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# ICHTHYOPLANKTON AND STATION DATA FOR CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS SURVEY CRUISES IN 1967

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

NOAA Technical Memorandum NMFS

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## 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 1967. It is the seventeenth report in a series that presents these data for all biological-oceanographic CalCOFI surveys from 1951 to the present. A total of 258 stations was occupied during 2 cruises over a survey area which extended from Pt. Conception, California to Cape San Juanico, Mexico and seaward to several hundred miles. The data are listed in a series of 5 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 123 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 seventeenth 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 1967. 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.

Data resulting from CalCOFI surveys in 1967 have been published in a number of forms. Hydrographic data (Univ. of Calif., SIO, 1969) were presented in a standard format. Distributional maps of larvae of two taxa taken on CalCOFI surveys during 1967 are presented in the CalCOFI Atlas series: rockfish (*Sebastes* spp.), Ahlstrom et al., 1978; northern anchovy (*Engraulis mordax*), Hewitt, 1980.

A computer data base for eggs and larvae of sardine and anchovy, for larvae of 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 1967 were subjected to an extensive verification and editing process to produce this report. This and previous (Ambrose et al., 1987a,b,c; 1988; Sandknop et al., 1987a,b; 1988a,b; Stevens et al., 1987a,b,c; 1988; Sumida et al., 1987a,b; 1988a,b) 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 1967, CalCOFI survey cruises were conducted only in June-July (Cruise 6706) and December (Cruise 6712). Cruise 6706 is designated as 6707 in the hydrographic data reports (Univ. of Calif., SIO, 1969). A total of 258 stations included in this data base was occupied on these 2 cruises (170 stations on 6706 and 88 stations on 6712). Coverage of the survey station pattern varied between cruises and the entire survey area was not covered on any single cruise (Figures 1-3, Table 1). The area off northern California (lines 40-57) and central California (lines 60-77) was not covered. The area between Pt. Conception, California and Pt. Abreojos, Baja California (lines 80-130) was surveyed in June-July on Cruise 6706. The area from Cape San Quintin to Pt. San Juanico, Baja California (lines 107-137) was surveyed in December on Cruise 6712. Coverage extended seaward to station 140 (approximately 450 miles offshore) on lines 90 and

93 (Cruise 6706) but typically did not extend beyond station 80 (approximately 200 miles offshore)[1]. Several inshore stations were occupied during Cruises 6706 and 6712 which were not covered on early CalCOFI surveys. These stations were included in the data base (Table 1) but omitted from the station plots (Figures 2 and 3).

Two SIO vessels were employed on these cruises: the *Ellen B. Scripps* (Cruise 6706) and the *Horizon* (Cruise 6712) (Univ. of Calif., SIO, 1969).

## SAMPLING GEAR AND METHODS

The standard CalCOFI net used from 1949 to 1969 had a 1-m diameter mouth opening (0.785 $m^2$ area) and an overall length of about 5 m. The net was constructed of 30xxx gauze, a heavy duty grade of silk bolting cloth, with a mesh size of 0.55 mm after shrinkage. The last 40 cm of the cone and the cod end were constructed of 56xxx grit gauze which had a mesh size of 0.25 mm after shrinkage. The net ring was fastened to a short 3-lead bridle connected to several meters of line which attached to the towing cable by a clamp. A current meter was suspended in the center of the net mouth to measure volume of water filtered (see Kramer et al., 1972, for further details).

The standard tow from 1951 through 1968 was an oblique haul to 140 m depth (to 15 m of the bottom in shallow areas) designed to filter a constant amount of water per depth interval (ca. $3m^3/m$ of depth) over the vertical range of most ichthyoplankters. Hauls were made at a ship speed of 1.5-2.0 knots and initiated by clamping the net line to the towing cable with the 45 kg terminal weight about 10-15 m below the surface. The net was lowered to 140 m depth by paying out 200 m of wire over a 4 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° ($\pm$3°) by adjusting the ship speed and course. After reaching the surface, the net was washed down and the

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[1]CalCOFI lines (Figure 4) 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).

samples preserved in 5% formalin buffered with sodium borate. Flowmeter readings were made at the beginning and end of each tow. Detailed descriptions of gear and methods are given by Ahlstrom (1953), Kramer et al. (1972), 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. Usually, each sample was sorted completely; however, one sample (Cruise 6706, 97.30) was fractioned into aliquots using a Folsom plankton splitter (McEwen et al., 1954) prior to sorting.

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 $m^3$ 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 $m^2$ of sea surface. The SHF is calculated for each haul by the formula:

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

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

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

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

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

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

p = length of 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 1967. 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 121 taxa was identified for 1967, with 70 taken to species, 26 to genus, 20 to family, and 5 to order or suborder. Beginning in 1961, larvae in the families Paralepididae and Labridae were identified to genus or species.

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 of coded data, 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 misinterpretations.

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 1967 which received special attention, with explanations and caveats intended to aid in quantitative interpretations:

Anguilliformes - tentative and sporadic identifications to family or lower taxon lumped to order.

*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.

*Vinciguerria lucetia* - specimens taken seaward of station 100 checked for misidentification of *V. poweriae*; some *V. poweriae* may remain in these samples because small larve 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.

*Bathophilus* spp. - all specimens checked.

*Tactostoma macropus* - all specimens checked.

Paralepididae - all specimens examined and identified to species.

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

*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.

*Stenobrachius leucopsarus* - all specimens taken seaward of station 100 checked.

*Triphoturus mexicanus* - specimens taken seaward of station 100 checked for misidentification of *T. nigrescens*.

*Diogenichthys atlanticus* - all specimens at margins of range checked.

*Diogenichthys laternatus* - all specimens at margins of range checked.

*Electrona rissoi* - recognition of this species was inconsistent and others may be included in *Protomyctophum crockeri* or Myctophidae.

*Hygophum* spp. - all specimens reidentified to species.

*Hygophum atratum* - all specimens checked.

*Hygophum reinhardtii* - all specimens checked.

*Physiculus* spp. - specimen examined.

Ophidiiformes - this category did not exist originally and ophidiiform larvae were included in *Brosmophycis marginata*, "*Otophidium*", "Zoarcidae", and "blenny"; identifications of *B. marginata* proved to be mostly correct and "Zoarcidae" to be a yet unidentified ophidiiform species; all "*Otophidium*" and "blenny" were reexamined and the former included *Chilara taylori* and other ophidiiform taxa (moved to order); "blenny" contained *C. taylori*, and other ophidiiform taxa in addition to true blennioids.

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

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.

Cottidae - all specimens checked; tentative and sporadic identifications to species were lumped to family.

*Zaniolepis* spp. - all specimens checked.

*Sebastes* spp. - category may contain other scorpaenid genera, particularly in samples south of line 120.

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 (*Oxylebius californica, Semicossyphus pulcher*); residuals are small, poorly preserved or unavailable specimens.

*Mugil* spp. - specimen checked.

Apogonidae - all specimens checked and identified as *Howella brodiei*; in this report we list *H. brodiei* in Apogonidae for convenience, recognizing that its systematic affinities are not resolved.

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

*Seriola lalandi* - all specimens checked.

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

*Girella nigricans* - all specimens checked.

*Medialuna californiensis* - all specimens checked.

*Caulolatilus princeps* - all specimens checked.

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

Scombridae - all larvae originally identified to this family or constituent taxa (except *Scomber japonicus*) were reexamined and reassigned; residual are small, poorly preserved or unavailable specimens.

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

Pleuronectiformes - all available specimens of this category (originally called "flatfish") were examined and reidentified; residual is a small, poorly preserved specimen.

Bothidae - all specimens examined and reassigned; most were assigned to various paralichthyid genera.

*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 c . 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 *Xystreurys liolepis*.

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

*Lepidopsetta bilineata* - all specimens examined; originally identified as *Psettichthys melanostictus*.

*Microstomus pacificus* - all specimens examined.

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

## 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 41% of all fish larvae taken on CalCOFI cruises during 1967 and numbered over three times as many as the sanddab category *Citharichthys* spp., the next most abundant taxa with 12% of the total larvae (Table 2, 3). Northern anchovy also ranked first in incidence; *Citharichthys* spp. ranked 5th. The next most abundant species was the gonostomatid *Vinciguerria lucetia* also with 12% of total larvae; it ranked 3rd in occurrence. The myctophid *Triphoturus mexicanus* ranked 4th in abundance (8%) and 2nd in incidence. A deepsea smelt, *Bathylagus wesethi*, ranked 5th in abundance and 6th in incidence. Larvae of Pacific sardine (*Sardinops sagax*) and the myctophid *Diogenichthys laternatus* ranked 6th and 7th in abundance respectively; however, in incidence these species ranked only 26th and 13th respectively, suggesting relatively large sample sizes. Jack mackerel (*Trachurus symmetricus*), *Sebastes* spp. (a composite of about 70 species of rockfish), and the gonostomatid genus *Cyclothone* spp. completed the 10 most abundant taxa ranking 8th, 9th, and 10th respectively; these taxa also ranked in the top 10 in incidence (10th, 8th, and 9th respectively). These 10 top-ranking taxa contributed 85% of all larvae taken during 1967. The remaining 15% was represented by 111 taxa plus the unidentified and disintegrated categories. Of the 10 taxa, 5 were midwater species or generic groupings, 2 were coastal demersal species or generic groupings, and 3 were coastal pelagic species.

## EXPLANATION OF TABLES

Table 1 - This table lists by cruise the pertinent station and tow data for 1967, 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 2-3). 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: EB, *Ellen B. Scripps* and HO, *Horizon*.

Table 2 - This table lists pooled occurrences of all larval fish taxa taken during 1967 in ranked order.

Table 3 - This table lists pooled counts of all larval fish taxa taken during 1967 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, listed by station and calendar month in which the tow was taken. Counts are adjusted for percent of sample sorted and standard haul factor. 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 1961 to 1969. Taxa are listed in the same order as in Table 4.

## ACKNOWLEDGMENTS

Lois Hunter originally identified larvae from CalCOFI cruises of 1967. 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, Larry Zins, 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 and Diane Forsythe 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 and Reuben Lasker, Chief, Coastal Fisheries Resources Division, SWFC, provided the 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.

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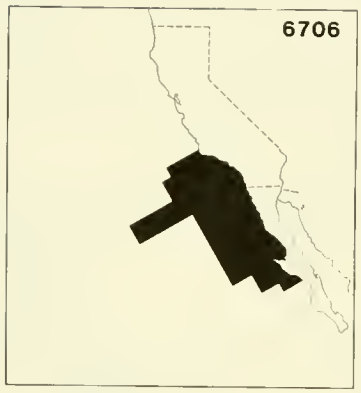


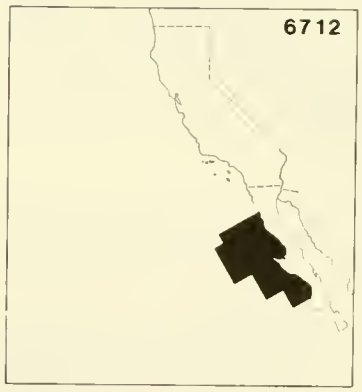


Figure 1. Composite arrangement of diagrammatic charts showing areas sampled on each CalCOFI cruise during 1967.


Figure 2. Station pattern for CalCOFI Cruise 6706 showing tracks for each vessel. Stations with plankton tows are indicated by a dot; circles designate hydrographic stations and diamonds signify STD recordings. Figures 2 and 3 modified from charts in Univ. of Calif., SIO (1969) to include only those stations listed in Table 1 of this report; see Table 1 for inshore stations not shown on charts.


Figure 3. Station pattern for CalCOFI Cruise 6712. Symbols as in Figure 2.

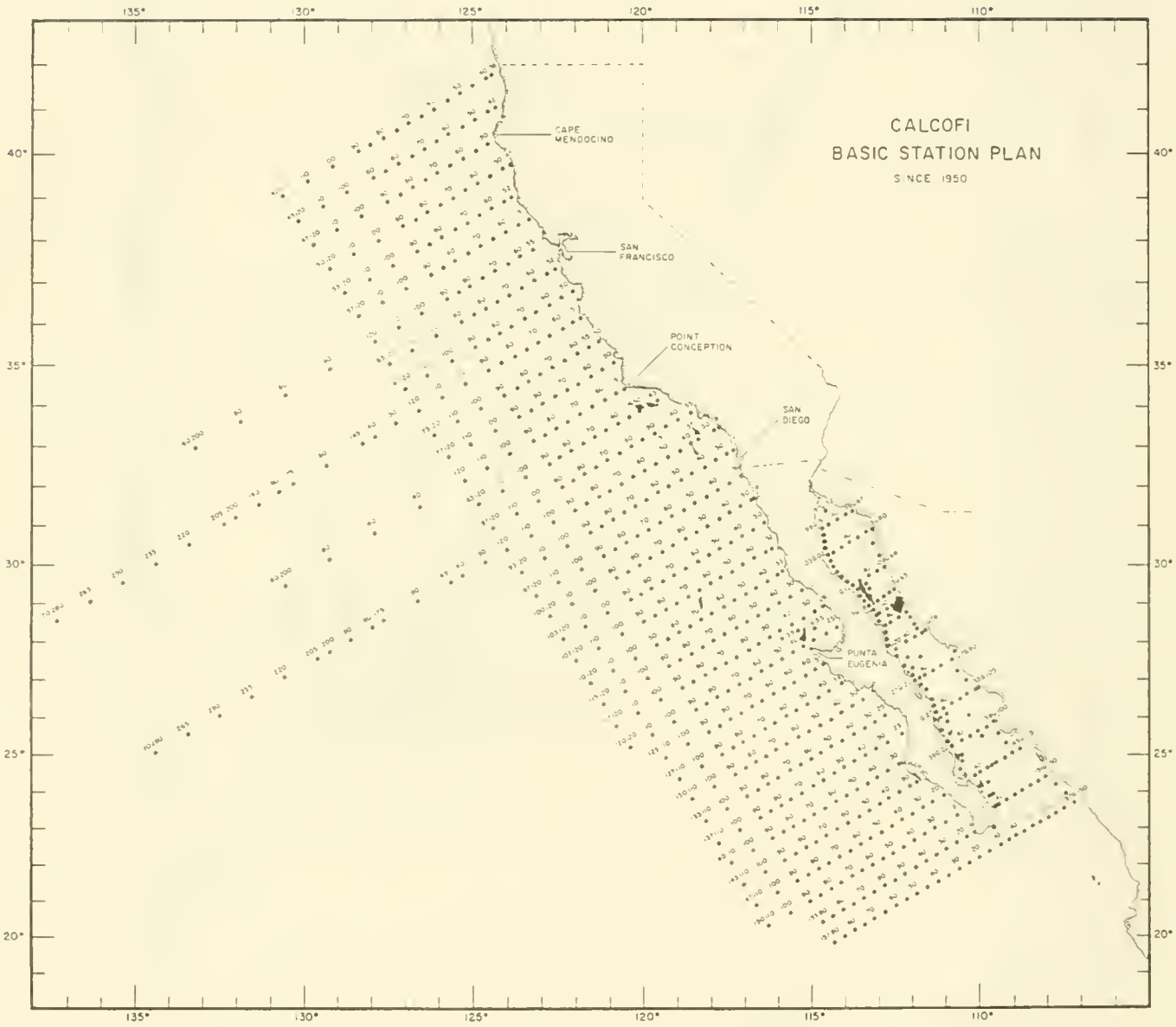


Figure 4. The basic station plan for CalCOFI cruises from 1950 to the present.

TABLE 1. Station and plankton tow data for CalCOFI cruises in 1967. Counts for fish eggs and larvae are not adjusted for standard haul factor or percent of sample sorted.

CalCOFI Cruise 6706

| 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) | Standard Haul Factor | Percent Sorted | Total Larvae | Total Eggs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 51.0 | 34 26.0 | 120 32.5 | EB | 67 06 22 | 0409 | 91 | 295 | 3.09 | 100.0 | 69 | 46 |
| 80.0 | 52.0 | 34 24.3 | 120 36.5 | EB | 67 06 22 | 0246 | 108 | 484 | 2.24 | 100.0 | 46 | 68 |
| 80.0 | 55.0 | 34 19.8 | 120 50.0 | EB | 67 06 21 | 2300 | 124 | 482 | 2.56 | 100.0 | 216 | 27 |
| 80.0 | 60.0 | 34 09.0 | 121 09.0 | EB | 67 06 21 | 1950 | 134 | 435 | 3.07 | 100.0 | 102 | 207 |
| 80.0 | 65.0 | 33 57.2 | 121 30.0 | EB | 67 06 21 | 1520 | 152 | 444 | 3.43 | 100.0 | 16 | 70 |
| 80.0 | 70.0 | 33 45.0 | 121 50.0 | EB | 67 06 21 | 1230 | 140 | 514 | 2.73 | 100.0 | 38 | 146 |
| 80.0 | 80.0 | 33 27.2 | 122 34.5 | EB | 67 06 21 | 0701 | 139 | 506 | 2.76 | 100.0 | 31 | 41 |
| 82.0 | 47.0 | 34 14.8 | 119 58.5 | EB | 67 06 22 | 0806 | 129 | 418 | 3.08 | 100.0 | 110 | 380 |
| 83.0 | 40.0 | 34 13.7 | 119 21.7 | EB | 67 06 23 | 1025 | 15 | 64 | 2.26 | 100.0 | 9 | 210 |
| 83.0 | 43.0 | 34 08.3 | 119 34.0 | EB | 67 06 23 | 1246 | 141 | 521 | 2.71 | 100.0 | 327 | 175 |
| 83.0 | 51.0 | 33 52.0 | 120 07.5 | EB | 67 06 23 | 1733 | 55 | 421 | 1.31 | 100.0 | 197 | 96 |
| 83.0 | 55.0 | 33 43.9 | 120 24.0 | EB | 67 06 23 | 2010 | 144 | 439 | 3.29 | 100.0 | 395 | 275 |
| 83.0 | 60.0 | 33 33.9 | 120 44.9 | EB | 67 06 23 | 0044 | 124 | 649 | 1.90 | 100.0 | 133 | 141 |
| 83.0 | 65.0 | 33 24.3 | 121 05.8 | EB | 67 06 24 | 0336 | 111 | 587 | 1.89 | 100.0 | 56 | 308 |
| 83.0 | 70.0 | 33 14.0 | 121 25.5 | EB | 67 06 24 | 0631 | 148 | 444 | 3.33 | 100.0 | 45 | 76 |
| 83.0 | 80.0 | 32 54.5 | 122 10.0 | EB | 67 06 24 | 1156 | 129 | 562 | 2.29 | 100.0 | 70 | 104 |
| 83.0 | 90.0 | 32 34.5 | 122 50.0 | EB | 67 06 24 | 1711 | 128 | 543 | 2.36 | 100.0 | 153 | 244 |
| 87.0 | 33.0 | 33 54.0 | 118 29.4 | EB | 67 06 26 | 0459 | 32 | 163 | 1.93 | 100.0 | 137 | 2394 |
| 87.0 | 35.0 | 33 50.0 | 118 37.5 | EB | 67 06 26 | 0341 | 145 | 536 | 2.70 | 100.0 | 707 | 628 |
| 87.0 | 40.0 | 33 40.0 | 118 58.4 | EB | 67 06 26 | 0046 | 142 | 496 | 2.87 | 100.0 | 673 | 689 |
| 87.0 | 45.0 | 33 30.0 | 119 19.0 | EB | 67 06 25 | 2200 | 147 | 499 | 2.95 | 100.0 | 128 | 7 |
| 87.0 | 50.0 | 33 20.0 | 119 39.5 | EB | 67 06 25 | 1918 | 60 | 277 | 2.16 | 100.0 | 120 | 121 |
| 87.0 | 55.0 | 33 09.0 | 119 59.2 | EB | 67 06 25 | 1621 | 146 | 475 | 3.07 | 100.0 | 195 | 419 |
| 87.0 | 60.0 | 33 00.0 | 121 21.2 | EB | 67 06 25 | 1351 | 151 | 446 | 3.38 | 100.0 | 48 | 31 |
| 87.0 | 65.0 | 32 52.0 | 120 41.3 | EB | 67 06 25 | 1021 | 137 | 526 | 2.60 | 100.0 | 37 | 20 |
| 87.0 | 70.0 | 32 39.7 | 121 03.0 | EB | 67 06 25 | 0746 | 131 | 548 | 2.40 | 100.0 | 108 | 86 |
| 87.0 | 80.0 | 32 21.0 | 121 44.7 | EB | 67 06 25 | 0256 | 122 | 602 | 2.03 | 100.0 | 325 | 71 |
| 87.0 | 90.0 | 32 00.0 | 122 27.4 | EB | 67 06 24 | 2150 | 128 | 537 | 2.38 | 100.0 | 247 | 114 |
| 90.0 | 28.0 | 33 28.5 | 117 46.7 | EB | 67 06 27 | 0421 | 126 | 563 | 2.24 | 100.0 | 454 | 867 |
| 90.0 | 32.0 | 33 21.2 | 118 01.6 | EB | 67 06 27 | 0636 | 136 | 520 | 2.62 | 100.0 | 177 | 80 |
| 90.0 | 37.0 | 33 11.1 | 118 22.5 | EB | 67 06 27 | 1011 | 145 | 530 | 2.73 | 100.0 | 814 | 244 |
| 90.0 | 45.0 | 32 54.6 | 118 55.5 | EB | 67 06 27 | 1406 | 143 | 518 | 2.75 | 100.0 | 79 | 6 |
| 90.0 | 53.0 | 32 39.0 | 119 28.7 | EB | 67 06 27 | 1801 | 144 | 514 | 2.81 | 100.0 | 244 | 790 |
| 90.0 | 60.0 | 32 22.0 | 120 00.0 | EB | 67 06 27 | 2231 | 143 | 486 | 2.93 | 100.0 | 212 | 111 |
| 90.0 | 65.0 | 32 08.0 | 120 20.0 | EB | 67 06 28 | 0116 | 144 | 516 | 2.78 | 100.0 | 53 | 29 |
| 90.0 | 70.0 | 32 04.0 | 120 38.5 | EB | 67 06 28 | 0326 | 140 | 499 | 2.81 | 100.0 | 136 | 661 |
| 90.0 | 80.0 | 31 44.5 | 121 19.2 | EB | 67 06 28 | 0831 | 144 | 478 | 3.00 | 100.0 | 40 | 44 |
| 90.0 | 90.0 | 31 24.1 | 122 02.0 | EB | 67 06 28 | 1306 | 141 | 514 | 2.73 | 100.0 | 51 | 22 |
| 90.0 | 100.0 | 31 04.0 | 122 41.0 | EB | 67 06 28 | 1826 | 132 | 509 | 2.59 | 100.0 | 36 | 154 |
| 90.0 | 110.0 | 30 39.0 | 123 24.2 | EB | 67 06 28 | 2341 | 141 | 512 | 2.76 | 100.0 | 171 | 172 |
| 90.0 | 120.0 | 30 23.0 | 124 00.0 | EB | 67 06 29 | 0446 | 141 | 507 | 2.77 | 100.0 | 60 | 124 |
| 90.0 | 130.0 | 30 03.2 | 124 40.7 | EB | 67 06 29 | 0916 | 140 | 529 | 2.64 | 100.0 | 41 | 75 |
| 90.0 | 140.0 | 29 45.0 | 125 20.4 | EB | 67 06 29 | 1431 | 135 | 529 | 2.56 | 100.0 | 206 | 100 |

TABLE 1. (cont.)

CalCOFI Cruise 6706

| 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) | Standard Haul Factor | Percent Sorted | Total Larvae | Total Eggs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 28.0 | 32 54.5 | 117 21.5 | EB | 67 07 02 | 0941 | 136 | 491 | 2.76 | 100.0 | 218 | 57 |
| 93.0 | 30.0 | 32 50.3 | 117 31.1 | EB | 67 07 02 | 0616 | 148 | 455 | 3.24 | 100.0 | 205 | 50 |
| 93.0 | 35.0 | 32 42.1 | 117 52.0 | EB | 67 07 02 | 0351 | 136 | 494 | 2.76 | 100.0 | 357 | 135 |
| 93.0 | 40.0 | 32 30.9 | 118 11.7 | EB | 67 07 02 | 0131 | 138 | 493 | 2.80 | 100.0 | 596 | 1856 |
| 93.0 | 45.0 | 32 21.2 | 118 33.8 | EB | 67 07 01 | 2158 | 146 | 452 | 3.23 | 100.0 | 445 | 603 |
| 93.0 | 50.0 | 32 10.0 | 118 53.0 | EB | 67 07 01 | 1932 | 146 | 489 | 2.99 | 100.0 | 286 | 139 |
| 93.0 | 55.0 | 31 59.5 | 119 12.2 | EB | 67 07 01 | 1616 | 148 | 478 | 3.09 | 100.0 | 214 | 415 |
| 93.0 | 60.0 | 31 54.2 | 119 37.0 | EB | 67 07 01 | 1331 | 140 | 501 | 2.80 | 100.0 | 41 | 71 |
| 93.0 | 65.0 | 31 40.0 | 119 53.9 | EB | 67 07 01 | 1016 | 135 | 505 | 2.68 | 100.0 | 54 | 51 |
| 93.0 | 70.0 | 31 29.0 | 120 15.5 | EB | 67 07 01 | 0741 | 147 | 464 | 3.18 | 100.0 | 22 | 53 |
| 93.0 | 80.0 | 31 07.0 | 120 56.5 | EB | 67 07 01 | 0116 | 141 | 491 | 2.87 | 100.0 | 78 | 184 |
| 93.0 | 90.0 | 30 49.8 | 121 34.0 | EB | 67 06 30 | 2001 | 140 | 500 | 2.80 | 100.0 | 54 | 137 |
| 93.0 | 100.0 | 30 28.5 | 122 12.8 | EB | 67 06 30 | 1536 | 147 | 480 | 3.07 | 100.0 | 12 | 132 |
| 93.0 | 110.0 | 30 08.2 | 122 54.0 | EB | 67 06 30 | 1001 | 142 | 521 | 2.72 | 100.0 | 250 | 40 |
| 93.0 | 120.0 | 29 54.5 | 123 32.0 | EB | 67 06 30 | 0551 | 137 | 548 | 2.51 | 100.0 | 263 | 244 |
| 93.0 | 130.0 | 29 29.0 | 124 14.0 | EB | 67 06 30 | 0101 | 136 | 540 | 2.52 | 100.0 | 242 | 133 |
| 93.0 | 140.0 | 29 09.0 | 124 52.5 | EB | 67 06 29 | 1935 | 143 | 512 | 2.80 | 100.0 | 179 | 94 |
| 97.0 | 29.0 | 32 17.3 | 117 04.6 | EB | 67 07 04 | 0330 | 21 | 216 | 0.96 | 100.0 | 406 | 1729 |
| 97.0 | 30.0 | 32 16.1 | 117 07.0 | EB | 67 07 04 | 0410 | 37 | 124 | 2.97 | 50.0 | 240 | 26 |
| 97.0 | 32.0 | 32 12.1 | 117 15.3 | EB | 67 07 04 | 0611 | 139 | 511 | 2.72 | 100.0 | 464 | 1602 |
| 97.0 | 35.0 | 32 05.6 | 117 25.4 | EB | 67 07 04 | 0816 | 141 | 501 | 2.82 | 100.0 | 162 | 28 |
| 97.0 | 40.0 | 31 56.0 | 117 46.0 | EB | 67 07 04 | 1116 | 143 | 472 | 3.02 | 100.0 | 110 | 23 |
| 97.0 | 45.0 | 31 45.0 | 118 10.9 | EB | 67 07 04 | 1401 | 145 | 510 | 2.85 | 100.0 | 64 | 28 |
| 97.0 | 50.0 | 31 35.0 | 118 32.1 | EB | 67 07 04 | 1646 | 133 | 521 | 2.56 | 100.0 | 48 | 207 |
| 97.0 | 55.0 | 31 26.2 | 118 49.5 | EB | 67 07 04 | 1916 | 144 | 492 | 2.92 | 100.0 | 49 | 11 |
| 97.0 | 60.0 | 31 14.8 | 119 10.0 | EB | 67 07 04 | 2241 | 140 | 506 | 2.78 | 100.0 | 33 | 42 |
| 97.0 | 65.0 | 31 05.1 | 119 30.0 | EB | 67 07 05 | 0111 | 131 | 485 | 2.70 | 100.0 | 25 | 26 |
| 97.0 | 70.0 | 30 54.0 | 119 50.5 | EB | 67 07 05 | 0406 | 143 | 493 | 2.90 | 100.0 | 82 | 162 |
| 97.0 | 80.0 | 30 33.6 | 120 31.7 | EB | 67 07 05 | 0856 | 142 | 454 | 3.14 | 100.0 | 38 | 233 |
| 100.0 | 29.0 | 31 42.1 | 116 43.4 | EB | 67 07 06 | 1937 | 100 | 380 | 2.63 | 100.0 | 467 | 417 |
| 100.0 | 30.0 | 31 40.5 | 116 46.5 | EB | 67 07 06 | 1851 | 139 | 481 | 2.89 | 100.0 | 269 | 442 |
| 100.0 | 35.0 | 31 30.6 | 117 07.0 | EB | 67 07 06 | 1551 | 140 | 490 | 2.86 | 100.0 | 43 | 51 |
| 100.0 | 40.0 | 31 21.4 | 117 26.2 | EB | 67 07 06 | 1306 | 138 | 500 | 2.77 | 100.0 | 23 | 123 |
| 100.0 | 45.0 | 31 10.0 | 117 45.5 | EB | 67 07 06 | 0941 | 136 | 483 | 2.83 | 100.0 | 23 | 95 |
| 100.0 | 50.0 | 30 59.0 | 118 07.2 | EB | 67 07 06 | 0656 | 137 | 402 | 3.39 | 100.0 | 54 | 200 |
| 100.0 | 55.0 | 30 49.2 | 118 27.2 | EB | 67 07 06 | 0406 | 151 | 367 | 4.13 | 100.0 | 43 | 83 |
| 100.0 | 60.0 | 30 40.5 | 118 46.3 | EB | 67 07 06 | 0116 | 140 | 400 | 3.49 | 100.0 | 38 | 47 |
| 100.0 | 65.0 | 30 30.1 | 119 07.3 | EB | 67 07 05 | 2151 | 138 | 534 | 2.59 | 100.0 | 155 | 176 |
| 100.0 | 70.0 | 30 20.5 | 119 27.0 | EB | 67 07 05 | 1901 | 136 | 541 | 2.52 | 100.0 | 51 | 187 |
| 100.0 | 80.0 | 30 00.0 | 120 06.7 | EB | 67 07 05 | 1416 | 138 | 535 | 2.57 | 100.0 | 33 | 221 |
| 103.0 | 29.0 | 31 07.0 | 116 21.0 | EB | 67 07 07 | 1735 | 20 | 96 | 2.08 | 100.0 | 62 | 208 |
| 103.0 | 30.0 | 31 06.2 | 116 24.5 | EB | 67 07 07 | 1818 | 64 | 235 | 2.72 | 100.0 | 104 | 381 |
| 103.0 | 35.0 | 30 56.0 | 116 44.8 | EB | 67 07 07 | 2115 | 132 | 535 | 2.46 | 100.0 | 131 | 145 |
| 103.0 | 40.0 | 30 46.0 | 117 03.0 | EB | 67 07 07 | 0011 | 137 | 524 | 2.61 | 100.0 | 484 | 92 |
| 103.0 | 45.0 | 30 35.0 | 117 22.7 | EB | 67 07 08 | 0226 | 128 | 557 | 2.30 | 100.0 | 424 | 190 |

TABLE 1. (cont.)

CalCOFI Cruise 6706

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 50.0 | 30 23.0 | 117 45.1 | EB | 67 07 08 | 0526 | 143 | 513 | 2.79 | 100.0 | 226 | 235 |
| 103.0 | 55.0 | 30 12.0 | 118 04.7 | EB | 67 07 08 | 0801 | 141 | 519 | 2.72 | 100.0 | 162 | 292 |
| 103.0 | 60.0 | 30 02.1 | 118 23.2 | EB | 67 07 08 | 1126 | 139 | 502 | 2.77 | 100.0 | 148 | 259 |
| 103.0 | 65.0 | 29 55.0 | 118 43.8 | EB | 67 07 08 | 1356 | 139 | 548 | 2.53 | 100.0 | 105 | 117 |
| 103.0 | 70.0 | 29 46.3 | 119 03.1 | EB | 67 07 08 | 1646 | 146 | 483 | 3.02 | 100.0 | 67 | 124 |
| 103.0 | 80.0 | 29 25.0 | 119 43.1 | EB | 67 07 08 | 2136 | 143 | 517 | 2.76 | 100.0 | 166 | 775 |
| 107.0 | 31.0 | 30 27.8 | 116 06.2 | EB | 67 07 10 | 0654 | 29 | 162 | 1.77 | 100.0 | 69 | 234 |
| 107.0 | 32.0 | 30 25.9 | 116 11.3 | EB | 67 07 10 | 0556 | 140 | 512 | 2.73 | 100.0 | 65 | 703 |
| 107.0 | 35.0 | 30 19.4 | 116 19.9 | EB | 67 07 10 | 0346 | 147 | 469 | 3.13 | 100.0 | 79 | 69 |
| 107.0 | 40.0 | 30 10.2 | 116 40.1 | EB | 67 07 10 | 0056 | 121 | 557 | 2.17 | 100.0 | 338 | 97 |
| 107.0 | 45.0 | 30 00.5 | 117 01.0 | EB | 67 07 09 | 2201 | 142 | 510 | 2.79 | 100.0 | 220 | 180 |
| 107.0 | 50.0 | 29 50.0 | 117 22.2 | EB | 67 07 09 | 1926 | 139 | 499 | 2.78 | 100.0 | 147 | 81 |
| 107.0 | 55.0 | 29 41.5 | 117 40.8 | EB | 67 07 09 | 1621 | 141 | 508 | 2.78 | 100.0 | 20 | 39 |
| 107.0 | 60.0 | 29 31.5 | 118 01.2 | EB | 67 07 09 | 1351 | 140 | 493 | 2.84 | 100.0 | 29 | 166 |
| 107.0 | 65.0 | 29 18.7 | 118 21.2 | EB | 67 07 09 | 1001 | 139 | 530 | 2.62 | 100.0 | 75 | 215 |
| 107.0 | 70.0 | 29 12.8 | 118 41.0 | EB | 67 07 09 | 0726 | 145 | 513 | 2.84 | 100.0 | 164 | 448 |
| 107.0 | 80.0 | 28 50.0 | 119 19.5 | EB | 67 07 09 | 0226 | 126 | 568 | 2.21 | 100.0 | 191 | 927 |
| 110.0 | 32.0 | 29 52.0 | 115 47.5 | EB | 67 07 10 | 1305 | 10 | 77 | 1.32 | 100.0 | 12 | 931 |
| 110.0 | 35.0 | 29 46.8 | 116 00.0 | EB | 67 07 10 | 1701 | 139 | 488 | 2.85 | 100.0 | 100 | 66 |
| 110.0 | 40.0 | 29 36.5 | 116 19.5 | EB | 67 07 10 | 2021 | 139 | 469 | 2.96 | 100.0 | 508 | 34 |
| 110.0 | 45.0 | 29 26.2 | 116 39.0 | EB | 67 07 10 | 2246 | 129 | 490 | 2.63 | 100.0 | 114 | 31 |
| 110.0 | 50.0 | 29 15.9 | 116 59.0 | EB | 67 07 11 | 0136 | 126 | 503 | 2.50 | 100.0 | 310 | 207 |
| 110.0 | 55.0 | 29 04.8 | 117 19.2 | EB | 67 07 11 | 0411 | 139 | 502 | 2.77 | 100.0 | 49 | 60 |
| 110.0 | 60.0 | 28 55.3 | 117 39.6 | EB | 67 07 11 | 0726 | 140 | 501 | 2.79 | 100.0 | 19 | 324 |
| 110.0 | 65.0 | 28 44.8 | 117 59.5 | EB | 67 07 11 | 1001 | 142 | 510 | 2.77 | 100.0 | 43 | 120 |
| 110.0 | 70.0 | 28 36.5 | 118 17.8 | EB | 67 07 11 | 1235 | 127 | 573 | 2.22 | 100.0 | 105 | 472 |
| 110.0 | 80.0 | 28 17.0 | 118 57.5 | EB | 67 07 11 | 1740 | 129 | 528 | 2.45 | 100.0 | 66 | 233 |
| 113.0 | 29.0 | 29 24.0 | 115 13.1 | EB | 67 07 13 | 0206 | 12 | 76 | 1.55 | 100.0 | 60 | 297 |
| 113.0 | 30.0 | 29 21.6 | 115 17.7 | EB | 67 07 13 | 0118 | 55 | 159 | 3.43 | 100.0 | 79 | 86 |
| 113.0 | 35.0 | 29 12.0 | 115 37.8 | EB | 67 07 12 | 2241 | 137 | 506 | 2.70 | 100.0 | 129 | 53 |
| 113.0 | 40.0 | 29 02.0 | 115 57.2 | EB | 67 07 12 | 2011 | 143 | 500 | 2.86 | 100.0 | 43 | 26 |
| 113.0 | 45.0 | 28 53.0 | 116 17.0 | EB | 67 07 12 | 1726 | 142 | 515 | 2.76 | 100.0 | 39 | 17 |
| 113.0 | 50.0 | 28 46.1 | 116 40.2 | EB | 67 07 12 | 1501 | 136 | 520 | 2.62 | 100.0 | 19 | 35 |
| 113.0 | 55.0 | 28 40.0 | 117 00.0 | EB | 67 07 12 | 1221 | 140 | 533 | 2.63 | 100.0 | 186 | 85 |
| 113.0 | 60.0 | 28 24.0 | 117 19.2 | EB | 67 07 12 | 0946 | 141 | 522 | 2.70 | 100.0 | 131 | 177 |
| 113.0 | 65.0 | 28 13.2 | 117 36.7 | EB | 67 07 12 | 0611 | 140 | 519 | 2.70 | 100.0 | 122 | 237 |
| 113.0 | 70.0 | 28 01.7 | 117 55.8 | EB | 67 07 12 | 0321 | 132 | 538 | 2.46 | 100.0 | 44 | 328 |
| 113.0 | 80.0 | 27 40.6 | 118 34.8 | EB | 67 07 11 | 2206 | 146 | 520 | 2.81 | 100.0 | 52 | 893 |
| 117.0 | 25.0 | 28 57.8 | 114 36.6 | EB | 67 07 13 | 0939 | 46 | 200 | 2.32 | 100.0 | 10 | 19 |
| 117.0 | 26.0 | 28 56.0 | 114 41.7 | EB | 67 07 13 | 0858 | 65 | 224 | 2.91 | 100.0 | 124 | 45 |
| 117.0 | 30.0 | 28 47.8 | 114 56.5 | EB | 67 07 13 | 0637 | 87 | 330 | 2.65 | 100.0 | 500 | 5544 |
| 117.0 | 35.0 | 28 37.5 | 115 16.3 | EB | 67 07 14 | 1846 | 131 | 526 | 2.49 | 100.0 | 436 | 171 |
| 117.0 | 40.0 | 28 27.3 | 115 35.2 | EB | 67 07 14 | 2121 | 138 | 507 | 2.72 | 100.0 | 55 | 96 |
| 117.0 | 45.0 | 28 18.0 | 115 56.0 | EB | 67 07 14 | 0006 | 130 | 541 | 2.39 | 100.0 | 13 | 48 |
| 117.0 | 50.0 | 28 09.5 | 116 18.3 | EB | 67 07 15 | 0303 | 128 | 534 | 2.40 | 100.0 | 6 | 70 |

TABLE 1. (cont.)

CalCOFI Cruise 6706

| 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) | Standard Haul Factor | Percent Sorted | Total Larvae | Total Eggs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 55.0 | 28 01.8 | 116 37.0 | EB | 67 07 15 | 0516 | 140 | 515 | 2.73 | 100.0 | 25 | 41 |
| 117.0 | 60.0 | 27 52.4 | 116 57.6 | EB | 67 07 15 | 0831 | 132 | 413 | 3.20 | 100.0 | 229 | 459 |
| 117.0 | 65.0 | 27 45.9 | 117 12.9 | EB | 67 07 15 | 1021 | 129 | 547 | 2.36 | 100.0 | 246 | 593 |
| 117.0 | 70.0 | 27 38.0 | 117 32.2 | EB | 67 07 15 | 1315 | 141 | 513 | 2.75 | 100.0 | 111 | 528 |
| 117.0 | 80.0 | 27 12.5 | 118 02.8 | EB | 67 07 15 | 1751 | 133 | 540 | 2.47 | 100.0 | 149 | 633 |
| 118.0 | 39.0 | 28 18.5 | 115 23.7 | EB | 67 07 20 | 0411 | 135 | 507 | 2.67 | 100.0 | 180 | 169 |
| 119.0 | 33.0 | 28 19.2 | 114 52.3 | EB | 67 07 13 | 1527 | 90 | 389 | 2.31 | 100.0 | 1275 | 274 |
| 120.0 | 24.0 | 28 23.8 | 114 10.8 | EB | 67 07 14 | 0914 | 20 | 97 | 2.06 | 100.0 | 151 | 556 |
| 120.0 | 25.0 | 28 22.2 | 114 14.7 | EB | 67 07 14 | 0839 | 41 | 180 | 2.28 | 100.0 | 207 | 57 |
| 120.0 | 30.0 | 28 11.7 | 114 33.3 | EB | 67 07 14 | 0553 | 77 | 289 | 2.66 | 100.0 | 415 | 246 |
| 120.0 | 35.0 | 28 02.9 | 114 54.0 | EB | 67 07 14 | 0338 | 68 | 247 | 2.74 | 100.0 | 934 | 173 |
| 120.0 | 40.0 | 27 56.5 | 115 14.0 | EB | 67 07 16 | 2031 | 34 | 121 | 2.79 | 100.0 | 651 | 384 |
| 120.0 | 45.0 | 27 42.5 | 115 33.0 | EB | 67 07 16 | 1746 | 143 | 517 | 2.77 | 100.0 | 200 | 280 |
| 120.0 | 50.0 | 27 36.5 | 115 52.7 | EB | 67 07 16 | 1421 | 139 | 578 | 2.40 | 100.0 | 159 | 107 |
| 120.0 | 55.0 | 27 28.0 | 116 15.0 | EB | 67 07 16 | 1045 | 138 | 528 | 2.61 | 100.0 | 20 | 138 |
| 120.0 | 60.0 | 27 17.2 | 116 32.9 | EB | 67 07 16 | 0841 | 136 | 550 | 2.48 | 100.0 | 256 | 630 |
| 120.0 | 65.0 | 27 06.9 | 116 51.0 | EB | 67 07 16 | 0531 | 142 | 516 | 2.75 | 100.0 | 165 | 854 |
| 120.0 | 70.0 | 26 54.8 | 117 10.0 | EB | 67 07 16 | 0256 | 136 | 525 | 2.59 | 100.0 | 157 | 833 |
| 120.0 | 80.0 | 26 37.1 | 117 41.0 | EB | 67 07 15 | 2251 | 137 | 542 | 2.52 | 100.0 | 137 | 647 |
| 123.0 | 36.0 | 27 26.0 | 114 36.1 | EB | 67 07 17 | 0129 | 32 | 175 | 1.85 | 100.0 | 98 | 180 |
| 123.0 | 37.0 | 27 24.5 | 114 39.8 | EB | 67 07 17 | 0210 | 52 | 269 | 1.93 | 100.0 | 85 | 169 |
| 123.0 | 42.0 | 27 13.7 | 114 59.0 | EB | 67 07 17 | 0456 | 123 | 541 | 2.27 | 100.0 | 55 | 145 |
| 123.0 | 45.0 | 27 06.8 | 115 11.2 | EB | 67 07 17 | 0631 | 131 | 530 | 2.47 | 100.0 | 11 | 20 |
| 123.0 | 50.0 | 26 53.6 | 115 34.0 | EB | 67 07 17 | 0916 | 130 | 553 | 2.35 | 100.0 | 3 | 13 |
| 123.0 | 55.0 | 26 40.7 | 115 55.8 | EB | 67 07 17 | 1146 | 137 | 509 | 2.69 | 100.0 | 7 | 16 |
| 123.0 | 60.0 | 26 39.1 | 116 08.3 | EB | 67 07 17 | 1406 | 137 | 523 | 2.63 | 100.0 | 11 | 20 |
| 127.0 | 33.0 | 26 57.4 | 114 02.1 | EB | 67 07 18 | 0943 | 54 | 186 | 2.92 | 100.0 | 51 | 127 |
| 127.0 | 34.0 | 26 55.0 | 114 07.2 | EB | 67 07 18 | 0858 | 70 | 210 | 3.32 | 100.0 | 141 | 320 |
| 127.0 | 40.0 | 26 41.8 | 114 29.0 | EB | 67 07 18 | 0606 | 135 | 508 | 2.65 | 100.0 | 2 | 12 |
| 127.0 | 45.0 | 26 32.0 | 114 48.3 | EB | 67 07 18 | 0321 | 133 | 506 | 2.63 | 100.0 | 21 | 558 |
| 127.0 | 50.0 | 26 22.0 | 115 08.3 | EB | 67 07 18 | 0054 | 131 | 519 | 2.53 | 100.0 | 13 | 696 |
| 127.0 | 55.0 | 26 13.0 | 115 25.5 | EB | 67 07 17 | 2201 | 136 | 559 | 2.43 | 100.0 | 6 | 518 |
| 127.0 | 60.0 | 26 03.1 | 115 47.0 | EB | 67 07 17 | 1931 | 142 | 408 | 3.49 | 100.0 | 6 | 987 |
| 130.0 | 28.0 | 26 33.0 | 113 21.0 | EB | 67 07 18 | 1719 | 43 | 162 | 2.63 | 100.0 | 1 | 2 |
| 130.0 | 30.0 | 26 29.0 | 113 29.0 | EB | 67 07 18 | 1858 | 61 | 209 | 2.90 | 100.0 | 2 | 2 |
| 130.0 | 35.0 | 26 19.5 | 113 48.0 | EB | 67 07 18 | 2126 | 142 | 467 | 3.05 | 100.0 | 4 | 14 |
| 130.0 | 40.0 | 26 09.0 | 114 07.0 | EB | 67 07 18 | 0051 | 137 | 455 | 3.01 | 100.0 | 0 | 15 |

TABLE 1. (cont.)

CalCOFI Cruise 6712

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.0 | 31.0 | 30 27.8 | 116 07.0 | HO | 67 12 19 | 1109 | 34 | 199 | 1.71 | 100.0 | 189 | 13 |
| 107.0 | 32.0 | 30 25.8 | 116 11.0 | HO | 67 12 19 | 1236 | 146 | 481 | 3.04 | 100.0 | 66 | 118 |
| 107.0 | 35.0 | 30 21.5 | 116 22.0 | HO | 67 12 19 | 1506 | 145 | 469 | 3.10 | 100.0 | 160 | 23 |
| 107.0 | 40.0 | 30 11.1 | 116 41.0 | HO | 67 12 19 | 1811 | 134 | 513 | 2.62 | 100.0 | 142 | 15 |
| 107.0 | 45.0 | 30 02.1 | 117 02.3 | HO | 67 12 19 | 2041 | 111 | 616 | 1.80 | 100.0 | 301 | 42 |
| 107.0 | 50.0 | 29 53.0 | 117 23.5 | HO | 67 12 20 | 2336 | 143 | 486 | 2.93 | 100.0 | 46 | 28 |
| 107.0 | 55.0 | 29 43.0 | 117 44.5 | HO | 67 12 20 | 0201 | 144 | 493 | 2.92 | 100.0 | 58 | 23 |
| 107.0 | 60.0 | 29 32.0 | 118 01.5 | HO | 67 12 20 | 0456 | 142 | 498 | 2.85 | 100.0 | 44 | 9 |
| 107.0 | 65.0 | 29 21.0 | 118 21.0 | HO | 67 12 20 | 0701 | 141 | 505 | 2.79 | 100.0 | 19 | 60 |
| 107.0 | 70.0 | 29 11.0 | 118 41.0 | HO | 67 12 20 | 1011 | 136 | 514 | 2.65 | 100.0 | 25 | 21 |
| 110.0 | 32.0 | 29 52.0 | 115 47.8 | HO | 67 12 19 | 0714 | 20 | 138 | 1.45 | 100.0 | 40 | 23 |
| 110.0 | 35.0 | 29 46.0 | 116 00.0 | HO | 67 12 19 | 0541 | 107 | 592 | 1.81 | 100.0 | 253 | 179 |
| 110.0 | 40.0 | 29 36.0 | 116 19.5 | HO | 67 12 19 | 0246 | 138 | 519 | 2.66 | 100.0 | 53 | 38 |
| 110.0 | 45.0 | 29 26.5 | 116 39.0 | HO | 67 12 18 | 2336 | 135 | 507 | 2.66 | 100.0 | 95 | 3 |
| 110.0 | 50.0 | 29 16.5 | 116 59.0 | HO | 67 12 18 | 2136 | 129 | 565 | 2.28 | 100.0 | 82 | 7 |
| 110.0 | 55.0 | 29 06.5 | 117 18.0 | HO | 67 12 18 | 1846 | 152 | 416 | 3.65 | 100.0 | 53 | 16 |
| 110.0 | 60.0 | 28 56.5 | 117 39.0 | HO | 67 12 18 | 1651 | 143 | 459 | 3.11 | 100.0 | 14 | 12 |
| 110.0 | 65.0 | 28 46.0 | 117 59.0 | HO | 67 12 18 | 1336 | 139 | 478 | 2.90 | 100.0 | 12 | 5 |
| 110.0 | 70.0 | 28 36.5 | 118 17.5 | HO | 67 12 18 | 1126 | 138 | 512 | 2.68 | 100.0 | 27 | 9 |
| 110.0 | 80.0 | 28 16.5 | 118 57.5 | HO | 67 12 18 | 0556 | 136 | 507 | 2.68 | 100.0 | 118 | 11 |
| 113.0 | 29.0 | 29 24.2 | 115 13.2 | HO | 67 12 16 | 1759 | 23 | 198 | 1.15 | 100.0 | 18 | 46 |
| 113.0 | 30.0 | 29 22.0 | 115 18.0 | HO | 67 12 16 | 1909 | 40 | 180 | 2.19 | 100.0 | 9 | 1 |
| 113.0 | 35.0 | 29 11.2 | 115 38.5 | HO | 67 12 16 | 2221 | 122 | 528 | 2.31 | 100.0 | 89 | 1 |
| 113.0 | 40.0 | 29 01.5 | 115 56.5 | HO | 67 12 17 | 0136 | 138 | 500 | 2.76 | 100.0 | 22 | 4 |
| 113.0 | 45.0 | 28 50.8 | 116 16.5 | HO | 67 12 17 | 0406 | 143 | 488 | 2.94 | 100.0 | 78 | 1 |
| 113.0 | 50.0 | 28 39.0 | 116 37.0 | HO | 67 12 17 | 0816 | 132 | 538 | 2.46 | 100.0 | 7 | 9 |
| 113.0 | 55.0 | 28 30.2 | 116 58.0 | HO | 67 12 17 | 1051 | 101 | 603 | 1.67 | 100.0 | 6 | 0 |
| 113.0 | 60.0 | 28 21.5 | 117 16.5 | HO | 67 12 17 | 1421 | 106 | 582 | 1.82 | 100.0 | 39 | 17 |
| 113.0 | 65.0 | 28 12.0 | 117 36.0 | HO | 67 12 17 | 1636 | 137 | 513 | 2.67 | 100.0 | 23 | 24 |
| 113.0 | 70.0 | 28 02.0 | 117 55.0 | HO | 67 12 17 | 1946 | 137 | 509 | 2.68 | 100.0 | 64 | 48 |
| 113.0 | 80.0 | 27 41.2 | 118 34.0 | HO | 67 12 18 | 0046 | 141 | 515 | 2.74 | 100.0 | 46 | 10 |
| 117.0 | 25.0 | 28 58.0 | 114 37.0 | HO | 67 12 16 | 1138 | 19 | 236 | 0.79 | 100.0 | 2 | 25 |
| 117.0 | 26.0 | 28 56.0 | 114 41.5 | HO | 67 12 16 | 1228 | 39 | 295 | 1.30 | 100.0 | 69 | 50 |
| 117.0 | 30.0 | 28 48.0 | 114 56.5 | HO | 67 12 16 | 1413 | 61 | 295 | 2.06 | 100.0 | 21 | 114 |
| 117.0 | 35.0 | 28 38.0 | 115 16.0 | HO | 67 12 15 | 2256 | 140 | 499 | 2.81 | 100.0 | 82 | 90 |
| 117.0 | 40.0 | 28 28.0 | 115 35.5 | HO | 67 12 15 | 2026 | 150 | 504 | 2.96 | 100.0 | 64 | 19 |
| 117.0 | 45.0 | 28 18.0 | 115 56.0 | HO | 67 12 14 | 1316 | 140 | 516 | 2.71 | 100.0 | 55 | 88 |
| 117.0 | 50.0 | 28 03.0 | 116 14.0 | HO | 67 12 14 | 1026 | 122 | 513 | 2.38 | 100.0 | 58 | 73 |
| 117.0 | 55.0 | 27 55.5 | 116 33.5 | HO | 67 12 14 | 0741 | 135 | 435 | 3.11 | 100.0 | 92 | 24 |
| 117.0 | 60.0 | 27 44.5 | 116 56.0 | HO | 67 12 14 | 0456 | 134 | 471 | 2.84 | 100.0 | 44 | 5 |
| 117.0 | 65.0 | 27 36.0 | 117 13.5 | HO | 67 12 14 | 0206 | 137 | 519 | 2.63 | 100.0 | 115 | 8 |
| 117.0 | 80.0 | 27 07.5 | 118 11.0 | HO | 67 12 13 | 1756 | 147 | 445 | 3.30 | 100.0 | 67 | 26 |
| 118.0 | 39.0 | 28 18.5 | 115 23.7 | HO | 67 12 15 | 1826 | 136 | 519 | 2.61 | 100.0 | 163 | 75 |
| 119.0 | 33.0 | 28 19.0 | 114 53.0 | HO | 67 12 16 | 0208 | 68 | 287 | 2.35 | 100.0 | 66 | 24 |
| 120.0 | 24.0 | 28 25.0 | 114 10.7 | HO | 67 12 16 | 0724 | 30 | 213 | 1.38 | 100.0 | 40 | 94 |

TABLE 1. (cont.)

CalCOFI Cruise 6712

| 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 | 25.0 | 28 22.5 | 114 15.0 | HO | 67 12 16 | 0644 | 38 | 195 | 1.96 | 100.0 | 228 | 223 |
| 120.0 | 30.0 | 28 14.0 | 114 33.5 | HO | 67 12 16 | 0418 | 59 | 286 | 2.07 | 100.0 | 93 | 192 |
| 120.0 | 35.0 | 28 03.0 | 114 54.8 | HO | 67 12 12 | 0833 | 37 | 286 | 1.31 | 100.0 | 40 | 127 |
| 120.0 | 40.0 | 27 56.5 | 115 14.0 | HO | 67 12 11 | 1235 | 120 | 211 | 0.57 | 100.0 | 10 | 58 |
| 120.0 | 45.0 | 27 43.0 | 115 33.0 | HO | 67 12 12 | 1506 | 125 | 523 | 2.39 | 100.0 | 227 | 70 |
| 120.0 | 50.0 | 27 32.0 | 115 53.2 | HO | 67 12 12 | 1741 | 128 | 521 | 2.46 | 100.0 | 473 | 157 |
| 120.0 | 55.0 | 27 22.0 | 116 12.5 | HO | 67 12 12 | 1936 | 143 | 506 | 2.83 | 100.0 | 105 | 7 |
| 120.0 | 60.0 | 27 14.0 | 116 31.2 | HO | 67 12 12 | 2236 | 144 | 480 | 2.99 | 100.0 | 49 | 1 |
| 120.0 | 65.0 | 27 04.0 | 116 49.0 | HO | 67 12 13 | 0056 | 136 | 488 | 2.79 | 100.0 | 106 | 23 |
| 120.0 | 70.0 | 26 54.0 | 117 09.0 | HO | 67 12 13 | 0336 | 140 | 520 | 2.68 | 100.0 | 48 | 4 |
| 120.0 | 80.0 | 26 31.5 | 117 49.5 | HO | 67 12 13 | 0936 | 142 | 485 | 2.93 | 100.0 | 13 | 73 |
| 123.0 | 36.0 | 27 26.0 | 114 36.0 | HO | 67 12 11 | 0749 | 31 | 279 | 1.11 | 100.0 | 227 | 434 |
| 123.0 | 37.0 | 27 24.0 | 114 40.0 | HO | 67 12 11 | 0658 | 65 | 411 | 1.59 | 100.0 | 220 | 196 |
| 123.0 | 42.0 | 27 14.0 | 114 59.0 | HO | 67 12 11 | 0431 | 138 | 473 | 2.92 | 100.0 | 3 | 7 |
| 123.0 | 45.0 | 27 06.8 | 115 10.0 | HO | 67 12 11 | 0236 | 140 | 495 | 2.82 | 100.0 | 36 | 65 |
| 123.0 | 50.0 | 26 57.0 | 115 30.0 | HO | 67 12 11 | 0006 | 139 | 514 | 2.69 | 100.0 | 31 | 7 |
| 123.0 | 55.0 | 26 47.0 | 115 49.0 | HO | 67 12 10 | 2121 | 135 | 523 | 2.58 | 100.0 | 41 | 4 |
| 123.0 | 60.0 | 26 39.0 | 116 12.0 | HO | 67 12 10 | 1851 | 146 | 502 | 2.90 | 100.0 | 90 | 9 |
| 127.0 | 33.0 | 26 57.5 | 114 02.2 | HO | 67 12 09 | 1924 | 30 | 201 | 1.47 | 100.0 | 52 | 263 |
| 127.0 | 34.0 | 26 55.0 | 114 06.5 | HO | 67 12 09 | 2013 | 57 | 267 | 2.12 | 100.0 | 10 | 714 |
| 127.0 | 40.0 | 26 44.0 | 114 29.8 | HO | 67 12 09 | 2256 | 129 | 467 | 2.75 | 100.0 | 46 | 21 |
| 127.0 | 45.0 | 26 34.8 | 114 48.0 | HO | 67 12 10 | 0111 | 148 | 425 | 3.49 | 100.0 | 11 | 30 |
| 127.0 | 50.0 | 26 25.8 | 115 10.5 | HO | 67 12 10 | 0346 | 131 | 497 | 2.62 | 100.0 | 8 | 5 |
| 127.0 | 55.0 | 26 18.0 | 115 28.0 | HO | 67 12 10 | 0611 | 141 | 492 | 2.87 | 100.0 | 37 | 10 |
| 127.0 | 60.0 | 26 05.0 | 115 54.0 | HO | 67 12 10 | 0951 | 147 | 478 | 3.08 | 100.0 | 17 | 18 |
| 130.0 | 28.0 | 26 33.2 | 113 21.2 | HO | 67 12 09 | 1509 | 33 | 205 | 1.59 | 100.0 | 2 | 310 |
| 130.0 | 30.0 | 26 28.9 | 113 29.5 | HO | 67 12 09 | 1348 | 56 | 308 | 1.80 | 100.0 | 1 | 211 |
| 130.0 | 35.0 | 26 19.2 | 113 49.2 | HO | 67 12 09 | 1121 | 142 | 447 | 3.16 | 100.0 | 23 | 331 |
| 130.0 | 40.0 | 26 09.0 | 114 07.0 | HO | 67 12 09 | 0911 | 133 | 498 | 2.68 | 100.0 | 4 | 13 |
| 130.0 | 45.0 | 25 58.8 | 114 34.0 | HO | 67 12 09 | 0456 | 151 | 453 | 3.33 | 100.0 | 13 | 16 |
| 130.0 | 50.0 | 25 49.2 | 114 50.0 | HO | 67 12 09 | 0251 | 143 | 465 | 3.07 | 100.0 | 32 | 13 |
| 130.0 | 55.0 | 25 39.2 | 115 06.0 | HO | 67 12 08 | 0001 | 138 | 466 | 2.96 | 100.0 | 11 | 4 |
| 130.0 | 60.0 | 25 29.0 | 115 24.0 | HO | 67 12 08 | 2131 | 135 | 512 | 2.63 | 100.0 | 8 | 19 |
| 133.0 | 23.0 | 26 08.5 | 112 40.0 | HO | 67 12 08 | 0349 | 40 | 235 | 1.70 | 100.0 | 41 | 73 |
| 133.0 | 25.0 | 26 04.5 | 112 48.0 | HO | 67 12 08 | 0458 | 57 | 301 | 1.91 | 100.0 | 0 | 2 |
| 133.0 | 30.0 | 25 55.0 | 113 10.0 | HO | 67 12 08 | 0721 | 142 | 487 | 2.92 | 100.0 | 20 | 30 |
| 133.0 | 35.0 | 25 46.0 | 113 32.0 | HO | 67 12 08 | 0956 | 142 | 483 | 2.94 | 100.0 | 5 | 452 |
| 133.0 | 40.0 | 25 36.2 | 113 55.8 | HO | 67 12 08 | 1311 | 119 | 523 | 2.28 | 100.0 | 34 | 108 |
| 137.0 | 22.0 | 25 36.0 | 112 14.8 | HO | 67 12 07 | 2340 | 26 | 257 | 1.01 | 100.0 | 114 | 200 |
| 137.0 | 23.0 | 25 34.0 | 112 19.0 | HO | 67 12 07 | 2248 | 55 | 364 | 1.51 | 100.0 | 213 | 307 |
| 137.0 | 30.0 | 25 21.5 | 112 46.8 | HO | 67 12 07 | 1856 | 133 | 526 | 2.52 | 100.0 | 121 | 44 |
| 137.0 | 35.0 | 25 09.0 | 113 03.5 | HO | 67 12 07 | 1621 | 140 | 478 | 2.93 | 100.0 | 95 | 114 |
| 137.0 | 40.0 | 24 59.0 | 113 24.0 | HO | 67 12 07 | 1346 | 139 | 486 | 2.85 | 100.0 | 12 | 2 |

TABLE 2. Pooled occurrences of fish larvae taken during CalCOFI cruises in 1967.

| Rank | Taxon | Occurrences |
|---|---|---|
| 1 | *Engraulis mordax* | 150 |
| 2 | *Triphoturus mexicanus* | 142 |
| 3 | *Vinciguerria lucetia* | 121 |
| 4 | *Protomyctophum crockeri* | 109 |
| 5 | *Citharichthys* spp. | 108 |
| 6 | *Bathylagus wesethi* | 99 |
| 7 | Disintegrated fish larva | 84 |
| 8 | *Sebastes* spp. | 81 |
| 9 | *Cyclothone* spp. | 80 |
| 10 | *Trachurus symmetricus* | 76 |
| 11 | *Melamphaes* spp. | 68 |
| 12 | *Lampanyctus* spp. | 67 |
| 13 | *Diogenichthys laternatus* | 63 |
| 14 | Unidentified fish larva | 60 |
| 15 | *Diaphus* spp. | 46 |
| 16 | *Lampanyctus ritteri* | 43 |
| 16 | *Leuroglossus stilbius* | 43 |
| 18 | *Diogenichthys atlanticus* | 38 |
| 18 | *Symbolophorus californiensis* | 38 |
| 20 | *Ceratoscopelus townsendi* | 37 |
| 21 | *Lestidiops ringens* | 36 |
| 21 | Gobiidae | 36 |
| 21 | *Tetragonurus cuvieri* | 36 |
| 24 | Myctophidae | 33 |
| 25 | Sciaenidae | 32 |
| 26 | *Stenobrachius leucopsarus* | 31 |
| 26 | *Sardinops sagax* | 31 |
| 28 | Scopelarchidae | 29 |
| 29 | *Bathylagus ochotensis* | 28 |
| 29 | Sternoptychidae | 28 |
| 31 | *Merluccius productus* | 25 |
| 32 | *Pleuronichthys verticalis* | 24 |
| 32 | *Stomias atriventer* | 24 |
| 34 | *Synodus* spp. | 23 |
| 34 | *Oxyjulis californica* | 23 |
| 34 | Serranidae | 23 |
| 37 | *Peprilus simillimus* | 22 |
| 38 | *Argentina sialis* | 21 |
| 38 | *Hygophum atratum* | 21 |
| 40 | *Hypsoblennius* spp. | 19 |
| 40 | *Citharichthys stigmaeus* | 19 |
| 42 | *Icichthys lockingtoni* | 18 |
| 43 | *Gonichthys tenuiculus* | 16 |
| 43 | *Diogenichthys* spp. | 16 |
| 45 | *Chilara taylori* | 15 |
| 45 | *Idiacanthus antrostomus* | 15 |
| 47 | *Scomber japonicus* | 14 |
| 48 | *Microstomus pacificus* | 13 |

TABLE 2. (cont.)

| Rank | Taxon | Occurrences |
|---|---|---|
| 48 | *Paralichthys californicus* | 13 |
| 50 | *Hippoglossina stomata* | 12 |
| 50 | *Lampanyctus regalis* | 12 |
| 52 | *Myctophum nitidulum* | 11 |
| 52 | *Notoscopelus resplendens* | 11 |
| 54 | Ophidiiformes | 10 |
| 54 | *Lampadena urophaos* | 10 |
| 54 | Trichiuridae | 10 |
| 54 | *Pleuronichthys* spp. | 10 |
| 54 | *Tarletonbeania crenularis* | 10 |
| 54 | *Symphurus* spp. | 10 |
| 60 | Clinidae | 9 |
| 60 | *Chauliodus macouni* | 9 |
| 60 | Stomiiformes | 9 |
| 60 | *Microstoma microstoma* | 9 |
| 64 | *Scorpaena* spp. | 8 |
| 64 | Scombridae | 8 |
| 64 | *Nansenia crassa* | 8 |
| 67 | *Etrumeus acuminatus* | 7 |
| 67 | *Macroramphosus gracilis* | 7 |
| 67 | *Zaniolepis* spp. | 7 |
| 67 | *Hygophum reinhardtii* | 7 |
| 67 | *Sphyraena argentea* | 7 |
| 67 | *Notolychnus valdiviae* | 7 |
| 73 | *Nansenia candida* | 6 |
| 73 | *Medialuna californiensis* | 6 |
| 73 | *Parophrys vetulus* | 6 |
| 73 | *Syngnathus* spp. | 6 |
| 73 | *Bathylagus* spp. | 6 |
| 73 | *Scopelosaurus* spp. | 6 |
| 73 | Chiasmodontidae | 6 |
| 73 | Trachipteridae | 6 |
| 73 | *Poromitra* spp. | 6 |
| 82 | *Ichthyococcus* spp. | 5 |
| 82 | Agonidae | 5 |
| 82 | Anguilliformes | 5 |
| 82 | *Brosmophycis marginata* | 5 |
| 82 | *Seriola lalandi* | 5 |
| 82 | Cottidae | 5 |
| 82 | *Chromis punctipinnis* | 5 |
| 89 | *Semicossyphus pulcher* | 4 |
| 89 | *Halichoeres* spp. | 4 |
| 89 | *Sebastolobus* spp. | 4 |
| 89 | Cyclopteridae | 4 |
| 89 | *Scopelogadus bispinosus* | 4 |
| 89 | *Lyopsetta exilis* | 4 |
| 89 | *Xystreurys liolepis* | 4 |
| 96 | *Girella nigricans* | 3 |
| 96 | Blennioidei | 3 |

TABLE 2. (cont.)

| Rank | Taxon | Occurrences |
|---|---|---|
| 96 | *Cololabis saira* | 3 |
| 96 | *Tactostoma macropus* | 3 |
| 100 | Macrouridae | 2 |
| 100 | Atherinidae | 2 |
| 100 | *Pleuronichthys ritteri* | 2 |
| 100 | *Notolepis risso* | 2 |
| 100 | *Lepidopsetta bilineata* | 2 |
| 100 | *Bathophilus* spp. | 2 |
| 100 | Labridae | 2 |
| 100 | *Aristostomias scintillans* | 2 |
| 100 | Gerreidae | 2 |
| 100 | Carangidae | 2 |
| 110 | *Mugil* spp. | 1 |
| 110 | *Centrobranchus* spp. | 1 |
| 110 | *Coryphaena hippurus* | 1 |
| 110 | *Loweina rara* | 1 |
| 110 | *Brama* spp. | 1 |
| 110 | *Howella brodiei* | 1 |
| 110 | *Physiculus* spp. | 1 |
| 110 | Scorpaenidae | 1 |
| 110 | *Sarda chiliensis* | 1 |
| 110 | *Porichthys* spp. | 1 |
| 110 | *Caulolatilus princeps* | 1 |
| 110 | Pleuronectiformes | 1 |
| 110 | *Diplophos taenia* | 1 |
| 110 | *Pleuronichthys coenosus* | 1 |

TABLE 3. Pooled numbers of fish larvae taken during CalCOFI cruises in 1967. Counts are adjusted for percent of sample sorted and standard haul factor (see text).

| Rank | Taxon | Count |
|---|---|---|
| 1 | *Engraulis mordax* | 35258 |
| 2 | *Citharichthys* spp. | 10359 |
| 3 | *Vinciguerria lucetia* | 10185 |
| 4 | *Triphoturus mexicanus* | 7237 |
| 5 | *Bathylagus wesethi* | 2786 |
| 6 | *Sardinops sagax* | 2061 |
| 7 | *Diogenichthys laternatus* | 1752 |
| 8 | *Trachurus symmetricus* | 1470 |
| 9 | *Sebastes* spp. | 1185 |
| 10 | *Cyclothone* spp. | 1010 |
| 11 | *Diaphus* spp. | 896 |
| 12 | *Ceratoscopelus townsendi* | 722 |
| 13 | *Protomyctophum crockeri* | 711 |
| 14 | Unidentified fish larva | 631 |
| 15 | Sciaenidae | 547 |
| 16 | *Lampanyctus* spp. | 495 |
| 17 | *Lampanyctus ritteri* | 474 |
| 18 | *Lestidiops ringens* | 426 |
| 19 | Disintegrated fish larva | 410 |
| 20 | *Melamphaes* spp. | 402 |
| 21 | *Stenobrachius leucopsarus* | 395 |
| 22 | *Symbolophorus californiensis* | 384 |
| 23 | *Merluccius productus* | 342 |
| 24 | *Peprilus simillimus* | 334 |
| 25 | Myctophidae | 308 |
| 26 | *Diogenichthys atlanticus* | 298 |
| 27 | Serranidae | 289 |
| 28 | *Tetragonurus cuvieri* | 238 |
| 29 | *Pleuronichthys verticalis* | 224 |
| 30 | *Argentina sialis* | 188 |
| 31 | *Leuroglossus stilbius* | 186 |
| 32 | *Diogenichthys* spp. | 183 |
| 33 | *Synodus* spp. | 181 |
| 34 | *Scomber japonicus* | 180 |
| 35 | *Oxyjulis californica* | 157 |
| 36 | *Bathylagus ochotensis* | 139 |
| 37 | *Hypsoblennius* spp. | 130 |
| 38 | Gobiidae | 129 |
| 39 | Scopelarchidae | 128 |
| 40 | *Icichthys lockingtoni* | 122 |
| 41 | *Etrumeus acuminatus* | 121 |
| 42 | Scombridae | 108 |
| 43 | Sternoptychidae | 103 |
| 44 | *Idiacanthus antrostomus* | 99 |
| 45 | *Stomias atriventer* | 82 |
| 46 | *Hygophum atratum* | 80 |
| 47 | *Citharichthys stigmaeus* | 70 |

TABLE 3. (cont.)

| Rank | Taxon | Count |
|---|---|---|
| 48 | Trichiuridae | 69 |
| 49 | *Chilara taylori* | 63 |
| 50 | *Gonichthys tenuiculus* | 55 |
| 51 | *Scorpaena* spp. | 53 |
| 51 | *Tarletonbeania crenularis* | 53 |
| 51 | *Sphyraena argentea* | 53 |
| 54 | *Lampanyctus regalis* | 52 |
| 54 | *Hippoglossina stomata* | 52 |
| 56 | *Paralichthys californicus* | 51 |
| 57 | Cottidae | 50 |
| 58 | *Nansenia candida* | 46 |
| 59 | *Notoscopelus resplendens* | 43 |
| 60 | *Xystreurys liolepis* | 40 |
| 60 | *Microstomus pacificus* | 40 |
| 60 | Gerreidae | 40 |
| 60 | *Myctophum nitidulum* | 40 |
| 64 | *Lampadena urophaos* | 39 |
| 65 | *Symphurus* spp. | 37 |
| 65 | *Bathylagus* spp. | 37 |
| 67 | Stomiiformes | 34 |
| 68 | *Microstoma microstoma* | 33 |
| 69 | Ophidiiformes | 32 |
| 69 | Clinidae | 32 |
| 71 | *Pleuronichthys* spp. | 31 |
| 72 | *Hygophum reinhardtii* | 30 |
| 73 | *Chauliodus macouni* | 28 |
| 74 | *Nansenia crassa* | 27 |
| 75 | *Zaniolepis* spp. | 26 |
| 76 | Cyclopteridae | 24 |
| 77 | *Parophrys vetulus* | 22 |
| 77 | Anguilliformes | 22 |
| 79 | *Notolychnus valdiviae* | 21 |
| 79 | *Chromis punctipinnis* | 21 |
| 79 | *Scopelosaurus* spp. | 21 |
| 82 | *Medialuna californiensis* | 20 |
| 83 | *Macroramphosus gracilis* | 19 |
| 83 | Chiasmodontidae | 19 |
| 83 | *Seriola lalandi* | 19 |
| 86 | *Lyopsetta exilis* | 18 |
| 87 | Agonidae | 16 |
| 87 | *Poromitra* spp. | 16 |
| 87 | Trachipteridae | 16 |
| 90 | *Bathophilus* spp. | 15 |
| 91 | *Semicossyphus pulcher* | 14 |
| 92 | *Ichthyococcus* spp. | 13 |
| 92 | *Scopelogadus bispinosus* | 13 |
| 94 | *Brosmophycis marginata* | 12 |
| 95 | *Tactostoma macropus* | 10 |
| 95 | Labridae | 10 |

TABLE 3. (cont.)

| Rank | Taxon | Count |
|---|---|---|
| 95 | Atherinidae | 10 |
| 95 | *Sebastolobus* spp. | 10 |
| 99 | *Cololabis saira* | 9 |
| 99 | Blennioidei | 9 |
| 99 | *Aristostomias scintillans* | 9 |
| 99 | *Syngnathus* spp. | 9 |
| 99 | Carangidae | 9 |
| 104 | *Notolepis risso* | 8 |
| 104 | *Halichoeres* spp. | 8 |
| 106 | *Girella nigricans* | 7 |
| 106 | *Pleuronichthys ritteri* | 7 |
| 108 | *Howella brodiei* | 6 |
| 109 | Macrouridae | 5 |
| 109 | *Caulolatilus princeps* | 5 |
| 109 | *Lepidopsetta bilineata* | 5 |
| 112 | *Loweina rara* | 3 |
| 112 | *Brama* spp. | 3 |
| 112 | Pleuronectiformes | 3 |
| 112 | *Diplophos taenia* | 3 |
| 112 | Scorpaenidae | 3 |
| 112 | *Physiculus* spp. | 3 |
| 112 | *Sarda chiliensis* | 3 |
| 112 | *Mugil* spp. | 3 |
| 112 | *Centrobranchus* spp. | 3 |
| 112 | *Pleuronichthys coenosus* | 3 |
| 122 | *Porichthys* spp. | 2 |
| 123 | *Coryphaena hippurus* | 1 |
| | Total | 85911 |

TABLE 4. Numbers of fish larvae taken on stations occupied during CalCOFI cruises in 1967. 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.

## Anguilliformes

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.2 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 5.9 |

## *Etrumeus acuminatus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 24.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 83.7 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 0.0 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.5 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 20.5 |

## *Sardinops sagax*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 29.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 17.8 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 81.5 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 54.9 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 2.1 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 51.7 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 3.4 |
| 107.0 | 32.0 | - | - | - | - | - | - | 71.0 | - | - | - | - | 0.0 |
| 110.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 11.6 |
| 110.0 | 35.0 | - | - | - | - | - | - | 14.3 | - | - | - | - | 5.4 |
| 110.0 | 40.0 | - | - | - | - | - | - | 29.6 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 0.0 |
| 118.0 | 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 120.0 | 24.0 | - | - | - | - | - | - | 226.6 | - | - | - | - | 0.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 1141.1 | - | - | - | - | 0.6 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.2 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.4 |
| 123.0 | 36.0 | - | - | - | - | - | - | 24.1 | - | - | - | - | 98.8 |
| 123.0 | 37.0 | - | - | - | - | - | - | 17.4 | - | - | - | - | 39.8 |
| 127.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.9 |

TABLE 4. (cont )

*Sardinops sagax* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 127.0 | 34.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.1 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 19.0 |
| 133.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.7 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 33.3 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 71.0 |

*Engraulis mordax*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 51.0 | - | - | - | - | - | 185.4 | - | - | - | - | - | - |
| 80.0 | 52.0 | - | - | - | - | - | 87.4 | - | - | - | - | - | - |
| 80.0 | 55.0 | - | - | - | - | - | 463.4 | - | - | - | - | - | - |
| 80.0 | 60.0 | - | - | - | - | - | 82.9 | - | - | - | - | - | - |
| 82.0 | 47.0 | - | - | - | - | - | 221.8 | - | - | - | - | - | - |
| 83.0 | 40.0 | - | - | - | - | - | 15.8 | - | - | - | - | - | - |
| 83.0 | 43.0 | - | - | - | - | - | 813.0 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 233.2 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 1135.0 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 79.8 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 | 33.0 | - | - | - | - | - | 252.8 | - | - | - | - | - | - |
| 87.0 | 35.0 | - | - | - | - | - | 1833.3 | - | - | - | - | - | - |
| 87.0 | 40.0 | - | - | - | - | - | 1856.9 | - | - | - | - | - | - |
| 87.0 | 45.0 | - | - | - | - | - | 327.5 | - | - | - | - | - | - |
| 87.0 | 50.0 | - | - | - | - | - | 207.4 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 485.1 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 87.0 | 70.0 | - | - | - | - | - | 31.2 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 972.2 | - | - | - | - | - | - |
| 90.0 | 32.0 | - | - | - | - | - | 442.8 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 2178.5 | - | - | - | - | - | - |
| 90.0 | 45.0 | - | - | - | - | - | 162.3 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 635.1 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 249.1 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 13.9 | - | - | - | - | - | - |
| 90.0 | 70.0 | - | - | - | - | - | 266.9 | - | - | - | - | - | - |
| 90.0 | 80.0 | - | - | - | - | - | 24.0 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 27.3 | - | - | - | - | - | - |
| 90.0 | 100.0 | - | - | - | - | - | 10.4 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 524.4 | - | - | - | - | - |
| 93.0 | 30.0 | - | - | - | - | - | - | 615.6 | - | - | - | - | - |
| 93.0 | 35.0 | - | - | - | - | - | - | 781.1 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 1467.2 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 1285.5 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 753.5 | - | - | - | - | - |

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 55.0 | - | - | - | - | - | - | 516.0 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 16.8 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 6.4 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 74.6 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 11.2 | - | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 330.2 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 1116.7 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 1115.2 | - | - | - | - | - |
| 97.0 | 35.0 | - | - | - | - | - | - | 414.5 | - | - | - | - | - |
| 97.0 | 40.0 | - | - | - | - | - | - | 129.9 | - | - | - | - | - |
| 97.0 | 45.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 97.0 | 50.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 52.6 | - | - | - | - | - |
| 97.0 | 60.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 697.0 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 505.8 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 8.6 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 13.6 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 33.0 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 38.4 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 91.5 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 92.5 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 76.1 | - | - | - | - | 222.3 |
| 107.0 | 32.0 | - | - | - | - | - | - | 35.5 | - | - | - | - | 100.3 |
| 107.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 316.2 |
| 107.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 351.1 |
| 107.0 | 45.0 | - | - | - | - | - | - | 36.3 | - | - | - | - | 520.2 |
| 107.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 73.3 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 11.7 |
| 110.0 | 32.0 | - | - | - | - | - | - | 1.3 | - | - | - | - | 24.7 |
| 110.0 | 35.0 | - | - | - | - | - | - | 205.2 | - | - | - | - | 381.9 |
| 110.0 | 40.0 | - | - | - | - | - | - | 1160.3 | - | - | - | - | 13.3 |
| 110.0 | 45.0 | - | - | - | - | - | - | 44.7 | - | - | - | - | 133.0 |
| 110.0 | 50.0 | - | - | - | - | - | - | 40.0 | - | - | - | - | 29.6 |
| 110.0 | 55.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 110.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.8 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 113.0 | 29.0 | - | - | - | - | - | - | 60.4 | - | - | - | - | 1.1 |
| 113.0 | 30.0 | - | - | - | - | - | - | 198.9 | - | - | - | - | 13.1 |
| 113.0 | 35.0 | - | - | - | - | - | - | 24.3 | - | - | - | - | 134.0 |
| 113.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.9 |
| 113.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.7 |

TABLE 4. (cont.)

*Engraulis mordax* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 25.0 | - | - | - | - | - | - | 16.2 | - | - | - | - | 0.0 |
| 117.0 | 26.0 | - | - | - | - | - | - | 299.7 | - | - | - | - | 87.1 |
| 117.0 | 30.0 | - | - | - | - | - | - | 967.3 | - | - | - | - | 14.4 |
| 117.0 | 35.0 | - | - | - | - | - | - | 597.6 | - | - | - | - | 146.1 |
| 117.0 | 40.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 0.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 70.5 |
| 117.0 | 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 52.4 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 90.2 |
| 117.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 17.0 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 163.1 |
| 118.0 | 39.0 | - | - | - | - | - | - | 16.0 | - | - | - | - | 211.4 |
| 119.0 | 33.0 | - | - | - | - | - | - | 157.1 | - | - | - | - | 141.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 20.6 | - | - | - | - | 48.3 |
| 120.0 | 25.0 | - | - | - | - | - | - | 212.0 | - | - | - | - | 433.2 |
| 120.0 | 30.0 | - | - | - | - | - | - | 50.5 | - | - | - | - | 184.2 |
| 120.0 | 35.0 | - | - | - | - | - | - | 369.9 | - | - | - | - | 51.1 |
| 120.0 | 40.0 | - | - | - | - | - | - | 334.8 | - | - | - | - | 4.6 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 74.1 |
| 120.0 | 50.0 | - | - | - | - | - | - | 24.0 | - | - | - | - | 1008.6 |
| 120.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.5 |
| 120.0 | 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 13.9 |
| 123.0 | 36.0 | - | - | - | - | - | - | 70.3 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 56.0 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 9.1 | - | - | - | - | 0.0 |
| 123.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 14.1 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 81.2 |
| 127.0 | 33.0 | - | - | - | - | - | - | 90.5 | - | - | - | - | 38.2 |
| 127.0 | 34.0 | - | - | - | - | - | - | 235.7 | - | - | - | - | 0.0 |
| 127.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.3 |
| 127.0 | 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 130.0 | 28.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 130.0 | 30.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | 1.8 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 130.0 | 60.0 | - | - | - | - | - | - | - | - | - | - | - | 2.6 |
| 133.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 15.3 |
| 133.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 43.8 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 61.6 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 160.1 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 136.1 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 52.7 |

TABLE 4. (cont.)

*Argentina sialis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 1.3 | - | - | - | - | - | - |
| 87.0 | 33.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 | 45.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 113.0 | 55.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 117.0 | 30.0 | - | - | - | - | - | - | 26.5 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 34.9 | - | - | - | - | 0.0 |
| 117.0 | 40.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 117.0 | 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 118.0 | 39.0 | - | - | - | - | - | - | 18.7 | - | - | - | - | 20.9 |
| 120.0 | 45.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 28.8 | - | - | - | - | 0.0 |
| 133.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |

*Microstoma microstoma*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 97.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 6.8 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |

*Nansenia candida*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 70.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 13.3 | - | - | - | - | - | - |
| 83.0 | 80.0 | - | - | - | - | - | 9.2 | - | - | - | - | - | - |
| 87.0 | 90.0 | - | - | - | - | - | 11.9 | - | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |

TABLE 4. (cont.)

*Nansenia crassa*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.0 |
| 120.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 130.0 | 60.0 | - | - | - | - | - | - | - | - | - | - | - | 2.6 |

*Bathylagus* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 | 80.0 | - | - | - | - | - | 6.0 | - | - | - | - | - | - |
| 113.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.4 |
| 117.0 | 65.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 127.0 | 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |

*Bathylagus ochotensis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 21.5 | - | - | - | - | - | - |
| 80.0 | 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 13.8 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 6.7 | - | - | - | - | - | - |
| 87.0 | 45.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 45.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 5.9 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 | 30.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |

TABLE 4. (cont.)

*Bathylagus ochotensis* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 | 50.0 | - | - | - | - | - | - | 7.7 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 110.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |

*Bathylagus wesethi*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 70.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 24.8 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 5.7 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 | 80.0 | - | - | - | - | - | 75.6 | - | - | - | - | - | - |
| 83.0 | 90.0 | - | - | - | - | - | 122.7 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 23.7 | - | - | - | - | - | - |
| 87.0 | 65.0 | - | - | - | - | - | 28.6 | - | - | - | - | - | - |
| 87.0 | 70.0 | - | - | - | - | - | 26.4 | - | - | - | - | - | - |
| 87.0 | 80.0 | - | - | - | - | - | 257.8 | - | - | - | - | - | - |
| 87.0 | 90.0 | - | - | - | - | - | 180.9 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 23.4 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 13.9 | - | - | - | - | - | - |
| 90.0 | 70.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 13.7 | - | - | - | - | - | - |
| 90.0 | 100.0 | - | - | - | - | - | 28.5 | - | - | - | - | - | - |
| 90.0 | 110.0 | - | - | - | - | - | 99.4 | - | - | - | - | - | - |
| 90.0 | 120.0 | - | - | - | - | - | 91.4 | - | - | - | - | - | - |
| 90.0 | 130.0 | - | - | - | - | - | 21.1 | - | - | - | - | - | - |
| 90.0 | 140.0 | - | - | - | - | - | 7.7 | - | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 16.1 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 14.0 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 50.9 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 15.9 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 14.3 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 11.2 | - | - | - | - | - | - |
| 93.0 | 100.0 | - | - | - | - | - | 15.3 | - | - | - | - | - | - |
| 93.0 | 110.0 | - | - | - | - | - | 5.4 | - | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 62.8 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 131.0 | - | - | - | - | - | - |
| 93.0 | 140.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 40.0 | - | - | - | - | - | - | 9.1 | - | - | - | - | - |
| 97.0 | 45.0 | - | - | - | - | - | - | 8.6 | - | - | - | - | - |
| 97.0 | 60.0 | - | - | - | - | - | - | 22.2 | - | - | - | - | - |
| 97.0 | 65.0 | - | - | - | - | - | - | 10.8 | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 29.0 | - | - | - | - | - |
| 97.0 | 80.0 | - | - | - | - | - | - | 53.4 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 8.6 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 16.6 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 54.4 | - | - | - | - | - |
| 100.0 | 70.0 | - | - | - | - | - | - | 30.2 | - | - | - | - | - |
| 100.0 | 80.0 | - | - | - | - | - | - | 12.8 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 76.3 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 62.6 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 96.6 | - | - | - | - | - |
| 103.0 | 50.0 | - | - | - | - | - | - | 55.8 | - | - | - | - | - |
| 103.0 | 55.0 | - | - | - | - | - | - | 35.4 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 22.2 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 48.1 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 33.2 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 24.8 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 0.0 |
| 107.0 | 32.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 87.6 | - | - | - | - | 0.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 89.0 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 50.2 | - | - | - | - | 0.0 |
| 107.0 | 50.0 | - | - | - | - | - | - | 75.1 | - | - | - | - | 0.0 |
| 107.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 28.5 |
| 107.0 | 65.0 | - | - | - | - | - | - | 23.6 | - | - | - | - | 0.0 |
| 107.0 | 70.0 | - | - | - | - | - | - | 22.7 | - | - | - | - | 2.7 |
| 107.0 | 80.0 | - | - | - | - | - | - | 4.4 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 1.8 |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 21.0 | - | - | - | - | 0.0 |
| 110.0 | 50.0 | - | - | - | - | - | - | 12.5 | - | - | - | - | 6.8 |
| 110.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 110.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 110.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 10.7 |
| 113.0 | 30.0 | - | - | - | - | - | - | 10.3 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 21.6 | - | - | - | - | 4.6 |
| 113.0 | 40.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 0.0 |
| 113.0 | 60.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 0.0 |
| 113.0 | 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 2.7 |
| 117.0 | 35.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 2.8 |

TABLE 4. (cont.)

*Bathylagus wesethi* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 40.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 3.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 60.0 | - | - | - | - | - | - | 35.2 | - | - | - | - | 0.0 |
| 118.0 | 39.0 | - | - | - | - | - | - | 26.7 | - | - | - | - | 2.6 |
| 120.0 | 45.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 120.0 | 60.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 120.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |

*Leuroglossus stilbius*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 | 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 82.0 | 47.0 | - | - | - | - | - | 6.2 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 19.7 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 | 35.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 87.0 | 40.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 87.0 | 45.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 4.5 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 45.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 30.0 | - | - | - | - | - | - | 9.7 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 110.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 110.0 | 50.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 0.0 |
| 110.0 | 55.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 113.0 | 30.0 | - | - | - | - | - | - | 3.4 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Leuroglossus stilbius* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 117.0 45.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 8.1 |
| 118.0 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.8 |
| 120.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.8 |
| 120.0 50.0 | - | - | - | - | - | - | 7.2 | - | - | - | - | 2.5 |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 127.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 127.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 137.0 30.0 | - | - | - | - | - | - | - | - | - | - | - | 7.6 |

Stomiiformes

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 11.8 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 110.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 117.0 65.0 | - | - | - | - | - | - | 4.7 | - | - | - | - | 0.0 |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 127.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 137.0 35.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |

*Cyclothone* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 70.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 80.0 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 83.0 80.0 | - | - | - | - | - | 4.6 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 4.7 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 54.8 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 64.3 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 46.9 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 10.2 | - | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 21.8 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 35.1 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 40.3 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Cyclothone* spp. (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 140.0 | - | - | - | - | - | 25.2 | - | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 10.4 | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 7.7 | - | - | - | - | - |
| 103.0 35.0 | - | - | - | - | - | - | 27.1 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 26.1 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 59.8 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 25.1 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 19.0 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | - |
| 103.0 70.0 | - | - | - | - | - | - | 6.0 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 80.0 | - | - | - | - | - |
| 107.0 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 0.0 |
| 107.0 35.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | 0.0 |
| 107.0 40.0 | - | - | - | - | - | - | 34.7 | - | - | - | - | 0.0 |
| 107.0 45.0 | - | - | - | - | - | - | 27.9 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 13.9 | - | - | - | - | 2.9 |
| 107.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 38.0 |
| 107.0 60.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 8.6 |
| 107.0 65.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 19.9 | - | - | - | - | 2.7 |
| 107.0 80.0 | - | - | - | - | - | - | 24.3 | - | - | - | - | - |
| 110.0 32.0 | - | - | - | - | - | - | 1.3 | - | - | - | - | 0.0 |
| 110.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 16.0 |
| 110.0 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 2.7 |
| 110.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.1 |
| 110.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.3 |
| 110.0 80.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | 10.7 |
| 113.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 113.0 40.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 2.8 |
| 113.0 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 113.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.6 |
| 113.0 65.0 | - | - | - | - | - | - | 13.5 | - | - | - | - | 5.3 |
| 113.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.4 |
| 117.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 117.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.9 |
| 117.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 60.0 | - | - | - | - | - | - | 16.0 | - | - | - | - | 0.0 |
| 117.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 117.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 6.6 |
| 120.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 60.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 3.0 |
| 120.0 65.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | 5.6 |
| 120.0 70.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | 2.7 |
| 120.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Cyclothone* spp. (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.0 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 123.0 60.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 2.9 |
| 127.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 133.0 40.0 | - | - | - | - | - | - | - | - | - | - | - | 2.3 |

*Diplophos taenia*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |

*Ichthyococcus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 107.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

*Vinciguerria lucetia*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 80.0 | - | - | - | - | - | 12.2 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 30.9 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 11.0 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 16.6 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 5.3 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 320.0 | - | - | - | - | - | - |
| 93.0 65.0 | - | - | - | - | - | - | 8.0 | - | - | - | - | - |
| 93.0 70.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 549.4 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 411.6 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 214.2 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 246.4 | - | - | - | - | - | - |
| 100.0 60.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 62.2 | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 20.2 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 20.6 | - | - | - | - | - |
| 103.0 35.0 | - | - | - | - | - | - | 39.4 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 608.1 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 473.8 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 337.6 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 255.7 | - | - | - | - | - |

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 60.0 | - | - | - | - | - | - | 235.4 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 83.5 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 21.1 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 129.7 | - | - | - | - | - |
| 107.0 | 35.0 | - | - | - | - | - | - | 31.3 | - | - | - | - | 0.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 301.6 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 122.8 | - | - | - | - | 3.6 |
| 107.0 | 50.0 | - | - | - | - | - | - | 116.8 | - | - | - | - | 8.8 |
| 107.0 | 55.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | 70.1 |
| 107.0 | 60.0 | - | - | - | - | - | - | 17.0 | - | - | - | - | 48.4 |
| 107.0 | 65.0 | - | - | - | - | - | - | 83.8 | - | - | - | - | 25.1 |
| 107.0 | 70.0 | - | - | - | - | - | - | 193.1 | - | - | - | - | 37.1 |
| 107.0 | 80.0 | - | - | - | - | - | - | 313.8 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 37.2 |
| 110.0 | 45.0 | - | - | - | - | - | - | 15.8 | - | - | - | - | 29.3 |
| 110.0 | 50.0 | - | - | - | - | - | - | 12.5 | - | - | - | - | 70.7 |
| 110.0 | 55.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 98.6 |
| 110.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 21.8 |
| 110.0 | 65.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 2.9 |
| 110.0 | 70.0 | - | - | - | - | - | - | 13.3 | - | - | - | - | 18.8 |
| 110.0 | 80.0 | - | - | - | - | - | - | 125.0 | - | - | - | - | 211.7 |
| 113.0 | 35.0 | - | - | - | - | - | - | 13.5 | - | - | - | - | 4.6 |
| 113.0 | 40.0 | - | - | - | - | - | - | 28.6 | - | - | - | - | 16.6 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 17.6 |
| 113.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.4 |
| 113.0 | 55.0 | - | - | - | - | - | - | 334.0 | - | - | - | - | 1.7 |
| 113.0 | 60.0 | - | - | - | - | - | - | 202.5 | - | - | - | - | 18.2 |
| 113.0 | 65.0 | - | - | - | - | - | - | 175.5 | - | - | - | - | 21.4 |
| 113.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 56.3 |
| 113.0 | 80.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 54.8 |
| 117.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 117.0 | 40.0 | - | - | - | - | - | - | 13.6 | - | - | - | - | 29.6 |
| 117.0 | 45.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 5.4 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 117.0 | 60.0 | - | - | - | - | - | - | 387.2 | - | - | - | - | 2.8 |
| 117.0 | 65.0 | - | - | - | - | - | - | 450.8 | - | - | - | - | 7.9 |
| 117.0 | 70.0 | - | - | - | - | - | - | 134.8 | - | - | - | - | - |
| 117.0 | 80.0 | - | - | - | - | - | - | 96.3 | - | - | - | - | 66.0 |
| 118.0 | 39.0 | - | - | - | - | - | - | 18.7 | - | - | - | - | 20.9 |
| 120.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 120.0 | 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 8.5 |
| 120.0 | 60.0 | - | - | - | - | - | - | 491.0 | - | - | - | - | 14.9 |

TABLE 4. (cont.)

*Vinciguerria lucetia* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 65.0 | - | - | - | - | - | - | 327.3 | - | - | - | - | 19.5 |
| 120.0 | 70.0 | - | - | - | - | - | - | 328.9 | - | - | - | - | 69.7 |
| 120.0 | 80.0 | - | - | - | - | - | - | 297.4 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 2.9 |
| 123.0 | 45.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 14.1 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.1 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.7 |
| 123.0 | 60.0 | - | - | - | - | - | - | 23.7 | - | - | - | - | 2.9 |
| 127.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.9 |
| 127.0 | 34.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.5 |
| 127.0 | 45.0 | - | - | - | - | - | - | 13.2 | - | - | - | - | 20.9 |
| 127.0 | 50.0 | - | - | - | - | - | - | 20.2 | - | - | - | - | 5.2 |
| 127.0 | 55.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 127.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 12.3 |
| 130.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 130.0 | 45.0 | - | - | - | - | - | - | - | - | - | - | - | 30.0 |
| 130.0 | 50.0 | - | - | - | - | - | - | - | - | - | - | - | 12.3 |
| 130.0 | 60.0 | - | - | - | - | - | - | - | - | - | - | - | 5.3 |
| 133.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 13.7 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |
| 137.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 5.7 |

Sternoptychidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 | 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 | 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 140.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | 0.0 |
| 107.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 110.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 110.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 | 40.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 0.0 |
| 113.0 | 55.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.6 |
| 117.0 | 60.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

## Sternoptychidae (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 65.0 | - | - | - | - | - | - | 4.7 | - | - | - | - | 5.3 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.8 |
| 120.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 120.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 127.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 127.0 | 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 0.0 |

## *Chauliodus macouni*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 107.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 107.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 1.8 |
| 113.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |

## *Idiacanthus antrostomus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 90.0 | - | - | - | - | - | 9.4 | - | - | - | - | - | - |
| 87.0 | 80.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 87.0 | 90.0 | - | - | - | - | - | 11.9 | - | - | - | - | - | - |
| 90.0 | 110.0 | - | - | - | - | - | 13.8 | - | - | - | - | - | - |
| 90.0 | 130.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 | 110.0 | - | - | - | - | - | 8.2 | - | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 10.0 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 7.6 | - | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 100.0 | 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 11.0 | - | - | - | - | - |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 107.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 110.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |

## *Aristostomias scintillans*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 | 80.0 | - | - | - | - | - | 2.0 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Aristostomias scintillans* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 90.0 | - | - | - | - | - | 7.1 | - | - | - | - | - | - |

*Bathophilus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 80.0 | - | - | - | - | - | 12.2 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |

*Tactostoma macropus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 5.2 | - | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | - |

*Stomias atriventer*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 70.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 107.0 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.1 |
| 107.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.2 |
| 107.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 110.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.0 |
| 113.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 113.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.6 |
| 113.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 113.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 117.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.3 |
| 118.0 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.8 |
| 120.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 123.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 123.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 130.0 50.0 | - | - | - | - | - | - | - | - | - | - | - | 3.1 |
| 130.0 60.0 | - | - | - | - | - | - | - | - | - | - | - | 2.6 |

TABLE 4. (cont.)

*Lestidiops ringens*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 4.1 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 14.3 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 8.3 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 12.6 | - | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 18.1 | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 17.6 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 35.0 | - | - | - | - | - | - | 9.8 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 26.1 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 30.7 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 21.8 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 103.0 70.0 | - | - | - | - | - | - | 18.1 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 30.4 | - | - | - | - | - |
| 107.0 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 107.0 35.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | 0.0 |
| 107.0 40.0 | - | - | - | - | - | - | 19.5 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 2.9 |
| 107.0 70.0 | - | - | - | - | - | - | 107.9 | - | - | - | - | 0.0 |
| 107.0 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |
| 110.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 40.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 0.0 |
| 113.0 60.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 113.0 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 117.0 40.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 118.0 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 2.6 |

*Notolepis risso*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 110.0 | - | - | - | - | - | 5.4 | - | - | - | - | - | - |
| 107.0 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Scopelosaurus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 90.0 | – | – | – | – | – | 4.7 | – | – | – | – | – | – |
| 87.0 90.0 | – | – | – | – | – | 4.8 | – | – | – | – | – | – |
| 93.0 130.0 | – | – | – | – | – | 2.5 | – | – | – | – | – | – |
| 93.0 140.0 | – | – | – | – | – | 2.8 | – | – | – | – | – | – |
| 103.0 80.0 | – | – | – | – | – | – | 2.8 | – | – | – | – | – |
| 107.0 35.0 | – | – | – | – | – | – | 3.1 | – | – | – | – | 0.0 |

Scopelarchidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 60.0 | – | – | – | – | – | 13.5 | – | – | – | – | – | – |
| 87.0 90.0 | – | – | – | – | – | 2.4 | – | – | – | – | – | – |
| 90.0 130.0 | – | – | – | – | – | 2.6 | – | – | – | – | – | – |
| 93.0 120.0 | – | – | – | – | – | 7.5 | – | – | – | – | – | – |
| 93.0 130.0 | – | – | – | – | – | 2.5 | – | – | – | – | – | – |
| 100.0 65.0 | – | – | – | – | – | – | 7.8 | – | – | – | – | – |
| 103.0 35.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | – |
| 103.0 50.0 | – | – | – | – | – | – | 2.8 | – | – | – | – | – |
| 103.0 55.0 | – | – | – | – | – | – | 2.7 | – | – | – | – | – |
| 103.0 60.0 | – | – | – | – | – | – | 2.8 | – | – | – | – | – |
| 103.0 80.0 | – | – | – | – | – | – | 5.5 | – | – | – | – | – |
| 107.0 35.0 | – | – | – | – | – | – | 3.1 | – | – | – | – | 0.0 |
| 107.0 45.0 | – | – | – | – | – | – | 19.5 | – | – | – | – | 1.8 |
| 107.0 50.0 | – | – | – | – | – | – | 8.3 | – | – | – | – | 0.0 |
| 107.0 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.9 |
| 107.0 60.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.7 |
| 107.0 65.0 | – | – | – | – | – | – | 2.6 | – | – | – | – | 0.0 |
| 107.0 80.0 | – | – | – | – | – | – | 2.2 | – | – | – | – | – |
| 110.0 70.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.7 |
| 113.0 60.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 1.8 |
| 113.0 70.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.7 |
| 117.0 35.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 117.0 60.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 117.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.3 |
| 120.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 120.0 70.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.7 |
| 127.0 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.9 |
| 130.0 55.0 | – | – | – | – | – | – | – | – | – | – | – | 3.0 |

Myctophidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 43.0 | – | – | – | – | – | 2.7 | – | – | – | – | – | – |
| 83.0 65.0 | – | – | – | – | – | 3.8 | – | – | – | – | – | – |

TABLE 4. (cont.)

## Myctophidae (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 70.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 32.0 | - | - | - | - | - | 5.2 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 35.0 | - | - | - | - | - | - | 110.4 | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 28.0 | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 100.0 50.0 | - | - | - | - | - | - | 6.8 | - | - | - | - | - |
| 103.0 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 107.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 107.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 107.0 80.0 | - | - | - | - | - | - | 6.6 | - | - | - | - | - |
| 110.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |
| 110.0 55.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 110.0 60.0 | - | - | - | - | - | - | 13.9 | - | - | - | - | 0.0 |
| 110.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 113.0 50.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | 0.0 |
| 113.0 65.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 113.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 117.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.9 |
| 117.0 80.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | 36.3 |
| 120.0 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 120.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 123.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 127.0 55.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 130.0 50.0 | - | - | - | - | - | - | - | - | - | - | - | 3.1 |

## *Ceratoscopelus townsendi*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 80.0 | - | - | - | - | - | 4.6 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 4.7 | - | - | - | - | - | - |
| 87.0 40.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 12.2 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 40.5 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 13.8 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 69.1 | - | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 6.5 | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 59.8 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 20.1 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 15.1 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Ceratoscopelus townsendi* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 140.0 | - | - | - | - | - | 106.4 | - | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 10.4 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 75.7 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 34.5 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 19.5 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 13.6 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | - |
| 103.0 65.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 70.0 | - | - | - | - | - | - | 30.2 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 16.6 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 17.4 | - | - | - | - | 0.0 |
| 107.0 45.0 | - | - | - | - | - | - | 22.3 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 0.0 |
| 107.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 107.0 70.0 | - | - | - | - | - | - | 19.9 | - | - | - | - | 2.7 |
| 107.0 80.0 | - | - | - | - | - | - | 39.8 | - | - | - | - | - |
| 110.0 45.0 | - | - | - | - | - | - | 7.9 | - | - | - | - | 0.0 |
| 110.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.7 |
| 110.0 80.0 | - | - | - | - | - | - | 9.8 | - | - | - | - | 2.7 |
| 113.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 113.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 40.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 70.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |

*Diaphus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 60.0 | - | - | - | - | - | 30.7 | - | - | - | - | - | - |
| 80.0 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 28.5 | - | - | - | - | - | - |
| 83.0 65.0 | - | - | - | - | - | 35.9 | - | - | - | - | - | - |
| 83.0 70.0 | - | - | - | - | - | 43.3 | - | - | - | - | - | - |
| 83.0 80.0 | - | - | - | - | - | 16.0 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 94.4 | - | - | - | - | - | - |
| 87.0 35.0 | - | - | - | - | - | 10.8 | - | - | - | - | - | - |
| 87.0 60.0 | - | - | - | - | - | 54.1 | - | - | - | - | - | - |
| 87.0 65.0 | - | - | - | - | - | 31.2 | - | - | - | - | - | - |
| 87.0 70.0 | - | - | - | - | - | 19.2 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 81.2 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 9.5 | - | - | - | - | - | - |
| 90.0 45.0 | - | - | - | - | - | 19.3 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 99.6 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 13.9 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 33.7 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Diaphus* spp. (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 80.0 | - | - | - | - | - | 36.0 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 10.9 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 10.4 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 22.1 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 23.0 | - | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 16.1 | - | - | - | - | - |
| 93.0 50.0 | - | - | - | - | - | - | 9.0 | - | - | - | - | - |
| 93.0 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 14.0 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 20.1 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 11.2 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 97.0 55.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 97.0 80.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | - |
| 100.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 55.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 70.0 | - | - | - | - | - | - | 15.1 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 35.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 120.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

*Lampadena urophaos*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 103.0 65.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.4 |
| 120.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 120.0 80.0 | - | - | - | - | - | - | 7.6 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Lampanyctus* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 70.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 20.3 | - | - | - | - | - | - |
| 90.0 | 32.0 | - | - | - | - | - | 7.9 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 11.7 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 100.0 | - | - | - | - | - | 10.4 | - | - | - | - | - | - |
| 90.0 | 110.0 | - | - | - | - | - | 38.6 | - | - | - | - | - | - |
| 90.0 | 140.0 | - | - | - | - | - | 43.5 | - | - | - | - | - | - |
| 93.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 29.9 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 8.0 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 12.7 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 11.5 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 93.0 | 100.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 | 140.0 | - | - | - | - | - | 30.8 | - | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 4.1 | - | - | - | - | - |
| 100.0 | 80.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 7.4 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 22.1 | - | - | - | - | - |
| 107.0 | 35.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | 0.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 8.7 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | 1.8 |
| 107.0 | 50.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 0.0 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.8 |
| 107.0 | 60.0 | - | - | - | - | - | - | 8.5 | - | - | - | - | 0.0 |
| 107.0 | 70.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 0.0 |
| 107.0 | 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 110.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.3 |
| 110.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.0 |
| 113.0 | 40.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 113.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.6 |
| 113.0 | 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Lampanyctus* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 35.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 117.0 | 40.0 | – | – | – | – | – | – | 2.7 | – | – | – | – | 0.0 |
| 117.0 | 60.0 | – | – | – | – | – | – | 3.2 | – | – | – | – | 0.0 |
| 117.0 | 80.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | 3.3 |
| 118.0 | 39.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.2 |
| 120.0 | 25.0 | – | – | – | – | – | – | 2.3 | – | – | – | – | 0.0 |
| 120.0 | 50.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 4.9 |
| 120.0 | 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.7 |
| 120.0 | 60.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | 3.0 |
| 120.0 | 65.0 | – | – | – | – | – | – | 5.5 | – | – | – | – | 5.6 |
| 120.0 | 70.0 | – | – | – | – | – | – | 7.8 | – | – | – | – | 5.4 |
| 123.0 | 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.6 |
| 127.0 | 55.0 | – | – | – | – | – | – | 2.4 | – | – | – | – | 2.9 |
| 130.0 | 50.0 | – | – | – | – | – | – | – | – | – | – | – | 6.1 |

*Lampanyctus regalis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | – | – | – | – | – | 6.1 | – | – | – | – | – | – |
| 83.0 | 60.0 | – | – | – | – | – | 3.8 | – | – | – | – | – | – |
| 83.0 | 65.0 | – | – | – | – | – | 7.6 | – | – | – | – | – | – |
| 83.0 | 70.0 | – | – | – | – | – | 3.3 | – | – | – | – | – | – |
| 87.0 | 40.0 | – | – | – | – | – | 2.9 | – | – | – | – | – | – |
| 87.0 | 65.0 | – | – | – | – | – | 2.6 | – | – | – | – | – | – |
| 87.0 | 70.0 | – | – | – | – | – | 2.4 | – | – | – | – | – | – |
| 90.0 | 60.0 | – | – | – | – | – | 8.8 | – | – | – | – | – | – |
| 90.0 | 80.0 | – | – | – | – | – | 3.0 | – | – | – | – | – | – |
| 93.0 | 40.0 | – | – | – | – | – | – | 5.6 | – | – | – | – | – |
| 93.0 | 100.0 | – | – | – | – | – | 3.1 | – | – | – | – | – | – |
| 93.0 | 130.0 | – | – | – | – | – | 2.5 | – | – | – | – | – | – |

*Lampanyctus ritteri*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | – | – | – | – | – | 9.2 | – | – | – | – | – | – |
| 80.0 | 70.0 | – | – | – | – | – | 8.2 | – | – | – | – | – | – |
| 80.0 | 80.0 | – | – | – | – | – | 8.3 | – | – | – | – | – | – |
| 83.0 | 65.0 | – | – | – | – | – | 1.9 | – | – | – | – | – | – |
| 83.0 | 80.0 | – | – | – | – | – | 6.9 | – | – | – | – | – | – |
| 83.0 | 90.0 | – | – | – | – | – | 16.5 | – | – | – | – | – | – |
| 87.0 | 35.0 | – | – | – | – | – | 5.4 | – | – | – | – | – | – |
| 87.0 | 40.0 | – | – | – | – | – | 8.6 | – | – | – | – | – | – |
| 87.0 | 65.0 | – | – | – | – | – | 5.2 | – | – | – | – | – | – |
| 87.0 | 70.0 | – | – | – | – | – | 14.4 | – | – | – | – | – | – |

TABLE 4. (cont.)

*Lampanyctus ritteri* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 80.0 | - | - | - | - | - | 109.6 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 52.4 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 22.2 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 7.9 | - | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 16.1 | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 15.1 | - | - | - | - | - | - |
| 97.0 55.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 97.0 60.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | - |
| 97.0 65.0 | - | - | - | - | - | - | 10.8 | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 20.3 | - | - | - | - | - |
| 100.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 60.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 15.5 | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 10.4 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 107.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 14.7 |
| 107.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.6 |
| 110.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |
| 110.0 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 113.0 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 117.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.9 |
| 117.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 118.0 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.0 |

*Notolychnus valdiviae*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 80.0 | - | - | - | - | - | 2.0 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 107.0 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |

TABLE 4. (cont.)

*Notoscopelus resplendens*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 80.0 | - | - | - | - | - | 2.0 | - | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 5.4 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 120.0 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

*Stenobrachius leucopsarus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 51.0 | - | - | - | - | - | 12.4 | - | - | - | - | - | - |
| 80.0 52.0 | - | - | - | - | - | 4.5 | - | - | - | - | - | - |
| 80.0 55.0 | - | - | - | - | - | 46.1 | - | - | - | - | - | - |
| 80.0 60.0 | - | - | - | - | - | 12.3 | - | - | - | - | - | - |
| 80.0 65.0 | - | - | - | - | - | 6.9 | - | - | - | - | - | - |
| 80.0 70.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 80.0 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 82.0 47.0 | - | - | - | - | - | 15.4 | - | - | - | - | - | - |
| 83.0 43.0 | - | - | - | - | - | 16.3 | - | - | - | - | - | - |
| 83.0 51.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 83.0 55.0 | - | - | - | - | - | 42.8 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 5.7 | - | - | - | - | - | - |
| 83.0 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 40.0 | - | - | - | - | - | 25.8 | - | - | - | - | - | - |
| 87.0 45.0 | - | - | - | - | - | 26.6 | - | - | - | - | - | - |
| 87.0 50.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 87.0 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 90.0 37.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 45.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 90.0 53.0 | - | - | - | - | - | 16.9 | - | - | - | - | - | - |
| 93.0 35.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 44.8 | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 25.8 | - | - | - | - | - |
| 93.0 50.0 | - | - | - | - | - | - | 12.0 | - | - | - | - | - |
| 93.0 55.0 | - | - | - | - | - | - | 9.3 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 19.6 | - | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 5.0 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Stenobrachius leucopsarus* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 50.0 | - | - | - | - | - | - | 6.8 | - | - | - | - | - |

*Triphoturus mexicanus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 40.0 | - | - | - | - | - | 20.1 | - | - | - | - | - | - |
| 87.0 50.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 50.0 | - | - | - | - | - | - |
| 90.0 32.0 | - | - | - | - | - | 5.2 | - | - | - | - | - | - |
| 90.0 37.0 | - | - | - | - | - | 10.9 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 25.0 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 27.6 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 13.9 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 10.2 | - | - | - | - | - | - |
| 93.0 30.0 | - | - | - | - | - | - | 9.7 | - | - | - | - | - |
| 93.0 35.0 | - | - | - | - | - | - | 49.7 | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 19.4 | - | - | - | - | - |
| 93.0 50.0 | - | - | - | - | - | - | 14.9 | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 65.0 | - | - | - | - | - | - | 56.3 | - | - | - | - | - |
| 93.0 70.0 | - | - | - | - | - | - | 12.7 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 14.3 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 33.6 | - | - | - | - | - | - |
| 93.0 100.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 8.2 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 20.1 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 70.6 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 29.0 | - | - | - | - | - | - | 8.6 | - | - | - | - | - |
| 97.0 30.0 | - | - | - | - | - | - | 124.7 | - | - | - | - | - |
| 97.0 32.0 | - | - | - | - | - | - | 35.4 | - | - | - | - | - |
| 97.0 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 21.1 | - | - | - | - | - |
| 97.0 45.0 | - | - | - | - | - | - | 139.6 | - | - | - | - | - |
| 97.0 50.0 | - | - | - | - | - | - | 66.6 | - | - | - | - | - |
| 97.0 55.0 | - | - | - | - | - | - | 8.8 | - | - | - | - | - |
| 97.0 60.0 | - | - | - | - | - | - | 38.9 | - | - | - | - | - |
| 97.0 65.0 | - | - | - | - | - | - | 37.8 | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 130.5 | - | - | - | - | - |
| 97.0 80.0 | - | - | - | - | - | - | 28.3 | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 52.6 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 60.7 | - | - | - | - | - |

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 | 35.0 | - | - | - | - | - | - | 25.7 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 11.3 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 84.8 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 49.6 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 27.9 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 108.8 | - | - | - | - | - |
| 100.0 | 70.0 | - | - | - | - | - | - | 32.8 | - | - | - | - | - |
| 100.0 | 80.0 | - | - | - | - | - | - | 10.3 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 4.2 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 73.4 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 113.2 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 373.2 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 207.0 | - | - | - | - | - |
| 103.0 | 50.0 | - | - | - | - | - | - | 89.3 | - | - | - | - | - |
| 103.0 | 55.0 | - | - | - | - | - | - | 54.4 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 80.3 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 93.6 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 45.3 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 60.7 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 24.6 | - | - | - | - | 0.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 68.9 | - | - | - | - | 0.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 199.6 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 273.4 | - | - | - | - | 0.0 |
| 107.0 | 50.0 | - | - | - | - | - | - | 139.0 | - | - | - | - | 2.9 |
| 107.0 | 55.0 | - | - | - | - | - | - | 19.5 | - | - | - | - | 2.9 |
| 107.0 | 60.0 | - | - | - | - | - | - | 34.1 | - | - | - | - | 0.0 |
| 107.0 | 65.0 | - | - | - | - | - | - | 34.1 | - | - | - | - | 0.0 |
| 107.0 | 70.0 | - | - | - | - | - | - | 31.2 | - | - | - | - | 0.0 |
| 107.0 | 80.0 | - | - | - | - | - | - | 4.4 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 17.1 | - | - | - | - | 0.0 |
| 110.0 | 40.0 | - | - | - | - | - | - | 186.5 | - | - | - | - | 0.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 147.3 | - | - | - | - | 5.3 |
| 110.0 | 50.0 | - | - | - | - | - | - | 180.0 | - | - | - | - | 0.0 |
| 110.0 | 55.0 | - | - | - | - | - | - | 27.7 | - | - | - | - | 0.0 |
| 110.0 | 60.0 | - | - | - | - | - | - | 19.5 | - | - | - | - | 0.0 |
| 110.0 | 65.0 | - | - | - | - | - | - | 99.7 | - | - | - | - | 0.0 |
| 110.0 | 70.0 | - | - | - | - | - | - | 190.9 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 8.0 |
| 113.0 | 30.0 | - | - | - | - | - | - | 10.3 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 164.7 | - | - | - | - | 0.0 |
| 113.0 | 40.0 | - | - | - | - | - | - | 68.6 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 80.0 | - | - | - | - | 0.0 |
| 113.0 | 50.0 | - | - | - | - | - | - | 36.7 | - | - | - | - | 0.0 |
| 113.0 | 55.0 | - | - | - | - | - | - | 126.2 | - | - | - | - | 0.0 |
| 113.0 | 60.0 | - | - | - | - | - | - | 97.2 | - | - | - | - | 1.8 |

TABLE 4. (cont.)

*Triphoturus mexicanus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 | 65.0 | - | - | - | - | - | - | 108.0 | - | - | - | - | 0.0 |
| 113.0 | 70.0 | - | - | - | - | - | - | 41.8 | - | - | - | - | 8.0 |
| 113.0 | 80.0 | - | - | - | - | - | - | 134.9 | - | - | - | - | 0.0 |
| 117.0 | 30.0 | - | - | - | - | - | - | 13.3 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | 0.0 |
| 117.0 | 40.0 | - | - | - | - | - | - | 81.6 | - | - | - | - | 0.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 12.0 | - | - | - | - | 2.7 |
| 117.0 | 50.0 | - | - | - | - | - | - | 7.2 | - | - | - | - | 0.0 |
| 117.0 | 55.0 | - | - | - | - | - | - | 41.0 | - | - | - | - | 0.0 |
| 117.0 | 60.0 | - | - | - | - | - | - | 268.8 | - | - | - | - | 0.0 |
| 117.0 | 65.0 | - | - | - | - | - | - | 89.7 | - | - | - | - | 0.0 |
| 117.0 | 70.0 | - | - | - | - | - | - | 143.0 | - | - | - | - | - |
| 117.0 | 80.0 | - | - | - | - | - | - | 247.0 | - | - | - | - | 3.3 |
| 118.0 | 39.0 | - | - | - | - | - | - | 333.8 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | 0.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 10.6 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 68.5 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 19.4 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 16.8 | - | - | - | - | 0.0 |
| 120.0 | 55.0 | - | - | - | - | - | - | 26.1 | - | - | - | - | 2.8 |
| 120.0 | 60.0 | - | - | - | - | - | - | 109.1 | - | - | - | - | 0.0 |
| 120.0 | 65.0 | - | - | - | - | - | - | 55.0 | - | - | - | - | 0.0 |
| 120.0 | 70.0 | - | - | - | - | - | - | 25.9 | - | - | - | - | 0.0 |
| 120.0 | 80.0 | - | - | - | - | - | - | 22.7 | - | - | - | - | 2.9 |
| 123.0 | 42.0 | - | - | - | - | - | - | 36.3 | - | - | - | - | 0.0 |
| 123.0 | 45.0 | - | - | - | - | - | - | 7.4 | - | - | - | - | 8.5 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 10.8 |
| 123.0 | 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 123.0 | 60.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 127.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.5 |
| 127.0 | 34.0 | - | - | - | - | - | - | 19.9 | - | - | - | - | 0.0 |
| 127.0 | 45.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | 0.0 |
| 127.0 | 50.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | 0.0 |
| 127.0 | 55.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 11.5 |
| 127.0 | 60.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | 3.1 |
| 130.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 130.0 | 55.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |
| 130.0 | 60.0 | - | - | - | - | - | - | - | - | - | - | - | 5.3 |
| 133.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 2.3 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 17.6 |
| 137.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 17.1 |

TABLE 4. (cont.)

*Centrobranchus* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |

*Diogenichthys* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.6 |
| 110.0 | 55.0 | - | - | - | - | - | - | 36.0 | - | - | - | - | 0.0 |
| 113.0 | 55.0 | - | - | - | - | - | - | 7.9 | - | - | - | - | 0.0 |
| 113.0 | 60.0 | - | - | - | - | - | - | 18.9 | - | - | - | - | 0.0 |
| 113.0 | 65.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 117.0 | 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 120.0 | 60.0 | - | - | - | - | - | - | 14.9 | - | - | - | - | 0.0 |
| 120.0 | 65.0 | - | - | - | - | - | - | 38.5 | - | - | - | - | 0.0 |
| 120.0 | 70.0 | - | - | - | - | - | - | 23.3 | - | - | - | - | 0.0 |
| 120.0 | 80.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 123.0 | 45.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | 0.0 |
| 123.0 | 50.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | 0.0 |
| 123.0 | 55.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 0.0 |

*Diogenichthys atlanticus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 70.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 83.0 | 80.0 | - | - | - | - | - | 4.6 | - | - | - | - | - | - |
| 83.0 | 90.0 | - | - | - | - | - | 9.4 | - | - | - | - | - | - |
| 87.0 | 70.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 87.0 | 80.0 | - | - | - | - | - | 18.3 | - | - | - | - | - | - |
| 87.0 | 90.0 | - | - | - | - | - | 19.0 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 | 100.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 | 110.0 | - | - | - | - | - | 35.9 | - | - | - | - | - | - |
| 90.0 | 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 20.1 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 7.6 | - | - | - | - | - | - |
| 93.0 | 140.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 100.0 | 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |

TABLE 4. (cont.)

*Diogenichthys atlanticus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 27.6 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 4.3 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 | 50.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.8 |
| 107.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 17.1 |
| 107.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.9 |
| 107.0 | 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.7 |
| 107.0 | 80.0 | - | - | - | - | - | - | 13.3 | - | - | - | - | - |
| 113.0 | 35.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 117.0 | 40.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

*Diogenichthys laternatus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.6 |
| 107.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 11.7 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.8 |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.3 |
| 110.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 37.2 |
| 110.0 | 50.0 | - | - | - | - | - | - | 15.0 | - | - | - | - | 45.6 |
| 110.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 54.8 |
| 110.0 | 60.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 3.1 |
| 110.0 | 65.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 8.7 |
| 110.0 | 70.0 | - | - | - | - | - | - | 4.4 | - | - | - | - | 13.4 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.4 |
| 113.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 20.8 |
| 113.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 27.6 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 105.8 |
| 113.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 113.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.7 |
| 113.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 23.7 |
| 113.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 10.7 |
| 113.0 | 70.0 | - | - | - | - | - | - | 17.2 | - | - | - | - | 59.0 |
| 113.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 52.1 |
| 117.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.1 |
| 117.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.4 |
| 117.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 94.7 |

TABLE 4. (cont.)

*Diogenichthys laternatus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.6 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 24.9 |
| 117.0 | 60.0 | - | - | - | - | - | - | 6.4 | - | - | - | - | 36.9 |
| 117.0 | 65.0 | - | - | - | - | - | - | 7.1 | - | - | - | - | 47.3 |
| 117.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 85.8 |
| 118.0 | 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 52.2 |
| 119.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 120.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.8 |
| 120.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 135.8 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 53.8 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 125.5 |
| 120.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 34.8 |
| 120.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 26.4 |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.1 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 123.0 | 42.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.8 |
| 123.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 25.4 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 35.0 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 51.6 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 26.1 |
| 127.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 96.3 |
| 127.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 14.0 |
| 127.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 17.2 |
| 127.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 130.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 130.0 | 45.0 | - | - | - | - | - | - | - | - | - | - | - | 13.3 |
| 130.0 | 50.0 | - | - | - | - | - | - | - | - | - | - | - | 64.5 |
| 130.0 | 55.0 | - | - | - | - | - | - | - | - | - | - | - | 26.6 |
| 130.0 | 60.0 | - | - | - | - | - | - | - | - | - | - | - | 2.6 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 7.6 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 11.7 |
| 137.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 8.6 |

*Gonichthys tenuiculus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 | 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 107.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 110.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 110.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 113.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 113.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 6.6 |
| 118.0 | 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Gonichthys tenuiculus* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 60.0 | – | – | – | – | – | – | 5.0 | – | – | – | – | 0.0 |
| 120.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 120.0 70.0 | – | – | – | – | – | – | 7.8 | – | – | – | – | 0.0 |
| 120.0 80.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | 0.0 |
| 133.0 40.0 | – | – | – | – | – | – | – | – | – | – | – | 4.6 |
| 137.0 35.0 | – | – | – | – | – | – | – | – | – | – | – | 2.9 |
| 137.0 40.0 | – | – | – | – | – | – | – | – | – | – | – | 2.8 |

*Hygophum atratum*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.0 45.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 1.8 |
| 110.0 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 7.3 |
| 110.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.9 |
| 113.0 45.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.9 |
| 113.0 60.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.5 |
| 113.0 70.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.4 |
| 113.0 80.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.7 |
| 117.0 60.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 5.7 |
| 117.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.6 |
| 120.0 45.0 | – | – | – | – | – | – | 5.5 | – | – | – | – | 0.0 |
| 120.0 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 120.0 60.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | 0.0 |
| 120.0 65.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 120.0 70.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.7 |
| 120.0 80.0 | – | – | – | – | – | – | 2.5 | – | – | – | – | 0.0 |
| 127.0 40.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.8 |
| 127.0 45.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 3.5 |
| 127.0 55.0 | – | – | – | – | – | – | 0.0 | – | – | – | – | 2.9 |
| 133.0 40.0 | – | – | – | – | – | – | – | – | – | – | – | 6.8 |
| 137.0 30.0 | – | – | – | – | – | – | – | – | – | – | – | 5.0 |
| 137.0 35.0 | – | – | – | – | – | – | – | – | – | – | – | 2.9 |

*Hygophum reinhardtii*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 140.0 | – | – | – | – | – | 2.6 | – | – | – | – | – | – |
| 93.0 110.0 | – | – | – | – | – | 2.7 | – | – | – | – | – | – |
| 93.0 120.0 | – | – | – | – | – | 2.5 | – | – | – | – | – | – |
| 93.0 130.0 | – | – | – | – | – | 2.5 | – | – | – | – | – | – |
| 93.0 140.0 | – | – | – | – | – | 11.2 | – | – | – | – | – | – |
| 103.0 50.0 | – | – | – | – | – | – | 2.8 | – | – | – | – | – |
| 103.0 80.0 | – | – | – | – | – | – | 5.5 | – | – | – | – | – |

TABLE 4. (cont.)

*Loweina rara*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |

*Myctophum nitidulum*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 80.0 | - | - | - | - | - | 2.3 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 40.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

*Protomyctophum crockeri*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 60.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 80.0 70.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 83.0 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 5.7 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 87.0 45.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 87.0 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 87.0 60.0 | - | - | - | - | - | 6.8 | - | - | - | - | - | - |
| 87.0 70.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 2.0 | - | - | - | - | - | - |
| 90.0 53.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 80.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 8.3 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 30.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 35.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 14.0 | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 50.0 | - | - | - | - | - | - | 6.0 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 93.0 | 110.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 5.0 | - | - | - | - | - | - |
| 97.0 | 50.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 8.7 | - | - | - | - | - |
| 97.0 | 80.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 24.8 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 44.0 | - | - | - | - | - |
| 100.0 | 80.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 17.2 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 11.5 | - | - | - | - | - |
| 103.0 | 50.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 3.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 6.3 | - | - | - | - | 6.2 |
| 107.0 | 40.0 | - | - | - | - | - | - | 8.7 | - | - | - | - | 5.2 |
| 107.0 | 45.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 5.4 |
| 107.0 | 50.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 11.7 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.8 |
| 107.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 107.0 | 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 107.0 | 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 | 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 8.6 | - | - | - | - | 5.4 |
| 110.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 23.9 |
| 110.0 | 45.0 | - | - | - | - | - | - | 7.9 | - | - | - | - | 10.6 |
| 110.0 | 50.0 | - | - | - | - | - | - | 7.5 | - | - | - | - | 2.3 |
| 110.0 | 55.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 3.7 |
| 110.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.7 |
| 110.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 24.1 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 10.7 |
| 113.0 | 35.0 | - | - | - | - | - | - | 16.2 | - | - | - | - | 11.6 |
| 113.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 113.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 113.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.5 |

TABLE 4. (cont.)

*Protomyctophum crockeri* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 21.4 |
| 113.0 | 70.0 | - | - | - | - | - | - | 7.4 | - | - | - | - | 10.7 |
| 113.0 | 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 8.2 |
| 117.0 | 35.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 16.9 |
| 117.0 | 40.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 3.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 117.0 | 55.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 117.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.7 |
| 117.0 | 65.0 | - | - | - | - | - | - | 4.7 | - | - | - | - | 2.6 |
| 117.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.9 |
| 118.0 | 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 120.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.7 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 120.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 120.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.7 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 127.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 127.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 12.3 |

*Symbolophorus californiensis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 70.0 | - | - | - | - | - | 10.9 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 3.8 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 | 80.0 | - | - | - | - | - | 4.6 | - | - | - | - | - | - |
| 83.0 | 90.0 | - | - | - | - | - | 30.7 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 87.0 | 65.0 | - | - | - | - | - | 7.8 | - | - | - | - | - | - |
| 87.0 | 80.0 | - | - | - | - | - | 46.7 | - | - | - | - | - | - |
| 87.0 | 90.0 | - | - | - | - | - | 38.1 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 110.0 | - | - | - | - | - | 58.0 | - | - | - | - | - | - |
| 90.0 | 130.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 17.6 | - | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 23.3 | - | - | - | - | - |

TABLE 4. (cont.)

*Symbolophorus californiensis* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 | 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 9.8 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 9.2 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 9.1 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | - |
| 107.0 | 40.0 | - | - | - | - | - | - | 6.5 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | 0.0 |
| 107.0 | 50.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 0.0 |
| 107.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.8 |
| 107.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 107.0 | 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 10.8 | - | - | - | - | 0.0 |
| 113.0 | 40.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 0.0 |
| 113.0 | 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 118.0 | 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |

*Tarletonbeania crenularis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 80.0 | 60.0 | - | - | - | - | - | 18.4 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 5.7 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 6.0 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | - |
| 107.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |

*Synodus* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 117.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.2 |
| 117.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.1 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.8 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 40.4 |
| 117.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.7 |

TABLE 4. (cont.)

*Synodus* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 118.0 | 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.8 |
| 120.0 | 24.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.4 |
| 120.0 | 25.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.8 |
| 120.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 19.1 |
| 120.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 120.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.7 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 31.8 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.8 |
| 127.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.5 |
| 133.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.5 |

*Merluccius productus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 80.0 | 60.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 1.3 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 3.8 | - | - | - | - | - | - |
| 90.0 | 80.0 | - | - | - | - | - | 6.0 | - | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 107.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 117.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.1 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.6 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 11.9 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 28.0 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 118.0 | 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 60.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 23.9 |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 7.8 |
| 123.0 | 37.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 36.6 |
| 123.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 25.3 |
| 133.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 8.8 |
| 133.0 | 40.0 | - | - | - | - | - | - | - | - | - | - | - | 45.6 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 12.6 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 23.4 |

TABLE 4. (cont.)

*Physiculus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |

Macrouridae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 133.0 40.0 | - | - | - | - | - | - | - | - | - | - | - | 2.3 |

Ophidiiformes

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 51.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 3.8 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 97.0 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 133.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.7 |
| 137.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |

*Brosmophycis marginata*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 82.0 47.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 83.0 51.0 | - | - | - | - | - | 1.3 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 110.0 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

*Chilara taylori*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 35.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 107.0 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 110.0 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 13.5 | - | - | - | - | 0.0 |
| 117.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Chilara taylori* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 | 35.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 0.0 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.8 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 120.0 | 35.0 | - | - | - | - | - | - | 11.0 | - | - | - | - | 0.0 |
| 120.0 | 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.1 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |

*Porichthys* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.2 |

*Cololabis saira*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | - |
| 117.0 | 45.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |

Atherinidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 29.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 113.0 | 29.0 | - | - | - | - | - | - | 4.7 | - | - | - | - | 0.0 |

Trachipteridae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 70.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 3.4 | - | - | - | - | - |

*Melamphaes* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Melamphaes* spp. (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 60.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 70.0 | - | - | - | - | - | 6.7 | - | - | - | - | - | - |
| 83.0 80.0 | - | - | - | - | - | 11.4 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 21.2 | - | - | - | - | - | - |
| 87.0 65.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 18.3 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 9.5 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 8.3 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 7.8 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 22.1 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 7.9 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 90.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 93.0 100.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 20.1 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 12.6 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | - |
| 97.0 80.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 100.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 55.0 | - | - | - | - | - | - | 4.1 | - | - | - | - | - |
| 100.0 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 7.8 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 103.0 65.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 107.0 40.0 | - | - | - | - | - | - | 19.5 | - | - | - | - | 0.0 |
| 107.0 45.0 | - | - | - | - | - | - | 22.3 | - | - | - | - | 0.0 |
| 107.0 50.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 107.0 65.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |
| 107.0 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |
| 110.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |
| 110.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 110.0 55.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Melamphaes* spp. (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 113.0 40.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 2.8 |
| 113.0 60.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 113.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 117.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 117.0 70.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 118.0 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 120.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 120.0 60.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 120.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 123.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 127.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.5 |
| 127.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.7 |
| 127.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 130.0 50.0 | - | - | - | - | - | - | - | - | - | - | - | 3.1 |
| 137.0 30.0 | - | - | - | - | - | - | - | - | - | - | - | 2.5 |

*Poromitra* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 45.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | - |
| 103.0 65.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 110.0 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 113.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 117.0 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 117.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |

*Scopelogadus bispinosus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 140.0 | - | - | - | - | - | 5.1 | - | - | - | - | - | - |
| 107.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 110.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 120.0 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |

*Macroramphosus gracilis*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 110.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |

TABLE 4. (cont.)

*Macroramphosus gracilis* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.7 |
| 113.0 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 113.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.7 |
| 117.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |

*Syngnathus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 113.0 29.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.1 |
| 117.0 25.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 0.8 |
| 117.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 120.0 24.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.4 |
| 120.0 25.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.0 |

Agonidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 33.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 50.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 93.0 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 113.0 30.0 | - | - | - | - | - | - | 3.4 | - | - | - | - | 0.0 |

Cottidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 45.0 | - | - | - | - | - | 5.9 | - | - | - | - | - | - |
| 87.0 50.0 | - | - | - | - | - | 25.9 | - | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 119.0 33.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |

Cyclopteridae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 29.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 107.0 31.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 0.0 |
| 113.0 30.0 | - | - | - | - | - | - | 6.9 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Zaniolepis* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.0 | 47.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 | 29.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.1 |

Scorpaenidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 130.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |

*Scorpaena* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | 0.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 8.0 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 16.4 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 127.0 | 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |

*Sebastes* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 51.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 | 52.0 | - | - | - | - | - | 9.0 | - | - | - | - | - | - |
| 80.0 | 55.0 | - | - | - | - | - | 17.9 | - | - | - | - | - | - |
| 80.0 | 60.0 | - | - | - | - | - | 27.6 | - | - | - | - | - | - |
| 80.0 | 65.0 | - | - | - | - | - | 6.9 | - | - | - | - | - | - |
| 80.0 | 80.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 82.0 | 47.0 | - | - | - | - | - | 49.3 | - | - | - | - | - | - |
| 83.0 | 43.0 | - | - | - | - | - | 10.8 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 14.4 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 75.7 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 45.6 | - | - | - | - | - | - |
| 83.0 | 65.0 | - | - | - | - | - | 13.2 | - | - | - | - | - | - |
| 83.0 | 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 | 35.0 | - | - | - | - | - | 45.9 | - | - | - | - | - | - |
| 87.0 | 40.0 | - | - | - | - | - | 5.7 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Sebastes* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 | 45.0 | - | - | - | - | - | 5.9 | - | - | - | - | - | - |
| 87.0 | 50.0 | - | - | - | - | - | 8.6 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 95.2 | - | - | - | - | - | - |
| 87.0 | 60.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 87.0 | 70.0 | - | - | - | - | - | 7.2 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 6.7 | - | - | - | - | - | - |
| 90.0 | 45.0 | - | - | - | - | - | 19.3 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 14.7 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 | 70.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 90.0 | 80.0 | - | - | - | - | - | 21.0 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 19.1 | - | - | - | - | - | - |
| 90.0 | 100.0 | - | - | - | - | - | 7.8 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 19.6 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 9.7 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 12.0 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 46.3 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 9.5 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 40.2 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 93.0 | 100.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 23.8 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | - |
| 97.0 | 50.0 | - | - | - | - | - | - | 12.8 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 20.4 | - | - | - | - | - |
| 97.0 | 65.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 97.0 | 80.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 11.4 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 19.8 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 16.5 | - | - | - | - | - |
| 100.0 | 60.0 | - | - | - | - | - | - | 31.4 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 4.2 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 0.0 |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 36.5 |
| 107.0 | 35.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | 71.3 |
| 107.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 23.5 |
| 110.0 | 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 113.0 | 30.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.4 |

TABLE 4. (cont.)

*Sebastes* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.9 |
| 117.0 | 26.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.3 |
| 117.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 2.1 |
| 117.0 | 35.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | 22.5 |
| 117.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 23.7 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.1 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.5 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 117.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |
| 118.0 | 39.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 120.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 123.0 | 36.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 0.0 |

*Sebastolobus* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 60.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 | 80.0 | - | - | - | - | - | 2.3 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 | 65.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |

Blennioidei

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 53.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 80.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |

*Hypsoblennius* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 40.0 | - | - | - | - | - | 2.3 | - | - | - | - | - | - |
| 87.0 | 33.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 11.2 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 93.0 | 30.0 | - | - | - | - | - | - | 6.5 | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 16.3 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Hypsoblennius* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 | 32.0 | - | - | - | - | - | - | 9.2 | - | - | - | - | 0.0 |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 40.0 | - | - | - | - | - | - | 8.9 | - | - | - | - | 0.0 |
| 113.0 | 29.0 | - | - | - | - | - | - | 15.5 | - | - | - | - | 0.0 |
| 113.0 | 30.0 | - | - | - | - | - | - | 17.1 | - | - | - | - | 0.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 4.1 | - | - | - | - | 0.0 |
| 127.0 | 33.0 | - | - | - | - | - | - | 8.8 | - | - | - | - | 0.0 |
| 127.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 130.0 | 28.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 2.0 |

Clinidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.0 | 47.0 | - | - | - | - | - | 12.3 | - | - | - | - | - | - |
| 87.0 | 50.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 4.2 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 1.7 |
| 110.0 | 32.0 | - | - | - | - | - | - | 1.3 | - | - | - | - | 1.5 |
| 113.0 | 29.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |

Gobiidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 82.0 | 47.0 | - | - | - | - | - | 12.3 | - | - | - | - | - | - |
| 83.0 | 43.0 | - | - | - | - | - | 10.8 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 83.0 | 60.0 | - | - | - | - | - | 3.8 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 | 45.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 70.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 | 80.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |

TABLE 4. (cont.)

## Gobiidae (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 0.0 |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 3.0 |
| 110.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 110.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 113.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 117.0 | 35.0 | - | - | - | - | - | - | 5.0 | - | - | - | - | 0.0 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 119.0 | 33.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.4 |
| 120.0 | 25.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 127.0 | 34.0 | - | - | - | - | - | - | 3.3 | - | - | - | - | 0.0 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 2.5 |

## Labridae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 24.0 | - | - | - | - | - | - | 4.1 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |

## *Halichoeres* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 123.0 | 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.2 |
| 123.0 | 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.5 |

## *Oxyjulis californica*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 | 40.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 87.0 | 70.0 | - | - | - | - | - | 7.2 | - | - | - | - | - | - |
| 90.0 | 60.0 | - | - | - | - | - | 5.9 | - | - | - | - | - | - |
| 90.0 | 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 16.1 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |

TABLE 4. (cont.)

*Oxyjulis californica* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 80.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 97.0 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 12.1 | - | - | - | - | - |
| 97.0 50.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 26.0 | - | - | - | - | - |
| 103.0 30.0 | - | - | - | - | - | - | 10.9 | - | - | - | - | - |
| 107.0 31.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 110.0 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 13.5 | - | - | - | - | 0.0 |
| 120.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 120.0 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 120.0 55.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | 0.0 |

*Semicossyphus pulcher*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 110.0 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |
| 120.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

*Chromis punctipinnis*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 28.0 | - | - | - | - | - | 4.5 | - | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 8.7 | - | - | - | - | - |
| 113.0 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

*Mugil* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |

*Howella brodiei*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 140.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Brama* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |

Carangidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 117.0 60.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | 0.0 |

*Seriola lalandi*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 119.0 33.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 120.0 50.0 | - | - | - | - | - | - | 7.2 | - | - | - | - | 0.0 |
| 127.0 34.0 | - | - | - | - | - | - | 3.3 | - | - | - | - | 0.0 |
| 130.0 35.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |

*Trachurus symmetricus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 60.0 | - | - | - | - | - | 30.7 | - | - | - | - | - | - |
| 80.0 65.0 | - | - | - | - | - | 20.6 | - | - | - | - | - | - |
| 80.0 70.0 | - | - | - | - | - | 54.6 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 41.8 | - | - | - | - | - | - |
| 83.0 65.0 | - | - | - | - | - | 15.1 | - | - | - | - | - | - |
| 83.0 70.0 | - | - | - | - | - | 53.3 | - | - | - | - | - | - |
| 83.0 80.0 | - | - | - | - | - | 6.9 | - | - | - | - | - | - |
| 83.0 90.0 | - | - | - | - | - | 26.0 | - | - | - | - | - | - |
| 87.0 60.0 | - | - | - | - | - | 27.0 | - | - | - | - | - | - |
| 87.0 65.0 | - | - | - | - | - | 13.0 | - | - | - | - | - | - |
| 87.0 70.0 | - | - | - | - | - | 127.2 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 4.1 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 23.8 | - | - | - | - | - | - |
| 90.0 53.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 172.9 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 16.7 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 33.7 | - | - | - | - | - | - |
| 90.0 80.0 | - | - | - | - | - | 6.0 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 35.5 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 44.2 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 10.2 | - | - | - | - | - | - |

TABLE 4. (cont.)

*Trachurus symmetricus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 28.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 50.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 55.6 | - | - | - | - | - |
| 93.0 | 60.0 | - | - | - | - | - | - | 16.8 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 93.0 | 70.0 | - | - | - | - | - | - | 6.4 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 8.4 | - | - | - | - | - | - |
| 93.0 | 110.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 10.0 | - | - | - | - | - | - |
| 93.0 | 130.0 | - | - | - | - | - | 30.2 | - | - | - | - | - | - |
| 97.0 | 40.0 | - | - | - | - | - | - | 30.2 | - | - | - | - | - |
| 97.0 | 45.0 | - | - | - | - | - | - | 14.3 | - | - | - | - | - |
| 97.0 | 50.0 | - | - | - | - | - | - | 28.2 | - | - | - | - | - |
| 97.0 | 55.0 | - | - | - | - | - | - | 43.8 | - | - | - | - | - |
| 97.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 8.7 | - | - | - | - | - |
| 97.0 | 80.0 | - | - | - | - | - | - | 6.3 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | - |
| 100.0 | 35.0 | - | - | - | - | - | - | 54.3 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 14.1 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 37.3 | - | - | - | - | - |
| 100.0 | 55.0 | - | - | - | - | - | - | 16.5 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 10.4 | - | - | - | - | - |
| 100.0 | 70.0 | - | - | - | - | - | - | 7.6 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 33.9 | - | - | - | - | - |
| 103.0 | 45.0 | - | - | - | - | - | - | 29.9 | - | - | - | - | - |
| 103.0 | 50.0 | - | - | - | - | - | - | 16.7 | - | - | - | - | - |
| 103.0 | 55.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | - |
| 103.0 | 60.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 15.2 | - | - | - | - | - |
| 103.0 | 70.0 | - | - | - | - | - | - | 21.1 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 6.3 | - | - | - | - | 0.0 |
| 107.0 | 45.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 107.0 | 50.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 107.0 | 55.0 | - | - | - | - | - | - | 13.9 | - | - | - | - | 0.0 |
| 107.0 | 60.0 | - | - | - | - | - | - | 11.4 | - | - | - | - | 0.0 |
| 107.0 | 65.0 | - | - | - | - | - | - | 31.4 | - | - | - | - | 0.0 |
| 107.0 | 80.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | - |
| 110.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 110.0 | 70.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Trachurus symmetricus* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 30.0 | - | - | - | - | - | - | 3.4 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 113.0 45.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 113.0 50.0 | - | - | - | - | - | - | 7.9 | - | - | - | - | 0.0 |
| 117.0 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 120.0 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 123.0 42.0 | - | - | - | - | - | - | 4.5 | - | - | - | - | 0.0 |

*Coryphaena hippurus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.0 36.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.1 |

Gerreidae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137.0 22.0 | - | - | - | - | - | - | - | - | - | - | - | 1.0 |
| 137.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 39.3 |

*Girella nigricans*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |

*Medialuna californiensis*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 45.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | - |
| 97.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 35.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 113.0 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |

*Caulolatilus princeps*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 119.0 33.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

## Sciaenidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 55.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 13.8 | - | - | - | - | - |
| 93.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 17.8 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 239.3 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 17.3 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 4.2 | - | - | - | - | - |
| 103.0 | 55.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 82.1 |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 107.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 110.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 20.3 |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 1.8 |
| 110.0 | 40.0 | - | - | - | - | - | - | 8.9 | - | - | - | - | 0.0 |
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 | 29.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 16.1 |
| 117.0 | 30.0 | - | - | - | - | - | - | 42.4 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 10.0 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 4.6 | - | - | - | - | 0.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.4 |
| 120.0 | 50.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 4.5 |

## Serranidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 19.0 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 18.4 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 117.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 10.3 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 13.7 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 12.0 |
| 120.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |

TABLE 4. (cont.)

## Serranidae (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.0 | 36.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 3.3 |
| 123.0 | 37.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 3.2 |
| 123.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 127.0 | 45.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 0.0 |
| 127.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 52.9 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 102.6 |

## Scombridae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 26.3 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 46.2 | - | - | - | - | - |
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 127.0 | 34.0 | - | - | - | - | - | - | 16.6 | - | - | - | - | 0.0 |
| 127.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 130.0 | 35.0 | - | - | - | - | - | - | 6.1 | - | - | - | - | 0.0 |

## *Sarda chiliensis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.0 | 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |

## *Scomber japonicus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.0 | 130.0 | - | - | - | - | - | 18.5 | - | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 10.9 | - | - | - | - | - |
| 97.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 107.0 | 40.0 | - | - | - | - | - | - | 13.0 | - | - | - | - | 0.0 |
| 110.0 | 40.0 | - | - | - | - | - | - | 8.9 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 18.9 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 10.0 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 13.9 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 35.6 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 11.2 | - | - | - | - | 0.0 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 25.2 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |

TABLE 4. (cont.)

## Trichiuridae

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 140.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 119.0 33.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |
| 120.0 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.4 |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 123.0 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 28.2 |
| 127.0 34.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 8.5 |
| 127.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.7 |
| 127.0 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.1 |

## *Sphyraena argentea*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 28.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 97.0 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 107.0 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 11.0 | - | - | - | - | 0.0 |
| 120.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 127.0 34.0 | - | - | - | - | - | - | 23.2 | - | - | - | - | 0.0 |

## *Icichthys lockingtoni*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 51.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 60.0 | - | - | - | - | - | 33.8 | - | - | - | - | - | - |
| 80.0 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 80.0 80.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 83.0 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 60.0 | - | - | - | - | - | 15.2 | - | - | - | - | - | - |
| 83.0 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 70.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 70.0 | - | - | - | - | - | 7.2 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 60.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 90.0 65.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 70.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 90.0 80.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 93.0 50.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 93.0 55.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 93.0 60.0 | - | - | - | - | - | - | 16.8 | - | - | - | - | - |

TABLE 4. (cont.)

*Peprilus simillimus*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 28.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | - |
| 93.0 55.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | - |
| 97.0 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 97.0 32.0 | - | - | - | - | - | - | 10.9 | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 13.2 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 110.0 50.0 | - | - | - | - | - | - | 27.5 | - | - | - | - | 0.0 |
| 113.0 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 26.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.3 |
| 117.0 30.0 | - | - | - | - | - | - | 84.8 | - | - | - | - | 0.0 |
| 117.0 35.0 | - | - | - | - | - | - | 52.3 | - | - | - | - | 0.0 |
| 117.0 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 6.2 |
| 119.0 33.0 | - | - | - | - | - | - | 9.2 | - | - | - | - | 0.0 |
| 120.0 30.0 | - | - | - | - | - | - | 8.0 | - | - | - | - | 0.0 |
| 120.0 35.0 | - | - | - | - | - | - | 65.8 | - | - | - | - | 0.0 |
| 120.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 4.8 |
| 120.0 50.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | 0.0 |
| 127.0 34.0 | - | - | - | - | - | - | 6.6 | - | - | - | - | 0.0 |
| 127.0 60.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 0.0 |

*Tetragonurus cuvieri*

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 90.0 | - | - | - | - | - | 2.4 | - | - | - | - | - | - |
| 90.0 100.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 110.0 | - | - | - | - | - | 22.1 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 13.2 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 12.8 | - | - | - | - | - | - |
| 93.0 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 110.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 7.5 | - | - | - | - | - | - |
| 93.0 130.0 | - | - | - | - | - | 12.6 | - | - | - | - | - | - |
| 93.0 140.0 | - | - | - | - | - | 25.2 | - | - | - | - | - | - |
| 97.0 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 97.0 80.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 100.0 70.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | - |
| 100.0 80.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 45.0 | - | - | - | - | - | - | 6.9 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |

TABLE 4. (cont.)

*Tetragonurus cuvieri* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 80.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 107.0 | 55.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | 0.0 |
| 107.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 | 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 110.0 | 40.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 110.0 | 70.0 | - | - | - | - | - | - | 2.2 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 113.0 | 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 113.0 | 60.0 | - | - | - | - | - | - | 16.2 | - | - | - | - | 0.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 7.2 | - | - | - | - | 0.0 |
| 117.0 | 55.0 | - | - | - | - | - | - | 16.4 | - | - | - | - | 0.0 |
| 117.0 | 80.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 | 55.0 | - | - | - | - | - | - | 7.8 | - | - | - | - | 0.0 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |

Chiasmodontidae

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 110.0 | 40.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 113.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.5 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 5.3 |

Pleuronectiformes

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |

*Citharichthys* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 | 65.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 | 28.0 | - | - | - | - | - | 9.0 | - | - | - | - | - | - |
| 90.0 | 32.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 | 37.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | - |
| 93.0 | 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.0 | 30.0 | - | - | - | - | - | - | 71.3 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 13.2 | - | - | - | - | - |
| 100.0 | 30.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 20.3 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 8.6 |
| 107.0 | 32.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 39.5 |
| 107.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 96.1 |
| 107.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 107.0 | 70.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 35.0 | - | - | - | - | - | - | 5.7 | - | - | - | - | 21.7 |
| 110.0 | 40.0 | - | - | - | - | - | - | 65.1 | - | - | - | - | 10.6 |
| 110.0 | 45.0 | - | - | - | - | - | - | 10.5 | - | - | - | - | 10.6 |
| 110.0 | 50.0 | - | - | - | - | - | - | 457.5 | - | - | - | - | 11.4 |
| 110.0 | 55.0 | - | - | - | - | - | - | 41.5 | - | - | - | - | 3.7 |
| 110.0 | 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 3.1 |
| 110.0 | 65.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.9 |
| 110.0 | 70.0 | - | - | - | - | - | - | 11.1 | - | - | - | - | 0.0 |
| 113.0 | 29.0 | - | - | - | - | - | - | 1.5 | - | - | - | - | 0.0 |
| 113.0 | 30.0 | - | - | - | - | - | - | 10.3 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 4.6 |
| 113.0 | 45.0 | - | - | - | - | - | - | 8.3 | - | - | - | - | 76.4 |
| 113.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.3 |
| 113.0 | 65.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 0.0 |
| 113.0 | 70.0 | - | - | - | - | - | - | 32.0 | - | - | - | - | 0.0 |
| 117.0 | 25.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | 0.0 |
| 117.0 | 26.0 | - | - | - | - | - | - | 46.6 | - | - | - | - | 0.0 |
| 117.0 | 30.0 | - | - | - | - | - | - | 145.8 | - | - | - | - | 12.4 |
| 117.0 | 35.0 | - | - | - | - | - | - | 288.8 | - | - | - | - | 5.6 |
| 117.0 | 40.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 3.0 |
| 117.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 40.5 |
| 117.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 80.9 |
| 117.0 | 60.0 | - | - | - | - | - | - | 9.6 | - | - | - | - | 42.6 |
| 117.0 | 65.0 | - | - | - | - | - | - | 9.4 | - | - | - | - | 34.2 |
| 117.0 | 70.0 | - | - | - | - | - | - | 22.0 | - | - | - | - | - |
| 118.0 | 39.0 | - | - | - | - | - | - | 45.4 | - | - | - | - | 13.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 2670.4 | - | - | - | - | 9.4 |
| 120.0 | 24.0 | - | - | - | - | - | - | 24.7 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 232.6 | - | - | - | - | 2.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 965.6 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 1882.4 | - | - | - | - | 0.0 |
| 120.0 | 40.0 | - | - | - | - | - | - | 83.7 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 459.8 | - | - | - | - | 372.8 |
| 120.0 | 50.0 | - | - | - | - | - | - | 223.2 | - | - | - | - | 125.5 |

TABLE 4. (cont.)

*Citharichthys* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 116.0 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 41.9 |
| 120.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 86.5 |
| 123.0 | 36.0 | - | - | - | - | - | - | 33.3 | - | - | - | - | 124.3 |
| 123.0 | 37.0 | - | - | - | - | - | - | 30.9 | - | - | - | - | 216.2 |
| 123.0 | 42.0 | - | - | - | - | - | - | 61.3 | - | - | - | - | 0.0 |
| 123.0 | 45.0 | - | - | - | - | - | - | 12.4 | - | - | - | - | 8.5 |
| 123.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 13.5 |
| 123.0 | 55.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 25.8 |
| 123.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 130.5 |
| 127.0 | 33.0 | - | - | - | - | - | - | 40.9 | - | - | - | - | 20.6 |
| 127.0 | 34.0 | - | - | - | - | - | - | 136.1 | - | - | - | - | 0.0 |
| 127.0 | 40.0 | - | - | - | - | - | - | 5.3 | - | - | - | - | 8.3 |
| 127.0 | 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 127.0 | 50.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | 15.7 |
| 127.0 | 55.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | 54.5 |
| 127.0 | 60.0 | - | - | - | - | - | - | 7.0 | - | - | - | - | 3.1 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 9.5 |
| 130.0 | 50.0 | - | - | - | - | - | - | - | - | - | - | - | 6.1 |
| 133.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 42.5 |
| 133.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 2.9 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 7.1 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 31.7 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 45.4 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 14.7 |

*Citharichthys stigmaeus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 87.0 | 55.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 93.0 | 45.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 93.0 | 55.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | - |
| 93.0 | 90.0 | - | - | - | - | - | 5.6 | - | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | - |
| 97.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 110.0 | 40.0 | - | - | - | - | - | - | 5.9 | - | - | - | - | 2.7 |
| 110.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 55.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.7 |
| 113.0 | 60.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Citharichthys stigmaeus* (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 118.0 | 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.0 |

*Hippoglossina stomata*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 123.0 | 36.0 | - | - | - | - | - | - | 7.4 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 7.7 | - | - | - | - | 1.6 |
| 127.0 | 34.0 | - | - | - | - | - | - | 3.3 | - | - | - | - | 0.0 |
| 133.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.7 |

*Paralichthys californicus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 43.0 | - | - | - | - | - | 5.4 | - | - | - | - | - | - |
| 93.0 | 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 1.8 | - | - | - | - | 5.1 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 120.0 | 24.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | 1.4 |
| 120.0 | 40.0 | - | - | - | - | - | - | 13.9 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 1.0 |

*Xystreurys liolepis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 119.0 | 33.0 | - | - | - | - | - | - | 16.2 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 11.0 | - | - | - | - | 0.0 |
| 123.0 | 36.0 | - | - | - | - | - | - | 9.3 | - | - | - | - | 0.0 |
| 123.0 | 37.0 | - | - | - | - | - | - | 3.9 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Lepidopsetta bilineata*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.0 | 47.0 | – | – | – | – | – | 3.1 | – | – | – | – | – | – |
| 87.0 | 50.0 | – | – | – | – | – | 2.2 | – | – | – | – | – | – |

*Lyopsetta exilis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 51.0 | – | – | – | – | – | 6.2 | – | – | – | – | – | – |
| 80.0 | 55.0 | – | – | – | – | – | 2.6 | – | – | – | – | – | – |
| 82.0 | 47.0 | – | – | – | – | – | 6.2 | – | – | – | – | – | – |
| 117.0 | 26.0 | – | – | – | – | – | – | 2.9 | – | – | – | – | 0.0 |

*Microstomus pacificus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | – | – | – | – | – | 3.1 | – | – | – | – | – | – |
| 80.0 | 80.0 | – | – | – | – | – | 2.8 | – | – | – | – | – | – |
| 83.0 | 60.0 | – | – | – | – | – | 3.8 | – | – | – | – | – | – |
| 90.0 | 60.0 | – | – | – | – | – | 2.9 | – | – | – | – | – | – |
| 90.0 | 65.0 | – | – | – | – | – | 2.8 | – | – | – | – | – | – |
| 90.0 | 70.0 | – | – | – | – | – | 2.8 | – | – | – | – | – | – |
| 90.0 | 80.0 | – | – | – | – | – | 3.0 | – | – | – | – | – | – |
| 93.0 | 40.0 | – | – | – | – | – | – | 2.8 | – | – | – | – | – |
| 93.0 | 50.0 | – | – | – | – | – | – | 3.0 | – | – | – | – | – |
| 93.0 | 80.0 | – | – | – | – | – | – | 2.9 | – | – | – | – | – |
| 100.0 | 55.0 | – | – | – | – | – | – | 4.1 | – | – | – | – | – |
| 107.0 | 35.0 | – | – | – | – | – | – | 3.1 | – | – | – | – | 0.0 |
| 110.0 | 40.0 | – | – | – | – | – | – | 3.0 | – | – | – | – | 0.0 |

*Parophrys vetulus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.0 | 33.0 | – | – | – | – | – | 1.9 | – | – | – | – | – | – |
| 90.0 | 28.0 | – | – | – | – | – | 2.2 | – | – | – | – | – | – |
| 93.0 | 28.0 | – | – | – | – | – | – | 5.5 | – | – | – | – | – |
| 93.0 | 30.0 | – | – | – | – | – | – | 6.5 | – | – | – | – | – |
| 100.0 | 29.0 | – | – | – | – | – | – | 2.6 | – | – | – | – | – |
| 120.0 | 35.0 | – | – | – | – | – | – | 2.7 | – | – | – | – | 0.0 |

*Pleuronichthys* spp.

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 55.0 | – | – | – | – | – | 5.1 | – | – | – | – | – | – |

TABLE 4. (cont.)

*Pleuronichthys* spp. (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 83.0 | 51.0 | - | - | - | - | - | 1.3 | - | - | - | - | - | - |
| 83.0 | 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 87.0 | 50.0 | - | - | - | - | - | 4.3 | - | - | - | - | - | - |
| 93.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 110.0 | 32.0 | - | - | - | - | - | - | 1.3 | - | - | - | - | 0.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 2.1 | - | - | - | - | 0.0 |
| 120.0 | 45.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |

*Pleuronichthys coenosus*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.0 | 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |

*Pleuronichthys ritteri*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 | 24.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.4 |
| 120.0 | 40.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |

*Pleuronichthys verticalis*

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 | 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 82.0 | 47.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 83.0 | 40.0 | - | - | - | - | - | 2.3 | - | - | - | - | - | - |
| 87.0 | 33.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 93.0 | 30.0 | - | - | - | - | - | - | 3.2 | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 6.7 | - | - | - | - | - |
| 97.0 | 30.0 | - | - | - | - | - | - | 11.9 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 | 30.0 | - | - | - | - | - | - | 6.9 | - | - | - | - | 0.0 |
| 117.0 | 26.0 | - | - | - | - | - | - | 11.6 | - | - | - | - | 0.0 |
| 117.0 | 30.0 | - | - | - | - | - | - | 10.6 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 39.8 | - | - | - | - | 0.0 |
| 119.0 | 33.0 | - | - | - | - | - | - | 18.5 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 6.8 | - | - | - | - | 0.0 |
| 120.0 | 30.0 | - | - | - | - | - | - | 21.3 | - | - | - | - | 0.0 |
| 120.0 | 35.0 | - | - | - | - | - | - | 27.4 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

*Pleuronichthys verticalis* (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 50.0 | - | - | - | - | - | - | 7.2 | - | - | - | - | 0.0 |
| 123.0 36.0 | - | - | - | - | - | - | 20.4 | - | - | - | - | 0.0 |
| 123.0 37.0 | - | - | - | - | - | - | 1.9 | - | - | - | - | 0.0 |
| 127.0 33.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | 0.0 |
| 127.0 34.0 | - | - | - | - | - | - | 3.3 | - | - | - | - | 0.0 |

*Symphurus* spp.

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 35.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 0.0 |
| 120.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.4 |
| 123.0 37.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.6 |
| 123.0 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 127.0 45.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 130.0 35.0 | - | - | - | - | - | - | 3.0 | - | - | - | - | 0.0 |
| 133.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.7 |
| 133.0 35.0 | - | - | - | - | - | - | - | - | - | - | - | 11.8 |
| 137.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |

Disintegrated fish larva

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 60.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 80.0 65.0 | - | - | - | - | - | 3.4 | - | - | - | - | - | - |
| 80.0 70.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 80.0 80.0 | - | - | - | - | - | 5.5 | - | - | - | - | - | - |
| 83.0 43.0 | - | - | - | - | - | 8.1 | - | - | - | - | - | - |
| 83.0 55.0 | - | - | - | - | - | 3.3 | - | - | - | - | - | - |
| 83.0 65.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 83.0 80.0 | - | - | - | - | - | 11.4 | - | - | - | - | - | - |
| 87.0 33.0 | - | - | - | - | - | 1.9 | - | - | - | - | - | - |
| 87.0 35.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 87.0 40.0 | - | - | - | - | - | 2.9 | - | - | - | - | - | - |
| 87.0 65.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 87.0 70.0 | - | - | - | - | - | 7.2 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 6.1 | - | - | - | - | - | - |
| 87.0 90.0 | - | - | - | - | - | 4.8 | - | - | - | - | - | - |
| 90.0 53.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 80.0 | - | - | - | - | - | 3.0 | - | - | - | - | - | - |
| 90.0 90.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 90.0 120.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 90.0 140.0 | - | - | - | - | - | 2.6 | - | - | - | - | - | - |
| 93.0 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |

TABLE 4. (cont.)

Disintegrated fish larva (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.0 | 30.0 | - | - | - | - | - | - | 6.5 | - | - | - | - | - |
| 93.0 | 35.0 | - | - | - | - | - | - | 16.6 | - | - | - | - | - |
| 93.0 | 65.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 93.0 | 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 93.0 | 140.0 | - | - | - | - | - | 2.8 | - | - | - | - | - | - |
| 97.0 | 29.0 | - | - | - | - | - | - | 1.0 | - | - | - | - | - |
| 97.0 | 32.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 97.0 | 35.0 | - | - | - | - | - | - | 39.5 | - | - | - | - | - |
| 97.0 | 70.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 97.0 | 80.0 | - | - | - | - | - | - | 3.1 | - | - | - | - | - |
| 100.0 | 29.0 | - | - | - | - | - | - | 13.2 | - | - | - | - | - |
| 100.0 | 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 100.0 | 50.0 | - | - | - | - | - | - | 3.4 | - | - | - | - | - |
| 100.0 | 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 100.0 | 80.0 | - | - | - | - | - | - | 7.7 | - | - | - | - | - |
| 103.0 | 29.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | - |
| 103.0 | 30.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | - |
| 103.0 | 35.0 | - | - | - | - | - | - | 4.9 | - | - | - | - | - |
| 103.0 | 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 | 50.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | - |
| 103.0 | 65.0 | - | - | - | - | - | - | 5.1 | - | - | - | - | - |
| 103.0 | 80.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 107.0 | 31.0 | - | - | - | - | - | - | 3.5 | - | - | - | - | 0.0 |
| 107.0 | 40.0 | - | - | - | - | - | - | 6.5 | - | - | - | - | 2.6 |
| 107.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.8 |
| 110.0 | 35.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 45.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.7 |
| 110.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 110.0 | 55.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 110.0 | 60.0 | - | - | - | - | - | - | 8.4 | - | - | - | - | 0.0 |
| 110.0 | 70.0 | - | - | - | - | - | - | 8.9 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 113.0 | 29.0 | - | - | - | - | - | - | 7.8 | - | - | - | - | 0.0 |
| 113.0 | 35.0 | - | - | - | - | - | - | 8.1 | - | - | - | - | 0.0 |
| 113.0 | 45.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | 5.9 |
| 113.0 | 60.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.8 |
| 113.0 | 65.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 0.0 |
| 117.0 | 25.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 0.8 |
| 117.0 | 30.0 | - | - | - | - | - | - | 10.6 | - | - | - | - | 0.0 |
| 117.0 | 40.0 | - | - | - | - | - | - | 5.4 | - | - | - | - | 8.9 |
| 117.0 | 45.0 | - | - | - | - | - | - | 2.4 | - | - | - | - | 0.0 |
| 117.0 | 65.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.6 |
| 118.0 | 39.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 120.0 | 24.0 | - | - | - | - | - | - | 2.1 | - | - | - | - | 0.0 |
| 120.0 | 25.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

Disintegrated fish larva (cont.)

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.0 40.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 0.0 |
| 120.0 70.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | 0.0 |
| 120.0 80.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.9 |
| 123.0 36.0 | - | - | - | - | - | - | 5.6 | - | - | - | - | 0.0 |
| 127.0 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 1.5 |
| 127.0 34.0 | - | - | - | - | - | - | 13.3 | - | - | - | - | 2.1 |
| 130.0 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 133.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 5.1 |
| 137.0 22.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |
| 137.0 23.0 | - | - | - | - | - | - | - | - | - | - | - | 1.5 |
| 137.0 30.0 | - | - | - | - | - | - | - | - | - | - | - | 2.5 |

Unidentified fish larva

| STATION | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.0 52.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 82.0 47.0 | - | - | - | - | - | 3.1 | - | - | - | - | - | - |
| 83.0 43.0 | - | - | - | - | - | 2.7 | - | - | - | - | - | - |
| 87.0 35.0 | - | - | - | - | - | 8.1 | - | - | - | - | - | - |
| 87.0 50.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 87.0 80.0 | - | - | - | - | - | 2.0 | - | - | - | - | - | - |
| 90.0 28.0 | - | - | - | - | - | 2.2 | - | - | - | - | - | - |
| 90.0 37.0 | - | - | - | - | - | 8.2 | - | - | - | - | - | - |
| 90.0 130.0 | - | - | - | - | - | 18.5 | - | - | - | - | - | - |
| 93.0 28.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 93.0 80.0 | - | - | - | - | - | - | 2.9 | - | - | - | - | - |
| 93.0 120.0 | - | - | - | - | - | 2.5 | - | - | - | - | - | - |
| 97.0 29.0 | - | - | - | - | - | - | 4.8 | - | - | - | - | - |
| 97.0 32.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | - |
| 97.0 40.0 | - | - | - | - | - | - | 114.8 | - | - | - | - | - |
| 100.0 29.0 | - | - | - | - | - | - | 7.9 | - | - | - | - | - |
| 100.0 30.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | - |
| 100.0 65.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | - |
| 103.0 29.0 | - | - | - | - | - | - | 6.2 | - | - | - | - | - |
| 103.0 40.0 | - | - | - | - | - | - | 5.2 | - | - | - | - | - |
| 103.0 50.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 55.0 | - | - | - | - | - | - | 10.9 | - | - | - | - | - |
| 103.0 60.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | - |
| 103.0 80.0 | - | - | - | - | - | - | 5.5 | - | - | - | - | - |
| 107.0 31.0 | - | - | - | - | - | - | 10.6 | - | - | - | - | 0.0 |
| 107.0 70.0 | - | - | - | - | - | - | 48.3 | - | - | - | - | 0.0 |
| 110.0 32.0 | - | - | - | - | - | - | 1.3 | - | - | - | - | 0.0 |
| 110.0 40.0 | - | - | - | - | - | - | 8.9 | - | - | - | - | 0.0 |
| 110.0 45.0 | - | - | - | - | - | - | 21.0 | - | - | - | - | 0.0 |

TABLE 4. (cont.)

Unidentified fish larva (cont.)

| STATION | | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEP. | OCT. | NOV. | DEC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.0 | 50.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 110.0 | 80.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 10.7 |
| 113.0 | 35.0 | - | - | - | - | - | - | 2.7 | - | - | - | - | 0.0 |
| 117.0 | 30.0 | - | - | - | - | - | - | 15.9 | - | - | - | - | 0.0 |
| 117.0 | 35.0 | - | - | - | - | - | - | 2.5 | - | - | - | - | 0.0 |
| 117.0 | 50.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.4 |
| 119.0 | 33.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 2.3 |
| 120.0 | 30.0 | - | - | - | - | - | - | 26.6 | - | - | - | - | 2.1 |
| 120.0 | 35.0 | - | - | - | - | - | - | 8.2 | - | - | - | - | 1.3 |
| 120.0 | 40.0 | - | - | - | - | - | - | 108.8 | - | - | - | - | 0.6 |
| 120.0 | 45.0 | - | - | - | - | - | - | 2.8 | - | - | - | - | 2.4 |
| 120.0 | 50.0 | - | - | - | - | - | - | 26.4 | - | - | - | - | 2.5 |
| 120.0 | 55.0 | - | - | - | - | - | - | 2.6 | - | - | - | - | 0.0 |
| 123.0 | 36.0 | - | - | - | - | - | - | 3.7 | - | - | - | - | 4.4 |
| 123.0 | 37.0 | - | - | - | - | - | - | 38.6 | - | - | - | - | 0.0 |
| 123.0 | 42.0 | - | - | - | - | - | - | 2.3 | - | - | - | - | 0.0 |
| 127.0 | 33.0 | - | - | - | - | - | - | 5.8 | - | - | - | - | 1.5 |
| 127.0 | 34.0 | - | - | - | - | - | - | 3.3 | - | - | - | - | 0.0 |
| 130.0 | 35.0 | - | - | - | - | - | - | 0.0 | - | - | - | - | 3.2 |
| 137.0 | 22.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |
| 137.0 | 23.0 | - | - | - | - | - | - | - | - | - | - | - | 3.0 |
| 137.0 | 30.0 | - | - | - | - | - | - | - | - | - | - | - | 5.0 |
| 137.0 | 35.0 | - | - | - | - | - | - | - | - | - | - | - | 11.7 |

TABLE 5. Summary of pooled occurrences of all larval fish taxa taken on CalCOFI surveys from 1961 to 1969. Taxa are listed in the same order as Table 4.

| NAME | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|---|---|---|---|
| Anguilliformes | 7 | 8 | 20 | 8 | 24 | 17 | 5 | 3 | 13 |
| *Etrumeus acuminatus* | 4 | 7 | 36 | 37 | 35 | 26 | 7 | 1 | 9 |
| *Opisthonema* spp. | – | – | – | – | 2 | 3 | – | – | – |
| *Sardinops sagax* | 53 | 58 | 99 | 88 | 104 | 143 | 31 | 10 | 79 |
| *Engraulis mordax* | 408 | 454 | 567 | 707 | 618 | 987 | 150 | 188 | 880 |
| *Argentina sialis* | 18 | 49 | 33 | 37 | 49 | 93 | 21 | 18 | 98 |
| *Microstoma microstoma* | 12 | 19 | 11 | 31 | 17 | 48 | 9 | 19 | 73 |
| *Nansenia candida* | 9 | 13 | 5 | 7 | 9 | 39 | 6 | 12 | 32 |
| *Nansenia crassa* | 29 | 15 | 30 | 33 | 22 | 48 | 8 | 5 | 40 |
| *Bathylagus* spp. | 18 | 1 | 54 | 1 | 7 | 18 | 6 | 35 | 215 |
| *Bathylagus milleri* | – | – | 2 | 3 | 1 | 1 | – | 1 | 33 |
| *Bathylagus ochotensis* | 57 | 66 | 98 | 196 | 127 | 260 | 28 | 106 | 359 |
| *Bathylagus pacificus* | 5 | 7 | 8 | 38 | 3 | 26 | – | 15 | 80 |
| *Bathylagus wesethi* | 149 | 168 | 160 | 235 | 220 | 461 | 99 | 90 | 328 |
| *Leuroglossus stilbius* | 202 | 225 | 236 | 360 | 300 | 449 | 43 | 116 | 498 |
| *Dolichopteryx* spp. | – | – | – | – | – | – | – | – | 1 |
| *Macropinna microstoma* | 1 | – | – | – | – | – | – | – | – |
| Osmeridae | – | – | 2 | – | – | – | – | – | 1 |
| Stomiiformes | 12 | 4 | 3 | 6 | 1 | 6 | 9 | 1 | 4 |
| Gonostomatidae | 2 | 5 | 12 | 8 | 18 | 8 | – | 4 | 126 |
| *Cyclothone* spp. | 214 | 277 | 241 | 247 | 265 | 593 | 80 | 65 | 346 |
| *Diplophos taenia* | 5 | 5 | 7 | – | 3 | 11 | 1 | 1 | 7 |
| *Ichthyococcus* spp. | 4 | 11 | 11 | 13 | 7 | 35 | 5 | 2 | 34 |
| *Vinciguerria lucetia* | 342 | 371 | 383 | 369 | 436 | 828 | 121 | 82 | 479 |
| *Vinciguerria poweriae* | 3 | 7 | 3 | 4 | 3 | 6 | – | – | 1 |
| *Woodsia nonsuchae* | – | – | 1 | – | – | – | – | – | – |
| Sternoptychidae | 54 | 71 | 45 | 79 | 59 | 250 | 28 | 48 | 469 |
| Astronesthidae | – | 2 | – | – | – | – | – | – | 1 |
| *Chauliodus macouni* | 28 | 28 | 31 | 68 | 57 | 171 | 9 | 46 | 189 |
| *Idiacanthus antrostomus* | 48 | 43 | 26 | 32 | 33 | 72 | 15 | 22 | 114 |
| *Aristostomias scintillans* | 9 | 10 | 9 | 6 | 9 | 12 | 2 | – | 11 |
| *Bathophilus* spp. | 5 | 10 | 4 | 3 | 4 | 5 | 2 | 1 | 2 |
| *Eustomias* spp. | 1 | 1 | – | 1 | 1 | – | – | 1 | – |
| *Photonectes* spp. | 7 | 3 | 2 | 2 | 6 | 4 | – | – | – |
| *Tactostoma macropus* | 7 | 4 | – | 4 | 2 | 16 | 3 | – | 4 |
| *Stomias atriventer* | 58 | 76 | 98 | 81 | 100 | 326 | 24 | 46 | 214 |
| Evermannellidae | 1 | 3 | 1 | 1 | 1 | – | – | – | – |
| Paralepididae | – | 3 | 5 | 10 | 3 | – | – | 3 | 6 |
| *Lestidiops ringens* | 50 | 80 | 58 | 63 | 67 | 232 | 36 | 52 | 231 |
| *Notolepis risso* | 9 | 12 | 9 | 7 | 9 | 12 | 2 | 8 | 18 |
| *Paralepis atlantica* | – | – | – | – | 1 | – | – | – | – |
| *Stemonosudis macrura* | 4 | 6 | – | 2 | 6 | 5 | – | 1 | 1 |
| *Sudis atrox* | 2 | 4 | – | 2 | 4 | – | – | – | – |
| *Aulopus* spp. | – | – | – | – | – | 1 | – | – | – |
| *Scopelosaurus* spp. | 16 | 10 | 8 | 16 | 19 | 21 | 6 | 3 | 36 |
| Scopelarchidae | 67 | 60 | 50 | 21 | 33 | 114 | 29 | 13 | 93 |

TABLE 5. (cont.)

| NAME | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|---|---|---|---|
| Myctophidae | 165 | 151 | 179 | 220 | 222 | 346 | 33 | 79 | 329 |
| *Ceratoscopelus townsendi* | 149 | 157 | 128 | 146 | 156 | 302 | 37 | 23 | 153 |
| *Diaphus* spp. | 77 | 56 | 46 | 101 | 80 | 187 | 46 | 34 | 110 |
| *Lampadena urophaos* | 53 | 45 | 50 | 25 | 32 | 62 | 10 | 1 | 23 |
| *Lampanyctus* spp. | 148 | 139 | 199 | 155 | 183 | 401 | 67 | 65 | 550 |
| *Lampanyctus regalis* | 13 | 12 | 2 | 20 | 9 | 46 | 12 | 11 | 19 |
| *Lampanyctus ritteri* | 154 | 204 | 120 | 189 | 234 | 523 | 43 | 72 | 155 |
| *Notolychnus valdiviae* | 29 | 13 | 22 | 16 | 21 | 22 | 7 | 1 | 10 |
| *Notoscopelus resplendens* | 59 | 41 | 50 | 39 | 44 | 54 | 11 | 3 | 29 |
| *Parvilux ingens* | - | - | - | - | - | - | - | - | 1 |
| *Stenobrachius leucopsarus* | 177 | 179 | 186 | 342 | 263 | 420 | 31 | 127 | 390 |
| *Triphoturus mexicanus* | 407 | 422 | 451 | 448 | 494 | 990 | 142 | 92 | 556 |
| *Triphoturus nigrescens* | 4 | - | - | - | 1 | - | - | - | - |
| *Benthosema pterota* | - | - | - | - | - | 3 | - | - | - |
| *Centrobranchus* spp. | 2 | 10 | - | 2 | 2 | - | 1 | - | 2 |
| *Diogenichthys* spp. | 54 | 62 | 88 | 61 | 11 | 165 | 16 | 13 | 79 |
| *Diogenichthys atlanticus* | 102 | 155 | 92 | 111 | 116 | 171 | 38 | 46 | 210 |
| *Diogenichthys laternatus* | 94 | 127 | 161 | 163 | 249 | 361 | 63 | 32 | 210 |
| *Electrona rissoi* | 3 | 5 | - | 3 | 2 | 3 | - | - | 7 |
| *Gonichthys tenuiculus* | 20 | 24 | 29 | 46 | 81 | 146 | 16 | 12 | 48 |
| *Hygophum* spp. | 4 | 3 | 29 | 6 | 11 | 4 | - | - | 13 |
| *Hygophum atratum* | 27 | 38 | 41 | 44 | 103 | 178 | 21 | 6 | 81 |
| *Hygophum reinhardtii* | 39 | 58 | 27 | 20 | 27 | 9 | 7 | - | 10 |
| *Loweina rara* | 8 | 4 | 5 | 4 | 8 | 6 | 1 | - | 11 |
| *Myctophum nitidulum* | 46 | 42 | 31 | 32 | 19 | 58 | 11 | 8 | 59 |
| *Protomyctophum crockeri* | 247 | 252 | 225 | 292 | 261 | 671 | 109 | 139 | 717 |
| *Protomyctophum thompsoni* | - | - | - | - | - | - | - | - | 9 |
| *Symbolophorus californiensis* | 82 | 140 | 78 | 116 | 111 | 291 | 38 | 61 | 157 |
| *Tarletonbeania crenularis* | 160 | 115 | 111 | 140 | 132 | 208 | 10 | 73 | 277 |
| *Synodus* spp. | 19 | 23 | 41 | 35 | 42 | 121 | 23 | - | 54 |
| *Bregmaceros* spp. | - | - | - | - | - | 2 | - | - | - |
| *Microgadus proximus* | - | - | - | 3 | - | 2 | - | - | - |
| *Merluccius productus* | 152 | 228 | 229 | 290 | 290 | 398 | 25 | 95 | 361 |
| *Physiculus* spp. | - | 1 | 1 | 1 | 3 | 2 | 1 | - | 2 |
| Macrouridae | 4 | 6 | 6 | 5 | 3 | 5 | 2 | 3 | 14 |
| Ophidiiformes | 16 | 16 | 35 | 49 | 37 | 69 | 10 | 16 | 45 |
| *Brosmophycis marginata* | - | 2 | 3 | 3 | 7 | 17 | 5 | 8 | 16 |
| Carapidae | - | 1 | - | 1 | - | - | - | - | - |
| *Chilara taylori* | 12 | 31 | 15 | 11 | 29 | 55 | 15 | - | 28 |
| *Ophidion scrippsae* | 2 | 10 | 61 | 19 | 40 | 67 | - | - | 34 |
| *Porichthys* spp. | 1 | - | 1 | 1 | - | 1 | 1 | - | 2 |
| Ceratioidei | 15 | 26 | 17 | 7 | 18 | 43 | - | - | 30 |
| Gobiesocidae | 3 | - | 5 | 8 | 9 | 12 | - | - | 1 |
| Exocoetidae | 2 | - | 1 | 3 | 2 | 10 | - | 2 | 5 |
| Hemiramphidae | - | - | - | 2 | 1 | - | - | - | - |
| *Cololabis saira* | 11 | 6 | 13 | 22 | 9 | 31 | 3 | 10 | 32 |
| Atherinidae | - | - | 9 | 23 | 8 | 11 | 2 | 2 | 5 |
| Trachipteridae | 27 | 27 | 20 | 22 | 19 | 75 | 6 | 9 | 80 |
| Eutaeniophoridae | - | - | - | - | - | - | - | - | 5 |

TABLE 5. (cont.)

| NAME | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|---|---|---|---|
| *Melamphaes* spp. | 117 | 106 | 134 | 114 | 151 | 340 | 68 | 84 | 333 |
| *Poromitra* spp. | 13 | 18 | 28 | 28 | 32 | 51 | 6 | 14 | 27 |
| *Scopeloberyx robustus* | 4 | 2 | 2 | - | 7 | - | - | - | 2 |
| *Scopelogadus bispinosus* | 18 | 34 | 10 | 31 | 13 | 60 | 4 | 5 | 17 |
| *Macroramphosus gracilis* | 3 | 6 | 6 | 3 | 7 | 6 | 7 | - | 11 |
| *Syngnathus* spp. | 6 | 5 | 8 | 12 | 12 | 15 | 6 | 3 | 10 |
| Agonidae | 3 | 6 | 16 | 24 | 22 | 20 | 5 | 4 | 9 |
| *Anoplopoma fimbria* | - | - | - | 1 | - | - | - | - | - |
| Cottidae | 11 | 21 | 33 | 45 | 37 | 43 | 5 | 12 | 40 |
| *Scorpaenichthys marmoratus* | 3 | 3 | 7 | 13 | 20 | 15 | - | 5 | 24 |
| Cyclopteridae | 8 | 2 | 12 | 14 | 16 | 14 | 4 | 4 | 17 |
| Hexagrammidae | - | 1 | - | 2 | 1 | 1 | - | 1 | 6 |
| *Ophiodon elongatus* | - | - | - | - | - | 1 | - | 1 | 1 |
| *Oxylebius pictus* | 6 | 3 | 7 | 27 | 13 | 7 | - | 5 | 20 |
| *Zaniolepis* spp. | 2 | 9 | 12 | 11 | 7 | 26 | 7 | 3 | 19 |
| Scorpaenidae | - | 1 | 2 | - | - | 1 | 1 | - | - |
| *Scorpaena* spp. | 11 | 11 | 17 | 16 | 25 | 62 | 8 | 3 | 12 |
| *Sebastes* spp. | 311 | 273 | 289 | 492 | 387 | 698 | 81 | 207 | 705 |
| *Sebastolobus* spp. | 8 | 2 | 17 | 20 | 20 | 87 | 4 | 14 | 47 |
| *Prionotus* spp. | 10 | 9 | 40 | 15 | 30 | 25 | - | - | 19 |
| Acanthuridae | - | - | 1 | - | - | - | - | - | - |
| Blennioidei | 1 | - | 14 | 6 | 4 | - | 3 | - | 4 |
| *Hypsoblennius* spp. | 11 | 14 | 68 | 69 | 73 | 77 | 19 | 6 | 61 |
| Clinidae | 12 | 21 | 31 | 44 | 64 | 51 | 9 | 10 | 51 |
| Gobiidae | 31 | 41 | 87 | 80 | 104 | 198 | 36 | 19 | 138 |
| *Icosteus aenigmaticus* | 1 | 1 | 1 | 1 | - | 3 | - | - | 1 |
| Labridae | - | 2 | 9 | - | 7 | - | 2 | 3 | - |
| *Halichoeres* spp. | 12 | 12 | 40 | 18 | 36 | 50 | 4 | 1 | 28 |
| *Oxyjulis californica* | 23 | 22 | 34 | 15 | 31 | 97 | 23 | 15 | 58 |
| *Semicossyphus pulcher* | 6 | 10 | 21 | 7 | 27 | 28 | 4 | - | 8 |
| Pomacentridae | - | - | 10 | 4 | 8 | 5 | - | - | - |
| *Chromis punctipinnis* | 3 | 21 | 42 | 13 | 39 | 105 | 5 | 1 | 54 |
| *Hypsypops rubicundus* | - | - | 1 | - | 8 | 1 | - | - | - |
| *Mugil* spp. | - | - | - | 1 | 1 | 5 | 1 | - | - |
| Apogonidae | - | - | - | - | - | 1 | - | - | - |
| *Howella brodiei* | 16 | 7 | - | 5 | 4 | 3 | 1 | 1 | 4 |
| *Brama* spp. | 21 | 17 | 17 | 7 | 9 | 21 | 1 | - | 12 |
| Carangidae | - | 1 | 20 | 14 | 25 | 13 | 2 | - | 3 |
| *Seriola lalandi* | 5 | 12 | 15 | 7 | 14 | 30 | 5 | 4 | 9 |
| *Trachurus symmetricus* | 144 | 208 | 199 | 206 | 214 | 503 | 76 | 85 | 248 |
| *Caristius macropus* | - | - | - | - | 1 | 1 | - | - | - |
| *Coryphaena hippurus* | - | 7 | 2 | 1 | 10 | 5 | 1 | - | 1 |
| *Chaetodipterus zonatus* | - | - | 1 | - | - | - | - | - | - |
| Gerreidae | - | 2 | 15 | 10 | 14 | 12 | 2 | - | 4 |
| Haemulidae | - | 1 | 13 | 16 | 11 | 17 | - | - | 4 |
| *Girella nigricans* | 5 | 1 | 11 | 3 | 3 | 4 | 3 | 7 | 7 |
| *Medialuna californiensis* | 4 | 11 | 13 | 4 | 5 | 22 | 6 | 3 | 12 |
| *Caulolatilus princeps* | 4 | 3 | 2 | 3 | 7 | 5 | 1 | - | 2 |
| Mullidae | - | - | 2 | - | - | - | - | - | - |

TABLE 5. (cont )

| NAME | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|---|---|---|---|
| Sciaenidae | 28 | 42 | 85 | 135 | 147 | 157 | 32 | 38 | 195 |
| Serranidae | 10 | 6 | 68 | 38 | 59 | 91 | 23 | 2 | 72 |
| Sparidae | - | - | 1 | - | - | - | - | - | - |
| Polynemidae | - | - | - | - | - | 1 | - | - | - |
| Gempylidae | 7 | 15 | 6 | 5 | 8 | 7 | - | - | 1 |
| Scombridae | 3 | - | 3 | 2 | 4 | - | 8 | 2 | 2 |
| *Auxis* spp. | - | - | 2 | - | 8 | 4 | - | - | 2 |
| *Sarda chiliensis* | 7 | 3 | 10 | 8 | 9 | 29 | 1 | - | 30 |
| *Scomber japonicus* | 26 | 32 | 57 | 39 | 34 | 68 | 14 | - | 24 |
| *Scomberomorus* spp. | 1 | - | 1 | 1 | 5 | 3 | - | - | - |
| Trichiuridae | 10 | 23 | 27 | 17 | 27 | 74 | 10 | - | 23 |
| *Sphyraena argentea* | 6 | 6 | 22 | 10 | 25 | 31 | 7 | 4 | 15 |
| *Icichthys lockingtoni* | 38 | 39 | 52 | 78 | 53 | 131 | 18 | 48 | 202 |
| Nomeidae | - | - | 1 | 1 | 1 | 2 | - | - | 1 |
| *Peprilus simillimus* | 2 | 19 | 19 | 18 | 45 | 52 | 22 | 11 | 45 |
| *Tetragonurus cuvieri* | 45 | 76 | 98 | 46 | 31 | 74 | 36 | 5 | 48 |
| Chiasmodontidae | 25 | 22 | 39 | 13 | 40 | 60 | 6 | 10 | 41 |
| Pleuronectiformes | 2 | - | 13 | 7 | 4 | - | 1 | 1 | 7 |
| *Bothus* spp. | - | - | 2 | - | - | - | - | - | - |
| *Citharichthys* spp. | 186 | 221 | 281 | 243 | 342 | 590 | 108 | 101 | 611 |
| *Citharichthys stigmaeus* | 50 | 97 | 65 | 73 | 65 | 171 | 19 | 42 | 269 |
| *Hippoglossina stomata* | 24 | 15 | 44 | 42 | 44 | 83 | 12 | 5 | 52 |
| *Paralichthys californicus* | 21 | 37 | 57 | 96 | 107 | 81 | 13 | 13 | 60 |
| *Syacium ovale* | - | - | 3 | - | 1 | 3 | - | - | - |
| *Xystreurys liolepis* | 1 | 9 | 15 | 18 | 8 | 30 | 4 | - | 22 |
| *Glyptocephalus zachirus* | 2 | - | 9 | 18 | 4 | 36 | - | 14 | 15 |
| *Hypsopsetta guttulata* | 1 | - | 4 | 5 | 10 | 3 | - | - | 6 |
| *Lepidopsetta bilineata* | 1 | 1 | - | 1 | 2 | 3 | 2 | 2 | 1 |
| *Lyopsetta exilis* | 32 | 31 | 33 | 46 | 33 | 72 | 4 | 20 | 65 |
| *Microstomus pacificus* | 2 | - | 11 | 13 | 16 | 52 | 13 | 17 | 56 |
| *Parophrys vetulus* | 14 | 32 | 41 | 41 | 81 | 80 | 6 | 21 | 80 |
| *Platichthys stellatus* | - | - | - | - | - | 3 | - | - | - |
| *Pleuronichthys* spp. | 4 | 3 | 10 | 12 | 1 | - | 10 | 3 | 1 |
| *Pleuronichthys coenosus* | 2 | 2 | 6 | 9 | 5 | 11 | 1 | 3 | 15 |
| *Pleuronichthys decurrens* | 1 | 4 | - | 1 | 4 | 11 | - | 2 | 11 |
| *Pleuronichthys ritteri* | 5 | 3 | 12 | 12 | 9 | 8 | 2 | 1 | 7 |
| *Pleuronichthys verticalis* | 10 | 47 | 56 | 74 | 88 | 81 | 24 | 18 | 66 |
| *Psettichthys melanostictus* | 1 | 1 | 5 | 12 | 9 | 10 | - | 4 | 14 |
| *Symphurus* spp. | 18 | 41 | 73 | 48 | 75 | 138 | 10 | - | 71 |
| Soleidae | - | - | - | - | 1 | - | - | - | - |
| Tetraodontidae | - | - | - | - | 3 | - | - | - | - |
| Disintegrated fish larva | 184 | 223 | 274 | 311 | 319 | 542 | 84 | 74 | 458 |
| Unidentified fish larva | 147 | 147 | 256 | 217 | 263 | 485 | 60 | 72 | 422 |

INDEX

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

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(January 1988)

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