490                         | 4.39                       | 41                 | 100.0             | 51              | 104           |

Table 1. (cont.)

## CalCOFI Cruise 9204

| Line | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|---------------------------|----------------------------|--------------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| 86.7 | 70.0    | 32 39.4                   | 121 02.1                   | JD           | 92 04 21                | 2303          | 201                 | 480                         | 4.19                       | 37                 | 100.0             | 14              | 11            |
| 86.7 | 80.0    | 32 19.5                   | 121 42.9                   | JD           | 92 04 21                | 1647          | 216                 | 443                         | 4.88                       | 18                 | 100.0             | 5               | 7             |
| 86.7 | 90.0    | 31 59.4                   | 122 23.8                   | JD           | 92 04 21                | 1000          | 213                 | 460                         | 4.62                       | 22                 | 100.0             | 12              | 176           |
| 86.7 | 100.0   | 31 39.4                   | 123 04.3                   | JD           | 92 04 21                | 0344          | 208                 | 466                         | 4.47                       | 26                 | 100.0             | 38              | 112           |
| 86.7 | 110.0   | 31 19.4                   | 123 44.5                   | JD           | 92 04 20                | 2200          | 220                 | 420                         | 5.24                       | 26                 | 100.0             | 45              | 67            |
| 90.0 | 28.0    | 33 29.1                   | 117 46.1                   | JD           | 92 04 18                | 0559          | 213                 | 433                         | 4.91                       | 30                 | 100.0             | 298             | 24            |
| 90.0 | 30.0    | 33 25.1                   | 117 54.3                   | JD           | 92 04 18                | 0854          | 212                 | 414                         | 5.13                       | 29                 | 100.0             | 221             | 86            |
| 90.0 | 35.0    | 33 15.1                   | 118 15.1                   | JD           | 92 04 18                | 1312          | 213                 | 443                         | 4.81                       | 29                 | 100.0             | 147             | 250           |
| 90.0 | 37.0    | 33 11.1                   | 118 23.2                   | JD           | 92 04 18                | 1558          | 214                 | 450                         | 4.77                       | 18                 | 100.0             | 24              | 19            |
| 90.0 | 45.0    | 32 55.1                   | 118 56.0                   | JD           | 92 04 18                | 2122          | 210                 | 440                         | 4.79                       | 73                 | 100.0             | 240             | 39            |
| 90.0 | 53.0    | 32 39.1                   | 119 28.9                   | JD           | 92 04 19                | 0253          | 212                 | 444                         | 4.78                       | 36                 | 100.0             | 40              | 8             |
| 90.0 | 60.0    | 32 25.1                   | 119 57.6                   | JD           | 92 04 19                | 0742          | 215                 | 441                         | 4.87                       | 48                 | 100.0             | 35              | 22            |
| 90.0 | 70.0    | 32 05.1                   | 120 38.3                   | JD           | 92 04 19                | 1540          | 215                 | 456                         | 4.73                       | 127                | 100.0             | 3               | 4             |
| 90.0 | 80.0    | 31 45.2                   | 121 18.9                   | JD           | 92 04 19                | 2115          | 215                 | 442                         | 4.88                       | 61                 | 100.0             | 14              | 9             |
| 90.0 | 90.0    | 31 25.1                   | 121 59.4                   | JD           | 92 04 20                | 0256          | 209                 | 435                         | 4.81                       | 41                 | 100.0             | 38              | 38            |
| 90.0 | 100.0   | 31 05.1                   | 122 39.7                   | JD           | 92 04 20                | 0824          | 218                 | 447                         | 4.87                       | 13                 | 100.0             | 33              | 94            |
| 90.0 | 110.0   | 30 45.1                   | 123 19.9                   | JD           | 92 04 20                | 1535          | 212                 | 451                         | 4.71                       | 16                 | 100.0             | 52              | 27            |
| 90.0 | 120.0   | 30 25.1                   | 123 59.9                   | JD           | 92 04 16                | 1032          | 215                 | 421                         | 5.12                       | 33                 | 100.0             | 15              | 109           |
| 93.3 | 26.7    | 32 57.4                   | 117 18.4                   | JD           | 92 04 13                | 1213          | 86                  | 179                         | 4.79                       | 33                 | 100.0             | 33              | 31            |
| 93.3 | 28.0    | 32 54.8                   | 117 23.7                   | JD           | 92 04 13                | 1421          | 196                 | 491                         | 4.00                       | 14                 | 100.0             | 51              | 148           |
| 93.3 | 30.0    | 32 50.7                   | 117 31.9                   | JD           | 92 04 13                | 1735          | 201                 | 465                         | 4.32                       | 19                 | 100.0             | 7               | 4             |
| 93.3 | 35.0    | 32 40.6                   | 117 52.4                   | JD           | 92 04 13                | 2154          | 214                 | 434                         | 4.94                       | 30                 | 100.0             | 23              | 43            |
| 93.3 | 40.0    | 32 30.8                   | 118 12.8                   | JD           | 92 04 14                | 0253          | 214                 | 434                         | 4.93                       | 46                 | 100.0             | 89              | 50            |
| 93.3 | 45.0    | 32 20.8                   | 118 33.3                   | JD           | 92 04 14                | 0655          | 225                 | 441                         | 5.10                       | 16                 | 100.0             | 22              | 42            |
| 93.3 | 50.0    | 32 10.7                   | 118 53.6                   | JD           | 92 04 14                | 1110          | 225                 | 437                         | 5.16                       | 25                 | 100.0             | 16              | 4             |
| 93.3 | 55.0    | 32 00.8                   | 119 14.0                   | JD           | 92 04 14                | 1501          | 218                 | 433                         | 5.03                       | 14                 | 100.0             | 12              | 1             |
| 93.3 | 60.0    | 31 50.8                   | 119 34.3                   | JD           | 92 04 14                | 1905          | 204                 | 496                         | 4.11                       | 28                 | 100.0             | 19              | 2             |
| 93.3 | 70.0    | 31 30.8                   | 120 14.7                   | JD           | 92 04 15                | 0037          | 214                 | 416                         | 5.14                       | 24                 | 100.0             | 27              | 7             |
| 93.3 | 80.0    | 31 10.8                   | 120 55.2                   | JD           | 92 04 15                | 0622          | 220                 | 428                         | 5.14                       | 23                 | 100.0             | 31              | 88            |
| 93.3 | 90.0    | 30 50.9                   | 121 35.4                   | JD           | 92 04 15                | 1243          | 211                 | 457                         | 4.61                       | 9                  | 100.0             | 16              | 25            |
| 93.3 | 100.0   | 30 30.8                   | 122 15.5                   | JD           | 92 04 15                | 1818          | 208                 | 456                         | 4.57                       | 18                 | 100.0             | 55              | 22            |
| 93.3 | 110.0   | 30 10.9                   | 122 55.4                   | JD           | 92 04 15                | 2345          | 212                 | 463                         | 4.57                       | 15                 | 100.0             | 63              | 83            |
| 93.3 | 120.0   | 29 50.8                   | 123 35.2                   | JD           | 92 04 16                | 0500          | 211                 | 436                         | 4.84                       | 21                 | 100.0             | 58              | 57            |

## CalCOFI Cruise 9207

Table 1. (cont.)

| Line | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|---------------------------|----------------------------|--------------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| 76.7 | 49.0    | 35 05.3                   | 120 46.6                   | JD           | 92 07 15                | 1714          | 60                  | 147                         | 4.08                       | 286                | 52.4              | 3               | 14            |
| 76.7 | 51.0    | 35 01.3                   | 120 55.1                   | JD           | 92 07 15                | 1517          | 206                 | 447                         | 4.61                       | 143                | 46.9              | 3               | 2             |
| 76.7 | 55.0    | 34 53.3                   | 121 11.9                   | JD           | 92 07 15                | 1217          | 212                 | 438                         | 4.84                       | 105                | 52.2              | 7               | 12            |
| 76.7 | 60.0    | 34 43.3                   | 121 32.9                   | JD           | 92 07 15                | 0736          | 215                 | 431                         | 5.00                       | 98                 | 45.2              | 5               | 29            |
| 76.7 | 70.0    | 34 23.2                   | 122 14.9                   | JD           | 92 07 15                | 0055          | 212                 | 450                         | 4.71                       | 58                 | 100.0             | 16              | 25            |
| 76.7 | 80.0    | 34 03.5                   | 122 56.4                   | JD           | 92 07 14                | 1905          | 211                 | 439                         | 4.81                       | 50                 | 100.0             | 21              | 15            |
| 76.7 | 90.0    | 33 43.3                   | 123 38.0                   | JD           | 92 07 14                | 1343          | 213                 | 437                         | 4.87                       | 46                 | 100.0             | 20              | 22            |
| 76.7 | 100.0   | 33 23.3                   | 124 19.4                   | JD           | 92 07 14                | 0624          | 211                 | 436                         | 4.84                       | 37                 | 100.0             | 30              | 38            |
| 80.0 | 51.0    | 34 27.0                   | 120 31.4                   | JD           | 92 07 12                | 1849          | 63                  | 135                         | 4.69                       | 379                | 51.0              | 3               | 128           |
| 80.0 | 55.0    | 34 19.0                   | 120 48.0                   | JD           | 92 07 12                | 2147          | 203                 | 462                         | 4.38                       | 197                | 46.2              | 5               | 10            |
| 80.0 | 60.0    | 34 09.1                   | 121 09.0                   | JD           | 92 07 13                | 0133          | 211                 | 362                         | 5.83                       | 75                 | 100.0             | 16              | 11            |
| 80.0 | 70.0    | 33 49.0                   | 121 50.6                   | JD           | 92 07 13                | 0650          | 209                 | 430                         | 4.86                       | 79                 | 50.0              | 8               | 13            |
| 80.0 | 80.0    | 33 29.2                   | 122 31.6                   | JD           | 92 07 13                | 1318          | 212                 | 425                         | 4.99                       | 42                 | 100.0             | 21              | 20            |
| 80.0 | 90.0    | 33 09.0                   | 123 13.3                   | JD           | 92 07 13                | 1919          | 215                 | 435                         | 4.95                       | 37                 | 100.0             | 10              | 4             |
| 80.0 | 100.0   | 32 49.1                   | 123 54.4                   | JD           | 92 07 14                | 0049          | 214                 | 424                         | 5.06                       | 50                 | 100.0             | 279             | 267           |
| 81.8 | 46.9    | 34 16.6                   | 120 01.5                   | JD           | 92 07 12                | 1448          | 213                 | 412                         | 5.17                       | 213                | 46.6              | 4               | 39            |
| 83.3 | 40.6    | 34 13.5                   | 119 24.7                   | JD           | 92 07 12                | 0531          | 21                  | 52                          | 3.94                       | 96                 | 100.0             | 2               | 47            |
| 83.3 | 42.0    | 34 10.7                   | 119 30.5                   | JD           | 92 07 12                | 0337          | 91                  | 192                         | 4.71                       | 229                | 50.0              | 11              | 31            |
| 83.3 | 51.0    | 33 52.7                   | 120 08.0                   | JD           | 92 07 11                | 2225          | 83                  | 174                         | 4.79                       | 161                | 100.0             | 14              | 78            |
| 83.3 | 55.0    | 33 44.7                   | 120 24.6                   | JD           | 92 07 11                | 1935          | 214                 | 435                         | 4.93                       | 198                | 48.8              | 12              | 2             |
| 83.3 | 60.0    | 33 34.7                   | 120 45.3                   | JD           | 92 07 11                | 1600          | 214                 | 435                         | 4.92                       | 39                 | 100.0             | 15              | 30            |
| 83.3 | 70.0    | 33 15.0                   | 121 26.3                   | JD           | 92 07 11                | 0904          | 216                 | 413                         | 5.24                       | 44                 | 100.0             | 9               | 16            |
| 83.3 | 80.0    | 32 54.7                   | 122 07.7                   | JD           | 92 07 11                | 0336          | 210                 | 435                         | 4.82                       | 92                 | 50.0              | 11              | 8             |
| 83.3 | 90.0    | 32 34.6                   | 122 48.7                   | JD           | 92 07 10                | 2207          | 214                 | 431                         | 4.96                       | 88                 | 100.0             | 38              | 85            |
| 83.3 | 100.0   | 32 14.7                   | 123 29.4                   | JD           | 92 07 10                | 1700          | 209                 | 446                         | 4.69                       | 27                 | 100.0             | 388             | 55            |
| 83.3 | 110.0   | 31 54.6                   | 124 10.1                   | JD           | 92 07 10                | 1047          | 211                 | 446                         | 4.72                       | 22                 | 100.0             | 277             | 25            |
| 86.7 | 33.0    | 33 53.4                   | 118 29.4                   | JD           | 92 07 08                | 0408          | 42                  | 88                          | 4.75                       | 830                | 46.6              | 38              | 249           |
| 86.7 | 35.0    | 33 49.4                   | 118 37.7                   | JD           | 92 07 08                | 0615          | 209                 | 420                         | 4.97                       | 83                 | 51.4              | 16              | 88            |
| 86.7 | 40.0    | 33 39.4                   | 118 58.6                   | JD           | 92 07 08                | 1003          | 211                 | 418                         | 5.05                       | 69                 | 48.3              | 25              | 0             |
| 86.7 | 45.0    | 33 29.5                   | 119 19.1                   | JD           | 92 07 08                | 1456          | 212                 | 420                         | 5.05                       | 60                 | 100.0             | 3               | 4             |
| 86.7 | 50.0    | 33 19.4                   | 119 39.8                   | JD           | 92 07 08                | 1805          | 56                  | 124                         | 4.47                       | 233                | 100.0             | 4               | 79            |
| 86.7 | 55.0    | 33 09.4                   | 120 00.4                   | JD           | 92 07 08                | 2103          | 212                 | 415                         | 5.11                       | 65                 | 100.0             | 16              | 26            |
| 86.7 | 60.0    | 32 59.4                   | 120 20.9                   | JD           | 92 07 09                | 0100          | 208                 | 426                         | 4.88                       | 99                 | 100.0             | 61              | 13            |

Table 1. (cont.)

## CalCOFI Cruise 9207

| Line | Station | Latitude (N) |           | Longitude (W) |           | Ship Code | Tow Date    |             | Time (PST) | Tow Depth (m) | Volume Water Strained | Standard Haul Factor | Plankton Volume | Percent Sorted | Total Larvae | Total Eggs |     |
|------|---------|--------------|-----------|---------------|-----------|-----------|-------------|-------------|------------|---------------|-----------------------|----------------------|-----------------|----------------|--------------|------------|-----|
|      |         | deg. min.    | deg. min. | deg. min.     | deg. min. |           | yr. mo. day | yr. mo. day |            |               |                       |                      |                 |                |              |            |     |
| 86.7 | 70.0    | 32           | 39.3      | 121           | 02.0      | JD        | 92          | 07          | 09         | 0634          | 211                   | 433                  | 4.87            | 85             | 100.0        | 20         | 23  |
| 86.7 | 80.0    | 32           | 19.4      | 121           | 42.9      | JD        | 92          | 07          | 09         | 1244          | 212                   | 436                  | 4.86            | 57             | 100.0        | 22         | 145 |
| 86.7 | 90.0    | 31           | 59.1      | 122           | 23.4      | JD        | 92          | 07          | 09         | 1839          | 209                   | 426                  | 4.91            | 80             | 100.0        | 15         | 76  |
| 86.7 | 100.0   | 31           | 39.3      | 123           | 04.2      | JD        | 92          | 07          | 09         | 2356          | 212                   | 427                  | 4.97            | 66             | 100.0        | 27         | 64  |
| 86.7 | 110.0   | 31           | 19.4      | 123           | 44.5      | JD        | 92          | 07          | 10         | 0515          | 220                   | 443                  | 4.96            | 47             | 100.0        | 56         | 420 |
| 90.0 | 28.0    | 33           | 29.1      | 117           | 46.2      | JD        | 92          | 07          | 07         | 2220          | 219                   | 418                  | 5.24            | 136            | 50.9         | 38         | 5   |
| 90.0 | 30.0    | 33           | 25.2      | 117           | 54.3      | JD        | 92          | 07          | 07         | 2030          | 217                   | 442                  | 4.91            | 154            | 47.1         | 19         | 16  |
| 90.0 | 35.0    | 33           | 15.0      | 118           | 15.0      | JD        | 92          | 07          | 07         | 1645          | 214                   | 426                  | 5.01            | 122            | 50.0         | 11         | 6   |
| 90.0 | 37.0    | 33           | 10.0      | 118           | 25.3      | JD        | 92          | 07          | 07         | 1335          | 211                   | 421                  | 5.01            | 43             | 100.0        | 15         | 21  |
| 90.0 | 45.0    | 32           | 55.0      | 118           | 56.0      | JD        | 92          | 07          | 07         | 0822          | 219                   | 396                  | 5.53            | 124            | 46.9         | 0          | 6   |
| 90.0 | 53.0    | 32           | 38.9      | 119           | 28.9      | JD        | 92          | 07          | 07         | 0338          | 214                   | 430                  | 4.99            | 102            | 50.0         | 9          | 0   |
| 90.0 | 60.0    | 32           | 25.1      | 119           | 57.7      | JD        | 92          | 07          | 06         | 2310          | 219                   | 395                  | 5.54            | 109            | 46.5         | 10         | 9   |
| 90.0 | 70.0    | 32           | 05.1      | 120           | 38.3      | JD        | 92          | 07          | 06         | 1745          | 217                   | 420                  | 5.17            | 38             | 100.0        | 86         | 33  |
| 90.0 | 80.0    | 31           | 45.1      | 121           | 19.1      | JD        | 92          | 07          | 06         | 1200          | 209                   | 460                  | 4.55            | 28             | 100.0        | 23         | 247 |
| 90.0 | 90.0    | 31           | 25.0      | 121           | 59.4      | JD        | 92          | 07          | 06         | 0538          | 222                   | 454                  | 4.90            | 15             | 100.0        | 185        | 99  |
| 90.0 | 100.0   | 31           | 05.1      | 122           | 39.9      | JD        | 92          | 07          | 05         | 2354          | 208                   | 430                  | 4.83            | 44             | 100.0        | 49         | 479 |
| 90.0 | 110.0   | 30           | 45.0      | 123           | 19.9      | JD        | 92          | 07          | 05         | 1811          | 215                   | 444                  | 4.84            | 14             | 100.0        | 180        | 131 |
| 90.0 | 120.0   | 30           | 25.1      | 123           | 59.9      | JD        | 92          | 07          | 05         | 0928          | 197                   | 463                  | 4.26            | 11             | 100.0        | 376        | 48  |
| 93.3 | 26.7    | 32           | 57.5      | 117           | 18.2      | JD        | 92          | 07          | 02         | 1243          | 49                    | 119                  | 4.13            | 169            | 100.0        | 4          | 3   |
| 93.3 | 28.0    | 32           | 54.1      | 117           | 23.5      | JD        | 92          | 07          | 02         | 1640          | 213                   | 443                  | 4.80            | 36             | 100.0        | 6          | 3   |
| 93.3 | 30.0    | 32           | 50.8      | 117           | 31.9      | JD        | 92          | 07          | 02         | 1900          | 217                   | 425                  | 5.11            | 45             | 100.0        | 17         | 10  |
| 93.3 | 35.0    | 32           | 40.8      | 117           | 52.5      | JD        | 92          | 07          | 02         | 2240          | 218                   | 417                  | 5.24            | 86             | 52.8         | 30         | 137 |
| 93.3 | 40.0    | 32           | 30.8      | 118           | 12.9      | JD        | 92          | 07          | 03         | 0306          | 217                   | 404                  | 5.36            | 91             | 51.4         | 33         | 22  |
| 93.3 | 45.0    | 32           | 20.7      | 118           | 33.3      | JD        | 92          | 07          | 03         | 0639          | 216                   | 409                  | 5.28            | 81             | 48.5         | 6          | 5   |
| 93.3 | 50.0    | 32           | 10.9      | 118           | 53.6      | JD        | 92          | 07          | 03         | 1011          | 214                   | 428                  | 4.99            | 49             | 100.0        | 25         | 2   |
| 93.3 | 55.0    | 32           | 00.8      | 119           | 14.0      | JD        | 92          | 07          | 03         | 1453          | 212                   | 418                  | 5.07            | 112            | 48.9         | 16         | 5   |
| 93.3 | 60.0    | 31           | 50.8      | 119           | 34.4      | JD        | 92          | 07          | 03         | 1830          | 212                   | 416                  | 5.11            | 29             | 100.0        | 77         | 24  |
| 93.3 | 70.0    | 31           | 30.9      | 120           | 14.8      | JD        | 92          | 07          | 04         | 0002          | 214                   | 424                  | 5.06            | 68             | 100.0        | 77         | 23  |
| 93.3 | 80.0    | 31           | 10.8      | 120           | 55.2      | JD        | 92          | 07          | 04         | 0526          | 208                   | 440                  | 4.73            | 27             | 100.0        | 212        | 111 |
| 93.3 | 90.0    | 30           | 50.8      | 121           | 35.4      | JD        | 92          | 07          | 04         | 1130          | 208                   | 427                  | 4.88            | 19             | 100.0        | 311        | 271 |
| 93.3 | 100.0   | 30           | 30.9      | 122           | 15.5      | JD        | 92          | 07          | 04         | 1655          | 212                   | 445                  | 4.77            | 22             | 100.0        | 108        | 90  |
| 93.3 | 110.0   | 30           | 10.9      | 122           | 55.3      | JD        | 92          | 07          | 04         | 2215          | 219                   | 443                  | 4.94            | 29             | 100.0        | 299        | 55  |
| 93.3 | 120.0   | 29           | 50.9      | 123           | 35.2      | JD        | 92          | 07          | 05         | 0347          | 216                   | 455                  | 4.74            | 31             | 100.0        | 171        | 23  |



CalCOFI Cruise 9210

Table 1. (cont.)

| Line | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|---------------------------|----------------------------|--------------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| 76.7 | 49.0    | 35 05.3                   | 120 46.7                   | NH           | 92 10 09                | 1537          | 57                  | 128                         | 4.43                       | 188                | 100.0             | 5               | 23            |
| 76.7 | 51.0    | 35 01.3                   | 120 55.0                   | NH           | 92 10 09                | 1306          | 214                 | 465                         | 4.60                       | 226                | 49.5              | 3               | 13            |
| 76.7 | 55.0    | 34 53.2                   | 121 11.9                   | NH           | 92 10 09                | 0920          | 211                 | 451                         | 4.68                       | 71                 | 50.0              | 6               | 7             |
| 76.7 | 60.0    | 34 43.3                   | 121 33.0                   | NH           | 92 10 09                | 0528          | 211                 | 462                         | 4.55                       | 132                | 49.2              | 16              | 1             |
| 76.7 | 70.0    | 34 23.3                   | 122 14.9                   | NH           | 92 10 08                | 2337          | 209                 | 460                         | 4.55                       | 120                | 47.3              | 3               | 0             |
| 76.7 | 80.0    | 34 03.3                   | 122 56.5                   | NH           | 92 10 08                | 1741          | 215                 | 425                         | 5.06                       | 75                 | 46.9              | 6               | 3             |
| 76.7 | 90.0    | 33 43.2                   | 123 38.0                   | NH           | 92 10 08                | 1005          | 214                 | 448                         | 4.78                       | 20                 | 100.0             | 7               | 9             |
| 76.7 | 100.0   | 33 23.3                   | 124 19.3                   | NH           | 92 10 08                | 0425          | 209                 | 447                         | 4.69                       | 34                 | 100.0             | 44              | 13            |
| 80.0 | 51.0    | 34 27.0                   | 120 31.4                   | NH           | 92 10 06                | 1624          | 67                  | 150                         | 4.48                       | 127                | 100.0             | 14              | 28            |
| 80.0 | 55.0    | 34 19.0                   | 120 48.1                   | NH           | 92 10 06                | 1935          | 206                 | 468                         | 4.40                       | 96                 | 53.3              | 5               | 5             |
| 80.0 | 60.0    | 34 09.0                   | 121 08.9                   | NH           | 92 10 06                | 2338          | 212                 | 439                         | 4.83                       | 114                | 48.0              | 6               | 3             |
| 80.0 | 70.0    | 33 49.0                   | 121 50.6                   | NH           | 92 10 07                | 0505          | 213                 | 446                         | 4.77                       | 159                | 47.9              | 5               | 0             |
| 80.0 | 80.0    | 33 29.0                   | 122 31.9                   | NH           | 92 10 07                | 1136          | 211                 | 411                         | 5.13                       | 37                 | 100.0             | 29              | 6             |
| 80.0 | 90.0    | 33 09.0                   | 123 13.3                   | NH           | 92 10 07                | 1715          | 210                 | 452                         | 4.64                       | 40                 | 100.0             | 17              | 9             |
| 80.0 | 100.0   | 32 49.1                   | 123 54.6                   | NH           | 92 10 07                | 2242          | 212                 | 454                         | 4.67                       | 42                 | 100.0             | 59              | 14            |
| 81.8 | 46.9    | 34 16.5                   | 120 01.5                   | NH           | 92 10 06                | 1243          | 220                 | 441                         | 4.99                       | 52                 | 100.0             | 6               | 41            |
| 83.3 | 40.6    | 34 13.5                   | 119 24.7                   | NH           | 92 10 06                | 0707          | 22                  | 51                          | 4.29                       | 215                | 100.0             | 0               | 20            |
| 83.3 | 42.0    | 34 10.6                   | 119 30.5                   | NH           | 92 10 06                | 0513          | 126                 | 295                         | 4.28                       | 115                | 52.9              | 26              | 41            |
| 83.3 | 51.0    | 33 52.6                   | 120 08.1                   | NH           | 92 10 05                | 2326          | 95                  | 201                         | 4.72                       | 45                 | 100.0             | 4               | 138           |
| 83.3 | 55.0    | 33 44.6                   | 120 24.6                   | NH           | 92 10 05                | 2011          | 215                 | 438                         | 4.91                       | 91                 | 52.5              | 13              | 1             |
| 83.3 | 60.0    | 33 40.0                   | 120 45.1                   | NH           | 92 10 05                | 1616          | 213                 | 484                         | 4.39                       | 128                | 46.8              | 2               | 7             |
| 83.3 | 80.0    | 32 54.7                   | 122 07.7                   | NH           | 92 10 05                | 0500          | 211                 | 451                         | 4.67                       | 29                 | 100.0             | 74              | 17            |
| 83.3 | 90.0    | 32 34.6                   | 122 48.7                   | NH           | 92 10 04                | 2315          | 215                 | 470                         | 4.58                       | 40                 | 100.0             | 89              | 31            |
| 83.3 | 100.0   | 32 14.7                   | 123 29.5                   | NH           | 92 10 04                | 1727          | 212                 | 504                         | 4.20                       | 40                 | 100.0             | 10              | 17            |
| 83.3 | 110.0   | 31 54.6                   | 124 10.2                   | NH           | 92 10 04                | 1119          | 213                 | 492                         | 4.32                       | 49                 | 100.0             | 20              | 15            |
| 86.7 | 33.0    | 33 53.4                   | 118 29.4                   | NH           | 92 10 02                | 0130          | 43                  | 92                          | 4.65                       | 65                 | 100.0             | 9               | 28            |
| 86.7 | 35.0    | 33 49.4                   | 118 37.7                   | NH           | 92 10 02                | 0340          | 214                 | 420                         | 5.09                       | 79                 | 48.5              | 7               | 3             |
| 86.7 | 40.0    | 33 39.4                   | 118 58.4                   | NH           | 92 10 02                | 0750          | 209                 | 456                         | 4.60                       | 40                 | 100.0             | 5               | 3             |
| 86.7 | 45.0    | 33 29.4                   | 119 19.0                   | NH           | 92 10 02                | 1302          | 213                 | 441                         | 4.84                       | 39                 | 100.0             | 5               | 1             |
| 86.7 | 50.0    | 33 19.5                   | 119 39.8                   | NH           | 92 10 02                | 1612          | 69                  | 148                         | 4.69                       | 81                 | 100.0             | 2               | 35            |
| 86.7 | 55.0    | 33 09.3                   | 120 00.3                   | NH           | 92 10 02                | 2012          | 210                 | 423                         | 4.96                       | 85                 | 44.4              | 2               | 1             |
| 86.7 | 60.0    | 32 59.4                   | 120 21.0                   | NH           | 92 10 02                | 2354          | 202                 | 487                         | 4.15                       | 94                 | 47.8              | 21              | 3             |

Table 1. (cont.)

## CalCOFI Cruise 9210

| Line | Station | Latitude (N)<br>deg. min. | Longitude (W)<br>deg. min. | Ship<br>Code | Tow Date<br>yr. mo. day | Time<br>(PST) | Tow<br>Depth<br>(m) | Volume<br>Water<br>Strained | Standard<br>Haul<br>Factor | Plankton<br>Volume | Percent<br>Sorted | Total<br>Larvae | Total<br>Eggs |
|------|---------|---------------------------|----------------------------|--------------|-------------------------|---------------|---------------------|-----------------------------|----------------------------|--------------------|-------------------|-----------------|---------------|
| 86.7 | 70.0    | 32 39.4                   | 121 02.0                   | NH           | 92 10 03                | 0504          | 211                 | 441                         | 4.80                       | 45                 | 100.0             | 115             | 28            |
| 86.7 | 80.0    | 32 19.4                   | 121 42.8                   | NH           | 92 10 03                | 1112          | 214                 | 436                         | 4.90                       | 23                 | 100.0             | 26              | 16            |
| 86.7 | 90.0    | 31 59.4                   | 122 23.5                   | NH           | 92 10 03                | 1644          | 212                 | 439                         | 4.82                       | 23                 | 100.0             | 45              | 26            |
| 86.7 | 100.0   | 31 39.4                   | 123 04.2                   | NH           | 92 10 03                | 2309          | 215                 | 442                         | 4.88                       | 52                 | 100.0             | 35              | 56            |
| 86.7 | 110.0   | 31 19.4                   | 123 44.6                   | NH           | 92 10 04                | 0440          | 211                 | 455                         | 4.64                       | 48                 | 100.0             | 40              | 24            |
| 90.0 | 28.0    | 33 29.0                   | 117 46.1                   | NH           | 92 10 01                | 1924          | 91                  | 186                         | 4.91                       | 64                 | 100.0             | 14              | 16            |
| 90.0 | 30.0    | 33 25.1                   | 117 54.3                   | NH           | 92 10 01                | 1726          | 213                 | 401                         | 5.32                       | 20                 | 100.0             | 0               | 0             |
| 90.0 | 35.0    | 33 15.1                   | 118 15.0                   | NH           | 92 10 01                | 1345          | 218                 | 412                         | 5.30                       | 44                 | 100.0             | 3               | 0             |
| 90.0 | 37.0    | 33 11.1                   | 118 23.2                   | NH           | 92 10 01                | 1118          | 216                 | 462                         | 4.68                       | 15                 | 100.0             | 2               | 1             |
| 90.0 | 53.0    | 32 39.1                   | 119 29.0                   | NH           | 92 10 01                | 0205          | 213                 | 444                         | 4.80                       | 115                | 49.0              | 2               | 1             |
| 90.0 | 60.0    | 32 25.1                   | 119 57.6                   | NH           | 92 09 30                | 2126          | 215                 | 412                         | 5.23                       | 78                 | 46.9              | 2               | 0             |
| 90.0 | 70.0    | 32 05.1                   | 120 38.2                   | NH           | 92 09 30                | 1551          | 209                 | 419                         | 4.99                       | 41                 | 100.0             | 6               | 11            |
| 90.0 | 80.0    | 31 45.0                   | 121 18.9                   | NH           | 92 09 30                | 0827          | 214                 | 380                         | 5.63                       | 205                | 100.0             | 8               | 8             |
| 90.0 | 90.0    | 31 25.1                   | 121 59.5                   | NH           | 92 09 30                | 0255          | 213                 | 424                         | 5.03                       | 40                 | 100.0             | 72              | 30            |
| 90.0 | 100.0   | 31 05.1                   | 122 39.7                   | NH           | 92 09 29                | 2121          | 208                 | 427                         | 4.88                       | 47                 | 100.0             | 76              | 34            |
| 90.0 | 110.0   | 30 45.1                   | 123 19.9                   | NH           | 92 09 29                | 1550          | 214                 | 408                         | 5.23                       | 42                 | 100.0             | 49              | 69            |
| 90.0 | 120.0   | 30 25.1                   | 123 59.9                   | NH           | 92 09 29                | 0810          | 207                 | 421                         | 4.93                       | 62                 | 100.0             | 38              | 25            |
| 93.3 | 26.7    | 32 57.3                   | 117 18.3                   | NH           | 92 09 26                | 1238          | 101                 | 229                         | 4.43                       | 17                 | 100.0             | 1               | 18            |
| 93.3 | 28.0    | 32 54.8                   | 117 23.6                   | NH           | 92 09 26                | 1441          | 206                 | 443                         | 4.64                       | 34                 | 100.0             | 1               | 8             |
| 93.3 | 30.0    | 32 50.8                   | 117 32.0                   | NH           | 92 09 26                | 1658          | 193                 | 488                         | 3.96                       | 14                 | 100.0             | 7               | 1             |
| 93.3 | 35.0    | 32 40.8                   | 117 52.4                   | NH           | 92 09 26                | 2033          | 208                 | 429                         | 4.85                       | 70                 | 53.3              | 10              | 2             |
| 93.3 | 40.0    | 32 30.9                   | 118 12.9                   | NH           | 92 09 27                | 0030          | 213                 | 462                         | 4.63                       | 126                | 48.3              | 8               | 2             |
| 93.3 | 45.0    | 32 20.8                   | 118 33.2                   | NH           | 92 09 27                | 0415          | 211                 | 418                         | 5.06                       | 117                | 53.1              | 2               | 0             |
| 93.3 | 50.0    | 32 10.8                   | 118 53.6                   | NH           | 92 09 27                | 0755          | 210                 | 435                         | 4.83                       | 67                 | 55.2              | 0               | 1             |
| 93.3 | 55.0    | 32 00.9                   | 119 13.9                   | NH           | 92 09 27                | 1300          | 217                 | 422                         | 5.14                       | 73                 | 51.6              | 0               | 1             |
| 93.3 | 60.0    | 31 50.8                   | 119 34.3                   | NH           | 92 09 27                | 1629          | 208                 | 413                         | 5.04                       | 32                 | 100.0             | 2               | 2             |
| 93.3 | 70.0    | 31 30.8                   | 120 14.7                   | NH           | 92 09 27                | 2212          | 212                 | 431                         | 4.93                       | 88                 | 52.6              | 2               | 6             |
| 93.3 | 80.0    | 31 10.8                   | 120 55.1                   | NH           | 92 09 28                | 0350          | 212                 | 452                         | 4.69                       | 71                 | 100.0             | 30              | 35            |
| 93.3 | 90.0    | 30 50.8                   | 121 35.3                   | NH           | 92 09 28                | 0920          | 205                 | 421                         | 4.88                       | 43                 | 100.0             | 12              | 30            |
| 93.3 | 100.0   | 30 30.8                   | 122 15.4                   | NH           | 92 09 28                | 1541          | 211                 | 425                         | 4.96                       | 52                 | 100.0             | 37              | 47            |
| 93.3 | 110.0   | 30 10.8                   | 122 55.3                   | NH           | 92 09 28                | 2102          | 208                 | 409                         | 5.09                       | 49                 | 100.0             | 61              | 2             |
| 93.3 | 120.0   | 29 50.8                   | 123 35.2                   | NH           | 92 09 29                | 0235          | 214                 | 434                         | 4.92                       | 37                 | 100.0             | 41              | 2             |

TABLE 2. Pooled occurrences of fish larvae taken on CalCOFI cruises in 1992.

| Rank | Taxon                               | Occurrences |
|------|-------------------------------------|-------------|
| 1    | <i>Protomyctophum crockeri</i>      | 105         |
| 2    | <i>Lampanyctus</i> spp.             | 102         |
| 3    | <i>Stenobranchius leucopsarus</i>   | 95          |
| 4    | <i>Engraulis mordax</i>             | 91          |
| 5    | <i>Vinciguerria lucetia</i>         | 84          |
| 6    | <i>Cyclothone signata</i>           | 80          |
| 7    | <i>Bathylagus ochotensis</i>        | 76          |
| 8    | <i>Sebastes</i> spp.                | 74          |
| 9    | <i>Triphoturus mexicanus</i>        | 71          |
| 10   | <i>Lampanyctus ritteri</i>          | 70          |
| 11   | <i>Diogenichthys atlanticus</i>     | 69          |
| 12   | <i>Symbolophorus californiensis</i> | 67          |
| 13   | <i>Leuroglossus stilbius</i>        | 58          |
| 13   | <i>Bathylagus wesethi</i>           | 58          |
| 15   | <i>Merluccius productus</i>         | 50          |
| 16   | <i>Ceratoscopelus townsendi</i>     | 48          |
| 17   | <i>Citharichthys sordidus</i>       | 43          |
| 18   | <i>Sardinops sagax</i>              | 40          |
| 18   | <i>Trachurus symmetricus</i>        | 40          |
| 20   | <i>Citharichthys stigmaeus</i>      | 38          |
| 21   | <i>Sebastes jordani</i>             | 34          |
| 22   | <i>Idiacanthus antrostomus</i>      | 31          |
| 23   | <i>Tarletonbeania crenularis</i>    | 30          |
| 24   | <i>Danaphos oculatus</i>            | 28          |
| 25   | <i>Chauliodus macouni</i>           | 25          |
| 25   | <i>Melamphaes lugubris</i>          | 25          |
| 27   | <i>Lestidiops ringens</i>           | 23          |
| 27   | <i>Diaphus</i> spp.                 | 23          |
| 29   | Myctophidae                         | 22          |
| 30   | <i>Sternoptyx</i> spp.              | 21          |
| 31   | <i>Argyrolepecus sladeni</i>        | 20          |
| 31   | <i>Lampanyctus regalis</i>          | 20          |
| 33   | <i>Coryphopterus nicholsii</i>      | 19          |
| 33   | <i>Argyrolepecus affinis</i>        | 19          |
| 35   | <i>Vinciguerria poweriae</i>        | 18          |
| 36   | <i>Tetragonurus cuvieri</i>         | 17          |
| 36   | <i>Sebastes paucispinis</i>         | 17          |
| 36   | <i>Bathylagus pacificus</i>         | 17          |
| 36   | <i>Argentina sialis</i>             | 17          |
| 40   | <i>Sebastes diploproa</i>           | 13          |
| 41   | <i>Scopelogadus bispinosus</i>      | 12          |
| 41   | <i>Scomber japonicus</i>            | 12          |
| 43   | <i>Cyclothone acclinidens</i>       | 11          |
| 43   | <i>Electrona risso</i>              | 11          |
| 43   | <i>Oxyjulis californica</i>         | 11          |
| 46   | <i>Melamphaes</i> spp.              | 10          |
| 46   | <i>Sphyræna argentea</i>            | 10          |
| 46   | <i>Hygophum reinhardtii</i>         | 10          |
| 49   | <i>Lyopsetta exilis</i>             | 9           |
| 49   | <i>Aristostomias scintillans</i>    | 9           |

TABLE 2. (cont.)

| Rank | Taxon                             | Occurrences |
|------|-----------------------------------|-------------|
| 49   | Disintegrated fish larvae         | 9           |
| 52   | <i>Genyonemus lineatus</i>        | 8           |
| 52   | Unidentified fish larvae          | 8           |
| 52   | <i>Notolychnus valdiviae</i>      | 8           |
| 52   | <i>Notoscopelus resplendens</i>   | 8           |
| 52   | <i>Trachipterus altivelis</i>     | 8           |
| 52   | <i>Icichthys lockingtoni</i>      | 8           |
| 52   | <i>Paralichthys californicus</i>  | 8           |
| 59   | <i>Chiasmodon niger</i>           | 7           |
| 59   | <i>Chromis punctipinnis</i>       | 7           |
| 59   | <i>Cyclothone</i> spp.            | 7           |
| 59   | <i>Melamphaes parvus</i>          | 7           |
| 59   | <i>Microstoma</i> spp.            | 7           |
| 59   | <i>Sebastes aurora</i>            | 7           |
| 65   | <i>Pleuronichthys verticalis</i>  | 6           |
| 65   | <i>Myctophum nitidulum</i>        | 6           |
| 65   | <i>Scopelarchus analis</i>        | 6           |
| 65   | <i>Scopelosaurus harryi</i>       | 6           |
| 65   | <i>Cyclothone pseudopallida</i>   | 6           |
| 65   | <i>Rosenblattichthys volucris</i> | 6           |
| 71   | <i>Seriphus politus</i>           | 5           |
| 71   | <i>Hypsoblennius jenkinsi</i>     | 5           |
| 71   | <i>Stomias atriventer</i>         | 5           |
| 71   | <i>Arctozenus risso</i>           | 5           |
| 71   | <i>Lampadena urophaos</i>         | 5           |
| 76   | <i>Bathylagus milleri</i>         | 4           |
| 76   | <i>Artedius creaseri</i>          | 4           |
| 76   | <i>Lepidogobius lepidus</i>       | 4           |
| 76   | <i>Argyropelecus hemigymnus</i>   | 4           |
| 76   | <i>Argyropelecus</i> spp.         | 4           |
| 76   | <i>Sebastes goodei</i>            | 4           |
| 76   | <i>Cololabis saira</i>            | 4           |
| 76   | Stomiiformes                      | 4           |
| 84   | <i>Lampanyctus "niger"</i>        | 3           |
| 84   | <i>Lampanyctus "no pectorals"</i> | 3           |
| 84   | <i>Oneirodes</i> spp.             | 3           |
| 84   | <i>Icelinus quadriseriatus</i>    | 3           |
| 84   | <i>Citharichthys</i> spp.         | 3           |
| 84   | <i>Paralabrax</i> spp.            | 3           |
| 84   | <i>Gigantactis</i> spp.           | 3           |
| 84   | <i>Lythrypnus zebra</i>           | 3           |
| 84   | <i>Scopeloberyx robustus</i>      | 3           |
| 84   | <i>Poromitra crassiceps</i>       | 3           |
| 94   | <i>Benthalbella dentata</i>       | 2           |
| 94   | <i>Xeneretmus latifrons</i>       | 2           |
| 94   | <i>Brama japonica</i>             | 2           |
| 94   | <i>Parophrys vetulus</i>          | 2           |
| 94   | <i>Microstomus pacificus</i>      | 2           |
| 94   | <i>Cryptotrema corallinum</i>     | 2           |
| 94   | <i>Etrumeus teres</i>             | 2           |
| 94   | <i>Argyropelecus lychnus</i>      | 2           |

TABLE 2. (cont.)

| Rank | Taxon                              | Occurrences |
|------|------------------------------------|-------------|
| 94   | <i>Ichthyococcus irregularis</i>   | 2           |
| 94   | <i>Zaniolepis latipinnis</i>       | 2           |
| 94   | <i>Parvilux ingens</i>             | 2           |
| 94   | <i>Peprilus simillimus</i>         | 2           |
| 94   | <i>Bathophilus flemingi</i>        | 2           |
| 94   | <i>Loweina rara</i>                | 2           |
| 94   | <i>Melamphaes simus</i>            | 2           |
| 94   | <i>Chilara taylori</i>             | 2           |
| 94   | <i>Nansenia candida</i>            | 2           |
| 94   | <i>Cataetyx rubrirostris</i>       | 2           |
| 94   | Cottidae                           | 2           |
| 113  | Sternoptychidae                    | 1           |
| 113  | Bathylagidae                       | 1           |
| 113  | <i>Typhlogobius californiensis</i> | 1           |
| 113  | <i>Atherinopsis californiensis</i> | 1           |
| 113  | <i>Hypsypops rubicundus</i>        | 1           |
| 113  | <i>Rathbunella</i> spp.            | 1           |
| 113  | Stichaeidae                        | 1           |
| 113  | <i>Hypsoblennius</i> spp.          | 1           |
| 113  | <i>Howella</i> spp.                | 1           |
| 113  | <i>Lythrypnus dalli</i>            | 1           |
| 113  | <i>Odontopyxis trispinosa</i>      | 1           |
| 113  | <i>Diplospinus multistriatus</i>   | 1           |
| 113  | <i>Psenes pellucidus</i>           | 1           |
| 113  | <i>Citharichthys xanthostigma</i>  | 1           |
| 113  | <i>Hippoglossina stomata</i>       | 1           |
| 113  | <i>Lepidopsetta bilineata</i>      | 1           |
| 113  | <i>Symphurus atricaudus</i>        | 1           |
| 113  | <i>Hypsoblennius gilberti</i>      | 1           |
| 113  | <i>Oxylebius pictus</i>            | 1           |
| 113  | Paralepididae                      | 1           |
| 113  | <i>Ophidion scrippsae</i>          | 1           |
| 113  | <i>Brosmophycis marginata</i>      | 1           |
| 113  | <i>Cyema atrum</i>                 | 1           |
| 113  | <i>Leuresthes tenuis</i>           | 1           |
| 113  | <i>Girella nigricans</i>           | 1           |
| 113  | <i>Scorpaena guttata</i>           | 1           |
| 113  | <i>Tactostoma macropus</i>         | 1           |
| 113  | <i>Artedius fenestralis</i>        | 1           |
| 113  | <i>Artedius lateralis</i>          | 1           |
| 113  | <i>Icelinus</i> spp.               | 1           |
| 113  | <i>Oligocottus</i> spp.            | 1           |
| 113  | <i>Orthonopias triacis</i>         | 1           |
| 113  | <i>Scorpaenichthys marmoratus</i>  | 1           |
| 113  | <i>Sebastes levis</i>              | 1           |
|      | Total                              | 2205        |

TABLE 3. Pooled counts of fish larvae taken on CalCOFI cruises in 1992. Counts are adjusted for percent of sample sorted and standard haul factor (see text).

| Rank | Taxon                               | Count |
|------|-------------------------------------|-------|
| 1    | <i>Merluccius productus</i>         | 31763 |
| 2    | <i>Vinciguerria lucetia</i>         | 16670 |
| 3    | <i>Engraulis mordax</i>             | 13913 |
| 4    | <i>Sebastes</i> spp.                | 5363  |
| 5    | <i>Stenobranchius leucopsarus</i>   | 4042  |
| 6    | <i>Leuroglossus stilbius</i>        | 1932  |
| 7    | <i>Sebastes jordani</i>             | 1470  |
| 8    | <i>Cyclothone signata</i>           | 1467  |
| 9    | <i>Sardinops sagax</i>              | 1341  |
| 10   | <i>Bathylagus ochotensis</i>        | 1135  |
| 11   | <i>Symbolophorus californiensis</i> | 1083  |
| 12   | <i>Trachurus symmetricus</i>        | 1017  |
| 13   | <i>Triphoturus mexicanus</i>        | 995   |
| 14   | <i>Lampanyctus</i> spp.             | 977   |
| 15   | <i>Bathylagus wesethi</i>           | 973   |
| 16   | <i>Protomyctophum crockeri</i>      | 925   |
| 17   | <i>Diogenichthys atlanticus</i>     | 852   |
| 18   | <i>Lampanyctus ritteri</i>          | 742   |
| 19   | <i>Ceratoscopelus townsendi</i>     | 706   |
| 20   | <i>Genyonemus lineatus</i>          | 491   |
| 21   | <i>Idiacanthus antrostomus</i>      | 380   |
| 21   | <i>Citharichthys sordidus</i>       | 380   |
| 23   | <i>Citharichthys stigmaeus</i>      | 355   |
| 23   | <i>Argentina sialis</i>             | 355   |
| 25   | <i>Scomber japonicus</i>            | 306   |
| 26   | <i>Tarletonbeania crenularis</i>    | 282   |
| 27   | <i>Vinciguerria poweriae</i>        | 196   |
| 28   | <i>Chauliodus macouni</i>           | 194   |
| 29   | <i>Danaphos oculatus</i>            | 190   |
| 30   | <i>Sebastes diploproa</i>           | 187   |
| 31   | <i>Melamphaes lugubris</i>          | 185   |
| 32   | <i>Lestidiops ringens</i>           | 178   |
| 33   | <i>Sebastes paucispinis</i>         | 173   |
| 34   | <i>Diaphus</i> spp.                 | 166   |
| 35   | <i>Lampanyctus regalis</i>          | 154   |
| 36   | <i>Coryphopterus nicholsii</i>      | 150   |
| 37   | Myctophidae                         | 139   |
| 38   | <i>Sphyræna argentea</i>            | 127   |
| 39   | <i>Argyropelecus sladeni</i>        | 119   |
| 40   | <i>Tetragonurus cuvieri</i>         | 114   |
| 41   | <i>Sternoptyx</i> spp.              | 113   |
| 42   | <i>Bathylagus pacificus</i>         | 105   |
| 43   | <i>Argyropelecus affinis</i>        | 98    |
| 43   | <i>Oxyjulis californica</i>         | 98    |
| 45   | <i>Seriphus politus</i>             | 94    |
| 46   | <i>Scopelogadus bispinosus</i>      | 89    |
| 47   | <i>Lyopsetta exilis</i>             | 78    |
| 47   | <i>Icichthys lockingtoni</i>        | 78    |

TABLE 3. (cont.)

| Rank | Taxon                             | Count |
|------|-----------------------------------|-------|
| 47   | <i>Paralichthys californicus</i>  | 78    |
| 50   | <i>Notolychnus valdiviae</i>      | 76    |
| 51   | <i>Sebastes aurora</i>            | 69    |
| 51   | <i>Melamphaes</i> spp.            | 69    |
| 53   | <i>Hygophum reinhardtii</i>       | 67    |
| 54   | <i>Electrona risso</i>            | 65    |
| 55   | <i>Chromis punctipinnis</i>       | 64    |
| 55   | <i>Cyclothone acclinidens</i>     | 64    |
| 57   | <i>Hypsoblennius</i> spp.         | 61    |
| 58   | <i>Hypsoblennius jenkinsi</i>     | 60    |
| 59   | <i>Cyclothone</i> spp.            | 54    |
| 60   | <i>Trachipterus altivelis</i>     | 50    |
| 61   | <i>Aristostomias scintillans</i>  | 49    |
| 62   | <i>Melamphaes parvus</i>          | 48    |
| 62   | Disintegrated fish larvae         | 48    |
| 62   | <i>Notoscopelus resplendens</i>   | 48    |
| 65   | <i>Stomias atriventer</i>         | 44    |
| 66   | <i>Lepidogobius lepidus</i>       | 43    |
| 67   | <i>Paralabrax</i> spp.            | 42    |
| 68   | <i>Chiasmodon niger</i>           | 39    |
| 69   | Unidentified fish larvae          | 37    |
| 70   | <i>Pleuronichthys verticalis</i>  | 36    |
| 71   | <i>Microstoma</i> spp.            | 35    |
| 72   | <i>Cyclothone pseudopallida</i>   | 34    |
| 72   | <i>Cololabis saira</i>            | 34    |
| 74   | <i>Scopelosaurus harryi</i>       | 30    |
| 74   | <i>Artedius creaseri</i>          | 30    |
| 74   | <i>Myctophum nitidulum</i>        | 30    |
| 77   | <i>Rosenblattichthys volucris</i> | 29    |
| 77   | <i>Scopelarchus analis</i>        | 29    |
| 79   | <i>Lampanyctus "niger"</i>        | 28    |
| 80   | <i>Sebastes goodei</i>            | 26    |
| 80   | <i>Icelinus quadriseriatus</i>    | 26    |
| 82   | <i>Lythrypnus zebra</i>           | 25    |
| 82   | <i>Peprilus simillimus</i>        | 25    |
| 82   | Stomiiiformes                     | 25    |
| 82   | <i>Lampadena urophaos</i>         | 25    |
| 86   | <i>Arctozenus risso</i>           | 24    |
| 86   | <i>Argyropelecus</i> spp.         | 24    |
| 86   | <i>Argyropelecus hemigymnus</i>   | 24    |
| 89   | <i>Citharichthys</i> spp.         | 19    |
| 89   | <i>Scopeloberyx robustus</i>      | 19    |
| 91   | <i>Bathylagus milleri</i>         | 17    |
| 92   | <i>Microstomus pacificus</i>      | 16    |
| 93   | <i>Argyropelecus lychnus</i>      | 15    |
| 93   | <i>Lampanyctus "no pectorals"</i> | 15    |
| 93   | <i>Parvilux ingens</i>            | 15    |
| 93   | <i>Melamphaes simus</i>           | 15    |
| 93   | <i>Poromitra crassiceps</i>       | 15    |
| 93   | <i>Oneirodes</i> spp.             | 15    |
| 93   | <i>Lepidopsetta bilineata</i>     | 15    |

TABLE 3. (cont.)

| Rank | Taxon                              | Count |
|------|------------------------------------|-------|
| 93   | <i>Parophrys vetulus</i>           | 15    |
| 101  | <i>Gigantactis</i> spp.            | 14    |
| 102  | <i>Girella nigricans</i>           | 12    |
| 103  | <i>Artedius fenestralis</i>        | 11    |
| 104  | <i>Zaniolepis latipinnis</i>       | 10    |
| 104  | <i>Scorpaena guttata</i>           | 10    |
| 104  | <i>Benthalbella dentata</i>        | 10    |
| 104  | <i>Chilara taylori</i>             | 10    |
| 104  | <i>Ichthyococcus irregularis</i>   | 10    |
| 104  | <i>Hippoglossina stomata</i>       | 10    |
| 104  | <i>Oligocottus</i> spp.            | 10    |
| 104  | <i>Loweina rara</i>                | 10    |
| 104  | <i>Leuresthes tenuis</i>           | 10    |
| 104  | Cottidae                           | 10    |
| 104  | <i>Brama japonica</i>              | 10    |
| 115  | <i>Rathbunella</i> spp.            | 9     |
| 115  | <i>Etrumeus teres</i>              | 9     |
| 115  | <i>Symphurus atricaudus</i>        | 9     |
| 115  | <i>Nansenia candida</i>            | 9     |
| 115  | <i>Typhlogobius californiensis</i> | 9     |
| 115  | <i>Cryptotrema corallinum</i>      | 9     |
| 115  | <i>Bathophilus flemingi</i>        | 9     |
| 115  | <i>Tactostoma macropus</i>         | 9     |
| 115  | <i>Cataetyx rubrirostris</i>       | 9     |
| 124  | <i>Xeneretmus latifrons</i>        | 8     |
| 125  | Bathylagidae                       | 6     |
| 126  | <i>Citharichthys xanthostigma</i>  | 5     |
| 126  | <i>Ophidion scrippsae</i>          | 5     |
| 126  | <i>Cyema atrum</i>                 | 5     |
| 126  | <i>Oxylebius pictus</i>            | 5     |
| 126  | <i>Orthonopias triacis</i>         | 5     |
| 126  | <i>Artedius lateralis</i>          | 5     |
| 126  | <i>Odontopyxis trispinosa</i>      | 5     |
| 126  | <i>Psenes pellucidus</i>           | 5     |
| 126  | Paralepididae                      | 5     |
| 126  | <i>Atherinopsis californiensis</i> | 5     |
| 126  | <i>Howella</i> spp.                | 5     |
| 126  | <i>Diplospinus multistriatus</i>   | 5     |
| 126  | <i>Scorpaenichthys marmoratus</i>  | 5     |
| 126  | Stichaeidae                        | 5     |
| 126  | Sternoptychidae                    | 5     |
| 126  | <i>Brosmophycis marginata</i>      | 5     |
| 142  | <i>Hypsoblennius gilberti</i>      | 4     |
| 142  | <i>Sebastes levis</i>              | 4     |
| 142  | <i>Hypsypops rubicundus</i>        | 4     |
| 142  | <i>Icelinus</i> spp.               | 4     |
| 142  | <i>Lythrypnus dalli</i>            | 4     |
|      | Total                              | 95187 |



TABLE 4. Number of fish larvae taken at stations occupied on CalCOFI cruises in 1992. Counts are adjusted for percent of sample sorted and standard haul factor (see text). Unoccupied stations are indicated by a dash.

| Station                | <i>Cyema atrum</i> |      |      |      |     |      |       |      |      |      |      |      |
|------------------------|--------------------|------|------|------|-----|------|-------|------|------|------|------|------|
|                        | Jan.               | Feb. | Mar. | Apr. | May | June | July  | Aug. | Sep. | Oct. | Nov. | Dec. |
| 93.3                   | 110.0              | 5.0  | -    | 0.0  | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| <i>Etrumeus teres</i>  |                    |      |      |      |     |      |       |      |      |      |      |      |
| 86.7                   | 33.0               | 0.0  | -    | 4.5  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 90.0                   | 30.0               | 0.0  | -    | 5.1  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| <i>Sardinops sagax</i> |                    |      |      |      |     |      |       |      |      |      |      |      |
| 76.7                   | 55.0               | -    | -    | 10.6 | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 80.0                   | 51.0               | -    | -    | 0.0  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 80.0                   | 55.0               | -    | -    | 0.0  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 80.0                   | 60.0               | -    | -    | 44.4 | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 81.8                   | 46.9               | -    | -    | 0.0  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 83.3                   | 40.6               | -    | -    | 0.0  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 83.3                   | 51.0               | -    | -    | 0.0  | -   | -    | 23.9  | -    | -    | 0.0  | -    | -    |
| 86.7                   | 33.0               | -    | -    | 4.5  | -   | -    | 30.6  | -    | -    | 0.0  | -    | -    |
| 86.7                   | 35.0               | -    | -    | 4.8  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 86.7                   | 39.5               | -    | -    | 5.0  | -   | -    | -     | -    | -    | -    | -    | -    |
| 86.7                   | 40.0               | -    | -    | -    | -   | -    | 20.9  | -    | -    | 0.0  | -    | -    |
| 86.7                   | 50.0               | -    | -    | 0.0  | -   | -    | 4.5   | -    | -    | 0.0  | -    | -    |
| 86.7                   | 70.0               | -    | -    | 4.2  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 90.0                   | 28.0               | -    | -    | 4.9  | -   | -    | 102.9 | -    | -    | 0.0  | -    | -    |
| 90.0                   | 30.0               | -    | -    | 97.5 | -   | -    | 10.4  | -    | -    | 0.0  | -    | -    |
| 90.0                   | 35.0               | -    | -    | 19.2 | -   | -    | 20.0  | -    | -    | 0.0  | -    | -    |
| 90.0                   | 37.0               | -    | -    | 4.8  | -   | -    | 5.0   | -    | -    | 0.0  | -    | -    |
| 90.0                   | 53.0               | -    | -    | 0.0  | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 90.0                   | 60.0               | -    | -    | 0.0  | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 92.8                   | 54.1               | 5.2  | -    | -    | -   | -    | -     | -    | -    | -    | -    | -    |

TABLE 4. (cont.)

|           |      | <i>Sardinops sagax</i> (cont.) |      |        |     |      |       |      |      |       |      |      |  |
|-----------|------|--------------------------------|------|--------|-----|------|-------|------|------|-------|------|------|--|
| Station   | Jan. | Feb.                           | Mar. | Apr.   | May | June | July  | Aug. | Sep. | Oct.  | Nov. | Dec. |  |
| 93.3 26.7 | 3.8  | -                              | -    | 9.6    | -   | -    | 4.1   | -    | 0.0  | -     | -    | -    |  |
| 93.3 28.0 | 0.0  | -                              | -    | 20.0   | -   | -    | 0.0   | -    | 0.0  | -     | -    | -    |  |
| 93.3 30.0 | 0.0  | -                              | -    | 0.0    | -   | -    | 15.3  | -    | 0.0  | -     | -    | -    |  |
| 93.3 35.0 | 0.0  | -                              | -    | 4.9    | -   | -    | 228.3 | -    | 0.0  | -     | -    | -    |  |
| 93.3 40.0 | 0.0  | -                              | -    | 0.0    | -   | -    | 239.8 | -    | 0.0  | -     | -    | -    |  |
| 93.3 50.0 | 0.0  | -                              | -    | 0.0    | -   | -    | 10.0  | -    | 0.0  | -     | -    | -    |  |
|           |      | <i>Engraulis mordax</i>        |      |        |     |      |       |      |      |       |      |      |  |
| Station   | Jan. | Feb.                           | Mar. | Apr.   | May | June | July  | Aug. | Sep. | Oct.  | Nov. | Dec. |  |
| 76.7 49.0 | -    | -                              | -    | 70.2   | -   | -    | 0.0   | -    | -    | 4.4   | -    | -    |  |
| 76.7 51.0 | -    | -                              | -    | 28.4   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 76.7 55.0 | -    | -                              | -    | 26.4   | -   | -    | 0.0   | -    | -    | 9.4   | -    | -    |  |
| 76.7 60.0 | -    | -                              | -    | 4.8    | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 76.7 80.0 | -    | 9.5                            | -    | 10.6   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 76.7 90.0 | -    | 0.0                            | -    | 10.4   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 80.0 51.0 | -    | 1595.8                         | -    | 0.0    | -   | -    | 0.0   | -    | -    | 62.7  | -    | -    |  |
| 80.0 55.0 | -    | 69.9                           | -    | 30.1   | -   | -    | 0.0   | -    | -    | 16.5  | -    | -    |  |
| 80.0 60.0 | -    | 4.9                            | -    | 55.5   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 80.0 70.0 | -    | 0.0                            | -    | 4.8    | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 81.8 46.9 | -    | 683.8                          | -    | 49.1   | -   | -    | 11.1  | -    | -    | 15.0  | -    | -    |  |
| 83.3 40.6 | -    | 11.1                           | -    | 48.0   | -   | -    | 3.9   | -    | -    | 0.0   | -    | -    |  |
| 83.3 42.0 | -    | 16.9                           | -    | 37.1   | -   | -    | 28.3  | -    | -    | 194.2 | -    | -    |  |
| 83.3 51.0 | -    | 131.2                          | -    | 70.1   | -   | -    | 19.2  | -    | -    | 14.2  | -    | -    |  |
| 83.3 55.0 | -    | 0.0                            | -    | 198.0  | -   | -    | 10.1  | -    | -    | 0.0   | -    | -    |  |
| 83.3 60.0 | -    | 43.2                           | -    | 21.6   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 83.3 70.0 | -    | 28.5                           | -    | 25.0   | -   | -    | 0.0   | -    | -    | -     | -    | -    |  |
| 86.7 33.0 | -    | 585.3                          | -    | 138.3  | -   | -    | 203.9 | -    | -    | 18.6  | -    | -    |  |
| 86.7 35.0 | -    | 400.4                          | -    | 2553.6 | -   | -    | 58.0  | -    | -    | 52.5  | -    | -    |  |
| 86.7 39.5 | -    | 102.5                          | -    | 104.4  | -   | -    | -     | -    | -    | -     | -    | -    |  |
| 86.7 40.0 | -    | -                              | -    | -      | -   | -    | 219.6 | -    | -    | -     | -    | -    |  |
| 86.7 45.0 | -    | 260.0                          | -    | 10.0   | -   | -    | 0.0   | -    | -    | 0.0   | -    | -    |  |
| 86.7 50.0 | -    | 43.2                           | -    | 119.9  | -   | -    | 0.0   | -    | -    | 14.5  | -    | -    |  |
|           |      |                                |      |        |     |      |       |      |      | 0.0   |      |      |  |

TABLE 4. (cont.)

| <i>Engraulis mordax</i> (cont.) |      |       |      |        |     |      |       |      |      |      |      |      |
|---------------------------------|------|-------|------|--------|-----|------|-------|------|------|------|------|------|
| Station                         | Jan. | Feb.  | Mar. | Apr.   | May | June | July  | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7                            | 55.0 | 0.0   | -    | 20.4   | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 86.7                            | 60.0 | 0.0   | -    | 0.0    | -   | -    | 0.0   | -    | -    | 8.7  | -    | -    |
| 90.0                            | 28.0 | 18.2  | -    | 1301.2 | -   | -    | 144.1 | -    | -    | 54.0 | -    | -    |
| 90.0                            | 30.0 | 25.3  | -    | 877.2  | -   | -    | 83.4  | -    | -    | 0.0  | -    | -    |
| 90.0                            | 35.0 | 67.0  | -    | 428.1  | -   | -    | 30.1  | -    | -    | 0.0  | -    | -    |
| 90.0                            | 37.0 | 14.8  | -    | 19.1   | -   | -    | 10.0  | -    | -    | 0.0  | -    | -    |
| 90.0                            | 45.0 | 215.0 | -    | 737.7  | -   | -    | 0.0   | -    | -    | -    | -    | -    |
| 90.0                            | 53.0 | 148.8 | -    | 9.6    | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 92.8                            | 54.1 | -     | -    | -      | -   | -    | -     | -    | -    | -    | -    | -    |
| 93.3                            | 26.7 | -     | -    | 86.2   | -   | -    | 4.1   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 28.0 | -     | -    | 140.0  | -   | -    | 4.8   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 30.0 | -     | -    | 4.3    | -   | -    | 10.2  | -    | 0.0  | -    | -    | -    |
| 93.3                            | 35.0 | -     | -    | 14.8   | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 40.0 | -     | -    | 364.8  | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 45.0 | -     | -    | 66.3   | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 50.0 | -     | -    | 0.0    | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 60.0 | -     | -    | 24.7   | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 93.3                            | 70.0 | -     | -    | 5.1    | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| <i>Argentina stialis</i>        |      |       |      |        |     |      |       |      |      |      |      |      |
| Station                         | Jan. | Feb.  | Mar. | Apr.   | May | June | July  | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7                            | 49.0 | -     | -    | 0.0    | -   | -    | 7.8   | -    | -    | 0.0  | -    | -    |
| 76.7                            | 55.0 | -     | -    | 0.0    | -   | -    | 9.3   | -    | -    | 0.0  | -    | -    |
| 80.0                            | 51.0 | 0.0   | -    | 0.0    | -   | -    | 9.2   | -    | -    | 0.0  | -    | -    |
| 80.0                            | 55.0 | 9.3   | -    | 0.0    | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 80.0                            | 60.0 | 4.9   | -    | 0.0    | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 81.8                            | 46.9 | 129.5 | -    | 0.0    | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 83.3                            | 42.0 | 39.5  | -    | 15.9   | -   | -    | 0.0   | -    | -    | 8.1  | -    | -    |
| 86.7                            | 35.0 | 15.6  | -    | 19.2   | -   | -    | 19.3  | -    | -    | 0.0  | -    | -    |
| 86.7                            | 39.5 | 4.9   | -    | 0.0    | -   | -    | -     | -    | -    | -    | -    | -    |
| 90.0                            | 28.0 | 0.0   | -    | 14.7   | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |
| 90.0                            | 30.0 | 0.0   | -    | 5.1    | -   | -    | 0.0   | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

|         |       | <i>Argentina sialis</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|---------|-------|---------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station | Jan.  | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0    | 35.0  | 0.0                             | -    | 38.5 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 53.0  | 5.0                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|         |       | <i>Microstoma</i> spp.          |      |      |     |      |      |      |      |      |      |      |  |
| 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  | -    | -    |  |
| 80.0    | 100.0 | 0.0                             | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 90.0  | 0.0                             | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 90.0  | 0.0                             | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 110.0 | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 37.0  | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 93.3    | 60.0  | -                               | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Nansenia candida</i>         |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 90.0  | 4.2                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 70.0  | 0.0                             | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|         |       | <i>Bathylagidae</i>             |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0    | 60.0  | 0.0                             | -    | 5.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|         |       | <i>Bathylagus milleri</i>       |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 70.0  | 4.3                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 90.0  | 4.2                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 100.0 | 4.2                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 110.0 | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Bathylagus ochotensis</i>    |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 49.0  | -                               | -    | 4.7  | -   | -    | 0.0  | -    | -    | 4.4  | -    | -    |  |
| 76.7    | 55.0  | -                               | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 70.0  | 47.7                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 80.0  | 4.7                             | -    | 15.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 90.0  | 25.3                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 100.0 | 9.3                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |

TABLE 4. (cont.)

| Station    | <i>Bathylagus ochotensis</i> (cont.) |       |      |      |     |      |      |      |      |      |      |      |
|------------|--------------------------------------|-------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.                                 | Feb.  | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 60.0  | -                                    | 63.6  | -    | 33.3 | -   | -    | 5.8  | -    | -    | 0.0  | -    | -    |
| 80.0 70.0  | -                                    | 55.2  | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0  | -                                    | 36.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0  | -                                    | 4.8   | -    | 5.2  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0 | -                                    | 8.4   | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0  | -                                    | 5.6   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 55.0  | -                                    | 0.0   | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0  | -                                    | 162.1 | -    | 13.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0  | -                                    | 47.6  | -    | 5.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 80.0  | -                                    | 10.6  | -    | 9.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 90.0  | -                                    | 25.7  | -    | 21.2 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0 | -                                    | 0.0   | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0 | -                                    | 8.7   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0  | -                                    | 0.0   | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0  | -                                    | 10.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0  | -                                    | 0.0   | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -                                    | 32.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0  | -                                    | 10.9  | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -                                    | 4.2   | -    | 8.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0  | -                                    | 10.8  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0  | -                                    | 0.0   | -    | 13.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -                                    | 4.6   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0 | -                                    | 0.0   | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -                                    | 0.0   | -    | 0.0  | -   | -    | 10.3 | -    | -    | 0.0  | -    | -    |
| 90.0 30.0  | -                                    | 10.1  | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 35.0  | -                                    | 9.6   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -                                    | 0.0   | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -                                    | 10.0  | -    | 14.4 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -                                    | 5.0   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -                                    | 50.1  | -    | 14.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 90.0  | -                                    | 5.1   | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| <i>Bathylagus ochotensis</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|--------------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 93.3 28.0                            | 5.1  | -    | -    | 4.0  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| 93.3 30.0                            | 5.0  | -    | -    | 4.3  | -   | -    | 30.7 | -    | 0.0  | -    | -    | -    |
| 93.3 35.0                            | 24.4 | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                            | 10.3 | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 45.0                            | 14.9 | -    | -    | 0.0  | -   | -    | 10.9 | -    | 0.0  | -    | -    | -    |
| 93.3 50.0                            | 15.5 | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 55.0                            | -    | -    | -    | 20.1 | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                            | 4.9  | -    | -    | 4.1  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 70.0                            | 0.0  | -    | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                           | 5.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Bathylagus pacificus</i>          |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 60.0                            | -    | -    | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 70.0                            | -    | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                            | -    | 0.0  | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0                            | -    | 4.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                            | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                            | -    | 4.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                            | -    | 18.2 | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                            | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0                           | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 55.0                            | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                            | -    | 0.0  | -    | 4.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                            | -    | 9.5  | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 100.0                           | -    | 9.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                           | -    | 4.3  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0                            | -    | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Bathylagus wesethi</i>            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 80.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 38.5 | -    | -    | 0.0  | -    | -    |
| 76.7 90.0                            | -    | 0.0  | -    | 10.4 | -   | -    | 9.7  | -    | -    | 4.8  | -    | -    |

TABLE 4. (cont.)

| Station    | <i>Bathylagus wesethi</i> (cont.) |      |      |      |     |      |       |      |      |      |      |      |
|------------|-----------------------------------|------|------|------|-----|------|-------|------|------|------|------|------|
|            | Jan.                              | Feb. | Mar. | Apr. | May | June | July  | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 100.0 | 0.0                               | 0.0  | -    | 4.9  | -   | -    | 48.4  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 5.8   | -    | -    | 10.1 | -    | -    |
| 80.0 70.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 0.0   | -    | -    | 10.0 | -    | -    |
| 80.0 80.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 34.9  | -    | -    | 10.3 | -    | -    |
| 80.0 90.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 5.0   | -    | -    | 4.6  | -    | -    |
| 80.0 100.0 | -                                 | 4.2  | -    | 4.8  | -   | -    | 116.4 | -    | -    | 4.7  | -    | -    |
| 83.3 60.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 4.9   | -    | -    | 0.0  | -    | -    |
| 83.3 80.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 0.0   | -    | -    | 14.0 | -    | -    |
| 83.3 90.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 9.9   | -    | -    | 4.6  | -    | -    |
| 83.3 100.0 | -                                 | 4.8  | -    | 5.0  | -   | -    | 28.1  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0 | -                                 | 0.0  | -    | 0.0  | -   | -    | 14.2  | -    | -    | 4.3  | -    | -    |
| 86.7 55.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 0.0   | -    | -    | 11.2 | -    | -    |
| 86.7 60.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 53.7  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 19.5  | -    | -    | 9.6  | -    | -    |
| 86.7 80.0  | -                                 | 0.0  | -    | 0.0  | -   | -    | 24.3  | -    | -    | 4.9  | -    | -    |
| 86.7 90.0  | -                                 | 5.1  | -    | 0.0  | -   | -    | 4.9   | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -                                 | 0.0  | -    | 0.0  | -   | -    | 14.9  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0 | -                                 | 0.0  | -    | 26.2 | -   | -    | 29.8  | -    | -    | 4.6  | -    | -    |
| 90.0 60.0  | -                                 | 0.0  | -    | 24.4 | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |
| 90.0 70.0  | -                                 | 0.0  | -    | 4.7  | -   | -    | 72.4  | -    | 0.0  | -    | -    | -    |
| 90.0 80.0  | -                                 | 0.0  | -    | 9.8  | -   | -    | 13.6  | -    | 5.6  | -    | -    | -    |
| 90.0 100.0 | -                                 | 0.0  | -    | 0.0  | -   | -    | 4.8   | -    | 0.0  | -    | -    | -    |
| 90.0 110.0 | 0.0                               | -    | -    | 14.1 | -   | -    | 14.5  | -    | 5.2  | -    | -    | -    |
| 90.0 120.0 | 0.0                               | -    | -    | 0.0  | -   | -    | 0.0   | -    | 4.9  | -    | -    | -    |
| 93.3 60.0  | 0.0                               | -    | -    | 0.0  | -   | -    | 30.7  | -    | 0.0  | -    | -    | -    |
| 93.3 70.0  | 0.0                               | -    | -    | 0.0  | -   | -    | 40.5  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0  | 0.0                               | -    | -    | 0.0  | -   | -    | 23.7  | -    | 0.0  | -    | -    | -    |
| 93.3 90.0  | 0.0                               | -    | -    | 0.0  | -   | -    | 9.8   | -    | 0.0  | -    | -    | -    |
| 93.3 100.0 | 0.0                               | -    | -    | 32.0 | -   | -    | 0.0   | -    | 5.0  | -    | -    | -    |
| 93.3 110.0 | 10.0                              | -    | -    | 0.0  | -   | -    | 0.0   | -    | 5.1  | -    | -    | -    |
| 93.3 120.0 | 0.0                               | -    | -    | 14.5 | -   | -    | 0.0   | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| Station    | <i>Leuroglossus stilibius</i> |       |      |       |     |      |      |      |      |      |      |      |
|------------|-------------------------------|-------|------|-------|-----|------|------|------|------|------|------|------|
|            | Jan.                          | Feb.  | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0  | -                             | -     | -    | 5.3   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 60.0  | -                             | -     | -    | 4.8   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 70.0  | -                             | 4.3   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0  | -                             | 4.7   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0  | -                             | 12.7  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0  | -                             | 93.2  | -    | 5.0   | -   | -    | 9.5  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0  | -                             | 24.4  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8 46.9  | -                             | 57.0  | -    | 19.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0  | -                             | 124.1 | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 55.0  | -                             | 5.0   | -    | 5.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0  | -                             | 259.4 | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0  | -                             | 47.6  | -    | 0.0   | -   | -    | 5.2  | -    | -    | -    | -    | -    |
| 83.3 80.0  | -                             | 0.0   | -    | 9.3   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0 | -                             | 9.7   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0  | -                             | 166.4 | -    | 14.4  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |
| 86.7 39.5  | -                             | 83.0  | -    | 9.9   | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7 45.0  | -                             | 135.0 | -    | 5.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0  | -                             | 4.8   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -                             | 54.8  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -                             | 4.6   | -    | 34.4  | -   | -    | 10.3 | -    | -    | 0.0  | -    | -    |
| 90.0 30.0  | -                             | 25.3  | -    | 41.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 35.0  | -                             | 67.0  | -    | 134.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -                             | 24.7  | -    | 52.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -                             | 35.0  | -    | 47.9  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -                             | 19.8  | -    | 0.0   | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 92.8 54.1  | 5.2                           | -     | -    | -     | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3 28.0  | 41.0                          | -     | -    | 12.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 30.0  | 25.0                          | -     | -    | 4.3   | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 35.0  | 24.4                          | -     | -    | 4.9   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0  | 25.8                          | -     | -    | 9.9   | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |



TABLE 4. (cont.)

|            |      | <i>Leuroglossus stilbius</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|--------------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                                 | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3 45.0  | 19.9 | -                                    | -    | 20.4 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 50.0  | 5.2  | -                                    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 55.0  | -    | -                                    | -    | 15.1 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 4.9  | -                                    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 0.0  | -                                    | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Stomiiformes</i>                  |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                 | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 100.0 | -    | 4.7                                  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |  |
| 93.3 80.0  | 0.0  | -                                    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 10.4 | -                                    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Cyclothone</i> spp.               |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                 | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0 100.0 | -    | 0.0                                  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 83.3 90.0  | -    | 0.0                                  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 100.0 | -    | 0.0                                  | -    | 0.0  | -   | -    | 18.8 | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 0.0                                  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |  |
| 90.0 53.0  | -    | 5.0                                  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 90.0  | -    | 0.0                                  | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0 | 0.0  | -                                    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Cyclothone acclinidens</i>        |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                 | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 100.0 | -    | 0.0                                  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                                  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 83.3 110.0 | -    | 0.0                                  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 0.0                                  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                                  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 110.0 | -    | 0.0                                  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 90.0 90.0  | -    | 0.0                                  | -    | 0.0  | -   | -    | 0.0  | -    | 10.1 | -    | -    | -    |  |
| 90.0 100.0 | -    | 10.0                                 | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 93.3 100.0 | 0.0  | -                                    | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 110.0 | 0.0  | -                                    | -    | 0.0  | -   | -    | 0.0  | -    | 5.1  | -    | -    | -    |  |

TABLE 4. (cont.)

| <i>Cyclothone pseudopalpida</i> |      |      |      |      |     |      |      |      |      |      |      |      |
|---------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 100.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 83.3 90.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.2  | -    | -    |
| 83.3 110.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 90.0 120.0                      | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 93.3 80.0                       | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.7  | -    | -    | -    |
| <i>Cyclothone signata</i>       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 60.0                       | -    | -    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 46.2 | -    | -    |
| 76.7 70.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0                       | -    | 0.0  | -    | 15.7 | -   | -    | 4.9  | -    | -    | 9.6  | -    | -    |
| 76.7 100.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 19.4 | -    | -    | 9.4  | -    | -    |
| 80.0 55.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 8.3  | -    | -    |
| 80.0 80.0                       | -    | 0.0  | -    | 5.3  | -   | -    | 5.0  | -    | -    | 10.3 | -    | -    |
| 80.0 90.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.3  | -    | -    |
| 80.0 100.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 10.1 | -    | -    | 23.4 | -    | -    |
| 83.3 55.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 37.4 | -    | -    |
| 83.3 60.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                       | -    | 9.5  | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 80.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 23.4 | -    | -    |
| 83.3 90.0                       | -    | 5.1  | -    | 0.0  | -   | -    | 14.9 | -    | -    | 77.9 | -    | -    |
| 83.3 100.0                      | -    | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 4.2  | -    | -    |
| 83.3 110.0                      | -    | 0.0  | -    | 5.0  | -   | -    | 9.4  | -    | -    | 4.3  | -    | -    |
| 86.7 40.0                       | -    | -    | -    | -    | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 86.7 60.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 9.8  | -    | -    | 26.0 | -    | -    |
| 86.7 70.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 24.0 | -    | -    |
| 86.7 80.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 19.6 | -    | -    |
| 86.7 90.0                       | -    | 10.2 | -    | 4.6  | -   | -    | 0.0  | -    | -    | 14.5 | -    | -    |
| 86.7 100.0                      | -    | 0.0  | -    | 13.4 | -   | -    | 0.0  | -    | -    | 24.4 | -    | -    |
| 86.7 110.0                      | -    | 5.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 13.9 | -    | -    |
| 90.0 53.0                       | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

|                                   |       | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|-----------------------------------|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Cyclothone signata</i> (cont.) |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 90.0                              | 80.0  | -    | 0.0  | -    | 4.9  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0                              | 90.0  | -    | 0.0  | -    | 14.4 | -   | -    | 4.9  | -    | 85.5 | -    | -    | -    |
| 90.0                              | 100.0 | -    | 54.8 | -    | 9.7  | -   | -    | 9.7  | -    | 43.9 | -    | -    | -    |
| 90.0                              | 110.0 | 28.6 | -    | -    | 23.6 | -   | -    | 19.4 | -    | 36.6 | -    | -    | -    |
| 90.0                              | 120.0 | 29.7 | -    | -    | 0.0  | -   | -    | 12.8 | -    | 9.9  | -    | -    | -    |
| 93.3                              | 35.0  | 0.0  | -    | -    | 9.9  | -   | -    | 0.0  | -    | 9.1  | -    | -    | -    |
| 93.3                              | 40.0  | 0.0  | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                              | 50.0  | 0.0  | -    | -    | 0.0  | -   | -    | 5.0  | -    | 0.0  | -    | -    | -    |
| 93.3                              | 60.0  | 0.0  | -    | -    | 0.0  | -   | -    | 15.3 | -    | 0.0  | -    | -    | -    |
| 93.3                              | 70.0  | 0.0  | -    | -    | 15.4 | -   | -    | 20.2 | -    | 0.0  | -    | -    | -    |
| 93.3                              | 80.0  | 0.0  | -    | -    | 0.0  | -   | -    | 33.1 | -    | 9.4  | -    | -    | -    |
| 93.3                              | 90.0  | 0.0  | -    | -    | 0.0  | -   | -    | 9.8  | -    | 4.9  | -    | -    | -    |
| 93.3                              | 100.0 | 72.7 | -    | -    | 13.7 | -   | -    | 4.8  | -    | 34.7 | -    | -    | -    |
| 93.3                              | 110.0 | 99.6 | -    | -    | 50.3 | -   | -    | 19.8 | -    | 10.2 | -    | -    | -    |
| 93.3                              | 120.0 | 39.0 | -    | -    | 4.8  | -   | -    | 4.7  | -    | 9.8  | -    | -    | -    |
| <b>Sternoptychidae</b>            |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 86.7                              | 110.0 | -    | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Argyropelecus</i> spp.         |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 83.3                              | 110.0 | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7                              | 80.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 93.3                              | 90.0  | 0.0  | -    | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                              | 110.0 | 0.0  | -    | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Argyropelecus affinis</i>      |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 76.7                              | 80.0  | -    | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                              | 100.0 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 80.0                              | 100.0 | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                              | 55.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| 83.3                              | 70.0  | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |

TABLE 4. (cont.)

| <i>Argyropelecus affinis</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|--------------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 90.0                            | -    | 5.1  | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                           | -    | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                           | -    | 5.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                            | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 70.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 5.2  | -    | 5.0  | -    | -    | -    |
| 90.0 90.0                            | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0                           | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                            | 0.0  | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                            | 0.0  | -    | -    | 4.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                            | 0.0  | -    | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                           | 4.9  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Argyropelecus hemigygnus</i>      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 80.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.3 | -    | -    |
| 86.7 90.0                            | -    | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                           | -    | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 120.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| <i>Argyropelecus lychnus</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 55.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 93.3 120.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |
| <i>Argyropelecus sladeni</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                              | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 80.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 76.7 100.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 8.6  | -    | -    |
| 86.7 55.0                            | -    | 0.0  | -    | 4.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |
| 86.7 80.0                            | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 86.7 90.0                            | -    | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| <i>Argyroleucus stadeni</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|-------------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 110.0                          | -    | 10.1 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 11.9 | -    | 0.0  | -    | -    | -    |
| 90.0 70.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 5.2  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                          | 4.8  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 28.0                           | 0.0  | -    | -    | 4.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 70.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |
| 93.3 100.0                          | 5.2  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 5.1  | -    | -    | -    |
| 93.3 120.0                          | 0.0  | -    | -    | 4.8  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| <i>Danaphos oculatus</i>            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 80.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 76.7 100.0                          | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                           | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                           | -    | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                           | -    | 10.8 | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 83.3 90.0                           | -    | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 83.3 110.0                          | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |
| 86.7 55.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 15.3 | -    | -    | 0.0  | -    | -    |
| 86.7 60.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 9.8  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0                           | -    | 10.8 | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                          | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 90.0 35.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 37.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                           | -    | 0.0  | -    | 9.7  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 120.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 55.0                           | -    | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                           | 4.9  | -    | -    | 4.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

|         |       | <i>Danaphos oculatus</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|---------|-------|----------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station | Jan.  | Feb.                             | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3    | 80.0  | 0.0                              | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 90.0  | 0.0                              | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 100.0 | 5.2                              | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 110.0 | 0.0                              | -    | 0.0  | -   | -    | 0.0  | -    | 5.1  | -    | -    | -    |  |
|         |       | <i>Sternophyx</i> spp.           |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                             | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 100.0 | 0.0                              | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 100.0 | 0.0                              | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 110.0 | 0.0                              | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 60.0  | 0.0                              | -    | 0.0  | -   | -    | 9.8  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 80.0  | 0.0                              | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7    | 90.0  | 5.1                              | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 100.0 | 0.0                              | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 110.0 | 5.0                              | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 60.0  | 0.0                              | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 70.0  | 0.0                              | -    | 0.0  | -   | -    | 5.2  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 100.0 | 5.0                              | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 120.0 | 5.0                              | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 50.0  | 0.0                              | -    | 5.2  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 60.0  | 0.0                              | -    | 4.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 80.0  | 0.0                              | -    | 0.0  | -   | -    | 0.0  | -    | 4.7  | -    | -    | -    |  |
| 93.3    | 90.0  | 0.0                              | -    | 4.6  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 100.0 | 0.0                              | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 110.0 | 10.0                             | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Ichthyococcus irregularis</i> |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                             | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7    | 80.0  | 0.0                              | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 110.0 | 0.0                              | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|         |       | <i>Vinciguerria lucetia</i>      |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                             | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 60.0  | -                                | -    | 0.0  | -   | -    | 0.0  | -    | -    | 46.2 | -    | -    |  |

TABLE 4. (cont.)

| Station    | <i>Vinciguerria lucetia</i> (cont.) |      |      |       |     |      |        |      |       |       |      |      |
|------------|-------------------------------------|------|------|-------|-----|------|--------|------|-------|-------|------|------|
|            | Jan.                                | Feb. | Mar. | Apr.  | May | June | July   | Aug. | Sep.  | Oct.  | Nov. | Dec. |
| 76.7 90.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 9.6   | -    | -    |
| 76.7 100.0 | -                                   | 0.0  | -    | 19.6  | -   | -    | 4.8    | -    | -     | 150.1 | -    | -    |
| 80.0 60.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 20.1  | -    | -    |
| 80.0 80.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 71.8  | -    | -    |
| 80.0 90.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 9.3   | -    | -    |
| 80.0 100.0 | -                                   | 0.0  | -    | 4.8   | -   | -    | 1052.5 | -    | -     | 219.5 | -    | -    |
| 83.3 55.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 37.4  | -    | -    |
| 83.3 60.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 18.8  | -    | -    |
| 83.3 80.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 9.6    | -    | -     | 238.2 | -    | -    |
| 83.3 90.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 39.7   | -    | -     | 247.3 | -    | -    |
| 83.3 100.0 | -                                   | 0.0  | -    | 0.0   | -   | -    | 1655.6 | -    | -     | 25.2  | -    | -    |
| 83.3 110.0 | -                                   | 0.0  | -    | 0.0   | -   | -    | 1208.3 | -    | -     | 25.9  | -    | -    |
| 86.7 55.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 11.2  | -    | -    |
| 86.7 60.0  | -                                   | 0.0  | -    | 4.4   | -   | -    | 92.7   | -    | -     | 121.5 | -    | -    |
| 86.7 70.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 9.7    | -    | -     | 417.6 | -    | -    |
| 86.7 80.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 14.6   | -    | -     | 39.2  | -    | -    |
| 86.7 90.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 4.9    | -    | -     | 154.2 | -    | -    |
| 86.7 100.0 | -                                   | 0.0  | -    | 67.0  | -   | -    | 34.8   | -    | -     | 92.7  | -    | -    |
| 86.7 110.0 | -                                   | 5.0  | -    | 10.5  | -   | -    | 173.6  | -    | -     | 106.7 | -    | -    |
| 90.0 35.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | -     | 5.3   | -    | -    |
| 90.0 60.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 0.0    | -    | 11.2  | -     | -    | -    |
| 90.0 70.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 144.8  | -    | 0.0   | -     | -    | -    |
| 90.0 80.0  | -                                   | 0.0  | -    | 0.0   | -   | -    | 40.9   | -    | 22.5  | -     | -    | -    |
| 90.0 90.0  | -                                   | 0.0  | -    | 28.9  | -   | -    | 808.5  | -    | 206.2 | -     | -    | -    |
| 90.0 100.0 | -                                   | 5.0  | -    | 9.7   | -   | -    | 130.4  | -    | 248.9 | -     | -    | -    |
| 90.0 110.0 | 9.5                                 | -    | -    | 122.5 | -   | -    | 711.5  | -    | 167.4 | -     | -    | -    |
| 90.0 120.0 | 9.9                                 | -    | -    | 5.1   | -   | -    | 1405.8 | -    | 83.8  | -     | -    | -    |
| 93.3 30.0  | 0.0                                 | -    | -    | 0.0   | -   | -    | 0.0    | -    | 4.0   | -     | -    | -    |
| 93.3 35.0  | 0.0                                 | -    | -    | 0.0   | -   | -    | 0.0    | -    | 45.5  | -     | -    | -    |
| 93.3 50.0  | 0.0                                 | -    | -    | 5.2   | -   | -    | 29.9   | -    | 0.0   | -     | -    | -    |

TABLE 4. (cont.)

|            |      | <i>Vinciguerria lucetia</i> (cont.) |      |       |     |      |        |      |       |      |      |      |  |
|------------|------|-------------------------------------|------|-------|-----|------|--------|------|-------|------|------|------|--|
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July   | Aug. | Sep.  | Oct. | Nov. | Dec. |  |
| 93.3 60.0  | 4.9  | -                                   | -    | 4.1   | -   | -    | 194.2  | -    | 0.0   | -    | -    | -    |  |
| 93.3 70.0  | 0.0  | -                                   | -    | 10.3  | -   | -    | 146.7  | -    | 18.7  | -    | -    | -    |  |
| 93.3 80.0  | 0.0  | -                                   | -    | 0.0   | -   | -    | 747.3  | -    | 79.7  | -    | -    | -    |  |
| 93.3 90.0  | 0.0  | -                                   | -    | 4.6   | -   | -    | 1376.2 | -    | 29.3  | -    | -    | -    |  |
| 93.3 100.0 | 20.8 | -                                   | -    | 54.8  | -   | -    | 467.5  | -    | 104.2 | -    | -    | -    |  |
| 93.3 110.0 | 10.0 | -                                   | -    | 77.7  | -   | -    | 1314.0 | -    | 249.4 | -    | -    | -    |  |
| 93.3 120.0 | 0.0  | -                                   | -    | 130.7 | -   | -    | 739.4  | -    | 147.6 | -    | -    | -    |  |
|            |      | <i>Vinciguerria poweriae</i>        |      |       |     |      |        |      |       |      |      |      |  |
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July   | Aug. | Sep.  | Oct. | Nov. | Dec. |  |
| 83.3 110.0 | -    | 0.0                                 | -    | 0.0   | -   | -    | 0.0    | -    | -     | 4.3  | -    | -    |  |
| 90.0 70.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 5.2    | -    | 0.0   | -    | -    | -    |  |
| 90.0 90.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 4.9    | -    | 5.0   | -    | -    | -    |  |
| 90.0 100.0 | -    | 10.0                                | -    | 9.7   | -   | -    | 4.8    | -    | 0.0   | -    | -    | -    |  |
| 90.0 110.0 | 9.5  | -                                   | -    | 9.4   | -   | -    | 9.7    | -    | 0.0   | -    | -    | -    |  |
| 90.0 120.0 | 0.0  | -                                   | -    | 0.0   | -   | -    | 34.1   | -    | 0.0   | -    | -    | -    |  |
| 93.3 100.0 | 0.0  | -                                   | -    | 27.4  | -   | -    | 14.3   | -    | 0.0   | -    | -    | -    |  |
| 93.3 110.0 | 5.0  | -                                   | -    | 9.1   | -   | -    | 4.9    | -    | 0.0   | -    | -    | -    |  |
| 93.3 120.0 | 0.0  | -                                   | -    | 14.5  | -   | -    | 14.2   | -    | 0.0   | -    | -    | -    |  |
|            |      | <i>Chauliodus macouni</i>           |      |       |     |      |        |      |       |      |      |      |  |
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July   | Aug. | Sep.  | Oct. | Nov. | Dec. |  |
| 76.7 55.0  | -    | -                                   | -    | 0.0   | -   | -    | 9.3    | -    | -     | 0.0  | -    | -    |  |
| 76.7 60.0  | -    | -                                   | -    | 0.0   | -   | -    | 0.0    | -    | -     | 9.2  | -    | -    |  |
| 76.7 70.0  | -    | 8.7                                 | -    | 0.0   | -   | -    | 4.7    | -    | -     | 0.0  | -    | -    |  |
| 76.7 80.0  | -    | 0.0                                 | -    | 5.3   | -   | -    | 0.0    | -    | -     | 0.0  | -    | -    |  |
| 76.7 90.0  | -    | 0.0                                 | -    | 10.4  | -   | -    | 0.0    | -    | -     | 0.0  | -    | -    |  |
| 80.0 70.0  | -    | 0.0                                 | -    | 4.8   | -   | -    | 0.0    | -    | -     | 19.9 | -    | -    |  |
| 80.0 80.0  | -    | 0.0                                 | -    | 5.3   | -   | -    | 0.0    | -    | -     | 0.0  | -    | -    |  |
| 80.0 90.0  | -    | 9.6                                 | -    | 0.0   | -   | -    | 5.0    | -    | -     | 4.6  | -    | -    |  |
| 83.3 60.0  | -    | 10.8                                | -    | 0.0   | -   | -    | 0.0    | -    | -     | 0.0  | -    | -    |  |
| 83.3 80.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 9.6    | -    | -     | 0.0  | -    | -    |  |
| 83.3 90.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 5.0    | -    | -     | 4.6  | -    | -    |  |



TABLE 4. (cont.)

| Station                            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|------------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Chaulioides macouni</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
| 83.3 100.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 86.7 39.5                          | -    | 4.9  | -    | 0.0  | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7 55.0                          | -    | 0.0  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                         | -    | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                          | -    | 0.0  | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 70.0                          | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0 90.0                          | -    | 0.0  | -    | 9.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                         | 4.8  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 20.9 | -    | 0.0  | -    | -    | -    |
| <i>Stomias atriventer</i>          |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 100.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                          | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                          | 0.0  | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 9.5  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                         | 19.9 | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Bathophilus flemingi</i>        |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 100.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |
| <i>Tactostoma macropus</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 100.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| <i>Aristostomias scintillans</i>   |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 90.0                          | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                         | -    | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                         | -    | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 100.0                         | -    | 5.0  | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                         | 4.8  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 100.0                         | 0.0  | -    | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

|         |       | <i>Aristostomias scintillans</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|---------|-------|--|------|------|-----|------|------|------|------|------|------|------|--|
| Station | Jan.  | Feb.                                     | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3    | 110.0 | 0.0                                      | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 120.0 | 9.7                                      | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Idiacanthus antrostomus</i>           |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                                     | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 51.0  | -  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.3  | -    | -    |  |
| 76.7    | 90.0  | 0.0                                      | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 100.0 | 0.0                                      | -    | 0.0  | -   | -    | 4.8  | -    | -    | 23.5 | -    | -    |  |
| 80.0    | 60.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.1 | -    | -    |  |
| 80.0    | 80.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.3 | -    | -    |  |
| 80.0    | 90.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 80.0    | 100.0 | 0.0                                      | -    | 0.0  | -   | -    | 10.1 | -    | -    | 4.7  | -    | -    |  |
| 83.3    | 55.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |  |
| 83.3    | 80.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 23.4 | -    | -    |  |
| 83.3    | 110.0 | 0.0                                      | -    | 0.0  | -   | -    | 14.2 | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 70.0  | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 14.4 | -    | -    |  |
| 86.7    | 80.0  | 5.4                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.8  | -    | -    |  |
| 86.7    | 100.0 | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7    | 110.0 | 0.0                                      | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 70.0  | 0.0                                      | -    | 0.0  | -   | -    | 31.0 | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 80.0  | 0.0                                      | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 90.0  | 0.0                                      | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 100.0 | 0.0                                      | -    | 0.0  | -   | -    | 38.6 | -    | 4.9  | -    | -    | -    |  |
| 90.0    | 110.0 | 0.0                                      | -    | 0.0  | -   | -    | 9.7  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 120.0 | 0.0                                      | -    | 0.0  | -   | -    | 55.4 | -    | 9.9  | -    | -    | -    |  |
| 93.3    | 70.0  | 0.0                                      | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 80.0  | 0.0                                      | -    | 0.0  | -   | -    | 28.4 | -    | 4.7  | -    | -    | -    |  |
| 93.3    | 100.0 | 0.0                                      | -    | 4.6  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 110.0 | 0.0                                      | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Benthalbella dentata</i>              |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                                     | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7    | 90.0  | 5.1                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |

TABLE 4. (cont.)

|                                     |      |      |      |      |     |      |      |      |      |      |      |      |
|-------------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Benthalbella dentata</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 110.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| <i>Rosenblattichthys volucris</i>   |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 100.0                          | -    | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                           | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 80.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                          | 4.8  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 120.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 93.3 80.0                           | 0.0  | -    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |
| <i>Scopelarchus analis</i>          |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 70.0                           | -    | 4.3  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 90.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0 120.0                          | 0.0  | -    | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 100.0                          | 5.2  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                          | 5.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                          | 4.9  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Scopelosaurus harryi</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 100.0                          | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 90.0 80.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                          | 0.0  | -    | -    | 4.7  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                          | 0.0  | -    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |
| Paralepididae                       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 93.3 120.0                          | 0.0  | -    | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Arctozenus risso</i>             |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 80.0                           | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0                           | -    | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |

TABLE 4. (cont.)

|            |      | <i>Arctozenus risso</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|---------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7 100.0 | -    | 0.0                             | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 93.3 100.0 | 5.2  | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Lestidiops ringens</i>       |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 60.0  | -    | -                               | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.2  | -    | -    |  |
| 76.7 80.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.8 | -    | -    |  |
| 76.7 100.0 | -    | 0.0                             | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |  |
| 83.3 100.0 | -    | 4.8                             | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |  |
| 83.3 110.0 | -    | 0.0                             | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 60.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7 70.0  | -    | 0.0                             | -    | 4.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7 110.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 60.0  | -    | 0.0                             | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0 70.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 31.0 | -    | 0.0  | -    | -    | -    |  |
| 90.0 80.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |  |
| 90.0 100.0 | -    | 5.0                             | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 45.0  | 0.0  | -                               | -    | 5.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 55.0  | -    | -                               | -    | 10.1 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 0.0  | -                               | -    | 4.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 0.0  | -                               | -    | 0.0  | -   | -    | 9.5  | -    | 0.0  | -    | -    | -    |  |
| 93.3 90.0  | 0.0  | -                               | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 15.6 | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0 | 4.9  | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Myctophidae</i>              |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 100.0 | -    | 0.0                             | -    | 14.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 80.0  | -    | 18.2                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 4.2                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |

TABLE 4. (cont.)

|            |      | Myctophidae (cont.)             |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|---------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7 45.0  | -    | 0.0                             | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 50.0  | -    | 0.0                             | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 55.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |  |
| 86.7 60.0  | -    | 0.0                             | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 70.0  | -    | 0.0                             | -    | 4.2  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 5.1                             | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 90.0 28.0  | -    | 0.0                             | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 37.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 60.0  | -    | 5.0                             | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0 90.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 90.0 100.0 | -    | 5.0                             | -    | 0.0  | -   | -    | 9.7  | -    | 4.9  | -    | -    | -    |  |
| 93.3 55.0  | -    | -                               | -    | 5.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 0.0  | -                               | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |  |
| 93.3 110.0 | 0.0  | -                               | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Ceratoscopelus townsendi</i> |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 90.0  | -    | 0.0                             | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7 100.0 | -    | 0.0                             | -    | 4.9  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 45.5 | -    | -    | 0.0  | -    | -    |  |
| 83.3 80.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 9.6  | -    | -    | 14.0 | -    | -    |  |
| 83.3 90.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 4.6  | -    | -    |  |
| 83.3 100.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 18.8 | -    | -    | 4.2  | -    | -    |  |
| 83.3 110.0 | -    | 0.0                             | -    | 0.0  | -   | -    | 28.3 | -    | -    | 4.3  | -    | -    |  |
| 86.7 60.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7 70.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 24.0 | -    | -    |  |
| 86.7 80.0  | -    | 5.4                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 15.3                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                             | -    | 4.5  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 110.0 | -    | 15.1                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 90.0 70.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 10.3 | -    | 0.0  | -    | -    | -    |  |
| 90.0 90.0  | -    | 0.0                             | -    | 0.0  | -   | -    | 24.5 | -    | 0.0  | -    | -    | -    |  |

TABLE 4. (cont.)

| <i>Ceratoscopelus townsendi</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|---|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                                 | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 100.0                              | -    | 10.0 | -    | 14.6 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                              | 9.5  | -    | -    | 0.0  | -   | -    | 24.2 | -    | 5.2  | -    | -    | -    |
| 90.0 120.0                              | 5.0  | -    | -    | 0.0  | -   | -    | 34.1 | -    | 9.9  | -    | -    | -    |
| 93.3 35.0                               | 4.9  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.1  | -    | -    | -    |
| 93.3 60.0                               | 4.9  | -    | -    | 0.0  | -   | -    | 61.3 | -    | 0.0  | -    | -    | -    |
| 93.3 70.0                               | 0.0  | -    | -    | 5.1  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 90.0                               | 0.0  | -    | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 93.3 100.0                              | 0.0  | -    | -    | 41.1 | -   | -    | 4.8  | -    | 14.9 | -    | -    | -    |
| 93.3 110.0                              | 10.0 | -    | -    | 36.6 | -   | -    | 64.2 | -    | 5.1  | -    | -    | -    |
| 93.3 120.0                              | 9.7  | -    | -    | 29.0 | -   | -    | 9.5  | -    | 0.0  | -    | -    | -    |
| <i>Diaphus</i> spp.                     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                 | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0                               | -    | -    | -    | 0.0  | -   | -    | 18.5 | -    | -    | 0.0  | -    | -    |
| 76.7 70.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 9.6  | -    | -    | 21.6 | -    | -    |
| 76.7 90.0                               | -    | 0.0  | -    | 10.4 | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 5.8  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0                              | -    | 0.0  | -    | 0.0  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |
| 83.3 80.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 83.3 90.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0                              | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 86.7 80.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 90.0 80.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                              | 0.0  | -    | -    | 0.0  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                               | 0.0  | -    | -    | 4.1  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 93.3 70.0                               | 0.0  | -    | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                              | 0.0  | -    | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| Station                   | Jan. | Feb. | Mar. | Apr. | <i>Diaphus</i> spp. (cont.) |      |      | Aug. | Sep. | Oct. | Nov. | Dec. |
|---------------------------|------|------|------|------|-----------------------------|------|------|------|------|------|------|------|
|                           |      |      |      |      | May                         | June | July |      |      |      |      |      |
| 93.3 120.0                | 0.0  | -    | -    | 0.0  | -                           | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| Station                   | Jan. | Feb. | Mar. | Apr. | May                         | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 90.0                 | -    | 0.0  | -    | 0.0  | -                           | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 90.0 90.0                 | -    | 0.0  | -    | 0.0  | -                           | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0 110.0                | 0.0  | -    | -    | 0.0  | -                           | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                | 0.0  | -    | -    | 0.0  | -                           | -    | 4.7  | -    | 4.9  | -    | -    | -    |
| Station                   | Jan. | Feb. | Mar. | Apr. | May                         | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| <i>Lampadena urophaos</i> |      |      |      |      |                             |      |      |      |      |      |      |      |
| Station                   | Jan. | Feb. | Mar. | Apr. | May                         | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0                 | -    | -    | -    | 5.3  | -                           | -    | 9.3  | -    | -    | 0.0  | -    | -    |
| 76.7 60.0                 | -    | -    | -    | 4.8  | -                           | -    | 11.1 | -    | -    | 0.0  | -    | -    |
| 76.7 70.0                 | -    | 0.0  | -    | 10.3 | -                           | -    | 14.1 | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                 | -    | 9.5  | -    | 10.6 | -                           | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0                 | -    | 0.0  | -    | 10.4 | -                           | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 100.0                | -    | 4.7  | -    | 4.9  | -                           | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                 | -    | 4.7  | -    | 0.0  | -                           | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                 | -    | 0.0  | -    | 5.5  | -                           | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 70.0                 | -    | 0.0  | -    | 4.8  | -                           | -    | 9.7  | -    | -    | 10.0 | -    | -    |
| 80.0 80.0                 | -    | 9.1  | -    | 0.0  | -                           | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                 | -    | 4.8  | -    | 0.0  | -                           | -    | 9.9  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0                | -    | 0.0  | -    | 0.0  | -                           | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 81.8 46.9                 | -    | 0.0  | -    | 0.0  | -                           | -    | 11.1 | -    | -    | 0.0  | -    | -    |
| 83.3 55.0                 | -    | 0.0  | -    | 5.0  | -                           | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| 83.3 60.0                 | -    | 10.8 | -    | 8.7  | -                           | -    | 14.8 | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                 | -    | 9.5  | -    | 0.0  | -                           | -    | 5.2  | -    | -    | -    | -    | -    |
| 83.3 80.0                 | -    | 10.6 | -    | 0.0  | -                           | -    | 28.9 | -    | -    | 4.7  | -    | -    |
| 83.3 90.0                 | -    | 5.1  | -    | 0.0  | -                           | -    | 9.9  | -    | -    | 4.6  | -    | -    |
| 83.3 100.0                | -    | 0.0  | -    | 5.0  | -                           | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                | -    | 4.3  | -    | 9.9  | -                           | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0                 | -    | 0.0  | -    | 4.8  | -                           | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 40.0                 | -    | -    | -    | -    | -                           | -    | 10.5 | -    | -    | 0.0  | -    | -    |
| Station                   | Jan. | Feb. | Mar. | Apr. | May                         | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| <i>Lamparactus</i> spp.   |      |      |      |      |                             |      |      |      |      |      |      |      |
| Station                   | Jan. | Feb. | Mar. | Apr. | May                         | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |

TABLE 4. (cont.)

| Station    | <i>Lampanyctus</i> spp. (cont.) |      |      |      |     |      |      |      |      |      |      |      |
|------------|---------------------------------|------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.                            | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 45.0  | -                               | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -                               | 0.0  | -    | 36.8 | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -                               | 0.0  | -    | 0.0  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0  | -                               | 16.1 | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0  | -                               | 15.3 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -                               | 18.3 | -    | 4.5  | -   | -    | 19.9 | -    | -    | 4.9  | -    | -    |
| 86.7 110.0 | -                               | 5.0  | -    | 5.2  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -                               | 9.9  | -    | 4.8  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -                               | 5.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -                               | 5.0  | -    | 4.8  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -                               | 5.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 70.0  | -                               | 0.0  | -    | 0.0  | -   | -    | 5.2  | -    | -    | 0.0  | -    | -    |
| 90.0 80.0  | -                               | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | -    | 0.0  | -    | -    |
| 90.0 90.0  | -                               | 0.0  | -    | 19.2 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 100.0 | -                               | 0.0  | -    | 4.9  | -   | -    | 14.5 | -    | -    | 0.0  | -    | -    |
| 90.0 110.0 | 0.0                             | -    | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 90.0 120.0 | 5.0                             | -    | -    | 5.1  | -   | -    | 8.5  | -    | -    | 0.0  | -    | -    |
| 92.8 54.1  | 20.6                            | -    | -    | -    | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3 30.0  | 5.0                             | -    | -    | 13.0 | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 93.3 35.0  | 0.0                             | -    | -    | 0.0  | -   | -    | 9.9  | -    | -    | 0.0  | -    | -    |
| 93.3 40.0  | 0.0                             | -    | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3 45.0  | 0.0                             | -    | -    | 0.0  | -   | -    | 21.8 | -    | -    | 0.0  | -    | -    |
| 93.3 50.0  | 0.0                             | -    | -    | 15.5 | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 93.3 55.0  | -                               | -    | -    | 0.0  | -   | -    | 20.7 | -    | -    | 0.0  | -    | -    |
| 93.3 60.0  | 14.8                            | -    | -    | 4.1  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 93.3 70.0  | 5.1                             | -    | -    | 41.1 | -   | -    | 35.4 | -    | -    | 0.0  | -    | -    |
| 93.3 80.0  | 15.1                            | -    | -    | 10.3 | -   | -    | 9.5  | -    | -    | 0.0  | -    | -    |
| 93.3 90.0  | 0.0                             | -    | -    | 13.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3 100.0 | 0.0                             | -    | -    | 4.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3 110.0 | 10.0                            | -    | -    | 27.4 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |



TABLE 4. (cont.)

|                                   |      | <i>Lampanyctus</i> spp. (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|-----------------------------------|------|---------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station                           | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3 120.0                        | 4.9  | -                               | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| <i>Lampanyctus "niger"</i>        |      |                                 |      |      |     |      |      |      |      |      |      |      |  |
| Station                           | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0 110.0                        | 4.8  | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 110.0                        | 0.0  | -                               | -    | 18.3 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0                        | 4.9  | -                               | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| <i>Lampanyctus "no pectorals"</i> |      |                                 |      |      |     |      |      |      |      |      |      |      |  |
| Station                           | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0 100.0                        | -    | 0.0                             | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 93.3 80.0                         | 0.0  | -                               | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0                        | 0.0  | -                               | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| <i>Lampanyctus regalis</i>        |      |                                 |      |      |     |      |      |      |      |      |      |      |  |
| Station                           | Jan. | Feb.                            | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 70.0                         | -    | 0.0                             | -    | 10.3 | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 76.7 80.0                         | -    | 0.0                             | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7 100.0                        | -    | 0.0                             | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 60.0                         | -    | 0.0                             | -    | 11.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 80.0                         | -    | 0.0                             | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 81.8 46.9                         | -    | 0.0                             | -    | 0.0  | -   | -    | 11.1 | -    | -    | 0.0  | -    | -    |  |
| 83.3 60.0                         | -    | 0.0                             | -    | 13.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 70.0                         | -    | 0.0                             | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 90.0                         | -    | 0.0                             | -    | 0.0  | -   | -    | 19.8 | -    | -    | 0.0  | -    | -    |  |
| 86.7 55.0                         | -    | 0.0                             | -    | 4.1  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0                         | -    | 0.0                             | -    | 4.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 100.0                        | -    | 0.0                             | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 110.0                        | -    | 0.0                             | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 28.0                         | -    | 0.0                             | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 90.0 53.0                         | -    | 0.0                             | -    | 0.0  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |  |
| 93.3 40.0                         | 0.0  | -                               | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |  |
| 93.3 70.0                         | 0.0  | -                               | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0                         | 0.0  | -                               | -    | 10.3 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |

TABLE 4. (cont.)

| Station    | <i>Lampanyctus ritteri</i> |      |      |      |     |      |      |      |      |      |      |      |
|------------|----------------------------|------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.                       | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0  | -                          | -    | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 60.0  | -                          | -    | -    | 9.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 70.0  | -                          | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0  | -                          | 0.0  | -    | 10.6 | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0  | -                          | 8.4  | -    | 26.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 100.0 | -                          | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0  | -                          | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0  | -                          | 0.0  | -    | 5.5  | -   | -    | 11.7 | -    | -    | 0.0  | -    | -    |
| 80.0 70.0  | -                          | 4.6  | -    | 33.5 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0  | -                          | 9.1  | -    | 31.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0  | -                          | 0.0  | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0 | -                          | 4.2  | -    | 0.0  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |
| 83.3 70.0  | -                          | 0.0  | -    | 10.0 | -   | -    | 5.2  | -    | -    | -    | -    | -    |
| 83.3 80.0  | -                          | 0.0  | -    | 0.0  | -   | -    | 9.6  | -    | -    | 0.0  | -    | -    |
| 83.3 90.0  | -                          | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0 | -                          | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0 | -                          | 0.0  | -    | 19.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0  | -                          | 10.0 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -                          | 0.0  | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0  | -                          | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -                          | 0.0  | -    | 4.2  | -   | -    | 4.9  | -    | -    | 4.8  | -    | -    |
| 86.7 80.0  | -                          | 37.7 | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0  | -                          | 15.3 | -    | 9.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -                          | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 86.7 110.0 | -                          | 0.0  | -    | 15.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -                          | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -                          | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -                          | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -                          | 5.0  | -    | 23.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -                          | 5.0  | -    | 19.5 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
|            |                            |      |      |      |     |      |      |      |      |      |      | 0.0  |

TABLE 4. (cont.)

| <i>Lampanyctus ritteri</i> (cont.) |       |      |      |      |     |      |      |      |      |      |      |      |
|------------------------------------|-------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                            | Jan.  | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0                               | 70.0  | 0.0  | -    | 4.7  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0                               | 80.0  | 0.0  | -    | 19.5 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0                               | 90.0  | 0.0  | -    | 28.9 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 92.8                               | 54.1  | -    | -    | -    | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3                               | 28.0  | 0.0  | -    | 4.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 35.0  | 4.9  | -    | 4.9  | -   | -    | 0.0  | -    | 9.1  | -    | -    | -    |
| 93.3                               | 40.0  | 5.2  | -    | 4.9  | -   | -    | 0.0  | -    | 19.2 | -    | -    | -    |
| 93.3                               | 45.0  | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 50.0  | 5.2  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 60.0  | 0.0  | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 70.0  | 10.3 | -    | 15.4 | -   | -    | 15.2 | -    | 0.0  | -    | -    | -    |
| 93.3                               | 80.0  | 0.0  | -    | 25.7 | -   | -    | 4.7  | -    | 4.7  | -    | -    | -    |
| 93.3                               | 90.0  | 0.0  | -    | 4.6  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 93.3                               | 100.0 | 20.8 | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 110.0 | 39.8 | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 120.0 | 0.0  | -    | 9.7  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Notolychnus valdiviae</i>       |       |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan.  | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7                               | 100.0 | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                               | 90.0  | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0                               | 110.0 | 14.3 | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0                               | 120.0 | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 70.0  | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 110.0 | 0.0  | -    | 18.3 | -   | -    | 14.8 | -    | 0.0  | -    | -    | -    |
| 93.3                               | 120.0 | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 9.8  | -    | -    | -    |
| <i>Notoscoelus resplendens</i>     |       |      |      |      |     |      |      |      |      |      |      |      |
| Station                            | Jan.  | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7                               | 90.0  | 5.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                               | 110.0 | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0                               | 120.0 | 5.0  | -    | 5.1  | -   | -    | 4.3  | -    | 0.0  | -    | -    | -    |
| 93.3                               | 100.0 | 0.0  | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| <i>Notoscopelus resplendens</i> (cont.) |       |       |      |       |     |      |      |      |      |      |      |      |
|---|-------|-------|------|-------|-----|------|------|------|------|------|------|------|
| Station                                 | Jan.  | Feb.  | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 93.3                                    | 110.0 | -     | -    | 0.0   | -   | -    | 9.9  | -    | 0.0  | -    | -    | -    |
| 93.3                                    | 120.0 | -     | -    | 0.0   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Parvilux ingens</i>                  |       |       |      |       |     |      |      |      |      |      |      |      |
| Station                                 | Jan.  | Feb.  | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7                                    | 100.0 | 0.0   | -    | 4.9   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                                    | 110.0 | 0.0   | -    | 0.0   | -   | -    | 9.7  | -    | 0.0  | -    | -    | -    |
| <i>Stenobranchius leucopsarus</i>       |       |       |      |       |     |      |      |      |      |      |      |      |
| Station                                 | Jan.  | Feb.  | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7                                    | 49.0  | -     | -    | 46.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 51.0  | -     | -    | 175.4 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 55.0  | -     | -    | 142.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 60.0  | -     | -    | 43.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 70.0  | 65.1  | -    | 5.2   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 80.0  | 42.7  | -    | 159.3 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 90.0  | 71.7  | -    | 104.4 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                                    | 100.0 | 23.3  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 51.0  | 0.0   | -    | 3.9   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 55.0  | 93.2  | -    | 90.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 60.0  | 185.8 | -    | 27.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 70.0  | 82.8  | -    | 9.6   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 80.0  | 163.6 | -    | 26.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 90.0  | 0.0   | -    | 5.2   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                                    | 100.0 | 12.5  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8                                    | 46.9  | 108.8 | -    | 93.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                    | 42.0  | 45.1  | -    | 26.5  | -   | -    | 18.8 | -    | -    | 0.0  | -    | -    |
| 83.3                                    | 51.0  | 0.0   | -    | 53.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                    | 55.0  | 0.0   | -    | 163.3 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                    | 60.0  | 248.6 | -    | 69.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                    | 70.0  | 38.0  | -    | 15.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3                                    | 80.0  | 5.3   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station    | <i>Stenobrachius leucopsarus</i> (cont.) |       |      |       |     |      |      |      |      |      |      |      |
|------------|--|-------|------|-------|-----|------|------|------|------|------|------|------|
|            | Jan.                                     | Feb.  | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 90.0  | -  | 10.3  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0 | -  | 24.3  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0 | -  | 178.3 | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 33.0  | -  | 14.2  | -    | 4.5   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0  | -  | 62.4  | -    | 33.6  | -   | -    | 19.3 | -    | -    | 0.0  | -    | -    |
| 86.7 39.5  | -  | 29.3  | -    | 99.4  | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7 45.0  | -  | 95.0  | -    | 0.0   | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0  | -  | 33.6  | -    | 31.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -  | 11.0  | -    | 106.3 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0  | -  | 0.0   | -    | 43.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -  | 4.2   | -    | 16.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0  | -  | 10.8  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 90.0  | -  | 10.2  | -    | 18.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -  | 36.6  | -    | 8.9   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0 | -  | 5.0   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -  | 54.7  | -    | 34.4  | -   | -    | 10.3 | -    | -    | 0.0  | -    | -    |
| 90.0 30.0  | -  | 15.1  | -    | 5.1   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 35.0  | -  | 95.7  | -    | 43.3  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -  | 9.9   | -    | 14.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -  | 35.0  | -    | 14.4  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -  | 19.8  | -    | 14.3  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -  | 15.0  | -    | 4.9   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 70.0  | -  | 0.0   | -    | 0.0   | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0 80.0  | -  | 4.8   | -    | 9.8   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0  | -  | 5.1   | -    | 0.0   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0 | -  | 0.0   | -    | 0.0   | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 92.8 54.1  | 10.3                                     | -     | -    | -     | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3 28.0  | 51.2                                     | -     | -    | 4.0   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 30.0  | 5.0                                      | -     | -    | 0.0   | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 35.0  | 48.9                                     | -     | -    | 0.0   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

|            |      | <i>Stenobrachius leucopsarus</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|--|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                                     | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3 40.0  | 25.8 | -  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 45.0  | 5.0  | -  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 50.0  | 36.1 | -  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 55.0  | -    | -  | -    | 5.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 9.9  | -  | -    | 8.2  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 70.0  | 10.3 | -  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 5.0  | -  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Triphoturus mexicanus</i>             |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                     | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 51.0  | -    | -  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.3  | -    | -    |  |
| 76.7 55.0  | -    | -  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |  |
| 76.7 70.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 76.7 100.0 | -    | 0.0                                      | -    | 0.0  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |  |
| 80.0 60.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 5.8  | -    | -    | 0.0  | -    | -    |  |
| 80.0 80.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 5.0  | -    | -    | 5.1  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                                      | -    | 4.8  | -   | -    | 25.3 | -    | -    | 4.7  | -    | -    |  |
| 83.3 51.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |  |
| 83.3 60.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 9.8  | -    | -    | 0.0  | -    | -    |  |
| 83.3 80.0  | -    | 0.0                                      | -    | 4.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 90.0  | -    | 0.0                                      | -    | 15.9 | -   | -    | 39.7 | -    | -    | 27.5 | -    | -    |  |
| 83.3 100.0 | -    | 0.0                                      | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |  |
| 83.3 110.0 | -    | 0.0                                      | -    | 5.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7 35.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.5 | -    | -    |  |
| 86.7 39.5  | -    | 0.0                                      | -    | 5.0  | -   | -    | -    | -    | -    | -    | -    | -    |  |
| 86.7 40.0  | -    | -  | -    | -    | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 86.7 45.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 60.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 39.0 | -    | -    | 0.0  | -    | -    |  |
| 86.7 70.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 14.6 | -    | -    | 0.0  | -    | -    |  |
| 86.7 80.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7 90.0  | -    | 0.0                                      | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                                      | -    | 0.0  | -   | -    | 24.8 | -    | -    | 9.8  | -    | -    |  |

TABLE 4. (cont.)

| Station    | <i>Triphoturus mexicanus</i> (cont.) |      |      |      |     |      |                                 |      |      |      |      |      |  |
|------------|--------------------------------------|------|------|------|-----|------|---------------------------------|------|------|------|------|------|--|
|            | Jan.                                 | Feb. | Mar. | Apr. | May | June | July                            | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7 110.0 | -                                    | 0.0  | -    | 0.0  | -   | -    | 19.8                            | -    | -    | 0.0  | -    | -    |  |
| 90.0 28.0  | -                                    | 0.0  | -    | 0.0  | -   | -    | 20.6                            | -    | -    | 4.9  | -    | -    |  |
| 90.0 30.0  | -                                    | 0.0  | -    | 0.0  | -   | -    | 10.4                            | -    | -    | 0.0  | -    | -    |  |
| 90.0 35.0  | -                                    | 0.0  | -    | 0.0  | -   | -    | 0.0                             | -    | -    | 5.3  | -    | -    |  |
| 90.0 37.0  | -                                    | 0.0  | -    | 0.0  | -   | -    | 15.0                            | -    | -    | 0.0  | -    | -    |  |
| 90.0 45.0  | -                                    | 0.0  | -    | 4.8  | -   | -    | 0.0                             | -    | -    | -    | -    | -    |  |
| 90.0 60.0  | -                                    | 0.0  | -    | 4.9  | -   | -    | 0.0                             | -    | 0.0  | -    | -    | -    |  |
| 90.0 70.0  | -                                    | 0.0  | -    | 0.0  | -   | -    | 41.4                            | -    | 0.0  | -    | -    | -    |  |
| 90.0 80.0  | -                                    | 0.0  | -    | 4.9  | -   | -    | 0.0                             | -    | 5.6  | -    | -    | -    |  |
| 90.0 100.0 | -                                    | 0.0  | -    | 4.9  | -   | -    | 9.7                             | -    | 9.8  | -    | -    | -    |  |
| 90.0 110.0 | 0.0                                  | -    | -    | 0.0  | -   | -    | 29.0                            | -    | 26.2 | -    | -    | -    |  |
| 90.0 120.0 | 0.0                                  | -    | -    | 5.1  | -   | -    | 0.0                             | -    | 4.9  | -    | -    | -    |  |
| 93.3 28.0  | 0.0                                  | -    | -    | 4.0  | -   | -    | 4.8                             | -    | 0.0  | -    | -    | -    |  |
| 93.3 30.0  | 0.0                                  | -    | -    | 0.0  | -   | -    | 15.3                            | -    | 19.8 | -    | -    | -    |  |
| 93.3 35.0  | 0.0                                  | -    | -    | 14.8 | -   | -    | 9.9                             | -    | 0.0  | -    | -    | -    |  |
| 93.3 40.0  | 0.0                                  | -    | -    | 4.9  | -   | -    | 10.4                            | -    | 38.3 | -    | -    | -    |  |
| 93.3 45.0  | 0.0                                  | -    | -    | 0.0  | -   | -    | 0.0                             | -    | 9.5  | -    | -    | -    |  |
| 93.3 50.0  | 0.0                                  | -    | -    | 5.2  | -   | -    | 0.0                             | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 0.0                                  | -    | -    | 0.0  | -   | -    | 20.4                            | -    | 0.0  | -    | -    | -    |  |
| 93.3 70.0  | 0.0                                  | -    | -    | 5.1  | -   | -    | 55.7                            | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 0.0                                  | -    | -    | 0.0  | -   | -    | 66.2                            | -    | 0.0  | -    | -    | -    |  |
| 93.3 90.0  | 0.0                                  | -    | -    | 4.6  | -   | -    | 87.8                            | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 0.0                                  | -    | -    | 0.0  | -   | -    | 9.5                             | -    | 9.9  | -    | -    | -    |  |
| 93.3 110.0 | 0.0                                  | -    | -    | 4.6  | -   | -    | 9.9                             | -    | 5.1  | -    | -    | -    |  |
| 93.3 120.0 | 0.0                                  | -    | -    | 9.7  | -   | -    | 4.7                             | -    | 0.0  | -    | -    | -    |  |
|            |                                      |      |      |      |     |      | <i>Diogenichthys atlanticus</i> |      |      |      |      |      |  |
| Station    | Jan.                                 | Feb. | Mar. | Apr. | May | June | July                            | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 60.0  | -                                    | -    | -    | 0.0  | -   | -    | 0.0                             | -    | -    | 18.5 | -    | -    |  |
| 76.7 80.0  | -                                    | 4.7  | -    | 0.0  | -   | -    | 14.4                            | -    | -    | 0.0  | -    | -    |  |
| 76.7 90.0  | -                                    | 0.0  | -    | 5.2  | -   | -    | 24.4                            | -    | -    | 4.8  | -    | -    |  |
| 76.7 100.0 | -                                    | 0.0  | -    | 19.6 | -   | -    | 0.0                             | -    | -    | 4.7  | -    | -    |  |

TABLE 4. (cont.)

| Station    | <i>Diogenichthys atlanticus</i> (cont.) |      |      |      |     |      |      |      |      |      |      |      |
|------------|---|------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.                                    | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 70.0  | -                                       | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 15.4 | -    | -    |
| 80.0 90.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 37.1 | -    | -    |
| 80.0 100.0 | -                                       | 8.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.3  | -    | -    |
| 83.3 80.0  | -                                       | 0.0  | -    | 4.7  | -   | -    | 0.0  | -    | -    | 18.7 | -    | -    |
| 83.3 100.0 | -                                       | 0.0  | -    | 5.0  | -   | -    | 14.1 | -    | -    | 0.0  | -    | -    |
| 83.3 110.0 | -                                       | 4.3  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 24.0 | -    | -    |
| 86.7 80.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.8  | -    | -    |
| 86.7 90.0  | -                                       | 15.3 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |
| 86.7 100.0 | -                                       | 0.0  | -    | 13.4 | -   | -    | 14.9 | -    | -    | 9.8  | -    | -    |
| 86.7 110.0 | -                                       | 0.0  | -    | 10.5 | -   | -    | 0.0  | -    | -    | 18.6 | -    | -    |
| 90.0 70.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 25.9 | -    | 0.0  | -    | -    | -    |
| 90.0 80.0  | -                                       | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0  | -                                       | 5.1  | -    | 4.8  | -   | -    | 14.7 | -    | 35.2 | -    | -    | -    |
| 90.0 100.0 | -                                       | 19.9 | -    | 9.7  | -   | -    | 0.0  | -    | 19.5 | -    | -    | -    |
| 90.0 110.0 | 9.5                                     | -    | -    | 18.8 | -   | -    | 9.7  | -    | 5.2  | -    | -    | -    |
| 90.0 120.0 | 0.0                                     | -    | -    | 15.4 | -   | -    | 46.9 | -    | 14.8 | -    | -    | -    |
| 93.3 35.0  | 0.0                                     | -    | -    | 9.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0  | 0.0                                     | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 45.0  | 5.0                                     | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 50.0  | 0.0                                     | -    | -    | 5.2  | -   | -    | 5.0  | -    | 0.0  | -    | -    | -    |
| 93.3 60.0  | 4.9                                     | -    | -    | 4.1  | -   | -    | 10.2 | -    | 0.0  | -    | -    | -    |
| 93.3 70.0  | 10.3                                    | -    | -    | 0.0  | -   | -    | 10.1 | -    | 0.0  | -    | -    | -    |
| 93.3 80.0  | 0.0                                     | -    | -    | 0.0  | -   | -    | 9.5  | -    | 14.1 | -    | -    | -    |
| 93.3 90.0  | 10.4                                    | -    | -    | 4.6  | -   | -    | 9.8  | -    | 9.8  | -    | -    | -    |
| 93.3 100.0 | 31.1                                    | -    | -    | 0.0  | -   | -    | 9.5  | -    | 5.0  | -    | -    | -    |
| 93.3 110.0 | 0.0                                     | -    | -    | 0.0  | -   | -    | 14.8 | -    | 15.3 | -    | -    | -    |
| 93.3 120.0 | 9.7                                     | -    | -    | 0.0  | -   | -    | 14.2 | -    | 9.8  | -    | -    | -    |



TABLE 4. (cont.)

|            |      | <i>Electrona risso</i>      |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|-----------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 100.0 | -    | 0.0                         | -    | 9.8  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |  |
| 80.0 90.0  | -    | 0.0                         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 83.3 80.0  | -    | 0.0                         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |  |
| 83.3 100.0 | -    | 0.0                         | -    | 10.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 45.0  | -    | 0.0                         | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |  |
| 90.0 80.0  | -    | 0.0                         | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |  |
| 90.0 90.0  | -    | 5.1                         | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 5.0  | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 0.0  | -                           | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0 | 0.0  | -                           | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Hygophum reinhardtii</i> |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0 100.0 | -    | 0.0                         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |  |
| 86.7 90.0  | -    | 5.1                         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                         | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 100.0 | -    | 0.0                         | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 90.0 120.0 | 5.0  | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 90.0  | 0.0  | -                           | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 0.0  | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |  |
| 93.3 110.0 | 0.0  | -                           | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0 | 19.5 | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Loweina rara</i>         |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0 70.0  | -    | 0.0                         | -    | 0.0  | -   | -    | 5.2  | -    | 0.0  | -    | -    | -    |  |
| 93.3 50.0  | 0.0  | -                           | -    | 5.2  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Myctophum nitidulum</i>  |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0 100.0 | -    | 0.0                         | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 90.0 120.0 | 5.0  | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 100.0 | 5.2  | -                           | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 110.0 | 5.0  | -                           | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |

TABLE 4. (cont.)

|                                    |       | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|------------------------------------|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Myctophum nitidulum</i> (cont.) |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 93.3                               | 120.0 | 0.0  | -    | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Protomyctophum crockeri</i>     |       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                            |       |      |      |      |      |     |      |      |      |      |      |      |      |
| 76.7                               | 55.0  | -    | -    | -    | 10.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                               | 60.0  | -    | -    | -    | 4.8  | -   | -    | 0.0  | -    | -    | 9.2  | -    | -    |
| 76.7                               | 70.0  | -    | 17.4 | -    | 5.2  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |
| 76.7                               | 80.0  | -    | 0.0  | -    | 5.3  | -   | -    | 0.0  | -    | -    | 21.6 | -    | -    |
| 76.7                               | 90.0  | -    | 4.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                               | 100.0 | -    | 0.0  | -    | 4.9  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 80.0                               | 51.0  | -    | 0.0  | -    | 3.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                               | 55.0  | -    | 4.7  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                               | 60.0  | -    | 0.0  | -    | 11.1 | -   | -    | 0.0  | -    | -    | 10.1 | -    | -    |
| 80.0                               | 70.0  | -    | 4.6  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 10.0 | -    | -    |
| 80.0                               | 80.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 5.1  | -    | -    |
| 80.0                               | 90.0  | -    | 4.8  | -    | 10.3 | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 80.0                               | 100.0 | -    | 0.0  | -    | 9.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                               | 55.0  | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                               | 60.0  | -    | 0.0  | -    | 4.3  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 83.3                               | 70.0  | -    | 9.5  | -    | 10.0 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3                               | 80.0  | -    | 5.3  | -    | 0.0  | -   | -    | 9.6  | -    | -    | 0.0  | -    | -    |
| 83.3                               | 90.0  | -    | 5.1  | -    | 5.3  | -   | -    | 5.0  | -    | -    | 4.6  | -    | -    |
| 83.3                               | 100.0 | -    | 0.0  | -    | 10.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                               | 110.0 | -    | 21.8 | -    | 14.9 | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |
| 86.7                               | 39.5  | -    | 4.9  | -    | 0.0  | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7                               | 40.0  | -    | -    | -    | -    | -   | -    | 10.5 | -    | -    | 0.0  | -    | -    |
| 86.7                               | 45.0  | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7                               | 55.0  | -    | 11.0 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7                               | 60.0  | -    | 43.4 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 17.4 | -    | -    |
| 86.7                               | 70.0  | -    | 16.8 | -    | 4.2  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |
| 86.7                               | 80.0  | -    | 0.0  | -    | 9.8  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 86.7                               | 90.0  | -    | 15.3 | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station                             | <i>Protomyctophum crockeri</i> (cont.) |      |      |      |     |      |      |      |      |      |      |      |
|-------------------------------------|--|------|------|------|-----|------|------|------|------|------|------|------|
|                                     | Jan.                                   | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 100.0                          | -                                      | 9.2  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 86.7 110.0                          | -                                      | 10.1 | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0                           | -                                      | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                           | -                                      | 5.0  | -    | 0.0  | -   | -    | 20.8 | -    | -    | 0.0  | -    | -    |
| 90.0 35.0                           | -                                      | 0.0  | -    | 0.0  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0 37.0                           | -                                      | 4.9  | -    | 9.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0                           | -                                      | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 60.0                           | -                                      | 20.0 | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 70.0                           | -                                      | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 90.0 80.0                           | -                                      | 0.0  | -    | 9.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0                           | -                                      | 0.0  | -    | 14.4 | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0                          | -                                      | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 90.0 110.0                          | 0.0                                    | -    | -    | 9.4  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| 90.0 120.0                          | 19.8                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 30.0                           | 10.0                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 35.0                           | 4.9                                    | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0                           | 0.0                                    | -    | -    | 14.8 | -   | -    | 10.4 | -    | 9.6  | -    | -    | -    |
| 93.3 45.0                           | 5.0                                    | -    | -    | 0.0  | -   | -    | 10.9 | -    | 0.0  | -    | -    | -    |
| 93.3 50.0                           | 10.3                                   | -    | -    | 5.2  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 55.0                           | -                                      | -    | -    | 5.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                           | 29.6                                   | -    | -    | 4.1  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 70.0                           | 10.3                                   | -    | -    | 5.1  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                           | 20.1                                   | -    | -    | 5.1  | -   | -    | 9.5  | -    | 4.7  | -    | -    | -    |
| 93.3 90.0                           | 10.4                                   | -    | -    | 9.2  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 93.3 100.0                          | 10.4                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                          | 14.9                                   | -    | -    | 4.6  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                          | 9.7                                    | -    | -    | 0.0  | -   | -    | 4.7  | -    | 4.9  | -    | -    | -    |
| <i>Symbolophorus californiensis</i> |  |      |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan.                                   | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 70.0                           | -                                      | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                           | -                                      | 0.0  | -    | 0.0  | -   | -    | 9.6  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station    | <i>Symbolophorus californiensis</i> (cont.) |      |      |      |     |      |      |      |      |      |      |      |
|------------|---|------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.  | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 90.0  | -   | 0.0  | -    | 0.0  | -   | -    | 14.6 | -    | -    | 0.0  | -    | -    |
| 76.7 100.0 | -   | 0.0  | -    | 24.5 | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0  | -   | 0.0  | -    | 0.0  | -   | -    | 5.8  | -    | -    | 0.0  | -    | -    |
| 80.0 70.0  | -   | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0  | -   | 0.0  | -    | 0.0  | -   | -    | 25.0 | -    | -    | 5.1  | -    | -    |
| 80.0 100.0 | -   | 0.0  | -    | 0.0  | -   | -    | 55.7 | -    | -    | 0.0  | -    | -    |
| 83.3 55.0  | -   | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| 83.3 60.0  | -   | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 83.3 90.0  | -   | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 83.3 100.0 | -   | 4.8  | -    | 5.0  | -   | -    | 14.1 | -    | -    | 4.2  | -    | -    |
| 83.3 110.0 | -   | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0  | -   | 0.0  | -    | 0.0  | -   | -    | 14.6 | -    | -    | 0.0  | -    | -    |
| 86.7 70.0  | -   | 0.0  | -    | 12.6 | -   | -    | 9.7  | -    | -    | 4.8  | -    | -    |
| 86.7 80.0  | -   | 5.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 86.7 90.0  | -   | 20.4 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -   | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0 | -   | 5.0  | -    | 62.9 | -   | -    | 9.9  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -   | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 90.0 53.0  | -   | 0.0  | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -   | 0.0  | -    | 9.7  | -   | -    | 0.0  | -    | 11.2 | -    | -    | -    |
| 90.0 70.0  | -   | 0.0  | -    | 0.0  | -   | -    | 31.0 | -    | 0.0  | -    | -    | -    |
| 90.0 80.0  | -   | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0  | -   | 5.1  | -    | 24.0 | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0 | -   | 24.9 | -    | 0.0  | -   | -    | 14.5 | -    | 0.0  | -    | -    | -    |
| 90.0 110.0 | 42.8  | -    | -    | 28.3 | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| 90.0 120.0 | 9.9   | -    | -    | 35.8 | -   | -    | 0.0  | -    | 9.9  | -    | -    | -    |
| 93.3 35.0  | 19.6  | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0  | 0.0   | -    | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 50.0  | 0.0   | -    | -    | 31.0 | -   | -    | 34.9 | -    | 0.0  | -    | -    | -    |
| 93.3 55.0  | -   | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| <i>Symbolophorus californiensis</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|---|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                                     | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 93.3 60.0                                   | 0.0  | -    | -    | 0.0  | -   | -    | 25.6 | -    | 5.0  | -    | -    | -    |
| 93.3 70.0                                   | 10.3 | -    | -    | 30.8 | -   | -    | 25.3 | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                                   | 0.0  | -    | -    | 5.1  | -   | -    | 14.2 | -    | 0.0  | -    | -    | -    |
| 93.3 90.0                                   | 0.0  | -    | -    | 13.8 | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 93.3 100.0                                  | 93.4 | -    | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 110.0                                  | 64.7 | -    | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                                  | 9.7  | -    | -    | 14.5 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Tarletonbeania crenularis</i>            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                     | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                                   | -    | -    | -    | 0.0  | -   | -    | 15.6 | -    | -    | 0.0  | -    | -    |
| 76.7 60.0                                   | -    | -    | -    | 4.8  | -   | -    | 11.1 | -    | -    | 9.2  | -    | -    |
| 76.7 70.0                                   | -    | 17.4 | -    | 5.2  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                                   | -    | 9.5  | -    | 5.3  | -   | -    | 0.0  | -    | -    | 10.8 | -    | -    |
| 76.7 90.0                                   | -    | 8.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                                   | -    | 4.7  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                                   | -    | 4.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                                   | -    | 0.0  | -    | 5.2  | -   | -    | 9.9  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0                                   | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                                   | -    | 64.8 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                                   | -    | 9.5  | -    | 10.0 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 90.0                                   | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                                  | -    | 4.3  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 40.0                                   | -    | -    | -    | -    | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 86.7 100.0                                  | -    | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 53.0                                   | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                                   | -    | 0.0  | -    | 4.9  | -   | -    | 11.9 | -    | 0.0  | -    | -    | -    |
| 90.0 70.0                                   | -    | 0.0  | -    | 4.7  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 45.0                                   | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.5  | -    | -    | -    |
| 93.3 90.0                                   | 5.2  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| Station                     | <i>Trachipterus altivelis</i> |         |      |      |     |      |      |      |      |      |      |      |
|-----------------------------|-------------------------------|---------|------|------|-----|------|------|------|------|------|------|------|
|                             | Jan.                          | Feb.    | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0                   | -                             | -       | -    | 0.0  | -   | -    | 9.3  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                   | -                             | 4.9     | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                   | -                             | 0.0     | -    | 5.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 86.7 110.0                  | -                             | 0.0     | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0                   | -                             | 4.9     | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 80.0                   | -                             | 0.0     | -    | 0.0  | -   | -    | 0.0  | -    | 5.6  | -    | -    | -    |
| 93.3 45.0                   | 0.0                           | -       | -    | 0.0  | -   | -    | 10.9 | -    | 0.0  | -    | -    | -    |
| 93.3 60.0                   | 0.0                           | -       | -    | 4.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Merluccius productus</i> |                               |         |      |      |     |      |      |      |      |      |      |      |
| Station                     | Jan.                          | Feb.    | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                   | -                             | -       | -    | 4.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 51.0                   | -                             | -       | -    | 14.2 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 55.0                   | -                             | -       | -    | 15.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 60.0                   | -                             | -       | -    | 14.5 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 70.0                   | -                             | 2226.4  | -    | 25.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 80.0                   | -                             | 19.0    | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0                   | -                             | 29.5    | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 100.0                  | -                             | 9.3     | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                   | -                             | 18.6    | -    | 35.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                   | -                             | 357.0   | -    | 11.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 70.0                   | -                             | 2341.4  | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                   | -                             | 21077.6 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                   | -                             | 14.3    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8 46.9                   | -                             | 20.7    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 40.6                   | -                             | 3.7     | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0                   | -                             | 16.9    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0                   | -                             | 9.7     | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                   | -                             | 1869.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                   | -                             | 732.4   | -    | 20.0 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 100.0                  | -                             | 0.0     | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                  | -                             | 13.0    | -    | 14.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station                             | Jan.  | Feb.   | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|-------------------------------------|-------|--------|------|------|-----|------|------|------|------|------|------|------|
| <i>Merluccius productus</i> (cont.) |       |        |      |      |     |      |      |      |      |      |      |      |
| 86.7 35.0                           | -     | 5.2    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 39.5                           | -     | 4.9    | -    | 0.0  | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7 45.0                           | -     | 60.0   | -    | 10.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                           | -     | 24.0   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0                           | -     | 11.0   | -    | 12.3 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 60.0                           | -     | 0.0    | -    | 17.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0                           | -     | 0.0    | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 35.0                           | -     | 124.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0                           | -     | 50.0   | -    | 19.2 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0                           | -     | 1542.6 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                           | -     | 425.8  | -    | 29.2 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 80.0                           | -     | 4.8    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 92.8 54.1                           | 20.6  | -      | -    | -    | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3 30.0                           | 15.0  | -      | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 35.0                           | 48.9  | -      | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 45.0                           | 49.7  | -      | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 50.0                           | 339.9 | -      | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Chilara taylori</i>              |       |        |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan.  | Feb.   | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 60.0                           | -     | 4.9    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                           | -     | 0.0    | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| <i>Ophidion scrippsae</i>           |       |        |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan.  | Feb.   | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                           | -     | 0.0    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| <i>Brosmophycis marginata</i>       |       |        |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan.  | Feb.   | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 45.0                           | -     | 0.0    | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| <i>Cataetx rubrirostris</i>         |       |        |      |      |     |      |      |      |      |      |      |      |
| Station                             | Jan.  | Feb.   | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 55.0                           | -     | 0.0    | -    | 4.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                           | -     | 0.0    | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|---|------|------|------|------|-----|------|------|------|------|------|------|------|
| <b><i>Oneirodes</i> spp.</b>              |      |      |      |      |     |      |      |      |      |      |      |      |
| 80.0 80.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 5.1  | -    | -    |
| 86.7 80.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
| 90.0 100.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| <b><i>Gigantactis</i> spp.</b>            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 110.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |
| 90.0 100.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| 90.0 120.0                                | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
| <b><i>Atherinopsis californiensis</i></b> |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 45.0                                 | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| <b><i>Leuresthes tenuis</i></b>           |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| <b><i>Cololabis saira</i></b>             |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 100.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 83.3 110.0                                | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3 35.0                                 | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.1  | -    | -    | -    |
| 93.3 70.0                                 | 15.4 | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <b><i>Melamphaes</i> spp.</b>             |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                   | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 90.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 80.0 90.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 5.2  | -    | -    | -    | -    | -    |
| 86.7 80.0                                 | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                                 | -    | 0.0  | -    | 24.4 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 80.0                                 | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0                                 | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                                | 0.0  | -    | -    | 4.7  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                                | 0.0  | -    | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |



TABLE 4. (cont.)

|            |      | <i>Melamphaes lugubris</i> |      |      |     |      |      |      |      |      |      |      |  |
|------------|------|----------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                       | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 70.0  | -    | 0.0                        | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7 90.0  | -    | 0.0                        | -    | 15.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7 100.0 | -    | 0.0                        | -    | 4.9  | -   | -    | 14.5 | -    | -    | 0.0  | -    | -    |  |
| 80.0 70.0  | -    | 0.0                        | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                        | -    | 0.0  | -   | -    | 20.2 | -    | -    | 0.0  | -    | -    |  |
| 83.3 60.0  | -    | 10.8                       | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 83.3 70.0  | -    | 0.0                        | -    | 10.0 | -   | -    | 0.0  | -    | -    | -    | -    | -    |  |
| 83.3 100.0 | -    | 0.0                        | -    | 15.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 110.0 | -    | 0.0                        | -    | 5.0  | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |  |
| 86.7 80.0  | -    | 0.0                        | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7 100.0 | -    | 0.0                        | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7 110.0 | -    | 0.0                        | -    | 5.2  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0 100.0 | -    | 0.0                        | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0 110.0 | 0.0  | -                          | -    | 9.4  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0 120.0 | 0.0  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 93.3 50.0  | 5.2  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 60.0  | 4.9  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 80.0  | 0.0  | -                          | -    | 5.1  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |  |
| 93.3 90.0  | 0.0  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
| 93.3 110.0 | 5.0  | -                          | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Melamphaes parvus</i>   |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                       | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 70.0  | -    | 0.0                        | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |  |
| 76.7 80.0  | -    | 0.0                        | -    | 5.3  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |  |
| 76.7 90.0  | -    | 4.2                        | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 70.0  | -    | 9.5                        | -    | 10.0 | -   | -    | 0.0  | -    | -    | -    | -    | -    |  |
| 86.7 70.0  | -    | 0.0                        | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
|            |      | <i>Melamphaes simus</i>    |      |      |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                       | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 90.0 120.0 | 5.0  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 120.0 | 9.7  | -                          | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |

TABLE 4. (cont.)

|         |       | <i>Poromitra crassiceps</i>    |      |      |     |      |      |      |      |      |      |      |  |
|---------|-------|--------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station | Jan.  | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0    | 100.0 | 0.0                            | -    | 0.0  | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 93.3    | 50.0  | 0.0                            | -    | 5.2  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 110.0 | 5.0                            | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Scopeloberyx robustus</i>   |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 83.3    | 70.0  | 0.0                            | -    | 0.0  | -   | -    | 5.2  | -    | -    | -    | -    | -    |  |
| 93.3    | 80.0  | 0.0                            | -    | 0.0  | -   | -    | 9.5  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 120.0 | 0.0                            | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |  |
|         |       | <i>Scopelogadus bispinosus</i> |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 83.3    | 100.0 | 0.0                            | -    | 0.0  | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 70.0  | 0.0                            | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 80.0  | 0.0                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |  |
| 86.7    | 110.0 | 0.0                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 13.9 | -    | -    |  |
| 90.0    | 70.0  | 0.0                            | -    | 0.0  | -   | -    | 20.7 | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 80.0  | 0.0                            | -    | 0.0  | -   | -    | 4.5  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 90.0  | 0.0                            | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0    | 120.0 | 5.0                            | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 60.0  | 0.0                            | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 80.0  | 0.0                            | -    | 0.0  | -   | -    | 0.0  | -    | 4.7  | -    | -    | -    |  |
| 93.3    | 100.0 | 0.0                            | -    | 9.1  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 110.0 | 0.0                            | -    | 0.0  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |  |
|         |       | <i>Sebastes</i> spp.           |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan.  | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 49.0  | -                              | -    | 93.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 51.0  | -                              | -    | 19.0 | -   | -    | 29.5 | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 55.0  | -                              | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 60.0  | -                              | -    | 9.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 51.0  | -                              | -    | 7.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 55.0  | -                              | -    | 20.0 | -   | -    | 19.0 | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 60.0  | -                              | -    | 33.3 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |

TABLE 4. (cont.)

| Station | <i>Sebastes</i> spp. (cont.) |        |      |       |     |      |      |      |      |      |      |      |
|---------|------------------------------|--------|------|-------|-----|------|------|------|------|------|------|------|
|         | Jan.                         | Feb.   | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0    | 70.0                         | 36.8   | -    | 0.0   | -   | -    | 38.9 | -    | -    | 0.0  | -    | -    |
| 80.0    | 80.0                         | 9.1    | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8    | 46.9                         | 46.6   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3    | 40.6                         | 0.0    | -    | 4.4   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3    | 42.0                         | 39.5   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 8.1  | -    | -    |
| 83.3    | 51.0                         | 43.7   | -    | 70.1  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 83.3    | 55.0                         | 15.0   | -    | 29.7  | -   | -    | 20.2 | -    | -    | 0.0  | -    | -    |
| 83.3    | 60.0                         | 10.8   | -    | 52.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3    | 70.0                         | 38.0   | -    | 0.0   | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3    | 90.0                         | 0.0    | -    | 5.3   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7    | 33.0                         | 335.1  | -    | 17.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7    | 35.0                         | 26.0   | -    | 28.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7    | 39.5                         | 0.0    | -    | 109.3 | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7    | 40.0                         | -      | -    | -     | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 86.7    | 45.0                         | 55.0   | -    | 15.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7    | 50.0                         | 1204.8 | -    | 377.4 | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 86.7    | 55.0                         | 438.5  | -    | 65.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7    | 60.0                         | 0.0    | -    | 144.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0    | 28.0                         | 68.4   | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0    | 30.0                         | 10.1   | -    | 30.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0    | 35.0                         | 9.6    | -    | 14.4  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| 90.0    | 37.0                         | 24.7   | -    | 0.0   | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0    | 45.0                         | 30.0   | -    | 244.3 | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0    | 53.0                         | 426.6  | -    | 71.7  | -   | -    | 20.0 | -    | -    | 0.0  | -    | -    |
| 90.0    | 60.0                         | 50.1   | -    | 0.0   | -   | -    | 35.7 | -    | 0.0  | -    | -    | -    |
| 92.8    | 54.1                         | -      | -    | -     | -   | -    | -    | -    | -    | -    | -    | -    |
| 93.3    | 26.7                         | -      | -    | 0.0   | -   | -    | 4.1  | -    | 0.0  | -    | -    | -    |
| 93.3    | 28.0                         | -      | -    | 4.0   | -   | -    | 9.6  | -    | 0.0  | -    | -    | -    |
| 93.3    | 30.0                         | -      | -    | 4.3   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3    | 35.0                         | -      | -    | 29.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

|           |      | <i>Sebastes spp.</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|-----------|------|------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station   | Jan. | Feb.                         | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3 40.0 | 20.6 | -                            | -    | 9.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 45.0 | 0.0  | -                            | -    | 20.4 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 50.0 | 5.2  | -                            | -    | 0.0  | -   | -    | 15.0 | -    | 0.0  | -    | -    | -    |  |
| 93.3 55.0 | -    | -                            | -    | 0.0  | -   | -    | 72.6 | -    | 0.0  | -    | -    | -    |  |
|           |      | <i>Sebastes aurora</i>       |      |      |     |      |      |      |      |      |      |      |  |
| Station   | Jan. | Feb.                         | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 55.0 | -    | -                            | -    | 21.1 | -   | -    | 9.3  | -    | -    | 0.0  | -    | -    |  |
| 80.0 55.0 | -    | 0.0                          | -    | 10.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 60.0 | -    | 4.9                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 60.0 | -    | 0.0                          | -    | 8.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 40.0 | -    | -                            | -    | -    | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 90.0 35.0 | -    | 9.6                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|           |      | <i>Sebastes diploproa</i>    |      |      |     |      |      |      |      |      |      |      |  |
| Station   | Jan. | Feb.                         | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 49.0 | -    | -                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.4  | -    | -    |  |
| 76.7 55.0 | -    | -                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 18.7 | -    | -    |  |
| 80.0 55.0 | -    | 0.0                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 16.5 | -    | -    |  |
| 81.8 46.9 | -    | 0.0                          | -    | 0.0  | -   | -    | 11.1 | -    | -    | 10.0 | -    | -    |  |
| 83.3 42.0 | -    | 0.0                          | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |  |
| 83.3 55.0 | -    | 0.0                          | -    | 0.0  | -   | -    | 50.5 | -    | -    | 0.0  | -    | -    |  |
| 86.7 35.0 | -    | 0.0                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 10.5 | -    | -    |  |
| 86.7 39.5 | -    | 4.9                          | -    | 0.0  | -   | -    | -    | -    | -    | -    | -    | -    |  |
| 90.0 37.0 | -    | 0.0                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |  |
| 90.0 60.0 | -    | 5.0                          | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3 35.0 | 0.0  | -                            | -    | 0.0  | -   | -    | 9.9  | -    | 0.0  | -    | -    | -    |  |
| 93.3 50.0 | 30.9 | -                            | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|           |      | <i>Sebastes goodei</i>       |      |      |     |      |      |      |      |      |      |      |  |
| Station   | Jan. | Feb.                         | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0 55.0 | -    | 4.7                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 70.0 | -    | 4.6                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7 55.0 | -    | 11.0                         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |

TABLE 4. (cont.)

|         |      | <i>Sebastes goodei</i> (cont.) |      |      |     |      |      |      |      |      |      |      |  |
|---------|------|--------------------------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station | Jan. | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3    | 28.0 | 5.1                            | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
|         |      | <i>Sebastes jordani</i>        |      |      |     |      |      |      |      |      |      |      |  |
| Station | Jan. | Feb.                           | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7    | 49.0 | -                              | -    | 28.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7    | 51.0 | -                              | -    | 23.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 51.0 | 30.5                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 55.0 | 93.2                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 60.0 | 4.9                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0    | 70.0 | 27.6                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 81.8    | 46.9 | 134.7                          | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 40.6 | 3.7                            | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 42.0 | 95.9                           | -    | 15.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 51.0 | 0.0                            | -    | 16.2 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 55.0 | 0.0                            | -    | 14.9 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3    | 60.0 | 21.6                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 33.0 | 23.6                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 35.0 | 15.6                           | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 39.5 | 43.9                           | -    | 5.0  | -   | -    | -    | -    | -    | -    | -    | -    |  |
| 86.7    | 45.0 | 15.0                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 50.0 | 331.2                          | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 86.7    | 55.0 | 43.9                           | -    | 16.4 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 28.0 | 13.7                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 30.0 | 0.0                            | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 35.0 | 0.0                            | -    | 14.4 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0    | 45.0 | 20.0                           | -    | 14.4 | -   | -    | 0.0  | -    | -    | -    | -    | -    |  |
| 90.0    | 53.0 | 39.7                           | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 93.3    | 26.7 | -                              | -    | 9.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 28.0 | -                              | -    | 4.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 30.0 | -                              | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 93.3    | 35.0 | -                              | -    | 9.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |

TABLE 4. (cont.)

| 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  | -    | -    |
| <i>Sebastes levis</i>        |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 55.0                    | -    | 18.6 | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                    | -    | 14.7 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                    | -    | 9.1  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 55.0                    | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                    | -    | 32.4 | -    | 4.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0                    | -    | 0.0  | -    | 10.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                    | -    | 9.6  | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0                    | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0                    | -    | 19.8 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                    | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 28.0                    | 5.1  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 30.0                    | 5.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 45.0                    | 5.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 50.0                    | 15.5 | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Scorpaena guttata</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 35.0                    | -    | 0.0  | -    | 0.0  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |
| <i>Oxylebius pictus</i>      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 50.0                    | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Zaniolepis latipinnis</i> |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                    | -    | 4.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                    | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <b>Cottidae</b>              |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                    | -    | -    | -    | 4.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0                    | -    | 0.0  | -    | 5.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|-----------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Artemia creaseri</i>           |      |      |      |      |     |      |      |      |      |      |      |      |
| 80.0 51.0                         | -    | 0.0  | -    | 3.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                         | -    | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0                         | -    | 0.0  | -    | 16.2 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                         | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Artemia fenestrata</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                         | -    | 0.0  | -    | 10.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Artemia lateralis</i>          |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                         | -    | 0.0  | -    | 5.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Icelinus</i> spp.              |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 50.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | -    | 0.0  | -    | -    |
| <i>Icelinus quadriseriatus</i>    |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                         | -    | 9.7  | -    | 10.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                         | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Oligocottus</i> spp.           |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 50.0                         | -    | 9.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Orthonopias triacis</i>        |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                         | -    | 0.0  | -    | 5.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Scorpaenichthys marmoratus</i> |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                         | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| <i>Odontopyxis trispinosa</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 51.0                         | -    | 4.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Xeneretmus latifrons</i>       |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0 51.0                         | -    | 0.0  | -    | 3.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

|            |      | <i>Xeneretmus latifrons</i> (cont.) |      |       |     |      |      |      |      |      |      |      |  |
|------------|------|-------------------------------------|------|-------|-----|------|------|------|------|------|------|------|--|
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7 55.0  | -    | 0.0                                 | -    | 4.1   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
|            |      | <i>Paralabrax</i> spp.              |      |       |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7 33.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 20.4 | -    | -    | 0.0  | -    | -    |  |
| 90.0 28.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 10.3 | -    | -    | 0.0  | -    | -    |  |
| 90.0 60.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 11.9 | -    | 0.0  | -    | -    | -    |  |
|            |      | <i>Howella</i> spp.                 |      |       |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 83.3 100.0 | -    | 0.0                                 | -    | 0.0   | -   | -    | 4.7  | -    | -    | 0.0  | -    | -    |  |
|            |      | <i>Trachurus symmetricus</i>        |      |       |     |      |      |      |      |      |      |      |  |
| Station    | Jan. | Feb.                                | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7 55.0  | -    | -                                   | -    | 5.3   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 76.7 80.0  | -    | 0.0                                 | -    | 26.5  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |  |
| 76.7 90.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 24.4 | -    | -    | 0.0  | -    | -    |  |
| 76.7 100.0 | -    | 0.0                                 | -    | 259.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 55.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 9.5  | -    | -    | 0.0  | -    | -    |  |
| 80.0 60.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 23.3 | -    | -    | 0.0  | -    | -    |  |
| 80.0 70.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |  |
| 80.0 80.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 15.0 | -    | -    | 0.0  | -    | -    |  |
| 80.0 90.0  | -    | 0.0                                 | -    | 36.1  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0 100.0 | -    | 0.0                                 | -    | 62.8  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |  |
| 83.3 40.6  | -    | 0.0                                 | -    | 8.7   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 83.3 60.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |  |
| 83.3 70.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 21.0 | -    | -    | -    | -    | -    |  |
| 83.3 80.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 28.9 | -    | -    | 0.0  | -    | -    |  |
| 83.3 90.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 14.9 | -    | -    | 0.0  | -    | -    |  |
| 83.3 100.0 | -    | 0.0                                 | -    | 5.0   | -   | -    | 14.1 | -    | -    | 0.0  | -    | -    |  |
| 86.7 55.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 5.1  | -    | -    | 0.0  | -    | -    |  |
| 86.7 60.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 39.0 | -    | -    | 0.0  | -    | -    |  |
| 86.7 70.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |  |
| 86.7 80.0  | -    | 0.0                                 | -    | 0.0   | -   | -    | 24.3 | -    | -    | 0.0  | -    | -    |  |



TABLE 4. (cont.)

| Station                    | <i>Trachurus symmetricus</i> (cont.) |       |      |      |     |      |      |      |      |      |      |      |
|----------------------------|--------------------------------------|-------|------|------|-----|------|------|------|------|------|------|------|
|                            | Jan.                                 | Feb.  | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 80.0                  | -                                    | 0.0   | -    | 0.0  | -   | -    | 24.3 | -    | -    | 0.0  | -    | -    |
| 86.7 90.0                  | -                                    | 0.0   | -    | 4.6  | -   | -    | 34.4 | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                 | -                                    | 0.0   | -    | 4.5  | -   | -    | 9.9  | -    | -    | 0.0  | -    | -    |
| 86.7 110.0                 | -                                    | 0.0   | -    | 52.4 | -   | -    | 14.9 | -    | -    | 0.0  | -    | -    |
| 90.0 53.0                  | -                                    | 0.0   | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 70.0                  | -                                    | 0.0   | -    | 0.0  | -   | -    | 5.2  | -    | 0.0  | -    | -    | -    |
| 90.0 90.0                  | -                                    | 0.0   | -    | 9.6  | -   | -    | 4.9  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0                 | -                                    | 0.0   | -    | 77.9 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 50.0                  | 0.0                                  | -     | -    | 0.0  | -   | -    | 10.0 | -    | 0.0  | -    | -    | -    |
| 93.3 70.0                  | 0.0                                  | -     | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| 93.3 80.0                  | 0.0                                  | -     | -    | 82.2 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 90.0                  | 0.0                                  | -     | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 120.0                 | 0.0                                  | -     | -    | 24.2 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Brama japonica</i>      |                                      |       |      |      |     |      |      |      |      |      |      |      |
| Station                    | Jan.                                 | Feb.  | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 100.0                 | -                                    | 0.0   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 93.3 110.0                 | 0.0                                  | -     | -    | 4.6  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Genyonemus lineatus</i> |                                      |       |      |      |     |      |      |      |      |      |      |      |
| Station                    | Jan.                                 | Feb.  | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                  | -                                    | -     | -    | 4.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 51.0                  | -                                    | 157.0 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                  | -                                    | 4.7   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0                  | -                                    | 5.6   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 33.0                  | -                                    | 292.6 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0                  | -                                    | 5.2   | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0                  | -                                    | 0.0   | -    | 14.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                  | -                                    | 0.0   | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Seriphus politus</i>    |                                      |       |      |      |     |      |      |      |      |      |      |      |
| Station                    | Jan.                                 | Feb.  | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                  | -                                    | 0.0   | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 86.7 35.0                  | -                                    | 0.0   | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|---------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Seriphus politus</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
| 90.0 28.0                       | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                       | -    | 0.0  | -    | 20.5 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3 26.7                       | 0.0  | -    | -    | 47.9 | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Girella nigricans</i>        |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 90.0 60.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 11.9 | -    | 0.0  | -    | -    | -    |
| <i>Chromis punctipinnis</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 42.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 18.8 | -    | -    | 0.0  | -    | -    |
| 90.0 37.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 53.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.8  | -    | -    |
| 93.3 28.0                       | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.6  | -    | -    | -    |
| 93.3 30.0                       | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.0  | -    | -    | -    |
| 93.3 45.0                       | 0.0  | -    | -    | 0.0  | -   | -    | 10.9 | -    | 0.0  | -    | -    | -    |
| 93.3 55.0                       | -    | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| <i>Hypsypops rubicundus</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                       | -    | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Oxyulis californica</i>      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                       | -    | -    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.4  | -    | -    |
| 83.3 90.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0                       | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 9.7  | -    | -    |
| 86.7 60.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 8.7  | -    | -    |
| 90.0 35.0                       | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 37.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 90.0 53.0                       | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0                       | -    | 0.0  | -    | 0.0  | -   | -    | 23.8 | -    | 0.0  | -    | -    | -    |
| 93.3 55.0                       | -    | -    | -    | 0.0  | -   | -    | 20.7 | -    | 0.0  | -    | -    | -    |
| <i>Rathbunella</i> spp.         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                         | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                       | -    | -    | -    | 9.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

|                                |       | Stichaeidae |      |      |     |      |      |      |      |      |      |      |  |
|--------------------------------|-------|-------------|------|------|-----|------|------|------|------|------|------|------|--|
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0                           | 55.0  | -           | 4.7  | -    | 0.0 | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| <i>Chiasmodon niger</i>        |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 76.7                           | 90.0  | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 83.3                           | 90.0  | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |  |
| 86.7                           | 90.0  | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.8  | -    | -    |  |
| 86.7                           | 100.0 | 0.0         | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0                           | 90.0  | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |  |
| 90.0                           | 100.0 | 0.0         | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |  |
| 90.0                           | 110.0 | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | 10.5 | -    | -    | -    |  |
| <i>Cryptotrema corallinum</i>  |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7                           | 50.0  | 0.0         | -    | 0.0  | -   | -    | 4.5  | -    | -    | 4.7  | -    | -    |  |
| <i>Hypsoblennius</i> spp.      |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7                           | 33.0  | 0.0         | -    | 0.0  | -   | -    | 61.2 | -    | -    | 0.0  | -    | -    |  |
| <i>Hypsoblennius gilberti</i>  |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 93.3                           | 26.7  | 0.0         | -    | 0.0  | -   | -    | 4.1  | -    | 0.0  | -    | -    | -    |  |
| <i>Hypsoblennius jenkinsi</i>  |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 86.7                           | 33.0  | 0.0         | -    | 4.5  | -   | -    | 30.6 | -    | -    | 0.0  | -    | -    |  |
| 86.7                           | 35.0  | 0.0         | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 90.0                           | 30.0  | 0.0         | -    | 0.0  | -   | -    | 10.4 | -    | -    | 0.0  | -    | -    |  |
| 90.0                           | 35.0  | 0.0         | -    | 0.0  | -   | -    | 10.0 | -    | -    | 0.0  | -    | -    |  |
| <i>Coryphopterus nicholsii</i> |       |             |      |      |     |      |      |      |      |      |      |      |  |
| Station                        | Jan.  | Feb.        | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |  |
| 80.0                           | 55.0  | 4.7         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0                           | 60.0  | 0.0         | -    | 5.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 80.0                           | 70.0  | 4.6         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |  |
| 81.8                           | 46.9  | 0.0         | -    | 0.0  | -   | -    | 0.0  | -    | -    | 5.0  | -    | -    |  |

TABLE 4. (cont.)

|  |      | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|--|------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Coryphopterus nicholsii</i> (cont.) |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 83.3                                   | 40.6 | -    | 0.0  | -    | 8.7  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                   | 42.0 | -    | 11.3 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                                   | 51.0 | -    | 0.0  | -    | 0.0  | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 83.3                                   | 55.0 | -    | 0.0  | -    | 5.0  | -   | -    | 20.2 | -    | -    | 0.0  | -    | -    |
| 83.3                                   | 70.0 | -    | 9.5  | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 86.7                                   | 39.5 | -    | 0.0  | -    | 5.0  | -   | -    | -    | -    | -    | -    | -    | -    |
| 86.7                                   | 60.0 | -    | 0.0  | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                                   | 28.0 | -    | 0.0  | -    | 0.0  | -   | -    | 10.3 | -    | -    | 0.0  | -    | -    |
| 90.0                                   | 30.0 | -    | 0.0  | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                                   | 45.0 | -    | 0.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0                                   | 53.0 | -    | 19.8 | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3                                   | 35.0 | 0.0  | -    | -    | 0.0  | -   | -    | 9.9  | -    | 0.0  | -    | -    | -    |
| 93.3                                   | 50.0 | 0.0  | -    | -    | 0.0  | -   | -    | 5.0  | -    | 0.0  | -    | -    | -    |
| <i>Lepidogobius lepidus</i>            |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 80.0                                   | 55.0 | -    | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7                                   | 33.0 | -    | 28.3 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 90.0                                   | 28.0 | -    | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Lythrypnus dalli</i>                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 93.3                                   | 26.7 | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.4  | -    | -    | -    |
| <i>Lythrypnus zebra</i>                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 86.7                                   | 33.0 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 90.0                                   | 53.0 | -    | 0.0  | -    | 0.0  | -   | -    | 10.0 | -    | -    | 9.8  | -    | -    |
| <i>Typhlogobius californiensis</i>     |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 76.7                                   | 55.0 | -    | -    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| <i>Sphyaena argentea</i>               |      |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                |      |      |      |      |      |     |      |      |      |      |      |      |      |
| 83.3                                   | 42.0 | -    | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

|                                  |       | Jan. | Feb. | Mar. | Apr.  | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|----------------------------------|-------|------|------|------|-------|-----|------|------|------|------|------|------|------|
| <i>Sphyræna argentea</i> (cont.) |       |      |      |      |       |     |      |      |      |      |      |      |      |
| Station                          |       |      |      |      |       |     |      |      |      |      |      |      |      |
| 83.3                             | 51.0  | -    | 0.0  | -    | 0.0   | -   | -    | 4.8  | -    | -    | 0.0  | -    | -    |
| 86.7                             | 33.0  | -    | 0.0  | -    | 4.5   | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 86.7                             | 35.0  | -    | 0.0  | -    | 4.8   | -   | -    | 48.3 | -    | -    | 0.0  | -    | -    |
| 90.0                             | 30.0  | -    | 0.0  | -    | 5.1   | -   | -    | 31.3 | -    | -    | 0.0  | -    | -    |
| 90.0                             | 35.0  | -    | 0.0  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 5.3  | -    | -    |
| 93.3                             | 28.0  | 0.0  | -    | -    | 0.0   | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| <i>Diplospinus multistriatus</i> |       |      |      |      |       |     |      |      |      |      |      |      |      |
| Station                          |       |      |      |      |       |     |      |      |      |      |      |      |      |
| 90.0                             | 100.0 | -    | 5.0  | -    | 0.0   | -   | -    | 0.0  | Aug. | Sep. | 0.0  | Nov. | Dec. |
| <i>Scomber japonicus</i>         |       |      |      |      |       |     |      |      |      |      |      |      |      |
| Station                          |       |      |      |      |       |     |      |      |      |      |      |      |      |
| 76.7                             | 100.0 | -    | 0.0  | -    | 196.0 | May | June | July | Aug. | Sep. | 0.0  | Nov. | Dec. |
| 80.0                             | 60.0  | -    | 0.0  | -    | 16.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 70.0  | -    | 0.0  | -    | 5.0   | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 86.7                             | 35.0  | -    | 0.0  | -    | 4.8   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 28.0  | -    | 0.0  | -    | 4.9   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 30.0  | -    | 0.0  | -    | 0.0   | -   | -    | 10.4 | -    | -    | 0.0  | -    | -    |
| 90.0                             | 35.0  | -    | 0.0  | -    | 9.6   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 45.0  | -    | 0.0  | -    | 4.8   | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0                             | 53.0  | -    | 0.0  | -    | 33.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 90.0  | -    | 0.0  | -    | 4.8   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                             | 35.0  | 0.0  | -    | -    | 4.9   | -   | -    | 9.9  | -    | 0.0  | -    | -    | -    |
| <i>Icichthys lockingtoni</i>     |       |      |      |      |       |     |      |      |      |      |      |      |      |
| Station                          |       |      |      |      |       |     |      |      |      |      |      |      |      |
| 76.7                             | 90.0  | -    | 4.2  | -    | 0.0   | May | June | July | Aug. | Sep. | 0.0  | Nov. | Dec. |
| 80.0                             | 70.0  | -    | 9.2  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                             | 100.0 | -    | 8.4  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 60.0  | -    | 32.4 | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 70.0  | -    | 9.5  | -    | 5.0   | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 86.7                             | 90.0  | -    | 5.1  | -    | 0.0   | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 93.3                             | 45.0  | 5.0  | -    | -    | 0.0   | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

|                               |            | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|-------------------------------|------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Psenes pellucidus</i>      |            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                       | 93.3 80.0  | 0.0  | -    | -    | 0.0  | -   | -    | 4.7  | -    | 0.0  | -    | -    | -    |
| <i>Tetragonurus cuvieri</i>   |            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                       | 83.3 90.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
|                               | 83.3 100.0 | -    | 0.0  | -    | 0.0  | -   | -    | 4.7  | -    | -    | 4.2  | -    | -    |
|                               | 83.3 110.0 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 8.6  | -    | -    |
|                               | 86.7 60.0  | -    | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
|                               | 86.7 70.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 14.4 | -    | -    |
|                               | 86.7 80.0  | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
|                               | 86.7 100.0 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.9  | -    | -    |
|                               | 86.7 110.0 | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
|                               | 90.0 120.0 | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 4.9  | -    | -    | -    |
|                               | 93.3 35.0  | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.1  | -    | -    | -    |
|                               | 93.3 40.0  | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.6  | -    | -    | -    |
|                               | 93.3 50.0  | 0.0  | -    | -    | 0.0  | -   | -    | 5.0  | -    | 0.0  | -    | -    | -    |
|                               | 93.3 80.0  | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 9.4  | -    | -    | -    |
|                               | 93.3 100.0 | 0.0  | -    | -    | 9.1  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
|                               | 93.3 110.0 | 0.0  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 5.1  | -    | -    | -    |
| <i>Peprilus similimus</i>     |            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                       | 90.0 28.0  | -    | 0.0  | -    | 14.7 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
|                               | 93.3 55.0  | -    | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| <i>Citharichthys</i> spp.     |            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                       | 80.0 70.0  | -    | 0.0  | -    | 0.0  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |
|                               | 90.0 53.0  | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
|                               | 93.3 26.7  | 3.8  | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Citharichthys sordidus</i> |            |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                       | 76.7 55.0  | -    | -    | -    | 21.1 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
|                               | 76.7 60.0  | -    | -    | -    | 0.0  | -   | -    | 11.1 | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| Station    | <i>Citharichthys sordidus</i> (cont.) |      |      |      |     |      |      |      |      |      |      |      |
|------------|---------------------------------------|------|------|------|-----|------|------|------|------|------|------|------|
|            | Jan.                                  | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 70.0  | -                                     | 8.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |
| 76.7 80.0  | -                                     | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7 90.0  | -                                     | 4.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 51.0  | -                                     | 4.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0  | -                                     | 14.0 | -    | 15.0 | -   | -    | 9.5  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0  | -                                     | 9.8  | -    | 11.1 | -   | -    | 17.5 | -    | -    | 10.1 | -    | -    |
| 80.0 70.0  | -                                     | 9.2  | -    | 0.0  | -   | -    | 9.7  | -    | -    | 0.0  | -    | -    |
| 80.0 100.0 | -                                     | 4.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8 46.9  | -                                     | 5.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |
| 83.3 60.0  | -                                     | 10.8 | -    | 4.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 70.0  | -                                     | 9.5  | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 83.3 100.0 | -                                     | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0  | -                                     | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0  | -                                     | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0  | -                                     | 11.0 | -    | 4.1  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 86.7 90.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 9.8  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0 | -                                     | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 30.9 | -    | -    | 0.0  | -    | -    |
| 90.0 37.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0  | -                                     | 15.0 | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0  | -                                     | 5.0  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 60.0  | -                                     | 5.0  | -    | 0.0  | -   | -    | 11.9 | -    | 0.0  | -    | -    | -    |
| 90.0 70.0  | -                                     | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | 5.0  | -    | -    | -    |
| 93.3 28.0  | 5.1                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 40.0  | 0.0                                   | -    | -    | 0.0  | -   | -    | 10.4 | -    | 0.0  | -    | -    | -    |
| 93.3 60.0  | 4.9                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3 70.0  | 5.1                                   | -    | -    | 0.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

TABLE 4. (cont.)

| Station                           | <i>Citharichthys stigmæus</i> |      |      |      |     |      |      |      |      |      |      |      |
|-----------------------------------|-------------------------------|------|------|------|-----|------|------|------|------|------|------|------|
|                                   | Jan.                          | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 49.0                         | -                             | -    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.4  | -    | -    |
| 76.7 51.0                         | -                             | -    | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.3  | -    | -    |
| 76.7 55.0                         | -                             | -    | -    | 5.3  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| 76.7 60.0                         | -                             | -    | -    | 0.0  | -   | -    | 22.1 | -    | -    | 0.0  | -    | -    |
| 76.7 70.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.6  | -    | -    |
| 76.7 90.0                         | -                             | 4.2  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 60.0                         | -                             | 4.9  | -    | 16.6 | -   | -    | 11.7 | -    | -    | 0.0  | -    | -    |
| 80.0 70.0                         | -                             | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 80.0                         | -                             | 18.2 | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| 83.3 42.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 9.4  | -    | -    | 0.0  | -    | -    |
| 83.3 51.0                         | -                             | 4.9  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 55.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |
| 83.3 60.0                         | -                             | 0.0  | -    | 17.3 | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 33.0                         | -                             | 4.7  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 35.0                         | -                             | 5.2  | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 45.0                         | -                             | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 4.5  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0                         | -                             | 0.0  | -    | 4.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 80.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 4.9  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                        | -                             | 4.6  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 28.0                         | -                             | 0.0  | -    | 19.6 | -   | -    | 41.2 | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                         | -                             | 5.0  | -    | 5.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 45.0                         | -                             | 0.0  | -    | 9.6  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 90.0 53.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 20.0 | -    | -    | 0.0  | -    | -    |
| 90.0 80.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | -    | -    | -    |
| 93.3 35.0                         | 4.9                           | -    | -    | 0.0  | -   | -    | 19.8 | -    | 5.6  | -    | -    | -    |
| 93.3 70.0                         | 5.1                           | -    | -    | 0.0  | -   | -    | 5.1  | -    | 0.0  | -    | -    | -    |
| <i>Citharichthys xanthostigma</i> |                               |      |      |      |     |      |      |      |      |      |      |      |
| Station                           | Jan.                          | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7 33.0                         | -                             | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.7  | -    | -    |



TABLE 4. (cont.)

|                                  |      |      |      |      |     |      |      |      |      |      |      |      |
|----------------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| <i>Hippoglossina stomata</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3                             | 55.0 | 0.0  | -    | 0.0  | -   | -    | 10.1 | -    | -    | 0.0  | -    | -    |
| <i>Paralichthys californicus</i> |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 86.7                             | 33.0 | 23.6 | -    | 0.0  | -   | -    | 10.2 | -    | -    | 0.0  | -    | -    |
| 86.7                             | 35.0 | 10.4 | -    | 4.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 30.0 | 0.0  | -    | 10.3 | -   | -    | 10.4 | -    | -    | 0.0  | -    | -    |
| 93.3                             | 26.7 | -    | -    | 4.8  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 93.3                             | 28.0 | -    | -    | 4.0  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| <i>Lepidopsetta bilineata</i>    |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3                             | 51.0 | 14.6 | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Lyopsetta exilis</i>          |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7                             | 49.0 | -    | -    | 14.0 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 76.7                             | 51.0 | -    | -    | 9.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0                             | 51.0 | 0.0  | -    | 0.0  | -   | -    | 9.2  | -    | -    | 0.0  | -    | -    |
| 80.0                             | 55.0 | 4.7  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 81.8                             | 46.9 | 0.0  | -    | 9.8  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 42.0 | 0.0  | -    | 10.6 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 55.0 | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7                             | 35.0 | 0.0  | -    | 9.6  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Microstomus pacificus</i>     |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3                             | 51.0 | 0.0  | -    | 10.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0                             | 37.0 | 0.0  | -    | 0.0  | -   | -    | 5.0  | -    | -    | 0.0  | -    | -    |
| <i>Parophrys vetulus</i>         |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0                             | 51.0 | 0.0  | -    | 3.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3                             | 51.0 | 0.0  | -    | 10.8 | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| <i>Pleuronichthys verticalis</i> |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                          | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 80.0                             | 51.0 | 4.4  | -    | 0.0  | -   | -    | 9.2  | -    | -    | 0.0  | -    | -    |

TABLE 4. (cont.)

| <i>Pleuromichthys verticalis</i> (cont.) |      |      |      |      |     |      |      |      |      |      |      |      |
|--|------|------|------|------|-----|------|------|------|------|------|------|------|
| Station                                  | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 40.6                                | -    | 0.0  | -    | 4.4  | -   | -    | 3.9  | -    | -    | 0.0  | -    | -    |
| 86.7 33.0                                | -    | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 30.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 10.4 | -    | -    | 0.0  | -    | -    |
| <i>Symphurus atricaudus</i>              |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                  | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 83.3 55.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 9.4  | -    | -    |
| Disintegrated fish larvae                |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                  | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 100.0                               | -    | 4.7  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 51.0                                | -    | 4.4  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 100.0                               | -    | 4.8  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 83.3 110.0                               | -    | 0.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.3  | -    | -    |
| 86.7 110.0                               | -    | 5.0  | -    | 0.0  | -   | -    | 0.0  | -    | -    | 4.6  | -    | -    |
| 90.0 28.0                                | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 90.0                                | -    | 0.0  | -    | 0.0  | -   | -    | 9.8  | -    | 0.0  | -    | -    | -    |
| 90.0 110.0                               | 0.0  | -    | -    | 0.0  | -   | -    | 4.8  | -    | 0.0  | -    | -    | -    |
| Unidentified fish larvae                 |      |      |      |      |     |      |      |      |      |      |      |      |
| Station                                  | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| 76.7 55.0                                | -    | -    | -    | 5.3  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 80.0 55.0                                | -    | 0.0  | -    | 5.0  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 50.0                                | -    | 0.0  | -    | 4.4  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 55.0                                | -    | 0.0  | -    | 4.1  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 86.7 100.0                               | -    | 0.0  | -    | 4.5  | -   | -    | 0.0  | -    | -    | 0.0  | -    | -    |
| 90.0 80.0                                | -    | 0.0  | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |
| 90.0 100.0                               | -    | 5.0  | -    | 4.9  | -   | -    | 0.0  | -    | 0.0  | -    | -    | -    |

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