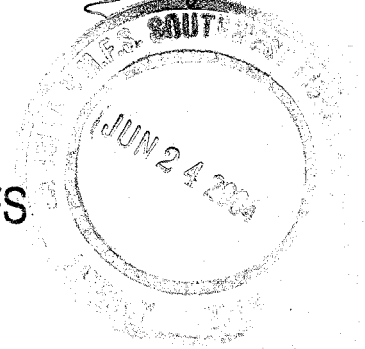


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# NOAA Technical Memorandum NMFS



1988

## ICHTHYOPLANKTON AND STATION DATA FOR CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS SURVEY CRUISES IN 1981

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NOAA-TM-NMFS-SWFC-112

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
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## NOAA Technical Memorandum NMFS

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**1988**



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## CONTENTS

	Page
List of Figures .....	iii
List of Tables .....	iv
Abstract .....	1
Introduction .....	1
Sampling Area and Pattern .....	2
Sampling Gear and Methods .....	3
Laboratory Procedures .....	4
Identification .....	5
Computer Entry and Editing .....	9
Species Summary .....	10
Explanation of Tables .....	10
Acknowledgments .....	11
Literature Cited .....	13
Figures .....	17
Tables .....	25
Index .....	166

## LIST OF FIGURES

	Page
Figure 1. Composite arrangement of diagrammatic charts showing areas sampled on each CalCOFI cruise during 1981 .....	17
Figure 2. Station pattern for CalCOFI Cruise 8012 showing tracks for each vessel .....	18
Figure 3. Station pattern for CalCOFI Cruise 8101 .....	19
Figure 4. Station pattern for CalCOFI Cruise 8102 .....	20
Figure 5. Station pattern for CalCOFI Cruise 8104 .....	21
Figure 6. Station pattern for CalCOFI Cruise 8105 .....	22
Figure 7. Station pattern for CalCOFI Cruise 8107 and 8108 .....	23
Figure 8. The basic station plan for CalCOFI cruises from 1950 to the present .....	24

## LIST OF TABLES

	Page
Table 1. Station and plankton tow data for CalCOFI cruises in 1981 .....	25
Table 2. Pooled occurrences of fish larvae taken during CalCOFI cruises in 1981 .....	50
Table 3. Pooled numbers of fish larvae taken during CalCOFI cruises in 1981 .....	54
Table 4. Numbers of fish larvae taken on stations occupied during CalCOFI cruises in 1981 .....	58
Table 5. Summary of pooled occurrences of fish larvae taken on CalCOFI cruises from 1972-1981 .....	160
Table 6. List of stations with multiple occupancies in one month during 1981 .....	165

## ABSTRACT

This report provides ichthyoplankton and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) cruises conducted off California and Baja California in 1981. It is the twenty-third report in a series that presents these data for all biological-oceanographic CalCOFI surveys from 1951 to the present. A total of 978 stations was occupied during 7 multivessel cruises over the survey area which extended from Pt. Reyes, California to Pt. San Juanico, Mexico, and seaward to several hundred miles. The data are listed in a series of 6 tables; the background, methodology, and information necessary for interpretation and quantitative analysis 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 key table lists, by station and month, standardized counts of each of the 150 larval fish categories identified from survey samples. This and previous and subsequent reports make the CalCOFI ichthyoplankton and station data available to all investigators and serve as guides to the newly developed computer data base.

## INTRODUCTION

This report, the twenty-third of a series, provides ichthyoplankton and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) joint biological-oceanographic survey cruises conducted in 1981. 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 such fluctuations. CalCOFI, known as the California Cooperative Sardine Research Program from 1949 to 1953, was made up of representatives of the South Pacific Fisheries Investigations (SPFI) of the U.S. Fish and Wildlife Service [now the La Jolla Laboratory, National Marine Fisheries Service (NMFS)], the Scripps Institution of Oceanography (SIO), the California Department of Fish and Game (CDFG), the California Academy of Sciences (CAS) and the Hopkins Marine Station of Stanford University. The first three of these agencies supplied ships and personnel to conduct the sea surveys. NMFS processed the plankton samples and analyzed the ichthyoplankton from them. SIO processed and analyzed the hydrographic samples and measurements and also analyzed invertebrate groups from the plankton samples.

The boundaries, station placement, and sampling frequency for the CalCOFI survey area were based on the results of joint biological and oceanographic cruises conducted by NMFS and SIO during 1939-41. Those cruises were designed to collect sardine eggs and larvae and associated hydrographic data over the entire areal and seasonal spawning range of the species. On these survey cruises, plankton tows were made to 70 m, a depth which

encompassed the vertical distribution of sardine eggs and larvae. Wide-ranging joint biological and oceanographic survey cruises were resumed in 1949 with sardine as the focus; however, an increasing interest in other biological components resulted in the deepening of standard tows to 140 m in 1951. This marked the beginning of truly quantitative ichthyoplankton sampling on CalCOFI surveys.

Hydrographic data resulting from CalCOFI surveys in 1981 have been published in standard formats (Univ. of Calif., SIO, 1985a,b). A computer data base for eggs and larvae of sardine and anchovy, for larvae of Pacific hake (*Merluccius productus*), jack mackerel (*Trachurus symmetricus*) and Pacific mackerel (*Scomber japonicus*), and for eggs of Pacific saury (*Cololabis saira*) was established in 1969. The development of a data base for other fish larvae is a complex undertaking because competency of identification has evolved steadily over the past 38 years. We began the task of producing a CalCOFI ichthyoplankton data base and associated data report series in 1983. All available original records for 1981 were subjected to an extensive verification and editing process to produce this report. This and previous (Ambrose et al., 1987a,b,c; 1988a,b,c; Sandknop et al., 1987a,b; 1988a,b,c,d; Stevens et al., 1987a,b,c; 1988a,b; Sumida et al., 1987a,b; 1988a,b,c) and subsequent reports make the CalCOFI ichthyoplankton and station data available to all investigators and serve as guides to the computer data base. The data base will be modified when additional errors are discovered and when composite taxa from the earlier years are reidentified. These reports are the fundamental reference documents against which subsequent changes in the data base can be compared.

#### SAMPLING AREA AND PATTERN

In 1981, the six CalCOFI cruises occupied stations during portions of all months from January to August. A seventh cruise (8012), conducted in November and December of 1980, was included in the 1981 data base. A total of 978 stations included in this data base was occupied on seven cruises, with an average of 140 stations per cruise (range 81-206). Coverage of the survey station pattern varied among cruises and the entire survey area was not covered on any single cruise (Figures 1-7, Table 1). The area off northern California (lines 40-57) was not covered. All major lines were occupied off central California (lines 60-76.7) on Cruises 8101 through 8107 and only line 60 was excluded from the coverage on Cruise 8012. All major lines between Pt. Conception, California, and Pt. San Juanico, Baja California (lines 80-137) were occupied on Cruise 8012; southerly coverage of this region stopped at Pt. Pequena (line 133.3) on Cruise 8104, at Pt. Abreojos (line 130) on 8102, at San Cristobal Bay (line 123.3) on 8108, and at Rosario Bay (line 110) on 8101 and 8105. The area off southern Baja California (lines 140-157) was not surveyed in 1981. Typically, coverage did not extend beyond station 90 (approximately 160-260 miles offshore). Ordinal stations ending in a decimal were rounded off in the station



plots (Figures 2-7)<sup>1</sup>. Cruises 8107 and 8108 in this report are considered a single cruise (8107) in the SIO hydrographic data base and are combined in Figure 7.

Two vessels were employed on these cruises: the *David Starr Jordan* of NMFS and the *New Horizon* of SIO. The *David Starr Jordan* was used on six cruises and the *New Horizon* on five (Univ. of Calif., SIO, 1985a,b).

After 1969, CalCOFI surveys were made on a triennial basis. These began in 1972 and continued every 3 years (1975, 1978, 1981, 1984) until 1985 when annual surveys were resumed.

### 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 by a central axle which is horizontal to the towing wire and attached to it by a clamp. The axle is free to rotate so that the mouth openings are vertical during the tow. The standard CalCOFI version of the bongo net has 71 cm diameter frames and net material constructed of nylon mesh. Each net consists of a cylindrical section ca. 146 cm long, a truncated conical section ca. 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 net is used for other purposes; the mesh size is either 0.505 mm or 0.333 mm mesh depending on requirements. The cod end of each net is constructed of 0.333 mm mesh (W. C. Flerx, pers. comm.)

The standard tow in 1981 was an oblique haul to ca. 210 m depth (to 15 m of the bottom in shallow areas) designed to filter a constant amount of water per depth interval (ca.  $2\text{m}^3/\text{m}$  of depth) over the vertical range of most ichthyoplankters. Hauls

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<sup>1</sup>CalCOFI lines (Figure 8) are arranged perpendicular to the coastline and extend from the Canadian border (line 10) to below Cape San Lucas, Baja California (line 157). Stations were established on the basis of a perpendicular to line 80 (off Pt. Conception) at a point designated as station 60. Stations were plotted seaward and shoreward from station 60 on each line. Cardinal CalCOFI lines (those ending in "0") are 120 miles apart and usually bracket two ordinal lines (ending in "3" or "7"), so that lines are 40 miles apart over most of the pattern. Cardinal stations are 40 miles apart and typically these are separated by a station number ending in "5" so that stations are 20 miles apart out to station 90 on most lines. Stations are placed at closer intervals near the coast and islands to accommodate these features (see Kramer et al., 1972 for further details).

were made at a ship speed of 1.5-2.0 knots and initiated by clamping the net to the towing cable with the 34 kg terminal weight below the surface. The net was lowered to ca. 210 m depth by paying out 300 m of wire over a 6 minute period (35 m of depth/min.). After fishing at depth for 30 seconds, the net was retrieved at 20 m/min. (14 m depth/min.). The angle of stray of the towing cable was recorded every 30 seconds and maintained at 45° (+3°) by adjusting the ship speed and course. After reaching the surface, the nets were washed down and the samples preserved in 5% formalin buffered with sodium borate. Flowmeter readings were made at the beginning and end of each tow. Descriptions of the methods are given by Kramer et al. (1972) and Smith and Richardson (1977). The bongo net frame is described in McGowan and Brown (1966) and Smith and Richardson (1977).

### LABORATORY PROCEDURES

Laboratory processing began with the determination of a displacement volume for each sample (methods described in Staff, SPFI, 1953 and Kramer et al., 1972). Sorting involved the removal of ichthyoplankton from the sample and identification and separation of: eggs and larvae of Pacific sardine and northern anchovy; larvae of Pacific hake; and eggs of Pacific saury. Some samples were fractionated into aliquots using a Folsom plankton splitter (McEwen et al., 1954) prior to sorting. Criteria for fractioning were: 1) samples taken at a distance greater than 200 nautical miles from shore were not fractioned, 2) samples taken closer than 200 miles from shore and containing 25 ml of plankton or less were not fractioned, and 3) samples taken closer than 200 miles from shore and containing more than 25 ml of plankton were fractioned to 50% of their original volume (J. R. Thrailkill, pers. comm.). Aliquot percentages for fractioned samples from 1981 are listed in Table 1 under the "Percent Sorted" column; 42% of the samples collected in 1981 were fractioned.

A "standard haul factor" (SHF) was calculated for each tow to make them comparable and allow estimations of areal abundance. This factor adjusts the number of eggs or larvae in a haul to the number in 10 m<sup>3</sup> of water strained per meter of depth fished. If the vertical distribution of the species has been encompassed, then the adjusted value is equivalent to the number under 10 m<sup>2</sup> of sea surface. The SHF is calculated for each haul by the formula:

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

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

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

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

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

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

$p$  = length of column of water (m) needed to 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 1975. 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 carried out by a separate group of specialists. 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 identifying these series by relating them to known metamorphic, juvenile, or adult stages with overlapping features (Powles and Markle, 1984). A total of 148 taxa was identified for 1981, with 93 taken to species, 27 to genus, 24 to family, and 4 to order or suborder. In the decade of the 1970's some taxa were identified for the first time. These included larvae of the bathylagid *Bathylagus longirostris*, the gonostomatids *Danaphos oculatus* and *Valencienellus stellatus*, the myctophid *Bolinichthys spp.*, and the trichiurid *Lepidopus xantusi*. Larvae in the families Scopelarchidae and Nomeidae were identified to genus or species. Five species of rockfish in the *Sebastes* group were also identified: *S. aurora*, *S. jordani*, *S. levis*, *S. macdonaldi*, and *S. paucispinis*. In 1981, four species of Sciaenidae were identified for the first time: *Cheilotrema saturnum*, *Genyonemus lineatus*, *Roncador stearnsii*, and *Seriphus politus*.

The task of producing a reliable and equitable ichthyoplankton data base required extensive procedures to verify, correct, and edit the original identifications. The primary data source was the original identification sheets (see Kramer et al., 1972, for examples); however, a critical resource used in all phases of this process was the CalCOFI

ichthyoplankton collection in which the samples are archived. Throughout the course of CalCOFI ichthyoplankton studies, samples have been identified to the lowest taxon possible. In reviewing these identifications for the data base, our approach has been conservative and we have preserved those identifications and counts which we could confirm, while correcting as many of the errors as possible. After computer entry, taxonomic errors and inconsistencies in the data base were corrected and the most obvious identification errors were corrected. Our current knowledge of ichthyoplankton techniques coupled with a precise understanding of the development of identification competency in the program over the years allowed us to critically judge the historical records. Identifications were changed to different taxa, lumped to a higher taxonomic category, or given a more precise taxonomic name. In some cases, identifications of a taxon were inconsistent among cruises in a year. These records were made equitable by lumping to the higher taxonomic category to avoid biases that could result in quantitative misinterpretation.

Next, statistical, seasonal, and geographic outliers were identified, employing a series of graphic summaries and listings. Examination of geographic outliers proved to be especially effective because of our accumulated knowledge of species distributions. In the course of examining samples for these outliers, other identification errors were discovered and eventually all taxa were scrutinized to some extent. Lastly, certain taxa were reexamined in all samples for the entire CalCOFI time series. These taxa were selected because of their commercial, ecological, phylogenetic, or zoogeographic importance or because taxonomic confusion was at the ordinal level. The following is a list of the taxa for 1981 which received special attention, with explanations and caveats intended to aid in quantitative interpretations:

*Sardinops sagax* - all specimens south of line 120 checked for misidentification of *Opisthonema* spp.

*Engraulis mordax* - some nearshore samples of small *E. mordax* may contain other anchovy genera which could not be differentiated.

*Nansenia* spp. - all specimens checked and identified as *N. candida* or *N. crassa*; all specimens of these species near their range boundaries checked.

*Bathylagus* spp. - includes small and/or disintegrated specimens of *Bathylagus* or *Leuroglossus stilbius*.

Stomiiformes - all specimens checked and identified to genus or species; residuals are small, poorly preserved or unavailable specimens.

Cyclothone spp. - tentative and sporadic identifications to species were lumped to genus.

*Vinciguerria lucetia* - some *V. poweriae* may remain in these samples because small larvae of the two species could not be differentiated; sporadic identification of *V. poweriae* began in 1961.

Sternoptychidae - tentative and sporadic identifications of hatchetfishes to genus were lumped to family.

Paralepididae - all specimens examined and identified to species; residuals are small, poorly preserved or unavailable specimens.

Scopelarchidae - all specimens reidentified to genus or species; residuals are small, poorly preserved specimens.

*Lampanyctus* spp. - tentative and sporadic identifications to species lumped to genus.

*Lampanyctus regalis* - underrepresented because of inability to differentiate small larvae (<5 mm) from those of other species of the genus; counts may include other species of the genus because of difficulty in identifying larvae of this large and complex genus.

*Lampanyctus ritteri* - comment for *L. regalis* applies to this species.

*Hygophum* spp. - all specimens reidentified to species; residuals are small, poorly preserved specimens.

*Hygophum atratum* - all specimens checked.

*Hygophum reinhardtii* - all specimens checked.

*Physiculus* spp. - specimen checked.

Ophidiiformes - this category did not exist originally and unidentified larvae of this order, including a type referred to as "Zoarcidae", were originally placed in the "blenny" category.

*Ophidion scrippsae* - all specimens checked.

Trachipteridae - tentative and sporadic identifications to genus were lumped to family.

*Melamphaes* spp. - all identifications ascribed to Melamphaidae were reexamined and assigned to genus (*Melamphaes*, *Poromitra*) or species (*Scopelogadus bispinosus*); larvae originally identified as *Melamphaes* spp. were not reexamined and this category may contain other melamphaid genera.

Hexagrammidae - all specimens checked and identified to genus or species; residual is a small, poorly preserved specimen.

*Oxylebius pictus* - all specimens checked.

*Zaniolepis* spp. - all specimens checked.

Blennioidei - this is the residual of the completely reexamined "blenny" category, which also contained various misidentified ophidiiforms, and is now restricted to members of northern stichaeioid families and true blennioids (other than *Hypsoblennius* spp.) in the southern part of the pattern).

Labridae - all specimens originally identified to family were reexamined and assigned to genus (*Halichoeres* spp.) or species (*Oxyjulis californica*, *Semicossyphus pulcher*).

*Chromis punctipinnis* - records south of about line 120 may include other pomacentrid taxa.

Carangidae - all specimens checked; tentative and sporadic identifications to genus or species (except *Trachurus symmetricus* and *Seriola lalandi*) were lumped to family.

*Seriola lalandi* - specimen checked.

Gerreidae - tentative and sporadic identifications to genus lumped to family.

Haemulidae - tentative and sporadic identifications to genus lumped to family.

*Girella nigricans* - specimen checked.

*Caulolatilus princeps* - all specimens checked.

Sciaenidae - larvae identified to species; residuals are small, poorly preserved specimens.

Scombridae - all larvae identified to this family or constituent taxa (except *Scomber japonicus*) were reexamined and reassigned.

Pleuronectiformes - all specimens of this category were reexamined and reassigned.

*Citharichthys* spp. - all larvae identified to species were lumped to genus except *C. stigmaeus*; category includes larvae of *Etropus* spp.

*Citharichthys stigmaeus* - includes larvae larger than ca. 4.5 mm; smaller larvae are in *Citharichthys* spp.

*Paralichthys* spp. - all specimens of this genus were examined and most were assigned to *P. californicus* or *Xystreurus liolepis*.

*Xystreurys liolepis* - originally misidentified as *Paralichthys californicus*; all specimens reidentified.

*Glyptocephalus zachirus* - all specimens examined.

*Microstomus pacificus* - all specimens examined.

*Pleuronichthys* spp. - all larvae of this genus and constituent species were examined and assigned to species; residuals are unavailable specimens.

*Psettichthys melanostictus* - all specimens examined.

#### COMPUTER ENTRY AND EDITING

Each taxon on the original identification sheets was given a 3-digit code based on the list of codes in Haight et al. (1979). Taxon codes and counts from these sheets were keypunched by cruise and station, along with pertinent station and tow data and entered into the VAX 11/780 computer at the University of California, San Diego, Computing Center. After entries were completed for an entire year, print-out listings of taxa and counts on each station were compared with the original data sheets to eliminate keypunch errors. Next, data in the file were cross-checked with data on an existing file which contained: station and tow data; numbers of eggs of sardine, anchovy, and saury; numbers of larvae of sardine, anchovy, hake, jack mackerel, and Pacific mackerel; total number of fish eggs; and total number of fish larvae.

Discrepancies in ichthyoplankton data in these two files were corrected by inspecting original records from the sorting laboratory, the original ichthyoplankton identification sheets, and the samples themselves. Station and tow data discrepancies between the two files were corrected by reviewing ships' logs and deck tow sheets, original records from the sorting laboratory, cruise announcements, publications, header information on the ichthyoplankton identification sheets, and station plots generated for each cruise. Eventually all station and tow data were checked by comparing these sources.

The corrected ichthyoplankton data base was then examined statistically and outliers were found and checked as above. Distributional plots were then prepared for each taxon and these were checked by reviewing the data sources mentioned above and by examining archived specimens. A listing of each taxon by station (Table 4) was produced, which became the primary document for subsequent checks. Misidentifications found in geographic outlier checks and other misidentifications and data problems discovered in the course of examining archived samples resulted in several iterations of Table 4. Finally, totals in Table 4 were checked against annual summaries of incidence and abundance

(Tables 2 and 3). Ecological analyses of the data were conducted concurrently with editing procedures and provided cross-checks that allowed correction of errors.

### SPECIES SUMMARY

Larvae of northern anchovy (*Engraulis mordax*) represented 65.5% of all fish larvae taken on CalCOFI cruises during 1981 and numbered 10 times as many as the rockfish genus, *Sebastes* spp., the next most abundant taxon with 6.4% of the total larvae (Table 2, 3). Northern anchovy also ranked first in incidence; *Sebastes* ranked 2nd. The next most abundant species was the gonostomatid *Vinciguerria lucetia* with 5.0% of the total, followed by the deepsea smelt *Leuroglossus stilbius* with 3.5%; they ranked 5th and 4th respectively, in incidence. Pacific hake, *Merluccius productus*, ranked 5th in abundance (2.5%) and 12th in occurrence. Two myctophids, *Stenobranchius leucopsarus* and *Triphoturus mexicanus*, ranked 6th (2.1%) and 7th (1.7%) in number and 6th and 8th in occurrence. The final 3 taxa in the top 10 collected in 1981 were the Pacific mackerel, *Scomber japonicus*, with 1.1%, the myctophid *Protomyctophum crockeri*, with 1.0%, and the sanddab genus *Citharichthys*, also with 1.0% of total larvae. These 3 taxa ranked 27th, 2nd, and 9th in incidence, respectively. These 10 taxa contributed 89.7% to the total number of larvae collected in 1981; the remaining 10.3% was distributed among 138 taxa plus the disintegrated and unidentified categories. Of the 10 taxa, 3 were coastal demersal groups, 2 were coastal pelagic species, and 5 were midwater species.

### EXPLANATION OF TABLES

Table 1 - This table lists by cruise the pertinent station and tow data for 1981 (including November and December, 1980), the volume of water filtered and standard haul factor for each tow, the percent of sample sorted, and the total numbers 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 2-7). Stations are designated by two groups of digits; the first set indicates the line and decimal fraction and the second set indicates the station on the line. Time is listed as Pacific Standard Time at the start of each tow in 24-hour designation. Methods for determining tow depth, volume of water strained, standard haul factor, and percent sorted were described in the methods section. The values for total fish eggs and larvae represent raw counts (unadjusted for percent sorted or standard haul factor). Ship codes are as follows: JD, David Starr Jordan; NH, New Horizon.



- Table 2 This table lists pooled occurrences of all larval fish taxa taken during 1981 in ranked order.
- Table 3 This table lists pooled counts of all larval fish taxa during 1981 in ranked order. Numbers are adjusted for percent sorted and standard haul factors.
- Table 4 - This table gives numbers of fish larvae for each taxon in 1981, listed by station and calendar month in which the tow was taken. Counts are adjusted for percent of sample sorted and standard haul factor. Average values are given for stations occupied more than once during a month. See Table 1 for station and tow data and Table 6 for listing of stations with multiple occupancies during a month. Multiple occupancies occurred when a station was occupied more than once during a calendar month; in some cases, multiple occupancies resulted from separate cruises. The orders are listed in "phylogenetic" sequence modified from Nelson (1984). Subtaxa within each order are listed alphabetically. Page numbers for each taxon are given in the index at the end of the report.
- Table 5 - This table is a summary of pooled occurrences of all larval fish taxa taken on CalCOFI surveys from 1972 to 1981. Taxa are listed in the same order as in Table 4.
- Table 6 - List of stations with multiple occupancies in one month during 1981.

#### ACKNOWLEDGMENTS

The senior author, Morgan Busby, Elaine Sandknop, Elizabeth Stevens, and Barbara MacCall originally identified larvae from CalCOFI cruises of 1981. Ronald Whyte coded each larval fish taxon or type and Rita Ford entered them into the computer. Debby Snow efficiently assisted in all aspects of data editing and retrieval. Cindy Meyer and James Ryan provided programming assistance. Dorothy Roll designed the CalCOFI data acquisition system and provided data processing support. Ken Raymond, Roy Allen, and Henry Orr helped with graphics and production of the report. Lorraine Prescott prepared the manuscript for printing. Paul Smith determined statistical outliers, provided assistance during geographical outlier checks and offered helpful suggestions throughout the project. Izadore Barrett, Director of the Southwest Fisheries Center provided support critical to the completion of the project. James Thrailkill planned CalCOFI surveys and supervised cruises, data handling, and plankton sorting from 1949 to 1986 and is largely responsible for the high quality of these operations. Without the vision and direction of Elbert Ahlstrom and Elton Sette and the dedicated efforts of the many people who collected, processed, and analyzed the samples,

this data base would not exist. During the final stages of preparing this report, Reuben Lasker succumbed to cancer. As Chief of the Coastal Fisheries Resources Division, SWFC, his encouragement and support for all of us involved in the sea surveys, sample processing, and data base and report preparation were unwavering. We dedicate this work to his memory.

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Figure 1. Composite arrangement of diagrammatic charts showing areas sampled on each CalCOFI cruise during 1981.

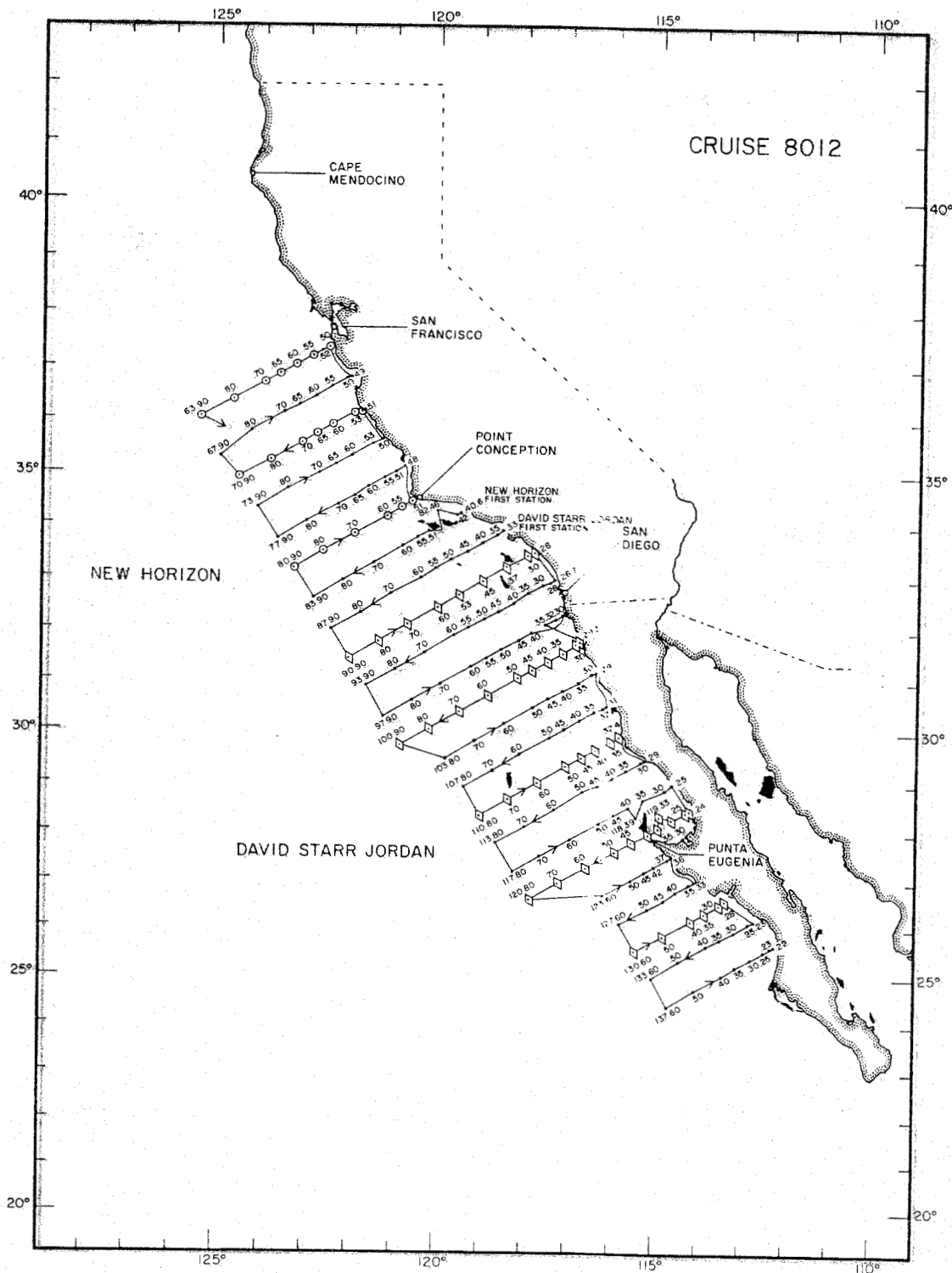


Figure 2. Station pattern for CalCOFI Cruise 8012 showing tracks for each vessel. Stations with plankton tows are indicated by a dot; circles designate hydrographic stations; diamonds signify STD recordings. Figures 2-7 modified from charts in Univ. of Calif., SIO (1985a, 1985b) to include only those stations listed in Table 1 of this report.



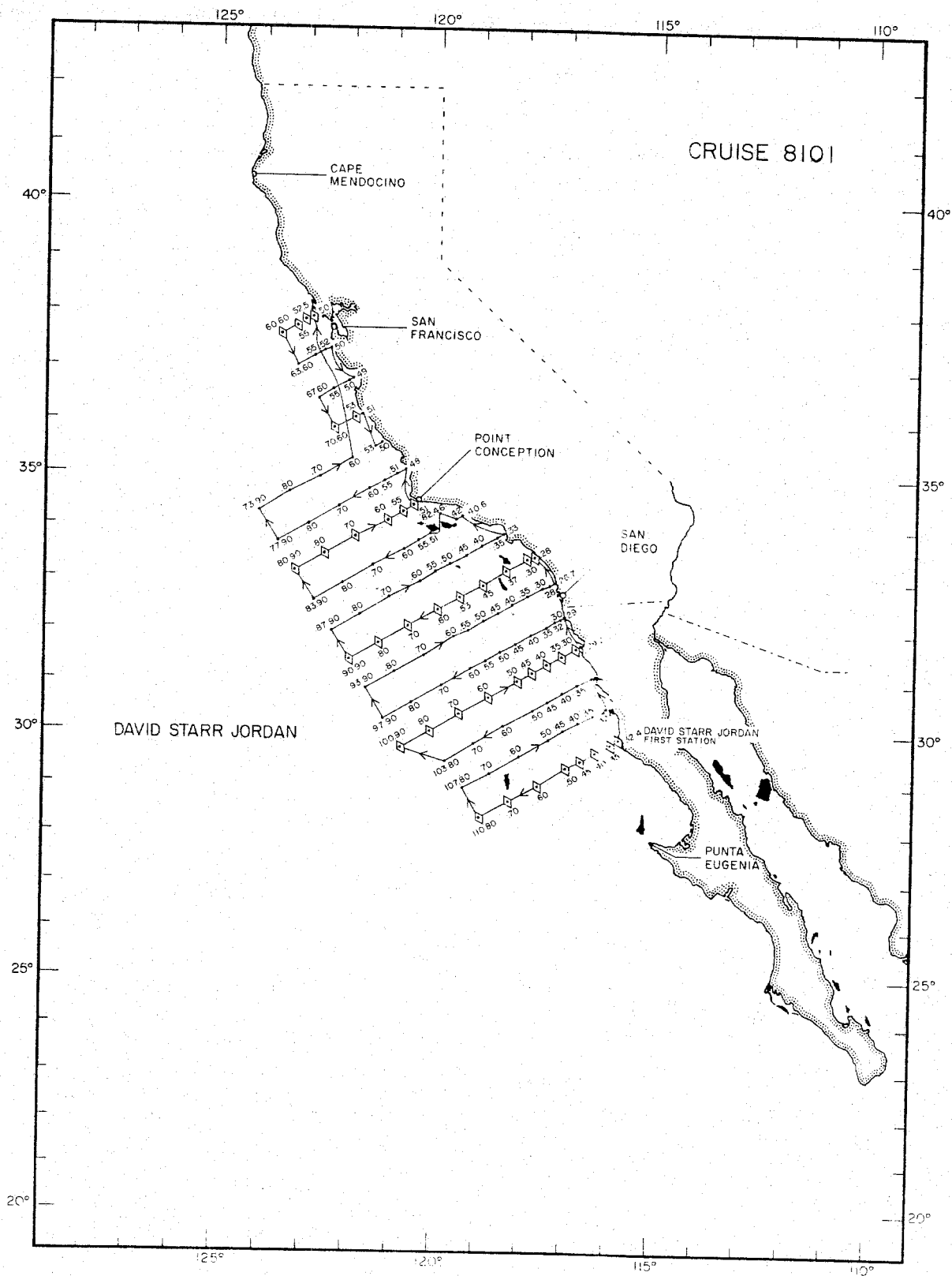


Figure 3. Station pattern for CalCOFI Cruise 8101. Symbols as in Figure 2.

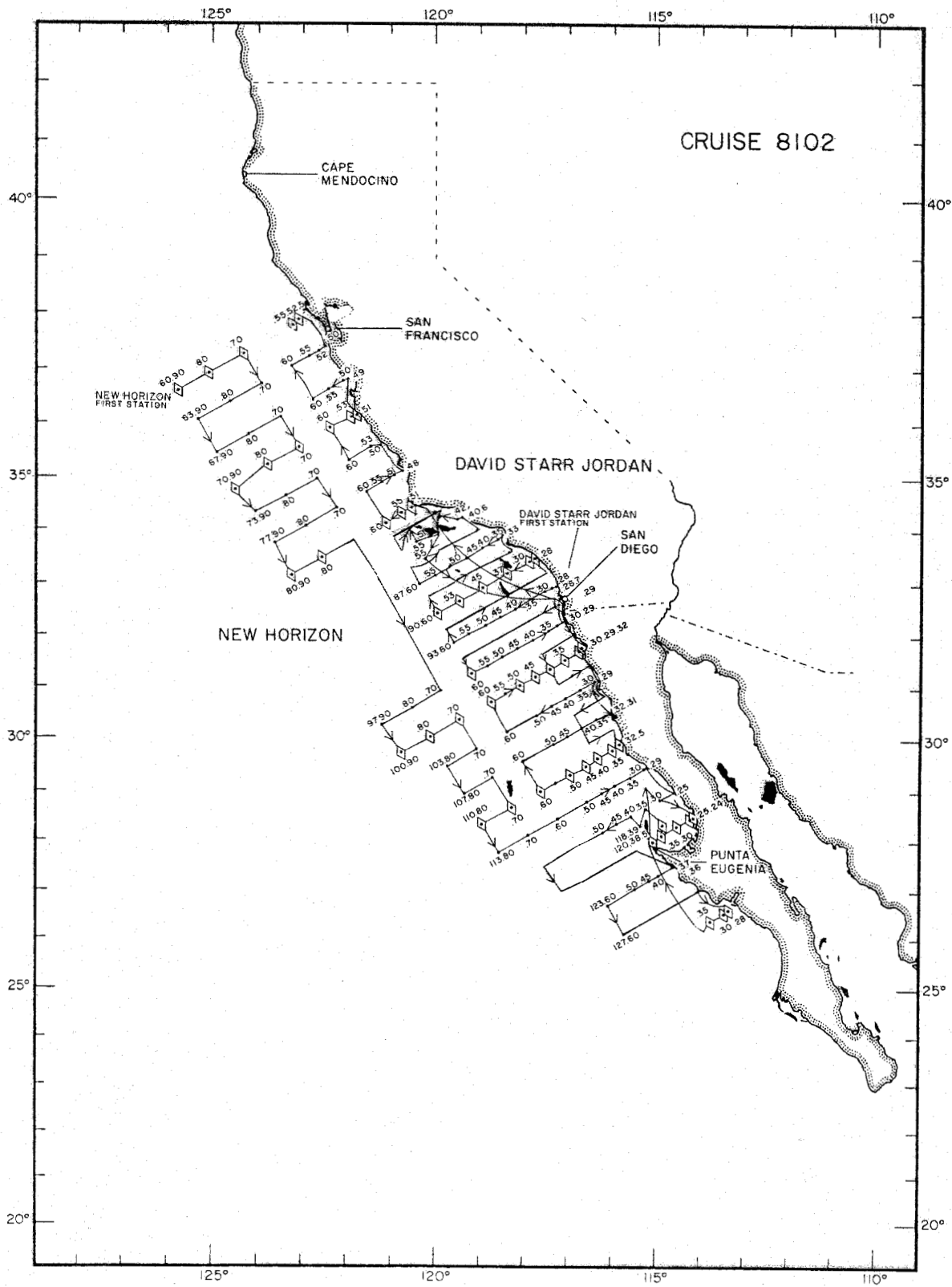


Figure 4. Station pattern for CalCOFI Cruise 8102. Symbols as in Figure 2.

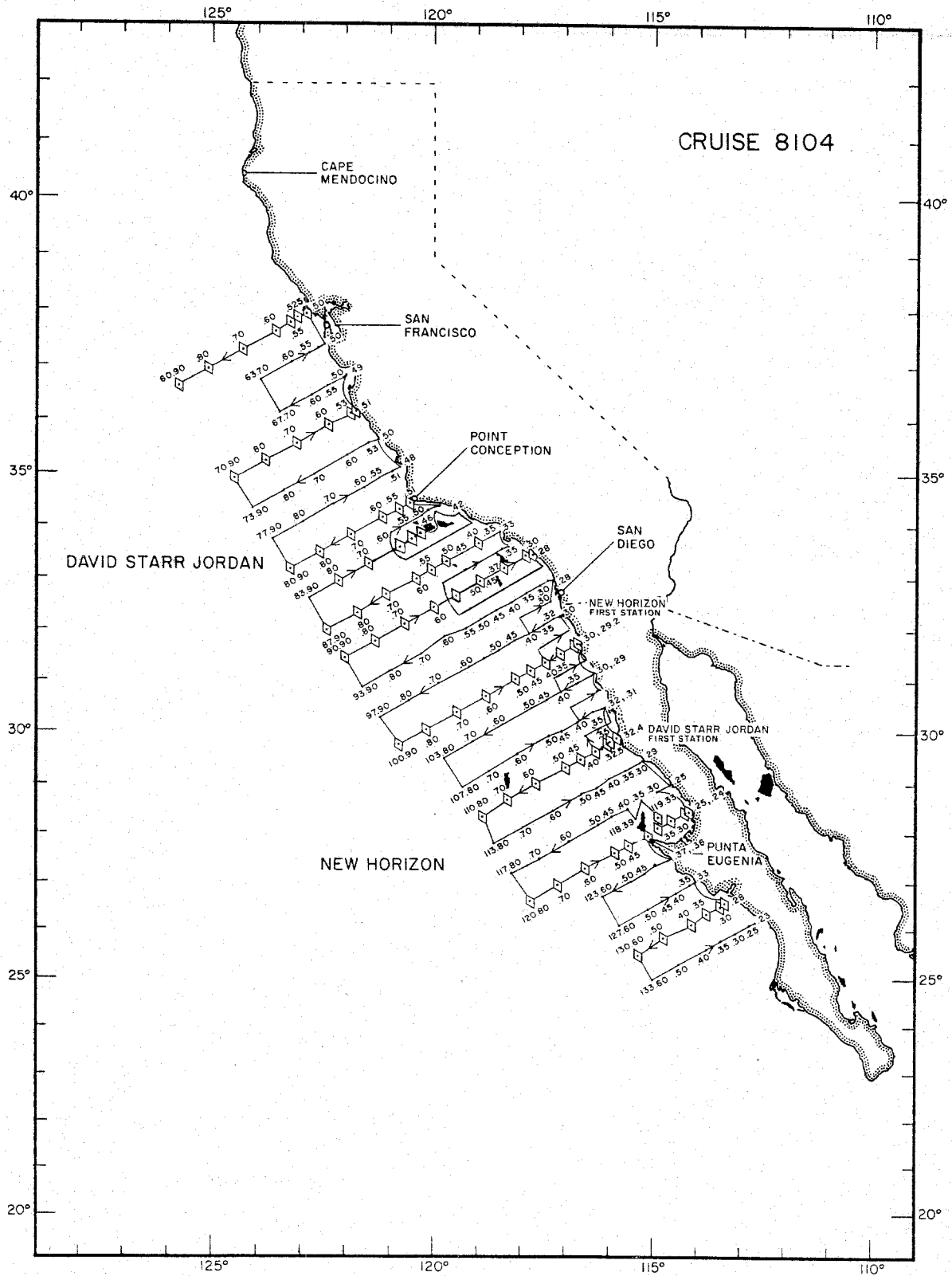


Figure 5. Station pattern for CalCOFI Cruise 8104. Symbols as in Figure 2.

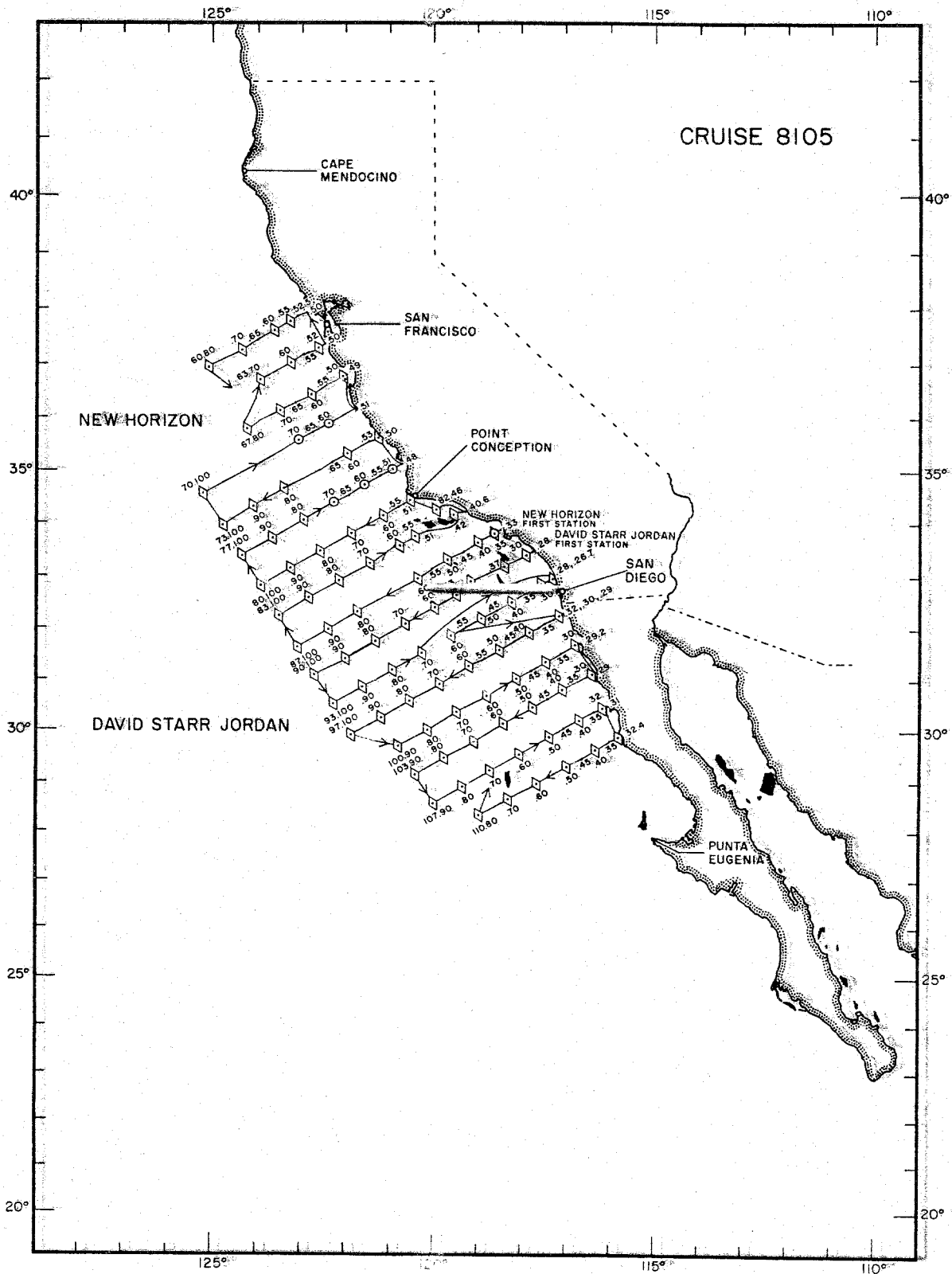


Figure 6. Station pattern for CalCOFI Cruise 8105. Symbols as in Figure 2.

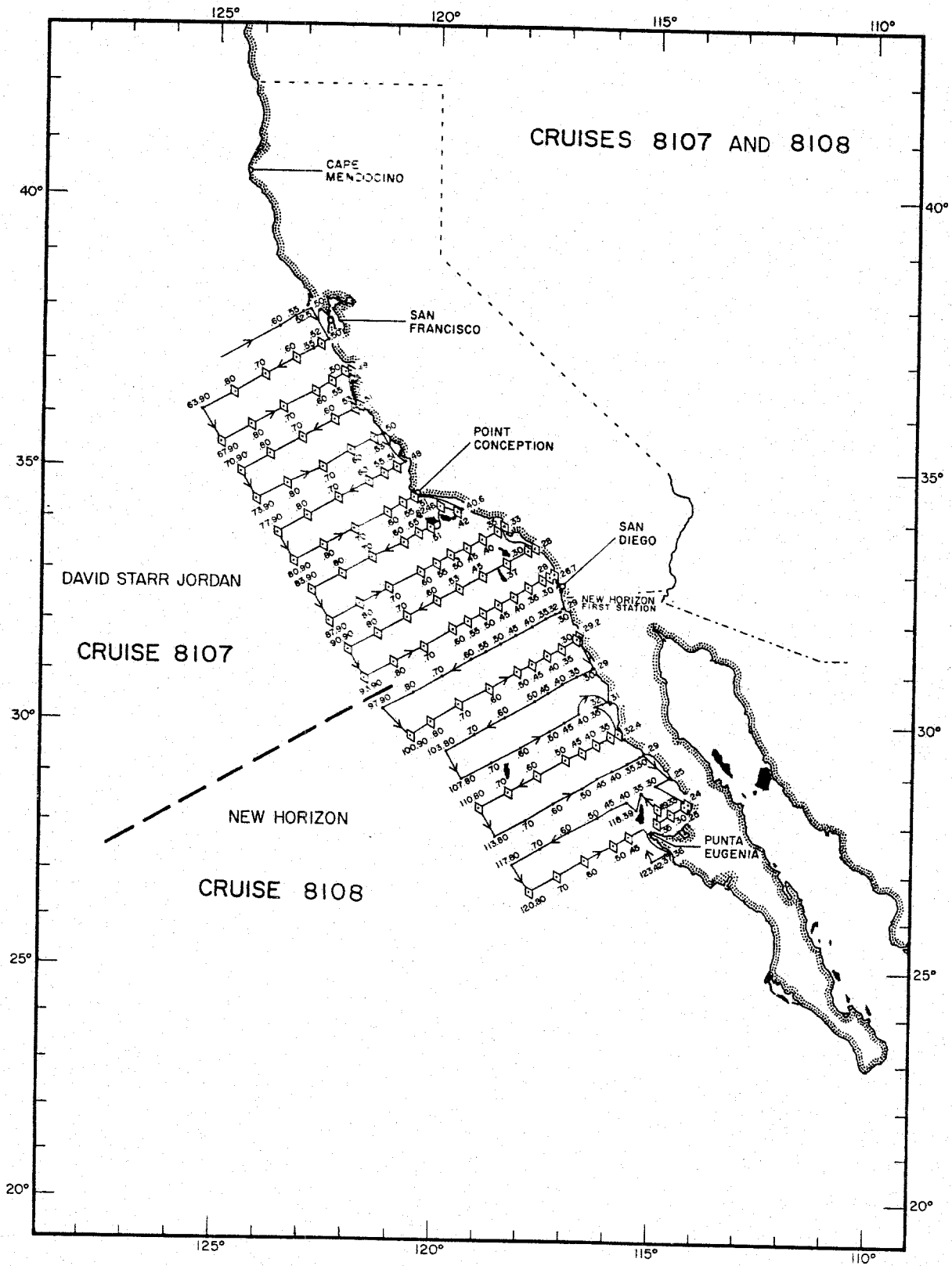


Figure 7. Station pattern for CalCOFI Cruises 8107 and 8108. Symbols as in Figure 2.

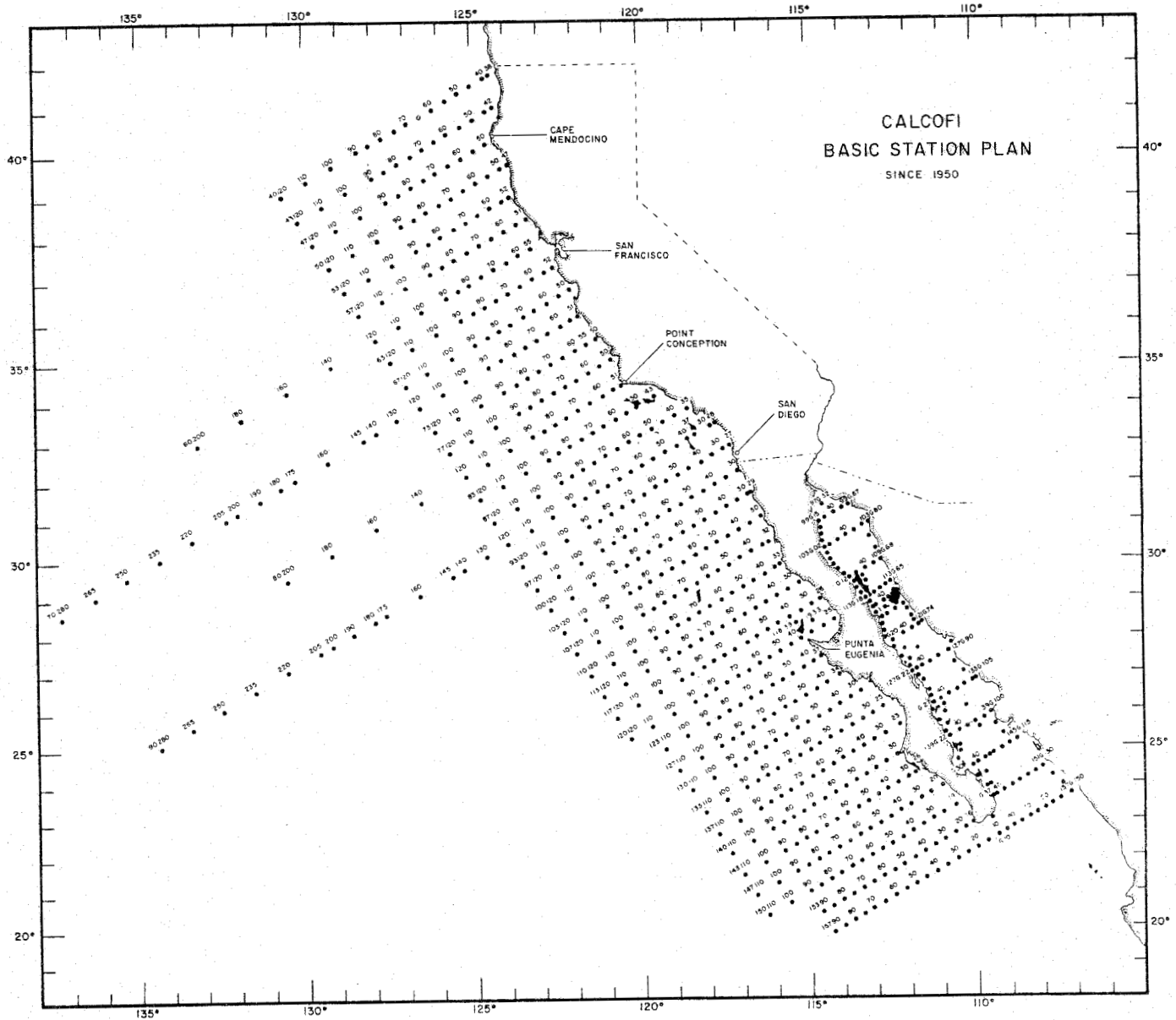


Figure 8. The basic station plan for CalCOFI cruises from 1950 to the present.

TABLE 1. Station and plankton tow data for CalCOFI cruises in 1981. Counts for fish eggs and larvae are not adjusted for standard haul factor or percent of sample sorted.

CalCOFI Cruise 8012

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand-ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
63.3	50.0	37 22.7	122 28.6	NH	80 12 17	0940	27	3.73	50.0	3	5
63.3	52.0	37 18.9	122 37.0	NH	80 12 17	1140	75	5.07	48.9	57	1073
63.3	55.0	37 12.5	122 50.3	NH	80 12 17	1340	207	4.77	46.8	39	16
63.3	60.0	37 02.5	123 11.9	NH	80 12 17	1715	212	5.07	52.9	9	17
63.3	65.0	36 52.5	123 33.4	NH	80 12 17	2105	208	4.40	51.8	14	28
63.3	70.0	36 42.4	123 55.0	NH	80 12 18	0050	209	5.01	51.4	8	10
63.3	80.0	36 22.6	124 37.6	NH	80 12 18	0630	200	4.21	46.8	15	20
63.3	90.0	36 02.6	125 20.5	NH	80 12 18	1145	210	5.20	100.0	11	12
66.7	49.0	36 49.2	121 59.1	NH	80 12 17	0405	207	4.75	48.9	76	810
66.7	50.0	36 47.3	122 03.4	NH	80 12 17	0235	213	5.24	53.6	103	1
66.7	55.0	36 37.7	122 25.0	NH	80 12 16	2305	206	4.14	49.3	14	19
66.7	60.0	36 27.2	122 46.4	NH	80 12 16	1955	207	4.21	51.3	54	15
66.7	65.0	36 17.2	123 07.8	NH	80 12 16	1640	192	4.01	46.4	5	5
66.7	70.0	36 07.2	123 29.1	NH	80 12 16	1215	205	5.00	100.0	10	8
66.7	80.0	35 47.2	124 11.7	NH	80 12 16	0650	205	4.21	100.0	14	7
66.7	90.0	35 27.3	124 54.1	NH	80 12 16	0035	210	4.83	100.0	15	11
70.0	51.0	36 10.9	121 43.6	NH	80 12 14	1530	211	5.05	54.3	27	3
70.0	53.0	36 06.9	121 52.3	NH	80 12 14	1725	215	5.23	50.0	41	7
70.0	60.0	35 52.9	122 21.9	NH	80 12 14	2205	208	4.96	49.1	6	27
70.0	65.0	35 42.9	122 43.1	NH	80 12 15	0205	210	5.00	48.1	1	8
70.0	70.0	35 32.9	123 04.4	NH	80 12 15	0615	211	4.78	52.3	3	2
70.0	80.0	35 12.6	123 46.9	NH	80 12 15	1215	203	4.37	100.0	11	30
70.0	90.0	34 53.0	124 54.3	NH	80 12 15	1845	213	4.85	100.0	16	18
73.3	50.0	35 38.2	121 15.4	NH	80 12 14	1020	35	4.23	100.0	82	30
73.3	53.0	35 32.6	121 28.1	NH	80 12 14	0810	210	4.83	52.9	32	5
73.3	60.0	35 18.6	121 57.7	NH	80 12 14	0405	209	5.06	48.4	15	30
73.3	65.0	35 08.6	122 18.8	NH	80 12 14	0050	211	5.08	53.4	8	22
73.3	70.0	34 58.6	122 40.1	NH	80 12 13	2135	215	5.22	48.0	7	11
73.3	80.0	34 38.6	123 21.9	NH	80 12 13	1620	214	5.01	100.0	4	28
73.3	90.0	34 18.3	124 03.9	NH	80 12 13	1100	212	4.85	100.0	8	10
76.7	48.0	35 07.3	120 42.4	NH	80 12 12	0535	22	4.42	100.0	68	165
76.7	51.0	35 00.8	120 54.7	NH	80 12 12	0735	50	5.63	52.1	7	6
76.7	55.0	34 53.5	121 11.4	NH	80 12 12	1005	428	5.05	51.2	23	23
76.7	60.0	34 43.3	121 32.9	NH	80 12 12	1315	397	5.53	54.1	9	32
76.7	65.0	34 33.3	121 53.9	NH	80 12 12	1625	381	5.78	50.0	1	18
76.7	70.0	34 23.3	122 14.8	NH	80 12 12	1925	439	4.82	52.2	6	14
76.7	80.0	34 03.2	122 56.6	NH	80 12 13	0030	413	5.08	48.4	4	8
76.7	90.0	33 43.3	123 38.0	NH	80 12 13	0545	396	5.45	46.3	10	7
80.0	51.0	34 27.0	120 31.4	NH	80 12 11	2325	129	5.08	100.0	306	125
80.0	55.0	34 19.5	120 48.0	NH	80 12 11	1945	405	5.22	52.3	38	60
80.0	60.0	34 09.0	121 09.0	NH	80 12 11	1550	393	5.55	100.0	29	49
80.0	70.0	33 48.9	121 50.8	NH	80 12 11	1000	390	5.44	51.7	6	14
80.0	80.0	33 29.0	122 32.0	NH	80 12 11	0345	352	6.44	51.7	7	6
80.0	90.0	33 09.0	123 13.3	NH	80 12 10	2147	420	5.16	100.0	22	1

TABLE 1. (cont.)

## CALCOFI Cruise 8012

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
82.0	46.0	34 15.8	119 57.0	NH	80 12 09	1430	207	5.52	100.0	10	161
83.3	40.6	34 13.0	119 25.5	NH	80 12 09	0940	38	7.67	100.0	28	173
83.3	42.0	34 10.7	119 30.5	NH	80 12 09	1035	118	7.46	100.0	10	69
83.3	51.0	33 52.7	120 08.0	NH	80 12 09	1928	91	5.16	100.0	4	88
83.3	55.0	33 44.3	120 23.8	NH	80 12 09	2220	213	5.24	48.9	21	35
83.3	60.0	33 34.7	120 45.4	NH	80 12 10	0130	215	5.31	50.7	5	20
83.3	70.0	33 14.7	121 26.6	NH	80 12 10	0645	220	5.86	100.0	4	11
83.3	80.0	32 54.9	122 07.5	NH	80 12 10	1200	208	5.04	100.0	7	18
83.3	90.0	32 34.7	122 48.7	NH	80 12 10	1640	224	5.50	100.0	8	20
86.7	33.0	33 53.4	118 29.4	JD	80 11 26	0600	47	3.99	100.0	3	191
86.7	35.0	33 49.4	118 37.7	JD	80 11 26	0755	203	4.60	100.0	2	6
86.7	40.0	33 39.4	118 58.5	JD	80 11 26	1145	441	4.63	100.0	10	23
86.7	45.0	33 29.4	119 19.1	JD	80 11 26	1510	434	4.87	100.0	10	31
86.7	50.0	33 19.4	119 39.7	JD	80 11 26	1855	133	4.71	48.1	6	14
86.7	55.0	33 09.5	120 00.4	JD	80 11 26	2215	204	4.96	51.5	9	2
86.7	60.0	32 59.4	120 21.0	JD	80 11 27	0140	408	5.22	51.1	18	14
86.7	70.0	32 39.4	121 02.8	JD	80 11 27	0700	407	5.14	47.5	5	12
86.7	80.0	32 19.4	121 42.8	JD	80 11 27	1205	216	5.25	100.0	10	17
86.7	90.0	31 59.4	122 23.6	JD	80 11 27	1725	207	4.81	100.0	27	14
90.0	28.0	33 29.1	117 46.1	JD	80 11 29	1335	55	4.51	100.0	3	2
90.0	30.0	33 25.1	117 54.3	JD	80 11 29	1120	206	5.04	100.0	1	2
90.0	37.0	33 11.2	118 23.2	JD	80 11 29	0650	400	5.15	100.0	4	5
90.0	45.0	32 55.1	118 56.1	JD	80 11 29	0155	381	5.38	48.6	5	7
90.0	53.0	32 39.2	119 28.9	JD	80 11 28	2045	203	4.82	49.0	13	2
90.0	60.0	32 25.1	119 57.6	JD	80 11 28	1625	216	5.17	100.0	7	2
90.0	70.0	32 05.0	120 38.2	JD	80 11 28	1100	208	4.15	100.0	10	40
90.0	80.0	31 45.2	121 19.0	JD	80 11 28	0510	214	5.03	47.8	7	7
90.0	90.0	31 25.1	121 59.4	JD	80 11 27	2315	207	5.37	100.0	34	40
93.3	26.7	32 57.3	117 18.4	JD	80 11 29	1805	56	4.55	100.0	6	0
93.3	28.0	32 54.8	117 23.4	JD	80 11 29	1930	209	4.55	100.0	6	0
93.3	30.0	32 50.8	117 31.9	JD	80 11 29	2135	205	4.88	100.0	2	0
93.3	35.0	32 40.8	117 52.4	JD	80 11 30	0040	212	5.32	50.0	6	1
93.3	40.0	32 30.8	118 12.8	JD	80 11 30	0335	209	4.96	100.0	11	7
93.3	45.0	32 20.8	118 33.2	JD	80 11 30	0635	203	4.87	47.8	1	2
93.3	50.0	32 10.8	118 53.5	JD	80 11 30	0930	210	5.22	100.0	3	3
93.3	55.0	32 00.8	119 14.0	JD	80 11 30	1245	212	5.09	100.0	4	9
93.3	60.0	31 50.8	119 34.3	JD	80 11 30	1555	203	4.56	100.0	6	4
93.3	70.0	31 30.8	120 14.7	JD	80 11 30	2050	204	4.81	51.8	14	3
93.3	80.0	31 10.8	120 55.2	JD	80 12 01	0200	208	4.96	100.0	6	5
93.3	90.0	30 50.8	121 35.4	JD	80 12 01	0700	202	4.94	100.0	7	26
96.7	29.0	32 17.4	117 04.8	JD	80 12 03	0300	38	4.80	100.0	2	2
96.7	30.0	32 15.4	117 08.8	JD	80 12 03	0420	88	4.92	100.0	12	6
96.7	32.0	32 11.4	117 17.0	JD	80 12 03	0605	398	5.34	100.0	8	1
96.7	35.0	32 05.5	117 29.3	JD	80 12 03	0830	394	5.47	100.0	11	6
96.7	40.0	31 55.4	117 49.3	JD	80 12 02	1625	417	5.14	100.0	1	2



TABLE 1. (cont.)

## CALCOFI Cruise 8012

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day.	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
96.7	45.0	118 09.1	JD	80 12 02	1320	209	420	4.98	100.0	0	2
96.7	55.0	118 50.2	JD	80 12 02	0630	210	396	5.31	100.0	7	4
96.7	60.0	119 10.5	JD	80 12 02	0300	212	413	5.13	100.0	16	10
96.7	70.0	119 50.7	JD	80 12 01	2200	216	414	5.21	100.0	55	13
96.7	80.0	120 30.8	JD	80 12 01	1700	209	435	4.79	100.0	23	13
96.7	90.0	121 10.8	JD	80 12 01	1210	210	416	5.06	100.0	14	21
100.0	29.2	116 43.4	JD	80 12 03	1455	65	132	4.90	100.0	11	10
100.0	30.0	116 46.6	JD	80 12 03	1650	215	398	5.41	53.3	15	4
100.0	35.0	117 06.6	JD	80 12 03	2050	213	403	5.29	100.0	2	5
100.0	40.0	117 27.1	JD	80 12 04	0035	211	412	5.12	100.0	17	3
100.0	45.0	117 47.2	JD	80 12 04	0410	212	408	5.18	100.0	21	10
100.0	50.0	118 07.0	JD	80 12 04	0800	214	403	5.31	100.0	4	1
100.0	60.0	118 47.5	JD	80 12 04	1405	219	425	5.14	100.0	6	5
100.0	70.0	119 27.7	JD	80 12 04	1945	216	407	5.29	100.0	8	6
100.0	80.0	120 07.4	JD	80 12 05	0120	224	411	5.45	100.0	15	5
100.0	90.0	120 47.2	JD	80 12 05	0700	210	428	4.89	100.0	95	65
103.3	29.0	116 20.5	JD	80 12 06	1915	21	55	3.90	100.0	3	68
103.3	30.0	116 24.5	JD	80 12 06	1755	49	109	4.53	100.0	3	0
103.3	35.0	116 44.6	JD	80 12 06	1445	212	418	5.08	100.0	2	1
103.3	40.0	117 04.8	JD	80 12 06	1135	214	421	5.09	100.0	1	4
103.3	45.0	117 24.7	JD	80 12 06	0820	215	410	5.24	100.0	4	4
103.3	50.0	117 44.6	JD	80 12 06	0505	214	427	5.02	100.0	17	2
103.3	60.0	118 24.6	JD	80 12 06	0005	225	425	5.29	100.0	50	14
103.3	70.0	119 04.6	JD	80 12 05	1900	221	402	5.29	100.0	5	5
103.3	80.0	119 44.1	JD	80 12 05	1340	223	411	5.44	100.0	23	11
106.7	31.0	116 05.8	JD	80 12 07	0035	15	48	3.02	100.0	4	42
106.7	32.0	116 09.8	JD	80 12 07	0130	36	81	4.44	100.0	18	25
106.7	35.0	116 21.8	JD	80 12 07	0350	214	413	5.19	53.3	20	2
106.7	40.0	116 41.8	JD	80 12 07	0705	211	415	5.09	100.0	8	10
106.7	45.0	117 01.7	JD	80 12 07	1015	221	397	5.56	100.0	5	6
106.7	50.0	117 21.6	JD	80 12 07	1325	213	434	4.92	100.0	8	5
106.7	60.0	118 01.3	JD	80 12 07	1830	222	405	5.48	100.0	31	18
106.7	70.0	118 40.8	JD	80 12 07	2335	219	450	4.86	100.0	70	44
106.7	80.0	119 20.2	JD	80 12 08	0505	218	422	5.18	100.0	88	141
110.0	32.4	115 49.5	JD	80 12 09	1830	43	97	4.48	100.0	11	20
110.0	35.0	115 59.8	JD	80 12 09	1555	208	420	4.94	100.0	12	15
110.0	40.0	116 19.7	JD	80 12 09	1220	214	412	5.19	100.0	4	3
110.0	45.0	116 39.4	JD	80 12 09	0840	216	381	5.68	100.0	11	15
110.0	50.0	116 59.2	JD	80 12 09	0505	216	409	5.29	100.0	29	13
110.0	60.0	117 38.8	JD	80 12 08	2305	212	429	4.94	47.3	3	0
110.0	70.0	118 18.0	JD	80 12 08	1700	210	413	5.07	100.0	13	4
110.0	80.0	118 57.2	JD	80 12 08	1040	223	402	5.54	100.0	70	34
113.3	29.0	115 14.2	JD	80 12 10	0005	21	53	3.94	100.0	2	0
113.3	30.0	115 18.2	JD	80 12 10	0110	50	109	4.57	100.0	14	0
113.3	35.0	115 37.9	JD	80 12 10	0355	202	448	4.52	100.0	5	1

TABLE 1. (cont.)

## CALCOFI Cruise 8012

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
113.3	29 02.9	115 57.4	JD	80 12 10	0800	219	402	5.44	100.0	1	2
113.3	28 52.9	116 17.3	JD	80 12 10	1110	220	407	5.40	100.0	16	4
113.3	28 42.9	116 37.0	JD	80 12 10	1420	218	411	5.32	100.0	8	10
113.3	28 23.3	117 16.3	JD	80 12 10	1905	217	419	5.16	48.6	1	1
113.3	28 02.8	117 55.3	JD	80 12 11	0015	217	410	5.29	46.3	6	2
113.3	27 42.9	118 34.4	JD	80 12 11	0505	213	391	5.45	100.0	72	18
116.7	28 57.6	114 36.2	JD	80 12 12	1940	37	88	4.19	100.0	4	2
116.7	28 47.6	114 55.8	JD	80 12 12	1650	87	181	4.79	100.0	2	4
116.7	28 37.6	115 15.5	JD	80 12 12	1355	179	361	4.94	100.0	2	22
116.7	28 27.6	115 35.1	JD	80 12 12	0710	213	416	5.13	100.0	29	22
116.7	28 17.6	115 54.7	JD	80 12 12	0400	214	412	5.20	100.0	108	15
116.7	28 07.6	116 14.2	JD	80 12 12	0105	216	423	5.10	46.8	71	8
116.7	27 47.6	116 53.1	JD	80 12 11	2005	213	435	4.89	100.0	146	72
116.7	27 27.6	117 32.1	JD	80 12 11	1510	211	437	4.83	50.0	9	15
116.7	27 07.6	118 10.9	JD	80 12 11	0950	213	428	4.98	100.0	15	63
118.0	28 16.1	115 22.6	JD	80 12 12	1035	127	257	4.96	100.0	4	15
119.0	28 17.6	114 52.3	JD	80 12 13	0715	97	207	4.66	100.0	17	39
120.0	28 25.3	114 10.8	JD	80 12 13	0025	21	52	4.00	100.0	23	15
120.0	28 23.3	114 14.7	JD	80 12 13	0145	43	95	4.51	100.0	7	8
120.0	28 13.3	114 34.4	JD	80 12 13	0440	83	179	4.65	52.7	15	0
120.0	28 03.3	114 53.8	JD	80 12 13	0940	71	154	4.63	100.0	11	57
120.0	27 56.3	115 07.4	JD	80 12 13	1210	27	68	3.97	100.0	2	13
120.0	27 43.3	115 32.8	JD	80 12 13	1610	213	411	5.20	100.0	3	23
120.0	27 33.3	115 52.2	JD	80 12 13	1945	214	417	5.14	100.0	6	15
120.0	27 13.3	116 31.0	JD	80 12 14	0115	216	411	5.25	100.0	200	118
120.0	26 53.3	117 09.6	JD	80 12 14	0640	210	430	4.90	100.0	64	12
120.0	26 33.3	117 48.3	JD	80 12 14	1225	216	426	5.07	100.0	66	32
123.3	27 27.0	114 36.1	JD	80 12 15	1430	28	68	4.14	100.0	8	19
123.3	27 25.0	114 40.0	JD	80 12 15	1305	64	134	4.76	100.0	10	27
123.3	27 15.0	114 59.4	JD	80 12 15	0955	213	418	5.10	100.0	7	1
123.3	27 09.0	115 11.0	JD	80 12 15	0730	212	413	5.13	100.0	10	6
123.3	26 59.0	115 30.3	JD	80 12 15	0405	211	415	5.08	100.0	13	10
123.3	26 38.9	116 08.9	JD	80 12 14	2230	211	426	4.96	100.0	68	14
126.7	26 57.7	114 02.2	JD	80 12 15	1945	49	115	4.28	100.0	23	31
126.7	26 53.7	114 10.0	JD	80 12 15	2135	85	185	4.60	100.0	4	43
126.7	26 43.7	114 29.4	JD	80 12 16	0040	215	424	5.08	48.1	5	5
126.7	26 33.7	114 48.6	JD	80 12 16	0350	215	414	5.20	54.2	1	11
126.7	26 23.7	115 08.0	JD	80 12 16	0705	209	416	5.02	100.0	7	18
126.7	26 03.7	115 46.2	JD	80 12 16	1215	215	426	5.05	100.0	23	24
130.0	26 33.4	113 29.3	JD	80 12 17	1430	43	92	4.67	100.0	18	154
130.0	26 29.4	113 21.7	JD	80 12 17	1220	63	135	4.67	100.0	13	211
130.0	26 19.4	113 48.7	JD	80 12 17	0855	210	405	5.19	100.0	3	1
130.0	26 09.4	114 07.9	JD	80 12 17	0540	211	413	5.10	100.0	14	10
130.0	25 49.4	114 46.1	JD	80 12 16	2355	217	414	5.23	100.0	7	99
130.0	25 29.4	115 24.4	JD	80 12 16	1755	212	423	5.02	100.0	23	14

TABLE 1. (cont.)

## CALCOFI Cruise 8012

Line Station	Lat.(N) deg. min.	Long.(W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
133.3	26 09.1	112 41.3	JD	80 12 17	1925	63	136	4.67	100.0	36	50
133.3	26 05.1	112 49.1	JD	80 12 17	2055	71	153	4.65	100.0	0	98
133.3	25 55.1	113 08.1	JD	80 12 17	2345	211	409	5.15	100.0	0	1
133.3	25 45.1	113 27.4	JD	80 12 18	0240	215	417	5.17	100.0	0	7
133.3	25 35.5	113 46.7	JD	80 12 18	0530	214	417	5.12	47.2	21	23
133.3	25 15.1	114 24.6	JD	80 12 18	1040	211	444	4.76	100.0	6	18
133.3	24 55.1	115 02.7	JD	80 12 18	1535	215	422	5.11	100.0	18	7
136.7	25 35.8	112 16.2	JD	80 12 19	1925	50	109	4.63	100.0	27	41
136.7	25 33.8	112 19.8	JD	80 12 19	1840	65	137	4.73	100.0	25	37
136.7	25 29.8	112 27.4	JD	80 12 19	1655	87	181	4.83	100.0	12	63
136.7	25 19.8	112 46.5	JD	80 12 19	1300	213	437	4.87	100.0	0	0
136.7	25 09.7	113 05.5	JD	80 12 19	0950	211	438	4.81	100.0	0	7
136.7	24 59.9	113 24.4	JD	80 12 19	0640	212	431	4.92	100.0	8	28
136.7	24 39.8	114 02.5	JD	80 12 19	0140	217	424	5.12	100.0	16	34
136.7	24 19.8	114 40.3	JD	80 12 18	2030	212	432	4.92	100.0	76	29

TABLE 1. (cont.)

## CALCOFI Cruise 8101

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	37 56.8	122 52.9	JD	81 01 29	1205	42	99	4.27	100.0	21	115
60.0	37 51.8	123 03.8	JD	81 01 29	1430	80	200	3.99	100.0	21	66
60.0	37 46.8	123 14.7	JD	81 01 29	1650	126	255	4.92	100.0	38	2
60.0	37 36.8	123 36.5	JD	81 01 29	2015	210	440	4.77	46.3	17	5
63.3	37 22.6	122 28.4	JD	81 01 30	0705	22	57	3.77	100.0	49	5851
63.3	37 18.7	122 37.5	JD	81 01 30	0545	80	170	4.73	44.4	43	14
63.3	37 12.6	122 50.1	JD	81 01 30	0350	211	443	4.77	51.0	134	9
63.3	37 02.6	123 11.7	JD	81 01 30	0050	210	480	4.37	52.3	22	15
66.7	36 49.2	121 59.1	JD	81 01 30	1140	191	414	4.62	47.3	89	211
66.7	36 47.2	122 03.4	JD	81 01 30	1320	212	434	4.89	45.0	65	6
66.7	36 37.2	122 24.9	JD	81 01 30	1615	218	429	5.09	52.1	20	10
66.7	36 27.3	122 46.4	JD	81 01 30	1910	206	465	4.42	45.0	24	5
70.0	36 10.7	121 43.9	JD	81 01 31	0650	181	381	4.76	53.4	80	1
70.0	36 07.1	121 52.6	JD	81 01 31	0445	212	424	4.98	48.1	57	2
70.0	35 52.9	122 21.9	JD	81 01 31	0020	216	430	5.04	55.3	103	23
73.3	35 38.6	121 15.3	JD	81 01 31	1335	21	62	3.43	100.0	39	77
73.3	35 32.6	121 28.0	JD	81 01 31	1130	211	415	5.08	100.0	106	7
73.3	35 18.6	121 57.7	JD	81 01 27	1005	215	400	5.37	100.0	41	68
73.3	34 58.3	122 40.1	JD	81 01 27	0510	213	443	4.80	49.0	69	7
73.3	34 38.8	123 21.9	JD	81 01 27	0015	208	458	4.53	100.0	20	6
73.3	34 18.4	124 03.4	JD	81 01 26	1915	211	440	4.80	44.0	8	6
76.7	35 07.3	120 42.3	JD	81 01 25	1110	20	55	3.69	100.0	184	41
76.7	35 01.3	120 55.1	JD	81 01 25	1300	215	411	5.24	50.9	220	6
76.7	34 53.3	121 11.8	JD	81 01 25	2050	212	430	4.92	44.6	20	10
76.7	34 43.2	122 14.7	JD	81 01 25	2325	214	423	5.06	56.1	6	3
76.7	34 23.3	122 32.9	JD	81 01 26	0400	216	417	5.19	51.1	7	13
76.7	34 03.3	122 56.4	JD	81 01 26	0910	208	424	4.91	100.0	20	20
76.7	33 43.3	123 38.0	JD	81 01 26	1355	213	424	5.03	100.0	8	12
80.0	34 27.1	120 31.5	JD	81 01 25	0510	49	108	4.55	100.0	330	394
80.0	34 19.0	120 48.1	JD	81 01 25	0225	216	424	5.10	47.5	139	47
80.0	34 09.0	121 09.0	JD	81 01 24	2240	204	458	4.44	52.7	30	5
80.0	33 49.0	121 50.6	JD	81 01 24	1645	217	429	5.07	100.0	13	51
80.0	33 28.9	122 32.0	JD	81 01 24	1055	216	423	5.10	100.0	23	8
80.0	33 08.9	123 13.1	JD	81 01 24	0545	219	410	5.35	100.0	14	16
82.0	34 16.2	119 56.2	JD	81 01 22	2230	208	415	5.02	51.7	274	295
83.3	34 13.5	119 24.7	JD	81 01 22	1755	20	53	3.81	100.0	128	817
83.3	34 10.7	119 30.5	JD	81 01 22	1935	71	144	4.92	100.0	550	269
83.3	33 52.7	120 08.0	JD	81 01 23	0255	84	190	4.44	53.6	240	36
83.3	33 44.7	120 24.6	JD	81 01 23	0510	212	433	4.90	50.7	7	2
83.3	33 34.6	120 45.3	JD	81 01 23	0820	214	415	5.15	53.3	48	586
83.3	33 14.7	121 26.6	JD	81 01 23	1335	217	433	5.03	100.0	8	24
83.3	32 54.7	122 07.7	JD	81 01 23	1855	215	408	5.27	50.0	6	4
83.3	32 34.7	122 48.7	JD	81 01 24	0005	216	431	5.01	100.0	27	7
86.7	33 53.4	118 29.4	JD	81 01 22	0540	42	93	4.51	100.0	196	638
86.7	33 49.4	118 37.7	JD	81 01 22	0350	216	375	5.76	53.3	234	15

TABLE 1. (cont.)

## CALCOFI Cruise 8101

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
86.7	40.0	118 58.5	JD	81 01 22	0025	215	419	5.12	50.0	125	166
86.7	45.0	119 19.4	JD	81 01 21	2120	206	438	4.71	100.0	181	82
86.7	50.0	119 39.8	JD	81 01 21	1845	54	120	4.51	100.0	1548	3
86.7	55.0	120 00.4	JD	81 01 21	1555	214	418	5.12	100.0	165	71
86.7	60.0	120 21.0	JD	81 01 21	1310	209	432	4.83	100.0	10	5
86.7	70.0	121 01.9	JD	81 01 21	0800	207	418	4.94	100.0	19	5
86.7	80.0	121 42.9	JD	81 01 21	0330	218	418	5.21	100.0	18	4
86.7	90.0	122 23.5	JD	81 01 20	2240	212	425	5.00	100.0	23	12
90.0	28.0	117 46.1	JD	81 01 19	0510	57	115	5.00	100.0	39	4
90.0	30.0	117 54.3	JD	81 01 19	0715	211	396	5.33	53.0	12	20
90.0	37.0	118 23.1	JD	81 01 19	1120	210	396	5.31	100.0	163	92
90.0	45.0	118 56.1	JD	81 01 19	1610	209	423	4.94	100.0	113	256
90.0	53.0	119 28.8	JD	81 01 19	2050	208	429	4.85	100.0	72	38
90.0	60.0	119 57.6	JD	81 01 20	0105	216	409	5.29	51.6	17	5
90.0	70.0	120 38.3	JD	81 01 20	0645	221	396	5.59	52.3	4	5
90.0	80.0	121 18.9	JD	81 01 20	1230	215	417	5.15	42.8	6	2
90.0	90.0	121 59.5	JD	81 01 20	1800	220	392	5.61	100.0	13	8
93.3	26.7	117 18.3	JD	81 01 19	0015	49	117	4.15	100.0	116	352
93.3	28.0	117 23.7	JD	81 01 18	2245	206	422	4.90	100.0	26	57
93.3	30.0	117 31.9	JD	81 01 18	2055	210	410	5.14	100.0	14	47
93.3	35.0	117 40.7	JD	81 01 18	1800	218	399	5.46	100.0	11	3
93.3	40.0	118 12.8	JD	81 01 18	1455	215	421	5.12	100.0	7	6
93.3	45.0	118 33.3	JD	81 01 18	1155	216	406	5.31	100.0	16	54
93.3	50.0	118 53.6	JD	81 01 18	0850	210	417	5.02	100.0	82	44
93.3	55.0	119 14.4	JD	81 01 18	0555	217	400	5.43	100.0	16	7
93.3	60.0	119 34.3	JD	81 01 18	0250	214	406	5.26	100.0	18	23
93.3	70.0	120 14.8	JD	81 01 17	2135	211	425	4.96	100.0	14	11
93.3	80.0	120 55.2	JD	81 01 17	1620	210	409	5.12	100.0	4	5
93.3	90.0	121 35.3	JD	81 01 17	1110	209	423	4.94	100.0	9	30
96.7	29.0	117 04.8	JD	81 01 15	0125	42	98	4.30	100.0	5	1
96.7	30.0	117 08.8	JD	81 01 15	0235	49	121	4.10	100.0	46	19
96.7	32.0	117 17.0	JD	81 01 15	0410	205	411	5.00	100.0	5	146
96.7	35.0	117 29.1	JD	81 01 15	2120	209	416	5.02	53.5	19	34
96.7	40.0	117 49.5	JD	81 01 16	0020	211	402	5.24	100.0	22	9
96.7	45.0	118 09.8	JD	81 01 16	0335	213	420	5.06	100.0	7	10
96.7	50.0	118 30.1	JD	81 01 16	0655	205	425	4.81	100.0	14	11
96.7	55.0	118 50.3	JD	81 01 16	1025	207	407	5.08	100.0	45	20
96.7	60.0	119 10.5	JD	81 01 16	1345	214	409	5.25	100.0	3	3
96.7	70.0	119 50.5	JD	81 01 16	1905	217	402	5.41	100.0	13	12
96.7	80.0	120 30.8	JD	81 01 17	0015	213	407	5.24	53.8	7	5
96.7	90.0	121 10.8	JD	81 01 17	0530	216	409	5.28	100.0	27	18
100.0	29.2	116 43.4	JD	81 01 14	2040	57	122	4.67	100.0	4	4
100.0	30.0	116 46.5	JD	81 01 14	1855	209	393	5.31	40.6	22	16
100.0	35.0	117 06.9	JD	81 01 14	1525	206	433	4.75	100.0	5	1
100.0	40.0	117 27.1	JD	81 01 14	1155	204	437	4.66	100.0	7	7

TABLE 1. (cont.)

## CALCOFI Cruise 8101

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
100.0	45.0	117 47.3	JD	81 01 14	0815	210	403	5.21	100.0	7	11
100.0	50.0	118 07.3	JD	81 01 14	0420	206	421	4.89	100.0	20	5
100.0	60.0	118 47.5	JD	81 01 13	2245	213	413	5.15	100.0	10	20
100.0	70.0	119 27.5	JD	81 01 13	1700	207	425	4.86	50.0	2	9
100.0	80.0	120 07.4	JD	81 01 13	1045	206	432	4.78	100.0	5	13
100.0	90.0	120 46.9	JD	81 01 13	0510	212	405	5.23	100.0	55	44
103.3	29.0	116 20.5	JD	81 01 11	1435	13	43	2.96	100.0	2	173
103.3	30.0	116 24.5	JD	81 01 11	1545	48	113	4.21	100.0	1	1
103.3	35.0	116 44.6	JD	81 01 11	1830	212	416	5.11	100.0	12	18
103.3	40.0	117 04.6	JD	81 01 11	2200	212	430	4.92	100.0	13	3
103.3	45.0	117 24.7	JD	81 01 12	0135	219	418	5.24	100.0	12	9
103.3	50.0	117 44.7	JD	81 01 12	0510	215	414	5.20	100.0	33	10
103.3	60.0	118 24.6	JD	81 01 12	1030	209	431	4.85	100.0	14	37
103.3	70.0	119 04.4	JD	81 01 12	1540	210	413	5.09	100.0	18	46
106.7	31.0	116 05.8	JD	81 01 11	0925	14	49	2.89	100.0	15	25
106.7	32.0	116 09.6	JD	81 01 11	0725	173	341	5.06	52.2	22	65
106.7	35.0	116 21.8	JD	81 01 11	0445	214	421	5.08	100.0	21	22
106.7	40.0	116 41.8	JD	81 01 11	0125	217	424	5.13	100.0	28	14
106.7	45.0	117 01.7	JD	81 01 11	2205	211	436	4.83	100.0	9	4
106.7	50.0	117 21.7	JD	81 01 10	1845	217	406	5.34	100.0	4	2
106.7	60.0	118 01.3	JD	81 01 10	1315	211	436	4.84	100.0	4	1
106.7	70.0	118 40.7	JD	81 01 10	0805	209	462	4.53	100.0	7	8
106.7	80.0	119 20.2	JD	81 01 10	0250	215	402	5.35	100.0	9	11
110.0	32.4	115 49.5	JD	81 01 08	1320	28	75	3.74	100.0	59	39
110.0	35.0	115 59.8	JD	81 01 08	1735	213	441	4.83	100.0	10	83
110.0	40.0	116 19.6	JD	81 01 08	2125	216	412	5.25	100.0	5	5
110.0	45.0	116 39.5	JD	81 01 09	0105	215	432	4.96	100.0	9	3
110.0	50.0	116 59.5	JD	81 01 09	0450	215	418	5.14	100.0	9	12
110.0	60.0	117 38.7	JD	81 01 09	1025	212	417	5.08	100.0	22	20
110.0	70.0	118 18.0	JD	81 01 09	1625	217	403	5.39	100.0	12	10
110.0	80.0	118 57.1	JD	81 01 09	2145	217	413	5.24	100.0	14	4
										15	12

TABLE 1. (cont.)

CALCOFI Cruise 8102											
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	52.5	37 51.8	123 03.8	JD	81 03 10	1402	69	4.14	100.0	56	14
60.0	55.0	37 46.8	123 14.7	JD	81 03 10	1530	143	4.80	50.0	13	23
60.0	70.0	37 16.9	124 19.5	NH	81 02 15	0941	198	3.93	50.0	77	15
60.0	80.0	36 56.5	125 05.0	NH	81 02 15	0114	182	3.61	50.0	68	25
60.0	90.0	36 36.5	125 48.1	NH	81 02 12	1704	201	4.05	50.0	26	23
63.3	50.0	37 22.6	122 28.3	JD	81 03 10	0500	22	4.44	50.0	129	258
63.3	52.0	37 18.6	122 37.1	JD	81 03 10	0225	86	4.87	100.0	387	353
63.3	55.0	37 12.5	122 50.1	JD	81 03 10	0000	214	5.12	50.0	260	31
63.3	60.0	37 02.4	123 11.6	JD	81 03 09	2010	211	4.82	50.0	78	43
63.3	70.0	36 42.8	123 54.5	NH	81 02 15	1632	204	4.17	50.0	42	20
63.3	80.0	36 22.6	124 37.9	NH	81 02 15	2227	221	4.48	50.0	50	53
63.3	90.0	36 02.7	125 20.4	NH	81 02 16	0415	213	5.22	50.0	32	124
66.7	49.0	36 49.1	121 59.4	JD	81 03 09	0450	178	4.82	50.0	267	16
66.7	50.0	36 47.2	122 03.4	JD	81 03 09	0625	405	5.21	50.0	155	11
66.7	55.0	36 37.2	122 24.8	JD	81 03 09	0955	208	4.85	50.0	120	8
66.7	60.0	36 27.2	122 46.4	JD	81 03 09	1327	212	5.03	50.0	33	43
66.7	70.0	36 07.0	123 30.0	NH	81 02 16	2054	212	4.90	45.0	37	24
66.7	80.0	35 47.7	124 12.2	NH	81 02 16	1502	213	5.26	50.0	13	49
66.7	90.0	35 27.1	124 53.9	NH	81 02 16	0932	188	3.61	100.0	17	37
70.0	51.0	36 10.9	121 43.6	JD	81 03 08	2139	212	5.04	50.0	87	3
70.0	53.0	36 06.9	121 52.2	JD	81 03 08	1900	216	5.07	50.0	53	5
70.0	60.0	35 52.9	122 21.9	JD	81 03 08	1344	208	4.94	50.0	35	24
70.0	70.0	35 33.1	123 04.4	NH	81 02 17	0211	212	5.17	50.0	15	6
70.0	80.0	35 13.0	123 46.6	NH	81 02 17	0905	209	4.69	50.0	27	34
70.0	90.0	34 46.0	124 30.0	NH	81 02 17	1555	216	5.08	50.0	20	45
73.3	50.0	35 38.5	121 15.3	JD	81 03 07	2335	21	3.55	100.0	59	19
73.3	53.0	35 32.6	121 28.1	JD	81 03 08	0145	213	5.01	50.0	112	23
73.3	60.0	35 18.6	121 57.7	JD	81 03 08	0640	207	4.73	47.0	31	88
73.3	70.0	34 58.5	122 40.0	NH	81 02 18	0923	213	4.84	53.0	4	9
73.3	80.0	34 38.5	123 21.7	NH	81 02 18	0351	198	4.48	100.0	21	11
73.3	90.0	34 18.8	124 03.5	NH	81 02 17	2219	214	4.27	50.0	75	6
76.7	48.0	35 07.3	120 42.4	JD	81 03 07	1705	21	4.05	50.0	130	250
76.7	51.0	35 01.3	120 55.1	JD	81 03 07	1428	213	5.08	50.0	107	52
76.7	55.0	34 53.2	121 11.9	JD	81 03 07	1115	205	5.12	50.0	77	51
76.7	60.0	34 43.1	121 32.8	JD	81 03 07	0725	210	5.52	50.0	134	41
76.7	70.0	34 23.7	122 15.2	NH	81 02 18	1437	210	4.79	100.0	20	28
76.7	80.0	34 03.1	122 56.3	NH	81 02 18	1948	213	4.59	50.0	10	21
76.7	90.0	33 43.6	123 37.9	NH	81 02 19	0133	212	5.01	50.0	26	12
80.0	51.0	34 27.0	120 31.0	JD	81 03 06	1620	50	4.14	50.0	1145	29
80.0	55.0	34 19.0	120 47.9	JD	81 03 06	1950	211	5.16	50.0	971	148
80.0	60.0	34 09.1	121 08.9	JD	81 03 07	0040	215	5.28	50.0	427	25
80.0	80.0	33 29.0	122 32.1	NH	81 02 19	1433	209	4.36	100.0	16	15
80.0	90.0	33 09.3	123 13.7	NH	81 02 19	0644	218	4.94	100.0	21	18
82.0	46.0	34 16.2	119 56.3	JD	81 02 19	0415	209	5.10	50.0	251	268
83.3	40.6	34 13.2	119 24.3	JD	81 02 18	2257	27	3.62	100.0	872	479

TABLE 1. (cont.)

## CALCOFI Cruise 8102

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.3	42.0	119 30.0	JD	81 02 19	0015	110	233	4.69	50.0	592	102
83.3	51.0	120 08.0	JD	81 02 19	0935	114	222	5.13	50.0	889	30
83.3	55.0	120 24.6	JD	81 02 19	1222	213	420	5.07	50.0	97	314
86.7	33.0	118 29.8	JD	81 02 17	0730	49	101	4.82	100.0	914	117
86.7	35.0	118 37.7	JD	81 02 17	0910	211	394	5.35	50.0	940	77
86.7	40.0	118 58.5	JD	81 02 17	1315	211	398	5.30	100.0	861	372
86.7	45.0	119 19.1	JD	81 02 17	1704	212	403	5.26	100.0	863	657
86.7	50.0	119 39.6	JD	81 02 17	2105	71	148	4.84	100.0	1333	36
86.7	55.0	120 00.4	JD	81 02 18	0200	216	400	5.41	50.0	102	18
86.7	60.0	120 21.0	JD	81 02 18	0430	213	416	5.12	50.0	818	21
90.0	28.0	117 46.1	JD	81 02 15	0645	56	119	4.69	100.0	1528	35
90.0	30.0	117 54.3	JD	81 02 15	0920	209	345	6.06	100.0	71	144
90.0	37.0	118 23.2	JD	81 02 15	1520	215	417	5.16	100.0	389	491
90.0	45.0	118 56.0	JD	81 02 15	2110	213	414	5.14	100.0	336	77
90.0	53.0	119 28.9	JD	81 02 16	0310	214	422	5.07	100.0	41	84
90.0	60.0	119 57.6	JD	81 02 16	0845	208	414	5.03	100.0	84	71
93.3	26.7	117 18.3	JD	81 02 12	2305	48	116	4.13	100.0	278	99
93.3	28.0	117 31.9	JD	81 02 13	0025	215	406	5.30	100.0	138	20
93.3	30.0	117 52.4	JD	81 02 13	0240	211	406	5.20	50.0	114	98
93.3	35.0	118 12.8	JD	81 02 13	0655	209	412	5.07	100.0	1262	691
93.3	40.0	118 33.3	JD	81 02 13	1505	214	421	4.96	100.0	21	104
93.3	45.0	118 53.6	JD	81 02 13	1845	213	410	5.20	50.0	757	1867
93.3	50.0	119 13.9	JD	81 02 13	2235	209	409	5.10	50.0	359	78
93.3	55.0	119 34.3	JD	81 02 14	0200	210	390	5.39	50.0	340	124
95.0	29.0	117 16.3	JD	81 02 23	1910	50	108	4.60	100.0	196	81
96.7	29.0	117 04.6	JD	81 03 05	0220	51	113	4.48	100.0	42	98
96.7	32.0	117 06.6	JD	81 03 05	0120	51	113	4.48	100.0	28	190
96.7	35.0	117 17.0	JD	81 03 04	2315	210	421	4.98	100.0	184	281
96.7	40.0	117 29.2	JD	81 03 04	2035	216	432	5.00	100.0	199	719
96.7	45.0	117 49.5	JD	81 03 04	1724	208	430	4.84	100.0	206	155
96.7	50.0	118 09.8	JD	81 03 04	1400	209	437	4.78	100.0	19	40
96.7	55.0	118 30.2	JD	81 03 04	1030	210	404	5.20	100.0	42	69
96.7	60.0	118 50.3	JD	81 03 04	0620	211	433	4.88	100.0	36	118
96.7	70.0	119 10.4	JD	81 03 04	0210	217	428	5.07	100.0	35	53
96.7	80.0	119 50.8	NH	81 02 25	0459	206	499	4.13	52.0	34	27
96.7	90.0	120 30.1	NH	81 02 25	1041	211	485	4.34	100.0	47	34
96.7	90.0	121 11.3	NH	81 02 25	1615	208	480	4.33	100.0	16	23
100.0	29.2	116 43.8	JD	81 03 02	1900	73	132	5.49	100.0	564	65
100.0	30.0	116 46.6	JD	81 03 02	1740	143	272	5.24	50.0	316	90
100.0	35.0	117 06.9	JD	81 03 02	1255	213	430	4.94	100.0	136	109
100.0	40.0	117 27.2	JD	81 03 02	0815	206	428	4.82	100.0	367	126
100.0	45.0	117 47.2	JD	81 03 02	0255	213	435	4.89	100.0	20	3
100.0	50.0	118 07.3	JD	81 03 01	2215	216	429	5.03	50.0	6	1
100.0	60.0	118 47.5	JD	81 03 01	1515	212	438	4.83	100.0	36	32



TABLE 1. (cont.)

## CALCOFI Cruise 8102

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
100.0	30 21.3	119 28.0	NH	81 02 26	0833	212	451	4.69	100.0	7	29
100.0	30 01.0	120 07.2	NH	81 02 26	0331	208	495	4.21	100.0	33	44
100.0	29 41.6	120 46.5	NH	81 02 25	2109	213	466	4.57	100.0	84	54
103.3	31 08.9	116 20.5	JD	81 02 28	0815	20	53	3.82	100.0	170	282
103.3	31 06.7	116 24.0	JD	81 02 28	0935	55	122	4.50	100.0	495	175
103.3	30 56.9	116 44.6	JD	81 02 28	1320	211	417	5.05	100.0	15	14
103.3	30 46.9	117 04.7	JD	81 02 28	1720	212	421	5.04	100.0	9	52
103.3	30 36.9	117 24.7	JD	81 02 28	2105	211	432	4.90	100.0	45	10
103.3	30 26.9	117 44.7	JD	81 03 01	0115	217	417	5.21	100.0	21	13
103.3	30 07.0	118 24.5	JD	81 03 01	0800	213	443	4.81	100.0	27	49
103.3	29 46.8	119 04.5	NH	81 02 26	1456	210	470	4.48	100.0	79	46
103.3	29 27.9	119 43.8	NH	81 02 26	2010	212	472	4.50	100.0	106	7
106.7	30 29.5	116 05.8	JD	81 02 28	0130	21	54	3.80	100.0	124	238
106.7	30 27.5	116 09.8	JD	81 02 27	2335	143	280	5.12	100.0	242	209
106.7	30 21.9	116 21.5	JD	81 02 27	2040	212	429	4.94	100.0	904	911
106.7	30 11.4	116 41.8	JD	81 02 27	1645	212	433	4.90	100.0	1000	182
106.7	29 51.5	117 01.7	JD	81 02 27	1300	212	417	5.09	100.0	30	27
106.7	29 31.5	118 01.3	JD	81 02 27	0910	209	438	4.76	100.0	28	28
106.7	29 12.4	118 42.6	NH	81 02 27	0230	215	412	5.21	100.0	39	23
106.7	28 51.8	119 20.0	NH	81 02 27	0633	194	495	3.91	100.0	113	84
110.0	29 52.2	115 49.9	JD	81 02 25	2100	211	419	5.05	100.0	30	41
110.0	29 47.2	115 59.8	JD	81 02 25	2320	211	435	4.86	100.0	282	108
110.0	29 37.2	116 19.7	JD	81 02 26	0420	213	452	4.71	100.0	70	119
110.0	29 27.2	116 39.4	JD	81 02 26	0840	209	426	4.90	100.0	22	40
110.0	29 17.2	116 59.2	JD	81 02 26	1245	215	429	5.01	50.0	5	4
110.0	28 57.3	117 39.5	JD	81 02 26	1955	211	438	4.82	100.0	38	11
110.0	28 37.0	118 18.0	NH	81 02 27	1130	212	408	5.21	100.0	19	46
113.3	29 25.0	115 14.2	NH	81 03 01	0218	197	458	4.29	100.0	54	25
113.3	29 22.9	115 18.0	NH	81 03 01	0045	7	25	2.66	100.0	6	0
113.3	29 12.6	115 37.7	NH	81 02 28	2140	11	49	2.20	100.0	25	2
113.3	29 03.9	115 57.0	NH	81 02 28	1858	210	443	4.92	100.0	31	33
113.3	28 53.2	116 16.1	NH	81 02 28	1621	209	433	4.73	100.0	34	6
113.3	28 43.0	116 37.3	NH	81 02 28	1357	215	420	4.84	100.0	28	21
113.3	28 22.8	117 15.3	NH	81 02 28	0850	212	443	5.11	100.0	17	58
113.3	28 03.0	117 55.0	NH	81 02 28	0352	205	475	4.79	100.0	14	12
113.3	27 43.1	118 33.6	NH	81 02 27	2300	212	442	4.80	100.0	28	49
116.7	28 57.5	114 36.2	NH	81 03 01	0744	14	41	3.46	100.0	18	25
116.7	28 47.5	114 55.9	NH	81 03 01	1023	99	217	4.56	100.0	2	3
116.7	28 36.0	115 16.2	NH	81 03 02	0705	209	450	4.65	100.0	11	14
116.7	28 27.6	115 35.1	NH	81 03 02	1246	213	469	4.55	100.0	66	2716
116.7	28 17.6	115 54.6	NH	81 03 02	1548	213	430	4.94	100.0	21	36
116.7	28 06.4	116 13.9	NH	81 03 02	1834	212	444	4.79	100.0	379	180
118.0	28 16.1	115 22.6	NH	81 03 02	1007	142	309	4.59	100.0	11	299

TABLE 1. (cont.)

## CALCOFI Cruise 8102

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
119.0	33.0	28 17.7	NH	81 03 02	0239	101	199	5.09	100.0	117	2441
120.0	24.0	28 25.3	NH	81 03 01	1532	28	77	3.60	100.0	4	1036
120.0	25.0	28 23.1	NH	81 03 01	1751	35	106	3.31	100.0	76	996
120.0	30.0	28 13.6	NH	81 03 01	1959	85	199	4.26	100.0	86	281
120.0	35.0	28 03.2	NH	81 03 02	0026	79	164	4.83	100.0	0	12
120.0	38.5	27 56.0	NH	81 03 06	2000	36	99	3.59	100.0	25	50
123.3	36.0	27 27.3	NH	81 03 04	0501	29	104	2.80	100.0	17	709
123.3	37.0	27 26.8	NH	81 03 04	0625	54	111	4.84	100.0	22	1975
123.3	42.0	27 14.8	NH	81 03 04	0922	213	437	4.87	100.0	0	6
123.3	45.0	27 09.3	NH	81 03 04	1151	214	443	4.84	100.0	12	32
123.3	50.0	26 58.8	NH	81 03 04	1427	214	424	5.05	100.0	16	28
123.3	60.0	26 38.6	NH	81 03 04	1943	206	432	4.78	100.0	49	74
126.7	60.0	26 04.0	NH	81 03 05	0110	213	454	4.69	100.0	24	5
130.0	28.0	26 33.4	NH	81 03 05	1934	42	106	4.00	100.0	548	510
130.0	30.0	26 29.3	NH	81 03 05	2213	49	160	3.08	100.0	27	1351
130.0	35.0	26 20.1	NH	81 03 06	0058	207	483	4.28	100.0	10	166

TABLE I. (cont.)

CalCOFI Cruise 8104												
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs	
60.0	50.0	37 56.8	122 52.9	JD	81 04 27	0950	35	82	4.30	100.0	9	7
60.0	52.5	37 51.8	123 03.8	JD	81 04 27	0750	81	148	5.47	100.0	21	51
60.0	55.0	37 46.8	123 14.7	JD	81 04 27	0555	116	221	5.24	51.0	13	9
60.0	60.0	37 36.8	123 36.5	JD	81 04 27	0235	217	425	5.10	53.0	13	9
60.0	70.0	37 16.8	124 19.5	JD	81 04 26	2025	208	413	5.04	49.0	38	5
60.0	80.0	36 56.8	125 03.2	JD	81 04 26	1455	216	409	5.28	49.0	20	8
60.0	90.0	36 36.8	125 46.2	JD	81 04 26	0850	206	420	4.90	51.0	18	19
63.3	50.0	37 22.6	122 28.4	JD	81 04 25	1525	22	49	4.42	100.0	9	12
63.3	52.0	37 18.6	122 37.1	JD	81 04 25	1325	69	143	4.85	50.0	12	8
63.3	55.0	37 12.5	122 50.1	JD	81 04 25	1050	205	380	5.40	51.0	22	20
63.3	60.0	37 02.5	123 11.8	JD	81 04 25	0725	209	353	5.91	51.0	97	23
63.3	70.0	36 42.6	123 54.8	JD	81 04 25	0200	219	406	5.40	48.0	25	63
66.7	49.0	36 49.2	121 59.1	JD	81 04 24	0740	208	385	5.41	49.0	5	9
66.7	50.0	36 47.2	122 03.4	JD	81 04 24	0855	213	405	5.26	50.0	14	4
66.7	55.0	36 37.2	122 24.8	JD	81 04 24	1205	213	405	5.25	50.0	43	2
66.7	60.0	36 27.2	122 46.4	JD	81 04 24	1455	217	399	5.43	48.0	25	6
66.7	70.0	36 07.3	123 29.1	JD	81 04 24	2000	212	402	5.27	51.0	57	35
70.0	51.0	36 10.9	121 43.6	JD	81 04 24	0200	214	408	5.23	47.0	15	9
70.0	53.0	36 06.9	121 52.1	JD	81 04 23	2355	198	418	4.75	49.0	62	13
70.0	60.0	35 53.0	122 22.1	JD	81 04 23	1910	213	377	5.64	50.0	21	4
70.0	70.0	35 32.9	123 04.4	JD	81 04 23	1305	216	394	5.47	49.0	9	8
70.0	80.0	35 12.7	123 46.8	JD	81 04 23	0750	217	386	5.63	100.0	11	31
70.0	90.0	34 52.9	124 28.8	JD	81 04 23	0230	221	424	5.21	51.0	16	2
73.3	50.0	35 38.6	121 15.3	JD	81 04 21	2120	27	66	4.03	100.0	27	9
73.3	53.0	35 32.6	121 28.1	JD	81 04 21	2320	206	413	4.98	49.0	38	4
73.3	60.0	35 18.6	121 57.7	JD	81 04 22	0310	213	414	5.16	49.0	38	5
73.3	70.0	34 58.6	122 39.7	JD	81 04 22	0745	209	413	5.06	50.0	19	10
73.3	80.0	34 38.6	123 21.9	JD	81 04 22	1345	214	416	5.14	52.0	9	16
73.3	90.0	34 18.8	124 03.6	JD	81 04 22	1845	209	430	4.86	100.0	19	8
76.7	48.0	35 07.3	120 42.4	JD	81 04 21	1505	22	55	4.04	100.0	1	13
76.7	51.0	35 01.3	120 55.1	JD	81 04 21	1205	212	371	5.71	47.0	30	25
76.7	55.0	34 53.3	121 11.8	JD	81 04 21	0935	209	401	5.21	52.0	15	9
76.7	60.0	34 43.2	121 33.0	JD	81 04 21	0640	210	423	4.96	51.0	11	12
76.7	70.0	34 23.3	122 14.8	JD	81 04 21	0115	210	430	4.89	50.0	31	9
76.7	80.0	34 03.2	122 56.8	JD	81 04 20	1945	210	423	4.96	100.0	20	23
76.7	90.0	33 43.3	123 38.0	JD	81 04 20	1425	214	410	5.21	100.0	14	16
80.0	51.0	34 27.0	120 31.4	JD	81 04 19	0815	56	110	5.11	48.0	21	4
80.0	55.0	34 19.0	120 48.0	JD	81 04 19	1140	213	343	6.23	52.0	33	12
80.0	60.0	34 09.0	121 09.0	JD	81 04 19	1610	204	398	5.14	51.0	13	21
80.0	70.0	33 49.0	121 50.6	JD	81 04 19	2145	207	404	5.12	50.0	41	8
80.0	80.0	33 29.0	122 32.0	JD	81 04 20	0320	213	376	5.66	100.0	31	25
80.0	90.0	33 09.0	123 13.1	JD	81 04 20	0855	217	396	5.47	100.0	29	308
82.0	46.0	34 16.2	119 56.3	JD	81 04 16	2015	194	403	4.81	51.0	103	72
83.3	40.6	34 13.5	119 24.7	JD	81 04 17	0230	28	59	4.82	47.0	176	192
83.3	42.0	34 10.7	119 30.5	JD	81 04 17	0045	92	169	5.44	50.0	81	37

TABLE 1. (cont.)

## CalCOFI Cruise 8104

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.3	51.0	120 08.0	JD	81 04 16	1530	86	169	5.11	51.0	132	27
83.3	55.0	120 24.6	JD	81 04 16	1110	211	383	5.51	51.0	87	33
83.3	60.0	120 45.3	JD	81 04 16	0505	208	401	5.19	49.0	32	19
83.3	70.0	121 26.6	JD	81 04 15	2155	207	393	5.28	52.0	22	211
83.3	80.0	122 07.7	JD	81 04 15	1610	209	386	5.40	100.0	144	108
83.3	90.0	122 48.7	JD	81 04 15	1040	212	400	5.31	100.0	66	208
86.7	33.0	118 29.4	JD	81 04 13	1410	36	69	5.29	50.0	148	26
86.7	35.0	118 37.7	JD	81 04 13	1550	204	381	5.37	48.0	653	96
86.7	40.0	118 58.2	JD	81 04 13	2005	209	398	5.25	49.0	453	104
86.7	45.0	119 19.0	JD	81 04 13	2340	207	374	5.53	53.0	272	37
86.7	50.0	119 39.8	JD	81 04 14	0345	53	118	4.48	47.0	172	244
86.7	55.0	120 00.4	JD	81 04 14	0715	206	392	5.26	56.0	60	57
86.7	60.0	120 21.0	JD	81 04 14	1205	211	395	5.34	51.0	46	35
86.7	70.0	121 02.5	JD	81 04 14	1845	210	400	5.25	50.0	48	0
86.7	80.0	121 42.8	JD	81 04 15	0040	216	368	5.87	53.0	7	596
86.7	90.0	122 23.6	JD	81 04 15	0540	201	404	4.98	100.0	73	118
90.0	28.0	117 46.1	JD	81 04 11	1900	56	117	4.79	48.0	294	46
90.0	30.0	117 54.3	JD	81 04 11	1645	210	397	5.30	48.0	216	104
90.0	37.0	118 23.1	JD	81 04 11	1130	213	379	5.61	49.0	666	59
90.0	45.0	118 56.1	JD	81 04 11	0425	196	424	4.63	50.0	78	142
90.0	53.0	119 28.9	JD	81 04 10	2110	210	419	5.01	45.0	219	25
90.0	60.0	119 57.6	JD	81 04 10	1520	219	405	5.43	100.0	51	203
90.0	70.0	120 38.7	JD	81 04 10	0920	216	421	5.13	100.0	26	22
90.0	80.0	121 18.9	JD	81 04 10	0250	216	419	5.17	100.0	144	41
90.0	90.0	121 59.3	JD	81 04 09	2040	213	413	5.16	100.0	42	77
93.3	26.7	117 18.2	JD	81 04 07	2115	56	123	4.56	100.0	580	139
93.3	28.0	117 31.9	JD	81 04 07	2245	211	392	5.38	49.0	463	256
93.3	30.0	117 52.4	JD	81 04 08	0100	205	405	5.06	53.0	534	200
93.3	35.0	118 12.6	JD	81 04 08	0435	206	393	5.25	53.0	1069	47
93.3	40.0	118 33.3	JD	81 04 08	0810	213	405	5.25	100.0	899	344
93.3	45.0	118 53.6	JD	81 04 08	1230	211	403	5.24	100.0	955	336
93.3	50.0	119 13.7	JD	81 04 08	1625	211	417	5.06	46.0	143	39
93.3	55.0	119 34.2	JD	81 04 08	2000	208	418	4.98	48.0	160	23
93.3	60.0	119 54.8	JD	81 04 08	2300	214	411	5.21	50.0	149	63
93.3	70.0	120 14.8	JD	81 04 09	0405	206	449	4.59	100.0	67	40
93.3	80.0	120 55.2	JD	81 04 09	0925	211	420	5.02	100.0	54	98
93.3	90.0	121 35.4	JD	81 04 09	1420	215	433	4.96	100.0	72	52
95.0	30.0	117 20.3	JD	81 03 31	2115	96	211	4.55	100.0	639	212
96.7	29.0	117 04.7	NH	81 04 07	1845	33	89	3.75	100.0	502	427
96.7	29.0	117 04.8	JD	81 04 05	2210	41	89	4.60	100.0	172	273
96.7	30.0	117 08.8	JD	81 04 05	2340	50	101	4.96	100.0	914	140
96.7	30.0	117 08.8	NH	81 04 08	1502	18	87	2.07	100.0	1135	779
96.7	32.0	117 16.7	NH	81 04 08	1646	205	436	4.69	46.0	728	80
96.7	32.0	117 17.0	JD	81 04 06	0140	213	390	5.47	52.0	886	89
96.7	35.0	117 29.2	JD	81 04 06	0415	207	398	5.21	50.0	1061	62

TABLE 1. (cont.)

CalCOFI Cruise 8104											
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
96.7	35.0	117 28.6	NH	81 04 08	1914	208	479	4.34	55.0	601	61
96.7	40.0	117 49.5	NH	81 04 08	2250	202	452	4.46	48.0	548	64
96.7	40.0	117 49.2	JD	81 04 06	0750	214	378	5.66	52.0	627	72
96.7	45.0	118 09.6	NH	81 04 09	0205	207	397	5.21	52.0	695	121
96.7	50.0	118 28.9	NH	81 04 09	0535	216	446	4.84	51.0	90	178
96.7	55.0	118 50.3	NH	81 04 09	0925	210	465	4.53	100.0	30	403
96.7	60.0	119 10.4	NH	81 04 09	1242	211	441	4.79	100.0	39	112
96.7	70.0	119 50.6	NH	81 04 09	1809	213	483	4.42	100.0	45	110
96.7	80.0	120 31.0	NH	81 04 09	2326	214	471	4.54	100.0	31	63
96.7	90.0	121 10.9	NH	81 04 10	0445	209	483	4.33	100.0	72	46
100.0	29.2	116 43.5	NH	81 04 12	0750	35	87	4.05	48.0	807	76
100.0	29.2	116 44.1	JD	81 04 04	2230	104	207	5.03	100.0	144	25
100.0	30.0	116 48.5	NH	81 04 12	0505	209	455	4.59	49.0	1715	54
100.0	30.0	116 46.7	JD	81 04 05	0030	206	418	4.92	100.0	350	98
100.0	35.0	117 06.9	JD	81 04 05	0430	208	377	5.50	54.0	373	42
100.0	35.0	117 07.5	NH	81 04 12	0125	212	426	4.98	52.0	356	35
100.0	40.0	117 27.2	NH	81 04 11	1922	205	442	4.64	53.0	164	47
100.0	40.0	117 26.8	JD	81 04 05	0935	209	384	5.44	46.0	98	51
100.0	45.0	117 47.7	NH	81 04 11	1604	210	466	4.52	100.0	78	21
100.0	50.0	118 07.0	NH	81 04 11	1035	214	464	4.61	100.0	142	62
100.0	50.0	118 48.2	NH	81 04 11	0525	205	495	4.14	100.0	89	229
100.0	70.0	119 27.6	NH	81 04 10	2153	212	456	4.66	100.0	42	253
100.0	80.0	120 07.6	NH	81 04 10	1633	210	487	4.31	100.0	26	60
100.0	90.0	120 45.8	NH	81 04 10	0940	209	461	4.53	100.0	52	176
103.3	29.0	116 21.2	NH	81 04 12	1302	20	53	3.77	54.0	410	147
103.3	29.0	116 20.5	JD	81 04 03	2210	21	54	3.90	51.0	177	198
103.3	30.0	116 24.5	JD	81 04 03	2355	56	114	4.92	48.0	575	124
103.3	30.0	116 24.5	NH	81 04 12	1432	61	101	6.09	51.0	884	312
103.3	35.0	116 42.1	NH	81 04 12	1719	216	441	4.90	100.0	165	26
103.3	35.0	116 44.6	JD	81 04 04	0345	212	376	5.65	48.0	86	115
103.3	40.0	117 04.8	JD	81 04 04	0800	209	408	5.14	100.0	93	69
103.3	40.0	117 04.8	NH	81 04 12	2117	207	419	4.94	50.0	1296	48
103.3	45.0	117 24.8	NH	81 04 13	0020	220	391	5.61	100.0	80	4
103.3	50.0	117 44.8	NH	81 04 13	0325	212	418	5.07	49.0	180	12
103.3	60.0	118 24.5	NH	81 04 13	0840	214	434	4.94	100.0	216	32
103.3	70.0	119 04.1	NH	81 04 13	1352	215	414	5.20	100.0	143	191
103.3	80.0	119 42.6	NH	81 04 13	1903	212	456	4.65	100.0	22	93
106.7	31.0	116 05.8	JD	81 04 02	2240	20	48	4.27	100.0	144	322
106.7	31.0	116 05.7	NH	81 04 15	0825	13	49	2.70	100.0	2060	601
106.7	32.0	116 10.0	NH	81 04 15	0630	143	282	5.08	50.0	225	151
106.7	32.0	116 09.8	JD	81 04 03	0020	116	209	5.56	50.0	543	40
106.7	35.0	116 22.1	NH	81 04 15	0400	215	421	5.10	47.0	506	9
106.7	35.0	116 21.8	JD	81 04 03	0330	217	445	4.87	52.0	606	17
106.7	40.0	116 41.8	NH	81 04 14	2352	207	423	4.89	50.0	170	66
106.7	40.0	116 41.7	JD	81 04 03	0735	215	416	5.18	100.0	244	16

TABLE I. (cont.)

## CALCOFI Cruise 8104

Line	Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PSF)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
106.7	45.0	30 00.1	117 03.0	NH	81 04 14	1910	211	437	4.82	55.0	118	191
106.7	50.0	29 51.9	117 22.0	NH	81 04 14	1612	211	467	4.67	100.0	68	31
106.7	60.0	29 31.8	118 02.0	NH	81 04 14	1045	212	434	4.90	100.0	149	7
106.7	70.0	29 11.2	118 41.4	NH	81 04 14	0515	217	444	4.88	100.0	84	79
106.7	80.0	28 51.1	119 19.4	NH	81 04 14	0015	216	395	5.48	100.0	50	176
110.0	32.4	29 53.0	115 50.5	NH	81 04 15	1314	31	113	2.76	53.0	98	70
110.0	32.5	29 52.2	115 49.9	JD	81 04 02	0135	43	80	5.32	47.0	443	27
110.0	35.0	29 46.9	115 59.4	NH	81 04 15	1617	211	442	4.77	53.0	423	71
110.0	35.0	29 47.2	115 59.8	JD	81 04 02	0430	211	446	4.73	100.0	241	160
110.0	40.0	29 37.1	116 19.5	JD	81 04 02	0905	207	420	4.92	100.0	64	10
110.0	40.0	29 36.3	116 19.3	NH	81 04 15	1924	213	436	4.89	100.0	151	36
110.0	45.0	29 26.6	116 38.8	NH	81 04 16	0030	210	395	5.32	50.0	28	0
110.0	50.0	29 17.4	116 58.8	NH	81 04 16	0340	208	401	5.19	100.0	55	6
110.0	60.0	28 57.1	117 38.8	NH	81 04 16	1105	213	427	4.98	100.0	65	12
110.0	70.0	28 37.1	118 17.9	NH	81 04 16	1615	214	438	4.89	100.0	76	143
110.0	80.0	28 16.8	118 57.2	NH	81 04 16	2336	215	429	5.01	100.0	111	197
113.3	29.0	29 25.2	115 14.3	NH	81 04 18	1402	8	47	1.73	100.0	4	24
113.3	30.0	29 23.2	115 18.2	NH	81 04 18	1227	40	110	3.63	100.0	19	7
113.3	35.0	29 12.7	115 37.8	NH	81 04 18	0835	214	406	5.26	100.0	747	463
113.3	40.0	29 02.6	115 59.3	NH	81 04 18	0435	212	444	4.78	100.0	119	390
113.3	45.0	28 50.9	116 17.7	NH	81 04 18	0105	209	440	4.75	100.0	33	76
113.3	50.0	28 43.6	116 36.7	NH	81 04 17	2148	210	414	5.07	100.0	117	547
113.3	60.0	28 23.0	117 16.0	NH	81 04 17	1623	208	456	4.58	100.0	67	40
113.3	70.0	28 02.7	117 55.9	NH	81 04 17	1035	213	424	5.02	100.0	199	261
113.3	80.0	27 43.5	118 34.7	NH	81 04 17	0505	241	454	5.30	100.0	85	107
116.7	25.0	28 57.8	114 36.0	NH	81 04 18	1935	37	95	3.86	100.0	2	1
116.7	30.0	28 47.7	114 55.1	NH	81 04 18	2244	84	176	4.75	50.0	2013	435
116.7	35.0	28 37.5	115 15.6	NH	81 04 19	2024	190	365	5.21	100.0	127	216
116.7	40.0	28 27.7	115 35.1	NH	81 04 20	0310	207	416	4.96	100.0	64	460
116.7	45.0	28 17.6	115 57.8	NH	81 04 20	0620	207	485	4.27	100.0	369	148
116.7	50.0	28 07.5	116 14.4	NH	81 04 20	0910	211	407	5.20	54.0	670	167
116.7	60.0	27 47.8	116 53.1	NH	81 04 20	1422	210	440	4.71	100.0	61	112
116.7	70.0	27 27.4	117 31.8	NH	81 04 20	1941	214	438	4.88	100.0	87	100
116.7	80.0	27 07.7	118 10.5	NH	81 04 21	0050	210	424	4.94	100.0	58	20
118.0	39.0	28 16.2	115 22.4	NH	81 04 20	0015	135	303	4.46	48.0	380	93
119.0	33.0	28 17.3	114 52.7	NH	81 04 20	1551	92	197	4.66	48.0	295	23
120.0	24.0	28 25.4	114 10.9	NH	81 04 19	0440	14	42	3.39	100.0	15	83
120.0	25.0	28 23.8	114 14.7	NH	81 04 19	0625	30	70	4.26	47.0	35	13
120.0	30.0	28 13.2	114 34.7	NH	81 04 19	0930	70	159	4.41	52.0	270	7
120.0	35.0	28 03.6	114 53.7	NH	81 04 19	1314	67	160	4.21	52.0	107	1
120.0	38.5	27 56.3	115 07.3	NH	81 04 22	1209	24	111	2.15	100.0	640	0
120.0	45.0	27 43.2	115 33.4	NH	81 04 22	0355	210	499	4.19	100.0	561	1193
120.0	50.0	27 33.3	115 51.5	NH	81 04 22	0050	212	403	5.26	100.0	1104	69
120.0	60.0	27 13.2	116 30.9	NH	81 04 21	1812	215	458	4.69	100.0	87	71
120.0	70.0	26 53.4	117 10.4	NH	81 04 21	1247	207	477	4.35	100.0	66	183

TABLE 1. (cont.)

CALCOFI Cruise 8104											
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
120.0	80.0	26 33.4	117 48.0	NH	81 04 21	0600	216	4.92	100.0	27	71
123.3	36.0	27 27.0	114 36.3	NH	81 04 22	1722	40	3.28	100.0	49	1
123.3	37.0	27 24.9	114 40.5	NH	81 04 22	1840	64	4.28	100.0	95	14
123.3	42.0	27 14.9	114 59.5	NH	81 04 22	2134	212	4.92	43.0	645	80
123.3	45.0	27 08.9	115 11.2	NH	81 04 23	0005	200	4.53	51.0	414	7
123.3	50.0	26 59.1	115 29.9	NH	81 04 23	0310	211	5.80	100.0	406	51
123.3	60.0	26 39.1	116 09.2	NH	81 04 23	0820	209	4.56	100.0	97	360
126.7	33.0	26 57.7	114 02.0	NH	81 04 24	0600	48	4.02	48.0	25	1
126.7	35.0	26 53.7	114 10.2	NH	81 04 24	0415	198	3.89	55.0	224	104
126.7	40.0	26 43.7	114 29.4	NH	81 04 24	0105	412	5.23	46.0	447	468
126.7	45.0	26 32.9	114 48.3	NH	81 04 23	2151	406	5.29	50.0	583	136
126.7	50.0	26 23.2	115 07.7	NH	81 04 23	1834	442	4.69	100.0	273	109
126.7	60.0	26 03.8	115 46.3	NH	81 04 23	1328	440	4.92	100.0	49	91
130.0	28.0	26 33.3	113 21.6	NH	81 04 24	1040	103	3.69	50.0	38	41
130.0	30.0	26 29.2	113 29.3	NH	81 04 24	1256	133	5.18	53.0	71	36
130.0	35.0	26 19.4	113 48.5	NH	81 04 24	1543	417	5.21	100.0	92	224
130.0	40.0	26 06.5	114 07.6	NH	81 04 24	2033	426	4.98	100.0	99	659
130.0	50.0	25 49.4	114 46.3	NH	81 04 25	0120	416	5.16	100.0	51	48
130.0	60.0	25 27.6	115 19.5	NH	81 04 25	0755	460	4.66	100.0	62	325
133.3	23.0	26 09.1	112 41.3	NH	81 04 26	1130	128	4.04	47.0	20	88
133.3	25.0	26 04.9	112 48.7	NH	81 04 26	0940	151	4.08	50.0	60	74
133.3	30.0	25 54.5	113 07.7	NH	81 04 26	0620	364	4.82	49.0	103	5
133.3	35.0	25 45.0	113 26.7	NH	81 04 26	0310	426	4.83	49.0	32	22
133.3	40.0	25 34.8	113 46.9	NH	81 04 25	2323	441	4.83	100.0	58	76
133.3	50.0	25 15.3	114 24.8	NH	81 04 25	1807	459	4.67	100.0	74	197
133.3	60.0	24 57.0	115 00.4	NH	81 04 25	1256	436	5.05	52.0	49	10

TABLE 1. (cont.)

## CALCOFI Cruise 8105

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	37 56.7	122 52.8	NH	81 06 04	0045	29	63	4.65	45.0	5	0
60.0	37 51.6	123 03.8	NH	81 06 04	0255	71	157	4.51	53.0	7	2
60.0	37 46.8	123 15.3	NH	81 06 04	0610	216	453	4.77	51.0	1	9
60.0	37 36.7	123 36.6	NH	81 06 04	1005	212	414	5.11	53.0	12	12
60.0	37 26.7	123 58.3	NH	81 06 04	1410	213	445	4.80	100.0	26	1
60.0	37 16.3	124 20.1	NH	81 06 04	1925	215	443	4.86	50.0	10	0
60.0	36 56.6	125 03.7	NH	81 06 05	0350	199	469	4.23	51.0	40	1
63.3	37 22.6	122 28.4	NH	81 06 03	1910	21	68	3.08	100.0	0	8
63.3	37 17.6	122 36.4	NH	81 06 03	1740	83	167	4.98	51.0	6	4
63.3	37 12.7	122 50.1	NH	81 06 03	1355	211	391	5.41	53.0	12	3
63.3	37 02.5	123 11.9	NH	81 06 03	0820	218	375	5.81	51.0	13	10
63.3	36 42.7	123 54.8	NH	81 06 03	0035	211	417	5.06	52.0	21	5
66.7	36 49.2	121 59.2	NH	81 06 01	1300	205	434	4.73	52.0	13	0
66.7	36 47.0	122 03.4	NH	81 06 01	1445	214	405	5.29	44.0	6	0
66.7	36 36.9	122 25.2	NH	81 06 01	1925	214	360	5.96	49.0	35	5
66.7	36 27.1	122 46.5	NH	81 06 01	2335	213	359	5.93	52.0	27	50
66.7	36 17.2	123 07.9	NH	81 06 02	0310	206	379	5.42	51.0	25	7
66.7	36 07.4	123 28.6	NH	81 06 02	0625	208	409	5.10	49.0	8	5
66.7	35 47.2	124 11.7	NH	81 06 02	1555	214	398	5.37	54.0	7	2
70.0	35 10.9	121 43.6	NH	81 06 01	0620	171	402	4.25	49.0	4	1
70.0	35 52.9	122 22.5	NH	81 05 31	2135	216	450	4.81	51.0	20	6
70.0	35 43.0	122 43.2	NH	81 05 31	1725	212	446	4.73	49.0	11	11
70.0	35 33.6	123 01.6	NH	81 05 31	1335	213	434	4.92	49.0	17	2
70.0	34 33.1	125 11.0	NH	81 05 30	1720	214	447	4.78	100.0	9	13
73.3	35 38.5	121 15.3	NH	81 05 28	1445	27	70	3.79	49.0	9	1
73.3	35 32.6	121 28.0	NH	81 05 28	1640	208	419	4.96	49.0	2	3
73.3	35 18.6	121 57.9	NH	81 05 28	2240	216	420	5.13	50.0	19	5
73.3	35 08.7	122 18.7	NH	81 05 29	0145	210	410	5.12	51.0	21	20
73.3	34 38.4	123 22.0	NH	81 05 29	2040	215	422	5.09	45.0	12	14
73.3	34 18.6	124 03.8	NH	81 05 30	0320	211	410	5.15	50.0	10	111
73.3	33 58.4	124 45.4	NH	81 05 30	0925	216	422	5.11	100.0	18	65
76.7	35 07.3	120 42.4	NH	81 05 28	0810	20	54	3.61	100.0	9	10
76.7	35 01.4	120 55.2	NH	81 05 28	0445	211	393	5.36	51.0	22	2
76.7	34 53.3	121 12.2	NH	81 05 28	0025	214	406	5.28	51.0	52	8
76.7	34 43.4	121 33.2	NH	81 05 27	2045	214	362	5.90	50.0	49	20
76.7	34 33.3	121 53.9	NH	81 05 27	1605	213	388	5.51	51.0	9	96
76.7	34 23.7	122 14.8	NH	81 05 27	1030	212	358	5.92	51.0	23	165
76.7	34 03.2	122 56.6	NH	81 05 27	0420	201	463	4.35	53.0	42	79
76.7	33 43.3	123 38.0	NH	81 05 26	2210	217	417	5.21	100.0	97	107
76.7	33 23.5	124 19.5	NH	81 05 26	1620	208	440	4.71	100.0	19	66
80.0	34 27.0	120 31.2	NH	81 05 24	2155	65	170	3.79	100.0	6	7
80.0	34 18.7	120 48.0	NH	81 05 25	0040	204	418	4.89	50.0	48	4
80.0	34 09.3	121 08.8	NH	81 05 25	0530	217	360	6.03	50.0	12	516
80.0	33 48.9	121 50.8	NH	81 05 25	1325	211	340	6.20	51.0	15	1149
80.0	33 28.8	122 31.7	NH	81 05 25	2015	214	363	5.92	56.0	129	130



TABLE 1. (cont.)

CALCOFI Cruise 8105											
Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
80.0	33 09.0	123 13.3	NH	81 05 26	0320	216	389	5.54	100.0	35	32
80.0	32 49.1	123 54.5	NH	81 05 26	0930	211	385	5.47	100.0	136	77
82.0	34 16.2	119 56.4	NH	81 05 24	1715	212	373	5.69	52.0	12	6
83.3	34 14.0	119 24.4	NH	81 05 24	0635	20	66	3.03	100.0	134	248
83.3	34 10.7	119 30.5	NH	81 05 24	0455	103	215	4.79	50.0	197	151
83.3	33 52.7	120 07.8	NH	81 05 23	2135	146	279	5.24	46.0	17	3
83.3	33 44.7	120 24.6	NH	81 05 23	1840	218	454	4.80	51.0	14	3
83.3	33 34.8	120 45.2	NH	81 05 23	1400	209	405	5.16	50.0	28	1388
83.3	33 15.2	121 25.8	NH	81 05 23	0645	216	473	4.56	50.0	6	435
83.3	32 54.6	122 07.4	NH	81 05 22	2355	213	464	4.59	50.0	13	770
83.3	32 34.7	122 48.6	NH	81 05 22	1720	221	457	4.83	100.0	49	113
83.3	32 14.6	123 29.5	NH	81 05 22	0955	215	431	5.00	100.0	5	66
86.7	33 53.4	118 29.6	NH	81 05 19	2130	51	118	4.36	52.0	443	241
86.7	33 49.2	118 37.8	NH	81 05 20	0300	211	465	4.54	49.0	760	67
86.7	33 39.1	118 59.5	NH	81 05 20	0930	180	423	4.26	52.0	105	1
86.7	33 29.5	119 19.0	NH	81 05 20	1415	215	428	5.02	47.0	146	34
86.7	33 19.4	119 39.8	NH	81 05 20	1830	77	202	3.81	51.0	21	44
86.7	33 09.3	120 00.5	NH	81 05 20	2145	216	478	4.52	50.0	28	19
86.7	32 59.1	120 21.2	NH	81 05 21	0250	203	481	4.21	52.0	63	343
86.7	32 19.3	121 42.9	NH	81 05 21	1355	214	427	5.02	47.0	15	101
86.7	31 58.8	122 22.0	NH	81 05 21	0220	211	444	4.76	100.0	56	102
86.7	31 39.4	123 04.3	NH	81 05 22	0250	213	430	4.96	100.0	41	93
90.0	33 29.1	117 46.1	JD	81 05 18	2250	49	108	4.53	50.0	190	81
90.0	33 25.1	117 54.3	JD	81 05 19	0155	205	389	5.26	48.0	356	258
90.0	33 11.1	118 23.2	JD	81 05 19	0640	208	384	5.43	100.0	157	253
90.0	32 55.0	119 09.0	JD	81 05 21	1130	214	393	5.45	49.0	112	24
90.0	32 39.1	119 28.9	JD	81 05 21	1610	206	422	4.87	50.0	16	5
90.0	32 25.1	119 57.6	JD	81 05 21	2140	214	371	5.79	50.0	39	351
90.0	32 05.1	120 38.3	JD	81 05 24	0155	211	424	4.98	52.0	33	19
90.0	31 45.1	121 18.9	JD	81 05 24	0750	208	398	5.24	100.0	36	73
90.0	31 25.1	121 59.4	JD	81 05 24	1440	205	439	4.67	100.0	24	42
90.0	31 05.1	122 39.7	JD	81 05 24	2025	213	391	5.45	100.0	30	136
93.3	32 57.4	117 18.3	JD	81 05 27	1725	55	118	4.69	51.0	59	229
93.3	32 54.8	117 23.7	JD	81 05 27	1850	198	408	4.86	50.0	37	0
93.3	32 50.8	117 31.9	JD	81 05 27	2120	209	391	5.34	52.0	37	10
93.3	32 40.8	117 52.4	JD	81 05 28	0025	205	405	5.07	52.0	267	18
93.3	32 30.8	118 12.8	JD	81 05 28	0435	203	392	5.17	100.0	142	8
93.3	32 20.8	118 33.3	JD	81 05 30	0345	209	397	5.26	50.0	115	26
93.3	32 10.8	118 53.6	JD	81 05 30	0745	212	385	5.51	50.0	39	7
93.3	32 00.8	119 14.0	JD	81 05 30	1140	217	401	5.41	51.0	123	111
93.3	31 50.8	119 34.3	JD	81 05 30	1455	207	437	4.73	49.0	9	70
93.3	31 30.8	120 14.8	JD	81 05 25	2100	217	364	5.97	52.0	120	47
93.3	31 10.8	120 55.2	JD	81 05 25	1435	208	412	5.06	100.0	22	85
93.3	30 50.8	121 35.4	JD	81 05 25	0800	212	398	5.33	100.0	44	186
93.3	30 30.8	122 15.5	JD	81 05 25	0200	212	422	5.03	100.0	389	1913

TABLE 1. (cont.)

## CALCOFI Cruise 8105

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code yr.	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
96.7	29.0	117 04.8	JD	81 06 02	0235	34	86	3.97	50.0	92	114
96.7	30.0	117 08.8	JD	81 06 02	0440	41	85	4.85	52.0	80	100
96.7	32.0	117 17.0	JD	81 06 02	0620	203	385	5.28	100.0	35	5
96.7	35.0	117 29.2	JD	81 06 02	0835	208	398	5.23	54.0	13	2
96.7	40.0	117 49.5	JD	81 06 02	1345	204	384	5.31	50.0	10	5
96.7	45.0	118 09.8	JD	81 06 02	1700	203	407	4.98	50.0	43	19
96.7	50.0	118 30.1	JD	81 06 02	2115	211	409	5.15	51.0	14	14
96.7	55.0	118 50.3	JD	81 06 03	0030	213	413	5.15	49.0	17	6
96.7	60.0	119 10.5	JD	81 06 03	0530	207	395	5.25	100.0	26	38
96.7	70.0	119 50.7	JD	81 06 03	1235	212	429	4.94	100.0	75	115
96.7	80.0	120 30.8	JD	81 06 03	1925	212	415	5.11	100.0	51	128
96.7	90.0	121 10.8	JD	81 06 04	0145	206	419	4.92	100.0	45	195
96.7	100.0	121 50.6	JD	81 06 04	0745	209	407	5.13	100.0	151	533
100.0	29.2	116 43.4	JD	81 06 06	0925	70	137	5.11	100.0	50	213
100.0	30.0	116 46.6	JD	81 06 06	0740	201	404	4.96	50.0	33	21
100.0	35.0	117 06.9	JD	81 06 06	0330	210	406	5.18	100.0	61	10
100.0	40.0	117 27.1	JD	81 06 06	0030	208	395	5.26	54.0	31	10
100.0	45.0	117 47.1	JD	81 06 05	2045	205	410	4.98	100.0	69	13
100.0	50.0	118 07.3	JD	81 06 05	1735	205	392	5.22	53.0	14	5
100.0	60.0	118 47.5	JD	81 06 05	1115	203	423	4.81	100.0	32	17
100.0	70.0	119 27.5	JD	81 06 05	0430	203	412	4.92	100.0	52	276
100.0	80.0	120 07.4	JD	81 06 04	2210	207	410	5.05	100.0	165	247
100.0	90.0	120 47.1	JD	81 06 04	1610	204	395	5.17	100.0	97	97
103.3	29.0	116 20.5	JD	81 06 07	0555	14	39	3.55	100.0	30	53
103.3	30.0	116 24.5	JD	81 06 07	0750	48	105	4.60	100.0	27	28
103.3	35.0	116 44.6	JD	81 06 07	1120	211	387	5.44	100.0	31	7
103.3	40.0	117 04.7	JD	81 06 07	1515	211	375	5.62	100.0	37	10
103.3	45.0	117 24.7	JD	81 06 07	1815	208	386	5.38	100.0	18	9
103.3	50.0	117 44.7	JD	81 06 07	2200	216	396	5.45	100.0	24	49
103.3	60.0	118 24.7	JD	81 06 08	0355	211	387	5.44	100.0	37	171
103.3	70.0	119 04.4	JD	81 06 08	0945	213	389	5.49	100.0	50	145
103.3	80.0	119 44.1	JD	81 06 08	1615	203	401	5.05	51.0	54	111
103.3	90.0	120 23.6	JD	81 06 08	2140	215	395	5.43	100.0	112	107
106.7	31.0	116 05.8	JD	81 06 10	1925	14	38	3.77	100.0	5	130
106.7	32.0	116 09.8	JD	81 06 10	1800	103	205	5.03	50.0	31	31
106.7	35.0	116 21.8	JD	81 06 10	1510	208	380	5.47	100.0	30	42
106.7	40.0	116 41.8	JD	81 06 10	1150	208	407	5.12	100.0	26	23
106.7	45.0	117 01.7	JD	81 06 10	0700	200	413	4.85	100.0	31	16
106.7	50.0	117 21.6	JD	81 06 10	0340	212	401	5.29	100.0	15	2
106.7	60.0	118 01.3	JD	81 06 09	2145	206	434	4.73	100.0	157	184
106.7	70.0	118 40.8	JD	81 06 09	1600	204	397	5.14	100.0	36	45
106.7	80.0	119 20.3	JD	81 06 09	0905	216	392	5.52	100.0	60	251
106.7	90.0	119 59.5	JD	81 06 09	0310	209	412	5.08	100.0	8	327
110.0	32.4	115 49.5	JD	81 06 11	0035	34	76	4.48	50.0	16	27
110.0	35.0	115 59.8	JD	81 06 11	0220	211	389	5.42	45.0	14	0

TABLE 1. (cont.)

## CalCOFI Cruise 8105

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
110.0	29 37.2	116 19.7	JD	81 06 11	0625	198	408	4.86	100.0	26	12
110.0	29 27.2	116 39.5	JD	81 06 11	0910	208	419	4.96	100.0	50	9
110.0	29 17.2	116 59.2	JD	81 06 11	1335	211	404	5.23	100.0	6	4
110.0	28 57.2	117 38.7	JD	81 06 11	1945	218	391	5.57	100.0	35	374
110.0	28 37.2	118 18.0	JD	81 06 12	0210	211	405	5.21	47.0	52	348
110.0	28 17.2	118 57.2	JD	81 06 12	0825	213	412	5.16	100.0	4	840

TABLE 1. (cont.)

## CALCOFI Cruise 8107

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
60.0	37 56.8	122 52.9	JD	81 06 28	0110	34	87	3.91	100.0	2	6
60.0	37 51.8	123 03.8	JD	81 06 27	2305	69	156	4.42	50.0	2	1
60.0	37 46.8	123 14.7	JD	81 06 27	2047	128	255	5.01	49.0	18	0
60.0	37 36.8	123 36.5	JD	81 06 27	1700	212	417	5.09	51.0	10	3
63.3	37 22.6	122 28.4	JD	81 06 28	1140	21	51	4.06	100.0	3	34
63.3	37 18.6	122 37.1	JD	81 06 28	1345	76	168	4.52	47.0	0	2
63.3	37 12.6	122 50.1	JD	81 06 28	1550	204	433	4.71	50.0	349	3
63.3	37 02.6	123 11.7	JD	81 06 28	1930	207	417	4.94	49.0	20	5
63.3	36 42.6	123 54.8	JD	81 06 29	0140	198	405	4.88	50.0	35	6
63.3	36 22.6	124 37.7	JD	81 06 29	0715	210	380	5.54	53.0	11	28
63.3	36 02.6	125 20.5	JD	81 06 29	1250	210	377	5.58	48.0	10	10
66.7	36 49.2	121 59.1	JD	81 06 30	2135	208	337	6.17	48.0	39	2
66.7	36 47.2	122 03.4	JD	81 06 30	1920	207	325	6.38	49.0	35	175
66.7	36 37.2	122 24.9	JD	81 06 30	1541	209	364	5.75	52.0	30	2
66.7	36 27.2	122 46.4	JD	81 06 30	1210	208	393	5.29	50.0	27	0
66.7	36 07.0	123 29.3	JD	81 06 30	0610	208	341	6.10	52.0	22	6
66.7	35 47.2	124 11.7	JD	81 06 30	0045	216	368	5.88	51.0	24	5
66.7	35 27.2	124 54.2	JD	81 06 29	1915	209	395	5.28	52.0	12	14
66.7	36 10.9	121 43.6	JD	81 07 01	0410	211	425	4.96	52.0	13	74
70.0	36 06.9	121 52.1	JD	81 07 01	0635	212	386	5.51	52.0	35	2
70.0	35 52.9	122 21.9	JD	81 07 01	1110	215	386	5.55	51.0	20	6
70.0	35 32.9	123 04.4	JD	81 07 01	1730	212	415	5.11	52.0	15	20
70.0	35 12.9	123 46.7	JD	81 07 01	2340	216	400	5.41	43.0	25	3
70.0	34 52.9	124 28.8	JD	81 07 02	0535	211	417	5.07	49.0	13	3
73.3	35 38.6	121 15.3	JD	81 07 03	1245	29	58	5.07	55.0	4	66
73.3	35 32.6	121 28.1	JD	81 07 03	0945	208	402	5.18	52.0	23	3
73.3	35 18.6	121 57.7	JD	81 07 03	0510	209	397	5.26	48.0	9	1
73.3	34 58.6	122 39.9	JD	81 07 02	2340	209	379	5.60	52.0	29	6
73.3	34 38.6	123 21.9	JD	81 07 02	1737	209	399	5.25	49.0	4	3
73.3	34 18.6	124 03.7	JD	81 07 02	1130	214	423	5.05	100.0	12	6
76.7	35 07.3	120 42.4	JD	81 07 03	1750	21	60	3.48	100.0	4	66
76.7	35 01.3	120 55.1	JD	81 07 03	2010	208	396	5.26	50.0	17	4
76.7	34 53.3	121 11.9	JD	81 07 03	2326	212	397	5.33	50.0	75	0
76.7	34 43.3	121 32.9	JD	81 07 04	0305	217	356	6.10	46.0	30	2
76.7	34 23.3	122 14.8	JD	81 07 04	0835	203	412	4.92	100.0	45	6
76.7	34 03.3	122 56.5	JD	81 07 04	1335	213	400	5.31	51.0	7	4
76.7	33 43.3	123 38.0	JD	81 07 04	1930	213	406	5.24	52.0	18	28
80.0	34 27.0	120 31.4	JD	81 07 06	0120	62	113	5.48	55.0	35	66
80.0	34 19.0	120 48.1	JD	81 07 05	2210	210	394	5.34	47.0	36	26
80.0	34 09.0	121 09.0	JD	81 07 05	1836	213	385	5.54	48.0	7	2
80.0	33 49.0	121 50.6	JD	81 07 05	1250	210	401	5.25	43.0	16	1
80.0	33 29.0	122 32.0	JD	81 07 05	0700	209	410	5.09	100.0	47	27
80.0	33 09.0	123 13.3	JD	81 07 05	0105	216	410	5.26	100.0	79	16
82.0	34 16.2	119 56.3	JD	81 07 07	1419	216	347	6.23	53.0	61	5
83.3	34 13.5	119 24.7	JD	81 07 07	0745	21	45	4.56	47.0	117	261

TABLE 1. (cont.)

## CalCOFI Cruise 8107

Line	Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
83.3	42.0	34 10.7	119 30.5	JD	81 07 07	0930	140	245	5.74	55.0	134	38
83.3	51.0	33 52.7	120 08.0	JD	81 07 07	1855	85	149	5.75	100.0	31	122
83.3	55.0	33 44.7	120 24.6	JD	81 07 07	2201	211	401	5.27	47.0	9	11
83.3	60.0	33 34.7	120 45.3	JD	81 07 08	0135	219	395	5.53	51.0	13	2
83.3	70.0	33 14.7	121 26.6	JD	81 07 08	0705	211	418	5.05	54.0	12	5
83.3	80.0	32 54.7	122 07.7	JD	81 07 08	1318	210	416	5.05	100.0	30	2
83.3	90.0	32 34.7	122 48.7	JD	81 07 08	1949	211	420	5.01	50.0	26	0
86.7	33.0	33 53.4	118 29.4	JD	81 07 10	1942	49	123	3.98	53.0	24	58
86.7	35.0	33 49.4	118 37.7	JD	81 07 10	1737	211	392	5.37	52.0	21	63
86.7	40.0	33 39.4	118 58.5	JD	81 07 10	1303	215	396	5.44	52.0	2	19
86.7	45.0	33 29.4	119 19.1	JD	81 07 10	0915	211	381	5.54	50.0	11	3
86.7	50.0	33 19.4	119 39.8	JD	81 07 10	0445	65	152	4.26	100.0	11	44
86.7	55.0	33 09.4	120 00.4	JD	81 07 10	0105	204	411	4.96	51.0	12	0
86.7	60.0	32 59.4	120 21.0	JD	81 07 09	2115	214	393	5.44	50.0	10	1
86.7	70.0	32 39.4	121 02.0	JD	81 07 09	1445	216	399	5.41	57.0	4	2
86.7	80.0	32 19.4	121 42.9	JD	81 07 09	0810	214	389	5.51	50.0	15	5
86.7	90.0	31 59.4	122 23.6	JD	81 07 09	0145	218	412	5.29	48.0	9	53
90.0	28.0	33 29.1	117 46.1	JD	81 07 11	0140	48	102	4.75	52.0	26	183
90.0	30.0	33 25.1	117 54.3	JD	81 07 11	0350	210	394	5.32	50.0	43	25
90.0	37.0	33 11.1	118 23.2	JD	81 07 11	0820	208	385	5.39	100.0	150	50
90.0	45.0	32 55.1	118 56.1	JD	81 07 11	1328	214	392	5.47	49.0	7	1
90.0	53.0	32 39.1	119 28.9	JD	81 07 11	1852	207	409	5.07	50.0	5	0
90.0	60.0	32 25.1	119 57.6	JD	81 07 11	2337	203	428	4.73	48.0	6	1
90.0	70.0	32 05.1	120 38.3	JD	81 07 12	0525	209	407	5.14	53.0	5	0
90.0	80.0	31 45.1	121 18.9	JD	81 07 12	1218	216	415	5.20	100.0	4	7
90.0	90.0	31 25.1	121 59.4	JD	81 07 12	1937	216	435	4.96	51.0	3	21
93.3	26.7	32 57.4	117 18.3	JD	81 07 15	0325	56	119	4.75	52.0	66	84
93.3	28.0	32 54.8	117 23.7	JD	81 07 15	0130	214	376	5.69	52.0	142	26
93.3	30.0	32 50.8	117 31.9	JD	81 07 14	2303	209	392	5.34	50.0	21	5
93.3	35.0	32 40.8	117 52.4	JD	81 07 14	1915	212	398	5.33	49.0	4	8
93.3	40.0	32 30.8	118 12.8	JD	81 07 14	1533	202	405	4.98	50.0	4	1
93.3	45.0	32 20.8	118 33.3	JD	81 07 14	1010	212	394	5.37	51.0	5	10
93.3	50.0	32 10.8	119 14.0	JD	81 07 14	0530	210	401	5.24	52.0	5	8
93.3	55.0	32 00.8	119 34.3	JD	81 07 13	2103	208	397	5.29	51.0	3	2
93.3	60.0	31 50.8	119 34.3	JD	81 07 13	2103	208	409	5.09	53.0	9	9
93.3	70.0	31 30.8	120 14.8	JD	81 07 13	1348	213	410	5.20	48.0	1	2
93.3	80.0	31 10.8	120 55.2	JD	81 07 13	0705	212	413	5.13	100.0	30	335
93.3	90.0	30 50.8	121 35.4	JD	81 07 13	0100	216	422	5.12	100.0	17	354

TABLE 1. (cont.)

## CalCOFI Cruise 8108

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
96.7	29.0	117 04.8	NH	81 07 23	1355	46	86	5.35	100.0	25	77
96.7	30.0	117 09.0	NH	81 07 23	1610	59	122	4.84	100.0	43	299
96.7	32.0	117 17.6	NH	81 07 23	1830	213	436	4.89	100.0	20	6
96.7	35.0	117 29.2	NH	81 07 23	2110	203	430	4.71	52.0	14	4
96.7	40.0	117 49.0	NH	81 07 24	0045	220	447	4.92	100.0	60	4
96.7	45.0	118 10.0	NH	81 07 24	0410	223	446	5.00	100.0	24	3
96.7	50.0	118 30.4	NH	81 07 24	0755	216	429	5.03	48.0	5	12
96.7	55.0	118 50.0	NH	81 07 24	1140	219	443	4.92	100.0	8	12
96.7	60.0	119 10.8	NH	81 07 24	1600	223	406	5.48	52.0	8	38
96.7	70.0	119 49.9	NH	81 07 24	2150	211	421	5.02	100.0	57	1491
96.7	80.0	120 30.3	NH	81 07 25	0335	217	489	4.44	100.0	29	166
96.7	90.0	121 11.7	NH	81 07 25	0840	211	440	4.78	48.0	29	132
100.0	29.2	116 43.7	NH	81 07 27	1755	106	211	5.04	100.0	18	105
100.0	30.0	116 46.5	NH	81 07 27	1440	213	440	4.84	100.0	12	274
100.0	35.0	117 07.5	NH	81 07 27	1010	204	380	5.36	51.0	5	0
100.0	40.0	117 27.6	NH	81 07 27	0535	207	417	4.94	50.0	16	2
100.0	45.0	117 47.2	NH	81 07 27	0055	215	425	5.05	49.0	49	0
100.0	50.0	118 07.6	NH	81 07 26	2020	212	416	5.09	52.0	28	2
100.0	60.0	118 47.1	NH	81 07 26	1150	213	450	4.71	100.0	58	155
100.0	70.0	119 28.2	NH	81 07 26	0520	215	493	4.36	100.0	95	1989
100.0	80.0	120 07.0	NH	81 07 25	2210	218	418	5.22	100.0	85	191
100.0	90.0	120 51.5	NH	81 07 25	1520	212	442	4.79	100.0	86	658
103.3	29.0	116 20.8	NH	81 07 28	0005	22	46	4.77	50.0	30	17
103.3	30.0	116 24.3	NH	81 07 28	0155	51	105	4.90	51.0	20	9
103.3	35.0	116 45.3	NH	81 07 28	0500	203	441	4.61	100.0	23	1
103.3	40.0	117 05.4	NH	81 07 28	0810	206	404	5.10	100.0	10	4
103.3	45.0	117 24.8	NH	81 07 28	1130	209	419	5.00	47.0	7	6
103.3	50.0	117 44.0	NH	81 07 28	1600	214	410	5.22	100.0	32	8
103.3	60.0	118 24.1	NH	81 07 28	2120	206	433	4.77	100.0	237	337
103.3	70.0	119 03.5	NH	81 07 29	0248	207	411	5.04	100.0	142	50
103.3	80.0	119 44.5	NH	81 07 29	0800	203	430	4.73	100.0	221	115
106.7	31.0	116 06.0	NH	81 07 30	1815	14	32	4.53	100.0	0	1
106.7	32.0	116 10.0	NH	81 07 30	1940	168	394	4.26	49.0	24	48
106.7	35.0	116 21.5	NH	81 07 30	2230	205	392	5.22	100.0	50	4
106.7	40.0	116 42.0	NH	81 07 30	1255	216	427	5.05	100.0	22	9
106.7	45.0	117 02.1	NH	81 07 30	0950	204	444	4.59	100.0	21	2
106.7	50.0	117 21.9	NH	81 07 30	0630	213	409	5.22	49.0	12	10
106.7	60.0	118 01.8	NH	81 07 30	0100	205	465	4.41	100.0	321	183
106.7	70.0	118 41.0	NH	81 07 29	1900	205	421	4.88	100.0	154	11
106.7	80.0	119 21.3	NH	81 07 29	1300	207	442	4.67	100.0	59	433
110.0	32.4	115 50.1	NH	81 07 31	0430	43	99	4.34	100.0	23	341
110.0	35.0	116 00.0	NH	81 07 31	0710	208	393	5.31	100.0	67	34
110.0	40.0	116 19.5	NH	81 07 31	1035	196	462	4.26	100.0	48	8
110.0	45.0	116 38.4	NH	81 07 31	1430	214	450	4.26	100.0	9	14
110.0	50.0	116 59.7	NH	81 07 31	1900	211	415	5.07	100.0	30	6

TABLE 1. (cont.)

## CalCOFI Cruise 8108

Line Station	Lat. (N) deg. min.	Long. (W) deg. min.	Ship Code	Tow Date yr. mo. day	Time (PST)	Tow Depth (m)	Vol. Water Strained (cu. m)	Stand- ard Haul Factor	Percent Sorted	Total Larvae	Total Eggs
110.0	28 56.7	117 38.4	NH	81 08 01	0140	213	446	4.78	53.0	89	165
110.0	28 36.9	118 18.3	NH	81 08 01	0725	208	428	4.87	100.0	66	296
110.0	28 16.7	118 57.0	NH	81 08 01	1355	211	466	4.52	100.0	117	99
113.3	29 25.3	115 14.0	NH	81 08 03	0615	22	40	5.41	100.0	15	36
113.3	29 23.0	115 18.0	NH	81 08 03	0420	45	87	5.11	100.0	32	91
113.3	29 13.5	115 36.5	NH	81 08 03	0025	208	420	4.96	100.0	10	2
113.3	29 04.2	115 56.6	NH	81 08 02	2015	217	433	5.02	100.0	66	70
113.3	28 54.0	116 16.5	NH	81 08 02	1620	215	427	5.04	100.0	59	87
113.3	28 42.3	116 36.7	NH	81 08 02	1255	212	440	4.82	100.0	60	46
113.3	28 22.2	117 16.5	NH	81 08 02	0705	206	424	4.86	100.0	85	83
113.3	28 02.7	117 55.4	NH	81 08 02	0140	209	458	4.56	100.0	153	98
113.3	27 43.4	118 34.3	NH	81 08 01	1935	203	433	4.69	100.0	22	77
116.7	28 57.2	114 35.7	NH	81 08 03	1225	43	93	4.64	100.0	11	6
116.7	28 47.5	114 56.2	NH	81 08 03	1605	91	195	4.66	100.0	14	8
116.7	28 37.6	115 15.6	NH	81 08 04	1420	174	377	4.62	100.0	28	42
116.7	28 27.1	115 35.7	NH	81 08 04	2105	212	426	4.98	100.0	31	10
116.7	28 17.7	115 54.9	NH	81 08 05	0040	205	452	4.54	51.0	41	26
116.7	28 07.6	116 14.0	NH	81 08 05	0350	219	427	5.13	100.0	51	16
116.7	27 48.3	116 54.5	NH	81 08 05	0840	208	386	5.40	100.0	152	77
116.7	27 27.9	117 32.1	NH	81 08 05	1400	203	465	4.37	100.0	127	48
116.7	27 07.9	118 10.7	NH	81 08 05	1920	209	428	4.90	100.0	105	358
118.0	28 16.0	115 22.4	NH	81 08 04	1750	165	336	4.90	100.0	42	7
119.0	28 17.8	114 51.8	NH	81 08 04	1010	93	183	5.06	100.0	15	19
120.0	28 25.0	114 11.2	NH	81 08 03	2210	28	75	3.74	100.0	278	13
120.0	28 23.2	114 15.0	NH	81 08 04	0015	48	114	4.23	100.0	95	2
120.0	28 12.8	114 35.7	NH	81 08 04	0340	82	168	4.90	100.0	0	0
120.0	28 03.3	114 53.5	NH	81 08 04	0720	68	150	4.56	100.0	10	57
120.0	27 56.0	115 07.0	NH	81 08 07	0515	23	59	3.80	100.0	88	158
120.0	27 44.0	115 32.3	NH	81 08 07	0035	208	447	4.65	53.0	190	35
120.0	27 33.7	115 51.8	NH	81 08 06	1940	211	409	5.14	52.0	119	25
120.0	27 13.9	116 30.7	NH	81 08 06	1345	212	397	5.33	100.0	27	337
120.0	26 53.4	117 10.3	NH	81 08 06	0725	209	422	4.96	100.0	119	40
120.0	26 33.0	117 48.8	NH	81 08 06	0150	207	441	4.69	100.0	170	216
123.3	27 26.8	114 36.3	NH	81 08 07	1025	30	59	5.04	100.0	16	669
123.3	27 25.2	114 40.4	NH	81 08 07	1205	57	104	5.52	52.0	8	21
123.3	27 14.5	115 00.1	NH	81 08 07	1540	214	438	4.88	100.0	22	41

TABLE 2. Pooled occurrences of fish larvae taken during CalCOFI cruises in 1981.

Rank	Taxon	Occurrences
1	<i>Engraulis mordax</i>	464
2	<i>Sebastes</i> spp.	431
2	<i>Protomyctophum crockeri</i>	431
4	<i>Leuroglossus stilbius</i>	320
5	<i>Vinciguerrria lucetia</i>	287
6	<i>Stenobranchius leucopsarus</i>	282
7	<i>Bathylagus ochotensis</i>	257
8	<i>Triphoturus mexicanus</i>	250
9	<i>Citharichthys</i> spp.	213
10	<i>Cyclothone</i> spp.	200
10	<i>Lampanyctus</i> spp.	200
12	<i>Merluccius productus</i>	198
13	Sternoptychidae	183
14	Myctophidae	176
15	Disintegrated fish larva	169
16	<i>Bathylagus wesethi</i>	138
17	Unidentified fish larva	124
18	<i>Symbolophorus californiensis</i>	102
19	<i>Ceratospelus townsendi</i>	98
20	<i>Lampanyctus ritteri</i>	97
21	<i>Diogenichthys laternatus</i>	90
22	<i>Tarletonbeania crenularis</i>	89
23	<i>Stomias atriventer</i>	88
23	<i>Melamphaes</i> spp.	88
23	<i>Trachurus symmetricus</i>	88
26	<i>Citharichthys stigmaeus</i>	87
27	<i>Scomber japonicus</i>	86
28	<i>Diogenichthys atlanticus</i>	79
28	<i>Genyonemus lineatus</i>	79
30	<i>Lestidiops ringens</i>	69
31	<i>Chauliodus macouni</i>	67
32	<i>Paralichthys californicus</i>	60
33	<i>Lyopsetta exilis</i>	59
34	<i>Argentina sialis</i>	58
35	<i>Sebastes paucispinis</i>	55
36	<i>Bathylagus</i> spp.	50
37	Gobiidae	44
38	<i>Sardinops sagax</i>	41
39	<i>Bathylagus pacificus</i>	39
40	<i>Parophrys vetulus</i>	38
41	<i>Microstoma microstoma</i>	37
42	<i>Oxyjulis californica</i>	34
43	<i>Peprilus simillimus</i>	31
44	Gonostomatidae	30
45	Serranidae	27
45	<i>Diaphus</i> spp.	27
47	<i>Seriphus politus</i>	26
47	<i>Pleuronichthys verticalis</i>	26



TABLE 2. (cont.)

Rank	Taxon	Occurrences
49	Cottidae	25
50	<i>Glyptocephalus zachirus</i>	24
51	<i>Poromitra</i> spp.	23
51	<i>Sebastes jordani</i>	23
53	<i>Icichthys lockingtoni</i>	22
53	<i>Sebastes aurora</i>	22
53	<i>Ichthyococcus</i> spp.	22
53	Chiasmodontidae	22
57	<i>Hypsoblennius</i> spp.	21
58	Clinidae	20
58	<i>Sebastolobus</i> spp.	20
58	<i>Danaphos oculatus</i>	20
58	<i>Diogenichthys</i> spp.	20
62	<i>Synodus</i> spp.	19
62	Ophidiiformes	19
64	<i>Nansenia candida</i>	18
65	<i>Myctophum nitidulum</i>	17
66	<i>Chromis punctipinnis</i>	16
66	<i>Nansenia crassa</i>	16
68	<i>Pleuronichthys ritteri</i>	15
69	<i>Tetragonurus cuvieri</i>	14
69	<i>Microstomus pacificus</i>	14
69	<i>Sphyraena argentea</i>	14
69	<i>Lampanyctus regalis</i>	14
69	<i>Scopelarchus</i> spp.	14
74	<i>Gonichthys tenuiculus</i>	13
75	<i>Idiacanthus antrostomus</i>	12
76	<i>Scopelosaurus</i> spp.	10
76	<i>Cololabis saira</i>	10
76	<i>Hygophum atratum</i>	10
79	Agonidae	9
79	Paralepididae	9
79	<i>Rosenblattichthys volucris</i>	9
82	<i>Symphurus</i> spp.	8
82	<i>Zaniolepis</i> spp.	8
82	<i>Notoscopelus resplendens</i>	8
82	<i>Sebastes macdonaldi</i>	8
82	<i>Aristostomias scintillans</i>	8
82	<i>Lepidopus xantusi</i>	8
82	Blennioidei	8
89	<i>Hygophum</i> spp.	7
89	Cyclopteridae	7
89	<i>Halichoeres</i> spp.	7
89	Sciaenidae	7
93	<i>Scorpaena</i> spp.	6
93	<i>Hippoglossina stomata</i>	6
93	<i>Macroramphosus gracilis</i>	6
93	<i>Lampadena urophaos</i>	6
93	<i>Bathylagus milleri</i>	6

TABLE 2. (cont.)

Rank	Taxon	Occurrences
93	<i>Electrona rissoi</i>	6
93	<i>Oxylebius pictus</i>	6
93	Trachipteridae	6
101	<i>Sebastes levis</i>	5
101	<i>Tactostoma macropus</i>	5
101	<i>Brosmophycis marginata</i>	5
101	<i>Notolepis risso</i>	5
105	<i>Hygophum reinhardtii</i>	4
105	Macrouridae	4
105	<i>Benthalbella dentata</i>	4
105	<i>Syngnathus</i> spp.	4
105	<i>Scopelogadus bispinosus</i>	4
105	Atherinidae	4
111	<i>Icosteus aenigmaticus</i>	3
111	<i>Xystreurys liolepis</i>	3
111	Gerreidae	3
111	<i>Hypsopsetta guttulata</i>	3
111	<i>Coryphaena hippurus</i>	3
111	Stomiiformes	3
111	<i>Scorpaenichthys marmoratus</i>	3
111	Exocoetidae	3
111	<i>Prionotus</i> spp.	3
111	<i>Loweina rara</i>	3
111	<i>Semicossyphus pulcher</i>	3
122	Haemulidae	2
122	<i>Pleuronichthys coenosus</i>	2
122	Scopelarchidae	2
122	<i>Platichthys stellatus</i>	2
122	<i>Girella nigricans</i>	2
122	<i>Valenciennellus stellatus</i>	2
122	<i>Notolychnus valdiviae</i>	2
122	<i>Caulolatilus princeps</i>	2
122	<i>Photonectes</i> spp.	2
122	<i>Cheilotrema saturnum</i>	2
132	<i>Gonostoma</i> spp.	1
132	<i>Physiculus</i> spp.	1
132	<i>Psettichthys melanostictus</i>	1
132	<i>Ophidion scrippsae</i>	1
132	Ceratioidei	1
132	Gempylidae	1
132	<i>Hypsypops rubicundus</i>	1
132	<i>Roncador stearnsii</i>	1
132	Carangidae	1
132	<i>Seriola lalandi</i>	1
132	<i>Ophiodon elongatus</i>	1
132	<i>Aulopus</i> spp.	1
132	<i>Gadus macrocephalus</i>	1
132	<i>Pleuronichthys decurrens</i>	1
132	<i>Pleuronichthys</i> spp.	1

TABLE 2. (cont.)

Rank	Taxon	Occurrences
132	Hemiramphidae	1
132	Hexagrammidae	1
132	<i>Sarda chiliensis</i>	1
132	Evermannellidae	1

TABLE 3. Pooled numbers of fish larvae taken during CalCOFI cruises in 1981. Counts are adjusted for percent of sample sorted and standard haul factor (see text).

Rank	Taxon	Count
1	<i>Engraulis mordax</i>	484269
2	<i>Sebastes</i> spp.	47046
3	<i>Vinciguerria lucetia</i>	36736
4	<i>Leuroglossus stilbius</i>	25683
5	<i>Merluccius productus</i>	18736
6	<i>Stenobranchius leucopsarus</i>	15640
7	<i>Triphoturus mexicanus</i>	12386
8	<i>Scomber japonicus</i>	7986
9	<i>Protomyctophum crockeri</i>	7277
10	<i>Citharichthys</i> spp.	7082
11	<i>Genyonemus lineatus</i>	6764
12	<i>Bathylagus ochotensis</i>	6308
13	<i>Sardinops sagax</i>	6047
14	<i>Trachurus symmetricus</i>	4013
15	<i>Cyclothone</i> spp.	3663
16	<i>Bathylagus wesethi</i>	2828
17	Disintegrated fish larva	2771
18	Myctophidae	2614
19	<i>Diogenichthys laternatus</i>	2606
20	<i>Lampanyctus</i> spp.	2315
21	Sternoptychidae	1972
22	<i>Sebastes paucispinis</i>	1793
23	<i>Seriphus politus</i>	1742
24	<i>Citharichthys stigmaeus</i>	1633
25	<i>Ceratoscopelus townsendi</i>	1559
26	Unidentified fish larva	1374
27	<i>Lampanyctus ritteri</i>	1354
28	<i>Paralichthys californicus</i>	1192
29	<i>Tarletonbeania crenularis</i>	1103
30	<i>Symbolophorus californiensis</i>	1063
31	<i>Argentina sialis</i>	1060
32	<i>Lyopsetta exilis</i>	998
33	<i>Bathylagus pacificus</i>	956
34	<i>Sebastes jordani</i>	938
35	<i>Stomias atriventer</i>	900
36	<i>Melamphaes</i> spp.	833
37	<i>Diogenichthys atlanticus</i>	822
38	Cottidae	754
39	Serranidae	697
40	<i>Oxyjulis californica</i>	675
41	<i>Chauliodus macouni</i>	621
42	<i>Diaphus</i> spp.	589
43	<i>Parophrys vetulus</i>	559
44	<i>Bathylagus</i> spp.	552
45	Gobiidae	541
46	<i>Lestidiops ringens</i>	518
47	<i>Peprilus simillimus</i>	442

TABLE 3. (cont.)

Rank	Taxon	Count
48	<i>Hypsoblennius</i> spp.	354
49	<i>Glyptocephalus zachirus</i>	328
50	<i>Synodus</i> spp.	321
51	<i>Microstoma microstoma</i>	294
52	<i>Chromis punctipinnis</i>	278
53	<i>Sebastes aurora</i>	277
54	<i>Sebastes macdonaldi</i>	273
55	<i>Pleuronichthys verticalis</i>	270
56	<i>Icichthys lockingtoni</i>	259
57	Clinidae	245
58	Gonostomatidae	243
59	<i>Diogenichthys</i> spp.	230
60	<i>Sebastolobus</i> spp.	218
61	Ophidiiformes	209
62	<i>Lepidopus xantusi</i>	199
63	<i>Sphyraena argentea</i>	198
64	<i>Nansenia candida</i>	176
65	<i>Ichthyococcus</i> spp.	169
66	<i>Danaphos oculatus</i>	163
67	<i>Poromitra</i> spp.	159
68	<i>Microstomus pacificus</i>	156
69	<i>Tetragonurus cuvieri</i>	143
70	<i>Symphurus</i> spp.	136
71	Chiasmodontidae	135
72	Blennioidei	133
73	<i>Pleuronichthys ritteri</i>	132
74	<i>Nansenia crassa</i>	128
75	<i>Myctophum nitidulum</i>	119
76	<i>Lampanyctus regalis</i>	116
77	<i>Idiacanthus antrostomus</i>	109
78	Sciaenidae	107
79	<i>Tactostoma macropus</i>	94
80	<i>Scopelarchus</i> spp.	92
80	<i>Hygophum atratum</i>	92
82	<i>Gonichthys tenuiculus</i>	85
83	<i>Sebastes levis</i>	81
84	<i>Scorpaena</i> spp.	78
85	Agonidae	77
86	<i>Halichoeres</i> spp.	76
87	<i>Cololabis saira</i>	73
87	<i>Scopelosaurus</i> spp.	73
89	<i>Zaniolepis</i> spp.	67
90	<i>Notoscopelus resplendens</i>	64
91	<i>Hippoglossina stomata</i>	61
91	<i>Rosenblattichthys volucris</i>	61
93	Cyclopteridae	59
93	Paralepididae	59
95	Haemulidae	55
96	<i>Bathylagus milleri</i>	53

TABLE 3. (cont.)

Rank	Taxon	Count
97	Gerreidae	52
97	<i>Brosmophycis marginata</i>	52
99	<i>Hygophum</i> spp.	48
99	<i>Aristostomias scintillans</i>	48
101	<i>Semicossyphus pulcher</i>	47
102	<i>Oxylebius pictus</i>	46
103	<i>Platichthys stellatus</i>	45
104	Trachipteridae	42
105	<i>Benthalbella dentata</i>	41
106	<i>Lampadena urophaos</i>	39
106	<i>Notolychnus valdiviae</i>	39
108	<i>Hygophum reinhardtii</i>	35
108	<i>Electrona rissoi</i>	35
110	Exocoetidae	33
111	<i>Icosteus aenigmaticus</i>	31
112	<i>Macroramphosus gracilis</i>	30
113	Evermannellidae	29
113	<i>Scorpaenichthys marmoratus</i>	29
115	Stomiiformes	28
115	Macrouridae	28
117	<i>Syngnathus</i> spp.	25
117	<i>Notolepis risso</i>	25
117	Atherinidae	25
117	<i>Scopelogadus bispinosus</i>	25
121	<i>Coryphaena hippurus</i>	24
122	<i>Pleuronichthys</i> spp.	21
122	<i>Prionotus</i> spp.	21
122	<i>Loweina rara</i>	21
122	<i>Girella nigricans</i>	21
126	<i>Xystreurys liolepis</i>	19
126	<i>Hypsopsetta guttulata</i>	19
128	<i>Cheilotrema saturnum</i>	15
128	<i>Valenciennellus stellatus</i>	15
130	Scopelarchidae	14
130	<i>Caulolatilus princeps</i>	14
132	<i>Pleuronichthys coenosus</i>	12
133	<i>Seriola lalandi</i>	11
133	<i>Sarda chiliensis</i>	11
135	<i>Ophiodon elongatus</i>	10
135	Carangidae	10
135	<i>Photonectes</i> spp.	10
135	<i>Pleuronichthys decurrens</i>	10
139	<i>Ophidion scrippsae</i>	9
139	<i>Roncador stearnsii</i>	9
141	<i>Physiculus</i> spp.	5
141	<i>Gonostoma</i> spp.	5
141	Hemiramphidae	5
141	Gempylidae	5
141	<i>Aulopus</i> spp.	5

TABLE 3. (cont.)

Rank	Taxon	Count
141	Ceratioidei	5
147	<i>Psettichthys melanostictus</i>	4
147	<i>Gadus macrocephalus</i>	4
147	<i>Hypsypops rubicundus</i>	4
147	Hexagrammidae	4
	Total	738806

TABLE 4. Numbers of fish larvae taken on stations occupied during CalCOFI cruises in 1981. Counts are adjusted for percent of sample sorted and standard haul factor (see text). Average number is given for stations occupied twice during a single month. Unoccupied stations are indicated by a dash.

*Sardinops sagax*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	52.0	103.7	0.0	-	0.0	0.0	0.0	0.0	-	-	-	-
80.0	51.0	0.0	0.0	-	0.0	0.0	0.0	0.0	10.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	0.0	-	5.8	-	-	-
86.7	33.0	-	0.0	0.0	-	31.7	0.0	-	0.0	-	-	-
96.7	29.0	0.0	0.0	-	0.0	0.0	0.0	15.9	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	0.0	-	74.6	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	10.6	38.2	-	-	-
103.3	30.0	0.0	0.0	0.0	-	17.9	-	0.0	28.8	-	-	-
106.7	31.0	0.0	0.0	0.0	-	39.6	-	0.0	0.0	-	-	-
106.7	32.0	0.0	0.0	20.5	-	0.0	-	0.0	0.0	-	-	-
106.7	35.0	9.7	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	32.4	0.0	0.0	-	-	0.0	-	0.0	26.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	74.3	-	-	-
113.3	29.0	0.0	-	-	0.0	0.0	-	-	-	5.4	-	-
113.3	30.0	4.6	-	-	0.0	0.0	-	-	-	148.2	-	-
116.7	25.0	4.2	-	-	0.0	0.0	-	-	-	51.0	-	-
116.7	30.0	0.0	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	24.0	76.0	-	-	0.0	0.0	-	-	-	957.4	-	-
120.0	25.0	18.0	-	-	13.2	0.0	-	-	-	346.9	-	-
120.0	30.0	44.1	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	38.5	0.0	-	-	0.0	814.9	-	-	-	205.2	-	-
120.0	45.0	5.2	-	-	-	0.0	-	-	-	0.0	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	217.5	-	-
123.3	36.0	8.3	-	-	0.0	0.0	-	-	-	15.1	-	-
123.3	50.0	0.0	-	-	0.0	29.0	-	-	-	-	-	-
126.7	33.0	8.6	-	-	-	0.0	-	-	-	-	-	-
126.7	35.0	4.6	-	-	-	0.0	-	-	-	-	-	-
130.0	28.0	32.7	-	-	16.0	0.0	-	-	-	-	-	-
136.7	23.0	4.7	-	-	-	-	-	-	-	-	-	-

*Engraulis mordax*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	34.2	-	-	0.0	-	5.2	-	-	-	-
60.0	52.5	-	4.0	-	12.4	0.0	-	0.0	-	-	-	-
60.0	65.0	-	-	-	-	-	-	4.8	-	-	-	-
63.3	50.0	-	154.6	-	328.6	0.0	-	0.0	-	-	-	-
63.3	52.0	31.1	42.6	-	1353.9	0.0	-	0.0	-	-	-	-
63.3	55.0	20.4	0.0	-	460.8	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	19.3	0.0	-	0.0	-	-	-	-
66.7	49.0	378.8	498.1	-	1137.5	0.0	-	0.0	-	-	-	-
66.7	50.0	136.9	43.5	-	41.7	21.0	-	0.0	-	-	-	-



TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	55.0	0.0	0.0	417.1	10.5	-	-	0.0	-	-	-	-
66.7	60.0	8.2	0.0	30.2	0.0	-	-	0.0	-	-	-	-
70.0	51.0	83.7	71.3	463.7	0.0	-	-	0.0	57.2	-	-	-
70.0	53.0	115.1	0.0	81.1	48.5	-	-	0.0	10.6	-	-	-
70.0	60.0	0.0	91.1	9.9	0.0	-	0.0	-	0.0	-	-	-
73.3	50.0	211.5	41.2	99.4	8.1	-	0.0	-	9.2	-	-	-
73.3	53.0	155.2	66.0	130.3	20.3	-	0.0	-	0.0	-	-	-
73.3	60.0	0.0	16.1	0.0	0.0	-	0.0	-	0.0	-	-	-
76.7	48.0	221.0	483.4	899.1	4.0	-	0.0	-	3.5	-	-	-
76.7	51.0	10.8	772.1	660.4	0.0	-	0.0	-	42.1	-	-	-
76.7	55.0	0.0	0.0	112.6	0.0	-	331.3	-	341.1	-	-	-
76.7	60.0	0.0	0.0	231.8	9.7	-	35.4	-	198.9	-	-	-
76.7	65.0	0.0	-	-	-	-	21.6	-	-	-	-	-
76.7	70.0	0.0	0.0	0.0	29.3	-	11.6	-	4.9	-	-	-
80.0	51.0	985.5	773.5	7096.0	74.5	-	0.0	-	139.5	-	-	-
80.0	55.0	10.0	0.0	8338.6	12.0	-	313.0	-	113.6	-	-	-
80.0	60.0	0.0	0.0	3294.7	0.0	-	0.0	-	0.0	-	-	-
80.0	70.0	0.0	0.0	-	20.5	-	0.0	-	0.0	-	-	-
82.0	46.0	0.0	1621.5	1550.4	320.7	-	10.9	-	176.3	-	-	-
83.3	40.6	207.1	430.5	3113.2	1671.6	-	363.6	-	252.3	-	-	-
83.3	42.0	7.5	2499.4	4661.9	500.5	-	1590.3	-	511.4	-	-	-
83.3	51.0	0.0	1689.9	8341.4	551.1	-	125.3	-	0.0	-	-	-
83.3	55.0	0.0	9.7	162.2	453.8	-	28.2	-	33.6	-	-	-
83.3	60.0	0.0	0.0	-	10.6	-	0.0	-	32.5	-	-	-
83.3	80.0	0.0	0.0	-	0.0	-	18.4	-	0.0	-	-	-
86.7	33.0	-	744.2	4328.4	1481.2	-	1693.7	-	97.6	-	-	-
86.7	35.0	-	1675.0	8795.4	6600.6	-	6745.1	-	103.3	-	-	-
86.7	40.0	-	737.3	3307.2	3782.1	-	688.2	-	0.0	-	-	-
86.7	45.0	-	438.0	3703.0	1752.9	-	1431.2	-	66.5	-	-	-
86.7	50.0	-	2660.9	2003.8	734.0	-	67.2	-	4.3	-	-	-
86.7	55.0	-	148.5	638.4	234.8	-	27.1	-	9.7	-	-	-
86.7	60.0	-	0.0	163.8	115.2	-	40.5	-	0.0	-	-	-
86.7	80.0	-	0.0	-	0.0	-	0.0	-	11.0	-	-	-
86.7	90.0	-	0.0	-	10.0	-	0.0	-	11.0	-	-	-
90.0	28.0	-	170.0	7030.3	2854.0	-	1032.8	-	73.1	-	-	-
90.0	30.0	-	40.2	309.1	1556.9	-	3320.4	-	425.6	-	-	-
90.0	37.0	-	690.3	1331.3	7098.4	-	781.9	-	269.5	-	-	-
90.0	45.0	-	340.9	1331.3	361.1	-	767.4	-	67.0	-	-	-
90.0	53.0	-	38.8	121.7	1246.9	-	9.7	-	0.0	-	-	-
90.0	60.0	-	30.8	342.0	0.0	-	69.5	-	0.0	-	-	-
90.0	70.0	-	0.0	-	5.1	-	0.0	-	0.0	-	-	-
90.0	80.0	-	0.0	-	258.5	-	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	5.2	-	0.0	-	0.0	-	-	-
93.3	26.7	-	381.8	1127.5	2476.1	-	404.6	-	319.7	-	-	-
93.3	28.0	-	63.7	551.2	3864.8	-	233.3	-	1061.4	-	-	-
93.3	30.0	-	25.7	988.0	4200.8	-	338.9	-	106.8	-	-	-

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
93.3	35.0	0.0	5.5	5911.6	-	9925.5	2379.0	-	0.0	-	-	-
93.3	40.0	0.0	20.5	14.9	-	4242.0	687.6	-	19.9	-	-	-
93.3	45.0	0.0	31.9	3766.6	-	4653.1	946.8	-	0.0	-	-	-
93.3	50.0	0.0	130.5	3608.8	-	1188.0	198.4	-	0.0	-	-	-
93.3	55.0	0.0	32.6	3427.2	-	1286.5	1209.3	-	0.0	-	-	-
93.3	60.0	0.0	0.0	2059.0	-	1292.1	0.0	-	0.0	-	-	-
93.3	70.0	0.0	0.0	-	-	27.5	23.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	15.1	0.0	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
95.0	29.0	-	-	179.4	-	-	-	-	-	-	-	-
95.0	30.0	-	-	-	2434.3	-	-	-	-	-	-	-
96.7	29.0	0.0	12.9	-	112.0	1204.2	-	412.9	16.0	-	-	-
96.7	30.0	0.0	131.2	-	345.0	3332.5	-	326.4	96.8	-	-	-
96.7	32.0	0.0	5.0	-	826.7	7724.2	-	73.9	53.8	-	-	-
96.7	35.0	16.4	103.2	-	985.0	7213.1	-	38.7	45.3	-	-	-
96.7	40.0	0.0	0.0	-	4.8	5521.3	-	21.2	0.0	-	-	-
96.7	45.0	0.0	10.1	-	0.0	6682.8	-	229.1	0.0	-	-	-
96.7	50.0	0.0	0.0	-	0.0	531.5	-	0.0	0.0	-	-	-
96.7	55.0	0.0	71.1	-	0.0	9.1	-	0.0	0.0	-	-	-
96.7	60.0	0.0	0.0	143.0	5.1	28.7	-	0.0	0.0	-	-	-
96.7	70.0	0.0	0.0	0.0	-	4.4	-	0.0	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	13.6	-	0.0	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	34.6	-	0.0	0.0	-	-	-
100.0	29.2	39.2	0.0	-	-	3514.5	-	86.9	40.3	-	-	-
100.0	30.0	40.6	0.0	-	2662.6	8648.4	-	238.1	29.0	-	-	-
100.0	35.0	0.0	0.0	-	2861.0	3018.3	-	170.9	0.0	-	-	-
100.0	40.0	0.0	0.0	-	548.3	798.2	-	9.7	0.0	-	-	-
100.0	45.0	0.0	0.0	-	1556.9	0.0	-	5.0	0.0	-	-	-
100.0	60.0	0.0	0.0	12.6	14.5	0.0	-	0.0	0.0	-	-	-
100.0	80.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	0.0	-	9.1	-	0.0	0.0	-	-	-
103.3	29.0	11.7	5.9	489.0	-	1775.8	-	10.6	133.6	-	-	-
103.3	30.0	19.1	4.2	2187.0	-	7762.3	-	82.8	86.5	-	-	-
103.3	35.0	10.2	0.0	15.2	-	701.1	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	6172.7	-	0.0	0.0	-	-	-
103.3	45.0	10.5	0.0	0.0	-	134.6	-	0.0	21.3	-	-	-
103.3	50.0	0.0	0.0	-	5.2	1355.4	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	19.8	-	0.0	0.0	-	-	-
106.7	31.0	6.0	63.6	402.8	-	2912.1	-	0.0	0.0	-	-	-
106.7	32.0	57.7	106.6	947.2	-	3861.4	-	70.4	17.4	-	-	-
106.7	35.0	126.6	106.7	4154.5	-	5204.3	-	10.9	20.9	-	-	-
106.7	40.0	0.0	20.5	4841.2	-	1147.7	-	0.0	0.0	-	-	-
106.7	45.0	5.6	0.0	50.9	-	543.3	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	0.0	-	154.1	-	0.0	10.7	-	-	-
106.7	60.0	0.0	0.0	36.5	-	0.0	-	52.0	0.0	-	-	-
110.0	32.4	26.9	18.7	-	-	218.7	-	80.6	17.4	-	-	-

TABLE 4. (cont.)

		<i>Engraulis mordax</i> (cont.)											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	
110.0	32.5	-	-	1202.7	-	4674.8	-	-	-	-	-	-	
110.0	35.0	14.8	0.0	325.6	-	2259.0	-	72.3	47.8	-	-	-	
110.0	40.0	10.4	0.0	47.1	-	372.2	-	0.0	4.3	-	-	-	
110.0	45.0	0.0	0.0	24.5	-	42.6	-	59.5	0.0	-	-	-	
110.0	50.0	0.0	5.1	30.1	-	0.0	-	0.0	0.0	-	-	-	
110.0	60.0	0.0	0.0	130.1	-	278.9	-	0.0	0.0	0.0	-	-	
110.0	70.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	0.0	-	-	
110.0	80.0	0.0	0.0	77.2	-	0.0	-	0.0	0.0	0.0	-	-	
113.3	29.0	0.0	-	-	5.3	3.5	-	-	-	5.1	-	-	
113.3	30.0	9.1	-	-	46.2	39.9	-	-	-	19.8	-	-	
113.3	35.0	0.0	-	0.0	-	3671.5	-	-	-	15.1	-	-	
113.3	40.0	5.4	-	4.7	-	382.4	-	-	-	25.2	-	-	
113.3	45.0	21.6	-	0.0	-	0.0	-	-	-	14.5	-	-	
113.3	50.0	0.0	-	15.3	-	0.0	-	-	-	0.0	-	-	
113.3	60.0	0.0	-	14.4	-	13.7	-	-	-	0.0	-	-	
113.3	70.0	0.0	-	13.0	-	0.0	-	-	-	0.0	-	-	
116.7	30.0	0.0	-	-	18.2	16045.5	-	-	-	55.9	-	-	
116.7	35.0	0.0	-	-	102.3	474.1	-	-	-	23.1	-	-	
116.7	40.0	0.0	-	-	4.6	14.9	-	-	-	5.0	-	-	
116.7	45.0	0.0	-	-	44.5	1490.2	-	-	-	160.2	-	-	
116.7	50.0	0.0	-	-	1777.1	6220.7	-	-	-	51.3	-	-	
118.0	39.0	5.0	-	-	23.0	3075.5	-	-	-	19.6	-	-	
119.0	33.0	0.0	-	-	524.3	2116.4	-	-	-	0.0	-	-	
120.0	24.0	0.0	-	-	14.4	44.1	-	-	-	3.7	-	-	
120.0	25.0	0.0	-	-	238.3	253.8	-	-	-	0.0	-	-	
120.0	30.0	0.0	-	-	298.2	951.6	-	-	-	0.0	-	-	
120.0	35.0	4.6	-	-	0.0	793.4	-	-	-	0.0	-	-	
120.0	38.5	0.0	-	-	86.2	539.7	-	-	-	0.0	-	-	
120.0	45.0	0.0	-	-	-	2145.3	-	-	-	61.4	-	-	
120.0	50.0	15.4	-	-	-	5170.6	-	-	-	0.0	-	-	
120.0	60.0	0.0	-	-	-	14.1	-	-	-	0.0	-	-	
123.3	36.0	8.3	-	-	47.6	141.0	-	-	-	0.0	-	-	
123.3	37.0	0.0	-	-	19.4	316.7	-	-	-	0.0	-	-	
123.3	42.0	0.0	-	-	0.0	6979.5	-	-	-	0.0	-	-	
123.3	45.0	0.0	-	-	19.4	3135.5	-	-	-	4.9	-	-	
123.3	50.0	5.1	-	-	0.0	1914.0	-	-	-	-	-	-	
123.3	60.0	0.0	-	-	148.2	156.1	-	-	-	-	-	-	
126.7	33.0	68.5	-	-	-	167.5	-	-	-	-	-	-	
126.7	35.0	9.2	-	-	-	1449.9	-	-	-	-	-	-	
126.7	40.0	0.0	-	-	-	4547.8	-	-	-	-	-	-	
126.7	45.0	0.0	-	-	-	5639.1	-	-	-	-	-	-	
126.7	50.0	0.0	-	-	-	769.2	-	-	-	-	-	-	
126.7	60.0	0.0	-	-	9.4	0.0	-	-	-	-	-	-	
130.0	28.0	0.0	-	-	2148.0	221.4	-	-	-	-	-	-	
130.0	30.0	14.0	-	-	83.2	488.7	-	-	-	-	-	-	
130.0	35.0	0.0	-	-	8.6	270.9	-	-	-	-	-	-	

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
130.0	40.0	0.0	-	-	-	239.0	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	41.3	-	-	-	-	-	-
130.0	60.0	5.0	-	-	-	37.3	-	-	-	-	-	-
133.3	23.0	149.4	-	-	-	77.4	-	-	-	-	-	-
133.3	25.0	0.0	-	-	-	391.7	-	-	-	-	-	-
133.3	30.0	0.0	-	-	-	639.4	-	-	-	-	-	-
133.3	35.0	0.0	-	-	-	128.1	-	-	-	-	-	-
133.3	40.0	0.0	-	-	-	24.1	-	-	-	-	-	-
133.3	50.0	0.0	-	-	-	9.3	-	-	-	-	-	-
133.3	60.0	0.0	-	-	-	38.8	-	-	-	-	-	-
136.7	22.0	83.3	-	-	-	-	-	-	-	-	-	-
136.7	23.0	70.9	-	-	-	-	-	-	-	-	-	-
136.7	25.0	48.3	-	-	-	-	-	-	-	-	-	-

*Argentina sialis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	50.0	9.8	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	8.2	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	51.0	0.0	0.0	-	0.0	11.1	-	0.0	0.0	-	-	-
76.7	51.0	0.0	0.0	-	0.0	12.1	10.5	0.0	0.0	-	-	-
76.7	55.0	0.0	0.0	-	10.2	0.0	0.0	0.0	0.0	-	-	-
76.7	60.0	0.0	0.0	-	0.0	0.0	0.0	0.0	13.3	-	-	-
76.7	90.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	-	-	-
80.0	70.0	0.0	0.0	-	-	10.2	0.0	-	0.0	-	-	-
82.0	46.0	16.6	0.0	81.6	-	0.0	0.0	-	0.0	-	-	-
83.3	42.0	0.0	0.0	9.4	-	0.0	0.0	-	0.0	-	-	-
86.7	35.0	-	10.8	0.0	-	22.4	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	0.0	-	10.7	0.0	-	0.0	-	-	-
90.0	37.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	45.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	26.7	-	0.0	0.0	-	4.6	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	15.9	-	0.0	0.0	-	0.0	-	-	-
93.3	35.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	100.0	-	0.0	0.0	-	-	5.0	-	-	-	-	-
96.7	30.0	4.9	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	32.0	0.0	0.0	-	10.0	0.0	-	0.0	0.0	-	-	-
96.7	35.0	5.5	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	2.5	-	0.0	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	81.5	-	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	0.0	5.9	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	5.1	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	5.6	-	0.0	0.0	-	-	-
106.7	32.0	0.0	19.4	41.0	-	25.7	-	0.0	0.0	-	-	-
106.7	35.0	0.0	5.1	49.4	-	0.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Argentina sialis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	40.0	0.0	10.3	0.0	-	2.6	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	8.8	-	4.8	0.0	-	-	-
110.0	35.0	29.6	4.8	0.0	-	20.4	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
113.3	30.0	22.9	-	-	0.0	-	-	-	-	0.0	-	-
113.3	35.0	0.0	-	0.0	-	10.5	-	-	-	0.0	-	-
116.7	30.0	0.0	-	-	0.0	28.5	-	-	-	0.0	-	-
116.7	35.0	0.0	-	-	0.0	46.9	-	-	-	0.0	-	-
116.7	40.0	15.4	-	-	9.1	0.0	-	-	-	0.0	-	-
116.7	50.0	0.0	-	-	0.0	48.1	-	-	-	0.0	-	-
118.0	39.0	0.0	-	-	0.0	9.3	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	0.0	12.6	-	-	-	0.0	-	-
123.3	37.0	0.0	-	-	0.0	4.3	-	-	-	0.0	-	-
123.3	42.0	10.2	-	-	0.0	0.0	-	-	-	0.0	-	-
126.7	40.0	0.0	-	-	-	11.4	-	-	-	-	-	-

*Microstoma microstoma*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	90.0	5.2	-	0.0	0.0	0.0	0.0	0.0	-	-	-	-
73.3	53.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	-	-	-
73.3	80.0	5.0	0.0	0.0	-	0.0	11.3	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	-	0.0	0.0	-	4.9	-	-	-
76.7	80.0	0.0	4.9	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	90.0	0.0	5.0	0.0	-	0.0	0.0	-	0.0	-	-	-
80.0	55.0	0.0	0.0	-	0.0	0.0	0.0	-	11.4	-	-	-
80.0	60.0	0.0	0.0	-	0.0	0.0	12.1	-	11.5	-	-	-
80.0	70.0	0.0	5.1	-	-	0.0	0.0	-	12.2	-	-	-
80.0	80.0	0.0	5.0	0.0	-	5.7	0.0	-	0.0	-	-	-
83.3	70.0	0.0	5.0	-	-	0.0	0.0	-	0.0	-	-	-
83.3	90.0	5.5	5.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	8.1	-	10.9	-	-	-
86.7	70.0	-	0.0	-	-	0.0	-	-	9.5	-	-	-
90.0	60.0	-	0.0	0.0	-	5.4	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	19.2	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	0.0	0.0	-	10.4	-	-	-
90.0	90.0	-	5.6	-	-	0.0	0.0	-	0.0	-	-	-
93.3	35.0	-	0.0	0.0	-	0.0	9.8	-	0.0	-	-	-
96.7	40.0	-	5.2	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	10.0	-	0.0	0.0	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	70.0	0.0	5.4	0.0	-	0.0	-	0.0	10.5	-	-	-
96.7	80.0	4.8	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	0.0	0.0	-	4.9	0.0	-	-	-
								5.0	0.0	-	-	-

TABLE 4. (cont.)

*Microstoma microstoma* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
100.0	70.0	0.0	0.0	0.0	-	0.0	-	4.9	0.0	-	-	-
103.3	80.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
133.3	60.0	0.0	-	-	-	9.7	-	-	-	-	-	-

*Nansenia candida*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	80.0	-	-	7.2	-	0.0	-	0.0	-	-	-	-
63.3	80.0	0.0	-	9.0	-	-	-	0.0	-	-	-	-
66.7	55.0	0.0	0.0	-	0.0	0.0	-	6.1	-	-	-	-
70.0	90.0	0.0	-	10.2	-	0.0	-	-	0.0	-	-	-
73.3	60.0	0.0	5.4	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	55.0	0.0	0.0	-	0.0	0.0	10.4	-	0.0	-	-	-
76.7	90.0	0.0	0.0	10.0	-	0.0	5.2	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	5.7	0.0	-	0.0	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	22.2	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	10.9	-	-	-	-	-
83.3	70.0	0.0	0.0	-	-	20.3	0.0	-	0.0	-	-	-
86.7	80.0	-	0.0	-	-	11.1	0.0	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	10.0	4.8	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	5.2	0.0	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	10.9	-	-	-	-	-
96.7	90.0	0.0	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-

*Nansenia crassa*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	90.0	0.0	0.0	0.0	-	21.6	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	0.0	-	10.8	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	4.9	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	4.9	-	-	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	4.8	-	0.0	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	9.0	-	0.0	0.0	-	-	-
110.0	45.0	5.7	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	80.0	0.0	0.0	4.3	-	0.0	-	0.0	0.0	0.0	-	-
113.3	50.0	0.0	-	5.1	-	0.0	-	0.0	-	0.0	-	-
116.7	45.0	0.0	-	-	0.0	4.3	-	0.0	-	0.0	-	-
120.0	50.0	0.0	-	-	0.0	10.5	-	0.0	-	0.0	-	-
120.0	70.0	0.0	-	-	-	4.3	-	0.0	-	0.0	-	-
123.3	45.0	0.0	-	-	0.0	8.9	-	-	-	-	-	-
130.0	60.0	5.0	-	-	-	0.0	-	-	-	-	-	-
133.3	40.0	0.0	-	-	-	9.7	-	-	-	-	-	-
136.7	60.0	4.9	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Bathylagus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0			0.0		0.0	10.9		0.0				
52.5			0.0		4.9	0.0		0.0				
63.3		9.6	0.0		0.0	0.0		0.0				
60.0		0.0	0.0									
63.3		0.0		9.0		0.0						
80.0		0.0		10.2		0.0			0.0			
70.0		0.0				0.0			0.0			
90.0		0.0					9.6					
100.0		0.0	3.4		0.0		0.0					
73.3		0.0	0.0	0.0		20.2						
70.0		0.0	0.0	0.0		0.0	10.3					
90.0		0.0	0.0	0.0		0.0	0.0					
76.7		0.0	0.0	0.0	10.2	0.0	0.0					
55.0		0.0	0.0	0.0		0.0	8.2					
76.7		0.0	0.0	20.0		5.2	26.1	10.1				
80.0		0.0	0.0	0.0		0.0	10.6	0.0				
80.0		0.0	0.0	0.0		0.0	5.5	0.0				
90.0		0.0	0.0	0.0		0.0	9.7	0.0				
83.3		0.0	0.0	0.0		0.0	0.0	0.0				
86.7	0.0		21.6	0.0		0.0	0.0	0.0				
35.0	0.0		10.2	0.0		0.0	0.0	0.0				
40.0	0.0		0.0	5.3		0.0	0.0	0.0				
45.0	0.0		0.0	0.0		10.5	0.0	0.0				
70.0	0.0		0.0	0.0		0.0	9.7	0.0				
53.0	0.0		0.0	0.0		0.0	0.0	0.0				
70.0	0.0		0.0	0.0		20.5	0.0	0.0				
80.0	0.0		0.0	0.0		15.5	0.0	0.0				
90.0	0.0		0.0	0.0		10.3	0.0	0.0				
80.0	0.0		5.0	0.0		0.0	0.0	0.0				
50.0	0.0		21.0	0.0		0.0	0.0	0.0				
60.0	0.0		0.0	0.0		0.0	11.5	0.0				
70.0	0.0		0.0	0.0		5.0	0.0	0.0				
90.0	0.0		0.0	0.0		0.0	0.0	0.0				
45.0	0.0	0.0	0.0	0.0		4.8		0.0				
70.0	0.0	0.0	0.0	0.0		4.9		0.0				
55.0	0.0	0.0	0.0	0.0		0.0		5.3				
60.0	0.0	0.0	0.0	0.0		8.8		0.0				
70.0	0.0	0.0	0.0	0.0		4.5		0.0				
80.0	0.0	0.0	0.0	0.0		0.0		4.9				
90.0	0.0	0.0	0.0	0.0		0.0		5.0				
45.0	0.0	0.0	0.0	0.0		18.4		0.0				
50.0	0.0	0.0	0.0	0.0		7.4		0.0				
35.0	0.0	0.0	0.0	0.0		11.2		0.0				
45.0	0.0	0.0	0.0	0.0		5.4		0.0				
35.0	0.0	0.0	0.0	5.1		26.3		0.0				
45.0	0.0	0.0	0.0	0.0		2.4		0.0				
35.0	0.0	0.0	0.0	0.0		5.3		0.0				0.0
50.0	0.0	0.0	0.0	0.0		34.3		0.0				0.0
42.0	0.0	0.0	0.0	0.0		5.0						
40.0	0.0	0.0	0.0	0.0								

TABLE 4. (cont.)

*Bathylagus milleri*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	60.0	0.0	0.0	-	0.0	11.6	-	0.0	-	-	-	-
63.3	65.0	8.5	-	-	-	-	-	-	-	-	-	-
66.7	49.0	0.0	9.8	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	8.2	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	90.0	4.8	-	0.0	-	-	-	0.0	-	-	-	-
76.7	80.0	10.5	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-

*Bathylagus ochotensis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	55.0	-	0.0	-	9.6	0.0	-	0.0	-	-	-	-
60.0	60.0	-	51.5	-	-	9.6	-	5.0	-	-	-	-
60.0	65.0	-	-	-	-	-	-	28.8	-	-	-	-
60.0	70.0	-	-	23.6	-	82.3	-	0.0	-	-	-	-
60.0	80.0	-	-	86.6	-	10.8	-	91.2	-	-	-	-
60.0	90.0	-	-	40.5	-	9.6	-	-	-	-	-	-
63.3	52.0	0.0	0.0	-	9.7	9.7	-	4.9	-	-	-	-
63.3	55.0	0.0	46.8	-	71.7	21.2	-	0.0	-	-	-	-
63.3	60.0	9.6	33.4	-	9.6	11.6	-	0.0	-	-	-	-
63.3	70.0	0.0	-	241.9	-	78.7	-	19.5	-	-	-	-
63.3	80.0	0.0	-	89.6	-	-	-	0.0	-	-	-	-
63.3	90.0	0.0	-	104.4	-	-	-	0.0	-	-	-	-
66.7	49.0	0.0	19.5	-	28.9	11.0	-	15.5	-	-	-	-
66.7	50.0	0.0	65.2	-	31.3	0.0	-	6.0	-	-	-	-
66.7	55.0	0.0	19.5	-	9.7	73.5	-	23.8	-	-	-	-
66.7	60.0	0.0	108.0	-	60.4	147.1	-	39.1	-	-	-	-
66.7	65.0	8.6	-	-	-	-	-	42.5	-	-	-	-
66.7	70.0	0.0	-	54.4	-	62.0	-	15.6	-	-	-	-
66.7	80.0	0.0	-	21.0	-	-	-	20.7	-	-	-	-
66.7	90.0	0.0	-	3.6	-	-	-	0.0	-	-	-	-
70.0	51.0	0.0	35.7	-	20.2	0.0	-	8.7	0.0	-	-	-
70.0	53.0	20.9	82.8	-	40.6	9.7	-	-	0.0	-	-	-
70.0	60.0	0.0	82.0	-	29.6	33.8	0.0	-	0.0	-	-	-
70.0	70.0	9.1	-	20.7	-	0.0	20.1	-	9.8	-	-	-
70.0	80.0	0.0	-	46.9	-	16.9	-	-	0.0	-	-	-
70.0	90.0	0.0	-	20.3	-	0.0	-	-	10.3	-	-	-
70.0	100.0	-	-	-	-	-	19.1	-	-	-	-	-
73.3	50.0	0.0	3.4	-	0.0	4.0	0.0	-	0.0	-	-	-
73.3	53.0	27.4	61.0	-	150.3	40.7	0.0	-	29.9	-	-	-
73.3	60.0	41.8	26.9	-	40.3	63.2	41.0	-	0.0	-	-	-
73.3	65.0	0.0	-	-	-	-	30.1	-	-	-	-	-
73.3	70.0	0.0	117.6	0.0	-	0.0	-	-	32.3	-	-	-
73.3	80.0	0.0	9.1	4.5	-	19.8	11.3	-	0.0	-	-	-
73.3	90.0	0.0	10.9	25.6	-	4.9	0.0	-	0.0	-	-	-
76.7	51.0	0.0	113.2	-	0.0	12.1	21.0	-	-	-	-	-



TABLE 4. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	11.0	-	30.7	0.0	0.0	-	10.7	-	-	-
76.7	60.0	10.2	0.0	-	66.2	19.5	0.0	-	13.3	-	-	-
76.7	65.0	0.0	-	-	-	-	10.8	-	-	-	-	-
76.7	70.0	0.0	0.0	4.8	-	19.6	46.4	-	0.0	-	-	-
76.7	80.0	0.0	39.3	18.4	-	19.8	0.0	-	10.4	-	-	-
76.7	100.0	-	-	-	-	-	33.0	-	-	-	-	-
80.0	55.0	0.0	32.2	-	20.6	0.0	0.0	-	0.0	-	-	-
80.0	60.0	5.6	0.0	-	10.6	0.0	12.1	-	0.0	-	-	-
80.0	70.0	0.0	5.1	-	-	10.2	0.0	-	24.4	-	-	-
80.0	80.0	0.0	10.2	8.7	-	28.3	10.6	-	0.0	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	5.5	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	5.5	-	-	-	-	-
82.0	46.0	0.0	19.4	0.0	-	0.0	10.9	-	0.0	-	-	-
83.3	42.0	0.0	0.0	18.8	-	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	57.0	-	0.0	-	-	-
83.3	55.0	10.7	19.3	30.4	-	0.0	0.0	-	0.0	-	-	-
83.3	60.0	0.0	9.7	-	-	10.6	20.6	-	0.0	-	-	-
83.3	70.0	0.0	10.1	-	-	0.0	0.0	-	9.4	-	-	-
83.3	80.0	0.0	21.1	-	-	0.0	9.2	-	0.0	-	-	-
86.7	35.0	-	0.0	10.7	-	0.0	18.5	-	10.3	-	-	-
86.7	40.0	-	0.0	15.9	-	10.7	0.0	-	0.0	-	-	-
86.7	45.0	-	33.0	15.8	-	20.9	10.7	-	0.0	-	-	-
86.7	50.0	-	0.0	14.5	-	0.0	0.0	-	0.0	-	-	-
86.7	55.0	-	25.6	10.8	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	70.0	-	29.6	0.0	-	73.5	-	-	9.5	-	-	-
86.7	80.0	-	5.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	-	0.0	12.1	-	0.0	11.0	-	0.0	-	-	-
90.0	30.0	-	5.3	10.3	-	0.0	5.4	-	0.0	-	-	-
90.0	37.0	-	34.6	5.1	-	9.3	11.1	-	0.0	-	-	-
90.0	45.0	-	4.8	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	53.0	-	41.0	5.0	-	10.9	0.0	-	0.0	-	-	-
90.0	60.0	-	10.7	-	-	0.0	28.7	-	9.7	-	-	-
90.0	70.0	-	12.0	-	-	15.5	0.0	-	5.2	-	-	-
90.0	80.0	-	0.0	-	-	0.0	14.0	-	0.0	-	-	-
90.0	90.0	-	0.0	4.1	-	0.0	0.0	-	0.0	-	-	-
93.3	26.7	-	0.0	15.9	-	0.0	0.0	-	0.0	-	-	-
93.3	28.0	-	10.3	10.4	-	0.0	0.0	-	0.0	-	-	-
93.3	30.0	-	10.3	10.4	-	0.0	0.0	-	0.0	-	-	-
93.3	35.0	-	0.0	10.1	-	0.0	9.8	-	0.0	-	-	-
93.3	40.0	-	5.1	0.0	-	5.3	0.0	-	0.0	-	-	-
93.3	45.0	-	10.6	0.0	-	10.5	0.0	-	0.0	-	-	-
93.3	50.0	-	10.0	0.0	-	22.0	11.0	-	0.0	-	-	-
93.3	55.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	70.0	-	5.0	0.0	-	4.6	0.0	-	0.0	-	-	-
93.3	90.0	-	0.0	-	-	5.0	0.0	-	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	2.5	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Bathylagus ochotensis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	32.0	0.0	0.0	-	0.0	15.3	-	0.0	0.0	-	-	-
96.7	35.0	5.5	0.0	-	0.0	13.1	-	0.0	0.0	-	-	-
96.7	40.0	0.0	10.5	-	9.7	14.7	-	10.6	0.0	-	-	-
96.7	45.0	0.0	5.1	-	4.8	30.1	-	10.0	0.0	-	-	-
96.7	50.0	-	0.0	-	5.2	0.0	-	10.1	0.0	-	-	-
96.7	55.0	0.0	5.1	-	4.9	4.5	-	10.5	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	14.1	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	9.9	77.8	-	5.2	0.0	-	-	-
100.0	40.0	0.0	0.0	-	0.0	26.3	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	14.7	36.2	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	4.6	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	15.4	-	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	-	21.6	-	5.4	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	22.7	-	0.0	0.0	-	-	-
103.3	45.0	0.0	5.2	0.0	-	5.6	-	0.0	0.0	-	-	-
103.3	50.0	0.0	5.2	0.0	0.0	31.0	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	4.9	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	34.3	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	44.9	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	5.1	-	35.1	-	0.0	0.0	-	-	-
106.7	50.0	4.9	0.0	0.0	-	9.3	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	4.9	-	7.3	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	45.0	0.0	0.0	0.0	-	0.0	-	5.0	0.0	-	-	-
113.3	35.0	0.0	0.0	0.0	-	15.8	-	10.5	0.0	0.0	-	-
113.3	40.0	0.0	-	0.0	-	14.3	-	-	-	0.0	-	-
116.7	40.0	0.0	-	0.0	0.0	5.0	-	-	-	0.0	-	-
123.3	45.0	0.0	-	-	0.0	8.9	-	-	-	-	-	-
126.7	40.0	0.0	-	-	0.0	11.4	-	-	-	-	-	-

*Bathylagus pacificus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	70.0	-	-	55.0	-	10.3	-	0.0	-	-	-	-
60.0	80.0	-	-	137.2	-	0.0	-	0.0	-	-	-	-
63.3	52.0	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	55.0	0.0	0.0	-	0.0	10.6	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	48.2	23.2	-	0.0	-	-	-	-
63.3	90.0	0.0	-	20.9	-	-	-	0.0	-	-	-	-
66.7	49.0	0.0	0.0	-	9.6	11.0	-	0.0	-	-	-	-
66.7	50.0	0.0	10.9	-	0.0	21.0	-	0.0	-	-	-	-
66.7	55.0	0.0	0.0	-	9.7	0.0	-	0.0	-	-	-	-
66.7	60.0	0.0	0.0	-	0.0	11.3	-	0.0	-	-	-	-
70.0	53.0	0.0	113.9	-	0.0	0.0	-	-	0.0	-	-	-

TABLE 4. (cont.)

*Bathylagus pacificus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	60.0	0.0	0.0	-	9.9	67.7	0.0	-	0.0	-	-	-
70.0	70.0	0.0	-	31.0	-	22.3	0.0	-	0.0	-	-	-
70.0	80.0	0.0	-	28.1	-	0.0	-	-	12.6	-	-	-
70.0	90.0	0.0	-	40.6	-	40.9	-	-	0.0	-	-	-
70.0	100.0	-	-	-	-	-	4.8	-	-	-	-	-
73.3	53.0	0.0	0.0	-	10.0	0.0	0.0	-	0.0	-	-	-
73.3	60.0	0.0	0.0	-	10.1	0.0	0.0	-	11.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	10.1	-	-	0.0	-	-	-
73.3	90.0	0.0	10.9	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	55.0	0.0	0.0	-	20.5	0.0	0.0	-	0.0	-	-	-
76.7	80.0	0.0	9.8	0.0	-	5.0	0.0	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-
80.0	70.0	0.0	0.0	0.0	-	10.2	12.2	-	0.0	-	-	-
83.3	90.0	0.0	0.0	-	-	5.3	0.0	-	0.0	-	-	-
86.7	70.0	0.0	39.5	-	-	0.0	-	-	0.0	-	-	-
93.3	80.0	-	5.1	-	-	0.0	0.0	-	0.0	-	-	-
106.7	40.0	30.5	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-

*Bathylagus wesethi*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	90.0	0.0	-	0.0	-	-	-	10.2	-	-	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	50.3	-	-	-
70.0	90.0	0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	0.0	-	10.4	-	-	-
76.7	90.0	0.0	0.0	0.0	-	0.0	0.0	-	30.2	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	31.7	-	71.3	-	-	-
80.0	90.0	0.0	0.0	0.0	-	38.3	11.1	-	84.2	-	-	-
80.0	100.0	-	-	-	-	-	103.9	-	-	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	10.9	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	0.0	-	20.2	-	-	-
83.3	90.0	0.0	0.0	-	-	31.9	0.0	-	40.1	-	-	-
83.3	100.0	-	-	-	-	-	5.0	-	-	-	-	-
86.7	40.0	-	0.0	0.0	-	0.0	8.2	-	0.0	-	-	-
86.7	55.0	0.0	0.0	0.0	-	9.4	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	0.0	0.0	-	-	11.1	0.0	-	33.1	-	-	-
86.7	90.0	0.0	0.0	-	-	19.9	9.5	-	0.0	-	-	-
90.0	60.0	0.0	0.0	0.0	-	10.9	0.0	-	0.0	-	-	-
90.0	70.0	0.0	0.0	0.0	-	5.1	19.2	-	0.0	-	-	-
90.0	80.0	0.0	0.0	-	-	25.9	5.2	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	0.0	0.0	-	9.7	-	-	-
90.0	100.0	10.6	0.0	-	-	0.0	0.0	-	-	-	-	-
93.3	70.0	0.0	0.0	-	-	4.6	45.9	-	0.0	-	-	-

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
93.3	80.0	0.0	0.0	-	-	45.2	35.4	-	15.4	-	-	-
93.3	90.0	0.0	0.0	-	-	5.0	5.3	-	0.0	-	-	-
93.3	100.0	-	-	-	-	-	30.2	-	-	-	-	-
96.7	40.0	0.0	0.0	0.0	0.0	0.0	-	10.6	14.8	-	-	-
96.7	45.0	0.0	0.0	0.0	4.8	20.0	-	10.0	0.0	-	-	-
96.7	50.0	0.0	0.0	0.0	10.4	9.5	-	20.2	0.0	-	-	-
96.7	55.0	0.0	0.0	0.0	4.9	9.1	-	21.0	0.0	-	-	-
96.7	60.0	0.0	0.0	0.0	5.1	14.4	-	15.8	0.0	-	-	-
96.7	70.0	0.0	0.0	0.0	-	17.7	-	24.7	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	0.0	-	61.3	8.9	-	-	-
96.7	90.0	0.0	0.0	0.0	-	0.0	-	9.8	10.0	-	-	-
100.0	40.0	0.0	0.0	0.0	0.0	34.6	-	9.7	29.6	-	-	-
100.0	45.0	0.0	0.0	0.0	0.0	10.3	-	9.7	29.6	-	-	-
100.0	50.0	0.0	0.0	0.0	0.0	45.2	-	29.9	41.2	-	-	-
100.0	50.0	0.0	0.0	0.0	0.0	96.8	-	49.2	0.0	-	-	-
100.0	60.0	0.0	0.0	0.0	0.0	12.4	-	9.6	9.4	-	-	-
100.0	70.0	0.0	0.0	0.0	0.0	23.3	-	83.6	17.4	-	-	-
100.0	80.0	0.0	0.0	0.0	-	8.6	-	50.5	0.0	-	-	-
100.0	90.0	19.6	5.2	0.0	-	36.2	-	25.9	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	-	0.0	-	5.4	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	0.0	-	11.2	0.0	-	-	-
103.3	45.0	0.0	0.0	14.7	-	11.2	-	5.4	10.6	-	-	-
103.3	50.0	0.0	0.0	-	0.0	0.0	-	5.4	57.4	-	-	-
103.3	60.0	0.0	0.0	-	0.0	14.8	-	0.0	0.0	-	-	-
103.3	80.0	16.3	0.0	4.5	-	5.2	-	16.5	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	9.3	-	9.9	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	5.4	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	14.7	-	10.2	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	8.8	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	9.5	-	23.4	-	0.0	21.3	-	-	-
106.7	60.0	0.0	0.0	15.6	-	24.5	-	0.0	0.0	-	-	-
106.7	70.0	19.4	0.0	0.0	-	34.2	-	10.3	4.9	-	-	-
106.7	80.0	5.2	0.0	5.1	-	32.9	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	2.4	-	0.0	25.6	-	-	-
110.0	60.0	0.0	0.0	0.0	-	5.0	-	0.0	27.1	-	-	-
110.0	70.0	0.0	0.0	10.4	-	0.0	-	22.2	0.0	-	-	-
110.0	80.0	0.0	21.0	4.3	-	0.0	-	0.0	0.0	-	-	-
113.3	40.0	0.0	-	0.0	-	4.8	-	-	-	-	-	-
113.3	50.0	0.0	-	0.0	-	5.1	-	-	-	-	-	-
113.3	60.0	0.0	-	0.0	-	27.5	-	-	-	-	-	-
113.3	70.0	0.0	-	0.0	-	15.1	-	-	-	-	-	-
113.3	80.0	5.4	-	0.0	-	0.0	-	-	-	-	-	-
116.7	40.0	0.0	-	0.0	0.0	0.0	-	-	-	0.0	-	-
116.7	45.0	15.6	-	0.0	0.0	0.0	-	-	-	0.0	-	-
116.7	50.0	43.6	-	0.0	0.0	0.0	-	-	-	0.0	-	-
116.7	60.0	4.9	-	-	-	28.3	-	-	-	15.4	-	-
116.7	70.0	0.0	-	-	-	34.2	-	-	-	27.0	-	-

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	35.0	0.0	-	-	0.0	0.0	-	-	-	4.6	-	-
120.0	80.0	10.1	-	-	-	0.0	-	-	-	4.7	-	-

*Leuroglossus stilbius*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	55.0	-	24.6	-	0.0	0.0	-	0.0	-	-	-	-
60.0	60.0	-	10.3	-	-	0.0	-	0.0	-	-	-	-
60.0	70.0	-	-	47.2	-	10.3	-	0.0	-	-	-	-
60.0	80.0	-	-	43.3	-	0.0	-	0.0	-	-	-	-
60.0	90.0	-	-	24.3	-	19.2	-	0.0	-	-	-	-
63.3	55.0	40.8	56.1	-	102.4	0.0	-	5.1	-	-	-	-
63.3	60.0	0.0	41.8	-	77.1	11.6	-	17.1	-	-	-	-
63.3	65.0	25.5	-	-	-	-	-	-	-	-	-	-
63.3	70.0	0.0	-	8.3	-	0.0	-	14.6	-	-	-	-
63.3	80.0	0.0	-	62.7	-	-	-	0.0	-	-	-	-
63.3	90.0	0.0	-	20.9	-	-	-	11.6	-	-	-	-
66.7	49.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	-
66.7	50.0	19.6	0.0	-	28.9	0.0	-	0.0	-	-	-	-
66.7	55.0	8.4	0.0	-	41.7	0.0	-	0.0	-	-	-	-
66.7	60.0	32.8	48.8	-	29.1	63.0	-	11.6	-	-	-	-
66.7	65.0	0.0	0.0	-	30.2	56.6	-	17.1	-	-	-	-
66.7	70.0	0.0	-	43.6	-	31.0	-	21.3	-	-	-	-
66.7	80.0	0.0	-	52.6	-	-	-	0.0	-	-	-	-
70.0	51.0	9.3	26.7	-	20.2	11.1	-	0.0	0.0	-	-	-
70.0	53.0	20.9	165.7	-	71.0	58.2	-	0.0	0.0	-	-	-
70.0	60.0	0.0	446.6	-	9.9	79.0	9.4	-	0.0	-	-	-
70.0	70.0	0.0	-	10.3	-	11.2	0.0	-	0.0	-	-	-
70.0	80.0	0.0	-	0.0	-	11.3	-	-	0.0	-	-	-
70.0	90.0	0.0	-	30.5	-	0.0	-	-	0.0	-	-	-
73.3	50.0	0.0	3.4	-	0.0	0.0	0.0	-	0.0	-	-	-
73.3	53.0	18.3	71.1	-	521.0	142.3	10.1	-	0.0	-	-	-
73.3	60.0	0.0	80.5	-	10.1	126.4	0.0	-	0.0	-	-	-
73.3	65.0	0.0	-	-	-	-	10.0	-	-	-	-	-
73.3	70.0	0.0	333.1	0.0	-	30.4	-	-	0.0	-	-	-
73.3	80.0	0.0	4.5	0.0	-	0.0	0.0	-	0.0	-	-	-
73.3	90.0	0.0	0.0	8.5	-	0.0	10.3	-	0.0	-	-	-
73.3	100.0	-	-	-	-	-	10.2	-	-	-	-	-
76.7	48.0	0.0	0.0	-	8.1	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	278.0	-	274.3	157.9	42.0	-	31.6	-	-	-
76.7	55.0	59.2	88.3	-	419.8	30.1	20.7	-	32.0	-	-	-
76.7	60.0	51.1	0.0	-	673.4	0.0	35.4	-	0.0	-	-	-
76.7	65.0	0.0	-	-	-	-	10.8	-	-	-	-	-
76.7	70.0	0.0	10.2	4.8	-	48.9	0.0	-	0.0	-	-	-
76.7	80.0	0.0	4.9	27.5	-	0.0	8.2	-	0.0	-	-	-

TABLE 4. (cont.)

*Leuroglossus stilbius* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	90.0	0.0	0.0	0.0	-	0.0	5.2	-	0.0	-	-	-
80.0	51.0	10.2	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	55.0	69.9	128.8	-	536.6	71.9	29.3	-	11.4	-	-	-
80.0	60.0	44.4	151.7	-	242.9	60.5	0.0	-	0.0	-	-	-
80.0	70.0	10.5	0.0	-	-	30.7	24.3	-	0.0	-	-	-
80.0	90.0	0.0	0.0	9.9	-	0.0	0.0	-	0.0	-	-	-
82.0	46.0	5.5	184.5	387.6	-	141.5	32.8	-	0.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	10.3	0.0	-	0.0	-	-	-
83.3	42.0	0.0	39.4	65.7	-	54.4	0.0	-	0.0	-	-	-
83.3	51.0	0.0	8.3	20.5	-	30.1	0.0	-	5.8	-	-	-
83.3	55.0	32.1	9.7	223.1	-	108.0	75.3	-	22.4	-	-	-
83.3	60.0	20.9	19.3	-	-	84.7	31.0	-	10.8	-	-	-
83.3	70.0	0.0	0.0	-	-	10.2	9.1	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	18.4	-	0.0	-	-	-
86.7	33.0	-	9.0	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	35.0	-	216.1	588.5	-	346.8	27.8	-	0.0	-	-	-
86.7	40.0	-	184.3	286.2	-	385.7	49.2	-	0.0	-	-	-
86.7	45.0	-	141.3	662.8	-	156.5	32.0	-	0.0	-	-	-
86.7	50.0	-	9.0	62.9	-	28.6	0.0	-	0.0	-	-	-
86.7	55.0	-	92.2	97.4	-	103.3	0.0	-	19.5	-	-	-
86.7	60.0	20.4	0.0	71.7	-	83.8	16.2	-	0.0	-	-	-
86.7	70.0	0.0	4.9	-	-	21.0	-	-	0.0	-	-	-
86.7	90.0	0.0	0.0	-	-	5.0	-	-	11.0	-	-	-
86.7	100.0	-	-	-	-	-	9.5	-	-	-	-	-
90.0	28.0	0.0	0.0	4.7	-	20.0	9.9	-	0.0	-	-	-
90.0	30.0	0.0	40.2	66.7	-	541.0	87.7	-	0.0	-	-	-
90.0	37.0	0.0	90.3	340.6	-	297.7	43.4	-	0.0	-	-	-
90.0	45.0	0.0	69.2	318.7	-	138.9	66.7	-	0.0	-	-	-
90.0	53.0	0.0	9.7	15.2	-	133.6	9.7	-	0.0	-	-	-
90.0	60.0	0.0	20.5	40.2	-	16.3	0.0	-	0.0	-	-	-
90.0	70.0	0.0	0.0	-	-	0.0	9.6	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	26.7	0.0	4.2	0.0	-	4.6	0.0	-	0.0	-	-	-
93.3	28.0	0.0	19.6	84.8	-	845.4	48.6	-	0.0	-	-	-
93.3	30.0	0.0	15.4	145.6	-	668.3	41.1	-	21.4	-	-	-
93.3	35.0	0.0	43.7	299.1	-	406.1	87.8	-	0.0	-	-	-
93.3	40.0	0.0	5.1	0.0	-	278.3	10.3	-	0.0	-	-	-
93.3	45.0	0.0	15.9	20.4	-	241.0	52.6	-	0.0	-	-	-
93.3	50.0	0.0	15.1	72.8	-	143.0	22.0	-	0.0	-	-	-
93.3	55.0	0.0	10.9	30.6	-	31.1	0.0	-	10.4	-	-	-
93.3	60.0	0.0	5.3	21.6	-	41.7	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	0.0	21.3	-	0.0	-	-	-
93.3	100.0	-	-	-	-	-	5.0	-	-	-	-	-
95.0	30.0	-	-	-	59.2	-	-	-	-	-	-	-
96.7	29.0	0.0	0.0	-	0.0	4.6	-	-	0.0	-	-	-

TABLE 4. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	30.0	0.0	0.0	-	0.0	5.0	-	0.0	0.0	-	-	-
96.7	32.0	0.0	5.0	-	34.9	390.9	-	26.4	0.0	-	-	-
96.7	35.0	0.0	9.4	-	10.0	552.5	-	9.7	0.0	-	-	-
96.7	40.0	0.0	5.2	-	0.0	356.3	-	0.0	0.0	-	-	-
96.7	45.0	0.0	4.8	-	4.8	110.2	-	0.0	0.0	-	-	-
96.7	50.0	-	4.8	-	0.0	38.0	-	0.0	10.5	-	-	-
96.7	55.0	0.0	5.1	-	0.0	4.5	-	21.0	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	4.3	-	0.0	0.0	-	-	-
100.0	30.0	10.2	0.0	0.0	0.0	42.2	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	0.0	39.5	241.0	-	0.0	0.0	-	-	-
100.0	40.0	0.0	0.0	0.0	33.7	139.9	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	0.0	4.9	18.1	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	0.0	10.1	4.6	-	0.0	0.0	-	-	-
100.0	60.0	0.0	0.0	0.0	9.7	0.0	-	0.0	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	3.8	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	20.5	-	0.0	0.0	-	-	-
103.3	35.0	0.0	5.1	10.1	-	68.1	-	0.0	9.2	-	-	-
103.3	40.0	0.0	0.0	10.1	-	184.6	-	11.2	5.1	-	-	-
103.3	45.0	0.0	0.0	0.0	-	123.4	-	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	0.0	0.0	165.6	-	0.0	0.0	-	-	-
106.7	32.0	0.0	0.0	30.7	-	0.0	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	74.1	-	195.0	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	107.6	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	25.5	-	245.4	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	0.0	-	18.7	-	5.3	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	14.7	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	64.6	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	4.7	-	14.7	-	0.0	0.0	-	-	-
110.0	45.0	0.0	0.0	0.0	-	21.3	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	5.2	-	19.8	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	14.9	-	5.2	0.0	0.0	-	-
113.3	35.0	0.0	0.0	4.9	-	94.7	-	-	-	0.0	-	-
113.3	40.0	0.0	0.0	0.0	-	14.3	-	-	-	0.0	-	-
116.7	35.0	0.0	0.0	-	0.0	41.7	-	-	-	0.0	-	-
116.7	40.0	0.0	0.0	-	0.0	59.5	-	-	-	0.0	-	-
116.7	45.0	0.0	0.0	-	0.0	4.3	-	-	-	0.0	-	-
116.7	50.0	0.0	0.0	-	0.0	28.9	-	-	-	0.0	-	-
120.0	39.0	0.0	0.0	-	0.0	27.9	-	-	-	0.0	-	-
120.0	45.0	0.0	0.0	-	0.0	25.1	-	-	-	0.0	-	-
123.3	42.0	0.0	0.0	-	0.0	57.2	-	-	-	0.0	-	-
123.3	45.0	0.0	0.0	-	0.0	8.9	-	-	-	0.0	-	-
126.7	45.0	0.0	0.0	-	0.0	10.6	-	-	-	-	-	-
126.7	50.0	0.0	0.0	-	-	4.7	-	-	-	-	-	-
130.0	35.0	0.0	0.0	-	4.3	78.2	-	-	-	-	-	-
133.3	30.0	0.0	0.0	-	-	29.5	-	-	-	-	-	-
133.3	35.0	0.0	0.0	-	-	39.4	-	-	-	-	-	-

TABLE 4. (cont.)

Stomiiformes

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	90.0	0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
83.3	90.0	0.0	10.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	-	0.0	0.0	-	0.0	0.0	-	7.5	-	-	-

Gonostomatidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	70.0	0.0	-	10.9	-	0.0	-	0.0	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	0.0	-	-	-	-
70.0	60.0	10.1	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
73.3	80.0	0.0	0.0	4.5	-	0.0	0.0	-	0.0	-	-	-
73.3	90.0	0.0	0.0	8.5	-	0.0	0.0	-	0.0	-	-	-
73.3	100.0	-	-	-	10.2	-	5.1	-	-	-	-	-
76.7	55.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	0.0	-	20.4	-	-	-
86.7	55.0	-	0.0	0.0	-	9.4	0.0	-	0.0	-	-	-
86.7	70.0	-	0.0	-	-	10.5	-	-	0.0	-	-	-
86.7	80.0	-	5.2	-	-	-	0.0	-	0.0	-	-	-
93.3	70.0	-	0.0	-	-	4.6	0.0	-	0.0	-	-	-
96.7	60.0	0.0	0.0	-	5.1	0.0	-	0.0	0.0	-	-	-
96.7	90.0	0.0	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	80.0	0.0	0.0	0.0	-	4.3	-	25.3	0.0	-	-	-
100.0	90.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	4.9	-	0.0	0.0	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
103.3	80.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	9.8	-	0.0	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	0.0	-	0.0	-	5.3	0.0	-	-	-
110.0	45.0	0.0	0.0	0.0	-	0.0	-	9.9	0.0	-	-	-
110.0	50.0	10.6	5.1	0.0	-	0.0	-	0.0	0.0	-	-	-
116.7	35.0	0.0	-	-	4.7	0.0	-	0.0	0.0	0.0	0.0	-
116.7	80.0	5.0	-	-	-	0.0	-	-	-	0.0	0.0	-
120.0	50.0	0.0	-	-	-	5.3	-	-	-	0.0	0.0	-
120.0	70.0	14.7	-	-	-	0.0	-	-	-	0.0	0.0	-

Cyclothone spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	90.0	0.0	-	14.4	-	-	-	0.0	-	-	-	-
70.0	80.0	8.7	-	0.0	-	0.0	-	-	0.0	-	-	-
70.0	90.0	24.3	-	10.2	-	0.0	-	-	0.0	-	-	-
76.7	70.0	0.0	10.2	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	-	0.0	31.3	-	20.2	-	-	-
80.0	80.0	0.0	0.0	0.0	-	11.3	126.9	-	0.0	-	-	-



TABLE 4. (cont.)

STATION	Cyclothone spp. (cont.)											
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	90.0	10.3	0.0	4.9	-	32.8	22.2	-	57.9	-	-	-
80.0	100.0	-	0.0	-	-	10.2	5.5	-	0.0	-	-	-
83.3	70.0	0.0	0.0	-	-	54.0	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	10.6	0.0	-	20.0	-	-	-
83.3	90.0	0.0	20.0	-	-	-	10.0	-	-	-	-	-
83.3	100.0	-	-	-	-	-	-	-	0.0	-	-	-
86.7	70.0	-	4.9	-	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	-	5.2	-	-	22.2	0.0	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	5.0	0.0	-	0.0	-	-	-
86.7	100.0	-	-	-	-	-	34.7	-	-	-	-	-
90.0	60.0	-	0.0	0.0	-	10.9	0.0	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	5.2	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	100.0	-	0.0	-	-	-	5.4	-	-	-	-	-
93.3	60.0	-	5.3	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	70.0	-	19.8	-	-	4.6	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	5.0	0.0	-	5.1	-	-	-
93.3	90.0	9.9	0.0	-	-	0.0	10.1	-	0.0	-	-	-
96.7	32.0	5.3	0.0	-	0.0	0.0	0.0	0.0	0.0	-	-	-
96.7	40.0	0.0	0.0	-	0.0	0.0	0.0	0.0	9.8	-	-	-
96.7	50.0	0.0	0.0	-	14.3	0.0	0.0	0.0	5.0	-	-	-
96.7	55.0	-	0.0	-	5.2	0.0	0.0	0.0	10.1	-	-	-
96.7	60.0	0.0	0.0	-	24.4	0.0	0.0	0.0	0.0	-	-	-
96.7	70.0	20.5	0.0	-	5.1	0.0	0.0	0.0	0.0	-	-	-
96.7	80.0	31.3	5.4	0.0	-	13.3	0.0	0.0	0.0	-	-	-
96.7	90.0	9.6	0.0	0.0	-	9.1	0.0	0.0	0.0	-	-	-
96.7	100.0	40.5	26.4	4.3	-	17.3	0.0	0.0	19.9	-	-	-
100.0	40.0	-	0.0	-	-	-	4.4	-	-	-	-	-
100.0	45.0	10.2	0.0	-	0.0	18.1	0.0	0.0	9.9	-	-	-
100.0	50.0	0.0	9.8	-	4.9	0.0	0.0	0.0	20.6	-	-	-
100.0	60.0	5.1	5.2	-	0.0	29.0	0.0	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	4.7	9.7	14.0	0.0	0.0	4.7	-	-	-
100.0	80.0	21.8	4.8	0.0	-	4.3	0.0	0.0	4.4	-	-	-
100.0	90.0	39.1	47.1	86.8	-	31.7	0.0	0.0	47.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	2.6	0.0	0.0	28.7	-	-	-
103.3	45.0	0.0	5.2	29.4	-	16.8	0.0	0.0	0.0	-	-	-
103.3	50.0	15.1	10.4	-	0.0	0.0	0.0	0.0	0.0	-	-	-
103.3	60.0	10.6	4.8	-	14.4	9.9	0.0	0.0	0.0	-	-	-
103.3	70.0	0.0	5.1	35.8	-	62.4	0.0	0.0	28.6	-	-	-
103.3	80.0	32.6	4.9	63.0	-	9.3	0.0	0.0	0.0	-	-	-
103.3	90.0	-	-	-	-	-	-	5.4	9.5	-	-	-
106.7	40.0	0.0	0.0	0.0	-	0.0	0.0	5.1	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	0.0	0.0	4.8	0.0	-	-	-
106.7	50.0	4.9	0.0	28.6	-	4.7	0.0	5.3	0.0	-	-	-
106.7	60.0	11.0	4.8	36.5	-	44.1	-	14.2	8.8	-	-	-

TABLE 4. (cont.)

*Cyclothone* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	70.0	19.4	4.5	86.0	-	14.6	-	5.1	0.0	-	-	-
106.7	80.0	0.0	21.4	25.3	-	16.4	-	5.5	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	2.4	-	0.0	5.3	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	4.9	4.3	-	-	-
110.0	45.0	5.7	0.0	0.0	-	31.9	-	0.0	0.0	-	-	-
110.0	50.0	0.0	10.3	0.0	-	10.4	-	0.0	5.1	-	-	-
110.0	60.0	0.0	0.0	4.8	-	0.0	-	0.0	-	0.0	-	-
110.0	70.0	0.0	16.2	0.0	-	39.1	-	22.2	-	4.9	-	-
110.0	80.0	22.2	0.0	8.6	-	35.1	-	0.0	-	0.0	-	-
113.3	35.0	0.0	-	34.4	-	0.0	-	-	-	0.0	-	-
113.3	40.0	0.0	-	23.6	-	4.8	-	-	-	0.0	-	-
113.3	45.0	0.0	-	9.7	-	9.5	-	-	-	0.0	-	-
113.3	50.0	0.0	-	5.1	-	30.4	-	-	-	0.0	-	-
113.3	60.0	0.0	-	9.6	-	9.2	-	-	-	9.7	-	-
113.3	70.0	11.4	-	4.3	-	10.0	-	-	-	9.1	-	-
113.3	80.0	5.4	-	14.4	-	58.3	-	-	-	0.0	-	-
116.7	40.0	10.3	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	45.0	41.6	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	50.0	43.6	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	60.0	68.5	-	-	-	9.4	-	-	-	16.2	-	-
116.7	70.0	9.7	-	-	-	14.6	-	-	-	17.5	-	-
116.7	80.0	0.0	-	-	-	4.9	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	35.1	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	9.9	-	-
120.0	60.0	31.5	-	-	-	28.1	-	-	-	0.0	-	-
120.0	70.0	14.7	-	-	-	0.0	-	-	-	0.0	-	-
120.0	80.0	25.4	-	-	-	0.0	-	-	-	19.8	-	-
123.3	50.0	0.0	-	-	0.0	5.8	-	-	-	23.5	-	-
123.3	60.0	19.8	-	-	0.0	0.0	-	-	-	-	-	-
126.7	35.0	0.0	-	-	-	7.1	-	-	-	-	-	-
126.7	45.0	0.0	-	-	-	10.6	-	-	-	-	-	-
126.7	50.0	0.0	-	-	-	32.8	-	-	-	-	-	-
126.7	60.0	0.0	-	-	0.0	4.9	-	-	-	-	-	-
130.0	60.0	0.0	-	-	-	9.3	-	-	-	-	-	-
133.3	40.0	10.8	-	-	-	0.0	-	-	-	-	-	-
133.3	60.0	5.1	-	-	-	0.0	-	-	-	-	-	-
136.7	60.0	4.9	-	-	-	-	-	-	-	-	-	-

*Danaphos oculatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	60.0	0.0	0.0	-	0.0	0.0	-	5.0	-	-	-	-
63.3	70.0	0.0	-	8.3	-	0.0	-	0.0	-	-	-	-
76.7	60.0	0.0	0.0	-	0.0	9.7	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	5.4	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Danaphos oculatus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	45.0	-	0.0	0.0	-	0.0	0.0	-	11.1	-	-	-
90.0	90.0	-	0.0	0.0	-	5.2	0.0	-	0.0	-	-	-
93.3	45.0	-	0.0	0.0	-	10.5	0.0	-	0.0	-	-	-
96.7	35.0	10.9	0.0	-	0.0	7.9	0.0	0.0	0.0	-	-	-
96.7	50.0	-	0.0	-	0.0	9.5	-	0.0	0.0	-	-	-
100.0	50.0	-	4.9	-	0.0	-	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	0.0	-	0.0	-	4.9	0.0	-	-	-
100.0	90.0	0.0	10.5	0.0	-	0.0	-	5.4	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	0.0	5.2	0.0	0.0	0.0	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	0.0	0.0	0.0	-	0.0	5.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	2.5	-	0.0	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	-	5.6	-	0.0	-	-
120.0	70.0	14.7	-	-	-	0.0	-	-	-	0.0	-	-

*Gonostoma* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	40.0	0.0	0.0	0.0	-	0.0	-	5.1	0.0	-	-	-

*Ichthyococcus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	90.0	0.0	-	10.2	-	0.0	-	-	0.0	-	-	-
76.7	90.0	11.8	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	0.0	4.7	-	0.0	-	-	-
93.3	70.0	-	5.0	-	-	0.0	0.0	-	0.0	-	-	-
93.3	90.0	-	4.9	-	-	0.0	0.0	-	0.0	-	-	-
96.7	70.0	0.0	0.0	7.9	-	0.0	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	0.0	4.5	-	0.0	0.0	-	-	-
100.0	90.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	40.0	0.0	4.9	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	9.8	-	5.6	-	0.0	0.0	-	-	-
103.3	80.0	0.0	0.0	0.0	-	4.7	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	5.1	-	0.0	-	4.8	0.0	-	-	-
106.7	70.0	9.7	0.0	4.8	-	0.0	-	0.0	0.0	-	-	-
106.7	80.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	80.0	0.0	0.0	0.0	-	11.0	-	0.0	0.0	0.0	-	-
113.3	35.0	0.0	-	4.9	-	5.3	-	-	-	0.0	-	-
113.3	80.0	0.0	-	0.0	-	4.9	-	-	-	0.0	-	-
116.7	70.0	0.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	70.0	34.3	-	-	-	0.0	-	-	-	0.0	-	-
123.3	50.0	0.0	-	-	0.0	5.8	-	-	-	0.0	-	-

TABLE 4. (cont.)

*Valenciennellus stellatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7 90.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0 90.0	-	0.0	5.2	0.0	-	0.0	-	0.0	0.0	-	-	-

*Vinciguerrria lucetia*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0 52.5	-	4.9	0.0	0.0	0.0	0.0	-	4.3	-	-	-	-
66.7 80.0	-	14.5	-	3.6	-	-	-	0.0	-	-	-	-
70.0 90.0	-	24.3	-	0.0	-	0.0	-	10.2	0.0	-	-	-
73.3 80.0	-	0.0	0.0	0.0	0.0	0.0	11.3	-	0.0	-	-	-
76.7 80.0	-	0.0	0.0	9.2	0.0	0.0	16.4	-	0.0	-	-	-
76.7 90.0	-	11.8	0.0	0.0	0.0	0.0	187.6	-	0.0	-	-	-
80.0 55.0	-	0.0	0.0	0.0	0.0	0.0	9.8	-	0.0	-	-	-
80.0 80.0	-	0.0	0.0	0.0	0.0	0.0	771.7	-	10.2	-	-	-
80.0 90.0	-	56.8	5.3	9.9	-	43.8	27.7	-	99.9	-	-	-
80.0 100.0	-	-	-	-	-	-	251.6	-	-	-	-	-
83.3 55.0	-	0.0	0.0	0.0	0.0	0.0	9.4	-	0.0	-	-	-
83.3 60.0	-	0.0	0.0	0.0	0.0	0.0	20.6	-	0.0	-	-	-
83.3 80.0	-	0.0	0.0	-	-	54.0	9.2	-	40.4	-	-	-
83.3 90.0	-	0.0	20.0	-	-	15.9	130.4	-	70.1	-	-	-
86.7 80.0	0.0	-	0.0	-	-	11.1	64.1	-	0.0	-	-	-
86.7 90.0	19.2	-	0.0	-	-	10.0	100.0	-	0.0	-	-	-
86.7 100.0	-	-	-	-	-	-	49.6	-	-	-	-	-
90.0 45.0	0.0	-	0.0	0.0	0.0	0.0	11.1	-	0.0	-	-	-
90.0 53.0	0.0	-	4.8	0.0	0.0	0.0	9.7	-	0.0	-	-	-
90.0 60.0	5.2	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
90.0 80.0	0.0	-	0.0	0.0	0.0	5.2	15.7	-	0.0	-	-	-
90.0 90.0	69.2	-	11.2	-	-	0.0	16.4	-	9.7	-	-	-
90.0 100.0	-	-	-	-	-	-	-	-	-	-	-	-
93.3 40.0	5.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
93.3 45.0	0.0	-	0.0	0.0	0.0	0.0	21.0	-	0.0	-	-	-
93.3 55.0	0.0	-	0.0	0.0	0.0	0.0	10.6	-	0.0	-	-	-
93.3 60.0	4.6	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
93.3 70.0	83.6	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
93.3 80.0	-	0.0	0.0	-	-	20.1	5.1	-	82.1	-	-	-
93.3 90.0	-	0.0	0.0	-	-	0.0	0.0	-	35.8	-	-	-
93.3 100.0	-	-	-	-	-	-	1680.0	-	-	-	-	-
96.7 32.0	-	5.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7 40.0	-	0.0	0.0	-	0.0	0.0	-	0.0	83.6	-	-	-
96.7 45.0	-	0.0	0.0	-	9.6	0.0	-	0.0	65.0	-	-	-
96.7 50.0	-	0.0	0.0	-	5.2	0.0	-	10.1	0.0	-	-	-
96.7 55.0	-	5.3	0.0	-	4.9	0.0	-	42.0	0.0	-	-	-
96.7 60.0	-	46.2	0.0	-	5.1	4.8	-	5.3	0.0	-	-	-
96.7 70.0	-	208.4	0.0	7.9	-	53.0	-	0.0	256.0	-	-	-

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	80.0	57.5	19.5	0.0	-	9.1	-	51.1	93.2	-	-	-
96.7	90.0	5.1	10.6	0.0	-	8.7	-	59.0	239.0	-	-	-
96.7	100.0	-	-	-	-	-	-	692.5	-	-	-	-
100.0	40.0	25.6	0.0	0.0	0.0	0.0	-	9.7	79.0	-	-	-
100.0	45.0	10.4	0.0	0.0	9.8	76.8	-	54.8	329.8	-	-	-
100.0	50.0	0.0	29.3	0.0	0.0	96.8	-	0.0	137.0	-	-	-
100.0	60.0	0.0	10.3	0.0	0.0	58.0	-	43.3	221.4	-	-	-
100.0	70.0	5.3	0.0	0.0	-	18.6	-	4.9	239.8	-	-	-
100.0	80.0	38.1	0.0	4.2	-	4.3	-	207.1	255.8	-	-	-
100.0	90.0	283.6	136.0	118.8	-	4.5	-	1023.7	335.3	-	-	-
103.3	35.0	0.0	15.3	0.0	-	0.0	-	10.9	0.0	-	-	-
103.3	40.0	0.0	19.7	0.0	-	0.0	-	22.5	0.0	-	-	-
103.3	45.0	0.0	10.5	19.6	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	45.2	88.4	-	10.4	0.0	-	32.7	41.8	-	-	-
103.3	60.0	169.3	34.0	48.1	-	163.0	-	21.8	996.9	-	-	-
103.3	70.0	16.5	45.8	-	-	494.0	-	43.9	645.1	-	-	-
103.3	80.0	43.5	4.9	116.5	-	32.5	-	366.4	998.0	-	-	-
103.3	90.0	-	-	198.0	-	-	-	548.4	-	-	-	-
106.7	35.0	9.7	0.0	0.0	-	0.0	-	5.5	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	0.0	-	25.6	55.6	-	-	-
106.7	45.0	0.0	0.0	0.0	-	0.0	-	4.8	4.6	-	-	-
106.7	50.0	9.8	5.3	23.8	-	0.0	-	10.6	0.0	-	-	-
106.7	60.0	76.7	4.8	31.3	-	186.2	-	222.3	1230.4	-	-	-
106.7	70.0	228.4	4.5	168.1	-	122.0	-	56.5	634.4	-	-	-
106.7	80.0	419.6	149.8	45.5	-	120.6	-	121.4	266.2	-	-	-
106.7	90.0	-	-	-	-	-	-	25.4	-	-	-	-
110.0	35.0	0.0	14.5	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	40.0	0.0	15.8	4.7	-	0.0	-	9.7	38.3	-	-	-
110.0	45.0	0.0	5.0	9.8	-	74.5	-	0.0	4.8	-	-	-
110.0	50.0	89.9	5.1	0.0	-	124.6	-	0.0	0.0	-	-	-
110.0	60.0	31.3	20.3	14.5	-	0.0	-	50.1	-	-	-	-
110.0	70.0	40.6	0.0	31.3	-	200.5	-	432.3	-	-	-	-
110.0	80.0	343.5	47.2	25.7	-	470.9	-	20.6	-	-	-	-
113.3	35.0	22.6	-	44.3	-	0.0	-	-	-	-	-	-
113.3	40.0	0.0	-	70.9	-	0.0	-	-	-	-	-	-
113.3	45.0	5.4	-	43.6	-	57.0	-	-	-	-	-	-
113.3	50.0	5.3	-	0.0	-	36.6	-	-	-	-	-	-
113.3	60.0	21.2	-	0.0	-	873.5	-	-	-	-	-	-
113.3	70.0	0.0	-	51.8	-	302.1	-	-	-	-	-	-
113.3	80.0	299.8	-	57.6	-	0.0	-	-	-	-	-	-
116.7	35.0	4.9	-	-	0.0	0.0	-	-	-	-	-	-
116.7	40.0	112.9	-	4.6	4.6	5.0	-	-	-	-	-	-
116.7	45.0	452.4	-	0.0	0.0	0.0	-	-	-	-	-	-
116.7	50.0	632.1	-	4.8	4.8	0.0	-	-	-	-	-	-
116.7	60.0	537.9	-	-	-	28.3	-	-	-	-	-	-
116.7	70.0	38.6	-	-	-	78.1	-	-	-	-	-	-
										387.8		
										248.4		
										465.6		
										9.9		
										165.7		
										75.6		
										125.3		
										170.1		
										652.1		
										98.5		
										9.2		
										5.0		
										8.9		
										51.3		
										226.8		
										410.8		

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
116.7	80.0	34.9	-	-	-	266.8	-	-	-	396.9	-	-
118.0	39.0	5.0	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	4.2	-	-	-	921.2	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	494.2	-	-
120.0	60.0	887.3	-	-	-	262.6	-	-	-	79.9	-	-
120.0	70.0	186.2	-	-	-	104.4	-	-	-	510.9	-	-
120.0	80.0	238.3	-	-	-	98.4	-	-	-	609.7	-	-
123.3	42.0	0.0	-	-	0.0	34.3	-	-	-	9.8	-	-
123.3	45.0	5.1	-	-	0.0	0.0	-	-	-	-	-	-
123.3	50.0	10.2	-	-	30.3	133.4	-	-	-	-	-	-
123.3	60.0	262.9	-	-	14.3	105.6	-	-	-	-	-	-
126.7	40.0	31.7	-	-	-	11.4	-	-	-	-	-	-
126.7	45.0	0.0	-	-	-	10.6	-	-	-	-	-	-
126.7	50.0	5.0	-	-	-	248.6	-	-	-	-	-	-
126.7	60.0	30.3	-	-	56.3	108.2	-	-	-	-	-	-
130.0	40.0	35.7	-	-	-	24.9	-	-	-	-	-	-
130.0	50.0	10.5	-	-	-	25.8	-	-	-	-	-	-
130.0	60.0	85.3	-	-	-	125.8	-	-	-	-	-	-
133.3	40.0	141.0	-	-	-	62.8	-	-	-	-	-	-
133.3	50.0	0.0	-	-	-	140.1	-	-	-	-	-	-
133.3	60.0	5.1	-	-	-	233.1	-	-	-	-	-	-
136.7	40.0	9.8	-	-	-	-	-	-	-	-	-	-
136.7	50.0	51.2	-	-	-	-	-	-	-	-	-	-
136.7	60.0	285.4	-	-	-	-	-	-	-	-	-	-

## Sternoptychidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	80.0	-	-	0.0	-	10.8	-	0.0	-	-	-	-
63.3	55.0	0.0	9.4	-	0.0	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	19.3	0.0	-	5.0	-	-	-	-
63.3	80.0	0.0	-	9.0	-	-	-	0.0	-	-	-	-
63.3	90.0	15.6	-	0.0	-	-	-	0.0	-	-	-	-
66.7	50.0	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-	-
66.7	60.0	8.2	0.0	-	10.1	0.0	-	0.0	-	-	-	-
66.7	90.0	4.8	-	0.0	-	-	-	20.3	-	-	-	-
73.3	53.0	0.0	0.0	-	0.0	0.0	-	0.0	19.9	-	-	-
73.3	65.0	9.5	-	-	-	-	-	0.0	-	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
76.7	70.0	0.0	0.0	4.8	-	0.0	-	-	0.0	-	-	-
76.7	80.0	0.0	0.0	0.0	-	9.9	-	0.0	0.0	-	-	-
80.0	70.0	0.0	5.1	-	-	0.0	-	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	-	-	20.4	-	-	-
80.0	90.0	5.2	0.0	0.0	-	0.0	-	-	0.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	10.0	-	-	0.0	-	-	-

TABLE 4. (cont.)

## Sternoptychidae (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	80.0	10.1	0.0	-	-	21.6	0.0	-	5.1	-	-	-
83.3	90.0	11.0	5.0	-	-	5.3	4.8	-	0.0	-	-	-
86.7	55.0	-	15.4	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	10.5	0.0	-	0.0	-	-	-
86.7	80.0	-	0.0	-	-	29.9	4.8	-	0.0	-	-	-
86.7	90.0	-	10.0	-	-	-	9.9	-	-	-	-	-
86.7	100.0	-	-	-	-	0.0	0.0	-	0.0	-	-	-
90.0	30.0	-	0.0	6.1	-	0.0	0.0	-	0.0	-	-	-
90.0	37.0	-	0.0	0.0	-	11.4	0.0	-	0.0	-	-	-
90.0	45.0	-	4.9	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	15.5	4.7	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	26.7	-	4.2	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
93.3	30.0	-	0.0	0.0	-	0.0	0.0	-	10.7	-	-	-
93.3	35.0	-	0.0	0.0	-	29.7	0.0	-	0.0	-	-	-
93.3	40.0	-	0.0	0.0	-	5.3	0.0	-	0.0	-	-	-
93.3	60.0	-	5.3	0.0	-	10.4	0.0	-	0.0	-	-	-
93.3	70.0	-	5.0	0.0	-	5.0	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
93.3	90.0	9.9	24.7	-	-	0.0	0.0	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	5.3	0.0	5.3	0.0	-	-	-
96.7	32.0	5.5	0.0	-	5.0	0.0	0.0	0.0	0.0	-	-	-
96.7	35.0	0.0	5.2	-	0.0	0.0	0.0	10.6	0.0	-	-	-
96.7	40.0	0.0	0.0	-	-	0.0	0.0	0.0	5.0	-	-	-
96.7	45.0	0.0	0.0	-	15.6	9.5	0.0	0.0	10.5	-	-	-
96.7	50.0	-	0.0	-	14.6	0.0	0.0	0.0	0.0	-	-	-
96.7	55.0	0.0	0.0	-	20.3	0.0	0.0	0.0	0.0	-	-	-
96.7	60.0	5.1	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-
96.7	70.0	15.6	0.0	-	-	0.0	0.0	0.0	0.0	-	-	-
96.7	80.0	9.6	9.7	7.9	-	0.0	0.0	5.1	4.4	-	-	-
96.7	90.0	0.0	10.6	0.0	-	21.6	0.0	4.9	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	0.0	10.2	0.0	10.4	0.0	-	-	-
100.0	40.0	0.0	0.0	-	0.0	8.8	0.0	39.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	4.9	0.0	0.0	10.0	0.0	-	-	-
100.0	50.0	10.6	4.9	-	0.0	9.2	0.0	0.0	9.8	-	-	-
100.0	60.0	0.0	0.0	-	14.5	20.7	0.0	0.0	4.7	-	-	-
100.0	70.0	0.0	0.0	4.7	-	0.0	0.0	0.0	4.4	-	-	-
100.0	80.0	0.0	0.0	4.2	-	0.0	0.0	15.2	0.0	-	-	-
100.0	90.0	0.0	15.7	32.0	-	0.0	0.0	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	-	13.2	0.0	5.4	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	5.1	0.0	5.6	5.1	-	-	-
103.3	45.0	5.2	0.0	19.6	-	0.0	0.0	0.0	0.0	-	-	-
103.3	50.0	0.0	5.2	-	0.0	31.0	0.0	5.4	0.0	-	-	-
103.3	60.0	15.9	0.0	-	9.6	0.0	0.0	0.0	0.0	-	-	-

TABLE 4. (cont.)

## Sternoptychidae (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	70.0	0.0	5.1	22.4	-	0.0	-	38.4	0.0	-	-	-
103.3	80.0	0.0	4.9	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	5.4	-	5.5	20.9	-	-	-
106.7	40.0	0.0	0.0	0.0	-	2.6	-	0.0	5.1	-	-	-
106.7	45.0	0.0	0.0	5.1	-	8.8	-	9.7	4.6	-	-	-
106.7	50.0	4.9	0.0	4.8	-	14.0	-	5.3	0.0	-	-	-
106.7	60.0	0.0	0.0	5.2	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	14.6	0.0	3.9	-	24.4	-	0.0	0.0	-	-	-
106.7	80.0	0.0	0.0	20.2	-	5.5	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	5.3	-	-	-
110.0	45.0	0.0	5.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	50.0	5.3	0.0	0.0	-	10.4	-	0.0	4.8	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	-	16.7	5.1	-	-	-
110.0	70.0	0.0	10.8	10.4	-	14.7	-	0.0	-	27.1	-	-
110.0	80.0	0.0	0.0	21.5	-	0.0	-	0.0	0.0	0.0	-	-
113.3	35.0	0.0	-	4.9	-	0.0	-	0.0	0.0	0.0	-	-
113.3	40.0	0.0	-	9.5	-	0.0	-	0.0	0.0	0.0	-	-
113.3	45.0	0.0	-	14.5	-	0.0	-	0.0	0.0	0.0	-	-
113.3	50.0	0.0	-	10.2	-	5.1	-	0.0	4.8	4.9	-	-
113.3	60.0	0.0	-	0.0	-	4.6	-	0.0	0.0	0.0	-	-
113.3	70.0	0.0	-	8.6	-	0.0	-	0.0	0.0	0.0	-	-
116.7	40.0	0.0	-	-	4.6	0.0	-	0.0	-	14.9	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	0.0	-	8.9	-	-
116.7	50.0	21.8	-	-	0.0	12.8	-	0.0	-	0.0	-	-
116.7	60.0	19.6	-	-	0.0	9.6	-	0.0	-	0.0	-	-
116.7	70.0	9.7	-	-	-	0.0	-	0.0	-	0.0	-	-
120.0	50.0	0.0	-	-	-	14.6	-	0.0	-	0.0	-	-
120.0	60.0	21.0	-	-	-	10.5	-	0.0	-	0.0	-	-
120.0	70.0	4.9	-	-	-	8.7	-	0.0	-	0.0	-	-
123.3	42.0	0.0	-	-	0.0	11.4	-	0.0	-	0.0	-	-
123.3	50.0	0.0	-	-	0.0	11.6	-	0.0	-	0.0	-	-
126.7	45.0	0.0	-	-	-	10.6	-	0.0	-	-	-	-
126.7	50.0	0.0	-	-	-	4.7	-	0.0	-	-	-	-
126.7	60.0	10.1	-	-	0.0	9.8	-	0.0	-	-	-	-
130.0	35.0	5.2	-	-	0.0	0.0	-	0.0	-	-	-	-
130.0	40.0	5.1	-	-	-	19.9	-	0.0	-	-	-	-
130.0	50.0	0.0	-	-	-	10.3	-	0.0	-	-	-	-
130.0	60.0	5.0	-	-	-	4.7	-	0.0	-	-	-	-
133.3	50.0	9.5	-	-	-	9.7	-	0.0	-	-	-	-
133.3	60.0	0.0	-	-	-	-	-	0.0	-	-	-	-
136.7	50.0	10.2	-	-	-	-	-	0.0	-	-	-	-



TABLE 4. (cont.)

STATION	<i>Chaulioidus macouni</i>											
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0				15.7		10.3		0.0				
60.0				7.2		10.8		8.3				
63.3		0.0		8.3		0.0		0.0				
63.3		0.0		17.9				10.5				
66.7		0.0	0.0		20.8	0.0		0.0				
66.7		0.0	0.0		0.0	0.0		5.5				
66.7		24.6	0.0		0.0	0.0		0.0				
66.7		0.0	0.0	0.0		10.3		11.5				
66.7		0.0	0.0	0.0				10.2				
66.7		0.0	0.0	0.0			0.0		0.0			
70.0		9.1	0.0	0.0		5.6		0.0	0.0			
70.0		0.0	0.0	0.0		20.4		0.0	0.0			
70.0		0.0	0.0	0.0		0.0		10.0				
73.3		0.0	0.0		0.0							
73.3		9.5	0.0	0.0					21.5			
73.3		0.0	0.0	0.0		10.1			0.0			
73.3		0.0	0.0	0.0		0.0	11.3		0.0			
73.3		0.0	0.0	0.0		4.9			0.0			
73.3		0.0	0.0	0.0	0.0	9.7			0.0			
76.7		10.5	0.0	9.2		0.0			0.0			
76.7		0.0	0.0	0.0		0.0			10.1			
76.7		0.0	0.0	0.0		0.0	4.7					
80.0		10.5	5.1			10.2			0.0			
80.0		0.0	5.1	0.0					0.0			
80.0		0.0	0.0	0.0		5.5			0.0			
83.3		0.0	9.7	0.0		0.0			0.0			
83.3		0.0	0.0	0.0		5.4			0.0			
86.7		0.0	0.0	0.0		0.0			0.0			
86.7		0.0	0.0	0.0		0.0	16.2		0.0			
86.7		0.0	0.0	0.0		0.0			9.5			
86.7		0.0	0.0	0.0		0.0			0.0			
86.7		5.3	0.0			0.0			0.0			
86.7		4.8	10.0	0.0		0.0			11.0			
90.0		10.3	0.0	0.0		0.0			0.0			
90.0		5.3	0.0	0.0		0.0	4.7		9.7			
90.0		0.0	0.0	0.0		0.0	5.4					
93.3		0.0	5.1	0.0		0.0			0.0			
93.3		0.0	0.0	0.0		10.4			0.0			
93.3		0.0	0.0	0.0		0.0	0.0		5.1			
96.7		0.0	0.0	0.0		0.0			0.0			
96.7		0.0	0.0	0.0		0.0			0.0			
96.7		0.0	0.0	0.0		0.0			0.0			
96.7		0.0	0.0	0.0		4.5			0.0			
96.7		0.0	0.0	0.0		4.4			0.0			
96.7		0.0	0.0	0.0		4.3			0.0			
96.7		5.2	0.0	0.0		0.0			5.1			
100.0			0.0	0.0		0.0			0.0			

TABLE 4. (cont.)

*Chauliodus macouni* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
100.0	70.0	0.0	0.0	0.0	-	9.3	-	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	0.0	-	4.5	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	4.9	-	0.0	-	0.0	0.0	-	-	-
103.3	60.0	5.3	0.0	-	0.0	-	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	3.9	-	0.0	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	0.0	-	0.0	5.1	-	-	-
113.3	45.0	5.4	-	0.0	-	0.0	-	-	-	0.0	-	-

*Idiacanthus antrostomus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	80.0	0.0	-	0.0	-	0.0	-	-	25.2	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	0.0	-	5.3	-	-	-
83.3	80.0	0.0	0.0	-	-	5.4	0.0	-	5.1	-	-	-
86.7	70.0	-	0.0	-	-	0.0	-	-	0.0	-	-	-
90.0	60.0	-	10.3	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	80.0	-	0.0	-	-	0.0	0.0	-	5.1	-	-	-
93.3	100.0	-	-	-	-	-	10.1	-	-	-	-	-
96.7	90.0	10.1	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	50.0	5.3	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-

*Aristostomias scintillans*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	90.0	0.0	5.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	100.0	-	-	-	-	-	5.0	-	-	-	-	-
96.7	90.0	-	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	60.0	0.0	0.0	0.0	0.0	4.1	-	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	9.1	-	0.0	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	-	9.6	0.0	-	0.0	0.0	-	-	-
113.3	40.0	0.0	-	4.7	-	0.0	-	0.0	0.0	0.0	-	-
113.3	45.0	0.0	-	4.8	-	0.0	-	-	-	0.0	-	-

*Photonectes* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	90.0	0.0	0.0	0.0	-	0.0	5.2	-	0.0	-	-	-
103.3	80.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Tactostoma macropus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	80.0	0.0	-	0.0	-	0.0	-	-	25.2	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	43.1	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	0.0	-	5.1	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	0.0	-	15.8	-	-	-
96.7	100.0	-	-	-	-	-	-	5.1	-	-	-	-

*Stomias atriventer*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	55.0	0.0	10.7	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	0.0	-	-	-	-	-
86.7	40.0	0.0	0.0	5.3	-	0.0	5.5	-	0.0	-	-	-
86.7	45.0	0.0	4.7	5.3	-	0.0	0.0	-	0.0	-	-	-
86.7	50.0	0.0	0.0	4.8	-	0.0	0.0	-	0.0	-	-	-
86.7	55.0	0.0	5.1	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	0.0	0.0	10.2	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	0.0	0.0	-	-	0.0	0.0	-	11.0	-	-	-
90.0	45.0	0.0	0.0	5.1	-	37.0	0.0	-	0.0	-	-	-
93.3	50.0	0.0	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	0.0	-	15.1	0.0	-	0.0	-	-	-
96.7	32.0	0.0	0.0	-	-	5.3	-	0.0	0.0	-	-	-
96.7	35.0	0.0	0.0	-	-	5.2	-	0.0	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	19.1	-	0.0	0.0	-	-	-
96.7	50.0	0.0	0.0	-	5.2	0.0	-	0.0	0.0	-	-	-
96.7	55.0	0.0	0.0	-	4.9	4.5	-	0.0	0.0	-	-	-
96.7	60.0	0.0	0.0	-	10.1	0.0	-	0.0	0.0	-	-	-
96.7	70.0	0.0	0.0	-	-	4.4	-	4.9	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	45.0	0.0	10.4	8.7	-	0.0	-	0.0	0.0	-	-	-
100.0	50.0	0.0	4.9	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	60.0	0.0	0.0	-	0.0	4.6	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	-	9.7	0.0	-	0.0	0.0	-	-	-
100.0	80.0	0.0	0.0	0.0	-	4.7	-	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	0.0	-	21.5	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	9.8	-	5.6	-	0.0	0.0	-	-	-
103.3	60.0	0.0	10.4	-	0.0	0.0	-	5.4	0.0	-	-	-
103.3	70.0	0.0	4.8	-	4.8	24.7	-	0.0	0.0	-	-	-
103.3	80.0	5.5	5.1	22.4	-	20.8	-	5.5	0.0	-	-	-
106.7	45.0	0.0	0.0	9.0	-	0.0	-	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	5.1	-	8.8	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	9.5	-	4.7	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	9.8	-	4.7	0.0	-	-	-
106.7	80.0	4.9	9.1	15.6	-	48.8	-	0.0	0.0	-	-	-
110.0	40.0	0.0	26.8	5.1	-	0.0	-	5.5	0.0	-	-	-
		0.0	0.0	0.0	-	0.0	-	0.0	12.8	-	-	-

TABLE 4. (cont.)

*Stomias atriventer* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
110.0	45.0	0.0	0.0	9.8	-	0.0	-	5.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	0.0	-	0.0	5.1	-	-	-
110.0	60.0	0.0	5.1	0.0	-	0.0	-	0.0	-	0.0	-	-
110.0	70.0	0.0	0.0	5.2	-	4.9	-	0.0	-	0.0	-	-
113.3	35.0	0.0	-	0.0	-	5.3	-	-	-	0.0	-	-
113.3	40.0	0.0	-	0.0	-	0.0	-	-	-	5.0	-	-
113.3	45.0	0.0	-	14.5	-	0.0	-	-	-	0.0	-	-
113.3	50.0	0.0	-	15.3	-	0.0	-	-	-	0.0	-	-
113.3	70.0	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-
113.3	80.0	32.7	-	0.0	-	47.1	-	-	-	0.0	-	-
116.7	60.0	29.3	-	-	-	9.8	-	-	-	5.4	-	-
116.7	70.0	0.0	-	-	-	0.0	-	-	-	0.0	-	-
116.7	80.0	10.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	50.0	5.1	-	-	-	5.3	-	-	-	0.0	-	-
120.0	70.0	9.8	-	-	-	0.0	-	-	-	9.9	-	-
123.3	45.0	5.1	-	-	0.0	0.0	-	-	-	0.0	-	-
123.3	50.0	0.0	-	-	0.0	17.4	-	-	-	-	-	-
123.3	60.0	0.0	-	-	4.8	4.6	-	-	-	-	-	-
126.7	50.0	0.0	-	-	-	4.7	-	-	-	-	-	-
126.7	60.0	15.2	-	-	0.0	0.0	-	-	-	-	-	-
130.0	35.0	0.0	-	-	4.3	0.0	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	5.2	-	-	-	-	-	-
133.3	40.0	0.0	-	-	-	4.8	-	-	-	-	-	-
133.3	60.0	5.1	-	-	-	0.0	-	-	-	-	-	-

## Evermannellidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
113.3	60.0	0.0	-	0.0	-	0.0	-	-	-	29.2	-	-

## Paralepididae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	80.0	0.0	4.5	0.0	-	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	5.1	0.0	-	0.0	0.0	-	0.0	-	-	-
100.0	50.0	0.0	9.8	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	0.0	0.0	0.0	-	0.0	4.4	-	-	-
100.0	80.0	0.0	0.0	0.0	-	0.0	-	5.1	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	4.9	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	0.0	-	15.6	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	0.0	-	0.0	5.1	-	-	-
106.7	70.0	0.0	0.0	0.0	-	0.0	-	0.0	4.9	-	-	-

TABLE 4. (cont.)

*Lestidiops ringens*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	80.0	0.0	-	10.5	-	-	-	0.0	-	-	-	-
73.3	80.0	0.0	0.0	4.5	-	0.0	0.0	-	0.0	-	-	-
76.7	55.0	0.0	11.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
76.7	70.0	9.2	0.0	0.0	-	5.0	0.0	-	0.0	-	-	-
76.7	80.0	0.0	4.9	0.0	-	0.0	0.0	-	5.1	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	0.0	-	5.3	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
83.3	70.0	5.9	0.0	-	-	5.4	9.2	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	4.8	-	0.0	-	-	-
83.3	90.0	0.0	0.0	-	-	0.0	0.0	-	11.0	-	-	-
86.7	80.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	4.8	0.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	100.0	-	-	-	-	-	5.0	-	-	-	-	-
90.0	53.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	60.0	-	10.3	0.0	-	5.4	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	5.1	0.0	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
96.7	40.0	0.0	5.2	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	45.0	0.0	0.0	-	4.8	0.0	-	0.0	5.0	-	-	-
96.7	50.0	-	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
96.7	55.0	0.0	10.2	-	0.0	0.0	-	10.5	0.0	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	5.3	0.0	-	-	-
96.7	70.0	0.0	0.0	0.0	5.1	4.4	-	0.0	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	0.0	-	0.0	4.4	-	-	-
100.0	40.0	10.2	4.7	-	0.0	4.4	-	9.7	9.9	-	-	-
100.0	45.0	0.0	0.0	-	9.8	0.0	-	5.0	30.9	-	-	-
100.0	60.0	0.0	0.0	-	0.0	0.0	-	4.9	9.4	-	-	-
100.0	70.0	0.0	0.0	0.0	0.0	0.0	-	10.1	8.7	-	-	-
100.0	80.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	35.0	0.0	5.1	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	9.8	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	5.3	0.0	-	0.0	0.0	-	5.4	0.0	-	-	-
103.3	60.0	5.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
103.3	80.0	5.5	0.0	0.0	-	0.0	-	9.9	0.0	-	-	-
106.7	60.0	0.0	0.0	5.2	-	9.8	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	4.9	-	10.3	0.0	-	-	-
106.7	80.0	0.0	10.7	5.1	-	0.0	-	11.0	0.0	-	-	-
110.0	40.0	0.0	0.0	4.7	-	2.5	-	0.0	0.0	-	-	-
110.0	45.0	0.0	5.1	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	10.4	-	0.0	0.0	-	-	-
110.0	60.0	0.0	0.0	9.6	-	0.0	-	0.0	0.0	-	-	-
113.3	45.0	5.4	-	4.8	-	0.0	-	0.0	0.0	0.0	-	-
113.3	50.0	0.0	-	10.2	-	0.0	-	-	-	0.0	-	-
113.3	70.0	0.0	-	4.3	-	0.0	-	-	-	0.0	-	-
116.7	60.0	0.0	-	-	-	4.7	-	-	-	0.0	-	-
126.7	50.0	0.0	-	-	-	9.4	-	-	-	0.0	-	-

TABLE 4. (cont.)

*Lestidiops ringens* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
133.3	60.0	5.1	-	-	-	0.0	-	-	-	-	-	-

*Notolepis risso*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	90.0	0.0	0.0	0.0	-	0.0	5.2	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	5.2	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	5.2	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	4.5	-	0.0	0.0	-	-	-

*Aulopus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	70.0	4.9	-	-	-	0.0	-	-	-	0.0	-	-

*Scopelosaurus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	60.0	0.0	0.0	-	0.0	0.0	-	5.3	-	-	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	12.6	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	0.0	-	10.4	-	-	-
80.0	70.0	0.0	0.0	-	-	0.0	0.0	-	12.2	-	-	-
93.3	90.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
100.0	90.0	0.0	0.0	4.6	-	4.5	0.0	0.0	0.0	-	-	-
106.7	70.0	4.9	0.0	3.9	-	0.0	-	0.0	0.0	-	-	-
113.3	80.0	0.0	-	4.8	-	0.0	-	-	-	0.0	-	-

## Scopelarchidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	70.0	0.0	-	-	-	4.3	-	-	-	9.9	-	-

*Benthalbella dentata*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	90.0	0.0	-	0.0	-	10.2	-	-	0.0	-	-	-
86.7	90.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
96.7	60.0	0.0	0.0	-	15.2	0.0	-	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	-	10.4	0.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Rosenblattichthys volucris*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	80.0	9.7	-	0.0	-	-	-	0.0	-	-	-	-
80.0	70.0	0.0	5.1	-	-	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	10.6	-	0.0	-	-	-
83.3	90.0	0.0	0.0	-	-	0.0	4.8	-	0.0	-	-	-
86.7	60.0	-	4.8	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	5.2	0.0	-	0.0	-	-	-
96.7	70.0	0.0	0.0	0.0	-	0.0	-	0.0	5.0	-	-	-
103.3	60.0	10.6	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
106.7	80.0	0.0	0.0	0.0	-	5.5	-	0.0	0.0	-	-	-

*Scopelarchus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	80.0	0.0	-	0.0	-	0.0	-	-	12.6	-	-	-
76.7	80.0	0.0	0.0	0.0	-	5.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	4.4	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	0.0	4.7	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	55.0	0.0	0.0	0.0	-	0.0	10.6	-	0.0	-	-	-
100.0	60.0	0.0	0.0	-	0.0	0.0	-	4.8	0.0	-	-	-
103.3	80.0	5.4	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	0.0	-	9.7	0.0	0.0	-	-
116.7	50.0	10.9	-	-	4.8	0.0	-	-	-	0.0	-	-
116.7	60.0	4.9	-	-	-	0.0	-	-	-	0.0	-	-
126.7	50.0	0.0	-	-	-	4.7	-	-	-	-	-	-

## Myctophidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	70.0	-	-	0.0	-	0.0	-	29.2	-	-	-	-
63.3	60.0	0.0	0.0	-	0.0	0.0	-	5.0	-	-	-	-
63.3	80.0	0.0	-	0.0	-	-	-	20.9	-	-	-	-
66.7	50.0	9.8	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	55.0	0.0	0.0	-	0.0	0.0	-	5.5	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	0.0	-	-	-	-
66.7	90.0	0.0	-	18.0	-	-	-	0.0	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	9.7	-	0.0	0.0	-	-	-
70.0	80.0	4.4	-	0.0	-	0.0	-	0.0	0.0	-	-	-
70.0	90.0	0.0	-	10.2	-	0.0	-	-	0.0	-	-	-
73.3	60.0	0.0	0.0	-	0.0	0.0	-	-	0.0	-	-	-
73.3	80.0	0.0	0.0	4.5	-	0.0	20.5	-	0.0	-	-	-
73.3	90.0	0.0	0.0	0.0	-	0.0	11.3	-	0.0	-	-	-
73.3	100.0	0.0	0.0	0.0	-	14.6	0.0	-	15.2	-	-	-
76.7	55.0	0.0	0.0	-	-	-	5.1	-	10.7	-	-	-

TABLE 4. (cont.)

## Myctophidae (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	60.0	0.0	0.0	-	0.0	9.7	0.0	-	0.0	-	-	-
76.7	70.0	0.0	10.2	0.0	-	0.0	0.0	-	4.9	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	24.6	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	-	10.4	36.5	-	10.1	-	-	-
80.0	51.0	0.0	0.0	-	0.0	0.0	0.0	-	10.0	-	-	-
80.0	60.0	0.0	8.4	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	70.0	0.0	5.1	-	-	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	8.7	-	0.0	0.0	-	5.1	-	-	-
80.0	90.0	0.0	0.0	4.9	-	5.5	0.0	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	10.9	-	-	-	-	-
83.3	51.0	0.0	0.0	0.0	-	30.1	0.0	-	0.0	-	-	-
83.3	55.0	0.0	0.0	0.0	-	0.0	18.8	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	10.8	9.2	-	5.1	-	-	-
83.3	90.0	0.0	0.0	-	-	5.3	33.8	-	10.0	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	37.4	-	0.0	-	-	-
86.7	55.0	-	0.0	10.8	-	9.4	27.1	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	8.1	-	0.0	-	-	-
86.7	80.0	-	0.0	0.0	-	0.0	10.7	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	0.0	9.5	-	0.0	-	-	-
86.7	100.0	-	-	-	-	-	19.8	-	-	-	-	-
90.0	53.0	-	0.0	0.0	-	11.1	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	10.3	0.0	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	10.3	0.0	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	0.0	0.0	-	10.2	-	-	-
96.7	30.0	0.0	0.0	-	0.0	2.1	-	0.0	0.0	-	-	-
96.7	32.0	5.3	0.0	-	0.0	15.5	-	0.0	0.0	-	-	-
96.7	35.0	0.0	9.4	-	0.0	9.2	-	0.0	0.0	-	-	-
96.7	40.0	0.0	0.0	-	4.8	4.6	-	0.0	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	40.1	-	0.0	10.0	-	-	-
96.7	50.0	-	0.0	-	0.0	9.5	-	0.0	0.0	-	-	-
96.7	55.0	0.0	0.0	-	0.0	0.0	-	10.5	0.0	-	-	-
96.7	60.0	0.0	0.0	-	0.0	57.5	-	5.3	10.5	-	-	-
96.7	70.0	0.0	0.0	0.0	-	4.5	-	0.0	10.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	13.0	-	5.1	8.9	-	-	-
96.7	90.0	0.0	0.0	4.3	-	0.0	-	4.9	10.0	-	-	-
100.0	45.0	5.2	0.0	-	0.0	32.3	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	0.0	-	0.0	9.8	-	-	-
100.0	60.0	0.0	0.0	-	0.0	0.0	-	0.0	4.7	-	-	-
100.0	70.0	0.0	0.0	0.0	-	0.0	-	4.9	0.0	-	-	-
100.0	80.0	5.4	0.0	0.0	-	22.7	-	5.1	0.0	-	-	-
100.0	90.0	0.0	0.0	13.7	-	0.0	-	10.3	4.8	-	-	-
103.3	35.0	0.0	5.1	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	0.0	-	5.6	0.0	-	-	-
103.3	45.0	0.0	0.0	29.4	-	0.0	-	0.0	0.0	-	-	-
103.3	60.0	5.3	0.0	-	9.6	39.5	-	10.9	23.9	-	-	-



TABLE 4. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3		0.0	0.0	0.0		5.2		5.5	0.0			
103.3		0.0	0.0	18.0		0.0		0.0	0.0			
103.3								5.4				
106.7		0.0	0.0	0.0		5.1		0.0	0.0			
106.7		0.0	5.1	0.0		0.0		0.0	0.0			
106.7		0.0	0.0	4.9		0.0		15.4	0.0			
106.7		0.0	0.0	0.0		8.8		0.0	0.0			
106.7		0.0	0.0	0.0		4.7		0.0	0.0			
106.7		0.0	0.0	0.0		9.8		0.0	0.0			
106.7		0.0	0.0	19.6		0.0		80.4	0.0			
106.7		0.0	0.0	0.0		0.0		0.0	4.9			
106.7		0.0	0.0	0.0		5.5		22.1	9.3			
110.0				4.3		0.0						
110.0		5.2	0.0	4.7		0.0		4.9	25.6			
110.0		0.0	0.0	0.0		21.3		0.0	9.5			
110.0		10.6	5.1	0.0		41.5		0.0	10.1			
110.0		0.0	0.0	0.0		0.0		5.6		0.0		
110.0		0.0	0.0	0.0		19.6		0.0		0.0		
110.0		0.0	0.0	0.0		10.0		0.0		0.0		
110.0		0.0		0.0		0.0				14.9		
113.3		0.0		0.0		9.6				25.1		
113.3		0.0		0.0		42.8				15.1		
113.3		0.0		5.1		0.0				4.8		
113.3		0.0		0.0		18.3				9.7		
113.3		22.9		0.0		25.1				0.0		
113.3		5.4		0.0		5.3				0.0		
116.7		0.0			0.0	31.3				0.0		
116.7		0.0			0.0	14.9				0.0		
116.7		0.0			0.0	0.0				8.9		
116.7		0.0			0.0	9.6				0.0		
116.7		0.0				4.7				16.2		
116.7		0.0				9.8				13.1		
116.7		0.0				14.8				9.8		
120.0		0.0				0.0				8.8		
120.0		0.0				15.8				19.8		
120.0		5.3				89.1				0.0		
120.0		4.9				30.4				9.9		
123.3		0.0			0.0	0.0				5.0		
123.3		0.0			0.0	22.9				0.0		
123.3		0.0			0.0	34.8						
123.3		0.0			0.0	32.1						
126.7		4.6				0.0						
126.7		0.0				31.7						
126.7		5.0				4.7						
126.7		0.0			0.0	44.3						
130.0		0.0			4.3	0.0						
130.0		0.0				29.9						

TABLE 4. (cont.)

## Myctophidae (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
130.0	50.0	0.0	-	-	-	51.6	-	-	-	-	-	-
130.0	60.0	0.0	-	-	-	32.6	-	-	-	-	-	-
133.3	35.0	0.0	-	-	-	108.4	-	-	-	-	-	-
133.3	50.0	4.8	-	-	-	23.4	-	-	-	-	-	-
133.3	60.0	0.0	-	-	-	19.4	-	-	-	-	-	-

*Ceratoscopelus townsendi*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	70.0	-	-	15.7	-	0.0	-	0.0	-	-	-	-
63.3	90.0	5.2	-	0.0	-	-	-	0.0	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	0.0	-	-	-	-
66.7	90.0	4.8	-	0.0	-	-	-	0.0	-	-	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	50.3	-	-	-
70.0	90.0	14.6	-	0.0	-	0.0	-	-	0.0	-	-	-
73.3	70.0	0.0	9.8	0.0	-	0.0	-	-	0.0	-	-	-
76.7	90.0	0.0	5.0	0.0	-	10.4	-	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	22.6	-	-	45.8	-	-	-
80.0	90.0	10.3	16.0	0.0	-	0.0	-	-	26.3	-	-	-
80.0	100.0	-	-	-	-	16.4	-	-	9.4	-	-	-
83.3	70.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	21.6	-	-	30.3	-	-	-
83.3	90.0	0.0	20.0	-	-	15.9	-	-	70.1	-	-	-
86.7	90.0	-	0.0	-	-	19.9	-	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	0.0	-	-	10.1	-	-	-
90.0	70.0	-	0.0	0.0	-	5.1	-	-	0.0	-	-	-
90.0	90.0	-	16.8	-	-	0.0	-	-	0.0	-	-	-
93.3	70.0	-	5.0	-	-	0.0	-	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	5.0	-	-	5.1	-	-	-
93.3	100.0	-	-	-	-	90.5	-	-	-	-	-	-
96.7	40.0	0.0	0.0	-	0.0	0.0	-	0.0	9.8	-	-	-
96.7	80.0	4.8	0.0	4.3	0.0	0.0	-	0.0	4.4	-	-	-
96.7	90.0	0.0	15.8	0.0	-	0.0	-	19.7	0.0	-	-	-
96.7	100.0	-	-	-	-	-	-	5.1	-	-	-	-
100.0	45.0	0.0	0.0	-	0.0	9.0	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	4.6	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	0.0	0.0	0.0	-	0.0	4.4	-	-	-
100.0	80.0	0.0	4.8	4.2	-	0.0	-	5.1	0.0	-	-	-
100.0	90.0	24.4	15.7	50.3	-	0.0	-	31.0	24.0	-	-	-
103.3	40.0	0.0	4.9	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	4.9	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	-	5.2	0.0	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	-	4.8	54.3	-	0.0	4.8	-	-	-
103.3	70.0	0.0	0.0	17.9	-	15.6	-	0.0	5.0	-	-	-
103.3	80.0	0.0	9.9	63.0	-	0.0	-	9.9	0.0	-	-	-

TABLE 4. (cont.)

<i>Ceratoscopelus townsendi</i> (cont.)												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	60.0	0.0	0.0	0.0	-	9.8	-	0.0	0.0	-	-	-
106.7	70.0	9.7	0.0	15.6	-	0.0	-	0.0	9.8	-	-	-
106.7	80.0	20.7	48.1	5.1	-	21.9	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	5.2	-	0.0	0.0	-	-	-
110.0	70.0	0.0	0.0	0.0	-	9.8	-	0.0	0.0	4.9	-	-
110.0	80.0	5.5	0.0	0.0	-	20.0	-	0.0	13.6	0.0	-	-
113.3	40.0	0.0	-	4.7	-	0.0	-	-	0.0	0.0	-	-
113.3	45.0	0.0	-	0.0	-	4.8	-	-	0.0	4.6	-	-
113.3	70.0	0.0	-	8.6	-	0.0	-	-	0.0	0.0	-	-
113.3	80.0	10.9	-	0.0	-	5.3	-	-	0.0	0.0	-	-
116.7	50.0	10.9	-	0.0	0.0	0.0	-	-	0.0	5.4	-	-
116.7	60.0	4.9	-	-	-	0.0	-	-	8.7	0.0	-	-
116.7	70.0	0.0	-	-	-	0.0	-	-	9.8	0.0	-	-
116.7	80.0	0.0	-	-	-	0.0	-	-	0.0	0.0	-	-
120.0	60.0	26.3	-	-	-	0.0	-	-	0.0	0.0	-	-
120.0	70.0	4.9	-	-	-	4.3	-	-	0.0	0.0	-	-
120.0	80.0	40.6	-	-	-	0.0	-	-	0.0	14.1	-	-
123.3	60.0	14.9	-	-	-	4.6	-	-	-	-	-	-
126.7	50.0	0.0	-	-	0.0	37.5	-	-	-	-	-	-
130.0	35.0	0.0	-	-	0.0	57.3	-	-	-	-	-	-
130.0	60.0	0.0	-	-	-	4.7	-	-	-	-	-	-
<i>Diaphus</i> spp.												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	60.0	0.0	0.0	-	0.0	0.0	-	30.2	-	-	-	-
63.3	70.0	0.0	-	0.0	-	0.0	-	29.3	-	-	-	-
63.3	80.0	0.0	-	0.0	-	-	-	41.8	-	-	-	-
66.7	60.0	0.0	0.0	0.0	0.0	0.0	-	11.6	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	5.3	-	-	-	-
66.7	90.0	0.0	-	0.0	-	-	-	0.0	-	-	-	-
70.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5	21.8	-	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	37.7	-	-	-
70.0	90.0	0.0	-	0.0	-	0.0	-	-	20.6	-	-	-
73.3	53.0	0.0	0.0	0.0	0.0	0.0	0.0	-	10.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	0.0	-	53.8	-	-	-
73.3	90.0	0.0	0.0	0.0	-	0.0	0.0	-	15.2	-	-	-
76.7	55.0	0.0	0.0	0.0	0.0	0.0	0.0	-	10.7	-	-	-
76.7	70.0	0.0	0.0	0.0	-	0.0	0.0	-	49.2	-	-	-
80.0	70.0	0.0	0.0	0.0	-	0.0	0.0	-	12.2	-	-	-
80.0	80.0	0.0	0.0	0.0	-	5.7	0.0	-	5.1	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	0.0	-	5.3	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	21.9	-	0.0	-	-	-
83.3	70.0	0.0	0.0	0.0	-	0.0	0.0	-	37.4	-	-	-

TABLE 4. (cont.)

*Diaphus* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	50.0	-	0.0	0.0	-	9.5	0.0	-	0.0	-	-	-
86.7	80.0	-	0.0	-	-	0.0	0.0	-	22.0	-	-	-
86.7	90.0	-	0.0	-	-	0.0	0.0	-	11.0	-	-	-
93.3	70.0	-	0.0	-	-	0.0	11.5	-	0.0	-	-	-
96.7	50.0	-	4.8	-	0.0	0.0	-	0.0	0.0	-	-	-
123.3	42.0	5.1	-	-	0.0	0.0	-	-	-	0.0	-	-

*Lampadena urophaos*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	90.0	0.0	0.0	0.0	-	0.0	-	0.0	10.0	-	-	-
100.0	90.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	0.0	4.4	-	-	-
106.7	70.0	0.0	0.0	0.0	-	0.0	-	0.0	9.8	-	-	-
106.7	80.0	0.0	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	80.0	0.0	0.0	0.0	-	0.0	-	0.0	-	4.5	-	-

*Lampanyctus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	65.0	-	-	-	-	-	-	4.8	-	-	-	-
60.0	70.0	-	-	0.0	-	0.0	-	19.4	-	-	-	-
63.3	52.0	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	0.0	0.0	-	10.1	-	-	-	-
63.3	70.0	0.0	-	8.3	-	0.0	-	4.9	-	-	-	-
63.3	80.0	0.0	-	0.0	-	-	-	10.5	-	-	-	-
63.3	90.0	0.0	-	10.4	-	-	-	0.0	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	0.0	-	-	-	-
66.7	90.0	4.8	-	7.2	-	-	-	10.2	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	0.0	9.4	-	0.0	-	-	-
70.0	70.0	0.0	-	10.3	-	0.0	0.0	-	0.0	-	-	-
70.0	80.0	0.0	-	9.4	-	0.0	-	-	12.6	-	-	-
70.0	90.0	0.0	-	0.0	-	10.2	-	-	20.6	-	-	-
73.3	60.0	0.0	5.4	-	0.0	0.0	20.5	-	0.0	-	-	-
73.3	80.0	0.0	4.5	9.0	0.0	0.0	0.0	-	32.1	-	-	-
73.3	90.0	0.0	0.0	0.0	-	0.0	0.0	-	5.1	-	-	-
73.3	100.0	-	-	-	-	-	5.1	-	-	-	-	-
76.7	55.0	9.9	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	60.0	0.0	9.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	70.0	0.0	10.2	0.0	0.0	0.0	0.0	-	4.9	-	-	-
76.7	80.0	0.0	0.0	0.0	-	14.9	0.0	-	10.4	-	-	-
76.7	90.0	0.0	0.0	0.0	-	0.0	0.0	-	20.2	-	-	-
76.7	100.0	-	-	30.1	-	0.0	5.2	-	-	-	-	-
80.0	70.0	0.0	0.0	-	-	0.0	14.1	-	-	-	-	-
							24.3	-	12.2	-	-	-

TABLE 4. (cont.)

*Lampanyctus* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	80.0	0.0	0.0	0.0	-	11.3	0.0	-	5.1	-	-	-
80.0	90.0	0.0	5.3	0.0	-	0.0	0.0	-	21.0	-	-	-
83.3	51.0	0.0	0.0	10.3	-	0.0	0.0	-	0.0	-	-	-
83.3	55.0	0.0	0.0	10.1	-	0.0	0.0	-	0.0	-	-	-
83.3	60.0	0.0	9.7	-	-	0.0	0.0	-	10.8	-	-	-
83.3	70.0	11.7	0.0	-	-	0.0	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	0.0	-	5.1	-	-	-
83.3	90.0	0.0	0.0	10.2	-	15.9	0.0	-	10.0	-	-	-
86.7	60.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	-	20.8	-	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	-	10.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	-	0.0	0.0	-	0.0	9.1	-	0.0	-	-	-
90.0	45.0	-	0.0	5.1	-	0.0	0.0	-	0.0	-	-	-
90.0	53.0	-	9.7	0.0	-	11.1	0.0	-	0.0	-	-	-
90.0	60.0	-	0.0	5.0	-	0.0	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	9.6	-	0.0	-	-	-
90.0	80.0	-	24.1	-	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	-	11.2	-	-	15.5	0.0	-	0.0	-	-	-
93.3	40.0	-	0.0	29.8	-	0.0	0.0	-	0.0	-	-	-
93.3	55.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	60.0	-	10.5	0.0	-	0.0	0.0	-	19.2	-	-	-
93.3	70.0	-	0.0	-	-	13.8	11.5	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	25.1	0.0	-	0.0	-	-	-
93.3	90.0	0.0	4.9	-	-	0.0	0.0	-	0.0	-	-	-
96.7	35.0	0.0	18.8	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	45.0	0.0	15.2	-	47.8	0.0	-	0.0	0.0	-	-	-
96.7	50.0	-	0.0	-	0.0	9.5	-	0.0	0.0	-	-	-
96.7	55.0	10.6	10.2	-	0.0	13.6	-	0.0	0.0	-	-	-
96.7	60.0	0.0	0.0	-	10.1	0.0	-	0.0	0.0	-	-	-
96.7	90.0	0.0	0.0	8.7	-	0.0	-	0.0	0.0	-	-	-
96.7	100.0	-	-	-	-	-	-	5.1	-	-	-	-
100.0	35.0	5.3	0.0	-	0.0	0.0	-	10.4	0.0	-	-	-
100.0	40.0	0.0	18.6	-	0.0	5.9	-	9.7	0.0	-	-	-
100.0	45.0	10.4	0.0	-	14.7	0.0	-	0.0	0.0	-	-	-
100.0	50.0	0.0	19.6	-	20.1	36.9	-	19.7	0.0	-	-	-
100.0	60.0	5.1	5.2	-	24.1	0.0	-	4.8	0.0	-	-	-
100.0	70.0	10.6	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	80.0	5.4	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	90.0	4.9	10.5	0.0	-	18.1	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	5.1	-	0.0	-	38.1	0.0	-	-	-
103.3	40.0	5.1	14.8	10.1	-	2.6	-	5.6	0.0	-	-	-
103.3	45.0	0.0	10.5	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	50.0	0.0	15.6	0.0	15.6	0.0	-	5.4	0.0	-	-	-
103.3	60.0	15.9	4.8	-	0.0	29.6	-	0.0	0.0	-	-	-
103.3	70.0	0.0	10.2	22.4	-	10.4	-	5.5	15.1	-	-	-

TABLE 4. (cont.)

*Lampanyctus* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	80.0	0.0	4.9	18.0	-	9.3	-	0.0	0.0	-	-	-
103.3	90.0	-	-	-	-	-	-	10.9	-	-	-	-
106.7	31.0	0.0	0.0	0.0	-	2.1	-	0.0	0.0	-	-	-
106.7	35.0	0.0	5.1	0.0	-	5.4	-	5.5	0.0	-	-	-
106.7	40.0	0.0	0.0	14.7	-	0.0	-	10.2	0.0	-	-	-
106.7	45.0	0.0	9.7	10.2	-	17.5	-	9.7	0.0	-	-	-
106.7	50.0	0.0	0.0	14.3	-	9.3	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	15.6	-	0.0	-	0.0	13.2	-	-	-
106.7	70.0	4.9	0.0	15.6	-	34.2	-	5.1	0.0	-	-	-
106.7	80.0	0.0	0.0	20.2	-	0.0	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	4.9	-	11.8	-	0.0	0.0	-	-	-
110.0	40.0	5.2	0.0	0.0	-	9.8	-	0.0	4.3	-	-	-
110.0	45.0	5.7	5.0	9.8	-	31.9	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	10.0	-	0.0	-	0.0	0.0	-	-	-
110.0	60.0	0.0	30.5	9.6	-	5.0	-	0.0	0.0	0.0	-	-
110.0	70.0	0.0	0.0	20.8	-	4.9	-	0.0	0.0	0.0	-	-
110.0	80.0	0.0	0.0	8.6	-	5.0	-	0.0	0.0	0.0	-	-
113.3	35.0	0.0	-	9.8	-	0.0	-	-	-	0.0	-	-
113.3	40.0	0.0	-	4.7	-	9.6	-	-	-	0.0	-	-
113.3	45.0	5.4	-	9.7	-	0.0	-	-	-	0.0	-	-
113.3	50.0	5.3	-	0.0	-	15.2	-	-	-	0.0	-	-
113.3	60.0	0.0	-	4.8	-	9.2	-	-	-	14.5	-	-
113.3	70.0	0.0	-	4.3	-	10.0	-	-	-	0.0	-	-
113.3	80.0	10.9	-	0.0	-	5.3	-	-	-	0.0	-	-
116.7	40.0	0.0	-	-	0.0	19.8	-	-	-	0.0	-	-
116.7	45.0	5.2	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	60.0	4.9	-	-	-	9.4	-	-	-	0.0	-	-
116.7	70.0	0.0	-	-	-	14.6	-	-	-	0.0	-	-
116.7	80.0	5.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	60.0	5.3	-	-	-	0.0	-	-	-	19.8	-	-
120.0	70.0	0.0	-	-	-	4.3	-	-	-	0.0	-	-
123.3	36.0	4.1	-	-	0.0	0.0	-	-	-	0.0	-	-
123.3	37.0	0.0	-	-	0.0	8.6	-	-	-	0.0	-	-
123.3	42.0	5.1	-	-	0.0	0.0	-	-	-	0.0	-	-
123.3	45.0	0.0	-	-	0.0	8.9	-	-	-	0.0	-	-
123.3	50.0	0.0	-	-	0.0	23.2	-	-	-	0.0	-	-
123.3	60.0	0.0	-	-	4.8	4.6	-	-	-	-	-	-
126.7	50.0	10.0	-	-	0.0	18.8	-	-	-	-	-	-
126.7	60.0	10.1	-	-	0.0	4.9	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	5.2	-	-	-	-	-	-
133.3	60.0	0.0	-	-	-	9.7	-	-	-	-	-	-
136.7	50.0	5.1	-	-	-	-	-	-	-	-	-	-
136.7	60.0	4.9	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

<i>Lampanyctus regalis</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	80.0	-	-	0.0	-	0.0	-	8.3	-	-	-	-
63.3	90.0	0.0	-	0.0	-	-	-	11.6	-	-	-	-
70.0	70.0	0.0	-	0.0	-	11.2	0.0	-	0.0	-	-	-
73.3	60.0	0.0	0.0	-	0.0	0.0	0.0	-	11.0	-	-	-
76.7	70.0	0.0	0.0	0.0	-	0.0	0.0	-	14.8	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	0.0	-	5.3	-	-	-
83.3	70.0	0.0	0.0	-	-	0.0	0.0	-	9.4	-	-	-
83.3	90.0	0.0	0.0	-	-	0.0	0.0	-	10.0	-	-	-
96.7	40.0	0.0	0.0	-	0.0	0.0	-	0.0	4.9	-	-	-
96.7	45.0	0.0	0.0	-	0.0	0.0	-	0.0	5.0	-	-	-
100.0	60.0	0.0	0.0	-	0.0	0.0	-	0.0	4.7	5.4	-	-
116.7	60.0	0.0	-	-	-	-	-	-	-	9.9	-	-
120.0	50.0	0.0	-	-	-	-	-	-	-	-	-	-
133.3	50.0	0.0	-	-	-	4.7	-	-	-	-	-	-

<i>Lampanyctus ritteri</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	4.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	52.0	31.1	0.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	70.0	0.0	-	25.0	-	33.8	-	0.0	-	-	-	-
63.3	80.0	0.0	-	9.0	-	-	-	0.0	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	0.0	0.0	-	21.8	-	-	-
70.0	90.0	4.8	5.1	0.0	0.0	10.2	0.0	-	0.0	-	-	-
73.3	53.0	0.0	11.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	70.0	9.2	0.0	4.8	-	0.0	0.0	-	0.0	-	-	-
76.7	80.0	0.0	4.9	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	20.8	-	0.0	-	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	74.0	-	0.0	-	-	-
83.3	60.0	0.0	0.0	0.0	-	0.0	16.6	-	0.0	-	-	-
83.3	80.0	0.0	9.7	-	-	10.6	0.0	-	0.0	-	-	-
83.3	90.0	0.0	0.0	-	-	21.6	0.0	-	0.0	-	-	-
86.7	33.0	0.0	0.0	-	-	0.0	9.7	-	0.0	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	0.0	-	7.5	-	-	-
86.7	55.0	-	4.5	0.0	-	9.5	0.0	-	4.3	-	-	-
86.7	60.0	-	0.0	0.0	-	28.2	0.0	-	0.0	-	-	-
86.7	70.0	-	14.5	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	-	0.0	0.0	-	42.0	0.0	-	0.0	-	-	-
86.7	100.0	-	0.0	-	-	0.0	23.8	-	0.0	-	-	-
90.0	45.0	-	0.0	0.0	-	9.3	0.0	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	0.0	9.7	-	0.0	-	-	-
90.0	60.0	-	0.0	10.1	-	16.3	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Lampanyctus ritteri* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	80.0	0.0	0.0	-	-	0.0	10.5	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	41.3	0.0	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	35.0	0.0	5.5	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	45.0	0.0	5.3	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	55.0	0.0	5.4	0.0	-	20.8	0.0	-	0.0	-	-	-
93.3	60.0	0.0	5.3	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	80.0	5.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
93.3	90.0	0.0	0.0	-	-	14.9	0.0	-	0.0	-	-	-
93.3	100.0	-	-	-	-	-	40.2	-	-	-	-	-
96.7	32.0	5.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	35.0	0.0	0.0	-	0.0	0.0	-	9.7	0.0	-	-	-
96.7	40.0	0.0	15.7	-	0.0	0.0	-	0.0	4.9	-	-	-
96.7	50.0	-	4.8	-	10.4	9.5	-	0.0	0.0	-	-	-
96.7	55.0	0.0	5.1	-	29.3	0.0	-	10.5	0.0	-	-	-
96.7	70.0	10.4	5.4	0.0	-	0.0	-	10.2	0.0	-	-	-
96.7	80.0	0.0	0.0	0.0	-	13.6	-	9.8	0.0	-	-	-
96.7	90.0	0.0	10.6	0.0	-	4.3	-	0.0	0.0	-	-	-
100.0	35.0	0.0	19.0	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	40.0	15.4	0.0	-	0.0	17.5	-	0.0	0.0	-	-	-
100.0	45.0	10.4	0.0	-	0.0	22.6	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	10.1	0.0	-	9.8	0.0	-	-	-
100.0	60.0	0.0	0.0	-	0.0	8.3	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	-	-	14.0	-	0.0	0.0	-	-	-
100.0	80.0	0.0	0.0	12.6	-	30.2	-	10.1	0.0	-	-	-
103.3	35.0	0.0	15.3	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	9.9	-	0.0	0.0	-	-	-
103.3	45.0	5.2	0.0	0.0	-	28.1	-	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	-	0.0	10.3	-	0.0	0.0	-	-	-
103.3	60.0	0.0	4.8	-	0.0	0.0	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
103.3	80.0	0.0	4.9	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	32.0	4.4	19.4	0.0	-	14.7	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	45.0	16.7	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	50.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	60.0	0.0	4.8	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	4.9	4.5	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	40.0	0.0	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	50.0	0.0	46.3	0.0	-	0.0	-	14.6	0.0	-	-	-
110.0	70.0	0.0	21.6	0.0	-	0.0	-	0.0	0.0	-	-	-
116.7	60.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
133.3	40.0	10.8	-	-	-	0.0	-	-	-	-	-	-
											0.0	
											0.0	



TABLE 4. (cont.)

*Notolychnus valdiviae*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	80.0	0.0	0.0	27.0	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	11.7	-	0.0	-	0.0	0.0	-	-	-

*Notoscopelus resplendens*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	90.0	0.0	0.0	0.0	-	0.0	5.2	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	17.0	0.0	-	0.0	-	-	-
103.3	70.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
103.3	80.0	0.0	0.0	9.0	-	0.0	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	7.8	-	0.0	-	0.0	0.0	-	-	-
113.3	50.0	0.0	-	0.0	-	10.1	-	0.0	0.0	0.0	-	-
113.3	80.0	0.0	-	0.0	-	5.3	-	-	-	0.0	-	-

*Stenobrachius leucopsarus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	12.0	-	37.3	0.0	-	0.0	-	-	-	-
60.0	55.0	-	24.6	-	48.0	0.0	-	0.0	-	-	-	-
60.0	60.0	-	10.3	-	-	57.7	-	5.0	-	-	-	-
60.0	65.0	-	-	-	-	-	-	43.2	-	-	-	-
60.0	70.0	-	-	369.4	-	226.3	-	29.2	-	-	-	-
60.0	80.0	-	-	137.2	-	43.1	-	165.9	-	-	-	-
60.0	90.0	-	-	72.9	-	28.8	-	-	-	-	-	-
63.3	50.0	0.0	0.0	-	44.4	0.0	-	0.0	-	-	-	-
63.3	52.0	41.5	32.0	-	180.2	0.0	-	0.0	-	-	-	-
63.3	55.0	101.9	46.8	-	184.3	31.8	-	20.4	-	-	-	-
63.3	60.0	19.2	58.5	-	144.6	57.9	-	25.9	-	-	-	-
63.3	70.0	0.0	-	25.0	-	78.7	-	48.7	-	-	-	-
63.3	80.0	27.0	-	197.1	-	-	-	0.0	-	-	-	-
63.3	90.0	0.0	-	167.0	-	-	-	0.0	-	-	-	-
66.7	49.0	0.0	19.5	-	279.6	0.0	-	47.7	-	-	-	-
66.7	50.0	58.7	54.3	-	583.5	0.0	-	0.0	-	-	-	-
66.7	55.0	16.8	9.8	-	174.6	252.0	-	162.0	-	-	-	-
66.7	60.0	24.6	39.3	-	100.6	33.9	-	49.7	-	-	-	-
66.7	65.0	8.6	-	-	-	-	-	74.4	-	-	-	-
66.7	70.0	0.0	-	239.6	-	382.3	-	10.4	-	-	-	-
66.7	80.0	0.0	-	42.1	-	-	-	5.8	-	-	-	-
70.0	51.0	0.0	17.8	-	70.6	66.8	-	0.0	0.0	-	-	-
70.0	53.0	10.5	93.2	-	30.4	378.1	-	63.6	63.6	-	-	-
70.0	60.0	0.0	18.2	-	237.1	0.0	37.7	54.4	54.4	-	-	-
70.0	65.0	0.0	-	-	-	-	29.0	-	-	-	-	-
70.0	70.0	0.0	-	51.7	-	0.0	10.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Stenobrachius leucopsarus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	80.0	0.0	-	84.4	-	11.3	-	-	0.0	-	-	-
70.0	90.0	0.0	-	10.2	-	20.4	-	-	20.6	-	-	-
73.3	50.0	0.0	0.0	-	14.2	44.3	0.0	-	0.0	-	-	-
73.3	53.0	0.0	30.5	-	30.1	152.4	0.0	-	10.0	-	-	-
73.3	60.0	10.5	32.2	-	50.3	126.4	41.0	-	11.0	-	-	-
73.3	65.0	0.0	-	-	-	-	130.5	-	-	-	-	-
73.3	70.0	0.0	98.0	9.1	-	20.2	-	-	64.6	-	-	-
73.3	80.0	0.0	22.7	53.8	-	29.7	22.6	-	0.0	-	-	-
73.3	90.0	0.0	21.8	145.2	-	24.3	0.0	-	10.1	-	-	-
76.7	48.0	4.4	0.0	-	24.3	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	102.9	-	40.6	85.0	31.5	-	42.1	-	-	-
76.7	55.0	9.9	44.1	-	92.2	40.1	62.1	-	21.3	-	-	-
76.7	60.0	0.0	9.0	-	110.4	29.2	283.2	-	53.0	-	-	-
76.7	70.0	0.0	10.2	47.9	-	97.8	127.7	-	93.5	-	-	-
76.7	80.0	10.5	4.9	0.0	-	5.0	197.0	-	10.4	-	-	-
76.7	90.0	0.0	5.0	110.2	-	0.0	10.4	-	0.0	-	-	-
80.0	51.0	0.0	0.0	-	8.3	53.2	0.0	-	0.0	-	-	-
80.0	55.0	10.0	64.4	-	350.9	95.8	29.3	-	11.4	-	-	-
80.0	60.0	0.0	16.9	-	84.5	50.4	48.2	-	11.5	-	-	-
80.0	70.0	0.0	0.0	-	-	204.8	36.5	-	0.0	-	-	-
80.0	80.0	0.0	30.6	4.4	-	0.0	95.1	-	0.0	-	-	-
80.0	90.0	0.0	0.0	19.8	-	0.0	11.1	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	16.4	-	0.0	-	-	-
82.0	46.0	0.0	19.4	20.4	-	56.6	10.9	-	0.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	10.3	0.0	-	0.0	-	-	-
83.3	42.0	0.0	4.9	75.0	-	32.6	19.2	-	0.0	-	-	-
83.3	51.0	10.3	16.6	0.0	-	30.1	0.0	-	0.0	-	-	-
83.3	55.0	10.7	0.0	20.3	-	86.4	0.0	-	22.4	-	-	-
83.3	60.0	0.0	29.0	-	-	53.0	51.6	-	21.7	-	-	-
83.3	70.0	0.0	0.0	-	-	71.1	9.1	-	0.0	-	-	-
83.3	80.0	0.0	10.5	-	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	-	9.0	28.9	-	0.0	0.0	-	0.0	-	-	-
86.7	35.0	-	64.8	224.7	-	123.1	9.3	-	0.0	-	-	-
86.7	40.0	-	194.6	74.2	-	64.3	0.0	-	0.0	-	-	-
86.7	45.0	-	28.3	57.9	-	73.0	0.0	-	0.0	-	-	-
86.7	50.0	-	4.5	58.1	-	38.1	0.0	-	4.3	-	-	-
86.7	55.0	-	15.4	0.0	-	65.8	27.1	-	9.7	-	-	-
86.7	60.0	-	0.0	30.7	-	0.0	121.4	-	21.8	-	-	-
86.7	80.0	-	5.2	-	-	0.0	21.4	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	10.0	47.6	-	0.0	-	-	-
90.0	28.0	-	15.0	46.9	-	0.0	0.0	-	0.0	-	-	-
90.0	30.0	-	10.1	18.2	-	77.3	0.0	-	10.6	-	-	-
90.0	37.0	-	10.6	129.0	-	22.9	0.0	-	0.0	-	-	-
90.0	45.0	-	9.9	46.3	-	0.0	11.1	-	0.0	-	-	-
90.0	53.0	-	29.1	5.1	-	0.0	19.5	-	30.4	-	-	-
90.0	60.0	-	0.0	0.0	-	0.0	46.3	-	0.0	-	-	-

TABLE 4. (cont.)

*Stenobrachius leucopsarus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	70.0	0.0	10.7	-	-	0.0	67.0	-	0.0	-	-	-
90.0	80.0	0.0	0.0	-	-	36.2	0.0	-	0.0	-	-	-
93.3	26.7	0.0	4.2	0.0	-	41.0	0.0	-	0.0	-	-	-
93.3	28.0	0.0	44.1	31.8	-	142.7	38.9	-	0.0	-	-	-
93.3	30.0	4.9	10.3	31.2	-	95.5	0.0	21.4	0.0	-	-	-
93.3	35.0	0.0	0.0	65.9	-	19.8	0.0	0.0	0.0	-	-	-
93.3	40.0	0.0	0.0	0.0	-	73.5	0.0	0.0	0.0	-	-	-
93.3	45.0	0.0	5.3	0.0	-	21.0	0.0	0.0	0.0	-	-	-
93.3	50.0	0.0	5.0	10.4	-	11.0	33.1	0.0	0.0	-	-	-
93.3	55.0	0.0	5.4	0.0	-	0.0	10.6	0.0	10.4	-	-	-
93.3	70.0	0.0	0.0	0.0	-	18.4	0.0	0.0	0.0	-	-	-
93.3	100.0	-	-	-	-	-	30.2	-	-	-	-	-
95.0	30.0	-	-	-	41.0	-	-	-	-	-	-	-
96.7	29.0	0.0	0.0	-	0.0	6.9	-	0.0	0.0	-	-	-
96.7	30.0	0.0	4.1	-	0.0	7.4	-	0.0	0.0	-	-	-
96.7	32.0	0.0	0.0	-	39.8	47.3	-	5.3	0.0	-	-	-
96.7	35.0	0.0	0.0	-	5.0	20.8	-	0.0	0.0	-	-	-
96.7	40.0	0.0	10.5	-	4.8	16.3	-	0.0	0.0	-	-	-
96.7	55.0	0.0	25.4	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	70.0	0.0	0.0	7.9	-	0.0	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	5.5	0.0	-	0.0	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	14.1	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	29.6	0.0	-	0.0	0.0	-	-	-
100.0	40.0	0.0	0.0	-	24.1	0.0	-	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	4.6	-	0.0	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	5.1	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	39.5	-	0.0	0.0	-	-	-
106.7	32.0	0.0	9.7	0.0	-	9.4	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	3.9	-	0.0	-	0.0	0.0	-	-	-
113.3	70.0	0.0	-	4.3	-	0.0	-	0.0	0.0	0.0	-	-

*Triphoturus mexicanus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	80.0	0.0	0.0	0.0	-	0.0	8.2	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	-	5.2	0.0	-	0.0	-	-	-
80.0	90.0	0.0	0.0	0.0	-	10.9	44.3	-	0.0	-	-	-
80.0	100.0	-	-	-	-	-	43.8	-	-	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	10.9	-	11.8	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	9.6	-	31.3	-	-	-
83.3	51.0	0.0	0.0	0.0	-	10.0	0.0	-	0.0	-	-	-
83.3	70.0	0.0	0.0	0.0	-	0.0	0.0	-	9.4	-	-	-
86.7	35.0	0.0	0.0	0.0	-	0.0	0.0	-	10.3	-	-	-
86.7	40.0	0.0	0.0	0.0	-	10.7	0.0	-	10.5	-	-	-

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	55.0	-	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-
86.7	80.0	-	0.0	-	-	0.0	21.4	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	0.0	4.8	-	11.0	-	-	-
86.7	100.0	-	-	-	-	-	5.0	-	-	-	-	-
90.0	28.0	-	0.0	0.0	-	0.0	0.0	-	9.1	-	-	-
90.0	45.0	-	0.0	0.0	-	0.0	11.1	-	11.2	-	-	-
90.0	53.0	-	0.0	0.0	-	33.4	9.7	-	0.0	-	-	-
90.0	60.0	-	0.0	0.0	-	59.7	23.2	-	9.7	-	-	-
90.0	70.0	-	0.0	-	-	0.0	19.2	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	0.0	52.4	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	0.0	42.0	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	5.4	-	-	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	0.0	-	76.6	-	-	-
93.3	35.0	-	0.0	0.0	-	0.0	9.8	-	43.5	-	-	-
93.3	40.0	-	0.0	0.0	-	0.0	25.9	-	19.9	-	-	-
93.3	45.0	-	0.0	0.0	-	0.0	0.0	-	52.6	-	-	-
93.3	50.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	55.0	-	0.0	0.0	-	51.9	0.0	-	0.0	-	-	-
93.3	70.0	-	0.0	-	-	0.0	206.7	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	25.1	20.2	-	41.0	-	-	-
93.3	90.0	0.0	0.0	-	-	0.0	37.3	-	20.5	-	-	-
93.3	100.0	-	-	-	-	-	5.0	-	-	-	-	-
96.7	30.0	-	0.0	-	0.0	0.0	-	28.0	0.0	-	-	-
96.7	32.0	0.0	0.0	-	0.0	0.0	-	37.0	29.3	-	-	-
96.7	35.0	0.0	0.0	-	0.0	0.0	-	58.1	27.2	-	-	-
96.7	40.0	0.0	0.0	-	0.0	0.0	-	31.9	152.5	-	-	-
96.7	45.0	0.0	0.0	-	19.1	0.0	-	79.7	10.0	-	-	-
96.7	50.0	-	0.0	-	5.2	19.0	-	10.1	0.0	-	-	-
96.7	55.0	-	0.0	-	0.0	22.7	-	10.5	0.0	-	-	-
96.7	60.0	0.0	0.0	-	10.1	0.0	-	42.0	0.0	-	-	-
96.7	70.0	0.0	0.0	0.0	-	22.1	-	29.6	15.1	-	-	-
96.7	80.0	0.0	0.0	0.0	-	13.6	-	71.5	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	0.0	-	19.7	0.0	-	-	-
96.7	100.0	-	-	-	-	-	-	30.8	-	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	-	5.1	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	0.0	-	9.9	0.0	-	-	-
100.0	35.0	0.0	0.0	-	0.0	0.0	-	93.2	42.0	-	-	-
100.0	40.0	0.0	0.0	-	0.0	73.1	-	165.6	19.8	-	-	-
100.0	45.0	0.0	0.0	-	4.9	49.7	-	194.2	72.1	-	-	-
100.0	50.0	0.0	0.0	-	10.1	83.0	-	59.1	88.1	-	-	-
100.0	60.0	0.0	0.0	-	4.8	45.5	-	67.3	4.7	-	-	-
100.0	70.0	5.3	0.0	0.0	-	51.3	-	127.9	82.8	-	-	-
100.0	80.0	0.0	0.0	0.0	-	0.0	-	429.3	99.2	-	-	-
100.0	90.0	0.0	0.0	0.0	-	0.0	-	103.4	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	9.5	-	-	-
103.3	35.0	0.0	5.1	0.0	-	24.5	-	70.7	83.0	-	-	-

TABLE 4. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	40.0	0.0	0.0	0.0	-	5.1	-	129.3	35.7	-	-	-
103.3	45.0	0.0	0.0	14.7	-	28.1	-	21.5	21.3	-	-	-
103.3	50.0	5.0	0.0	0.0	0.0	165.6	-	38.1	41.8	-	-	-
103.3	60.0	0.0	0.0	0.0	0.0	49.4	-	146.9	42.9	-	-	-
103.3	70.0	0.0	0.0	0.0	-	20.8	-	109.8	45.4	-	-	-
103.3	80.0	0.0	0.0	0.0	-	4.7	-	99.0	33.1	-	-	-
103.3	90.0	-	0.0	0.0	-	-	-	27.1	-	-	-	-
106.7	31.0	0.0	0.0	0.0	-	5.4	-	0.0	0.0	-	-	-
106.7	32.0	0.0	0.0	0.0	-	5.1	-	10.1	26.1	-	-	-
106.7	35.0	0.0	0.0	4.9	-	51.3	-	131.3	161.8	-	-	-
106.7	40.0	0.0	0.0	14.7	-	39.4	-	46.1	30.3	-	-	-
106.7	45.0	0.0	0.0	25.5	-	0.0	-	72.8	32.1	-	-	-
106.7	50.0	0.0	0.0	0.0	-	28.0	-	37.0	53.3	-	-	-
106.7	60.0	0.0	0.0	0.0	-	83.3	-	250.7	141.1	-	-	-
106.7	70.0	0.0	0.0	0.0	-	63.4	-	92.5	58.6	-	-	-
106.7	80.0	0.0	0.0	0.0	-	5.5	-	132.5	0.0	-	-	-
106.7	90.0	-	0.0	-	-	-	-	5.1	-	-	-	-
110.0	32.4	0.0	0.0	-	-	0.0	-	9.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	30.5	-	72.3	47.8	-	-	-
110.0	40.0	0.0	0.0	0.0	-	102.9	-	87.5	42.6	-	-	-
110.0	45.0	17.0	0.0	0.0	-	53.2	-	119.0	4.8	-	-	-
110.0	50.0	5.3	0.0	0.0	-	62.3	-	10.5	116.6	-	-	-
110.0	60.0	0.0	0.0	4.8	-	10.0	-	105.8	-	297.6	-	-
110.0	70.0	0.0	0.0	0.0	-	0.0	-	22.2	-	29.2	-	-
110.0	80.0	0.0	0.0	4.3	-	0.0	-	0.0	-	9.0	-	-
113.3	35.0	0.0	0.0	0.0	-	47.3	-	-	-	5.0	-	-
113.3	40.0	0.0	0.0	0.0	-	100.4	-	-	-	25.1	-	-
113.3	45.0	0.0	0.0	0.0	-	4.8	-	-	-	50.4	-	-
113.3	50.0	0.0	0.0	0.0	-	55.8	-	-	-	72.3	-	-
113.3	60.0	0.0	0.0	14.4	-	151.1	-	-	-	106.9	-	-
113.3	70.0	0.0	0.0	0.0	-	45.2	-	-	-	18.2	-	-
113.3	80.0	0.0	0.0	0.0	-	31.8	-	-	-	0.0	-	-
116.7	30.0	4.8	0.0	0.0	-	38.0	-	-	-	0.0	-	-
116.7	35.0	0.0	0.0	4.7	-	31.3	-	-	-	13.9	-	-
116.7	40.0	0.0	0.0	4.6	-	69.4	-	-	-	29.9	-	-
116.7	45.0	0.0	0.0	4.9	-	29.9	-	-	-	53.4	-	-
116.7	50.0	0.0	0.0	9.6	-	19.3	-	-	-	61.6	-	-
116.7	60.0	0.0	0.0	-	-	131.9	-	-	-	502.2	-	-
116.7	70.0	0.0	0.0	-	-	244.0	-	-	-	43.7	-	-
116.7	80.0	0.0	0.0	-	-	0.0	-	-	-	58.8	-	-
118.0	39.0	0.0	0.0	0.0	-	0.0	-	-	-	14.7	-	-
120.0	45.0	0.0	0.0	-	-	104.8	-	-	-	210.6	-	-
120.0	50.0	0.0	0.0	-	-	131.5	-	-	-	59.3	-	-
120.0	60.0	0.0	0.0	-	-	4.7	-	-	-	53.3	-	-
120.0	70.0	9.8	0.0	-	-	17.4	-	-	-	14.9	-	-
120.0	80.0	0.0	0.0	-	-	29.5	-	-	-	117.3	-	-

TABLE 4. (cont.)

*Tripnoturus mexicanus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
123.3	36.0	0.0	-	-	0.0	0.0	-	-	-	5.0	-	-
123.3	37.0	0.0	-	-	0.0	12.8	-	-	-	0.0	-	-
123.3	42.0	0.0	-	-	0.0	137.3	-	-	-	19.5	-	-
123.3	45.0	10.3	-	-	14.5	26.6	-	-	-	-	-	-
123.3	50.0	0.0	-	-	10.1	98.6	-	-	-	-	-	-
123.3	60.0	14.9	-	-	19.1	55.1	-	-	-	-	-	-
126.7	35.0	0.0	-	-	-	7.1	-	-	-	-	-	-
126.7	40.0	10.6	-	-	-	204.7	-	-	-	-	-	-
126.7	45.0	0.0	-	-	-	169.3	-	-	-	-	-	-
126.7	50.0	0.0	-	-	-	93.8	-	-	-	-	-	-
126.7	60.0	0.0	-	-	18.8	0.0	-	-	-	-	-	-
130.0	28.0	0.0	-	-	0.0	22.1	-	-	-	-	-	-
130.0	30.0	0.0	-	-	0.0	9.8	-	-	-	-	-	-
130.0	35.0	0.0	-	-	0.0	20.8	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	5.2	-	-	-	-	-	-
130.0	60.0	0.0	-	-	-	9.3	-	-	-	-	-	-
133.3	60.0	0.0	-	-	-	29.1	-	-	-	-	-	-
136.7	60.0	4.9	-	-	-	-	-	-	-	-	-	-

*Diogenichthys* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	80.0	0.0	0.0	-	-	5.4	0.0	-	0.0	-	-	-
93.3	60.0	0.0	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-
100.0	90.0	0.0	0.0	0.0	-	0.0	-	31.0	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	0.0	-	48.4	0.0	-	-	-
103.3	50.0	0.0	5.2	-	0.0	0.0	-	16.4	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	0.0	-	10.9	0.0	-	-	-
103.3	90.0	-	-	-	-	-	-	5.4	-	-	-	-
106.7	45.0	0.0	0.0	0.0	-	0.0	-	14.6	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	0.0	8.8	-	-	-
106.7	80.0	0.0	0.0	0.0	-	5.5	-	0.0	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	-	5.6	-	0.0	-	-
113.3	40.0	0.0	-	9.5	-	0.0	-	-	-	0.0	-	-
113.3	45.0	0.0	-	0.0	-	4.8	-	-	-	0.0	-	-
113.3	70.0	0.0	-	0.0	-	5.0	-	-	-	0.0	-	-
116.7	80.0	0.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	70.0	0.0	-	-	-	0.0	-	-	-	4.9	-	-
120.0	80.0	0.0	-	-	-	0.0	-	-	-	9.9	-	-
126.7	45.0	9.6	-	-	-	0.0	-	-	-	14.1	-	-
126.7	60.0	5.1	-	-	0.0	0.0	-	-	-	-	-	-

TABLE 4. (cont.)

STATION	<i>Diogenichthys atlanticus</i>											
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7		0.0	9.8	0.0	0.0	0.0	0.0	0.0				
66.7		4.8		0.0	0.0	0.0	9.4	0.0				
70.0		0.0	0.0	0.0	0.0	10.2		0.0	0.0			
70.0		4.8		4.5		0.0	0.0	0.0	0.0			
73.3		0.0	0.0	0.0		9.7	0.0	0.0	0.0			
73.3		0.0		0.0			10.2					
73.3		0.0	0.0	0.0	0.0	0.0	11.8	0.0	0.0			
76.7		0.0	0.0	0.0	0.0	14.9	0.0	0.0	0.0			
76.7		11.8	0.0	0.0	5.2	5.2	15.6	10.1	0.0			
80.0		0.0	0.0	0.0	0.0	5.7	12.1	0.0	0.0			
80.0		0.0	0.0	0.0	0.0	5.7	95.1	0.0	0.0			
80.0		5.2	16.0	0.0	0.0	0.0	11.1	10.5	0.0			
80.0							10.9					
83.3		0.0	0.0	0.0	0.0	10.2	0.0	0.0	0.0			
83.3		0.0	0.0			10.2	0.0	0.0	0.0			
83.3		5.0	0.0			5.4	0.0	15.2	0.0			
83.3		0.0	5.0			26.5	4.8	0.0	0.0			
86.7			0.0	0.0	0.0	0.0	0.0	9.7	0.0			
86.7			0.0	0.0	0.0	0.0	0.0	0.0	0.0			
86.7			10.4			0.0	0.0	0.0	0.0			
86.7			5.0			19.9	4.8	0.0	0.0			
86.7							9.9					
90.0			0.0	0.0	0.0	5.4	0.0	0.0	0.0			
90.0			0.0	0.0	0.0	5.2	0.0	0.0	0.0			
90.0							10.9					
90.0			0.0	0.0	0.0	0.0	9.7	0.0	0.0			
93.3			0.0	0.0	0.0	0.0	0.0	0.0	0.0			
93.3		9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
93.3		0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0			
93.3							10.1					
96.7		10.6	0.0	0.0	0.0	0.0		0.0	0.0			
96.7		0.0	5.4	0.0	0.0	0.0		0.0	0.0			
96.7		9.6	9.7	4.3	4.5	4.5		0.0	0.0			
96.7		0.0	10.6	0.0	0.0	0.0		0.0	0.0			
100.0		5.1	0.0	0.0	0.0	0.0		0.0	0.0			
100.0		5.1	0.0	0.0	0.0	0.0		0.0	0.0			
100.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0			
100.0		9.8	0.0	0.0	0.0	0.0		0.0	0.0			
103.3		0.0	0.0	5.1	0.0	0.0		0.0	0.0			
103.3		0.0	5.2	0.0	0.0	0.0		0.0	0.0			
103.3		0.0	0.0					0.0	0.0			
103.3		5.3	4.8	5.2	0.0	0.0		0.0	0.0			
103.3		0.0	0.0	0.0	0.0	0.0		5.4	0.0			
103.3		0.0	0.0	0.0	0.0	0.0		0.0	0.0			
103.3		0.0	0.0	13.4	0.0	0.0		0.0	0.0			
103.3		0.0	22.5					0.0	0.0			

TABLE 4. (cont.)

*Diogenichthys atlanticus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7 60.0	-	0.0	0.0	20.8	-	0.0	-	0.0	0.0	-	-	-
106.7 70.0	-	0.0	0.0	23.5	-	0.0	-	0.0	0.0	-	-	-
106.7 80.0	-	0.0	5.3	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7 90.0	-	-	-	-	-	-	-	5.1	-	-	-	-
110.0 70.0	-	0.0	5.4	0.0	-	0.0	-	0.0	-	0.0	-	-
110.0 80.0	-	5.5	0.0	0.0	-	5.0	-	0.0	-	0.0	-	-
113.3 35.0	-	0.0	-	9.8	-	0.0	-	-	-	0.0	-	-
113.3 40.0	-	0.0	-	4.7	-	0.0	-	-	-	0.0	-	-
123.3 60.0	-	5.0	-	-	0.0	0.0	-	-	-	-	-	-

*Diogenichthys laternatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3 80.0	-	0.0	0.0	-	-	5.4	0.0	-	0.0	-	-	-
90.0 60.0	0.0	-	0.0	0.0	-	0.0	11.6	-	0.0	-	-	-
90.0 90.0	5.3	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
96.7 80.0	-	0.0	0.0	0.0	-	0.0	-	0.0	4.4	-	-	-
96.7 90.0	-	0.0	0.0	0.0	-	13.0	-	0.0	0.0	-	-	-
100.0 45.0	-	0.0	0.0	-	0.0	0.0	-	0.0	10.3	-	-	-
100.0 50.0	-	0.0	0.0	-	0.0	0.0	-	0.0	19.6	-	-	-
100.0 90.0	-	4.9	15.7	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3 50.0	-	0.0	0.0	-	0.0	0.0	-	0.0	10.4	-	-	-
103.3 70.0	-	5.5	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3 80.0	-	5.4	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7 40.0	-	5.1	0.0	0.0	-	0.0	-	0.0	5.1	-	-	-
106.7 45.0	-	0.0	0.0	0.0	-	0.0	-	0.0	27.5	-	-	-
106.7 50.0	-	4.9	0.0	4.8	-	0.0	-	0.0	32.0	-	-	-
106.7 60.0	-	43.8	4.8	0.0	-	0.0	-	75.7	0.0	-	-	-
106.7 80.0	-	0.0	0.0	5.1	-	0.0	-	0.0	0.0	-	-	-
110.0 40.0	-	0.0	5.3	0.0	-	0.0	-	0.0	8.5	-	-	-
110.0 45.0	-	0.0	5.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0 50.0	-	5.3	10.3	0.0	-	0.0	-	0.0	5.1	-	-	-
110.0 60.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	9.0	-	-
110.0 70.0	-	0.0	10.8	0.0	-	0.0	-	0.0	-	0.0	-	-
110.0 80.0	-	0.0	5.2	0.0	-	0.0	-	0.0	-	0.0	-	-
113.3 40.0	-	0.0	-	0.0	-	0.0	-	0.0	-	15.1	-	-
113.3 45.0	-	32.4	-	0.0	-	0.0	-	-	-	20.2	-	-
113.3 50.0	-	0.0	-	0.0	-	0.0	-	-	-	38.6	-	-
113.3 60.0	-	10.6	-	0.0	-	0.0	-	-	-	0.0	-	-
113.3 70.0	-	34.3	-	0.0	-	0.0	-	-	-	0.0	-	-
113.3 80.0	-	21.8	-	4.8	-	0.0	-	-	-	0.0	-	-
116.7 40.0	-	0.0	-	-	0.0	0.0	-	-	-	34.9	-	-
116.7 45.0	-	31.2	-	-	0.0	0.0	-	-	-	8.9	-	-
116.7 50.0	-	0.0	-	-	0.0	0.0	-	-	-	15.4	-	-
116.7 60.0	-	4.9	-	-	-	0.0	-	-	-	16.2	-	-



TABLE 4. (cont.)

*Diogenichthys laternatus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
116.7	70.0	9.7	-	-	-	0.0	-	-	-	0.0	-	-
120.0	45.0	5.2	-	-	-	0.0	-	-	-	70.2	-	-
120.0	50.0	0.0	-	-	-	5.3	-	-	-	29.7	-	-
120.0	60.0	42.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	70.0	0.0	-	-	-	26.1	-	-	-	0.0	-	-
120.0	80.0	20.3	-	-	-	0.0	-	-	-	0.0	-	-
123.3	37.0	4.8	-	-	0.0	0.0	-	-	-	0.0	-	-
123.3	42.0	15.3	-	-	0.0	34.3	-	-	-	14.6	-	-
123.3	45.0	15.4	-	-	24.2	0.0	-	-	-	-	-	-
123.3	50.0	30.5	-	-	35.4	29.0	-	-	-	-	-	-
123.3	60.0	0.0	-	-	33.5	59.7	-	-	-	-	-	-
126.7	35.0	0.0	-	-	-	35.4	-	-	-	-	-	-
126.7	40.0	10.6	-	-	-	68.2	-	-	-	-	-	-
126.7	45.0	0.0	-	-	-	201.0	-	-	-	-	-	-
126.7	50.0	5.0	-	-	-	0.0	-	-	-	-	-	-
126.7	60.0	15.2	-	-	0.0	49.2	-	-	-	-	-	-
130.0	35.0	0.0	-	-	4.3	10.4	-	-	-	-	-	-
130.0	40.0	20.4	-	-	-	164.3	-	-	-	-	-	-
130.0	50.0	26.1	-	-	-	92.9	-	-	-	-	-	-
130.0	60.0	15.1	-	-	-	28.0	-	-	-	-	-	-
133.3	30.0	0.0	-	-	-	9.8	-	-	-	-	-	-
133.3	35.0	0.0	-	-	-	19.7	-	-	-	-	-	-
133.3	40.0	65.1	-	-	-	173.9	-	-	-	-	-	-
133.3	50.0	4.8	-	-	-	135.4	-	-	-	-	-	-
133.3	60.0	71.5	-	-	-	106.8	-	-	-	-	-	-
136.7	40.0	29.5	-	-	-	-	-	-	-	-	-	-
136.7	50.0	5.1	-	-	-	-	-	-	-	-	-	-
136.7	60.0	59.0	-	-	-	-	-	-	-	-	-	-

*Electrona rissoi*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	70.0	0.0	5.1	-	-	0.0	0.0	-	0.0	-	-	-
90.0	90.0	0.0	5.6	-	-	0.0	0.0	-	0.0	-	-	-
96.7	90.0	0.0	5.3	0.0	-	4.3	-	0.0	0.0	-	-	-
100.0	40.0	0.0	0.0	-	0.0	0.0	-	0.0	9.9	-	-	-
106.7	50.0	0.0	0.0	0.0	-	4.7	-	0.0	0.0	-	-	-

*Gonichthys tenuiculus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	60.0	0.0	0.0	-	0.0	4.9	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	0.0	4.4	-	-	-
110.0	80.0	0.0	0.0	0.0	-	5.0	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

*Conichthys tenuiculus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
116.7	50.0	10.9	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	60.0	5.3	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	70.0	0.0	-	-	4.3	-	-	-	-	0.0	-	-
123.3	60.0	5.0	-	-	4.8	0.0	-	-	-	-	-	-
126.7	50.0	5.0	-	-	0.0	0.0	-	-	-	-	-	-
130.0	40.0	10.2	-	-	0.0	0.0	-	-	-	-	-	-
130.0	50.0	0.0	-	-	10.3	-	-	-	-	-	-	-
130.0	60.0	0.0	-	-	4.7	-	-	-	-	-	-	-
133.3	60.0	0.0	-	-	9.7	-	-	-	-	-	-	-

*Hygophum* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	90.0	-	0.0	-	-	10.0	0.0	-	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	4.3	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
113.3	70.0	0.0	-	0.0	-	0.0	-	-	-	4.6	-	-
116.7	70.0	0.0	-	-	-	0.0	-	-	-	4.4	-	-
116.7	80.0	0.0	-	-	-	0.0	-	-	-	9.8	-	-

*Hygophum atratum*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
100.0	35.0	0.0	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
100.0	70.0	0.0	0.0	0.0	-	0.0	-	0.0	8.7	-	-	-
100.0	90.0	0.0	0.0	9.1	-	0.0	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	5.2	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	7.8	-	0.0	-	0.0	0.0	-	-	-
113.3	45.0	0.0	-	9.7	-	0.0	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	17.5	-	-
120.0	80.0	0.0	-	-	-	0.0	-	-	-	4.7	-	-
126.7	60.0	0.0	-	-	0.0	9.8	-	-	-	-	-	-
130.0	60.0	0.0	-	-	9.3	-	-	-	-	-	-	-

*Hygophum reinhardtii*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	70.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
110.0	70.0	0.0	0.0	0.0	-	4.9	-	0.0	-	0.0	-	-
120.0	60.0	15.8	-	-	-	0.0	-	-	-	0.0	-	-
136.7	50.0	10.2	-	-	-	-	-	-	-	-	-	-

TABLE 4. (cont.)

*Loweina rara*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	60.0	0.0	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
103.3	35.0	0.0	0.0	0.0	-	0.0	-	5.4	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	90.0	0.0	-	3.6	-	-	-	0.0	-	-	-	-
80.0	90.0	0.0	0.0	4.9	-	0.0	0.0	-	0.0	-	-	-
83.3	90.0	0.0	5.0	-	-	0.0	0.0	-	0.0	-	-	-
100.0	90.0	4.9	5.2	9.1	-	0.0	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	4.5	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	11.7	-	0.0	-	0.0	0.0	-	-	-
110.0	70.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	0.0	-	-
113.3	60.0	0.0	-	0.0	-	0.0	-	-	4.9	0.0	-	-
113.3	80.0	0.0	-	4.8	-	0.0	-	-	0.0	0.0	-	-
116.7	60.0	9.8	-	-	-	0.0	-	-	0.0	0.0	-	-
120.0	60.0	10.5	-	-	-	0.0	-	-	0.0	0.0	-	-
120.0	70.0	9.8	-	-	-	0.0	-	-	0.0	0.0	-	-
123.3	42.0	0.0	-	-	0.0	11.4	-	-	0.0	0.0	-	-
130.0	60.0	0.0	-	-	-	4.7	-	-	-	-	-	-
133.3	60.0	0.0	-	-	-	9.7	-	-	-	-	-	-

*Myctophum nitidulum**Protomyctophum crockeri*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	0.0	-	0.0	0.0	-	4.4	-	-	-	-
60.0	55.0	-	4.9	-	0.0	10.3	-	5.1	-	-	-	-
60.0	60.0	-	0.0	-	-	0.0	-	9.6	-	-	-	-
60.0	70.0	-	-	0.0	-	10.3	-	0.0	-	-	-	-
60.0	80.0	-	-	21.7	-	10.8	-	0.0	-	-	-	-
63.3	55.0	-	18.7	-	0.0	10.6	-	0.0	-	-	-	-
63.3	60.0	19.2	16.7	-	0.0	0.0	-	5.0	-	-	-	-
63.3	65.0	51.0	-	-	-	-	-	-	-	-	-	-
63.3	70.0	19.5	-	8.3	-	0.0	-	14.6	-	-	-	-
63.3	80.0	18.0	-	9.0	-	-	-	0.0	-	-	-	-
63.3	90.0	15.6	-	10.4	-	-	-	23.2	-	-	-	-
66.7	49.0	0.0	0.0	-	9.6	0.0	-	0.0	-	-	-	-
66.7	60.0	49.2	39.3	-	0.0	11.3	-	0.0	-	-	-	-
66.7	65.0	25.9	-	-	-	10.3	-	31.9	-	-	-	-
66.7	70.0	5.0	-	10.9	-	-	-	10.4	-	-	-	-
66.7	80.0	9.7	-	10.5	-	-	-	0.0	-	-	-	-
66.7	90.0	24.1	-	3.6	-	-	-	20.3	-	-	-	-
70.0	53.0	0.0	10.4	-	0.0	0.0	-	-	0.0	-	-	-

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	60.0	0.0	9.1	-	0.0	0.0	9.4	-	0.0	-	-	-
70.0	65.0	10.4	-	-	-	0.0	9.7	-	-	-	-	-
70.0	70.0	9.1	-	20.7	-	5.6	10.0	-	19.7	-	-	-
70.0	80.0	17.5	-	9.4	-	10.2	-	-	12.6	-	-	-
70.0	90.0	0.0	-	0.0	-	0.0	-	-	0.0	-	-	-
73.3	53.0	0.0	10.2	-	0.0	0.0	0.0	-	0.0	-	-	-
73.3	60.0	10.5	0.0	-	10.1	10.5	10.3	-	0.0	-	-	-
73.3	65.0	19.0	-	-	-	10.1	-	-	0.0	-	-	-
73.3	70.0	32.6	9.8	9.1	-	0.0	11.3	-	0.0	-	-	-
73.3	80.0	10.0	40.8	9.0	-	0.0	10.3	-	0.0	-	-	-
73.3	90.0	19.4	21.8	34.2	-	0.0	5.1	-	5.1	-	-	-
73.3	100.0	-	-	-	-	-	0.0	-	0.0	-	-	-
76.7	51.0	0.0	10.3	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	55.0	9.9	0.0	-	0.0	0.0	10.4	-	0.0	-	-	-
76.7	60.0	10.2	0.0	-	0.0	0.0	11.8	-	0.0	-	-	-
76.7	65.0	11.6	-	-	-	-	0.0	-	-	-	-	-
76.7	70.0	18.5	20.3	9.6	-	0.0	11.6	-	4.9	-	-	-
76.7	80.0	0.0	19.6	9.2	-	19.8	0.0	-	10.4	-	-	-
76.7	90.0	35.3	25.2	40.1	-	10.4	15.6	-	0.0	-	-	-
76.7	100.0	-	-	-	21.1	-	9.4	-	-	-	-	-
80.0	60.0	0.0	16.9	-	-	0.0	0.0	-	11.5	-	-	-
80.0	70.0	10.5	25.4	-	-	10.2	0.0	-	12.2	-	-	-
80.0	80.0	74.7	51.0	26.2	-	34.0	0.0	-	0.0	-	-	-
80.0	90.0	10.3	21.4	4.9	-	5.5	0.0	-	15.8	-	-	-
80.0	100.0	-	-	-	-	-	5.5	-	-	-	-	-
83.3	55.0	10.7	0.0	20.3	-	0.0	0.0	-	0.0	-	-	-
83.3	60.0	0.0	9.7	-	-	10.6	0.0	-	0.0	-	-	-
83.3	70.0	5.9	10.1	-	-	20.3	9.1	-	0.0	-	-	-
83.3	80.0	20.2	31.6	-	-	16.2	0.0	-	0.0	-	-	-
83.3	90.0	27.5	20.0	-	-	5.3	0.0	-	10.0	-	-	-
86.7	35.0	-	0.0	0.0	-	0.0	9.3	-	10.3	-	-	-
86.7	45.0	-	9.4	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	55.0	-	0.0	0.0	-	9.4	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	10.5	8.1	-	0.0	-	-	-
86.7	70.0	-	9.9	0.0	-	10.5	-	-	0.0	-	-	-
86.7	80.0	-	31.3	-	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	-	60.0	-	-	19.9	9.5	-	22.0	-	-	-
86.7	100.0	-	-	-	-	-	9.9	-	-	-	-	-
90.0	30.0	-	20.1	0.0	-	11.0	0.0	-	0.0	-	-	-
90.0	37.0	-	5.3	0.0	-	0.0	5.4	-	0.0	-	-	-
90.0	45.0	-	0.0	0.0	-	18.5	11.1	-	0.0	-	-	-
90.0	53.0	-	29.1	10.1	-	0.0	0.0	-	0.0	-	-	-
90.0	60.0	-	10.3	5.0	-	27.1	0.0	-	0.0	-	-	-
90.0	70.0	-	21.4	-	-	51.3	38.3	-	9.7	-	-	-
90.0	80.0	-	36.1	-	-	10.3	31.4	-	5.2	-	-	-
90.0	90.0	-	11.2	-	-	15.5	14.0	-	0.0	-	-	-

TABLE 4. (cont.)

		<i>Protomyctophum crockeri</i> (cont.)											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	
90.0	100.0	-	0.0	10.4	-	0.0	21.8	-	10.7	-	-	-	
93.3	30.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-	
93.3	35.0	-	5.5	0.0	-	0.0	0.0	-	0.0	-	-	-	
93.3	40.0	-	5.1	14.9	-	15.8	10.3	-	0.0	-	-	-	
93.3	45.0	-	0.0	5.1	-	0.0	21.0	-	0.0	-	-	-	
93.3	50.0	-	0.0	10.4	-	11.0	0.0	-	0.0	-	-	-	
93.3	55.0	-	16.3	0.0	-	20.8	10.6	-	0.0	-	-	-	
93.3	60.0	-	26.3	0.0	-	10.4	9.7	-	0.0	-	-	-	
93.3	70.0	-	24.8	-	-	32.1	68.9	-	0.0	-	-	-	
93.3	80.0	0.0	15.4	-	-	5.0	25.3	-	0.0	-	-	-	
93.3	90.0	4.9	0.0	-	-	5.0	16.0	-	5.1	-	-	-	
93.3	100.0	-	-	-	-	-	30.2	-	-	-	-	-	
96.7	32.0	10.7	5.0	-	0.0	15.6	-	31.7	4.9	-	-	-	
96.7	35.0	10.9	18.8	-	5.0	14.4	-	0.0	9.1	-	-	-	
96.7	40.0	0.0	26.2	-	24.2	15.5	-	0.0	14.8	-	-	-	
96.7	45.0	0.0	5.1	-	57.4	20.0	-	39.8	5.0	-	-	-	
96.7	50.0	-	9.6	-	31.2	9.5	-	70.7	0.0	-	-	-	
96.7	55.0	10.6	0.0	-	39.0	22.7	-	10.5	0.0	-	-	-	
96.7	60.0	5.1	10.5	-	20.3	0.0	-	15.8	0.0	-	-	-	
96.7	70.0	15.6	48.7	23.8	-	4.4	-	9.9	0.0	-	-	-	
96.7	80.0	14.4	0.0	13.0	-	9.1	-	30.7	0.0	-	-	-	
96.7	90.0	0.0	15.8	39.0	-	8.7	-	29.5	0.0	-	-	-	
100.0	30.0	0.0	4.8	-	0.0	4.7	-	0.0	0.0	-	-	-	
100.0	35.0	5.3	4.8	-	19.8	34.7	-	15.5	0.0	-	-	-	
100.0	40.0	5.1	9.3	-	28.9	38.1	-	19.5	0.0	-	-	-	
100.0	45.0	46.6	15.6	-	9.8	13.6	-	24.9	0.0	-	-	-	
100.0	50.0	10.6	14.7	-	10.1	23.1	-	0.0	0.0	-	-	-	
100.0	60.0	10.3	25.8	-	67.6	45.5	-	19.2	0.0	-	-	-	
100.0	70.0	10.6	19.4	9.4	-	14.0	-	4.9	8.7	-	-	-	
100.0	80.0	0.0	9.6	21.1	-	4.3	-	30.3	0.0	-	-	-	
100.0	90.0	29.3	15.7	27.4	-	18.1	-	10.3	0.0	-	-	-	
103.3	35.0	0.0	5.1	5.1	-	20.1	-	10.9	4.6	-	-	-	
103.3	40.0	0.0	14.8	5.0	-	69.2	-	0.0	0.0	-	-	-	
103.3	45.0	0.0	26.2	34.3	-	82.8	-	0.0	0.0	-	-	-	
103.3	50.0	15.1	20.8	-	26.1	0.0	-	5.4	10.4	-	-	-	
103.3	60.0	10.6	4.8	-	4.8	9.9	-	5.4	23.9	-	-	-	
103.3	70.0	0.0	15.3	62.7	-	15.6	-	0.0	0.0	-	-	-	
103.3	80.0	16.3	24.7	9.0	-	9.3	-	0.0	0.0	-	-	-	
106.7	35.0	29.2	10.2	0.0	-	33.5	-	0.0	10.4	-	-	-	
106.7	40.0	5.1	0.0	14.7	-	12.7	-	0.0	5.1	-	-	-	
106.7	45.0	5.6	9.7	15.3	-	26.3	-	9.7	9.2	-	-	-	
106.7	50.0	4.9	16.0	19.0	-	28.0	-	10.6	10.7	-	-	-	
106.7	60.0	32.9	14.5	5.2	-	24.5	-	9.5	0.0	-	-	-	
106.7	70.0	9.7	13.6	27.4	-	34.2	-	0.0	4.9	-	-	-	
106.7	80.0	0.0	16.0	0.0	-	21.9	-	0.0	0.0	-	-	-	
106.7	90.0	-	-	-	-	-	-	5.1	-	-	-	-	

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
110.0		0.0	4.8	4.9	-	0.0	-	0.0	0.0	-	-	-
110.0		0.0	21.0	18.8	-	0.0	-	0.0	4.3	-	-	-
110.0		28.4	9.9	14.7	-	10.6	-	5.0	4.8	-	-	-
110.0		10.6	15.4	0.0	-	5.2	-	5.2	0.0	-	-	-
110.0		0.0	0.0	4.8	-	5.0	-	5.6	0.0	0.0	-	-
110.0		15.2	10.8	20.8	-	4.9	-	22.2	-	0.0	-	-
110.0		5.5	5.2	72.9	-	0.0	-	0.0	-	0.0	-	-
113.3		0.0	-	19.7	-	15.8	-	-	-	0.0	-	-
113.3		0.0	-	18.9	-	9.6	-	-	-	0.0	-	-
113.3		5.4	-	19.4	-	14.3	-	-	-	5.0	-	-
113.3		31.9	-	15.3	-	25.4	-	-	-	0.0	-	-
113.3		10.6	-	14.4	-	18.3	-	-	-	9.7	-	-
113.3		0.0	-	21.6	-	5.0	-	-	-	0.0	-	-
116.7		4.9	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7		10.3	-	-	4.6	9.9	-	-	-	5.0	-	-
116.7		5.2	-	-	4.9	0.0	-	-	-	0.0	-	-
116.7		0.0	-	-	9.6	0.0	-	-	-	5.1	-	-
116.7		0.0	-	-	-	18.8	-	-	-	0.0	-	-
116.7		19.3	-	-	-	0.0	-	-	-	0.0	-	-
116.7		14.9	-	-	-	0.0	-	-	-	0.0	-	-
118.0		0.0	-	-	0.0	0.0	-	-	-	4.9	-	-
120.0		0.0	-	-	-	5.3	-	-	-	0.0	-	-
120.0		0.0	-	-	-	65.3	-	-	-	0.0	-	-
123.3		0.0	-	-	0.0	11.4	-	-	-	0.0	-	-
123.3		5.1	-	-	5.1	0.0	-	-	-	0.0	-	-
123.3		5.0	-	-	0.0	0.0	-	-	-	0.0	-	-
126.7		0.0	-	-	-	22.7	-	-	-	-	-	-
126.7		0.0	-	-	-	4.7	-	-	-	-	-	-
126.7		15.2	-	-	0.0	0.0	-	-	-	-	-	-
130.0		0.0	-	-	4.3	0.0	-	-	-	-	-	-
130.0		0.0	-	-	-	4.7	-	-	-	-	-	-
133.3		4.8	-	-	-	0.0	-	-	-	-	-	-
136.7		4.9	-	-	-	-	-	-	-	-	-	-

*Symbolophorus californiensis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7		0.0	-	0.0	-	-	-	10.2	-	-	-	-
70.0		0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
73.3		0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
73.3		0.0	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-
73.3		-	-	-	-	-	10.2	-	-	-	-	-
76.7		0.0	0.0	0.0	-	0.0	0.0	-	4.9	-	-	-
76.7		0.0	0.0	0.0	-	15.6	26.1	-	0.0	-	-	-
80.0		0.0	0.0	0.0	-	17.0	21.1	-	25.5	-	-	-

TABLE 4. (cont.)

STATION	<i>Symbolophorus californiensis</i> (cont.)											
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	90.0	0.0	0.0	0.0	0.0	0.0	11.1	-	42.1	-	-	-
83.3	70.0	0.0	5.0	0.0	20.3	0.0	0.0	-	18.7	-	-	-
83.3	80.0	0.0	0.0	-	21.6	0.0	0.0	-	15.2	-	-	-
83.3	90.0	0.0	0.0	-	42.5	0.0	5.0	-	0.0	-	-	-
83.3	100.0	-	-	-	-	9.5	0.0	-	0.0	-	-	-
86.7	50.0	0.0	0.0	0.0	9.4	0.0	0.0	-	0.0	-	-	-
86.7	55.0	0.0	0.0	0.0	0.0	8.1	0.0	-	0.0	-	-	-
86.7	60.0	0.0	10.4	0.0	0.0	0.0	0.0	-	0.0	-	-	-
86.7	80.0	0.0	0.0	-	10.0	4.8	0.0	-	0.0	-	-	-
86.7	90.0	0.0	0.0	-	-	14.9	0.0	-	0.0	-	-	-
86.7	100.0	0.0	0.0	0.0	5.4	0.0	0.0	-	0.0	-	-	-
90.0	60.0	0.0	0.0	-	10.3	0.0	0.0	-	0.0	-	-	-
90.0	80.0	0.0	0.0	-	10.3	4.7	0.0	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	5.4	0.0	-	0.0	-	-	-
90.0	100.0	0.0	0.0	0.0	11.0	0.0	0.0	-	0.0	-	-	-
93.3	50.0	0.0	0.0	0.0	0.0	0.0	10.6	-	0.0	-	-	-
93.3	55.0	0.0	5.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-
93.3	70.0	0.0	0.0	-	5.0	5.1	0.0	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	0.0	0.0	10.7	-	5.1	-	-	-
93.3	90.0	9.9	4.9	-	0.0	0.0	5.0	-	0.0	-	-	-
93.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	-	-	-
96.7	40.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	0.0	-	-	-
96.7	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
96.7	60.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
96.7	70.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
96.7	80.0	0.0	19.5	17.4	0.0	0.0	0.0	15.3	0.0	-	-	-
96.7	90.0	0.0	15.8	0.0	0.0	0.0	0.0	9.8	0.0	-	-	-
96.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	-	-	-
100.0	40.0	10.2	0.0	0.0	0.0	5.9	0.0	9.7	0.0	-	-	-
100.0	45.0	5.2	0.0	4.9	4.5	0.0	0.0	0.0	0.0	-	-	-
100.0	60.0	5.1	5.2	9.7	0.0	0.0	0.0	0.0	4.7	-	-	-
100.0	70.0	0.0	0.0	0.0	14.0	0.0	0.0	4.9	0.0	-	-	-
100.0	80.0	10.9	4.8	8.4	8.6	0.0	0.0	0.0	0.0	-	-	-
100.0	90.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0	-	-	-
103.3	35.0	0.0	5.1	5.1	0.0	0.0	0.0	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	7.5	0.0	0.0	11.2	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	-	-	-
103.3	50.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0	-	-	-
103.3	60.0	5.3	0.0	9.6	0.0	0.0	0.0	0.0	0.0	-	-	-
103.3	70.0	0.0	5.1	9.0	0.0	0.0	0.0	5.5	0.0	-	-	-
103.3	80.0	0.0	0.0	0.0	4.7	0.0	0.0	9.9	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	-	-	-
106.7	50.0	0.0	0.0	4.8	9.8	0.0	0.0	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	15.6	9.3	0.0	0.0	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Symbolophorus californiensis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	80.0	0.0	5.3	0.0	-	11.0	-	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	2.4	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	4.7	-	0.0	-	0.0	0.0	-	-	-
110.0	80.0	5.5	0.0	0.0	-	0.0	-	0.0	-	0.0	-	-
113.3	50.0	0.0	-	5.1	-	0.0	-	-	-	0.0	-	-
116.7	60.0	4.9	-	-	-	0.0	-	-	-	0.0	-	-
123.3	60.0	9.9	-	-	0.0	0.0	-	-	-	-	-	-

*Tarletonbeania crenularis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	60.0	-	10.3	-	-	0.0	-	4.8	-	-	-	-
60.0	70.0	-	-	0.0	-	10.3	-	0.0	-	-	-	-
60.0	80.0	-	-	14.4	-	0.0	-	16.6	-	-	-	-
60.0	90.0	-	-	8.1	-	0.0	-	-	-	-	-	-
63.3	52.0	0.0	0.0	-	14.6	0.0	-	0.0	-	-	-	-
63.3	55.0	10.2	28.1	-	10.2	0.0	-	0.0	-	-	-	-
63.3	60.0	9.6	0.0	-	19.3	11.6	-	0.0	-	-	-	-
63.3	70.0	9.7	-	16.7	-	33.8	-	4.9	-	-	-	-
63.3	80.0	18.0	-	0.0	-	-	-	10.5	-	-	-	-
63.3	90.0	5.2	-	0.0	-	-	-	23.2	-	-	-	-
66.7	49.0	9.7	0.0	-	28.9	0.0	-	4.5	-	-	-	-
66.7	50.0	9.8	10.9	-	0.0	0.0	-	0.0	-	-	-	-
66.7	55.0	0.0	0.0	-	9.7	0.0	-	18.2	-	-	-	-
66.7	60.0	8.2	0.0	-	10.1	0.0	-	5.7	-	-	-	-
66.7	65.0	0.0	-	-	-	0.0	-	10.6	-	-	-	-
66.7	70.0	5.0	-	10.9	-	20.7	-	0.0	-	-	-	-
66.7	80.0	4.9	-	0.0	-	-	-	5.8	-	-	-	-
70.0	51.0	0.0	8.9	-	0.0	11.1	-	0.0	0.0	-	-	-
70.0	53.0	0.0	0.0	-	0.0	9.7	-	10.6	0.0	-	-	-
70.0	60.0	0.0	0.0	-	9.9	11.3	9.4	32.6	0.0	-	-	-
70.0	70.0	0.0	-	0.0	-	11.2	0.0	0.0	0.0	-	-	-
70.0	80.0	4.4	-	37.5	-	0.0	-	0.0	0.0	-	-	-
70.0	90.0	0.0	-	10.2	-	0.0	-	10.0	0.0	-	-	-
73.3	53.0	0.0	5.1	-	10.0	0.0	0.0	-	10.0	-	-	-
73.3	60.0	0.0	0.0	-	0.0	21.1	20.5	-	0.0	-	-	-
73.3	65.0	0.0	-	-	-	-	10.0	-	-	-	-	-
73.3	70.0	0.0	0.0	9.1	-	0.0	-	0.0	0.0	-	-	-
73.3	80.0	0.0	0.0	0.0	-	9.9	0.0	10.7	0.0	-	-	-
73.3	90.0	4.8	0.0	0.0	-	0.0	0.0	10.1	0.0	-	-	-
76.7	51.0	0.0	0.0	-	0.0	12.1	10.5	21.0	0.0	-	-	-
76.7	60.0	0.0	0.0	-	0.0	9.7	0.0	0.0	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	-	0.0	0.0	9.8	0.0	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	0.0	10.4	0.0	-	-	-
76.7	90.0	23.5	0.0	0.0	-	0.0	8.2	20.2	0.0	-	-	-



TABLE 4. (cont.)

*Tarletonbeania crenularis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	60.0	0.0	0.0	-	0.0	10.1	12.1	-	23.1	-	-	-
80.0	80.0	12.5	0.0	4.4	-	0.0	0.0	-	5.1	-	-	-
80.0	90.0	0.0	0.0	4.9	-	0.0	0.0	-	0.0	-	-	-
83.3	60.0	0.0	0.0	-	-	0.0	0.0	-	10.8	-	-	-
83.3	70.0	0.0	5.0	-	-	0.0	0.0	-	0.0	-	-	-
83.3	90.0	0.0	0.0	-	-	0.0	0.0	-	10.0	-	-	-
86.7	45.0	-	0.0	0.0	-	0.0	0.0	-	11.1	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	-	0.0	0.0	-	0.0	0.0	-	11.0	-	-	-
90.0	60.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	0.0	-	0.0	11.6	-	0.0	-	-	-
106.7	70.0	-	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-
106.7	80.0	-	0.0	10.1	-	4.9	-	0.0	0.0	-	-	-
113.3	40.0	-	-	4.7	-	0.0	-	0.0	0.0	-	-	0.0

*Synodus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	51.0	0.0	0.0	-	0.0	0.0	0.0	-	10.0	-	-	-
113.3	29.0	3.9	-	-	0.0	0.0	-	-	-	0.0	-	-
113.3	30.0	4.6	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	25.0	8.4	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	-	-	0.0	-	-
118.0	39.0	5.0	-	-	0.0	0.0	-	-	-	8.9	-	-
119.0	33.0	46.6	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	24.0	8.0	-	-	0.0	0.0	-	-	-	20.2	-	-
120.0	25.0	9.0	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	30.0	61.8	-	-	0.0	0.0	-	-	-	4.2	-	-
120.0	35.0	41.7	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	38.5	7.9	-	-	0.0	0.0	-	-	-	9.1	-	-
120.0	45.0	5.2	-	-	0.0	0.0	-	-	-	41.8	-	-
120.0	50.0	5.1	-	-	-	0.0	-	-	-	0.0	-	-
										19.8	-	-

*Gadus macrocephalus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	0.0	-	-	4.3	-	0.0	-	-	-	-

*Merluccius productus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	55.0	-	4.9	-	0.0	0.0	-	0.0	-	-	-	-
60.0	80.0	-	-	0.0	-	43.1	-	0.0	-	-	-	-

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	90.0					57.6						
63.3	55.0	20.4	0.0	0.0	20.5	0.0		0.0				
63.3	60.0	0.0	0.0		0.0	0.0		11.4				
63.3	70.0	0.0		0.0		22.5		4.9				
66.7	50.0	9.8	21.7		0.0	0.0		0.0				
66.7	55.0	0.0	9.8		0.0	0.0		0.0				
66.7	70.0	0.0		10.9		31.0		0.0				
70.0	51.0	9.3	17.8		30.2	0.0		0.0	0.0			
70.0	53.0	31.4	0.0		223.1	9.7		0.0	0.0			
70.0	60.0	0.0	82.0		0.0	0.0		0.0	0.0			
70.0	90.0	0.0		0.0		10.2		0.0	0.0			
73.3	50.0	8.5	0.0		0.0	0.0		0.0	0.0			
73.3	53.0	36.5	10.2		0.0	10.2		0.0	0.0			
73.3	60.0	0.0	16.1		161.0	21.1		0.0	0.0			
73.3	70.0	0.0	19.6			10.1		0.0	0.0			
73.3	80.0	0.0	0.0			29.7		0.0	0.0			
73.3	90.0	0.0	0.0	384.3		4.9		0.0	0.0			
76.7	48.0	8.8	0.0		0.0	0.0		0.0	0.0			
76.7	51.0	0.0	257.4		20.3	36.4		0.0	0.0			
76.7	55.0	19.7	0.0		0.0	60.1		0.0	0.0			
76.7	60.0	10.2	0.0		110.4	0.0		0.0	0.0			
76.7	70.0	0.0	0.0			68.5		0.0	0.0			
76.7	80.0	0.0	0.0	4.8		0.0	16.4		0.0			
76.7	90.0	0.0	0.0	0.0		0.0		0.0	0.0			
80.0	51.0	5.1	9.1		8.3	31.9		0.0	0.0			
80.0	55.0	49.9	85.9		185.8	143.8		0.0	0.0			
80.0	60.0	0.0	0.0		147.8	10.1		0.0	0.0			
80.0	70.0	10.5	0.0			51.2	12.2		0.0			
82.0	46.0	5.5	126.2			150.9		0.0	0.0			
83.3	40.6	0.0	0.0			0.0		0.0	0.0			
83.3	42.0	0.0	0.0			32.6		0.0	0.0			
83.3	51.0	0.0	124.3			40.1	11.4		0.0			
83.3	55.0	32.1	9.7	162.2		10.8		0.0	0.0			
83.3	60.0	0.0	357.5			84.7		0.0	0.0			
83.3	80.0	0.0	0.0			0.0	9.2		5.1			
86.7	35.0	0.0	32.4			78.3		0.0	0.0			
86.7	40.0	4.6	20.5			53.6		0.0	0.0			
86.7	45.0	24.4	61.2			260.8		0.0	0.0			
86.7	50.0	39.2	22.6			171.6		0.0	0.0			
86.7	55.0	19.3	337.9			56.4	45.2		9.7			
86.7	60.0	0.0	9.7	7854.1		198.9		0.0	0.0			
86.7	70.0	0.0	0.0			273.0		0.0	0.0			
86.7	80.0	0.0	0.0			0.0	10.7		0.0			
90.0	28.0	0.0	0.0	18.8		0.0	9.1		0.0			
90.0	30.0	0.0	0.0	0.0		66.3		0.0	0.0			
90.0	37.0	0.0	10.6	129.0		34.3		0.0	0.0			
90.0	45.0	0.0	29.6	0.0		0.0		0.0	0.0			

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	53.0		72.8	5.1		111.3	0.0		0.0			
90.0	60.0		20.5	15.1		38.0	0.0		0.0			
90.0	70.0		0.0			30.8	0.0		0.0			
90.0	80.0		0.0			299.9	0.0		0.0			
90.0	90.0		0.0			10.3	0.0		0.0			
93.3	26.7		0.0	0.0		13.7	0.0		0.0			
93.3	28.0		0.0	5.3		120.8	0.0		0.0			
93.3	30.0		0.0	0.0		75.4	0.0		0.0			
93.3	35.0		0.0	0.0		19.8	0.0		0.0			
93.3	40.0		0.0	0.0		47.3	0.0		0.0			
93.3	45.0		0.0	40.7		5.2	0.0		0.0			
93.3	50.0		0.0	31.2		66.0	0.0		0.0			
93.3	55.0		0.0	10.2		62.3	0.0		0.0			
93.3	60.0		0.0	32.3		52.1	0.0		0.0			
93.3	70.0		0.0			197.4	0.0		0.0			
93.3	80.0		0.0			40.2	0.0		0.0			
93.3	90.0		0.0			267.8	0.0		0.0			
96.7	32.0		0.0		0.0	41.8		0.0	0.0			
96.7	35.0		0.0		5.0	15.6		0.0	0.0			
96.7	40.0		10.5		0.0	20.2		0.0	0.0			
96.7	45.0		0.0		9.6	40.1		10.0	0.0			
96.7	50.0		14.4		0.0	142.4		0.0	0.0			
96.7	55.0		55.9		29.3	4.5		0.0	0.0			
96.7	60.0		0.0		50.7	4.8		0.0	0.0			
96.7	70.0		0.0			0.0		0.0	0.0			
96.7	80.0		0.0			40.9		0.0	0.0			
96.7	90.0		0.0			56.3		0.0	0.0			
100.0	35.0		0.0			135.1		0.0	0.0			
100.0	40.0		0.0			110.4		0.0	0.0			
100.0	80.0		0.0			4.3		0.0	0.0			
100.0	90.0		0.0			58.9		0.0	0.0			
103.3	30.0		0.0			0.0		0.0	0.0			
103.3	35.0		0.0			9.1		0.0	0.0			
103.3	40.0		0.0			5.1		0.0	0.0			
103.3	45.0		0.0			0.0		0.0	0.0			
106.7	32.0		0.0			45.3		0.0	0.0			
106.7	35.0		0.0			16.8		0.0	0.0			
106.7	40.0		0.0			5.1		0.0	0.0			
106.7	45.0		0.0			4.7		0.0	0.0			
110.0	35.0		0.0			39.1		0.0	0.0			
113.3	35.0		0.0			43.8		0.0	0.0			
113.3	60.0		0.0			4.9		0.0	0.0			
116.7	30.0		0.0			11.4		0.0	0.0			
116.7	40.0		0.0			5.3		0.0	0.0			
118.0	39.0		0.0			4.6		0.0	0.0			
			0.0		0.0	47.5		0.0	0.0			
			0.0		18.4	19.8		0.0	0.0			
			0.0			9.3		0.0	0.0			

TABLE 4. (cont.)

*Merluccius productus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	45.0	0.0	-	-	-	4.2	-	-	-	0.0	-	-
123.3	37.0	0.0	-	-	0.0	4.3	-	-	-	0.0	-	-
126.7	33.0	0.0	-	-	-	33.5	-	-	-	-	-	-
126.7	35.0	0.0	-	-	-	7.1	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	5.2	-	-	-	-	-	-
133.3	23.0	0.0	-	-	-	43.0	-	-	-	-	-	-
133.3	25.0	0.0	-	-	-	40.8	-	-	-	-	-	-
133.3	30.0	0.0	-	-	-	127.9	-	-	-	-	-	-

*Physiculus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
130.0	35.0	0.0	-	-	0.0	5.2	-	-	-	-	-	-

## Macrouridae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	90.0	-	-	8.1	-	0.0	-	-	-	-	-	-
96.7	80.0	0.0	9.7	0.0	-	0.0	-	0.0	0.0	-	-	-
100.0	45.0	0.0	5.2	-	0.0	0.0	-	0.0	0.0	5.0	-	-
116.7	40.0	0.0	-	-	0.0	0.0	-	-	-	-	-	-

## Ophidiiformes

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	55.0	0.0	0.0	-	0.0	0.0	-	11.1	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	0.0	-	-	10.6	-	-	-
73.3	53.0	0.0	0.0	-	0.0	0.0	10.1	-	0.0	-	-	-
76.7	51.0	0.0	0.0	-	0.0	0.0	0.0	-	10.5	-	-	-
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
80.0	55.0	0.0	0.0	-	0.0	0.0	19.6	-	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	10.9	-	0.0	-	-	-
90.0	30.0	-	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
93.3	26.7	-	0.0	0.0	-	4.6	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	9.7	-	0.0	-	-	-
93.3	35.0	-	0.0	0.0	-	9.9	0.0	-	0.0	-	-	-
96.7	100.0	-	0.0	-	-	-	-	5.1	-	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	9.5	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	10.6	-	-	-
110.0	45.0	0.0	0.0	0.0	-	0.0	-	5.0	0.0	-	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	10.3	-	-
119.0	33.0	0.0	-	-	0.0	0.0	-	-	-	25.3	-	-
120.0	45.0	0.0	-	-	0.0	0.0	-	-	-	8.8	-	-

TABLE 4. (cont.)

Ophidiiformes (cont.)											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
123.3	42.0	0.0	-	-	0.0	0.0	-	-	-	4.9	-
<i>Brosomphycis marginata</i>											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
63.3	52.0	0.0	0.0	-	0.0	0.0	-	4.9	-	-	-
66.7	55.0	0.0	0.0	-	0.0	0.0	-	5.5	-	-	-
66.7	70.0	0.0	-	0.0	-	-	-	5.9	-	-	-
90.0	30.0	-	0.0	0.0	-	0.0	0.0	-	10.6	-	-
116.7	30.0	0.0	-	-	9.1	0.0	-	-	-	0.0	-
<i>Ophidion scrippsae</i>											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
93.3	26.7	-	0.0	0.0	-	0.0	0.0	-	9.1	-	-
Ceratioidei											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
100.0	90.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-
Exocoetidae											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
66.7	49.0	0.0	0.0	-	19.3	0.0	-	0.0	-	-	-
73.3	50.0	0.0	0.0	-	3.5	0.0	0.0	-	0.0	-	-
100.0	30.0	0.0	0.0	-	10.5	0.0	-	0.0	0.0	-	-
Hemiramphidae											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
120.0	60.0	0.0	-	-	-	4.7	-	-	-	0.0	-
<i>Cololabis saira</i>											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
66.7	49.0	9.7	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	70.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
76.7	80.0	0.0	0.0	9.2	-	0.0	0.0	-	0.0	-	-
76.7	90.0	11.8	0.0	0.0	-	0.0	0.0	-	0.0	-	-

TABLE 4. (cont.)

*Cololabis saira* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	90.0	-	0.0	-	-	0.0	0.0	-	11.0	-	-	-
86.7	100.0	-	-	-	-	-	5.0	-	-	-	-	-
90.0	60.0	-	0.0	0.0	-	5.4	0.0	-	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	5.0	-	0.0	-	0.0	-	-
120.0	38.5	0.0	-	-	0.0	2.2	-	-	-	0.0	-	-
120.0	80.0	0.0	-	-	-	4.9	-	-	-	0.0	-	-

## Atherinidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	29.0	0.0	0.0	-	0.0	4.6	-	7.9	0.0	-	-	-
116.7	25.0	0.0	-	-	0.0	3.9	-	-	-	0.0	-	-
120.0	24.0	4.0	-	-	0.0	0.0	-	-	-	0.0	-	-

## Trachipteridae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	60.0	0.0	0.0	-	0.0	0.0	0.0	-	11.0	-	-	-
76.7	65.0	0.0	-	-	-	-	10.8	-	-	-	-	-
80.0	90.0	0.0	5.3	0.0	-	0.0	0.0	-	5.3	-	-	-
93.3	80.0	5.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	0.0	-	0.0	5.0	-	-	-

*Melamphaes* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	80.0	-	-	0.0	-	0.0	-	8.3	-	-	-	-
63.3	60.0	0.0	25.1	-	0.0	0.0	-	0.0	-	-	-	-
63.3	70.0	0.0	-	0.0	-	11.3	-	9.8	-	-	-	-
66.7	70.0	0.0	-	10.9	-	10.3	-	0.0	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	11.3	0.0	-	0.0	-	-	-
70.0	70.0	0.0	-	10.3	-	0.0	0.0	-	0.0	-	-	-
70.0	80.0	0.0	-	9.4	-	0.0	-	-	12.6	-	-	-
70.0	90.0	4.8	-	10.2	-	0.0	-	-	0.0	-	-	-
73.3	60.0	0.0	0.0	-	10.1	10.5	0.0	-	11.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
73.3	90.0	0.0	0.0	0.0	-	9.7	0.0	-	0.0	-	-	-
76.7	51.0	0.0	0.0	-	0.0	0.0	0.0	-	10.5	-	-	-
76.7	60.0	10.2	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	80.0	0.0	4.9	0.0	-	0.0	8.2	-	0.0	-	-	-
76.7	90.0	0.0	0.0	30.1	-	0.0	0.0	-	20.2	-	-	-
80.0	70.0	0.0	0.0	-	-	10.2	0.0	-	0.0	-	-	-
80.0	80.0	0.0	5.1	4.4	-	5.7	21.1	-	5.1	-	-	-

TABLE 4. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	100.0		9.7	20.3			5.5					
83.3	55.0	0.0	0.0			0.0	0.0		0.0			
83.3	70.0	0.0	0.0			10.2	0.0		0.0			
83.3	90.0	0.0				0.0	4.8		0.0			
83.3	100.0						5.0					
86.7	60.0		0.0	0.0			8.1		0.0			
86.7	70.0		0.0			21.0			0.0			
86.7	80.0		0.0			0.0	0.0		0.0			
86.7	90.0		15.0			0.0	0.0		0.0			
90.0	53.0		0.0	0.0		11.1	0.0		0.0			
90.0	60.0		10.3	0.0		0.0	0.0		0.0			
90.0	80.0		0.0			10.3	0.0		0.0			
90.0	90.0	22.5				5.2	9.3		0.0			
90.0	100.0	0.0	11.2				10.9					
93.3	50.0		5.0	0.0		11.0	0.0		0.0			
93.3	60.0		5.3	0.0		0.0	19.3		0.0			
93.3	80.0	0.0	0.0			10.0	0.0		5.1			
93.3	90.0	0.0	0.0			9.9	0.0		0.0			
96.7	40.0	5.1	0.0		0.0	0.0		0.0	0.0			
96.7	50.0		0.0		5.2	0.0		10.1	0.0			
96.7	60.0		5.3		0.0	0.0		0.0	0.0			
96.7	70.0		0.0			0.0		0.0	0.0			
96.7	80.0	0.0	0.0			0.0		0.0	0.0			
96.7	90.0	0.0	0.0			4.5		0.0	0.0			
96.7	100.0	5.1	0.0			21.6		0.0	0.0			
100.0	40.0		0.0		0.0	9.0		0.0	0.0			
100.0	45.0	0.0	0.0			4.7		0.0	0.0			
100.0	70.0	0.0	0.0			0.0		0.0	0.0			
100.0	80.0	0.0	0.0			0.0		0.0	0.0			
100.0	90.0	0.0	5.2			0.0		0.0	0.0			
103.3	40.0	0.0	0.0			0.0		5.6	0.0			
103.3	45.0	0.0	0.0			5.6		0.0	0.0			
103.3	70.0	0.0	0.0			14.0		0.0	0.0			
103.3	80.0	0.0	4.9			8.8		0.0	0.0			
106.7	45.0	0.0	0.0			4.9		0.0	0.0			
106.7	70.0	0.0	0.0			0.0		0.0	0.0			
106.7	100.0	5.3	0.0			0.0		0.0	0.0			
110.0	50.0	0.0				0.0				5.0		
113.3	45.0	0.0				0.0				0.0		
113.3	60.0	0.0		9.6		0.0				0.0		
113.3	80.0	0.0		0.0		5.3				0.0		
116.7	60.0	4.9				0.0				0.0		
120.0	70.0	0.0				4.3				0.0		
123.3	50.0	0.0			0.0	5.8				0.0		
123.3	60.0	0.0			0.0	4.6				0.0		
126.7	40.0	0.0				11.4						
126.7	50.0	0.0				4.7						

TABLE 4. (cont.)

*Poromitra* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	90.0	0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
73.3	60.0	0.0	0.0	-	0.0	0.0	0.0	-	11.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	0.0	-	-	10.8	-	-	-
76.7	90.0	0.0	0.0	0.0	-	0.0	0.0	-	10.1	-	-	-
83.3	80.0	0.0	0.0	-	-	5.4	0.0	-	5.1	-	-	-
83.3	90.0	0.0	0.0	-	-	10.6	0.0	-	0.0	-	-	-
86.7	80.0	-	5.2	-	-	0.0	0.0	-	0.0	-	-	-
86.7	90.0	0.0	0.0	0.0	-	10.0	0.0	-	0.0	-	-	-
93.3	60.0	-	5.3	0.0	-	0.0	0.0	-	0.0	-	-	-
96.7	90.0	-	0.0	4.3	-	0.0	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	0.0	-	5.2	0.0	-	-	-
100.0	80.0	0.0	0.0	-	0.0	4.6	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	0.0	-	8.6	-	0.0	0.0	-	-	-
103.3	70.0	5.3	0.0	-	0.0	4.9	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	4.5	-	10.4	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
113.3	35.0	0.0	0.0	3.9	-	0.0	-	0.0	0.0	0.0	-	-
123.3	37.0	0.0	-	9.8	-	0.0	-	0.0	0.0	0.0	-	-
133.3	50.0	4.8	-	-	0.0	4.3	-	-	-	0.0	-	-
						0.0	-	-	-	0.0	-	-

*Scopelogadus bispinosus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	80.0	0.0	0.0	0.0	-	0.0	0.0	-	5.1	-	-	-
83.3	80.0	0.0	0.0	-	-	5.4	0.0	-	0.0	-	-	-
103.3	80.0	0.0	0.0	9.0	-	0.0	-	0.0	0.0	-	-	-
110.0	80.0	0.0	0.0	0.0	-	5.0	-	0.0	-	0.0	-	-

*Macroramphosus gracilis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	50.0	0.0	5.2	-	0.0	0.0	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	0.0	-	5.2	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	4.7	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	0.0	-	0.0	4.9	-	-	-
116.7	45.0	5.2	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	60.0	4.9	-	-	-	0.0	-	-	-	0.0	-	-

*Syngnathus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
95.0	30.0	-	-	-	-	-	-	-	-	-	-	-
					4.6							



TABLE 4. (cont.)

*Syngnathus* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	30.0	0.0	-	-	0.0	7.7	-	-	-	0.0	-	-
120.0	35.0	0.0	-	-	0.0	8.1	-	-	-	0.0	-	-
123.3	36.0	0.0	-	-	0.0	0.0	-	-	-	5.0	-	-

Agonidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	52.0	0.0	0.0	-	0.0	0.0	-	4.9	-	-	-	-
66.7	49.0	0.0	0.0	-	9.6	0.0	-	0.0	-	-	-	-
80.0	51.0	0.0	0.0	-	8.3	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	20.5	-	0.0	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	5.3	-	0.0	0.0	-	0.0	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	0.0	-	4.3	-	-	-
90.0	70.0	-	0.0	0.0	-	0.0	9.6	-	0.0	-	-	-
103.3	30.0	4.5	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	4.9	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-

123

## Cottidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	0.0	-	-	0.0	-	2.0	-	-	-	-
63.3	52.0	10.4	0.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	55.0	0.0	0.0	-	0.0	0.0	-	4.7	-	-	-	-
66.7	60.0	0.0	0.0	-	10.1	0.0	-	0.0	-	-	-	-
73.3	50.0	0.0	17.1	-	0.0	8.1	0.0	-	18.4	-	-	-
76.7	48.0	0.0	0.0	-	0.0	0.0	14.4	-	0.0	-	-	-
83.3	51.0	0.0	0.0	92.3	-	10.0	0.0	-	34.5	-	-	-
86.7	33.0	-	0.0	0.0	-	0.0	419.2	-	0.0	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	7.5	-	17.0	-	-	-
100.0	29.2	0.0	0.0	-	5.5	0.0	-	5.1	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	4.7	-	0.0	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	3.8	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	6.0	-	4.6	0.0	-	-	-
106.7	32.0	0.0	0.0	0.0	-	5.1	-	0.0	0.0	-	-	-
110.0	32.4	0.0	0.0	0.0	-	10.4	-	0.0	0.0	-	-	-
113.3	29.0	0.0	-	-	0.0	3.5	-	-	-	0.0	-	-
120.0	25.0	4.5	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	8.8	-	-

*Scorpaenichthys marmoratus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	50.0	8.5	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Scorpaenichthys marmoratus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	51.0	10.8	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	55.0	10.0	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-

## Cyclopteridae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	0.0	-	-	0.0	-	5.2	-	-	-	-
60.0	52.5	-	0.0	-	0.0	0.0	-	4.3	-	-	-	-
60.0	80.0	-	-	7.2	0.0	0.0	-	0.0	-	-	-	-
63.3	50.0	0.0	0.0	-	0.0	0.0	-	2.0	-	-	-	-
70.0	51.0	0.0	0.0	-	0.0	0.0	-	0.0	9.5	-	-	-
73.3	50.0	0.0	0.0	-	0.0	0.0	0.0	-	9.2	-	-	-
83.3	51.0	0.0	0.0	10.3	-	0.0	0.0	-	0.0	-	-	-

## Hexagrammidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	50.0	4.2	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-

*Ophiodon elongatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	51.0	0.0	0.0	10.3	-	0.0	0.0	-	0.0	-	-	-

*Oxylebius pictus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	50.0	0.0	3.4	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	60.0	0.0	0.0	-	0.0	0.0	11.8	-	0.0	-	-	-
82.0	46.0	0.0	0.0	10.2	-	0.0	0.0	-	0.0	-	-	-
86.7	40.0	0.0	0.0	0.0	-	10.7	0.0	-	0.0	-	-	-
86.7	45.0	0.0	0.0	5.3	-	0.0	0.0	-	0.0	-	-	-
106.7	35.0	0.0	5.1	0.0	-	0.0	-	0.0	0.0	-	-	-

*Zaniolepis* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	51.0	9.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
76.7	48.0	0.0	0.0	-	0.0	0.0	0.0	-	3.5	-	-	-
80.0	55.0	10.0	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
82.0	46.0	0.0	9.7	0.0	-	0.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Zaniolepis* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	51.0	0.0	0.0	20.5	-	0.0	0.0	-	0.0	-	-	-
86.7	45.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	2.5	-	0.0	0.0	-	-	-
116.7	40.0	0.0	-	-	4.6	0.0	-	-	-	0.0	-	-

*Scorpaena* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	21.2	-	-	-
113.3	45.0	0.0	-	0.0	-	0.0	-	-	-	20.2	-	-
116.7	35.0	0.0	-	-	0.0	0.0	-	-	-	4.6	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	-	-	8.9	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-
120.0	45.0	0.0	-	-	0.0	0.0	-	-	-	17.5	-	-

*Sebastes* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	8.5	-	-	25.8	-	10.3	-	-	-	-
60.0	52.5	-	55.9	-	161.5	76.6	-	12.8	-	-	-	-
60.0	55.0	-	98.4	-	67.2	113.0	-	86.9	-	-	-	-
60.0	60.0	-	20.6	-	-	19.2	-	68.7	-	-	-	-
60.0	65.0	-	-	-	-	-	-	19.2	-	-	-	-
60.0	70.0	-	-	55.0	-	20.6	-	24.9	-	-	-	-
60.0	80.0	-	-	21.7	-	32.3	-	-	-	-	-	-
60.0	90.0	-	-	8.1	-	28.8	-	-	-	-	-	-
63.3	50.0	-	26.4	-	17.8	0.0	-	4.1	-	-	-	-
63.3	52.0	14.9	372.9	-	238.6	106.7	-	14.6	-	-	-	-
63.3	55.0	51.0	1000.8	-	1781.8	116.5	-	1636.3	-	-	-	-
63.3	60.0	0.0	0.0	-	298.8	799.6	-	49.3	-	-	-	-
63.3	65.0	17.0	-	-	-	-	-	-	-	-	-	-
63.3	70.0	29.2	-	0.0	-	22.5	-	112.2	-	-	-	-
63.3	80.0	0.0	-	9.0	-	-	-	10.5	-	-	-	-
63.3	90.0	0.0	-	0.0	-	-	-	11.6	-	-	-	-
66.7	49.0	155.4	312.6	-	992.9	0.0	-	187.2	-	-	-	-
66.7	50.0	615.9	434.7	-	864.9	73.6	-	218.9	-	-	-	-
66.7	55.0	58.8	87.9	-	504.4	52.5	-	106.2	-	-	-	-
66.7	60.0	131.3	9.8	-	60.4	0.0	-	140.8	-	-	-	-
66.7	65.0	0.0	-	-	-	-	-	74.4	-	-	-	-
66.7	70.0	10.0	-	10.9	-	10.3	-	99.7	-	-	-	-
66.7	80.0	0.0	-	0.0	-	-	-	63.4	-	-	-	-
70.0	51.0	102.3	534.8	-	272.2	55.6	-	17.3	57.2	-	-	-
70.0	53.0	188.3	51.8	-	60.8	48.5	-	-	233.1	-	-	-
70.0	60.0	10.1	82.0	-	29.6	22.6	75.5	-	21.8	-	-	-

TABLE 4. (cont.)

## Sebastes spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	65.0	0.0	-	-	-	-	48.3	-	-	-	-	-
70.0	70.0	0.0	-	0.0	-	22.3	40.2	-	49.1	-	-	-
73.3	50.0	84.6	30.9	-	81.7	24.2	69.6	-	0.0	-	-	-
73.3	53.0	27.4	15.2	-	200.4	10.2	0.0	-	89.7	-	-	-
73.3	60.0	31.4	16.1	-	10.1	0.0	30.8	-	0.0	-	-	-
73.3	65.0	0.0	-	-	-	-	30.1	-	-	-	-	-
73.3	70.0	0.0	88.2	0.0	-	50.6	-	-	0.0	-	-	-
73.3	80.0	0.0	0.0	0.0	-	0.0	33.9	-	0.0	-	-	-
73.3	90.0	0.0	10.9	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	48.0	0.0	14.8	-	56.7	0.0	10.8	-	3.5	-	-	-
76.7	51.0	43.2	504.4	-	50.8	48.6	73.6	-	21.0	-	-	-
76.7	55.0	78.9	33.1	-	20.5	10.0	103.5	-	234.5	-	-	-
76.7	60.0	0.0	9.0	-	220.8	0.0	82.6	-	79.6	-	-	-
76.7	65.0	0.0	-	-	-	-	43.2	-	-	-	-	-
76.7	70.0	0.0	0.0	0.0	-	9.8	46.4	-	9.8	-	-	-
76.7	80.0	0.0	0.0	9.2	-	0.0	24.6	-	0.0	-	-	-
80.0	51.0	30.5	54.6	-	41.4	42.6	0.0	-	89.7	-	-	-
80.0	55.0	149.7	751.6	-	505.7	71.9	58.7	-	102.3	-	-	-
80.0	60.0	44.4	8.4	-	612.5	0.0	24.1	-	11.5	-	-	-
80.0	70.0	0.0	0.0	-	-	20.5	12.2	-	73.3	-	-	-
82.0	46.0	11.0	524.3	367.2	-	264.1	10.9	-	0.0	-	-	-
83.3	40.6	0.0	3.8	7.2	-	71.8	3.0	-	9.7	-	-	-
83.3	42.0	52.2	68.9	300.2	-	206.7	28.7	-	0.0	-	-	-
83.3	51.0	10.3	99.4	410.4	-	551.1	0.0	-	28.8	-	-	-
83.3	55.0	107.2	9.7	273.8	-	237.7	0.0	-	0.0	-	-	-
83.3	60.0	10.5	0.0	-	-	10.6	20.6	-	32.5	-	-	-
83.3	70.0	0.0	0.0	-	-	40.6	9.1	-	9.4	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	9.2	-	0.0	-	-	-
86.7	33.0	-	45.1	14.5	-	0.0	0.0	-	0.0	-	-	-
86.7	35.0	-	291.8	235.4	-	22.4	0.0	-	0.0	-	-	-
86.7	40.0	-	92.2	832.1	-	471.4	49.2	-	0.0	-	-	-
86.7	45.0	-	18.8	63.1	-	521.7	42.7	-	22.2	-	-	-
86.7	50.0	-	3626.0	3852.6	-	600.5	37.4	-	8.5	-	-	-
86.7	55.0	-	117.8	151.5	-	9.4	9.0	-	29.2	-	-	-
86.7	60.0	-	4.8	184.3	-	0.0	8.1	-	21.8	-	-	-
86.7	70.0	-	4.9	-	-	0.0	-	-	9.5	-	-	-
86.7	80.0	-	0.0	-	-	11.1	10.7	-	33.1	-	-	-
86.7	90.0	-	0.0	-	-	0.0	9.5	-	11.0	-	-	-
90.0	28.0	-	0.0	23.5	-	20.0	9.1	-	18.3	-	-	-
90.0	30.0	-	10.1	12.1	-	99.4	11.0	-	0.0	-	-	-
90.0	37.0	-	26.5	67.1	-	137.4	0.0	-	0.0	-	-	-
90.0	45.0	-	44.5	15.4	-	0.0	0.0	-	0.0	-	-	-
90.0	53.0	-	121.3	45.6	-	389.7	9.7	-	0.0	-	-	-
90.0	60.0	-	10.3	0.0	-	0.0	0.0	-	29.6	-	-	-
90.0	70.0	-	0.0	-	-	0.0	38.3	-	9.7	-	-	-
90.0	80.0	-	0.0	-	-	5.2	5.2	-	0.0	-	-	-

TABLE 4. (cont.)

## Sebastes spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	0.0	-	0.0	-	-	0.0	4.7	-	0.0	-	-	-
90.0	100.0	-	-	-	-	-	10.9	-	-	-	-	-
93.3	26.7	-	54.0	16.5	-	54.7	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	21.2	-	0.0	0.0	-	0.0	-	-	-
93.3	30.0	-	0.0	0.0	-	19.1	0.0	-	10.7	-	-	-
93.3	35.0	-	0.0	86.2	-	158.5	39.0	-	0.0	-	-	-
93.3	40.0	-	0.0	44.6	-	47.3	0.0	-	0.0	-	-	-
93.3	45.0	-	10.6	20.4	-	57.6	0.0	-	0.0	-	-	-
93.3	50.0	-	210.8	0.0	-	55.0	77.1	-	0.0	-	-	-
93.3	55.0	-	16.3	0.0	-	114.1	0.0	-	0.0	-	-	-
93.3	60.0	-	5.3	0.0	-	93.8	0.0	-	19.2	-	-	-
93.3	70.0	-	0.0	0.0	-	0.0	11.5	-	0.0	-	-	-
95.0	29.0	-	-	9.2	-	-	-	-	-	-	-	-
95.0	30.0	-	-	-	113.8	-	-	-	-	-	-	-
96.7	29.0	4.8	8.6	-	4.5	9.8	-	0.0	5.3	-	-	-
96.7	30.0	39.4	53.3	-	474.9	52.1	-	18.7	0.0	-	-	-
96.7	32.0	10.7	5.0	-	64.7	52.4	-	0.0	0.0	-	-	-
96.7	35.0	0.0	18.8	-	20.0	18.3	-	0.0	0.0	-	-	-
96.7	40.0	0.0	21.0	-	38.7	4.6	-	10.6	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	10.0	-	0.0	0.0	-	-	-
96.7	50.0	-	24.0	-	0.0	28.5	-	10.1	10.5	-	-	-
96.7	55.0	0.0	0.0	-	9.8	0.0	-	0.0	19.7	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	5.1	5.0	-	-	-
100.0	29.2	0.0	14.0	-	263.5	107.8	-	9.9	0.0	-	-	-
100.0	30.0	60.9	287.7	-	314.4	35.5	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	19.8	72.7	-	0.0	0.0	-	-	-
100.0	40.0	0.0	0.0	-	72.3	13.1	-	0.0	0.0	-	-	-
100.0	40.0	0.0	0.0	26.7	-	40.7	-	3.5	19.1	-	-	-
103.3	30.0	0.0	0.0	22.5	-	221.1	-	0.0	19.2	-	-	-
103.3	35.0	0.0	0.0	0.0	-	8.3	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	47.0	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	5.6	-	0.0	0.0	-	-	-
106.7	31.0	0.0	0.0	3.8	-	19.8	-	0.0	0.0	-	-	-
106.7	32.0	0.0	48.5	92.2	-	15.4	-	20.1	8.7	-	-	-
106.7	35.0	0.0	0.0	44.5	-	19.5	-	0.0	0.0	-	-	-
106.7	40.0	0.0	15.4	0.0	-	10.1	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	8.8	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	14.6	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	10.4	-	0.0	0.0	-	-	-
110.0	32.4	22.4	11.2	-	-	237.7	-	9.0	0.0	-	-	-
110.0	32.5	-	-	0.0	-	25.1	-	0.0	5.3	-	-	-
110.0	35.0	14.8	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	9.4	-	0.0	-	0.0	0.0	-	-	-
110.0	60.0	0.0	0.0	4.8	-	0.0	-	0.0	0.0	-	-	-
110.0	70.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
113.3	29.0	0.0	-	-	10.6	0.0	-	-	-	-	-	-
113.3	30.0	18.3	-	-	8.8	21.8	-	-	0.0	-	-	-

TABLE 4. (cont.)

*Sebastes spp. (cont.)*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
113.3	35.0	0.0	-	0.0	-	31.6	-	-	-	0.0	-	-
113.3	40.0	0.0	-	0.0	-	4.8	-	-	-	0.0	-	-
116.7	25.0	0.0	-	-	6.9	0.0	-	-	-	0.0	-	-
116.7	30.0	0.0	-	-	22.8	57.0	-	-	-	0.0	-	-
116.7	35.0	0.0	-	-	190.7	5.2	-	-	-	0.0	-	-
116.7	40.0	0.0	-	-	59.2	99.2	-	-	-	0.0	-	-
116.7	45.0	0.0	-	-	4.9	29.9	-	-	-	0.0	-	-
116.7	50.0	0.0	-	-	4.8	19.3	-	-	-	0.0	-	-
118.0	39.0	0.0	-	-	0.0	83.6	-	-	-	0.0	-	-
119.0	33.0	0.0	-	-	5.1	19.4	-	-	-	0.0	-	-
120.0	30.0	0.0	-	-	8.5	7.7	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	8.8	-	-
120.0	50.0	0.0	-	-	-	15.8	-	-	-	0.0	-	-
123.3	36.0	4.1	-	-	0.0	13.1	-	-	-	0.0	-	-
123.3	37.0	4.8	-	-	82.3	17.1	-	-	-	0.0	-	-
123.3	42.0	0.0	-	-	0.0	22.9	-	-	-	0.0	-	-
123.3	45.0	0.0	-	-	0.0	97.7	-	-	-	0.0	-	-
123.3	50.0	0.0	-	-	0.0	34.8	-	-	-	0.0	-	-
126.7	33.0	0.0	-	-	-	8.4	-	-	-	-	-	-
126.7	35.0	0.0	-	-	-	56.6	-	-	-	-	-	-
126.7	40.0	0.0	-	-	-	22.7	-	-	-	-	-	-
130.0	28.0	0.0	-	-	0.0	14.8	-	-	-	-	-	-
130.0	30.0	0.0	-	-	0.0	58.6	-	-	-	-	-	-
130.0	35.0	0.0	-	-	4.3	0.0	-	-	-	-	-	-
133.3	25.0	0.0	-	-	-	8.2	-	-	-	-	-	-
133.3	35.0	0.0	-	-	-	9.9	-	-	-	-	-	-
133.3	50.0	0.0	-	-	-	18.7	-	-	-	-	-	-

*Sebastes aurora*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	50.0	19.6	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	0.0	0.0	-	0.0	0.0	-	11.0	-	-	-	-
66.7	65.0	0.0	-	-	-	-	-	10.6	-	-	-	-
66.7	70.0	0.0	-	0.0	-	0.0	-	5.9	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	0.0	-	-	10.6	-	-	-
70.0	60.0	0.0	9.1	-	0.0	0.0	-	-	0.0	-	-	-
70.0	70.0	0.0	-	0.0	-	0.0	10.0	-	0.0	-	-	-
70.0	90.0	0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
73.3	53.0	0.0	0.0	-	10.0	0.0	0.0	-	10.0	-	-	-
76.7	55.0	9.9	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
76.7	60.0	0.0	0.0	-	0.0	0.0	47.2	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	0.0	0.0	0.0	-	4.9	-	-	-
80.0	60.0	0.0	0.0	-	0.0	0.0	12.1	-	0.0	-	-	-
80.0	70.0	0.0	0.0	-	-	0.0	12.2	-	0.0	-	-	-

TABLE 4. (cont.)

<i>Sebastes aurora</i> (cont.)												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	42.0	0.0	0.0	0.0	-	10.9	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	0.0	-	5.8	-	-	-
83.3	70.0	0.0	0.0	0.0	-	10.2	0.0	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-
100.0	35.0	0.0	0.0	-	0.0	9.6	-	0.0	0.0	-	-	-
<i>Sebastes jordani</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	4.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	52.0	10.4	0.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	55.0	0.0	0.0	-	0.0	31.8	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	0.0	173.8	-	0.0	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	19.4	-	-	0.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	20.2	-	-	0.0	-	-	-
76.7	51.0	0.0	51.5	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	55.0	0.0	279.2	-	0.0	0.0	0.0	-	0.0	-	-	-
82.0	46.0	0.0	19.4	0.0	-	0.0	0.0	-	0.0	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	9.6	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	0.0	9.2	-	0.0	-	-	-
86.7	33.0	-	13.5	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	22.4	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	0.0	-	0.0	8.2	-	0.0	-	-	-
86.7	55.0	-	0.0	0.0	-	0.0	18.1	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	35.0	-	0.0	0.0	-	9.9	0.0	-	0.0	-	-	-
93.3	40.0	-	0.0	0.0	-	5.3	0.0	-	0.0	-	-	-
93.3	50.0	-	0.0	0.0	-	0.0	11.0	-	0.0	-	-	-
95.0	30.0	-	-	-	150.2	-	-	-	-	-	-	-
96.7	32.0	0.0	0.0	-	0.0	21.0	-	0.0	0.0	-	-	-
96.7	35.0	0.0	0.0	-	0.0	3.9	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	5.1	-	0.0	0.0	-	-	-
<i>Sebastes levis</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	90.0	0.0	-	0.0	-	0.0	-	-	10.3	-	-	-
73.3	53.0	0.0	5.1	-	0.0	0.0	0.0	-	0.0	-	-	-
86.7	45.0	-	42.4	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	0.0	-	10.9	-	-	-
103.3	30.0	0.0	0.0	0.0	-	6.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Sebastes macdonaldi*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
116.7	30.0	0.0	-	-	0.0	19.0	-	-	-	0.0	-	-
120.0	25.0	0.0	-	-	0.0	27.2	-	-	-	0.0	-	-
120.0	45.0	0.0	-	-	-	4.2	-	-	-	0.0	-	-
130.0	28.0	0.0	-	-	0.0	14.8	-	-	-	-	-	-
130.0	30.0	0.0	-	-	0.0	19.5	-	-	-	-	-	-
133.3	23.0	0.0	-	-	-	34.4	-	-	-	-	-	-
133.3	25.0	0.0	-	-	-	16.3	-	-	-	-	-	-
133.3	30.0	0.0	-	-	-	137.7	-	-	-	-	-	-

*Sebastes paucispinis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	60.0	-	10.3	-	-	9.6	-	0.0	-	-	-	-
60.0	80.0	-	-	0.0	-	10.8	-	0.0	-	-	-	-
63.3	55.0	20.4	28.1	-	0.0	0.0	-	0.0	-	-	-	-
66.7	49.0	0.0	0.0	-	19.3	0.0	-	0.0	-	-	-	-
66.7	50.0	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-	-
66.7	60.0	49.2	9.8	-	0.0	0.0	-	0.0	-	-	-	-
66.7	80.0	0.0	-	0.0	-	-	-	9.9	-	-	-	-
70.0	53.0	0.0	10.4	-	0.0	0.0	-	-	0.0	-	-	-
70.0	60.0	10.1	27.3	-	9.9	0.0	0.0	-	0.0	-	-	-
73.3	53.0	18.3	10.2	-	0.0	0.0	0.0	-	0.0	-	-	-
73.3	60.0	0.0	10.7	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	55.0	0.0	0.0	-	10.2	0.0	0.0	-	0.0	-	-	-
76.7	60.0	0.0	0.0	-	22.1	0.0	0.0	-	0.0	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	8.2	-	0.0	-	-	-
80.0	51.0	0.0	0.0	-	0.0	10.6	0.0	-	0.0	-	-	-
80.0	55.0	29.9	128.8	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	60.0	33.3	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
82.0	46.0	0.0	68.0	0.0	42.2	0.0	0.0	-	0.0	-	-	-
83.3	42.0	0.0	0.0	0.0	-	10.9	0.0	-	0.0	-	-	-
83.3	55.0	10.7	0.0	20.3	-	21.6	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	0.0	-	10.7	0.0	-	0.0	-	-	-
86.7	45.0	-	61.2	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	50.0	-	631.4	0.0	-	9.5	0.0	-	0.0	-	-	-
86.7	55.0	-	71.7	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	60.0	-	4.8	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	-	5.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	37.0	-	10.6	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	45.0	-	4.9	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	53.0	-	24.3	0.0	-	111.3	0.0	-	0.0	-	-	-
93.3	26.7	-	4.2	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	50.0	-	5.0	0.0	-	11.0	0.0	-	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	3.5	0.0	0.0	0.0	-	-	-
96.7	32.0	0.0	5.0	-	0.0	0.0	-	0.0	0.0	-	-	-



TABLE 4. (cont.)

*Sebastes paucispinis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	35.0	0.0	0.0	-	0.0	3.9	-	0.0	0.0	-	-	-
96.7	40.0	0.0	0.0	-	0.0	4.6	-	0.0	0.0	-	-	-
96.7	50.0	-	4.8	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	55.0	0.0	25.4	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	8.4	-	0.0	0.0	-	-	-
100.0	35.0	0.0	0.0	-	0.0	4.8	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	14.8	-	0.0	0.0	-	-	-
106.7	40.0	0.0	0.0	0.0	-	5.2	-	0.0	0.0	-	-	-

*Sebastolobus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	65.0	-	-	-	-	-	-	4.8	-	-	-	-
60.0	70.0	-	-	0.0	-	10.3	-	0.0	-	-	-	-
60.0	80.0	-	-	0.0	-	21.6	-	0.0	-	-	-	-
60.0	90.0	-	-	0.0	-	9.6	-	0.0	-	-	-	-
63.3	52.0	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	9.6	0.0	-	5.0	-	-	-	-
66.7	70.0	0.0	0.0	0.0	-	10.3	-	0.0	-	-	-	-
70.0	80.0	0.0	0.0	0.0	-	11.3	-	0.0	0.0	-	-	-
73.3	50.0	0.0	0.0	0.0	7.1	0.0	0.0	-	0.0	-	-	-
73.3	80.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
73.3	90.0	0.0	0.0	0.0	-	0.0	11.3	-	0.0	-	-	-
76.7	55.0	0.0	0.0	-	10.2	0.0	0.0	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	-	9.8	0.0	-	0.0	-	-	-
76.7	80.0	0.0	0.0	0.0	-	0.0	8.2	-	0.0	-	-	-
80.0	70.0	0.0	0.0	0.0	-	10.2	0.0	-	0.0	-	-	-
86.7	50.0	-	0.0	0.0	-	9.5	0.0	-	24.4	-	-	-
86.7	70.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
126.7	50.0	0.0	0.0	-	-	14.1	-	-	0.0	-	-	-

*Prionotus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	24.0	0.0	-	-	0.0	0.0	-	-	-	3.7	-	-
120.0	38.5	0.0	-	-	0.0	0.0	-	-	-	7.6	-	-
120.0	50.0	0.0	-	-	0.0	0.0	-	-	-	9.9	-	-

## Blennioidaei

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	50.0	0.0	3.8	-	0.0	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	9.6	0.0	-	0.0	-	-	-	-

TABLE 4. (cont.)

## Blennioidei (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	50.0	0.0	24.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	0.0	-	20.3	0.0	0.0	-	0.0	-	-	-
76.7	60.0	0.0	0.0	-	11.0	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	20.5	-	0.0	0.0	-	0.0	-	-	-
93.3	35.0	0.0	0.0	5.1	-	0.0	0.0	-	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	19.1	-	0.0	0.0	-	-	-

## Hypsoblennius spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	33.0	-	0.0	0.0	-	0.0	8.4	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	11.2	0.0	-	0.0	-	-	-
90.0	28.0	-	0.0	0.0	-	0.0	117.8	-	0.0	-	-	-
93.3	26.7	-	0.0	0.0	-	4.6	0.0	-	27.4	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	0.0	-	10.9	-	-	-
96.7	29.0	4.8	0.0	-	0.0	0.0	0.0	0.0	10.7	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	-	0.0	5.1	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	19.1	-	-	-
103.3	30.0	0.0	0.0	0.0	-	0.0	-	0.0	9.6	-	-	-
106.7	32.0	0.0	0.0	0.0	-	0.0	-	0.0	17.4	-	-	-
110.0	32.4	0.0	0.0	-	-	0.0	-	17.9	17.4	-	-	-
113.3	29.0	0.0	-	-	0.0	0.0	-	-	-	10.8	-	-
120.0	38.5	0.0	-	-	0.0	2.2	-	-	-	3.8	-	-
123.3	37.0	0.0	-	-	0.0	0.0	-	-	-	31.8	-	-
130.0	28.0	9.3	-	-	0.0	0.0	-	-	-	-	-	-

## Clinidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	0.0	-	-	4.3	-	0.0	-	-	-	-
63.3	50.0	7.5	0.0	-	8.9	35.4	-	0.0	-	-	-	-
73.3	50.0	0.0	0.0	-	3.5	0.0	0.0	0.0	0.0	-	-	-
76.7	48.0	0.0	0.0	-	0.0	0.0	3.6	-	0.0	-	-	-
80.0	51.0	0.0	4.6	-	0.0	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	41.4	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	50.0	-	9.0	0.0	-	0.0	0.0	-	0.0	-	-	-
100.0	29.2	0.0	0.0	-	27.4	15.1	0.0	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	9.0	-	0.0	-	9.2	0.0	-	-	-
106.7	31.0	0.0	0.0	0.0	-	0.0	-	3.8	0.0	-	-	-
106.7	32.0	0.0	0.0	5.1	-	0.0	-	0.0	0.0	-	-	-
110.0	32.4	0.0	0.0	0.0	-	0.0	-	17.9	0.0	-	-	-
110.0	32.5	-	-	0.0	-	0.0	-	-	-	-	-	-
113.3	30.0	4.6	-	-	0.0	11.3	-	-	-	0.0	-	-
116.7	25.0	0.0	-	-	0.0	0.0	-	-	-	0.0	-	-
					0.0	3.9	-	-	-	0.0	-	-

TABLE 4. (cont.)

Clinidae (cont.)												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
126.7	33.0	4.3	-	-	-	0.0	-	-	-	-	-	-
Gobiidae												
60.0	50.0	0.0	0.0	-	0.0	0.0	-	2.0	-	-	-	-
63.3	50.0	0.0	0.0	-	0.0	4.4	-	0.0	-	-	-	-
66.7	55.0	8.4	0.0	-	9.7	0.0	-	0.0	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	0.0	-	0.0	10.6	-	-	-
73.3	53.0	0.0	0.0	-	10.0	0.0	-	0.0	0.0	-	-	-
76.7	48.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
76.7	51.0	0.0	0.0	-	10.2	0.0	-	0.0	0.0	-	-	-
76.7	60.0	0.0	0.0	-	0.0	0.0	-	0.0	13.3	-	-	-
80.0	60.0	0.0	0.0	0.0	10.6	0.0	-	0.0	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	10.3	-	0.0	0.0	-	-	-
83.3	51.0	0.0	0.0	10.3	-	0.0	-	0.0	0.0	-	-	-
83.3	55.0	0.0	0.0	0.0	-	10.8	-	0.0	0.0	-	-	-
83.3	60.0	0.0	0.0	0.0	-	10.6	-	0.0	0.0	-	-	-
86.7	33.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
86.7	40.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
86.7	45.0	0.0	0.0	0.0	-	10.7	-	0.0	0.0	-	-	-
86.7	50.0	0.0	0.0	9.7	-	10.4	-	0.0	0.0	-	-	-
86.7	55.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
86.7	60.0	0.0	0.0	10.2	-	0.0	-	0.0	0.0	-	-	-
90.0	28.0	0.0	0.0	0.0	-	0.0	-	0.0	21.8	-	-	-
90.0	45.0	0.0	0.0	0.0	-	18.5	-	0.0	18.3	-	-	-
90.0	53.0	0.0	0.0	0.0	-	33.4	-	0.0	0.0	-	-	-
90.0	60.0	0.0	10.3	0.0	-	0.0	-	0.0	0.0	-	-	-
93.3	45.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
93.3	55.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
93.3	60.0	0.0	0.0	0.0	-	0.0	-	0.0	10.4	-	-	-
100.0	29.2	0.0	0.0	0.0	-	0.0	-	0.0	9.6	-	-	-
100.0	30.0	0.0	0.0	-	0.0	0.0	-	5.1	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	2.5	-	0.0	0.0	-	-	-
113.3	29.0	0.0	0.0	0.0	-	6.0	-	0.0	0.0	-	-	-
116.7	25.0	4.2	-	-	0.0	0.0	-	-	-	5.4	-	-
120.0	24.0	0.0	-	-	0.0	0.0	-	-	-	0.0	-	-
120.0	35.0	0.0	-	-	0.0	0.0	-	-	-	3.7	-	-
120.0	38.5	0.0	-	-	3.6	0.0	-	-	-	9.1	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	0.0	-	-
120.0	50.0	0.0	-	-	-	0.0	-	-	-	9.9	-	-

TABLE 4. (cont.)

*Icosteus aenigmaticus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	51.0	0.0	0.0	-	0.0	0.0	10.5	-	0.0	-	-	-
76.7	60.0	0.0	0.0	-	11.0	0.0	0.0	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	0.0	9.7	-	0.0	-	-	-

*Halichoeres* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
100.0	29.2	0.0	0.0	-	0.0	0.0	-	5.1	5.0	-	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-
118.0	39.0	0.0	-	-	0.0	0.0	-	-	-	19.6	-	-
120.0	25.0	0.0	-	-	0.0	0.0	-	-	-	21.1	-	-
120.0	35.0	0.0	-	-	0.0	0.0	-	-	-	4.6	-	-
120.0	38.5	0.0	-	-	0.0	0.0	-	-	-	15.2	-	-

*Oxyjulis californica*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	55.0	0.0	0.0	-	0.0	0.0	-	6.1	-	-	-	-
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
80.0	55.0	0.0	0.0	-	0.0	0.0	0.0	-	11.4	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	0.0	-	58.8	-	-	-
83.3	42.0	0.0	0.0	0.0	-	21.8	0.0	-	52.2	-	-	-
83.3	51.0	0.0	0.0	0.0	-	10.0	0.0	-	11.5	-	-	-
83.3	60.0	0.0	0.0	0.0	-	10.6	0.0	-	10.8	-	-	-
86.7	45.0	-	0.0	0.0	-	0.0	0.0	-	11.1	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	0.0	-	4.3	-	-	-
86.7	55.0	-	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	45.0	-	0.0	0.0	-	37.0	0.0	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	155.9	0.0	-	0.0	-	-	-
90.0	60.0	-	0.0	0.0	-	0.0	0.0	-	9.9	-	-	-
93.3	50.0	-	0.0	0.0	-	22.0	0.0	-	0.0	-	-	-
93.3	55.0	-	0.0	0.0	-	51.9	0.0	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	10.4	0.0	-	19.2	-	-	-
93.3	70.0	-	0.0	0.0	-	0.0	0.0	-	10.8	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	-	10.2	10.1	-	-	-
100.0	30.0	0.0	0.0	-	0.0	0.0	-	19.8	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	14.2	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	0.0	-	0.0	9.6	-	-	-
103.3	35.0	0.0	0.0	0.0	-	0.0	-	0.0	4.6	-	-	-
103.3	40.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	0.0	-	0.0	10.4	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	5.3	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	0.0	4.3	-	-	-

TABLE 4. (cont.)

*Oxyjulis californica* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-
120.0	45.0	0.0	-	-	0.0	0.0	-	-	-	8.8	-	-

*Semicossyphus pulcher*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	0.0	-	31.3	-	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-

*Chromis punctipinnis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	0.0	-	10.4	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	0.0	-	17.3	-	-	-
86.7	55.0	0.0	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-
93.3	26.7	-	0.0	0.0	-	0.0	0.0	-	9.1	-	-	-
96.7	30.0	0.0	0.0	-	0.0	0.0	-	9.3	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	0.0	-	0.0	20.9	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	10.6	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	0.0	8.5	-	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-
118.0	39.0	0.0	-	-	0.0	0.0	-	-	-	19.6	-	-
120.0	25.0	0.0	-	-	0.0	0.0	-	-	-	16.9	-	-
120.0	38.5	0.0	-	-	0.0	0.0	-	-	-	11.4	-	-
120.0	45.0	0.0	-	-	0.0	0.0	-	-	-	26.3	-	-
120.0	50.0	0.0	-	-	0.0	0.0	-	-	-	49.4	-	-
123.3	37.0	0.0	-	-	0.0	0.0	-	-	-	42.5	-	-

*Hypsypops rubicundus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	31.0	0.0	0.0	0.0	-	0.0	-	3.8	0.0	-	-	-

## Carangidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	50.0	0.0	-	-	-	0.0	-	-	-	9.9	-	-

TABLE 4. (cont.)

<i>Seriola lalandi</i>											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
103.3	45.0	0.0	0.0	0.0	-	0.0	-	0.0	10.6	-	-
<i>Trachurus symmetricus</i>											
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	OCT.
63.3	80.0	0.0	-	0.0	-	-	-	10.5	-	-	-
63.3	90.0	0.0	-	0.0	-	-	-	11.6	-	-	-
66.7	90.0	0.0	-	7.2	-	-	-	0.0	9.8	-	-
70.0	70.0	0.0	-	0.0	-	0.0	0.0	-	12.6	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	32.3	-	-
73.3	70.0	0.0	0.0	0.0	0.0	0.0	0.0	-	13.3	-	-
76.7	60.0	0.0	0.0	0.0	0.0	0.0	5.2	-	10.1	-	-
76.7	90.0	0.0	0.0	0.0	-	-	14.1	-	-	-	-
76.7	100.0	0.0	0.0	0.0	-	-	21.1	-	0.0	-	-
80.0	80.0	0.0	0.0	0.0	-	0.0	5.5	-	0.0	-	-
80.0	90.0	0.0	0.0	0.0	-	0.0	251.6	-	0.0	-	-
80.0	100.0	0.0	0.0	-	-	-	72.2	-	0.0	-	-
83.3	60.0	0.0	0.0	-	-	10.6	0.0	-	0.0	-	-
83.3	80.0	0.0	0.0	-	-	491.4	0.0	-	0.0	-	-
83.3	90.0	0.0	0.0	-	-	159.3	0.0	-	10.0	-	-
86.7	60.0	-	0.0	0.0	-	52.4	16.2	-	0.0	-	-
86.7	70.0	-	0.0	-	-	10.5	10.7	-	0.0	-	-
86.7	80.0	-	0.0	-	-	0.0	10.7	-	0.0	-	-
86.7	90.0	-	0.0	-	-	149.4	4.8	-	0.0	-	-
86.7	100.0	-	0.0	-	-	-	9.9	-	0.0	-	-
90.0	28.0	-	0.0	0.0	-	0.0	18.1	-	0.0	-	-
90.0	30.0	-	0.0	0.0	-	0.0	43.8	-	0.0	-	-
90.0	37.0	-	0.0	0.0	-	0.0	10.9	-	0.0	-	-
90.0	53.0	-	0.0	0.0	-	66.8	0.0	-	0.0	-	-
90.0	60.0	-	0.0	0.0	-	27.1	150.5	-	0.0	-	-
90.0	70.0	-	0.0	0.0	-	10.3	9.6	-	0.0	-	-
90.0	80.0	-	0.0	-	-	5.2	15.7	-	0.0	-	-
90.0	90.0	-	0.0	-	-	67.1	0.0	-	0.0	-	-
93.3	35.0	-	0.0	0.0	-	0.0	9.8	-	0.0	-	-
93.3	45.0	-	0.0	0.0	-	0.0	10.5	-	0.0	-	-
93.3	50.0	-	0.0	0.0	-	0.0	22.0	-	0.0	-	-
93.3	55.0	-	0.0	0.0	-	10.4	0.0	-	0.0	-	-
93.3	70.0	-	0.0	0.0	-	0.0	137.8	-	0.0	-	-
93.3	80.0	0.0	0.0	-	-	45.2	5.1	-	0.0	-	-
93.3	90.0	0.0	0.0	-	-	29.8	106.6	-	0.0	-	-
96.7	30.0	0.0	0.0	-	0.0	0.0	-	9.3	0.0	-	-
96.7	55.0	0.0	0.0	-	4.9	18.1	-	21.0	0.0	-	-
96.7	60.0	0.0	0.0	-	0.0	38.3	-	0.0	0.0	-	-
96.7	70.0	0.0	0.0	0.0	-	44.2	-	0.0	0.0	-	-
96.7	90.0	0.0	0.0	0.0	-	8.7	-	0.0	0.0	-	-

TABLE 4. (cont.)

*Trachurus symmetricus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
100.0	40.0	0.0	0.0	-	0.0	19.0	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	0.0	36.2	-	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	235.1	-	0.0	0.0	-	-	-
100.0	60.0	0.0	0.0	-	0.0	111.8	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	9.4	-	28.0	-	0.0	8.7	-	-	-
100.0	80.0	0.0	0.0	0.0	-	12.9	-	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	5.1	-	0.0	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	5.0	-	2.6	-	0.0	0.0	-	-	-
103.3	45.0	0.0	0.0	4.9	-	16.8	-	5.4	0.0	-	-	-
103.3	50.0	0.0	0.0	-	10.4	10.3	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	-	0.0	597.7	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	0.0	-	57.2	-	0.0	0.0	-	-	-
103.3	80.0	0.0	0.0	0.0	-	4.7	-	19.8	0.0	-	-	-
106.7	50.0	0.0	0.0	0.0	-	4.7	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	279.3	-	9.5	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	0.0	-	0.0	4.9	-	-	-
106.7	80.0	0.0	0.0	5.1	-	5.5	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	4.9	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	36.1	-	-
110.0	70.0	0.0	0.0	0.0	-	39.1	-	22.2	-	0.0	-	-
113.3	70.0	0.0	-	0.0	-	5.0	-	-	-	0.0	-	-
123.3	50.0	5.1	-	0.0	-	10.6	-	-	-	0.0	-	-
126.7	50.0	0.0	-	-	0.0	4.7	-	-	-	-	-	-

*Coryphaena hippurus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	45.0	0.0	0.0	0.0	-	0.0	-	0.0	4.6	-	-	-
113.3	45.0	0.0	-	0.0	-	0.0	-	-	-	10.1	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	-	-	8.9	-	-

## Gerreidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	28.0	0.0	0.0	0.0	-	0.0	0.0	-	18.3	-	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	8.8	-	-
123.3	36.0	0.0	-	-	0.0	0.0	-	-	-	25.2	-	-

## Haemulidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
93.3	26.7	0.0	0.0	0.0	-	0.0	0.0	-	45.7	-	-	-

TABLE 4. (cont.)

## Haemulidae (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	9.5	-	-	-

*Girella nigricans*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	60.0	0.0	0.0	-	0.0	0.0	0.0	-	11.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-

*Caulolatilus princeps*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	32.0	0.0	0.0	0.0	-	0.0	-	0.0	8.7	-	-	-
116.7	40.0	0.0	-	-	0.0	0.0	-	-	-	5.0	-	-

## Sciaenidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	33.0	-	0.0	0.0	-	10.6	0.0	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	11.2	0.0	-	0.0	-	-	-
96.7	29.0	0.0	0.0	-	0.0	2.3	-	0.0	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	2.5	-	0.0	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	3.8	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	34.1	-	0.0	0.0	-	-	-

*Cheilotrema saturnum*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
103.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	9.5	-	-	-
106.7	35.0	0.0	0.0	0.0	-	0.0	-	0.0	5.2	-	-	-

*Genyonemus lineatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	42.7	-	-	0.0	-	0.0	-	-	-	-
63.3	50.0	0.0	0.0	-	701.5	0.0	-	0.0	-	-	-	-
63.3	52.0	41.5	10.7	-	29.2	0.0	-	0.0	-	-	-	-
66.7	49.0	116.6	9.8	-	0.0	0.0	-	0.0	-	-	-	-
66.7	50.0	19.6	0.0	-	0.0	0.0	-	0.0	-	-	-	-
73.3	50.0	16.9	6.9	-	0.0	0.0	0.0	0.0	0.0	-	-	-
76.7	48.0	53.0	177.1	-	48.6	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	10.3	-	0.0	0.0	0.0	-	0.0	-	-	-



TABLE 4. (cont.)

*Genyonemus lineatus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	51.0	502.9	618.8	-	2078.3	0.0	0.0	-	0.0	-	-	-
82.0	46.0	11.0	48.5	30.6	-	0.0	0.0	-	0.0	-	-	-
83.3	40.6	7.7	49.5	10.9	-	0.0	9.1	-	0.0	-	-	-
83.3	42.0	7.5	88.6	37.5	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	-	40.6	14.5	-	21.2	0.0	-	0.0	-	-	-
86.7	35.0	-	64.8	32.1	-	0.0	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	10.6	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	-	5.0	18.8	-	10.0	36.2	-	0.0	-	-	-
90.0	30.0	-	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
93.3	26.7	-	12.5	0.0	-	18.2	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	5.3	-	11.0	0.0	-	0.0	-	-	-
95.0	30.0	-	-	-	13.7	-	-	-	-	-	-	-
96.7	29.0	-	0.0	-	4.5	72.3	-	7.9	0.0	-	-	-
96.7	32.0	-	0.0	-	10.0	0.0	-	0.0	0.0	-	-	-
100.0	29.2	-	4.7	-	87.8	31.1	-	0.0	0.0	-	-	-
100.0	30.0	-	0.0	-	62.9	14.3	-	0.0	0.0	-	-	-
100.0	40.0	-	0.0	-	28.9	0.0	-	0.0	0.0	-	-	-
103.3	29.0	-	0.0	118.4	-	210.3	-	0.0	0.0	-	-	-
103.3	35.0	-	0.0	0.0	-	5.9	-	0.0	0.0	-	-	-
106.7	31.0	-	0.0	7.6	-	75.5	-	0.0	0.0	-	-	-
106.7	32.0	-	0.0	61.4	-	0.0	-	0.0	0.0	-	-	-
106.7	35.0	-	0.0	29.6	-	0.0	-	0.0	0.0	-	-	-
110.0	32.4	-	7.5	-	-	244.8	-	0.0	0.0	-	-	-
110.0	32.5	-	-	0.0	-	34.0	-	-	-	-	-	-
110.0	35.0	-	0.0	0.0	-	9.0	-	0.0	0.0	-	-	-
110.0	45.0	-	5.0	0.0	-	0.0	-	0.0	0.0	-	-	-
113.3	29.0	-	-	-	0.0	0.0	-	-	-	0.0	-	-
113.3	30.0	-	-	-	0.0	3.6	-	-	-	0.0	-	-
113.3	35.0	-	-	0.0	-	10.5	-	-	-	0.0	-	-
119.0	33.0	-	-	0.0	10.2	0.0	-	-	-	0.0	-	-

*Roncador stearnsii*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
93.3	26.7	0.0	0.0	0.0	-	0.0	0.0	-	9.1	-	-	-

*Seriphus politus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	21.3	-	-	-
80.0	51.0	0.0	0.0	-	0.0	0.0	0.0	-	49.8	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	6.1	-	562.7	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	57.5	-	10.4	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	11.4	-	0.0	-	-	-

TABLE 4. (cont.)

*Seriphus politus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	33.0	0.0	0.0	0.0	-	0.0	8.4	-	0.0	-	-	-
86.7	35.0	0.0	0.0	0.0	-	11.2	0.0	-	0.0	-	-	-
90.0	28.0	0.0	0.0	4.7	-	0.0	471.1	-	9.1	-	-	-
93.3	26.7	0.0	0.0	0.0	-	0.0	36.8	-	0.0	-	-	-
95.0	30.0	-	-	-	9.1	-	-	270.0	10.7	-	-	-
96.7	29.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	5.6	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	7.5	-	66.4	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	4.9	-	9.9	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	15.3	-	14.2	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	17.1	-	0.0	0.0	-	-	-

## Serranidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
80.0	51.0	0.0	0.0	-	0.0	0.0	0.0	-	19.9	-	-	-
80.0	55.0	0.0	0.0	-	0.0	0.0	0.0	-	34.1	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	0.0	-	35.3	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	0.0	-	38.8	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	0.0	-	135.7	-	-	-
86.7	33.0	0.0	0.0	0.0	-	0.0	0.0	-	15.0	-	-	-
86.7	35.0	0.0	0.0	0.0	-	0.0	0.0	-	31.0	-	-	-
90.0	28.0	0.0	0.0	0.0	-	0.0	0.0	-	27.4	-	-	-
90.0	37.0	0.0	0.0	0.0	-	0.0	0.0	-	16.2	-	-	-
93.3	26.7	0.0	0.0	0.0	-	0.0	0.0	-	82.2	-	-	-
96.7	29.0	0.0	0.0	-	0.0	0.0	0.0	0.0	48.1	-	-	-
96.7	30.0	0.0	0.0	-	0.0	0.0	0.0	0.0	48.4	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	0.0	0.0	5.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	0.0	0.0	9.9	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	-	-	-
110.0	32.4	0.0	0.0	0.0	-	0.0	0.0	0.0	4.3	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	9.0	-	-
113.3	45.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	5.0	-	-
116.7	35.0	0.0	0.0	-	0.0	0.0	0.0	-	-	4.6	-	-
116.7	40.0	0.0	0.0	-	0.0	0.0	0.0	-	-	5.0	-	-
116.7	45.0	0.0	0.0	-	0.0	0.0	0.0	-	-	44.5	-	-
116.7	50.0	0.0	0.0	-	0.0	0.0	0.0	-	-	10.3	-	-
119.0	33.0	0.0	0.0	-	0.0	0.0	0.0	-	-	5.1	-	-
120.0	45.0	0.0	0.0	-	0.0	0.0	0.0	-	-	35.1	-	-
123.3	36.0	4.1	0.0	-	0.0	0.0	0.0	-	-	5.0	-	-

TABLE 4. (cont.)

## Gempylidae

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	80.0	0.0	-	-	-	0.0	-	-	-	4.7	-	-

*Sarda chiliensis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
120.0	50.0	0.0	-	-	-	10.5	-	-	-	0.0	-	-

*Scomber japonicus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	0.0	0.0	-	10.7	-	-	-
80.0	55.0	0.0	0.0	-	0.0	0.0	0.0	-	102.3	-	-	-
80.0	70.0	0.0	0.0	-	-	0.0	48.6	-	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	0.0	-	152.8	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	0.0	-	87.3	-	-	-
83.3	42.0	0.0	0.0	0.0	-	10.9	162.9	-	490.5	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	0.0	-	63.3	-	-	-
83.3	55.0	0.0	0.0	0.0	-	0.0	0.0	-	22.4	-	-	-
83.3	60.0	0.0	0.0	-	-	0.0	10.3	-	10.8	-	-	-
83.3	70.0	0.0	0.0	-	-	0.0	9.1	-	0.0	-	-	-
86.7	33.0	-	0.0	0.0	-	0.0	1500.8	-	45.1	-	-	-
86.7	35.0	-	0.0	0.0	-	0.0	166.8	-	20.7	-	-	-
86.7	40.0	-	0.0	0.0	-	0.0	32.8	-	10.5	-	-	-
86.7	50.0	-	0.0	0.0	-	0.0	7.5	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	10.5	145.7	-	0.0	-	-	-
86.7	70.0	-	0.0	0.0	-	10.5	-	-	0.0	-	-	-
90.0	28.0	-	0.0	0.0	-	0.0	0.0	-	27.4	-	-	-
90.0	30.0	-	0.0	0.0	-	0.0	394.5	-	0.0	-	-	-
90.0	37.0	-	0.0	0.0	-	0.0	5.4	-	522.8	-	-	-
90.0	45.0	-	0.0	0.0	-	74.1	333.7	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	89.1	58.4	-	0.0	-	-	-
90.0	60.0	-	0.0	0.0	-	32.6	46.3	-	0.0	-	-	-
90.0	70.0	-	0.0	0.0	-	0.0	38.3	-	0.0	-	-	-
90.0	80.0	-	0.0	0.0	-	5.2	36.7	-	0.0	-	-	-
93.3	26.7	-	0.0	0.0	-	0.0	46.0	-	91.3	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	19.4	-	383.0	-	-	-
93.3	30.0	-	0.0	0.0	-	0.0	0.0	-	10.7	-	-	-
93.3	35.0	-	0.0	0.0	-	0.0	29.3	-	0.0	-	-	-
93.3	45.0	-	0.0	0.0	-	5.2	136.8	-	0.0	-	-	-
93.3	50.0	-	0.0	0.0	-	0.0	55.1	-	0.0	-	-	-
93.3	55.0	-	0.0	0.0	-	10.4	42.4	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-
93.3	70.0	-	0.0	0.0	-	0.0	792.2	-	0.0	-	-	-
93.3	80.0	0.0	0.0	-	-	0.0	5.1	-	0.0	-	-	-

TABLE 4. (cont.)

*Scomber japonicus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
93.3	100.0	-	0.0	-	0.0	0.0	15.1	-	5.3	-	-	-
96.7	29.0	0.0	0.0	-	0.0	0.0	-	0.0	9.7	-	-	-
96.7	30.0	0.0	0.0	-	0.0	0.0	-	205.2	27.2	-	-	-
96.7	35.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
96.7	45.0	0.0	0.0	-	0.0	0.0	-	29.9	0.0	-	-	-
96.7	50.0	-	0.0	-	0.0	0.0	-	121.2	0.0	-	-	-
96.7	55.0	0.0	0.0	-	0.0	4.5	-	0.0	0.0	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	10.5	0.0	-	-	-
96.7	90.0	0.0	0.0	0.0	-	0.0	-	9.8	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	-	0.0	20.2	-	-	-
100.0	30.0	0.0	0.0	-	0.0	0.0	-	0.0	19.4	-	-	-
100.0	40.0	0.0	0.0	-	0.0	17.7	-	0.0	0.0	-	-	-
100.0	45.0	0.0	0.0	-	0.0	9.0	-	0.0	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	0.0	-	10.6	9.5	-	-	-
103.3	35.0	0.0	0.0	0.0	-	0.0	-	5.4	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	0.0	-	0.0	10.4	-	-	-
110.0	32.4	0.0	0.0	0.0	-	0.0	-	0.0	34.7	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	42.5	-	-	-
110.0	40.0	0.0	0.0	0.0	-	2.4	-	0.0	0.0	-	-	-
110.0	40.0	0.0	-	0.0	0.0	0.0	-	-	48.7	-	-	-
113.3	29.0	0.0	-	0.0	-	4.8	-	-	0.0	-	-	-
113.3	40.0	0.0	-	0.0	0.0	655.5	-	-	0.0	-	-	-
116.7	30.0	0.0	-	0.0	0.0	0.0	-	-	5.1	-	-	-
116.7	50.0	0.0	-	0.0	0.0	9.3	-	-	83.3	-	-	-
118.0	39.0	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-
119.0	33.0	0.0	-	0.0	10.2	0.0	-	-	22.4	-	-	-
120.0	24.0	0.0	-	0.0	0.0	0.0	-	-	4.2	-	-	-
120.0	25.0	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-
120.0	30.0	0.0	-	0.0	0.0	7.7	-	-	26.6	-	-	-
120.0	38.5	0.0	-	0.0	0.0	4.3	-	-	8.8	-	-	-
120.0	45.0	0.0	-	0.0	-	15.8	-	-	0.0	-	-	-
120.0	50.0	0.0	-	0.0	-	0.0	-	-	0.0	-	-	-
123.3	60.0	0.0	-	0.0	4.8	0.0	-	-	-	-	-	-

*Lepidopus xantusi*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
90.0	28.0	-	0.0	0.0	-	0.0	0.0	-	9.1	-	-	-
113.3	45.0	0.0	-	0.0	-	0.0	-	-	-	35.3	-	-
113.3	50.0	0.0	-	0.0	-	0.0	-	-	-	4.8	-	-
116.7	40.0	0.0	-	-	0.0	0.0	-	-	-	14.9	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	-	-	17.8	-	-
120.0	45.0	0.0	-	-	0.0	0.0	-	-	-	87.7	-	-
120.0	50.0	0.0	-	-	0.0	0.0	-	-	-	19.8	-	-
123.3	42.0	0.0	-	-	0.0	0.0	-	-	-	9.8	-	-

TABLE 4. (cont.)

*Sphyræna argentea*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	40.6	0.0	0.0	0.0	-	0.0	0.0	-	9.7	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	0.0	-	52.2	-	-	-
83.3	51.0	0.0	0.0	0.0	-	0.0	0.0	-	5.8	-	-	-
86.7	33.0	-	0.0	0.0	-	0.0	8.4	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	0.0	9.3	-	0.0	-	-	-
90.0	28.0	-	0.0	0.0	-	0.0	0.0	-	18.3	-	-	-
93.3	26.7	-	0.0	0.0	-	0.0	36.8	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	0.0	0.0	-	10.9	-	-	-
96.7	30.0	-	0.0	-	0.0	0.0	0.0	0.0	19.4	-	-	-
103.3	29.0	-	0.0	0.0	-	0.0	-	3.5	0.0	-	-	-
106.7	31.0	-	0.0	0.0	-	0.0	-	3.8	0.0	-	-	-
106.7	32.0	-	0.0	0.0	-	0.0	-	10.1	0.0	-	-	-
110.0	35.0	-	0.0	0.0	-	0.0	-	0.0	5.3	-	-	-
110.0	40.0	-	0.0	0.0	-	0.0	-	0.0	4.3	-	-	-

*Icichthys lockingtoni*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	70.0	-	-	7.9	-	0.0	-	0.0	-	-	-	-
66.7	80.0	0.0	-	0.0	-	0.0	-	17.3	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	0.0	0.0	-	21.8	-	-	-
70.0	80.0	0.0	-	0.0	-	0.0	-	-	25.2	-	-	-
73.3	53.0	0.0	5.1	0.0	0.0	0.0	0.0	-	0.0	-	-	-
73.3	90.0	0.0	0.0	0.0	0.0	4.9	0.0	-	0.0	-	-	-
76.7	60.0	0.0	0.0	0.0	0.0	0.0	23.6	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	0.0	0.0	0.0	-	9.8	-	-	-
80.0	60.0	0.0	0.0	-	0.0	0.0	0.0	-	11.5	-	-	-
80.0	70.0	0.0	0.0	-	-	21.2	0.0	-	12.2	-	-	-
83.3	60.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
83.3	70.0	0.0	5.0	-	-	0.0	0.0	-	9.4	-	-	-
86.7	55.0	-	0.0	0.0	-	9.4	0.0	-	0.0	-	-	-
86.7	60.0	0.0	0.0	0.0	-	0.0	0.0	-	10.9	-	-	-
86.7	80.0	0.0	0.0	0.0	-	0.0	0.0	-	11.0	-	-	-
86.7	90.0	0.0	0.0	-	-	5.0	0.0	-	0.0	-	-	-
90.0	90.0	0.0	0.0	-	-	5.2	0.0	-	0.0	-	-	-
93.3	50.0	0.0	5.0	0.0	-	0.0	0.0	-	9.6	-	-	-
93.3	60.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	90.0	-	0.0	-	-	0.0	5.3	-	0.0	-	-	-
103.3	45.0	0.0	0.0	0.0	-	5.6	-	0.0	0.0	-	-	-

*Peprilus similimus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	52.0	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-	-

TABLE 4. (cont.)

*Peprilus similimus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	48.0	0.0	0.0	-	8.1	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	0.0	-	10.2	0.0	0.0	-	0.0	-	-	-
80.0	51.0	0.0	0.0	-	74.5	0.0	0.0	-	0.0	-	-	-
80.0	55.0	0.0	0.0	-	31.0	0.0	0.0	-	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	0.0	0.0	-	23.5	-	-	-
83.3	40.6	0.0	0.0	7.2	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	0.0	0.0	0.0	-	0.0	8.4	-	0.0	-	-	-
86.7	35.0	0.0	0.0	0.0	-	11.2	18.5	-	0.0	-	-	-
90.0	28.0	0.0	0.0	0.0	-	20.0	0.0	-	0.0	-	-	-
90.0	37.0	0.0	0.0	0.0	-	11.4	0.0	-	0.0	-	-	-
95.0	30.0	-	-	-	63.7	-	-	0.0	0.0	-	-	-
96.7	29.0	0.0	0.0	-	0.0	9.4	-	0.0	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	9.7	-	0.0	0.0	-	-	-
96.7	32.0	0.0	0.0	-	0.0	5.3	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	4.2	-	0.0	0.0	-	-	-
100.0	30.0	0.0	0.0	-	0.0	2.5	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	0.0	-	4.6	0.0	-	-	-
106.7	32.0	0.0	0.0	0.0	-	5.1	10.1	0.0	0.0	-	-	-
106.7	35.0	0.0	0.0	0.0	-	4.7	0.0	0.0	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	2.4	0.0	0.0	0.0	0.0	-	-
116.7	50.0	0.0	-	-	0.0	9.6	-	-	-	0.0	-	-
120.0	25.0	0.0	-	-	0.0	9.1	-	-	-	0.0	-	-
120.0	30.0	0.0	-	-	4.3	7.7	-	-	-	0.0	-	-
120.0	38.5	0.0	-	-	0.0	4.3	-	-	-	0.0	-	-
120.0	50.0	0.0	-	-	-	5.3	-	-	-	0.0	-	-
130.0	28.0	0.0	-	-	8.0	0.0	-	-	-	0.0	-	-

*Tetragonurus cuvieri*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
66.7	90.0	4.8	-	0.0	-	-	-	0.0	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	0.0	0.0	-	21.8	-	-	-
70.0	70.0	0.0	-	0.0	0.0	0.0	0.0	-	29.5	-	-	-
73.3	60.0	0.0	0.0	0.0	0.0	0.0	0.0	-	11.0	-	-	-
80.0	90.0	10.3	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	0.0	-	5.4	0.0	-	0.0	-	-	-
90.0	70.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
93.3	80.0	5.0	0.0	-	-	0.0	0.0	-	0.0	-	-	-
96.7	90.0	15.2	5.3	0.0	-	0.0	0.0	0.0	0.0	-	-	-
100.0	50.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	90.0	9.8	0.0	0.0	0.0	0.0	-	0.0	9.8	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
110.0	60.0	0.0	5.1	0.0	-	0.0	-	0.0	0.0	0.0	-	-

TABLE 4. (cont.)

*Chiasmodontidae*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	90.0	0.0	0.0	0.0	-	5.5	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	0.0	5.4	0.0	-	0.0	-	-	-
100.0	60.0	0.0	0.0	0.0	0.0	8.3	-	0.0	0.0	-	-	-
100.0	70.0	0.0	0.0	0.0	-	0.0	-	5.1	4.4	-	-	-
100.0	80.0	0.0	0.0	0.0	-	0.0	-	5.2	0.0	-	-	-
100.0	90.0	4.9	0.0	4.6	4.8	19.8	-	0.0	0.0	-	-	-
103.3	60.0	0.0	0.0	0.0	-	5.2	-	0.0	0.0	-	-	-
103.3	70.0	0.0	0.0	5.2	-	9.8	-	0.0	0.0	-	-	-
106.7	60.0	0.0	4.5	7.8	-	0.0	-	0.0	0.0	-	-	-
106.7	70.0	0.0	0.0	0.0	-	5.2	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	5.0	-	-
113.3	40.0	0.0	-	0.0	-	4.6	-	-	0.0	0.0	-	-
113.3	60.0	0.0	-	0.0	-	5.3	-	-	0.0	0.0	-	-
113.3	80.0	0.0	-	0.0	-	0.0	-	-	0.0	0.0	-	-
116.7	80.0	5.0	-	-	-	4.3	-	-	-	0.0	-	-
120.0	70.0	0.0	-	-	-	5.2	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	-	-	-	-	-	-	-

*Citharichthys* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	0.0	-	-	4.3	-	0.0	-	-	-	-
60.0	52.5	-	4.0	-	4.1	0.0	-	0.0	-	-	-	-
60.0	60.0	-	20.6	-	-	28.9	-	0.0	-	-	-	-
60.0	80.0	-	-	7.2	-	0.0	-	0.0	-	-	-	-
60.0	90.0	-	-	40.5	-	0.0	-	0.0	-	-	-	-
63.3	52.0	124.4	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	55.0	51.0	18.7	-	0.0	0.0	-	0.0	-	-	-	-
63.3	60.0	9.6	0.0	-	19.3	0.0	-	0.0	-	-	-	-
63.3	65.0	8.5	-	-	-	0.0	-	0.0	-	-	-	-
63.3	70.0	9.7	-	0.0	-	0.0	-	0.0	-	-	-	-
63.3	80.0	36.0	-	17.9	-	-	-	0.0	-	-	-	-
63.3	90.0	10.4	-	0.0	-	-	-	0.0	-	-	-	-
66.7	49.0	58.3	0.0	-	9.6	0.0	-	6.4	-	-	-	-
66.7	50.0	29.3	21.7	-	0.0	0.0	-	0.0	-	-	-	-
66.7	55.0	8.4	0.0	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	65.7	19.6	-	0.0	0.0	-	0.0	-	-	-	-
66.7	70.0	15.0	-	0.0	-	0.0	-	0.0	-	-	-	-
66.7	80.0	4.9	-	0.0	-	0.0	-	5.8	0.0	-	-	-
70.0	51.0	9.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
70.0	53.0	10.5	51.8	-	10.1	0.0	-	-	0.0	-	-	-
70.0	60.0	20.2	82.0	-	0.0	0.0	0.0	-	0.0	-	-	-
70.0	80.0	8.7	-	0.0	-	0.0	-	-	0.0	-	-	-
70.0	90.0	0.0	-	0.0	-	10.2	-	-	0.0	-	-	-
73.3	50.0	12.7	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	53.0	0.0	35.6	-	20.0	0.0	0.0	-	0.0	-	-	-
73.3	60.0	41.8	5.4	-	10.1	10.5	0.0	-	0.0	-	-	-
73.3	65.0	19.0	-	9.1	-	-	0.0	-	0.0	-	-	-
73.3	70.0	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-
73.3	80.0	5.0	10.9	25.6	-	-	0.0	-	0.0	-	-	-
73.3	90.0	9.7	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	48.0	4.4	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	51.0	10.8	41.2	-	20.5	0.0	0.0	-	0.0	-	-	-
76.7	55.0	9.9	11.0	0.0	-	19.6	0.0	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	80.0	10.5	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
76.7	90.0	11.8	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
80.0	51.0	10.2	0.0	-	8.3	0.0	0.0	-	19.9	-	-	-
80.0	55.0	29.9	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	60.0	22.2	8.4	-	10.6	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	5.1	0.0	-	0.0	0.0	-	0.0	-	-	-
82.0	46.0	5.5	9.7	10.2	-	0.0	0.0	-	141.1	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	3.0	-	0.0	-	-	-
83.3	42.0	7.5	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	20.5	-	0.0	0.0	-	0.0	-	-	-
83.3	55.0	10.7	0.0	30.4	-	0.0	0.0	-	0.0	-	-	-
83.3	60.0	20.9	0.0	-	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	-	0.0	4.8	-	0.0	50.3	-	0.0	-	-	-
86.7	35.0	-	21.6	21.4	-	0.0	9.3	-	31.0	-	-	-
86.7	45.0	-	0.0	0.0	-	31.3	0.0	-	0.0	-	-	-
86.7	50.0	-	4.5	58.1	-	9.5	0.0	-	0.0	-	-	-
86.7	55.0	-	15.4	21.6	-	0.0	18.1	-	0.0	-	-	-
86.7	60.0	-	0.0	41.0	-	0.0	0.0	-	0.0	-	-	-
86.7	80.0	-	0.0	-	-	0.0	0.0	-	22.0	-	-	-
86.7	90.0	-	0.0	4.7	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	-	0.0	6.1	-	0.0	0.0	-	0.0	-	-	-
90.0	30.0	-	0.0	0.0	-	9.3	0.0	-	0.0	-	-	-
90.0	45.0	-	0.0	5.1	-	0.0	11.1	-	10.1	-	-	-
90.0	53.0	-	4.8	0.0	-	0.0	0.0	-	9.9	-	-	-
93.3	26.7	-	4.2	0.0	-	0.0	9.2	-	0.0	-	-	-
93.3	30.0	-	5.1	10.1	-	19.1	0.0	-	21.4	-	-	-
93.3	35.0	-	0.0	0.0	-	9.9	29.3	-	0.0	-	-	-
93.3	45.0	-	5.0	0.0	-	11.0	0.0	-	0.0	-	-	-
93.3	50.0	-	5.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	0.0	0.0	-	9.6	-	-	-
95.0	30.0	-	0.0	-	13.7	-	-	0.0	-	-	-	-
96.7	29.0	0.0	0.0	-	0.0	0.0	-	0.0	10.7	-	-	-
96.7	30.0	4.9	0.0	-	0.0	0.0	-	28.0	0.0	-	-	-
96.7	32.0	0.0	0.0	-	0.0	15.8	-	0.0	0.0	-	-	-
96.7	35.0	5.5	0.0	-	0.0	5.2	-	0.0	9.1	-	-	-



TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	50.0	-	0.0	-	0.0	0.0	-	10.1	0.0	-	-	-
96.7	55.0	0.0	10.2	-	0.0	0.0	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	0.0	0.0	-	5.1	0.0	-	-	-
100.0	30.0	10.2	0.0	-	10.5	7.1	-	19.8	4.8	-	-	-
103.3	29.0	0.0	0.0	0.0	-	3.5	-	0.0	9.5	-	-	-
103.3	30.0	0.0	0.0	0.0	-	11.9	-	13.8	9.6	-	-	-
103.3	35.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
103.3	40.0	0.0	0.0	0.0	-	0.0	-	0.0	5.1	-	-	-
106.7	31.0	0.0	0.0	0.0	-	1.4	-	0.0	0.0	-	-	-
106.7	32.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	45.0	0.0	0.0	0.0	-	0.0	-	0.0	121.7	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	0.0	4.6	-	-	-
110.0	50.0	5.3	0.0	0.0	-	9.0	-	0.0	53.1	-	-	-
113.3	29.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
113.3	30.0	0.0	-	-	0.0	0.0	-	-	5.4	-	-	-
113.3	35.0	0.0	-	-	0.0	0.0	-	-	5.1	-	-	-
113.3	40.0	0.0	-	-	-	5.3	-	-	0.0	-	-	-
113.3	45.0	0.0	-	-	-	0.0	-	-	15.1	-	-	-
116.7	30.0	4.8	-	-	-	0.0	-	-	10.1	-	-	-
116.7	35.0	0.0	-	-	0.0	123.5	-	-	9.3	-	-	-
116.7	40.0	0.0	-	-	0.0	5.2	-	-	73.9	-	-	-
116.7	45.0	0.0	-	-	0.0	0.0	-	-	24.9	-	-	-
116.7	50.0	0.0	-	-	0.0	0.0	-	-	17.8	-	-	-
118.0	39.0	5.0	-	-	0.0	86.7	-	-	5.1	-	-	-
119.0	33.0	32.6	-	-	0.0	306.6	-	-	44.1	-	-	-
120.0	24.0	0.0	-	-	40.7	708.7	-	-	25.3	-	-	-
120.0	25.0	0.0	-	-	0.0	0.0	-	-	3.7	-	-	-
120.0	30.0	26.5	-	-	0.0	27.2	-	-	4.2	-	-	-
120.0	35.0	4.6	-	-	38.3	735.0	-	-	0.0	-	-	-
120.0	38.5	0.0	-	-	0.0	64.8	-	-	4.6	-	-	-
120.0	45.0	0.0	-	-	0.0	4.3	-	-	15.2	-	-	-
120.0	50.0	0.0	-	-	-	46.1	-	-	87.7	-	-	-
123.3	37.0	38.1	-	-	-	394.5	-	-	59.3	-	-	-
123.3	42.0	0.0	-	-	0.0	38.5	-	-	10.6	-	-	-
123.3	45.0	5.1	-	-	0.0	22.9	-	-	9.8	-	-	-
123.3	50.0	10.2	-	-	0.0	381.9	-	-	-	-	-	-
126.7	35.0	0.0	-	-	0.0	5.8	-	-	-	-	-	-
126.7	40.0	0.0	-	-	-	21.2	-	-	-	-	-	-
126.7	45.0	0.0	-	-	-	159.2	-	-	-	-	-	-
130.0	28.0	14.0	-	-	8.0	84.6	-	-	-	-	-	-
130.0	30.0	42.0	-	-	0.0	0.0	-	-	-	-	-	-
130.0	40.0	0.0	-	-	0.0	117.3	-	-	-	-	-	-
130.0	50.0	0.0	-	-	-	5.0	-	-	-	-	-	-
133.3	23.0	14.0	-	-	-	0.0	-	-	-	-	-	-
133.3	25.0	0.0	-	-	-	24.5	-	-	-	-	-	-
133.3	30.0	0.0	-	-	-	68.9	-	-	-	-	-	-

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
133.3	50.0	0.0	-	-	-	14.0	-	-	-	-	-	-
136.7	22.0	41.7	-	-	-	-	-	-	-	-	-	-
136.7	23.0	37.8	-	-	-	-	-	-	-	-	-	-
136.7	25.0	9.7	-	-	-	-	-	-	-	-	-	-

*Citharichthys stigmaeus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	55.0	-	29.5	-	0.0	0.0	-	0.0	-	-	-	-
60.0	60.0	-	41.2	-	-	0.0	-	0.0	-	-	-	-
60.0	70.0	-	-	15.7	-	0.0	-	0.0	-	-	-	-
60.0	90.0	-	-	8.1	-	0.0	-	0.0	-	-	-	-
63.3	55.0	61.2	0.0	-	0.0	0.0	-	0.0	-	-	-	-
63.3	60.0	9.6	8.4	-	57.8	0.0	-	0.0	-	-	-	-
63.3	65.0	8.5	-	-	-	-	-	0.0	-	-	-	-
63.3	70.0	9.7	-	0.0	-	0.0	-	0.0	-	-	-	-
63.3	80.0	36.0	-	9.0	-	-	-	0.0	-	-	-	-
66.7	50.0	29.3	32.6	-	0.0	0.0	-	0.0	-	-	-	-
66.7	55.0	16.8	9.8	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	24.6	0.0	-	20.1	0.0	-	0.0	-	-	-	-
66.7	70.0	15.0	-	0.0	-	0.0	-	0.0	-	-	-	-
70.0	51.0	18.6	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
70.0	53.0	31.4	10.4	-	10.1	9.7	-	0.0	0.0	-	-	-
70.0	60.0	10.1	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
70.0	70.0	0.0	-	0.0	-	0.0	-	0.0	0.0	-	-	-
73.3	53.0	0.0	208.3	-	30.1	0.0	-	-	-	-	-	-
73.3	60.0	20.9	5.4	-	0.0	0.0	-	-	-	-	-	-
73.3	65.0	9.5	-	-	-	-	-	-	0.0	-	-	-
73.3	70.0	32.6	0.0	0.0	-	0.0	-	-	0.0	-	-	-
73.3	80.0	0.0	4.5	0.0	-	0.0	-	-	0.0	-	-	-
73.3	90.0	0.0	0.0	8.5	-	0.0	-	-	0.0	-	-	-
76.7	51.0	0.0	113.2	-	0.0	0.0	-	-	0.0	-	-	-
76.7	55.0	0.0	11.0	-	0.0	0.0	-	-	0.0	-	-	-
76.7	60.0	0.0	18.0	-	11.0	9.7	-	-	0.0	-	-	-
76.7	70.0	9.2	0.0	14.4	-	0.0	-	-	0.0	-	-	-
80.0	60.0	11.1	25.3	-	0.0	0.0	-	-	0.0	-	-	-
80.0	80.0	0.0	0.0	8.7	-	0.0	-	-	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	9.4	-	-	0.0	-	-	-
83.3	60.0	0.0	9.7	-	-	10.6	-	-	0.0	-	-	-
86.7	33.0	-	0.0	0.0	-	10.6	-	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	11.2	-	-	0.0	-	-	-
86.7	40.0	-	10.2	0.0	-	21.4	-	-	0.0	-	-	-
86.7	45.0	-	4.7	0.0	-	0.0	-	-	0.0	-	-	-
86.7	55.0	-	0.0	10.8	-	9.4	-	-	0.0	-	-	-
86.7	60.0	-	9.7	0.0	-	0.0	-	-	0.0	-	-	-
									10.9			

TABLE 4. (cont.)

<i>Citharichthys stigmaeus</i> (cont.)												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	70.0	-	0.0	-	-	21.0	-	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
90.0	37.0	-	15.9	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	45.0	-	9.9	0.0	-	0.0	11.1	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	11.1	0.0	-	0.0	-	-	-
90.0	60.0	-	0.0	0.0	-	0.0	46.3	-	0.0	-	-	-
93.3	40.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	45.0	-	0.0	0.0	-	0.0	10.5	-	0.0	-	-	-
93.3	50.0	-	15.1	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	80.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	-
96.7	30.0	-	0.0	-	0.0	0.0	-	0.0	19.4	-	-	-
96.7	32.0	-	0.0	-	0.0	0.0	-	0.0	4.9	-	-	-
96.7	50.0	-	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
96.7	55.0	-	5.1	-	0.0	0.0	-	0.0	4.9	-	-	-
96.7	60.0	-	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-
100.0	30.0	-	0.0	-	0.0	0.0	-	0.0	4.8	-	-	-
100.0	35.0	-	0.0	-	0.0	0.0	-	5.2	0.0	-	-	-
100.0	40.0	-	0.0	-	14.5	0.0	-	0.0	0.0	-	-	-
100.0	70.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	35.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	45.0	-	0.0	0.0	-	8.8	-	0.0	0.0	-	-	-
110.0	45.0	-	0.0	0.0	-	0.0	-	19.8	0.0	-	-	-

<i>Hippoglossina stomata</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	60.0	-	0.0	-	0.0	0.0	0.0	-	10.9	-	-	-
83.3	40.6	-	0.0	0.0	-	10.3	0.0	-	0.0	-	-	-
103.3	30.0	-	0.0	0.0	-	0.0	-	0.0	9.6	-	-	-
120.0	30.0	-	-	-	4.3	0.0	-	-	-	0.0	-	-
120.0	45.0	-	-	-	-	0.0	-	-	-	17.5	-	-
133.3	25.0	-	-	-	-	8.2	-	-	-	-	-	-

<i>Paralichthys californicus</i>												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	48.0	-	3.7	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	51.0	-	22.8	-	99.4	0.0	0.0	-	0.0	-	-	-
80.0	55.0	-	0.0	-	10.3	0.0	0.0	-	0.0	-	-	-
82.0	46.0	-	0.0	10.2	-	0.0	0.0	-	0.0	-	-	-
83.3	40.6	-	0.0	3.6	-	10.3	0.0	-	116.4	-	-	-
83.3	42.0	-	3.8	9.4	-	0.0	0.0	-	0.0	-	-	-
83.3	51.0	-	4.9	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	33.0	-	8.3	9.6	-	0.0	0.0	-	0.0	-	-	-
		-	4.5	-	-	0.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Paralichthys californicus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	35.0	-	0.0	107.0	-	0.0	0.0	-	0.0	-	-	-
93.3	26.7	-	8.3	0.0	-	4.6	0.0	-	9.1	-	-	-
93.3	28.0	-	0.0	0.0	-	32.9	0.0	-	0.0	-	-	-
93.3	30.0	-	0.0	0.0	-	9.5	0.0	-	0.0	-	-	-
95.0	30.0	-	-	-	4.6	-	-	-	-	-	-	-
96.7	29.0	-	0.0	-	4.5	5.6	-	15.9	5.3	-	-	-
96.7	30.0	-	0.0	-	4.5	8.1	-	0.0	4.8	-	-	-
100.0	29.2	-	0.0	-	27.4	39.4	-	35.8	0.0	-	-	-
100.0	30.0	-	0.0	-	41.9	9.8	-	0.0	0.0	-	-	-
100.0	30.0	-	0.0	0.0	-	0.0	-	5.2	0.0	-	-	-
103.3	29.0	-	0.0	15.3	-	14.3	-	7.1	19.1	-	-	-
103.3	30.0	-	0.0	4.5	-	40.9	-	0.0	19.2	-	-	-
106.7	31.0	-	0.0	53.2	-	27.2	-	0.0	0.0	-	-	-
106.7	35.0	-	0.0	14.8	-	0.0	-	0.0	0.0	-	-	-
110.0	32.4	-	0.0	-	-	10.4	-	9.0	0.0	-	-	-
110.0	32.5	-	-	0.0	-	34.0	-	-	-	0.0	-	-
113.3	30.0	-	-	-	0.0	3.6	-	-	-	0.0	-	-
119.0	33.0	-	-	-	5.1	0.0	-	-	-	0.0	-	-
120.0	30.0	-	-	-	12.8	0.0	-	-	-	0.0	-	-
120.0	45.0	-	-	-	-	4.2	-	-	-	0.0	-	-
123.3	36.0	-	-	-	0.0	0.0	-	-	-	0.0	-	-
130.0	28.0	23.4	-	-	0.0	7.4	-	-	-	15.1	-	-

*Xystreureys liolepis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
113.3	35.0	0.0	-	0.0	-	5.3	-	-	-	0.0	-	-
116.7	30.0	0.0	-	-	0.0	9.5	-	-	-	0.0	-	-
120.0	38.5	0.0	-	-	0.0	4.3	-	-	-	0.0	-	-

*Glyptocephalus zachirus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	0.0	-	4.1	0.0	-	0.0	-	-	-	-
60.0	65.0	-	-	-	-	-	-	9.6	-	-	-	-
63.3	55.0	0.0	0.0	-	10.2	0.0	-	4.7	-	-	-	-
63.3	60.0	0.0	0.0	-	0.0	0.0	-	5.7	-	-	-	-
63.3	70.0	0.0	-	0.0	-	0.0	-	4.9	-	-	-	-
66.7	49.0	0.0	0.0	-	0.0	0.0	-	6.4	-	-	-	-
66.7	50.0	0.0	0.0	-	0.0	0.0	-	6.5	-	-	-	-
66.7	55.0	0.0	0.0	-	0.0	0.0	-	11.1	-	-	-	-
66.7	70.0	0.0	-	0.0	-	0.0	-	16.9	-	-	-	-
66.7	80.0	0.0	-	0.0	-	-	-	11.5	-	-	-	-
70.0	53.0	0.0	0.0	-	0.0	0.0	-	-	10.6	-	-	-

TABLE 4. (cont.)

*Parophrys vetulus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	55.0	0.0	0.0	-	0.0	10.0	0.0	-	0.0	-	-	-
80.0	51.0	0.0	4.6	-	41.4	0.0	0.0	-	0.0	-	-	-
80.0	55.0	0.0	0.0	-	10.3	0.0	0.0	-	0.0	-	-	-
80.0	60.0	0.0	0.0	-	21.1	0.0	0.0	-	0.0	-	-	-
82.0	46.0	0.0	9.7	10.2	-	0.0	0.0	-	0.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	10.3	0.0	-	0.0	-	-	-
83.3	42.0	0.0	0.0	93.8	-	0.0	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	20.5	-	0.0	11.4	-	0.0	-	-	-
83.3	55.0	0.0	0.0	10.1	-	0.0	0.0	-	0.0	-	-	-
86.7	40.0	0.0	10.2	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	45.0	0.0	9.4	0.0	-	0.0	0.0	-	0.0	-	-	-
86.7	55.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	0.0	0.0	4.7	-	0.0	27.1	-	0.0	-	-	-
93.3	26.7	0.0	0.0	0.0	-	4.6	9.2	-	0.0	-	-	-
93.3	30.0	0.0	0.0	0.0	-	9.5	0.0	-	0.0	-	-	-
96.7	29.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	-
96.7	30.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	-
96.7	32.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	0.0	-	5.5	17.6	5.1	0.0	-	-	-
100.0	30.0	0.0	0.0	0.0	-	10.5	0.0	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	-	16.2	0.0	0.0	-	-	-
110.0	32.5	0.0	0.0	0.0	-	-	22.6	0.0	0.0	-	-	-
116.7	30.0	0.0	0.0	0.0	-	0.0	19.0	-	-	0.0	-	-
123.3	36.0	0.0	0.0	0.0	-	0.0	3.3	-	-	0.0	-	-

*Platichthys stellatus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
63.3	50.0	0.0	0.0	-	35.5	0.0	-	0.0	-	-	-	-
63.3	52.0	0.0	0.0	-	9.7	0.0	-	0.0	-	-	-	-

*Pleuronichthys* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
96.7	29.0	0.0	0.0	-	0.0	0.0	-	0.0	21.4	-	-	-

*Pleuronichthys coenosus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
86.7	50.0	0.0	0.0	0.0	-	9.5	0.0	-	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	1.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

*Pleuronichthys decurrens*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	70.0	0.0	-	0.0	-	0.0	0.0	-	9.8	-	-	-

*Pleuronichthys Ritteri*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
76.7	48.0	0.0	0.0	-	0.0	0.0	0.0	-	3.5	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	3.0	-	48.5	-	-	-
86.7	33.0	-	0.0	0.0	-	0.0	8.4	-	7.5	-	-	-
93.3	26.7	-	0.0	0.0	-	9.1	0.0	-	0.0	-	-	-
93.3	30.0	-	0.0	0.0	-	0.0	0.0	-	10.7	-	-	-
96.7	29.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-
106.7	32.0	0.0	0.0	0.0	-	0.0	-	0.0	8.7	-	-	-
110.0	32.4	0.0	0.0	-	-	5.2	-	0.0	0.0	5.0	-	-
123.3	36.0	4.1	-	-	0.0	0.0	-	-	-	-	-	-
126.7	33.0	4.3	-	-	0.0	0.0	-	-	-	-	-	-
130.0	28.0	4.7	-	-	0.0	0.0	-	-	-	-	-	-
130.0	30.0	4.7	-	-	0.0	0.0	-	-	-	-	-	-

*Pleuronichthys verticalis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	51.0	5.1	4.6	-	8.3	0.0	0.0	-	0.0	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	15.1	-	0.0	-	-	-
83.3	42.0	0.0	0.0	0.0	-	0.0	9.6	-	0.0	-	-	-
86.7	33.0	-	9.0	4.8	-	10.6	0.0	-	0.0	-	-	-
86.7	35.0	-	0.0	10.7	-	0.0	0.0	-	0.0	-	-	-
90.0	28.0	-	0.0	4.7	-	10.0	9.1	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	32.9	0.0	-	0.0	-	-	-
96.7	29.0	0.0	0.0	-	0.0	3.8	-	0.0	0.0	-	-	-
96.7	30.0	0.0	0.0	-	0.0	2.1	-	0.0	0.0	-	-	-
100.0	29.2	0.0	0.0	-	5.5	9.2	-	0.0	0.0	-	-	-
103.3	29.0	0.0	0.0	0.0	-	10.5	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	16.2	-	0.0	0.0	-	-	-
103.3	35.0	0.0	0.0	0.0	-	11.8	-	0.0	0.0	-	-	-
106.7	31.0	0.0	0.0	3.8	-	0.0	-	3.8	0.0	-	-	-
110.0	32.4	0.0	0.0	-	-	10.4	-	0.0	0.0	-	-	-
136.7	23.0	4.7	-	-	-	-	-	-	-	-	-	-

*Psettichthys melanostictus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
73.3	50.0	0.0	0.0	-	0.0	4.0	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

*Glyptocephalus zachirus* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
70.0	-	0.0	-	-	-	-	19.3	-	-	-	-	-
70.0	-	0.0	-	0.0	-	0.0	10.0	-	9.8	-	-	-
73.3	-	0.0	0.0	-	0.0	0.0	0.0	-	29.9	-	-	-
73.3	-	0.0	0.0	-	0.0	10.5	0.0	-	11.0	-	-	-
76.7	-	0.0	0.0	-	0.0	0.0	0.0	-	21.3	-	-	-
76.7	-	0.0	0.0	-	0.0	0.0	0.0	-	13.3	-	-	-
76.7	-	0.0	0.0	0.0	-	0.0	11.6	-	0.0	-	-	-
80.0	-	0.0	0.0	0.0	10.3	0.0	0.0	-	0.0	-	-	-
86.7	0.0	-	0.0	-	-	1.1	0.0	-	0.0	-	-	-

*Hypsosetta guttulata*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	-	0.0	4.6	-	0.0	0.0	0.0	-	0.0	-	-	-
90.0	0.0	-	0.0	4.7	-	0.0	0.0	-	0.0	-	-	-
90.0	9.8	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-

*Lyopsetta exilis*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	-	-	0.0	-	-	0.0	-	5.2	-	-	-	-
60.0	-	-	0.0	-	0.0	0.0	-	12.9	-	-	-	-
60.0	-	-	0.0	-	0.0	10.3	-	4.7	-	-	-	-
60.0	-	-	0.0	-	-	0.0	-	5.0	-	-	-	-
60.0	-	-	-	0.0	-	10.8	-	8.3	-	-	-	-
60.0	-	-	-	0.0	-	9.6	-	0.0	-	-	-	-
63.3	-	0.0	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	-	0.0	0.0	-	0.0	0.0	-	33.8	-	-	-	-
63.3	-	0.0	0.0	-	0.0	23.2	-	0.0	-	-	-	-
66.7	-	0.0	0.0	-	0.0	33.1	-	35.6	-	-	-	-
66.7	-	9.8	0.0	-	0.0	31.6	-	32.6	-	-	-	-
66.7	-	0.0	0.0	-	0.0	0.0	-	6.1	-	-	-	-
66.7	-	0.0	0.0	-	0.0	22.6	-	17.1	-	-	-	-
66.7	-	0.0	0.0	0.0	-	10.3	-	5.9	-	-	-	-
70.0	-	0.0	0.0	-	0.0	11.1	-	8.7	0.0	-	-	-
70.0	-	0.0	0.0	-	10.1	0.0	-	-	10.6	-	-	-
70.0	-	0.0	0.0	-	0.0	11.3	-	-	0.0	-	-	-
70.0	-	0.0	0.0	0.0	-	0.0	18.9	-	0.0	-	-	-
73.3	-	0.0	0.0	-	0.0	16.1	0.0	-	9.8	-	-	-
73.3	-	9.1	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
73.3	-	0.0	0.0	-	-	10.1	-	-	0.0	-	-	-
76.7	-	0.0	0.0	0.0	0.0	0.0	21.0	-	0.0	-	-	-
76.7	-	0.0	0.0	-	20.5	0.0	0.0	-	0.0	-	-	-
76.7	-	0.0	0.0	-	11.0	0.0	11.8	-	0.0	-	-	-

TABLE 4. (cont.)

*Lyopsetta exilis* (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
80.0	51.0	0.0	0.0	-	0.0	10.6	0.0	-	0.0	-	-	-
80.0	55.0	0.0	10.7	-	20.6	0.0	9.8	-	11.4	-	-	-
80.0	60.0	0.0	0.0	-	10.6	0.0	12.1	-	0.0	-	-	-
80.0	70.0	0.0	0.0	-	-	10.2	0.0	-	0.0	-	-	-
82.0	46.0	0.0	0.0	0.0	-	28.3	0.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	20.0	0.0	-	0.0	-	-	-
83.3	80.0	0.0	0.0	0.0	-	0.0	9.2	-	0.0	-	-	-
86.7	35.0	-	0.0	0.0	-	33.6	0.0	-	0.0	-	-	-
86.7	40.0	-	0.0	0.0	-	10.7	0.0	-	0.0	-	-	-
86.7	45.0	-	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-
90.0	30.0	-	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
90.0	37.0	-	0.0	0.0	-	11.4	0.0	-	0.0	-	-	-
93.3	26.7	-	0.0	0.0	-	4.6	0.0	-	0.0	-	-	-
93.3	28.0	-	0.0	0.0	-	11.0	0.0	-	0.0	-	-	-
100.0	29.2	0.0	0.0	0.0	0.0	2.5	-	0.0	0.0	-	-	-
103.3	30.0	0.0	0.0	0.0	-	0.0	-	4.6	0.0	-	-	-

*Microstomus pacificus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	90.0	-	-	0.0	-	9.6	-	-	-	-	-	-
63.3	55.0	0.0	0.0	0.0	0.0	10.6	-	0.0	-	-	-	-
63.3	70.0	0.0	-	0.0	0.0	0.0	-	4.9	-	-	-	-
66.7	49.0	0.0	0.0	-	0.0	0.0	-	6.4	-	-	-	-
66.7	80.0	0.0	-	0.0	-	-	-	11.5	-	-	-	-
70.0	60.0	0.0	0.0	-	0.0	0.0	0.0	-	10.9	-	-	-
70.0	70.0	0.0	-	0.0	-	11.2	0.0	-	0.0	-	-	-
73.3	53.0	0.0	0.0	-	0.0	10.2	0.0	-	0.0	-	-	-
80.0	70.0	0.0	0.0	-	-	10.2	0.0	-	0.0	-	-	-
86.7	90.0	-	0.0	-	-	0.0	4.8	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	22.3	0.0	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	0.0	5.2	-	0.0	-	-	-
90.0	90.0	-	0.0	-	-	0.0	4.7	-	0.0	-	-	-
96.7	60.0	0.0	0.0	-	0.0	0.0	-	0.0	10.5	-	-	-

*Parophrys vetulus*

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	50.0	-	4.3	-	-	0.0	-	0.0	-	-	-	-
60.0	52.5	-	0.0	-	12.4	0.0	-	0.0	-	-	-	-
60.0	65.0	-	-	-	-	-	-	9.6	-	-	-	-
63.3	52.0	0.0	0.0	-	9.7	0.0	-	0.0	-	-	-	-
63.3	55.0	0.0	0.0	-	10.2	0.0	-	0.0	-	-	-	-
76.7	48.0	0.0	0.0	-	8.1	0.0	0.0	-	0.0	-	-	-



TABLE 4. (cont.)

*Symphurus* spp.

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
82.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	-	23.5	-	-	-
83.3	42.0	0.0	0.0	0.0	0.0	0.0	0.0	-	73.1	-	-	-
90.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	-	10.6	-	-	-
93.3	28.0	0.0	0.0	0.0	0.0	0.0	0.0	-	10.9	-	-	-
103.3	35.0	0.0	0.0	0.0	0.0	0.0	-	0.0	4.6	-	-	-
113.3	45.0	0.0	-	0.0	0.0	0.0	-	-	-	5.0	-	-
120.0	25.0	0.0	-	0.0	0.0	0.0	-	-	-	4.2	-	-
120.0	38.5	0.0	-	0.0	0.0	0.0	-	-	-	3.8	-	-

Disintegrated fish larva

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	60.0	-	0.0	-	0.0	0.0	-	9.6	-	-	-	-
63.3	55.0	10.2	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-
63.3	90.0	0.0	0.0	0.0	0.0	0.0	-	11.6	-	-	-	-
66.7	50.0	29.3	10.9	-	0.0	0.0	-	0.0	-	-	-	-
66.7	55.0	0.0	9.8	-	0.0	0.0	-	0.0	-	-	-	-
66.7	60.0	0.0	0.0	-	0.0	0.0	-	5.7	-	-	-	-
66.7	80.0	4.9	-	0.0	0.0	-	-	9.9	-	-	-	-
66.7	90.0	4.8	-	0.0	0.0	-	-	0.0	0.0	-	-	-
70.0	51.0	9.3	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-
70.0	60.0	0.0	9.1	-	0.0	0.0	-	0.0	0.0	-	-	-
70.0	80.0	0.0	-	18.8	-	0.0	-	-	12.6	-	-	-
70.0	90.0	0.0	-	30.5	-	10.2	-	-	0.0	-	-	-
70.0	100.0	-	-	-	-	-	9.6	-	-	-	-	-
73.3	65.0	9.5	-	-	-	0.0	0.0	-	0.0	-	-	-
73.3	70.0	10.9	0.0	0.0	0.0	0.0	-	-	0.0	-	-	-
73.3	90.0	4.8	0.0	0.0	0.0	0.0	61.8	-	0.0	-	-	-
73.3	100.0	-	-	-	-	-	40.9	-	0.0	-	-	-
76.7	48.0	4.4	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	51.0	0.0	10.3	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	55.0	19.7	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
76.7	60.0	0.0	0.0	-	0.0	0.0	11.8	-	0.0	-	-	-
76.7	70.0	0.0	0.0	0.0	0.0	0.0	11.6	-	0.0	-	-	-
76.7	80.0	0.0	0.0	0.0	0.0	0.0	8.2	-	0.0	-	-	-
76.7	90.0	0.0	0.0	0.0	0.0	0.0	88.6	-	0.0	-	-	-
76.7	100.0	-	-	-	-	-	14.1	-	0.0	-	-	-
80.0	51.0	5.1	4.6	-	0.0	0.0	22.7	-	0.0	-	-	-
80.0	55.0	10.0	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	60.0	0.0	16.9	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	70.0	0.0	5.1	-	0.0	0.0	0.0	-	0.0	-	-	-
80.0	80.0	0.0	0.0	0.0	-	5.7	63.4	-	5.1	-	-	-
80.0	90.0	5.2	5.3	39.5	-	0.0	0.0	-	15.8	-	-	-
83.3	40.6	0.0	0.0	0.0	-	0.0	3.0	-	0.0	-	-	-
83.3	51.0	0.0	0.0	0.0	-	30.1	0.0	-	0.0	-	-	-

TABLE 4. (cont.)

Disintegrated fish larva (cont.)

STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
83.3	60.0	0.0	0.0	-	-	0.0	51.6	-	0.0	-	-	-
83.3	70.0	0.0	0.0	-	-	0.0	9.1	-	0.0	-	-	-
83.3	80.0	0.0	0.0	-	-	5.4	9.2	-	0.0	-	-	-
83.3	90.0	0.0	20.0	-	-	0.0	29.0	-	0.0	-	-	-
86.7	35.0	-	129.7	0.0	-	0.0	27.8	-	0.0	-	-	-
86.7	40.0	-	20.5	0.0	-	0.0	8.2	-	0.0	-	-	-
86.7	45.0	-	0.0	5.3	-	0.0	10.7	-	0.0	-	-	-
86.7	50.0	-	0.0	4.8	-	0.0	0.0	-	0.0	-	-	-
86.7	55.0	-	0.0	0.0	-	0.0	9.0	-	0.0	-	-	-
86.7	60.0	-	0.0	0.0	-	0.0	89.1	-	0.0	-	-	-
86.7	80.0	-	0.0	0.0	-	0.0	10.7	-	0.0	-	-	-
86.7	100.0	-	0.0	-	-	0.0	5.0	-	-	-	-	-
90.0	45.0	-	9.9	0.0	-	9.3	0.0	-	0.0	-	-	-
90.0	53.0	-	0.0	0.0	-	0.0	9.7	-	0.0	-	-	-
90.0	60.0	-	0.0	0.0	-	0.0	46.3	-	0.0	-	-	-
90.0	70.0	-	0.0	0.0	-	0.0	9.6	-	0.0	-	-	-
90.0	80.0	-	0.0	-	-	0.0	10.5	-	0.0	-	-	-
93.3	26.7	-	4.2	0.0	-	0.0	0.0	-	0.0	-	-	-
93.3	60.0	-	0.0	0.0	-	0.0	38.6	-	0.0	-	-	-
93.3	70.0	-	0.0	0.0	-	0.0	57.4	-	0.0	-	-	-
93.3	90.0	-	0.0	-	-	0.0	26.6	-	0.0	-	-	-
96.7	30.0	-	0.0	-	-	0.0	-	46.6	0.0	-	-	-
96.7	32.0	-	0.0	-	-	0.0	-	5.3	4.9	-	-	-
96.7	35.0	-	0.0	-	-	5.1	-	0.0	9.1	-	-	-
96.7	45.0	-	0.0	-	-	0.0	-	10.0	5.0	-	-	-
96.7	55.0	-	0.0	-	-	4.5	-	0.0	9.8	-	-	-
96.7	60.0	-	0.0	-	-	14.4	-	21.0	10.5	-	-	-
96.7	70.0	-	0.0	0.0	-	8.8	-	0.0	0.0	-	-	-
96.7	80.0	-	0.0	0.0	-	4.5	-	0.0	0.0	-	-	-
100.0	60.0	-	0.0	-	-	24.8	-	0.0	4.7	-	-	-
100.0	80.0	-	0.0	0.0	-	0.0	-	15.2	5.2	-	-	-
100.0	90.0	-	0.0	0.0	-	0.0	-	20.7	14.4	-	-	-
103.3	29.0	-	0.0	0.0	-	7.0	-	17.8	0.0	-	-	-
103.3	30.0	-	0.0	0.0	-	17.9	-	4.6	0.0	-	-	-
103.3	40.0	-	4.9	0.0	-	0.0	-	0.0	0.0	-	-	-
103.3	45.0	-	0.0	0.0	-	0.0	-	0.0	10.6	-	-	-
103.3	50.0	-	0.0	0.0	-	10.3	-	10.9	5.2	-	-	-
103.3	60.0	-	4.8	0.0	-	0.0	-	16.5	0.0	-	-	-
103.3	70.0	-	0.0	0.0	-	0.0	-	0.0	4.7	-	-	-
103.3	80.0	-	4.9	0.0	-	0.0	-	5.4	-	-	-	-
103.3	90.0	-	0.0	0.0	-	10.3	-	0.0	0.0	-	-	-
106.7	32.0	-	5.1	0.0	-	0.0	-	5.5	0.0	-	-	-
106.7	35.0	-	0.0	0.0	-	0.0	-	5.1	0.0	-	-	-
106.7	40.0	-	0.0	0.0	-	26.3	-	4.8	9.2	-	-	-
106.7	45.0	-	0.0	0.0	-	0.0	-	9.5	4.4	-	-	-
106.7	60.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	-	-

TABLE 4. (cont.)

Disintegrated fish larva (cont.)												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	70.0	4.9	0.0	0.0	-	4.9	-	5.1	0.0	-	-	-
106.7	80.0	10.4	26.8	0.0	-	0.0	-	27.6	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	0.0	-	24.1	21.2	-	-	-
110.0	40.0	0.0	0.0	0.0	-	0.0	-	0.0	17.0	-	-	-
110.0	45.0	0.0	0.0	0.0	-	0.0	-	0.0	14.3	-	-	-
110.0	50.0	0.0	5.1	0.0	-	5.2	-	0.0	0.0	-	-	-
110.0	60.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	9.0	-	-
110.0	70.0	10.1	0.0	0.0	-	4.9	-	33.3	-	34.1	-	-
110.0	80.0	0.0	0.0	0.0	-	0.0	-	0.0	-	27.1	-	-
113.3	40.0	0.0	-	0.0	-	9.6	-	-	-	60.2	-	-
113.3	45.0	0.0	-	0.0	-	19.0	-	-	-	15.1	-	-
113.3	60.0	0.0	-	0.0	-	0.0	-	-	-	14.6	-	-
113.3	70.0	0.0	-	0.0	-	0.0	-	-	-	4.6	-	-
113.3	80.0	0.0	-	0.0	-	10.6	-	-	-	4.7	-	-
116.7	45.0	5.2	-	-	0.0	4.7	-	-	-	8.9	-	-
116.7	60.0	4.9	-	-	0.0	0.0	-	-	-	0.0	-	-
116.7	70.0	0.0	-	-	-	0.0	-	-	-	56.8	-	-
116.7	80.0	0.0	-	-	-	0.0	-	-	-	24.5	-	-
118.0	39.0	0.0	-	-	0.0	9.3	-	-	-	0.0	-	-
119.0	33.0	0.0	-	-	0.0	19.4	-	-	-	0.0	-	-
120.0	35.0	0.0	-	-	0.0	0.0	-	-	-	4.6	-	-
120.0	45.0	0.0	-	-	-	0.0	-	-	-	17.5	-	-
120.0	50.0	0.0	-	-	-	4.3	-	-	-	69.2	-	-
120.0	70.0	0.0	-	-	-	0.0	-	-	-	14.9	-	-
120.0	80.0	0.0	-	-	0.0	0.0	-	-	-	4.7	-	-
123.3	36.0	0.0	-	-	0.0	3.3	-	-	-	0.0	-	-
123.3	42.0	0.0	-	-	0.0	18.4	-	-	-	0.0	-	-
126.7	33.0	4.3	-	-	-	0.0	-	-	-	-	-	-
126.7	50.0	0.0	-	-	-	18.8	-	-	-	-	-	-
126.7	60.0	10.1	-	-	0.0	4.9	-	-	-	-	-	-
130.0	35.0	0.0	-	-	0.0	36.5	-	-	-	-	-	-
130.0	40.0	0.0	-	-	-	5.0	-	-	-	-	-	-
133.3	35.0	0.0	-	-	-	9.9	-	-	-	-	-	-
133.3	40.0	0.0	-	-	-	4.8	-	-	-	-	-	-

Unidentified fish larva												
STATION	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
60.0	52.5	-	0.0	-	0.0	27.3	-	0.0	-	-	-	-
60.0	80.0	-	-	0.0	-	10.8	-	0.0	-	-	-	-
63.3	50.0	0.0	0.0	-	8.9	0.0	-	0.0	-	-	-	-
63.3	52.0	31.1	0.0	-	4.9	0.0	-	0.0	-	-	-	-
63.3	55.0	0.0	0.0	-	10.2	0.0	-	0.0	-	-	-	-
63.3	60.0	0.0	0.0	-	19.3	0.0	-	0.0	-	-	-	-

TABLE 4. (cont.)

STATION	Unidentified fish larva (cont.)												
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	
66.7	49.0	9.7	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-
66.7	50.0	0.0	0.0	-	10.4	0.0	-	0.0	-	-	-	-	-
66.7	80.0	4.9	0.0	-	-	0.0	-	0.0	-	-	-	-	-
70.0	80.0	4.4	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
73.3	90.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
76.7	90.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
80.0	51.0	21.0	0.0	-	8.3	0.0	-	0.0	0.0	-	-	-	-
80.0	70.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
80.0	80.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
80.0	90.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
83.3	42.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
86.7	35.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
86.7	40.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
86.7	45.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
86.7	55.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
86.7	90.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
90.0	60.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
93.3	28.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
93.3	35.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
93.3	90.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
95.0	29.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	29.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	30.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	32.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	35.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	40.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	50.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	60.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	80.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
96.7	90.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	29.2	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	30.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	45.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	60.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	70.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	80.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
100.0	90.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	29.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	35.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	45.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	60.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	70.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
103.3	80.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
106.7	31.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
106.7	32.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-
106.7	40.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	-	-

TABLE 4. (cont.)

STATION	Unidentified fish larva (cont.)											
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.
106.7	50.0	0.0	0.0	4.8	-	0.0	-	0.0	0.0	-	-	-
106.7	60.0	0.0	0.0	0.0	-	0.0	-	9.5	0.0	-	-	-
106.7	80.0	0.0	0.0	0.0	-	5.5	-	5.5	0.0	-	-	-
110.0	35.0	0.0	0.0	0.0	-	4.7	-	0.0	0.0	-	-	-
110.0	40.0	0.0	0.0	0.0	-	4.9	-	0.0	0.0	-	-	-
110.0	45.0	0.0	5.0	0.0	-	10.6	-	0.0	0.0	-	-	-
110.0	50.0	0.0	0.0	10.0	-	0.0	-	0.0	0.0	-	-	-
110.0	70.0	0.0	0.0	0.0	-	9.8	-	0.0	0.0	0.0	-	-
110.0	80.0	0.0	0.0	4.3	-	0.0	-	0.0	0.0	0.0	-	-
113.3	29.0	0.0	-	-	0.0	0.0	-	-	-	5.4	-	-
113.3	30.0	0.0	-	-	0.0	0.0	-	-	-	5.1	-	-
113.3	35.0	0.0	-	9.8	-	10.5	-	-	-	0.0	-	-
113.3	45.0	0.0	-	4.8	-	0.0	-	-	-	0.0	-	-
113.3	50.0	0.0	-	0.0	-	10.1	-	-	-	9.6	-	-
113.3	60.0	0.0	-	0.0	-	9.2	-	-	-	0.0	-	-
113.3	70.0	0.0	-	0.0	-	0.0	-	-	-	4.6	-	-
116.7	35.0	0.0	-	-	4.7	26.1	-	-	-	0.0	-	-
116.7	50.0	0.0	-	-	4.8	0.0	-	-	-	5.1	-	-
118.0	39.0	0.0	-	-	9.2	0.0	-	-	-	0.0	-	-
120.0	24.0	0.0	-	-	0.0	6.8	-	-	-	44.9	-	-
120.0	35.0	0.0	-	-	0.0	0.0	-	-	-	9.1	-	-
120.0	38.5	0.0	-	-	0.0	0.0	-	-	-	3.8	-	-
120.0	50.0	5.1	-	-	-	0.0	-	-	-	29.7	-	-
120.0	60.0	0.0	-	-	-	4.7	-	-	-	10.7	-	-
123.3	37.0	0.0	-	-	4.8	0.0	-	-	-	0.0	-	-
123.3	45.0	10.3	-	-	0.0	0.0	-	-	-	-	-	-
123.3	50.0	0.0	-	-	0.0	5.8	-	-	-	-	-	-
126.7	33.0	8.6	-	-	-	0.0	-	-	-	-	-	-
126.7	40.0	0.0	-	-	-	11.4	-	-	-	-	-	-
126.7	50.0	5.0	-	-	-	0.0	-	-	-	-	-	-
126.7	60.0	5.1	-	-	28.1	4.9	-	-	-	-	-	-
130.0	28.0	0.0	-	-	12.0	0.0	-	-	-	-	-	-
130.0	35.0	10.4	-	-	8.6	0.0	-	-	-	-	-	-
130.0	60.0	0.0	-	-	-	14.0	-	-	-	-	-	-
133.3	23.0	4.7	-	-	-	17.2	-	-	-	-	-	-
136.7	60.0	4.9	-	-	-	-	-	-	-	-	-	-

TABLE 5. Summary of pooled occurrences of all larval fish taxa taken on CalCOFI surveys from 1972 to 1981. Data for 1974, 1977, and 1980 represent single cruises that are part of surveys in 1975, 1978, and 1981, respectively. Taxa are listed in the same order as Table 4.

NAME	1972	1974	1975	1977	1978	1980	1981
<i>Albula vulpes</i>	1	-	-	-	-	-	-
Anguilliformes	26	2	8	-	3	-	-
<i>Etrumeus acuminatus</i>	4	-	15	-	9	-	-
<i>Opisthonema</i> spp.	-	-	1	-	1	-	-
<i>Sardinops sagax</i>	27	11	51	8	46	13	28
<i>Engraulis mordax</i>	548	155	842	47	454	47	417
<i>Argentina sialis</i>	54	6	59	7	30	13	45
<i>Microstoma microstoma</i>	33	8	40	3	45	6	31
<i>Nansenia candida</i>	44	-	26	-	25	-	18
<i>Nansenia crassa</i>	39	8	17	1	19	3	13
<i>Bathylagus</i> spp.	121	1	41	3	47	1	49
<i>Bathylagus longirostris</i>	1	-	-	-	5	-	-
<i>Bathylagus milleri</i>	13	5	13	-	8	4	2
<i>Bathylagus ochotensis</i>	345	13	273	29	387	13	244
<i>Bathylagus pacificus</i>	99	1	39	-	45	1	38
<i>Bathylagus wesethi</i>	164	15	156	20	298	11	127
<i>Leuroglossus stilbius</i>	387	52	363	28	218	22	298
<i>Bathylachnops exilis</i>	1	-	-	-	-	-	-
<i>Dolichopteryx longipes</i>	1	-	-	-	-	-	-
<i>Macropinna microstoma</i>	-	1	1	-	-	-	-
Osmeriidae	5	-	-	-	1	-	-
Stomiiformes	8	1	1	-	5	-	3
Gonostomatidae	7	10	12	1	23	7	23
<i>Cyclothone</i> spp.	130	30	165	20	325	38	162
<i>Danaphos oculatus</i>	51	6	49	2	73	3	17
<i>Diplophos taenia</i>	47	-	1	-	2	-	-
<i>Gonostoma</i> spp.	-	-	-	-	2	-	1
<i>Ichthyococcus</i> spp.	7	1	8	2	40	4	18
<i>Valenciennellus stellatus</i>	8	-	1	-	3	1	1
<i>Vinciguerrria lucetia</i>	271	48	164	40	379	65	222
<i>Vinciguerrria poweriae</i>	1	-	-	-	30	-	-
Sternoptychidae	217	63	218	40	371	33	150
<i>Chauliodus macouni</i>	123	10	78	11	126	12	55
<i>Idiacanthus antrostomus</i>	25	18	30	8	67	3	9
<i>Aristostomias scintillans</i>	5	-	2	-	22	-	8
<i>Bathophilus</i> spp.	11	-	-	-	16	-	-
<i>Eustomias</i> spp.	1	-	-	-	1	-	-
Photonectes spp.	-	-	-	-	6	-	-
<i>Tactostoma macropus</i>	5	-	1	-	7	-	2
<i>Stomias atriventer</i>	117	9	59	6	110	11	77
Myctophiformes	2	-	-	-	-	-	-
Evermannellidae	1	-	-	-	-	-	1
Paralepididae	32	5	17	-	16	-	9
<i>Lestidiops ringens</i>	82	16	39	11	63	11	58
<i>Notolepis risso</i>	10	-	5	1	17	-	5
<i>Stemonosudis macrura</i>	2	-	-	-	1	-	-
<i>Sudis atrox</i>	-	-	-	-	5	-	-

TABLE 5. (cont.)

NAME	1972	1974	1975	1977	1978	1980	1981
<i>Aulopus</i> spp.	6	-	-	-	1	1	-
<i>Scopelosaurus</i> spp.	11	1	10	-	23	1	9
Scopelarchidae	-	-	2	-	3	-	2
<i>Benthalbella</i> spp.	-	-	3	-	11	-	4
<i>Benthalbella dentata</i>	6	7	23	2	21	2	7
<i>Rosenblattichthys volucris</i>	15	-	2	-	1	-	-
<i>Scopelarchoides nicholsi</i>	16	-	19	3	32	3	11
<i>Scopelarchus</i> spp.	24	12	80	6	154	17	159
Myctophidae	123	-	-	-	2	-	-
<i>Bolinichthys</i> spp.	11	-	-	-	2	-	-
<i>Ceratospopelus townsendi</i>	68	5	66	5	212	18	80
<i>Diaphus</i> spp.	107	70	70	-	141	2	25
<i>Lampadena urophaos</i>	14	2	5	-	19	1	5
<i>Lampanyctus</i> spp.	281	35	151	16	269	32	168
<i>Lampanyctus regalis</i>	25	1	29	-	63	-	14
<i>Lampanyctus ritteri</i>	187	11	149	8	147	16	81
<i>Notolychnus valdiviae</i>	7	-	13	-	31	-	2
<i>Notospopelus resplendens</i>	9	-	6	-	58	-	8
<i>Parvilux ingens</i>	-	-	-	-	2	-	-
<i>Stenobrachius leucopsarus</i>	356	29	351	11	300	18	264
<i>Taaningichthys minimus</i>	-	-	-	-	1	-	-
<i>Triphoturus mexicanus</i>	218	38	342	7	330	13	237
<i>Triphoturus nigrescens</i>	-	-	-	-	2	-	-
<i>Benthoosema pterota</i>	6	-	3	-	-	-	-
<i>Centrobranchus</i> spp.	-	-	-	-	6	-	-
<i>Diogenichthys</i> spp.	-	6	15	3	24	2	18
<i>Diogenichthys atlanticus</i>	68	22	141	14	191	19	60
<i>Diogenichthys laternatus</i>	201	29	114	22	168	34	56
<i>Electrona rissoi</i>	15	-	7	-	20	-	6
<i>Gonichthys tenuiculus</i>	49	9	14	1	44	5	8
<i>Hygophum</i> spp.	2	-	-	-	5	-	7
<i>Hygophum atratum</i>	120	6	16	1	47	-	10
<i>Hygophum reinhardtii</i>	12	-	9	1	29	2	2
<i>Loweina rara</i>	2	-	3	1	9	-	3
<i>Myctophum aurolaternatum</i>	21	-	-	-	-	-	-
<i>Myctophum nitidulum</i>	13	6	22	5	65	4	13
<i>Protomyctophum crockeri</i>	388	62	299	39	361	87	344
<i>Protomyctophum thompsoni</i>	14	-	-	-	-	-	-
<i>Symbolophorus californiensis</i>	100	14	120	6	179	11	91
<i>Tarletonbeania crenularis</i>	377	26	215	-	76	17	72
<i>Synodus</i> spp.	11	7	41	7	14	12	7
Bregmaceros spp.	37	-	-	-	-	-	-
Gadidae	1	-	-	-	-	-	-
<i>Gadus macrocephalus</i>	-	-	-	-	-	-	1
<i>Microgadus proximus</i>	4	-	-	-	-	-	-
<i>Merluccius productus</i>	305	16	279	14	222	21	177
Moridae	14	-	-	-	1	-	-
<i>Physiculus</i> spp.	1	-	-	-	-	-	1
Macrouridae	18	-	3	-	6	-	4

TABLE 5. (cont.)

NAME	1972	1974	1975	1977	1978	1980	1981
Ophidiiformes	9	-	15	-	18	-	19
<i>Bromophycis marginata</i>	7	-	5	-	11	-	5
Carapidae	2	-	-	-	-	-	-
<i>Chilara taylori</i>	3	-	17	-	4	-	-
<i>Ophidion scrippsae</i>	7	6	18	-	6	-	1
<i>Porichthys</i> spp.	-	-	-	-	1	-	-
Antennariidae	1	-	-	-	-	-	-
Ceratioidei	6	1	11	-	4	1	-
Lophiidae	1	-	-	-	-	-	-
Gobiesocidae	2	-	10	-	3	-	-
Exocoetidae	-	-	1	-	1	-	3
Hemiramphidae	-	-	-	-	-	-	1
<i>Oxyporhamphus micropterus</i>	1	-	-	-	-	-	-
<i>Coloabis saira</i>	31	1	7	-	10	3	7
Atherinidae	3	3	7	-	13	1	3
Trachipteridae	56	7	18	2	10	1	5
Eutaeniophoridae	2	-	-	-	2	-	-
<i>Melamphaes</i> spp.	219	9	130	9	181	9	79
<i>Poromitra</i> spp.	15	-	18	2	42	2	21
<i>Scopeloberyx robustus</i>	-	4	5	-	5	-	4
<i>Scopelogadus bispinosus</i>	21	3	-	3	19	-	4
<i>Macroramphosus gracilis</i>	1	3	-	-	3	2	4
<i>Syngnathus</i> spp.	2	3	8	-	6	-	4
Agonidae	17	1	11	-	1	2	7
<i>Anoplopoma fimbria</i>	1	-	-	-	-	-	-
Cottidae	28	5	44	2	17	2	23
<i>Scorpaenichthys marmoratus</i>	13	3	15	-	6	3	-
Cyclopteridae	14	1	13	-	3	-	7
Hexagrammidae	16	-	1	-	2	1	-
<i>Ophiodon elongatus</i>	3	-	1	-	-	-	1
<i>Oxylebius pictus</i>	6	-	4	-	-	-	6
<i>Zaniolepis</i> spp.	6	2	23	4	11	3	5
Scorpaenidae	2	-	-	-	-	-	-
<i>Scorpaena</i> spp.	3	-	11	-	8	-	6
<i>Sebastes</i> spp.	509	94	560	30	429	52	379
<i>Sebastes aurora</i>	18	-	13	2	29	2	20
<i>Sebastes jordani</i>	90	1	42	-	47	1	22
<i>Sebastes levis</i>	13	-	17	-	8	-	5
<i>Sebastes macdonaldi</i>	15	-	21	-	17	-	8
<i>Sebastes paucispinis</i>	140	10	73	11	48	7	48
<i>Sebastolobus</i> spp.	65	1	23	-	32	1	19
<i>Prionotus</i> spp.	6	-	12	-	7	-	3
Blennioidei	9	1	4	-	-	-	8
Bathymasteridae	1	-	-	-	-	-	-
<i>Hypsoblennius</i> spp.	16	6	82	-	50	2	19
Clinidae	30	9	67	2	23	3	17
Gobiidae	88	26	121	10	73	6	38
Microdesmidae	1	-	-	-	-	-	-
<i>Icosteus aenigmaticus</i>	12	-	1	-	2	-	3
Labridae	10	-	-	-	-	-	-



TABLE 5. (cont.)

NAME	1972	1974	1975	1977	1978	1980	1981
Halichoeres spp.	9	-	26	-	21	-	7
<i>Oxyjulis californica</i>	21	-	23	1	56	1	33
<i>Semicossyphus pulcher</i>	-	-	8	-	4	-	3
Pomacentridae	2	-	-	-	-	-	-
<i>Chromis punctipinnis</i>	2	-	22	1	14	-	16
<i>Hypsypops rubicundus</i>	-	-	3	-	-	-	1
<i>Mugil</i> spp.	2	-	-	-	1	-	-
<i>Howella brodiei</i>	2	-	1	-	9	-	-
<i>Brama</i> spp.	7	-	3	-	7	-	-
Carangidae	4	-	10	-	8	-	1
<i>Seriola lalandi</i>	1	-	5	-	7	-	1
<i>Trachurus symmetricus</i>	116	-	119	1	137	1	87
<i>Caristius macropus</i>	-	-	-	-	2	-	-
<i>Coryphaena hippurus</i>	6	1	4	-	2	-	3
Gerreidae	1	-	5	-	3	-	3
Haemulidae	1	-	8	-	12	-	2
<i>Girella nigricans</i>	-	-	1	1	3	-	2
<i>Medialuna californiensis</i>	2	-	3	-	1	-	-
<i>Caulolatilus princeps</i>	1	-	2	-	2	-	2
Sciaenidae	63	58	260	16	111	-	7
<i>Cheilotrema saturnum</i>	-	-	-	-	-	-	2
<i>Genyonemus lineatus</i>	-	-	-	-	-	15	64
<i>Roncador stearnsii</i>	-	-	-	-	-	-	1
<i>Seriphus politus</i>	-	-	-	-	-	-	26
Serranidae	21	-	55	1	32	1	26
Polynemidae	-	-	1	-	-	-	-
Gempylidae	15	-	1	-	12	-	1
Scombridae	-	-	1	-	1	-	-
<i>Auxis</i> spp.	4	-	-	-	2	-	-
<i>Euthynnus</i> spp.	-	-	-	-	1	-	-
<i>Sarda chiliensis</i>	4	-	3	-	-	-	1
<i>Scomber japonicus</i>	3	-	8	-	61	-	86
<i>Thunnus albacares</i>	2	-	-	-	-	-	-
<i>Lepidopus xantusi</i>	7	1	10	1	11	-	8
<i>Sphyrna argentea</i>	-	-	9	-	5	-	14
<i>Icichthys lockingtoni</i>	140	6	46	2	73	-	22
<i>Cubiceps caeruleus</i>	-	-	-	-	1	-	-
<i>Cubiceps pauciradiatus</i>	12	-	-	-	-	-	-
<i>Psenes pellucidus</i>	5	-	-	-	6	-	-
<i>Psenes sio</i>	5	-	-	-	-	-	-
<i>Peprilus simillimus</i>	11	6	54	3	65	-	31
<i>Tetragonurus cuvieri</i>	13	8	15	2	24	6	8
Chiasmodontidae	15	5	11	4	38	2	20
Uranoscopidae	1	-	-	-	-	-	-
Pleuronectiformes	8	-	-	-	2	-	-
Bothidae	1	-	-	-	-	-	-
<i>Bothus</i> spp.	8	-	-	-	-	-	-
<i>Citharichthys</i> spp.	227	96	357	27	297	60	153
<i>Citharichthys stigmaeus</i>	92	33	133	20	131	24	63
<i>Cyclopsetta</i> spp.	1	-	-	-	-	-	-

TABLE 5. (cont.)

NAME	1972	1974	1975	1977	1978	1980	1981
<i>Hippoglossina</i> spp.	-	-	-	-	1	-	-
<i>Hippoglossina stomata</i>	17	8	36	1	21	-	6
<i>Paralichthys californicus</i>	37	25	106	4	47	-	58
<i>Syacium ovale</i>	5	-	-	-	-	-	-
<i>Xystreurus liolepis</i>	5	4	12	1	5	-	3
<i>Glyptocephalus zachirus</i>	15	-	4	-	22	-	24
<i>Hypsopsetta guttulata</i>	1	5	8	2	7	1	2
<i>Isopsetta isolepis</i>	3	-	-	-	1	-	-
<i>Lepidopsetta bilineata</i>	3	-	3	-	1	-	-
<i>Lycopsetta exilis</i>	54	-	20	-	41	2	57
<i>Microstomus pacificus</i>	17	1	9	-	28	-	14
<i>Parophrys vetulus</i>	53	6	50	1	20	-	38
<i>Platichthys stellatus</i>	6	-	1	-	7	-	2
<i>Pleuronichthys</i> spp.	-	1	1	-	-	-	1
<i>Pleuronichthys coenosus</i>	3	-	3	-	6	-	2
<i>Pleuronichthys decurrens</i>	8	1	3	-	1	-	1
<i>Pleuronichthys ritteri</i>	8	2	33	1	6	4	11
<i>Pleuronichthys verticalis</i>	21	1	100	2	22	2	24
<i>Psettichthys melanostictus</i>	8	-	2	-	7	-	1
<i>Symphurus</i> spp.	20	8	26	1	16	-	8
Disintegrated fish larva	258	27	196	8	224	22	147
Unidentified fish larva	222	21	183	12	162	15	109

TABLE 6. List of stations which were occupied twice in one month during 1981.

Station	Month	
96.7	29.0	4
96.7	30.0	4
96.7	32.0	4
96.7	35.0	4
96.7	40.0	4
100.0	29.2	4
100.0	30.0	4
100.0	35.0	4
100.0	40.0	4
103.3	29.0	4
103.3	30.0	4
103.3	35.0	4
103.3	40.0	4
106.7	31.0	4
106.7	32.0	4
106.7	35.0	4
106.7	40.0	4
110.0	35.0	4
110.0	40.0	4
60.0	50.0	6
60.0	52.5	6
60.0	55.0	6
60.0	60.0	6
63.3	50.0	6
63.3	52.0	6
63.3	55.0	6
63.3	60.0	6
63.3	70.0	6
66.7	49.0	6
66.7	50.0	6
66.7	55.0	6
66.7	60.0	6
66.7	70.0	6
66.7	80.0	6



## INDEX

This index lists taxa included in Table 4 with their page numbers.

	Page
Clupeiformes	
Clupeidae	
<i>Sardinops sagax</i> .....	58
Engraulidae	
<i>Engraulis mordax</i> .....	58
Salmoniformes	
Argentinidae	
<i>Argentina sialis</i> .....	62
<i>Microstoma microstoma</i> .....	63
<i>Nansenia candida</i> .....	64
<i>Nansenia crassa</i> .....	64
Bathylagidae	
<i>Bathylagus</i> spp. ....	65
<i>Bathylagus milleri</i> .....	66
<i>Bathylagus ochotensis</i> .....	66
<i>Bathylagus pacificus</i> .....	68
<i>Bathylagus wesethi</i> .....	69
<i>Leuroglossus stilbius</i> .....	71
Stomiiformes .....	74
Gonostomatidae .....	74
<i>Cyclothone</i> spp. ....	74
<i>Danaphos oculatus</i> .....	76
<i>Gonostoma</i> spp. ....	77
<i>Ichthyococcus</i> spp. ....	77
<i>Valenciennellus stellatus</i> .....	78
<i>Vinciguerrria lucetia</i> .....	78
Sternoptychidae .....	80
Stomiatoidea	
Chauliodontidae	
<i>Chauliodus macouni</i> .....	83
Idiacanthidae	
<i>Idiacanthus antrostomus</i> .....	84
Malacosteidae	
<i>Aristostomias scintillans</i> .....	84
Melanostomiidae	
<i>Photonectes</i> spp. ....	84
<i>Tactostoma macropus</i> .....	85
Stomiidae	
<i>Stomias atriventer</i> .....	85
Myctophiformes	
Alepisauroidi	
Evermannellidae .....	86
Paralepididae .....	86
<i>Lestidiops ringens</i> .....	87
<i>Notolepis risso</i> .....	88

	Page
Aulopoidei	
Aulopidae	
<i>Aulopus</i> spp. ....	88
Chlorophthalmoidei	
Notosudidae	
<i>Scopelosaurus</i> spp. ....	88
Scopelarchidae	
<i>Benthalbella dentata</i> ....	88
<i>Rosenblattichthys volucris</i> ....	89
<i>Scopelarchus</i> spp. ....	89
Myctophoidei	
Myctophidae	89
Lampanyctinae	
<i>Ceratoscopelus townsendi</i> ....	92
<i>Diaphus</i> spp. ....	93
<i>Lampadena urophaos</i> ....	94
<i>Lampanyctus</i> spp. ....	94
<i>Lampanyctus regalis</i> ....	97
<i>Lampanyctus ritteri</i> ....	97
<i>Notolychnus valdiviae</i> ....	99
<i>Notoscopelus resplendens</i> ....	99
<i>Stenobranchius leucopsarus</i> ....	99
<i>Triphoturus mexicanus</i> ....	101
Myctophinae	
<i>Diogenichthys</i> spp. ....	104
<i>Diogenichthys atlanticus</i> ....	105
<i>Diogenichthys laternatus</i> ....	106
<i>Electrona rissoi</i> ....	107
<i>Gonichthys tenuiculus</i> ....	107
<i>Hygophum</i> spp. ....	108
<i>Hygophum atratum</i> ....	108
<i>Hygophum reinhardtii</i> ....	108
<i>Loweina rara</i> ....	109
<i>Myctophum nitidulum</i> ....	109
<i>Protomyctophum crockeri</i> ....	109
<i>Symbolophorus californiensis</i> ....	112
<i>Tarletonbeania crenularis</i> ....	114
Synodontoide	
Synodontidae	
<i>Synodus</i> spp. ....	115
Gadiformes	
Gadidae	
<i>Gadus macrocephalus</i> ....	115
Merlucciidae	
<i>Merluccius productus</i> ....	115
Moridae	
<i>Physiculus</i> spp. ....	118
Macrouridae	118
Ophidiiformes	118
Bythitidae	
<i>Brosmophycis marginata</i> ....	119

Ophidiidae	
<i>Ophidion scrippsae</i> .....	119
Lophiiformes	
Ceratioidei .....	119
Beloniformes	
Exocoetidae .....	119
Hemiramphidae .....	119
Scomberesocidae	
<i>Cololabis saira</i> .....	119
Atheriniformes	
Atherinidae .....	120
Lampriformes	
Trachipteridae .....	120
Beryciformes	
Melamphaidae	
<i>Melamphaes</i> spp. ....	120
<i>Poromitra</i> spp. ....	122
<i>Scopelogadus bispinosus</i> .....	122
Syngnathiformes	
Macroramphosidae	
<i>Macroramphosus gracilis</i> .....	122
Syngnathidae	
<i>Syngnathus</i> spp. ....	122
Scorpaeniformes	
Cottoidei	
Agonidae .....	123
Cottidae .....	123
<i>Scorpaenichthys marmoratus</i> .....	123
Cyclopteridae .....	124
Hexagrammidae .....	124
<i>Ophidion elongatus</i> .....	124
<i>Oxylebius pictus</i> .....	124
<i>Zaniolepis</i> spp. ....	124
Scorpaenoidei	
Scorpaenidae	
<i>Scorpaena</i> spp. ....	125
<i>Sebastes</i> spp. ....	125
<i>Sebastes aurora</i> .....	128
<i>Sebastes jordani</i> .....	129
<i>Sebastes levis</i> .....	129
<i>Sebastes macdonaldi</i> .....	130
<i>Sebastes paucispinis</i> .....	130
<i>Sebastolobus</i> spp. ....	131
Triglidae	
<i>Prionotus</i> spp. ....	131
Perciformes	
Blennioidei .....	131
Blenniidae	
<i>Hypsoblennius</i> spp. ....	132
Clinidae .....	132
Gobioidei	

	Page
Gobiidae .....	133
Icosteoidi	
Icosteidae	
<i>Icosteus aenigmaticus</i> .....	134
Labroidi	
Labridae	
<i>Halichoeres</i> spp. ....	134
<i>Oxyjulis californica</i> .....	134
<i>Semicossyphus pulcher</i> .....	135
Pomacentridae	
<i>Chromis punctipinnis</i> .....	135
<i>Hypsypops rubicuncus</i> .....	135
Percoidei	
Carangidae .....	135
<i>Seriola lalandi</i> .....	136
<i>Trachurus symmetricus</i> .....	136
Coryphaenidae	
<i>Coryphaena hippurus</i> .....	137
Gerreidae .....	137
Haemulidae .....	137
Kyphosidae	
<i>Girella nigricans</i> .....	138
Malacanthidae	
<i>Caulolatilus princeps</i> .....	138
Sciaenidae .....	138
<i>Cheilotrema saturnum</i> .....	138
<i>Genyonemus lineatus</i> .....	138
<i>Roncador stearnsii</i> .....	139
<i>Seriphus politus</i> .....	139
Serranidae .....	140
Scombroidei	
Gempylidae .....	141
Scombridae	
<i>Sarda chiliensis</i> .....	141
<i>Scomber japonicus</i> .....	141
Trichiuridae	
<i>Lepidopus xantusi</i> .....	142
Sphyraenoidei	
Sphyraenidae	
<i>Sphyraena argentea</i> .....	143
Stromateoidei	
Centrolophidae	
<i>Icichthys lockingtoni</i> .....	143
Stromateidae	
<i>Peprilus simillimus</i> .....	143
Tetragonuridae	
<i>Tetragonurus cuvieri</i> .....	144
Trachinoidei	
Chiasmodontidae .....	145
Pleuronectiformes	
Pleuronectoidei	



	Page
Paralichthyidae	
<i>Citharichthys</i> spp. ....	145
<i>Citharichthys stigmaeus</i> ....	148
<i>Hippoglossina stomata</i> ....	149
<i>Paralichthys californicus</i> ....	149
<i>Xystreureys liolepis</i> ....	150
Pleuronectidae	
<i>Glyptocephalus zachirus</i> ....	150
<i>Hypsopsetta guttulata</i> ....	151
<i>Lyopsetta exilis</i> ....	151
<i>Microstomus pacificus</i> ....	152
<i>Parophrys vetulus</i> ....	152
<i>Platichthys stellatus</i> ....	153
<i>Pleuronichthys</i> spp. ....	153
<i>Pleuronichthys coenosus</i> ....	153
<i>Pleuronichthys decurrens</i> ....	154
<i>Pleuronichthys ritteri</i> ....	154
<i>Pleuronichthys verticalis</i> ....	154
<i>Psettichthys melanostictus</i> ....	154
Soleoidei	
Cynoglossidae	
<i>Symphurus</i> spp. ....	155
Disintegrated fish larva ....	155
Unidentified fish larva ....	157

## RECENT TECHNICAL MEMORANDUMS

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