

Recovered Historic Catch and Weight - Length Data of Nearshore Fish Populations on Sturgeon and Roberts Banks, Fraser River Estuary, British Columbia

Herb Edward Herunter, Megan Francisco, Tolulope Amuwo, and John Steveson Macdonald

Science Branch
Pacific Region
Ocean Sciences Division
Fisheries and Oceans Canada
Pacific Science Enterprise Center
West Vancouver, British Columbia
V7V 1H2

2024

**Canadian Technical Report of
Fisheries and Aquatic Sciences 3626**



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Canada

Canadian Technical Report of Fisheries and Aquatic Sciences

Technical reports contain scientific and technical information that contributes to existing knowledge but which is not normally appropriate for primary literature. Technical reports are directed primarily toward a worldwide audience and have an international distribution. No restriction is placed on subject matter and the series reflects the broad interests and policies of Fisheries and Oceans Canada, namely, fisheries and aquatic sciences.

Technical reports may be cited as full publications. The correct citation appears above the abstract of each report. Each report is abstracted in the data base *Aquatic Sciences and Fisheries Abstracts*.

Technical reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page.

Numbers 1-456 in this series were issued as Technical Reports of the Fisheries Research Board of Canada. Numbers 457-714 were issued as Department of the Environment, Fisheries and Marine Service, Research and Development Directorate Technical Reports. Numbers 715-924 were issued as Department of Fisheries and Environment, Fisheries and Marine Service Technical Reports. The current series name was changed with report number 925.

Rapport technique canadien des sciences halieutiques et aquatiques

Les rapports techniques contiennent des renseignements scientifiques et techniques qui constituent une contribution aux connaissances actuelles, mais qui ne sont pas normalement appropriés pour la publication dans un journal scientifique. Les rapports techniques sont destinés essentiellement à un public international et ils sont distribués à cet échelon. Il n'y a aucune restriction quant au sujet; de fait, la série reflète la vaste gamme des intérêts et des politiques de Pêches et Océans Canada, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports techniques peuvent être cités comme des publications à part entière. Le titre exact figure au-dessus du résumé de chaque rapport. Les rapports techniques sont résumés dans la base de données *Résumés des sciences aquatiques et halieutiques*.

Les rapports techniques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre.

Les numéros 1 à 456 de cette série ont été publiés à titre de Rapports techniques de l'Office des recherches sur les pêcheries du Canada. Les numéros 457 à 714 sont parus à titre de Rapports techniques de la Direction générale de la recherche et du développement, Service des pêches et de la mer, ministère de l'Environnement. Les numéros 715 à 924 ont été publiés à titre de Rapports techniques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 925.

Canadian Technical Report of
Fisheries and Aquatic Sciences 3626

2024

Recovered Historic Catch and Weight – Length Data of Nearshore Fish Populations on
Sturgeon and Roberts Banks, Fraser River Estuary, British Columbia

By

Herb Edward Herunter, Megan Francisco, Tolulope Amuwo, and John Steveson
Macdonald

Science Branch
Pacific Region
Ocean Science Division
Fisheries and Oceans Canada
Pacific Science Enterprise Center
West Vancouver, British Columbia
V7V 1H2

© His Majesty the King in Right of Canada, as represented by the Minister of the
Department of Fisheries and Oceans, 2024.

Cat. Fs97-6/3626E-PDF ISBN 978-0-660-72667-0 ISSN 1488-5379

Correct Citation for this Publication:

Herunter, H.E., Francisco, M., Amuwo, T., and Macdonald, J.S. 2024. Recovered
Historic Catch and Weight – Length Data of Nearshore Fish Populations on Sturgeon
and Roberts Banks, Fraser River Estuary, British Columbia. Can. Tech. Rep. Fish.
Aquat. Sci. 3626: vii + 333 p.

Table of Contents

Abstract	vi
Résumé.....	vii
1.0 Introduction.....	1
1.1 Coastal Environmental Baseline Program.....	1
1.2 Study Area	1
1.3 Weight - Length Data	2
1.4 Rationale.....	2
2.0 Methods.....	2
2.1 Sampling Locations.....	2
2.2 Sampling Methods	3
2.3 Database Assembly	4
2.4 Data Analysis	5
3.0 Results	6
3.1 Database.....	6
3.2 Water Quality	6
3.3 Fish Community	6
3.4 Weight - Length Parameters and Condition Factor	7
4.0 Discussion.....	7
Acknowledgements	9
References.....	10
Appendix I: Water Quality Data (Water Characteristics).....	26
Appendix II: Catch Data.....	32
Appendix III: Weight – Length Data and Condition Factors.....	89
i. Aleutian sculpin, <i>Cottus aleuticus</i>	89
ii. Arrow goby, <i>Clevelandia ios</i>	89
iii. Bay pipefish, <i>Syngnathus griseolineatus</i>	106
iv. Brassy minnow, <i>Hybognathus hankinsoni</i>	110
v. Buffalo sculpin, <i>Enophrys bison</i>	110
vi. Butter sole, <i>Isopetta isolepis</i>	112
vii. Capelin, <i>Mallotus villosus</i>	112
viii. Chinook salmon, <i>Oncorhynchus tshawytscha</i>	114

ix.	Chum salmon, <i>Oncorhynchus keta</i>	136
x.	C-O sole, <i>Pleuronichtys census</i>	142
xi.	Coho salmon, <i>Oncorhynchus kisutch</i>	142
xii.	Crescent gunnel, <i>Pholis laeta</i>	143
xiii.	English sole, <i>Parophrys vetulus</i>	149
xiv.	Flathead sole, <i>Hippoglossoides elassodon</i>	163
xv.	Great sculpin, <i>Myoxocephalus polyacanthocephalus</i>	163
xvi.	High cockscomb, <i>Anoplarchus purpurescens</i>	163
xvii.	Kelp greenling, <i>Hexagrammos decogrammus</i>	163
xviii.	Largescale sucker, <i>Catostomus macrocheilus</i>	163
xix.	Lobefin snailfish, <i>Polypera greeni</i>	164
xx.	Masked greenling, <i>Hexagrammos octogrammus</i>	164
xxi.	Pacific herring, <i>Clupea harengus pallasii</i>	164
xxii.	Pacific sanddab, <i>Citharichthys sordidus</i>	186
xxiii.	Pacific sandlance, <i>Ammodytes hexapterus</i>	186
xxiv.	Pacific tomcod, <i>Microgadus Proximus</i>	191
xxv.	Padded sculpin, <i>Artedius fenestralis</i>	191
xxvi.	Peamouth chub, <i>Mylocheilus caurinus</i>	193
xxvii.	Penpoint gunnel, <i>Apodichthys flavidus</i>	194
xxviii.	Pile perch, <i>Rhacochilus vacca</i>	197
xxix.	Pink salmon, <i>Oncorhynchus gorbuscha</i>	197
xxx.	Plainfin midshipman, <i>Porichthys notatus</i>	201
xxxi.	Rock sole, <i>Lepidopsetta bilineata</i>	201
xxxii.	Rosylip sculpin, <i>Ascelichthys rhodorus</i>	202
xxxiii.	Saddleback sculpin, <i>Oligocottus rimensis</i>	202
xxxiv.	Saddleback gunnel, <i>Pholis ornate</i>	203
xxxv.	Sand sole, <i>Psettichthys melanosticus</i>	203
xxxvi.	Sharpnose sculpin, <i>Clinocottus acuticeps</i>	204
xxxvii.	Shiner perch, <i>Cymatogaster aggregate</i>	205
xxxviii.	Silverspotted sculpin, <i>Blepsias cirrhosis</i>	220
xxxix.	Slender cockscomb, <i>Anoplarchus insignis</i>	220
xl.	Smoothhead sculpin, <i>Artedius lateralis</i>	220
xli.	Snake prickleback, <i>Lumpenus sagitta</i>	220

xlii.	Speckled sanddab, <i>Citharichthys stigmaeus</i>	225
xliii.	Spinynose sculpin, <i>Asemichthys taylori</i>	225
xliv.	Staghorn sculpin, <i>Leptocottus armatus</i>	226
xlv.	Starry flounder, <i>Platichthys stellatus</i>	247
xlvi.	Striped seaperch, <i>Embiotoca lateralis</i>	277
xlvii.	Sturgeon poacher, <i>Agonus acipenserinus</i>	277
xlviii.	Surf smelt, <i>Hypomesus pretiosus pretiosus</i>	277
xlix.	Threespine stickleback, <i>Gasterosteus aculeatus</i>	287
I.	Tidepool sculpin, <i>Oligocottus maculosus</i>	310
li.	Tidepool snailfish, <i>Liparis florae</i>	318
lii.	Tubesnot, <i>Aulorhynchus flavidus</i>	318
liii.	Whitespotted greenling, <i>Hexagrammos stelleri</i>	332
liv.	Tadpole sculpin, <i>Psychrolutes paradoxus</i>	332

ABSTRACT

Herunter, H.E., Francisco, M., Amuwo, T., and Macdonald, J.S. 2024. Recovered Historic Catch and Weight – Length Data of Nearshore Fish Populations on Sturgeon and Roberts Banks, Fraser River Estuary, British Columbia. Can. Tech. Rep. Fish. Aquat. Sci. 3626: vii + 333 p.

A goal of the Government of Canada's Coastal Environmental Baseline Program (CEBP) is to amalgamate historic environmental data from high vessel traffic areas. An extensive DFO biological sampling program was conducted from 1980 to 1981 on Sturgeon and Roberts banks located on the outer Fraser River estuary, BC, Canada. This report collates and simplifies three data sets: water quality and nearshore fish catch previously published as DFO Data Report 340 (Conlin et al.1982), and unpublished weight-length (W-L) data for two locations on Sturgeon Bank (Iona and Steveston) and near Westshore Terminals (Coal Port) on Roberts Bank. W-L data were reconstructed from archived computer printouts using Optical Character Recognition methods. Analyses of water quality data indicate that the two banks provided different fish habitats with Sturgeon Bank having a greater freshwater influence. Although Iona area water quality was exposed to sewage outfall from a nearby sewage treatment plant, it appears that fish communities were not different from the other Sturgeon Bank area (Steveston). The fish communities were found to be different between the two banks with Roberts Bank having greater overall abundance and diversity. Interestingly, of the seven fish species used for condition factor analyses, five were found to have lower Relative Condition Factors in the Roberts Bank sampling area.

RÉSUMÉ

Herunter, H.E., Francisco, M., Amuwo, T., and Macdonald, J.S. 2024. Recovered Historic Catch and Weight – Length Data of Nearshore Fish Populations on Sturgeon and Roberts Banks, Fraser River Estuary, British Columbia. Can. Tech. Rep. Fish. Aquat. Sci. 3626: vii + 333 p.

Un objectif du Programme des références environnementales côtières (PREC) du gouvernement du Canada est d'amalgamer les données environnementales historiques des zones à fort trafic maritime. Un vaste programme d'échantillonnage biologique du MPO a été mené de 1980 à 1981 sur les bancs Sturgeon et Roberts situés à l'embouchure extérieure du fleuve Fraser, en Colombie-Britannique, Canada. Ce rapport regroupe et simplifie trois ensembles de données : la qualité de l'eau et les prises de poissons près du rivage précédemment publiées dans le rapport de données du MPO 340 (Conlin et al., 1982), ainsi que des données de longueur-poids (L-P) non publiées pour deux sites sur le banc Sturgeon (Iona et Steveston) et près des terminaux Westshore (Port du charbon) sur le banc Roberts. Les données L-P ont été reconstruites à partir de tirages informatiques archivés à l'aide de méthodes de reconnaissance optique de caractères. Les analyses des données de qualité de l'eau indiquent que les deux bancs offraient des habitats différents pour les poissons, le banc Sturgeon étant davantage influencé par les eaux douces. Bien que la qualité de l'eau de la région d'Iona ait été exposée aux rejets d'eaux usées d'une station d'épuration des eaux usées voisine, il semble que les communautés de poissons ne différaient pas de celles de l'autre zone du banc Sturgeon (Steveston). Les communautés de poissons étaient différentes entre les deux bancs, le banc Roberts présentant une abondance et une diversité globalement plus grandes. De façon intéressante, des sept espèces de poissons utilisées pour les analyses des facteurs de condition, cinq présentaient des facteurs de condition relatifs plus faibles dans la zone d'échantillonnage du banc Roberts.

1.0 INTRODUCTION

1.1 Coastal Environmental Baseline Program

One of the goals of the Coastal Environmental Baseline Program (CEBP - a component of the Government of Canada's Oceans Protection Plan) is to measure current environmental conditions in areas that are deemed to have existing or potentially high vessel traffic. By gathering comprehensive baseline data now, changes in environmental conditions can be detected should an incident occur. These measures can be used to document impacts, determine "end points" for clean-up and recovery targets or for other comparative analyses (e.g. climate change, coastal development and restoration). Additionally, the CEBP provides an opportunity to seek or restore historic datasets that could contribute to a baseline continuum rather than using a single point in time for reference and may guide future research. Some older data sets are published in summarized or non-tabular forms, making it difficult to find or extract raw data to include in more powerful present day statistical analyses. As well, some valuable datasets have not been published. Having readily accessible datasets for comparative analyses is a benefit to regulators, proponents, and a variety of interested parties. Here we provide a re-organized previously published fish catch and water quality data set together with unpublished weight-length (W-L) data collected in the early 1980's from the outer Fraser River estuary. We also present results of some preliminary analyses of these data.

1.2 Study Area

The port of Vancouver (Vancouver Fraser Port Authority) is a priority study area as identified by CEBP and encompasses Burrard Inlet and the Fraser River estuary in the Strait of Georgia off the west coast of British Columbia, Canada. The outer estuary includes two large banks – Sturgeon and Roberts – which have undergone development pressures over the last century. Most notably several sediment and water current training jetties have been installed for navigation, sewage dilution, and port access (Hemmera Envirochem, 2004). These include Steveston jetty (1912), North Arm jetty (1917), Tsawwassen ferry terminal causeway (1960), Iona Island sewage treatment plant jetty and outfall (1961), Airport antennae jetty (1962), and Roberts Bank Coal Port terminal (Westshore Terminals - 1970). During this period there have also been several port expansions. There is a general recognition of the habitat pressures caused by municipal sewage discharge and shipping activities which some of the jetties support (Goodman 1975; Levings 1980). To offset some of these effects, habitat enhancement projects including eel grass transplants (Harrison 1987; Levings 2016; Sutherland et al. 2013) and jetty breaches (Raincoast Conservation Foundation 2022) have occurred. There continues to be ongoing port development with concomitant increases in vessel traffic (Living Oceans Society 2011) as well as restoration initiatives in the Fraser estuary, necessitating assessment of current and historical fish use and habitat conditions (Archipelago Marine Research 2014; DFO 2016).

1.3 Weight - Length Data

While some recent fish catch data are available for the Fraser River estuary, W-L data are relatively rare, particularly for non-salmonid species. Computed W-L relationships yield intercept (*a*) and slope (*b*) regression parameters which are used in some fish condition factor calculations, a measure of fish health, and thus are convenient indicators of ecosystem health (Teubner 2015). Similarly, annual comparison of size and growth, may provide information on survival of fishery cohorts.

Very few nearshore fish sampling programs (e.g. Chalifour et al. 2019; MacDonald 1984) include W-L data usually due to added sampling complexity and animal health concerns. Captured fish are generally required to be handled or stressed several times, through seining/netting, anesthetization, weight and length measurements, recovery, and release procedures. However, both weight and length measures provide vital life stage information when modelling nearshore fish production (Wong et al. 2016, Siegle et al. 2014).

1.4 Rationale

This report simplifies and amalgamates three data sets from an extensive DFO biological sampling program conducted from 1980 to 1981 on Sturgeon and Roberts Banks. The program included both fish (Conlin et al. 1982; Gordon and Levings 1984) and invertebrate sampling (Bravender et al. 1993). Water quality and raw fish catch data have been previously released (Conlin et al. 1982). During beach seining, a subsample of the catch was processed for weight and length measures. These W-L data records were originally intended to be published as:

Kotyk, M., G. Greer, B. Piercey, and D. Gordon. 1982. Fraser estuary comparative habitat study: II Length-weight relationships for 33 species, March 1980 to July 1981. Can. Data Rep. Fish. Aquat. Sci.

as referenced in Conlin et al. (1982); however, this document was never produced. Summaries on portions of the length data have been provided by Levings (1982) and Gordon and Levings (1984). In this current report the complete data set in tabular format including water quality, fish catch, and W-L subsamples, with preliminary data analyses, is presented.

2.0 METHODS

2.1 Sampling Locations

Samples were taken from two locations on Sturgeon Bank (Iona Island and Steveston) and one location on Roberts Bank. Due to the intertidal expanse of the banks, approximately 14,000 ha combined, sampling was focused on “low tide refuges” which were depressions or channels on the banks where water would drain and fish could

congregate during low tides. Detailed bathymetry for each sampling area is presented in Conlin et al. (1982).

The following are general study area descriptions:

Iona (Area 1) - mix of sand and mud substrate, located 2.5 to 3.5 km along the southern side of the Iona Island jetty. Sampling locations were adjacent to or within the Iona sewage treatment plant outfall channel. The outfall was changed to a submerged outfall in 1988.

Steveston (Area 2) - primarily sand substrate, located in a relict river channel on southern Sturgeon Bank.

Roberts Bank (Area 3) - primarily sand/cobble with eel grass habitat, located within a dredge-borrow area between the Tsawwassen ferry terminal causeway and the Roberts Bank Coal Port Facility (Westshore Terminals). An expansion of the coal port facility was completed after data collection in 1984.

More specific site descriptions and characteristics are presented in Table 1. Each study area was divided into 6 - 7 sample sites. Coordinates of the original sampling sites were not available, so estimates were made by overlaying the original site location figures in Google Earth Pro (version 7.3.3.7786, 2021) and extracting latitude and longitude information. A redrawn version of study area and site locations (Figure 1) was produced using ArcGIS (version 10.8.1.14362, ESRI 2022) using current jetty and terminal foot prints. When sampling was originally conducted Site 1 of Area 3 was located on the southern shore of Westshore Terminals. The terminal has since been expanded and the site now appears on-shore.

2.2 Sampling Methods

Beach seine sampling was conducted between March 1980 and July 1981. Generally sampling occurred bimonthly (every 2 weeks) however was constrained somewhat during winter months by poor weather and low tides coinciding with nighttime, making boat use hazardous. Original field methods are provided in Conlin et al. (1982) and Gordon and Levings (1984) and are reproduced in brief here:

A 14.7 m beach seine was used, with wings 4.9 m (1 cm mesh), bunt 4.9 m (3 mm mesh), and depth 1.5 m. At stations with moderate or steep slopes a boat was used to set the net, otherwise personnel deployed the net by wading. The net was set 5 to 10 m from shore.

Salinity, temperature, and dissolved oxygen measurements were made simultaneously with fish collection. Usually, a depth of approximately 25 cm was sampled. Salinity estimates were obtained by collecting duplicate 75 mL samples, then analysed using either an Autosol 8400 or an American Optical Refractometer. Temperatures were obtained using a hand-held thermometer. Duplicate Dissolved Oxygen (DO) samples

were collected with 300 mL BOD bottles and fixed with manganous sulphate and alkaline iodide solutions (Strickland and Parsons 1972). DO samples were processed at the Environmental Protection Service Chemistry Laboratories in West Vancouver using the Winkler method.

2.3 Database Assembly

2.3.1 Water Quality and Catch Data

Water quality and beach seine catch data were extracted from Table 3 of Conlin et al. (1982) and tabulated into two MS Excel files. The original data set contained the following parameters: Study Area, Site, Haul Number (corresponding to replicate beach seine sets), Date (y-m-d), Time (PST), Minutes After Low Tide, Salinity (ppt), Temperature (°C), Dissolved Oxygen (mg/l), Species Name, and Catch Abundance. The reformatted water quality table contains the following field names: Study Area, Site, Date (y-m-d), Time (PST), Period, Salinity (ppt), Temperature (°C), and Dissolved Oxygen (mg/l). Fields in the new catch data table were assigned the following headings: Study Area, Site, Set (Haul Number), Date (y-m-d), Period, Tide Type (flood or ebb), Minutes From Low Tide, Species Name, Common Name, and Abundance. Both new tables were proofed against the original data report.

On one sampling date (81-06-29), an additional sampling site (Area 3 Site 9) was present in the raw data (Conlin et al. 1982, Table 3). A total of 1010 individuals of eight different species were caught, of which the majority (n=920) were Pacific Herring. This sampling station was not noted in either Conlin et al. (1982) or Gordon and Levings (1984) and therefore the data were not included in our database or analyses.

Unidentified specimen categories were retained in their various taxa, rather than grouped as a single “unidentified” category. These included flatfish, gunnel, juvenile greenling, juvenile rockfish, larval fish, sculpin, and snailfish.

2.3.2 Weight – Length Data

The original W-L computer files were no longer available however the data and associated cross references were retained in paper copy print-outs stored at the Pacific Science Enterprise Center (PSEC), West Vancouver. Multiple data versions had been printed, the most recent version (printed August 11, 1983) containing data marked as “after sorting, before blocking and elimination of missing data” was selected for data recovery. This dataset contained 11,035 records and the following column headings: Area, Site, Set (Haul), Length (mm), Weight (g), Genus Code, and Species Code. Fork length or total length were recorded depending on species morphology.

The paper file was scanned and uploaded to the online optical character recognition (OCR) site (Online OCR 2021) and exported as an Excel file. The OCR software recognized approximately 80% of the scanned pages; unrecognized data left blank data cells in the exported files which were manually entered. For the pages read by the OCR, some error correction was still required. The majority of errors were incorrectly

placed or missing decimal places in the “weight” column. These data were proofed and corrected for each row by comparison to the original paper file. W-L data were then aligned with the water quality and catch data using Date, Area, Site, and Set (haul) fields.

2.4 Data Analysis

Although the primary intent of this report is to provide access to valuable historic data, we performed some preliminary exploratory analyses on the three data sets. Water quality data were explored graphically with box plots of the three parameters: Water Temperature (°C), Salinity (parts per thousand) and Dissolved Oxygen (mg/l). Data were analysed by GLM ANOVA (Minitab 13 Statistical Software 2000) using a Tukey HSD multiple comparison if a significant main effect was detected ($\alpha = 0.05$).

Catch data were first summarized for each site as total site catch/# of sets. Then area Catch Per Unit Effort (CPUE) was calculated by dividing the sum of site catches by the number of sites sampled within a sampling period. Diversity was the number of different taxa captured within an area per sampling period. CPUE and taxa diversity tables and plots were produced. An nMDS and ANOSIM (Primer 7 2015) were used to compare community structure among the three areas (overall transformation = 4th root, Bray-Curtis similarity). Values of ANOSIM $R > 0.30$ were taken to indicate a difference in community structure.

W-L data were analyzed by calculating the *a* and *b* regression parameters for each species, calculating the condition factor for each individual, and then comparing condition factors for the most abundant species among the three areas. Condition as calculated from plots of log (10) weight against log (10) length data for each taxa, identified errors in the original data and were used to calculate the regression parameters using the INTERCEPT (= *a*) and SLOPE (= *b*) functions in MS Excel. Where available, maximum length and weight values from FishBase (Froese and Pauly, 2021) were used to guide the upper limit of these data. The lower limit for length was set at 15mm (the number of fish specimens measured below this limit was 22) as we presumed it was difficult to readily differentiate most species below this size in the field. If outliers were suspected, the original data were checked and if values could not be resolved the data point was removed.

Froese (2006) suggests that Le Cren’s relative condition factor (K_{rel}) is the preferable method for within sample (or study) comparisons. K_{rel} was calculated for each individual using the equation, $K_{rel} = W/aL^b$ where *W* is the total wet weight in grams, *L* is the total length in centimeters, and *a* and *b* are the average regression parameters of each species for all three areas combined. A GLM ANOVA (Minitab 13 Statistical Software 2000) was used to compare relative condition factors among areas for seven of the most abundant species: Pacific Herring, Pacific Sandlance, Shiner Perch, Threespine Stickleback, Starry Flounder, Staghorn Sculpin, and Chinook Salmon. A Tukey HSD

multiple comparison test was used for pairwise comparisons if a significant main effect was detected ($\alpha = .05$).

Taxa categorized as unidentified were not included in the W-L dataset. Fish condition factors and W-L parameters were not calculated for species with less than 5 individuals; however, these data remain in the Catch dataset. There were 356 fish comprising a variety of species that had lengths measured but no weights, these were retained in the W-L database but could not be included in the *a*, *b*, or condition factor calculations.

3.0 RESULTS

3.1 Database

Sampling took place over 74 days from 1980-03-20 to 1981-07-02. Individual sites were sampled between three and 25 times (Table 2). Sampling dates were divided into 25 “sampling periods” which generally were two weeks long. Some adjustments were made so that data from the three sampling areas were included in each sampling period in order to simplify inter-area comparisons.

The water quality dataset is presented in Appendix I and contains 203 records. Although the original document listed data by repetitive sets (hauls) for some sites, the within site values were identical, indicating they were not true replicates and were not included in the new dataset. Only values from Area 2, Site 3, Hauls 1, 2, and 3 on 1980-05-14 were true site replicates and are retained in the data. The catch dataset (Appendix II) has 2,004 records with a total of 60,372 individuals (Table 3). The weight-length dataset (Appendix III) contains 10,607 records; the original computer printout contained 11,035 records. The difference (428 records) were attributed to unreadable data, obvious errors, and Area 3 Site 9 data ($n=26$). The three datasets share the Area, Site, Period, and Date fields so data can be linked and summarized at several levels.

3.2 Water Quality

There were significant differences among the three areas in water quality attributes (Figure 2 a, b, and c; Table 4a). Iona had some of the highest water temperatures (max = 24 °C), and lowest dissolved oxygen (2 mg/l) of the three areas. While Roberts Bank data tended towards higher salinities (max = 28 ppt) and DO values which ranged from 7-18 mg/l. The GLM ANOVA (Table 4a) indicated that, Iona had significantly higher temperatures than Roberts ($p=0.002$), Roberts had significantly higher salinities than both Steveston and Iona ($p=0.000$), and dissolved oxygen was significantly different in all three areas (Roberts>Steveston>Iona; $p=0.000$).

3.3 Fish Community

Total CPUE was highest at Roberts, followed by Steveston, then Iona (Table 3, Figure 3a). However, CPUE, calculated for each sampling period, showed extreme variability (Figure 3b). Very high peaks were usually driven by one or two species. For example, high catches at Roberts in April 1980, June 1980, and July 1980 are attributed to

Sandlance, Herring, and Herring and Shiner Perch, respectively. High Steveston catches in August 1980 were due to large numbers of Herring and Sticklebacks. Shiner Perch accounted for high catches in Iona and Steveston in July 1981. Sampling periods during winter months (November to April) yielded small catches further contributing to CPUE variability. This variability is reflected in a non-significant difference among regions (ANOVA, $p=0.127$, Table 4b).

A total of 63 fish taxa were identified in the beach seine surveys, 26 at Steveston, 29 at Iona, and 59 at Roberts (Table 3). Taxa diversity for each sampling period tended to be highest at Roberts, followed by Steveston, then Iona (Figure 4; Table 3). Iona and Steveston had similar diversities while Roberts was significantly higher (ANOVA $p=0.000$; Table 4b). A different fish community was found at Roberts Bank compared to the other two locations (ANOSIM and nMDS $p=0.001$; Table 5; Figure 5).

3.4 Weight - Length Parameters and Condition Factor

Slope and intercept parameters for 37 species are presented in Table 6, and corresponding values from FishBase are included for comparative purposes. Individual Relative Condition Factor (K_{rel}) values are presented in Appendix III, while taxa averages are included in Table 6. The conditions of five of the seven species examined (Chinook Salmon, Pacific Herring, Shiner Perch, Staghorn Sculpin, and Threespine Stickleback) were lower on Roberts Bank relative to at least one of the other two sites (Table 4, Figure 6; ANOVA $p<0.003$). Condition factors were higher at Roberts for Starry Flounder and Pacific Sandlance ($p=0.000$ and $p=0.017$, respectively).

4.0 DISCUSSION

This report provides access to previously un-available Fraser estuary nearshore fish community and physical data. Water quality, fish catch, and fish weight-length data are provided in raw format as well as a brief analysis of each component.

Water Quality

Lower salinities found at the two Sturgeon Bank locations are attributable to the influence of the Fraser River while tidal and wind driven marine water had a greater influence on Roberts Bank. The Iona area was likely impacted by sewage channel discharge which would account for some of the finer grained materials and low DOs observed (Otte and Levings 1975; Gordon and Levings 1984; Arvai et al. 2002). Site bathymetry data (Conlin et al. 1982) indicate that a depression existed at the Iona site and may have "pooled" sewage effluent contributing to low DO. High DO levels seen at Robert's Bank have been attributed to increased primary productivity from algae and eel grass (Gordon and Levings 1984).

When using the 1980 - 1981 Iona area data for comparison with more recent sampling efforts consideration must be given to habitat improvements that have occurred since

installation of a submerged outfall in April 1988. Dissolved oxygen data from 1995 indicate summer minima values increased from 3 to 4.2 mg/l (Nishimura et al. 1996). While Arvai et al. (2002) found improvements in DO, infauna, and sediment quality (as measured by grain size, metals, and compactness) at sites closer to the original outfall. Improvements to at least some habitat conditions have occurred at this location (see Mesa, 1985).

Fish Community

Iona and Steveston had minor catches of freshwater species such as Peamouth Chub, Brassy Minnow, and Largescale Sucker indicating a stronger influence from the Fraser River in these areas. While Roberts Bank had large catches of marine fish such as Sandlance, Tubesnouts, and English Sole, which were rarely caught at Sturgeon Bank locations. These findings are supported by the water quality data that found greater freshwater influence at Iona and Steveston and more “marine like” conditions present at Roberts Bank.

Species diversity found in other studies tended to be lower than that reported here, likely due to lower sampling effort and less thorough sampling schedules (Table 7). The data summarized in this paper were collected during 74 trips over 16 months compared to other studies with sampling regimes as short as 2 months (e.g., Nishimura et al. 1996). Interestingly, Capelin were relatively common in 1981 but are not identified in more recent studies (e.g., Chalifour et al. 2019). Conversely, Anchovy were not recorded in 1981-82 but were identified by Chalifour et al. (2019). However, in June and July of 1981, Anchovy were collected by MacDonald (1984) on Roberts Bank during sampling at higher tides while Greer et al. (1980) had limited Anchovy catch in their 1979 seine survey. This demonstrates that many factors contribute to community structure including tidal state, season, and physical characteristics. Sampling effort and design must capture these factors for a lucid comparison of data sets on temporal and spatial scales.

Weight, Length, and Condition Factor

Sampling effort also plays a role in the evaluation of fish condition. Estimates of slope will be less reliable when numbers of captured individuals are limited, as was the case for High Cockscomb and Pile Perch (8 and 22, respectively). Estimates are also hampered when individuals fall within a narrow size range which can occur when only a single cohort is present (Froese 2006). With b-values of 3.88, 2.35, and 2.42, respectively, estimates of condition for Chum Salmon, Tubesnout and Arrow Goby may be unreliable and used with caution when comparing to other research studies. Froese (2006) suggests estimates of b below 2.5 or above 3.5 are sub-optimal.

Intra-species differences in condition factor may be attributed to a site’s food availability, spawning opportunities (Froese 2006), or environmental conditions (Tuebner 2015). The identification of other factors or measurement to a greater resolution may be necessary to explain results from Roberts Bank, where lower condition was estimated

for five of seven species examined. A concomitant study of meio-fauna abundance, diversity, and a harpacticoid copepod index, suggested that Roberts Bank provided more suitable fish rearing habitat than the Iona and Steveston areas (Bravender et al. 1993). Furthermore, juvenile Herring, an important food source for juvenile salmon (MacDonald 1984), were the most abundant fish in the Roberts Bank area (Conlin et al. 1982). If greater prey availability, species diversity, habitat structure (eel grass), and water quality (i.e. isolation from sewage treatment plant discharge) were limiting factors during this study it was not reflected in fish condition estimates. Perhaps the seven species tested were opportunistic feeders with diverse dietary preferences and thus highly adapted to the range of conditions at the mouth of a large river (Froese and Pauly 2021; Hart 1973). Starry Flounder, an epi-benthic feeder and Pacific Sandlance, a planktonic feeder, may have specific needs that are better met on Roberts Bank and therefore reflected in their condition.

Summary

This report provides access to historic (1980 – 1981) water quality, nearshore fish catch and W-L data for Sturgeon and Roberts banks. The W-L data were reconstructed from archived computer printouts using OCR methods. Analyses of water quality data indicate that the two banks provided different fish habitats, and that, although, Iona area water quality was exposed to outfall from the nearby sewage treatment plant, it appears that fish communities were not different from the other Sturgeon Bank area (Steveston). The fish communities were found to be different between the two banks with Roberts having greater overall abundance and diversity. Interestingly, of the seven fish species used for condition factor analyses, five were found to have lower Relative Condition Factors in the Roberts sampling area.

ACKNOWLEDGEMENTS

A special thanks to Dr. Colin Levings who designed the study, archived the original weight-length fish data, and provided invaluable insight to the sampling program. Funding for the original sampling program was provided by the Fraser River Estuary Management Program. The Coastal Environmental Baseline Program Baseline program provided funding for the recovery of these historic data.

REFERENCES

- Archipelago Marine Research. 2014. Roberts Bank Terminal 2 technical data report: Eelgrass Fish Community Survey. Prepared for Hemmera, Vancouver, B.C. Available at: <https://www.robertsbankterminal2.com/wp-content/uploads/RBT2-Eelgrass-Fish-Community-Survey-TDR.pdf>. Accessed 2024.
- Arvai, J.L., C.D. Levings, P.J. Harrison, W.E. Neill. 2002. Improvement of the sediment ecosystem following diversion of an intertidal sewage outfall at the Fraser River estuary, Canada, with emphasis on *Corophium salmonis* (amphipoda) Mar. Pollut. Bull., 44: 511-519
- Bravender, B.A., C.D. Levings and T.J. Brown. 1993. A comparison of meiofauna available as fish food on Sturgeon and Roberts Banks, Fraser River estuary, British Columbia. Can. Tech. Rep. Fish. Aquat. Sci. 1904: 40 p.
- Chalifour L., Scott D.C., MacDuffee M., Iacarella J.C., Martin T.G., Baum J.K. 2019. Habitat use by juvenile salmon, other migratory fish, and resident fish species underscores the importance of estuarine habitat mosaics. Mar. Ecol. Prog. Ser. 625:145-162. <https://doi.org/10.3354/meps13064>
- Conlin, K., Lawley, P., Futer, P., Kotyk, M., Jantz, L., Hillaby, B., Elvidge, R., Piercey, B., Gordon, D., Levings, C., Hutton, K. and MacIndoe, R., (1982). *Fraser Estuary Comparative Habitat Study: I. Beach seine catches, water characteristics, and geomorphology, March 1980 to July 1981*. Can. Data Rep. Fish. and Aquat. Sci 340. iii + 125p.
- DFO. 2016. Technical review of Roberts Bank Terminal 2 environmental assessment: section 10.3 – assessing ecosystem productivity. DFO Can. Sci. Advis. Sec. Sci. Resp. 2016/050.
- Froese, R. 2006. Cube law, condition factor and weight-length relationships: History, meta-analysis and recommendations. Journal of Applied Ichthyology. 22:241-253. <http://dx.doi.org/10.1111/j.1439-0426.2006.00805.x>
- Froese, R. and Pauly, D. Editors. 2021. FishBase. World Wide Web electronic publication. www.fishbase.org, version (08/2021). Accessed 2024.
- Goodman, D. 1975. Fisheries resources and foodweb components of the Fraser River estuary and an assessment of the impacts of proposed expansion of the Vancouver International Airport and other developments on these resources. Dept. of Environment. Fisheries and Marine Service, Vancouver, B.C. 134 p +appendices.
- Gordon, D.K. and C.D. Levings. 1984. Seasonal changes of inshore fish populations on Sturgeon and Roberts Bank, Fraser River estuary, British Columbia. Can. Tech. Rep. Fish. Aquat. Sci. 1240: 81 p.
- Greer, G. L., C. D. Levings, R. Harbo, B. Hillaby, T. Brown and J. Sibert. 1980. Distribution of fish species on Roberts and Sturgeon Banks recorded in seine and trawl surveys. Can. Manuscr. Rep. Fish. Aquat. Sci. 1596: 51 p.

- Harrison, P.G. 1987. Natural expansion and experimental manipulation of seagrass (*Zostera* spp.) abundance and the response of infaunal invertebrates. *Estuarine, Coastal and Shelf Science*. 24:6. p799-812. [https://doi.org/10.1016/0272-7714\(87\)90153-3](https://doi.org/10.1016/0272-7714(87)90153-3).
- Hart, J.L. 1973. Pacific fishes of Canada. Fisheries Research Board of Canada. Bulletin 180. 740 pages.
- Hemmera Envirochem. 2004. History of Development at Roberts Bank – an Overview. Prepared by: Hemmera Envirochem Inc. Suite 350 - 1190 Hornby Street, Vancouver, BC V6Z 2K5. November, 2004. Prepared for: Vancouver Port Authority, 1900 Granville Square, 200 Granville Street Vancouver, BC V6C 2P9. 36 pages.
- Levings, C.D. 1980. Consequences of training walls and Jetties for Aquatic Habitats at two BC estuaries. *Coastal Eng.*, 4: 111-136.
- Levings, C.D. 1982. Short term use of a low tide refuge in a sandflat by juvenile chinook (*Oncorhynchus tshawytscha*), Fraser River estuary. *Can. Tech. Rep. Fish. Aquat. Sci.* 1111: iv + 33 p.
- Levings, C.D. 2016. Ecology of salmonids in estuaries around the world: adaptations, habitats, and conservation. UBC Press, 2029 West Mall, Vancouver BC. 371 pp.
- Living Oceans Society. 2011. Shipping on the British Columbia Coast. Current Status, Projected Trends, Potential Casualties, and Our Ability to Respond: A Briefing Report. Sointula, BC: Living Oceans Society
- Macdonald, A.L. 1984. Seasonal use of the nearshore intertidal habitats by juvenile salmon on the delta front of Fraser River estuary, British Columbia. M.Sc. thesis. University of Victoria, Victoria, British Columbia.
- Mesa, K.A., 1985. The influence of temperature, salinity, and dissolved oxygen on juvenile salmon distributions in a nearshore estuarine environment. University of British Columbia Master's Thesis. <https://open.library.ubc.ca/collections/ubctheses/831/items/1.0096189>
- Minitab 13 Statistical Software. 2000. [Computer software]. State College, PA: Minitab, Inc. (www.minitab.com)
- Nishimura, D.J.H., G.E. Piercey, C.D. Levings, K. Yin and E.R. McGreer. 1996. Changes in fish communities and water chemistry after cessation of municipal sewage discharge near the Iona Island foreshore, Fraser River estuary, British Columbia. *Can. Tech. Rep. Fish. Aquat. Sci.* 2096: 17 p.
- Online OCR. 2021. Available at <http://www.onlineocr.net> (Accessed: October 2021).
- Otte, G., and C.D. Levings. 1975. Distribution of macro-invertebrate communities on a mud flat influenced by sewage, Fraser River estuary, British Columbia. *Fish. Mar. Serv. Res. Dev. Tech. Rep.*, 476: 77 p.
- Primer 7. 2015. [Computer software]. Clarke, K.R. and Gorley, R.N. PRIMER v7: User Manual/Tutorial. PRIMER-E, Plymouth.

- Raincoast Conservation Foundation. 2022. Website accessed March 2022.
Rain<https://www.raincoast.org/2022/03/another-jetty-another-breach-project/>
- Siegle, M.R., Robinson, C.L.K., Yakimishyn, J. 2014. The Effect of Region, Body Size, and Sample Size on the Weight-Length Relationships of Small-bodied Fishes Found in Eelgrass Meadows. *Northwest Science* 88:140-154.
- Strickland, J.D.H., and T.R. Parsons. 1972. A practical handbook of seawater analysis. *Bull Fish. Res. Bd. Canada*, 167: 310 p.
- Sutherland, T.F., Elner, R.W. and O'Neill, J.D., 2013. Roberts Bank: ecological crucible of the Fraser River estuary. *Progress in Oceanography*, 115:171-180.
- Teubner, D., Paulus, M., Veith, M., & Klein, R. 2015. Biometric parameters of the bream (*Abramis brama*) as indicators for long-term changes in fish health and environmental quality--data from the German ESB. *Environmental science and pollution research international*. 22: 1620–1627. <https://doi.org/10.1007/s11356-014-3008-3>
- Wong, M.C., Dowd, M., Bravo, M., Giroux, C., Haverstock, A., Humble, M., MacFarlane, M., Roach, S., and Rowsell, J. 2016. Nekton in *Zostera marina* (eelgrass) beds and bare soft-sediment bottom on the Atlantic Coast of Nova Scotia, Canada: species-specific density and data calibrations for sampling gear and day-night differences. *Can. Tech. Rep. Fish. Aquat. Sci.* 3155: v + 40 p.

Table 1. Sampling site descriptions and characteristics for two locations on Sturgeon Bank (Iona and Steveston) and one location on Roberts Bank. Adapted from Conlin et al. 1982.

Area	Site	Minimum Elevation	Approximate Location Latitude	Longitude	Description
1 - Iona	1	0.2m	49°12'23.78"N	123°15'23.55"W	90% sand - 10% mud; on north side of sewage channel; moderate slope
	2	0.6m	49°12'21.95"N	123°15'22.13"W	100% sand; on south side of sewage channel; very steep slope
	3	0.3m	49°12'17.73"N	123°15'18.32"W	100% sand; on tidal creek separated by a bar from the sewage channel; very gentle slope
	4	0.2m	49°12'30.55"N	123°14'50.25"W	50% sand - 50% mud; on north side of sewage channel; moderate slope
	5	0.2m	49°12'28.56"N	123°14'49.19"W	50% sand - 50% mud; on south side of sewage channel; moderate slope
	6	0.2m	49°12'37.90"N	123°14'16.85"W	20% sand - 80% mud; on north side of sewage channel; moderate slope
	7	0.2m	49°12'35.00"N	123°14'15.41"W	20% sand - 80% mud; on north side of sewage channel; moderate slope
2 - Steveston	1	0m	49°9'0.89"N	123°15'14.23"W	90% sand - 10% mud; on north side of relict river channel; very gentle slope
	2	0m	49°8'59.51"N	123°15'0.71"W	90% sand - 10% mud; on north side of relict river channel; steep slope
	3	0m	49°8'56.18"N	123°14'49.25"W	100% sand; at northeast end of relict river channel; gentle slope
	4	0m	49°8'48.35"N	123°14'57.02"W	100% sand; at east end of relict river channel; very gentle slope
	5	1m	49°8'50.35"N	123°15'21.85"W	100% sand; at east end of relict river channel; very gentle slope
	6	1m	49°8'55.15"N	123°15'31.14"W	100% sand; on southwest sand bar; moderate slope
3 - Roberts Bank	1	0.1m	49°1'9.35"N	123°9'33.92"W	Cobble from the mid-tide upshore; sand and eelgrass downshore; moderate slope; man-made beach
	2	0.1m	49°1'23.22"N	123°9'17.09"W	Sand with rip-rap near high water mark (causeway armour); gentle slope
	3	0.2m	49°1'25.81"N	123°8'48.45"W	On north side of borrow pit; eelgrass present; gentle slope
	4	0.4m	49°1'26.41"N	123°8'40.71"W	On northeast side of borrow pit; sand; extensive eelgrass beds about 10m distant; very steep slope
	5	0m	49°1'22.57"N	123°8'32.70"W	On northeast side of borrow pit; sand; close to the mouth of a tidal channel; steep slope
	6	0.2m	49°1'19.24"N	123°8'40.29"W	On southwest side of borrow pit; sand; extensive eelgrass beds about 5m distant; very steep slope
	7	0.1m	49°0'41.33"N	123°7'33.24"W	Tsawwassen causeway; cobble with eelgrass; steep slope

Sampling Period	Date (yy/mm/dd)	Area 1 - Iona							Area 2 - Steveston						Area 3 - Roberts Bank													
		Site							Site						Site													
		1	2	3	4	5	6	7	1	2	3	4	5	6	1	2	3	4	5	6	7							
20	81/04/08	2				2											2	1									1	
20	81/04/09																											
21	81/05/05									1	1	1			3													
21	81/05/06																1	1	1	1	1	1	1	1	1	1	1	
21	81/05/07	1	1			1	1																					
22	81/05/19	1	1	1	1	1																						
22	81/05/20																1	1									1	
22	81/05/21															3												
23	81/06/01																1	1			1					1	1	
23	81/06/02									1	1	1	1	1	1													
23	81/06/03	1	1			1	1																					
24	81/06/16																3								3		3	
24	81/06/17										1	1																
24	81/06/18	1	1	1	2	2																						
25	81/06/29																											
25	81/06/30									1	1	1																
25	81/07/02	1	1			1	1																					
No. of days sampled		25	13	6	16	12	4	5	3	7	7	4	4	21	24	21	7	12	11	7	21							
Total sets/Area								107						80													129	
Total # sites sampled/Area								81						46													103	

Table 3. Catch data summary in order of total abundance and by Area.

Common Name	Genus - Species	Area				Total
		Iona	Steveston	Roberts		
Pacific herring	<i>Clupea harengus pallasii</i>	1,381	923	13,014	15,318	
Pacific sand lance	<i>Ammodytes hexapterus</i>	3	290	10,484	10,777	
Shiner perch	<i>Cymatogaster aggregata</i>	1,320	2,784	5,399	9,503	
Threespine stickleback	<i>Gasterosteus aculeatus</i>	1,416	3,270	918	5,604	
Starry flounder	<i>Platichthys stellatus</i>	2,030	1,060	665	3,755	
Staghorn sculpin	<i>Leptocottus armatus</i>	1,141	269	1,841	3,251	
Chinook salmon	<i>Oncorhynchus tshawytscha</i>	404	1,510	443	2,357	
Tubesnout	<i>Aulorhynchus flavidus</i>	38	1	2,016	2,055	
English sole	<i>Parophrys vetulus</i>	9	95	1,289	1,393	
Arrow goby	<i>Clevelandia ios</i>	1,056	65		1,121	
Surf smelt	<i>Hypomesus pretiosus pretiosus</i>	189	354	373	916	
Tidepool sculpin	<i>Oligocottus maculosus</i>	1	1	490	492	
Snake prickleback	<i>Lumpenus sagitta</i>	59	307	123	489	
Crescent gunnel	<i>Pholis laeta</i>	8	3	415	426	
Pink salmon	<i>Oncorhynchus gorbuscha</i>	74	27	310	411	
Bay pipefish	<i>Syngnathus griseolineatus</i>	2	7	372	381	
Pile perch	<i>Rhacochilus vacca</i>			328	328	
Penpoint gunnel	<i>Apodichthys flavidus</i>		2	308	310	
Chum salmon	<i>Oncorhynchus keta</i>	101	16	175	292	
Capelin	<i>Mallotus villosus</i>	3	145	17	165	
Tadpole sculpin	<i>Psychrolutes paradoxus</i>			119	119	
Unidentified flatfish	<i>Unidentified flatfish</i>	16	16	72	104	
Padded sculpin	<i>Artedius fenestralis</i>			95	95	
Buffalo sculpin	<i>Enophrys bison</i>	1		83	84	
Unidentified larval fish	<i>Unidentified larval fish</i>			78	78	
Sharpnose sculpin	<i>Clinocottus acuticeps</i>			68	68	
Sand sole	<i>Psettichthys melanostictus</i>		49	12	61	
Unidentified sculpin	<i>Unidentified sculpin</i>	4		44	48	
Butter sole	<i>Isopsetta isolepis</i>		14	28	42	
Rock sole	<i>Lepidopsetta bilineata</i>			40	40	

Common Name	Genus - Species	Area			Total
		Iona	Steveston	Roberts	
Pacific tomcod	<i>Microgadus proximus</i>			34	34
Whitespotted greenling	<i>Hexagrammos stelleri</i>			31	31
Pacific sanddab	<i>Citharichthys sordidus</i>	3		27	30
Saddleback gunnel	<i>Pholis ornata</i>	2		28	30
Coho salmon	<i>Oncorhynchus kisutch</i>	10	1	9	20
Peamouth chub	<i>Mylocheilus caurinus</i>	6	12		18
Spinynose sculpin	<i>Asemichthys taylori</i>	4		14	18
Aleutian sculpin	<i>Cottus aleuticus</i>			16	16
Sturgeon poacher	<i>Agonus acipenserinus</i>			11	11
Unidentified juvenile rockfish	<i>Unidentified juvenile rockfish</i>	1	1	7	9
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>			8	8
High cockscomb	<i>Anoplarchus purpurescens</i>			8	8
Rosylip sculpin	<i>Ascelichthys rhodorus</i>			8	8
Unidentified juvenile greenling	<i>Unidentified juvenile greenling</i>			8	8
Smoothhead sculpin	<i>Artedius lateralis</i>	4		1	5
Flathead sole	<i>Hippoglossoides elassodon</i>			4	4
Unidentified gunnel	<i>Unidentified gunnel</i>			4	4
Kelp greenling	<i>Hexagrammos decogrammus</i>			3	3
Saddleback sculpin	<i>Oligocottus rimensis</i>			3	3
Tidepool snailfish	<i>Liparis florae</i>			3	3
Prickly sculpin	<i>Cottus asper</i>			2	2
Silverspotted sculpin	<i>Blepsias cirrhosus</i>			2	2
Slender cockscomb	<i>Anoplarchus insignis</i>			2	2
Speckled sanddab	<i>Citharichthys stigmaeus</i>			2	2
Unidentified snailfish	<i>Unidentified snailfish</i>			2	2
Brassy minnow	<i>Hybognathus hankinsoni</i>		1		1
C-O sole	<i>Pleuronichthys coensus</i>			1	1
Largescale sucker	<i>Catostomus macrocheilus</i>	1			1
Lobefin snailfish	<i>Polypera greeni</i>			1	1
Masked greenling	<i>Hexagrammos octogrammus</i>			1	1
Plainfin midshipman	<i>Porichthys notatus</i>			1	1
Spiny dogfish	<i>Squalus suckleyi</i>			1	1
Striped seaperch	<i>Embiotoca lateralis</i>			1	1
	Total Catch	9,287	11,223	39,862	60,372
	Total No. of Taxa	29	26	59	63
	Total beach seine sets	107	80	129	
	Overall CPUE	87	140	309	

Table 4. GLM ANOVA results for water quality, Catch Per Unit Effort, Species Diversity, and "by species" condition factor tests. Bold values indicate significant differences at $p < 0.05$.

Main Effects						Pairwise Tests		
	DF	Adj SS	Adj MS	F	p		t-Value	Adj p
a) Water Quality								
Temperature								
Area	2	247.55	123.77	6.23	0.002	Roberts-Iona	-3.52	0.002
Error	190	3776.71	19.88			Steveston-Iona	-1.36	0.364
Total	192					Steveston-Roberts	1.54	0.273
Salinity								
Area	2	10113	5056	289	0.000	Roberts-Iona	21.04	0.000
Error	194	3397	18			Steveston-Iona	-0.99	0.582
Total	196					Steveston-Roberts	-18.81	0.000
Dissolved Oxygen								
Area	2	1315.32	657.66	133.20	0.000	Roberts-Iona	16.20	0.000
Error	196	967.76	4.94			Steveston-Iona	8.93	0.000
Total	198					Steveston-Roberts	-4.30	0.000
b) Fish Community								
CPUE								
Area	2	786546	393273	2.13	0.127	Roberts-Iona	1.98	na
Error	65	11984519	184377			Steveston-Iona	0.43	na
Total	67					Steveston-Roberts	-1.43	na
diversity								
Area	2	1110.41	555.21	27.13	0.000	Roberts-Iona	7.09	0.000
Error	65	1330.34	20.47			Steveston-Iona	1.62	0.245
Total	67					Steveston-Roberts	-5.03	0.000
c) Condition Factor								
Chinook Salmon								
Area	2	4.45	2.23	66.66	0.000	Roberts-Iona	-9.20	0.000
Error	959	32.03	0.03			Steveston-Iona	-0.12	0.992
Total	961					Steveston-Roberts	10.81	0.000
Pacific Herring								
Area	2	1.36	0.68	7.16	0.001	Roberts-Iona	-3.79	0.001
Error	833	79.16	0.10			Steveston-Iona	-2.05	0.100
Total	835					Steveston-Roberts	1.51	0.286
Pacific Sandlance								
Area	2	0.18	0.09	4.17	0.017	Roberts-Iona	1.29	0.401
Error	181	3.96	0.02			Steveston-Iona	0.09	0.996
Total	183					Steveston-Roberts	-2.61	0.026
Shiner Perch								
Area	2	1.73	0.87	25.79	0.000	Roberts-Iona	-4.77	0.000
Error	610	20.47	0.03			Steveston-Iona	1.26	0.418
Total	612					Steveston-Roberts	6.50	0.000
Staghorn Sculpin								
Area	2	0.47	0.24	7.72	0.000	Roberts-Iona	-2.85	0.012
Error	931	28.54	0.03			Steveston-Iona	-3.60	0.001
Total	933					Steveston-Roberts	-1.40	0.340
Starry Flounder								
Area	2	1.18	0.59	26.07	0.000	Roberts-Iona	2.68	0.020
Error	1283	29.10	0.02			Steveston-Iona	-5.95	0.000
Total	1285					Steveston-Roberts	-5.81	0.000
Threespine Stickleback								
Area	2	1.05	0.52	5.81	0.003	Roberts-Iona	-3.36	0.002
Error	921	83.06	0.09			Steveston-Iona	-0.87	0.661
Total	923					Steveston-Roberts	2.64	0.022

Table 5. ANOSIM results for fish community data. Significant difference is indicated by Anosim R > 0.30 and p < 0.05.

Test	ANOSIM R	p value
Global	0.47	0.001
Pairwise 1,2	0.18	
Pairwise 1,3	0.68	0.001
Pairwise 2,3	0.48	0.001

Table 6. Species with sufficient weight-length data to calculate log-log a and b regression parameters. Values attained from FishBase (www.fishbase.se) included for comparison. Mean Relative Condition Factor computed with calculated a and b values (see text). Bold Fraser b values should be used with caution as they fall outside of the typical b= 2.5 to 3.5 range.

Common Name	Genus - Species	n	Fraser a	FishBase a	Fraser b	FishBase b	Mean K
Arrow goby	<i>Clevelandia ios</i>	749	0.01508	0.01023	2.42	3.05	1.04
Bay pipefish	<i>Syngnathus griseolineatus</i>	126	0.00017	0.00027	3.28	3.18	1.10
Buffalo sculpin	<i>Enophrys bison</i>	71	0.03494	0.00794	2.80	3.12	1.03
Capelin	<i>Mallotus villosus</i>	65	0.00451	0.00355	3.12	3.22	1.08
Chinook salmon	<i>Oncorhynchus tshawytscha</i>	962	0.01043	0.01047	3.05	3.03	1.03
Chum salmon	<i>Oncorhynchus keta</i>	262	0.00217	0.01413	3.88	3.10	1.05
Coho salmon	<i>Oncorhynchus kisutch</i>	16	0.00622	0.01047	3.29	3.03	1.02
Crescent gunnel	<i>Pholis laeta</i>	301	0.00315	0.00186	3.05	3.14	1.02
English sole	<i>Parophrys vetulus</i>	559	0.01299	0.00603	2.88	3.02	1.02
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	7	0.01272	0.00832	2.57	3.14	2.64
High cockscomb	<i>Anoplarchus purpurescens</i>	8	0.04990	0.00389	1.86	3.12	1.04
Pacific herring	<i>Clupea harengus pallasii</i>	836	0.00650	0.00646	3.14	3.07	1.04
Pacific sanddab	<i>Citharichthys sordidus</i>	13	0.01537	0.00977	2.82	3.07	1.02
Pacific sandlance	<i>Ammodytes hexapterus</i>	184	0.00305	0.00257	3.07	3.15	1.01
Pacific tomcod	<i>Microgadus proximus</i>	31	0.01102	0.00794	3.01	3.10	1.04
Padded sculpin	<i>Artemis fenestralis</i>	86	0.01401	0.00676	3.03	3.17	1.02
Peamouth chub	<i>Mylocheilus caurinus</i>	16	0.03074	0.00851	2.65	3.06	1.01
Penpoint gunnel	<i>Apodichthys flavidus</i>	106	0.00743	0.00102	2.71	3.06	1.10
Pile perch	<i>Rhacochilus vacca</i>	22	0.00485	0.01950	3.58	2.97	1.00
Pink salmon	<i>Oncorhynchus gorboscha</i>	171	0.00542	0.01148	3.26	3.08	1.04
Rock sole	<i>Lepidopsetta bilineata</i>	37	0.01246	0.00933	2.98	3.07	1.01
Rosylip sculpin	<i>Ascelichthys rhodorus</i>	8	0.01640	0.00676	3.04	3.17	1.03
Saddleback gunnel	<i>Pholis ornata</i>	7	0.00736	0.00186	2.67	3.14	1.04
Sand sole	<i>Psettichthys melanostictus</i>	43	0.01567	0.00933	2.82	3.08	1.02
Sharpnose sculpin	<i>Clinocottus acuticeps</i>	67	0.01304	0.00676	2.86	3.17	1.03
Shiner perch	<i>Cymatogaster aggregata</i>	613	0.01298	0.01950	3.13	2.97	1.02
Snake prickleback	<i>Lumpenus sagitta</i>	225	0.00499	0.00129	2.73	2.98	1.03
Spinynose sculpin	<i>Asemichthys taylori</i>	8	0.01083	0.00676	3.13	3.17	1.03
Staghorn sculpin	<i>Leptocottus armatus</i>	934	0.01512	0.01023	2.92	3.19	1.01
Starry flounder	<i>Platichthys stellatus</i>	1286	0.01326	0.00851	2.96	3.08	1.01
Sturgeon poacher	<i>Agonus acipenserinus</i>	11	0.00621	0.00389	2.86	3.12	1.01
Surf smelt	<i>Hypomesus pretiosus pretiosus</i>	437	0.00309	0.00363	3.47	3.17	1.02
Tadpole sculpin	<i>Psychrolutes paradoxus</i>	38	0.00399	0.00389	3.02	3.12	1.04
Threespine stickleback	<i>Gasterosteus aculeatus</i>	924	0.00984	0.01023	3.09	3.07	1.04
Tidepool sculpin	<i>Oligocottus maculosus</i>	349	0.01330	0.00676	3.11	3.17	1.02
Tubesnout	<i>Aulorhynchus flavidus</i>	621	0.00685	0.00263	2.35	3.14	1.08
Whitespotted greenling	<i>Hexagrammos stelleri</i>	20	0.00788	0.00676	3.13	3.16	1.01
	Total			10219			

Table 7. Comparison of sampling period (season), year, and fish diversity by a variety of studies. Location code: 1 = Iona, 2 = Steveston, and 3 = Roberts.

Study	Fish Species Diversity	Sampling Period	Year	Location (by area)
Greer et al. 1980	37	April-July	1979	1,2,3
Conlin (this study)	29	Mar 1980-July 1981	1980, 1981	1
Conlin (this study)	26	Mar 1980-July 1981	1980, 1981	2
Conlin (this study)	59	Mar 1980-July 1981	1980, 1981	3
MacDonald 1984	40	April-Aug	1981, 1982	3
Nishimura et al. 1996	9	July-Aug	1995	1
Chalifour et al. 2019	22	Mar-July + Sept-Oct	2016, 2017	2
Chalifour et al. 2019	37	Mar-July + Sept-Oct	2016, 2017	3

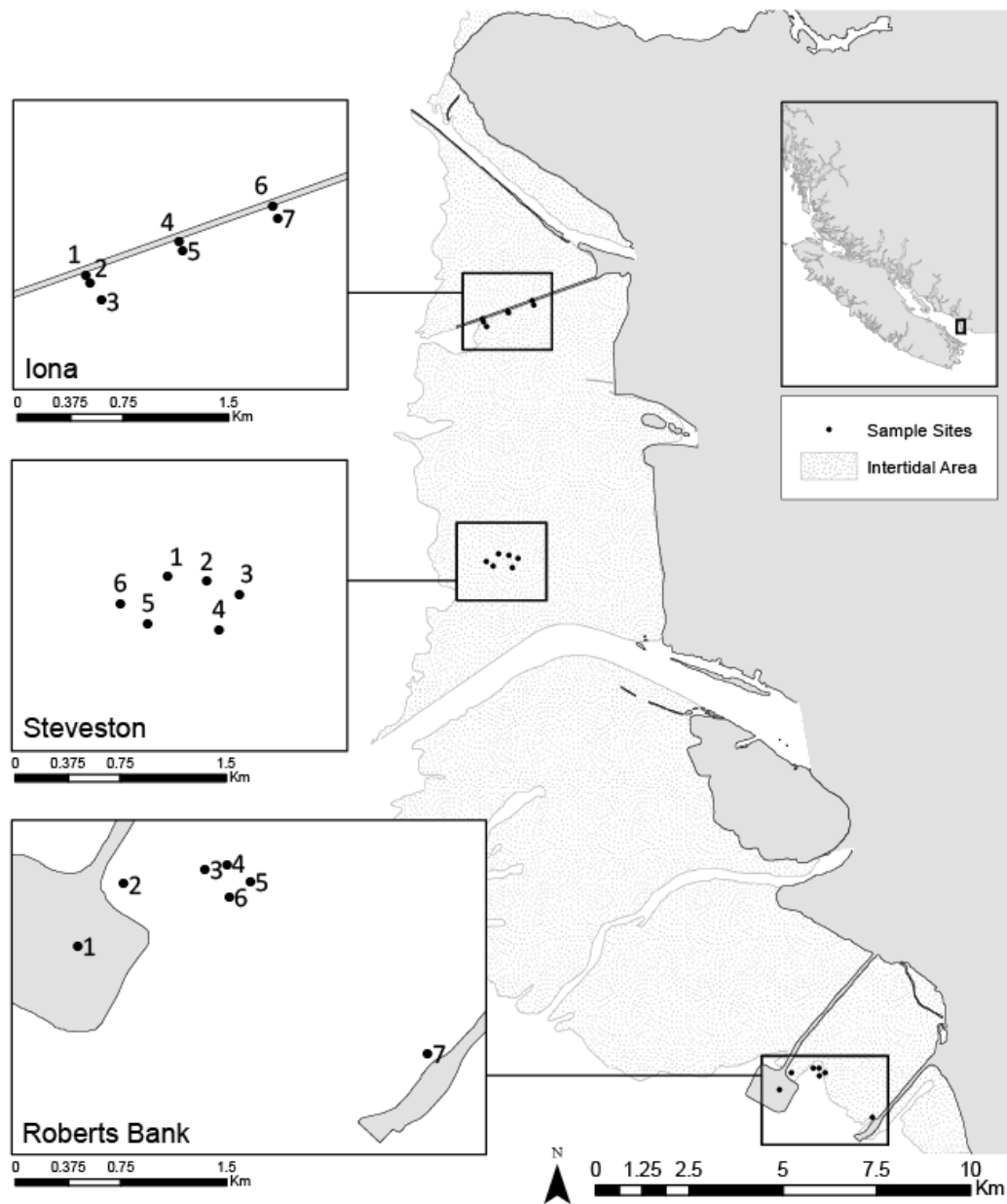


Figure 1. Map of the sample sites in the three sample areas on Sturgeon and Roberts Banks, British Columbia.

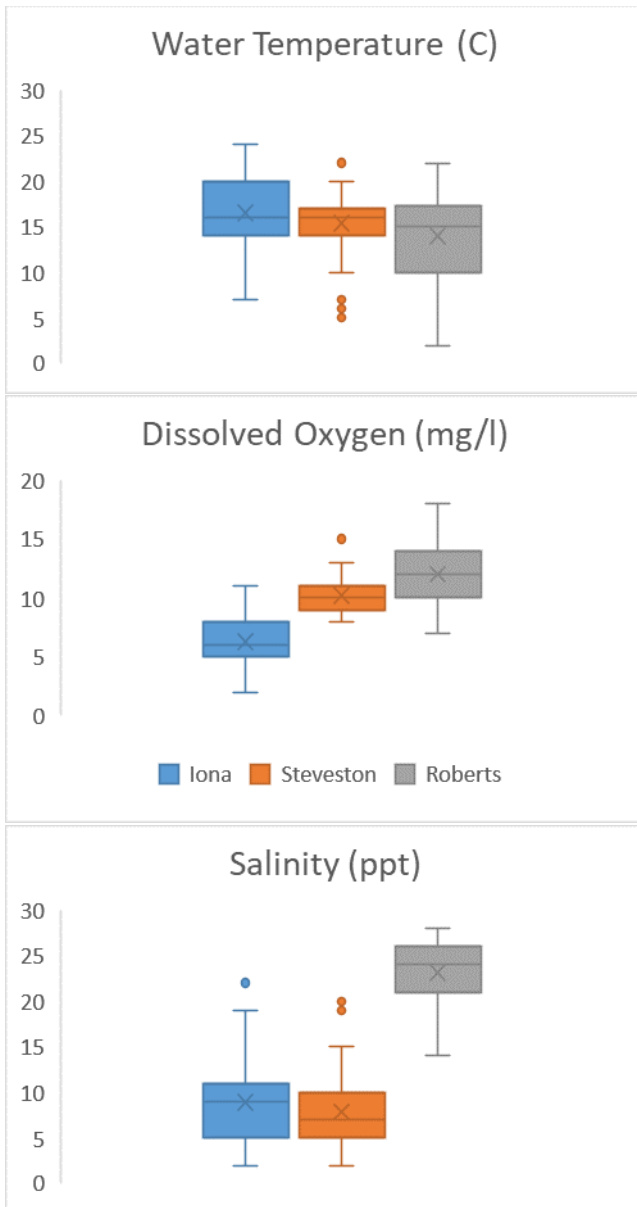


Figure 2. Water Quality boxplots for a) Temperature (C), b) Salinity (ppt), and c) Dissolved Oxygen (mg/l). Points indicate outliers, whiskers indicate quartiles, X indicates mean.

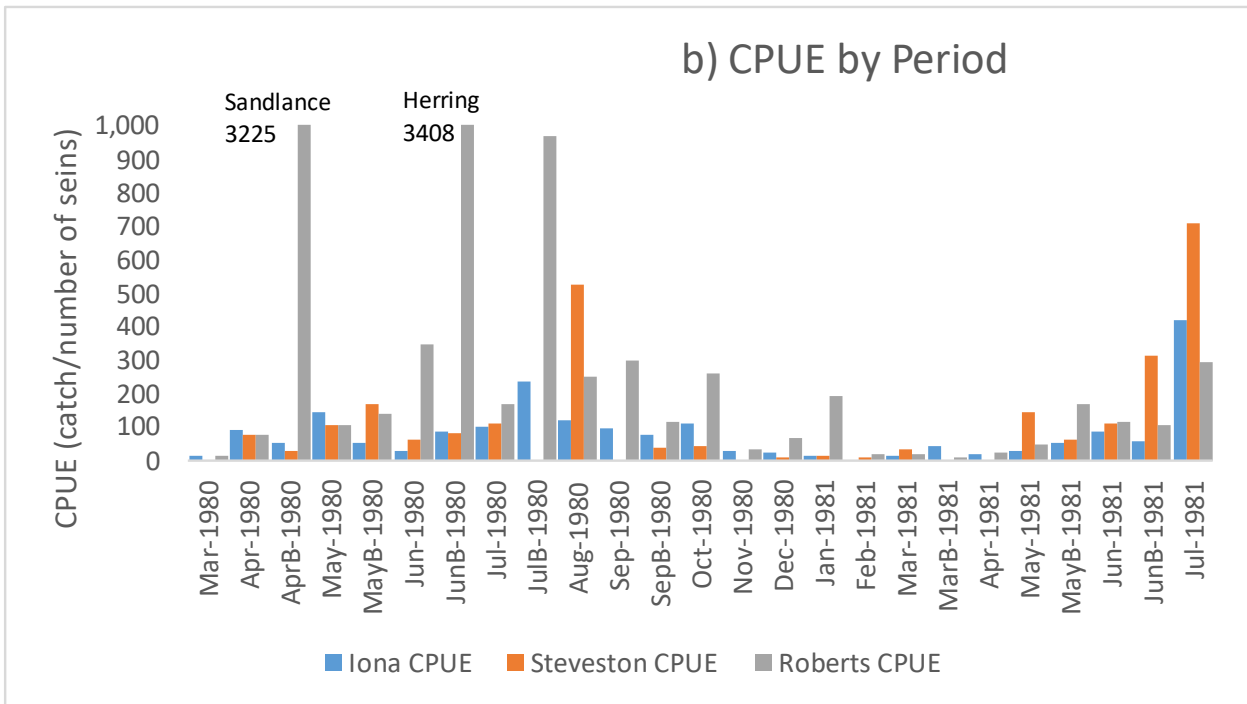
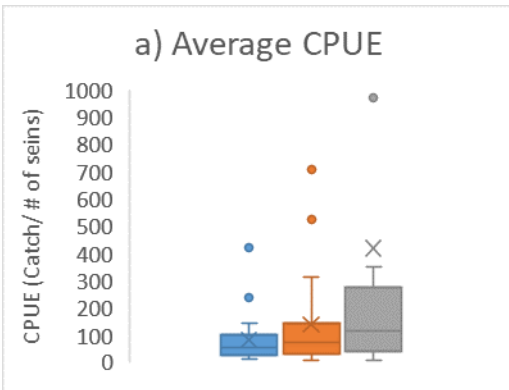


Figure 3. a) Average catch per unit effort (CPUE) boxplot and b) Average CPUE by sampling period (approximately every 2 weeks) showing high variability sources. Points off the vertical axis scale are identified.

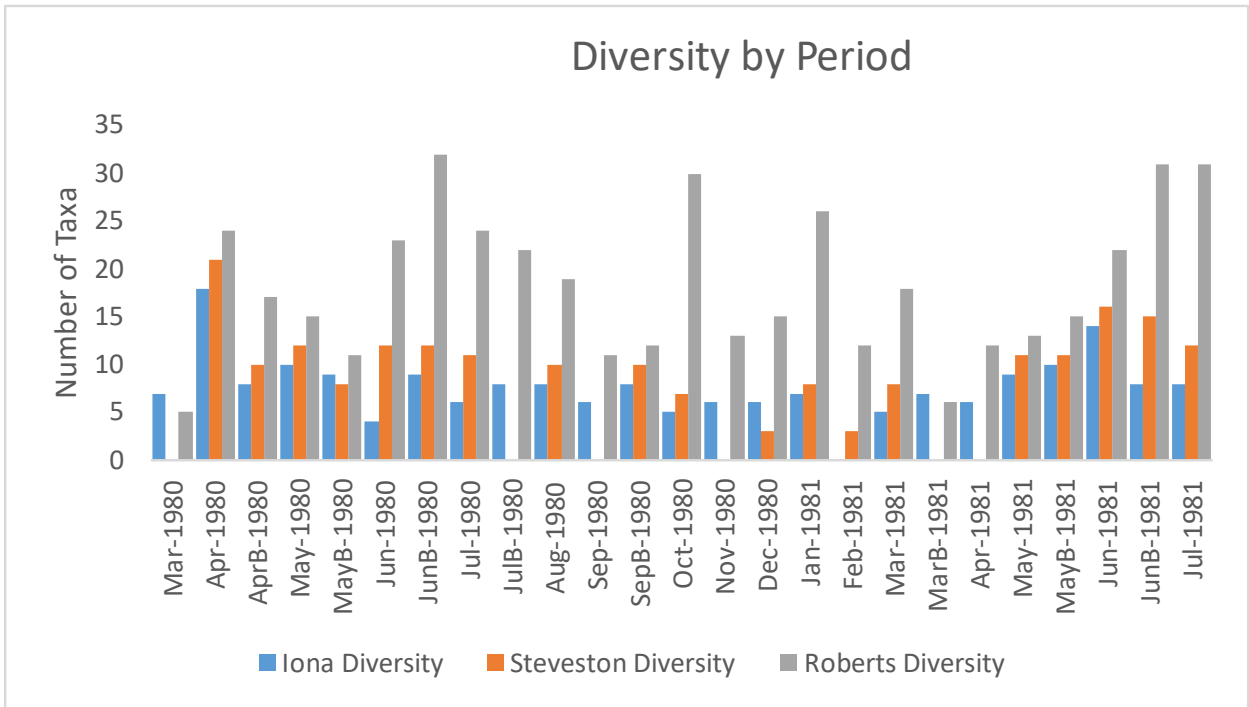
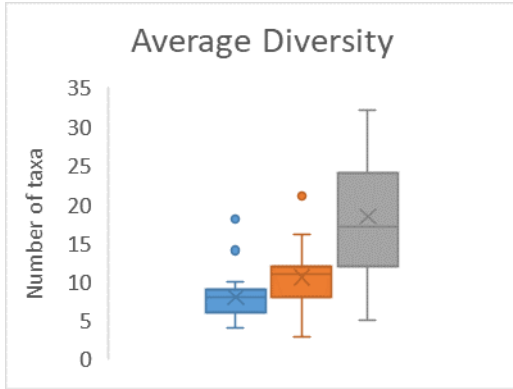


Figure 4. a) Average species diversity boxplot and b) Average diversity by sampling period (approximately every 2 weeks) showing high variability sources.

Non-metric MDS

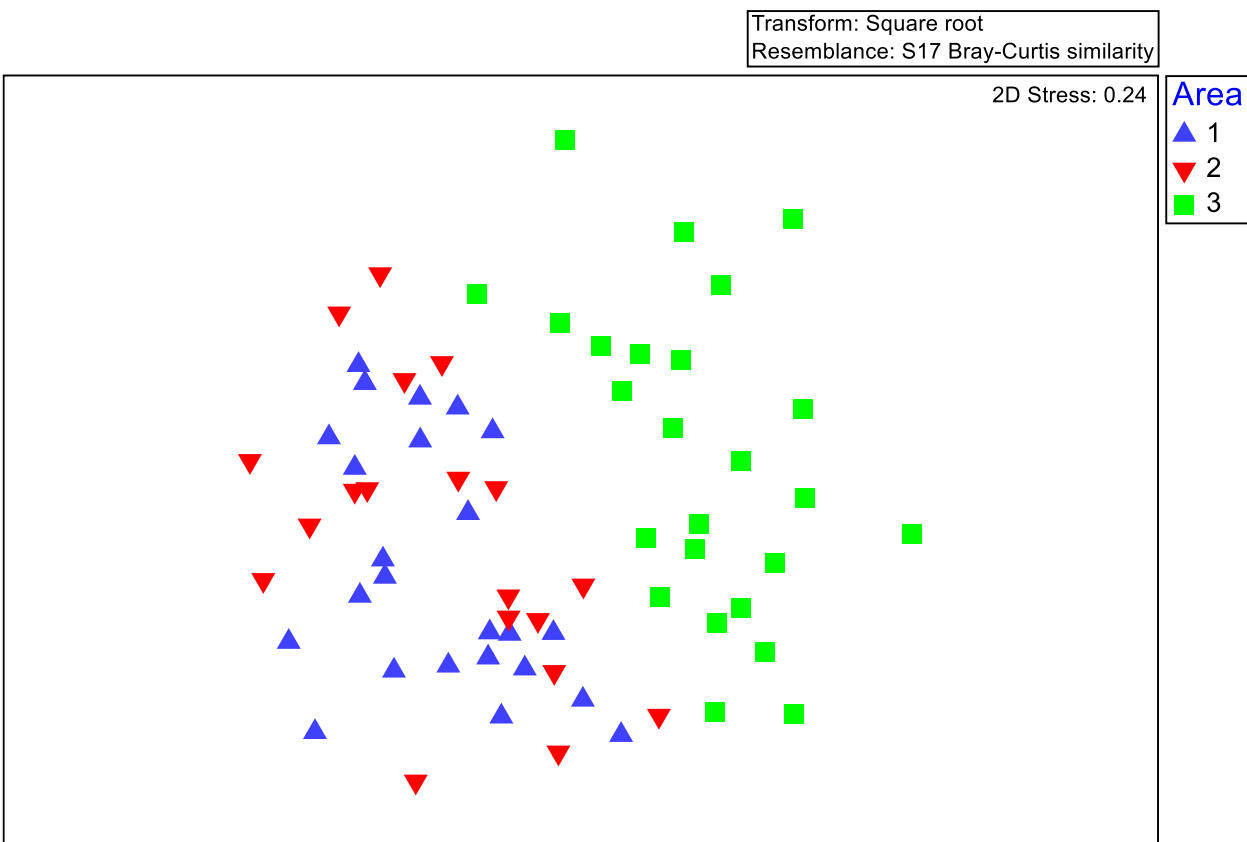


Figure 5. Non-metric multidimensional scaling biplot of fish communities sampled at Iona (blue triangles), Steveston (inverted red triangles), and Roberts (green squares) locations during 1980-1981. See text and Table 5 for ANOSIM results.

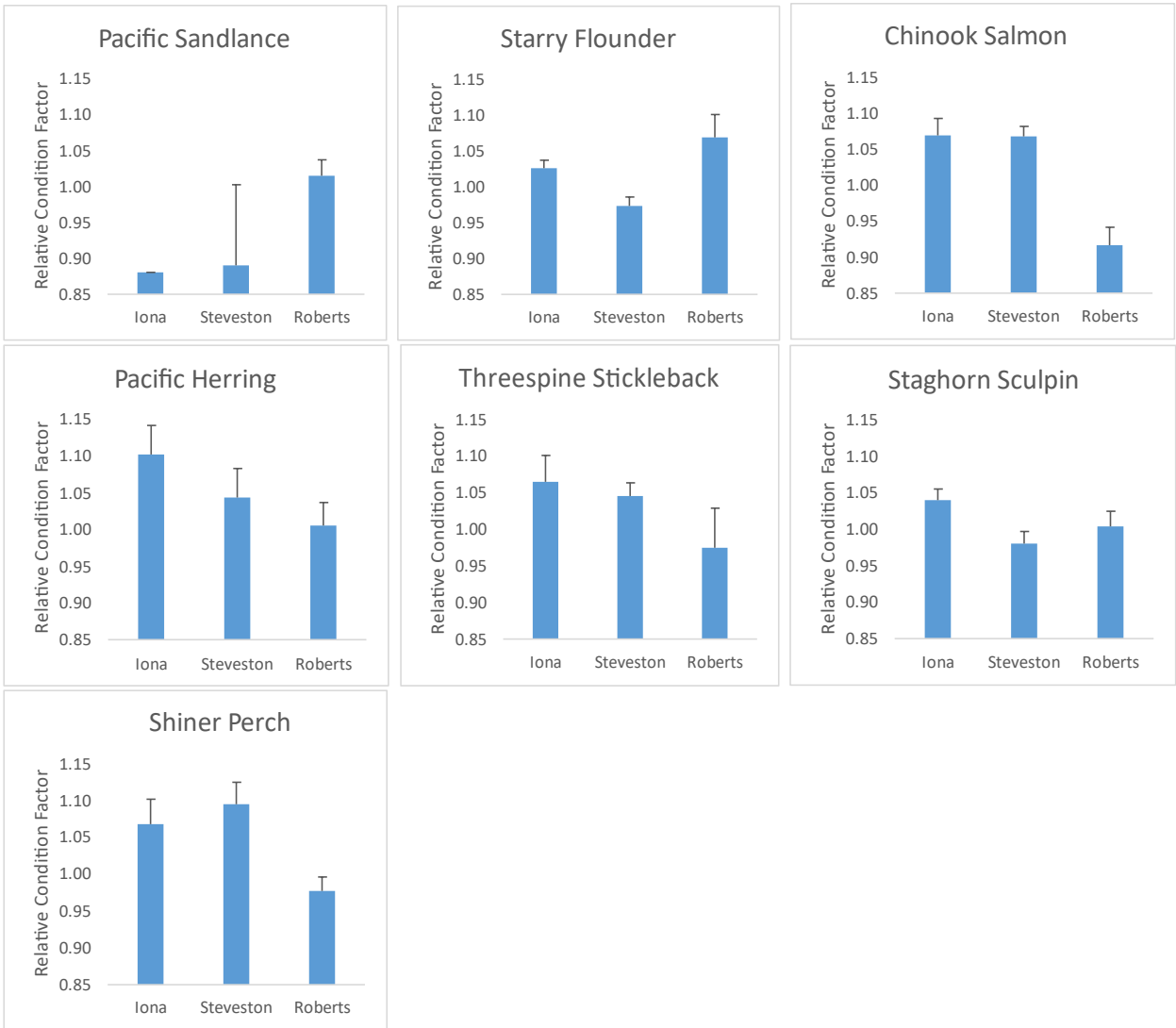


Figure 6. Average relative condition factor values for the seven most abundant species. Error bars are 95% confidence limits.

APPENDIX I: WATER QUALITY DATA (WATER CHARACTERISTICS)

Area	Site	Period	Date (yymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
1	1	1	800321	10	22	9
1	1	2	800409		15	
1	1	2	800418		11	3
1	1	3	800430	14	8	7
1	1	4	800515		3	6
1	1	5	800528	16	9	4
1	1	7	800626	16	4	3
1	1	8	800709	20	9	3
1	1	9	800730	23		6
1	1	10	800811	22	10	6
1	1	11	800904	15	10	3
1	1	12	800925	14	17	5
1	1	13	801030	12	17	3
1	1	14	801118	9	19	7
1	1	15	801211	8	17	8
1	1	16	810120	8	14	7
1	1	18	810303	9	16	8
1	1	19	810325	15	14	8
1	1	20	810408	12	12	11
1	1	21	810507	13	10	7
1	1	22	810519	16	5	6
1	1	23	810603	16	9	5
1	1	24	810618	14	5	4
1	1	25	810702	18	8	4
1	2	5	800528	16	10	6
1	2	7	800626	17	5	5
1	2	8	800709	20	10	8
1	2	9	800730	23		8
1	2	10	800811	23	12	7
1	2	11	800904	15	11	7
1	2	15	801211	8	16	7
1	2	21	810507	13	9	8
1	2	22	810519	16	5	6
1	2	23	810603	17	6	6
1	2	24	810618	14	5	8
1	2	25	810702	19	9	7
1	3	7	800626	17	6	
1	3	9	800730	23	10	8
1	3	10	800811	23	13	7

Area	Site	Period	Date (yymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
1	3	22	810519	16	8	8
1	4	5	800528	17	7	8
1	4	7	800626	18	5	4
1	4	8	800709	24	6	7
1	4	9	800730	23	9	5
1	4	11	800904	15	10	4
1	4	15	801211	9	9	6
1	4	16	810120	12	3	2
1	4	18	810303	8	15	7
1	4	19	810325		14	9
1	4	20	810408	12	6	10
1	4	21	810507	14	4	6
1	4	22	810519		5	4
1	4	23	810603	17	2	3
1	4	24	810618	14	2	6
1	4	25	810702	20	9	5
1	5	5	800528	16	8	5
1	5	7	800626	17	4	6
1	5	8	800709	21		11
1	5	9	800730	24	9	5
1	5	10	800811	24	11	8
1	5	15	801211	7	16	7
1	5	21	810507	14	5	6
1	5	22	810519		5	8
1	5	23	810603	17	6	7
1	5	24	810618	13	4	9
1	5	25	810702	20	8	5
1	6	5	800528	18	8	5
1	6	7	800626	18	4	7
1	6	8	800709	22	4	6
1	6	9	800730	23	9	5
1	7	5	800528	18	8	5
1	7	7	800626	20	4	6
1	7	9	800730	23	9	8
1	7	10	800811	24	11	7
2	1	21	810505	17	12	12
2	1	23	810602	18	3	9
2	2	6	800612	22	5	10
2	2	7	800627	16	5	8
2	2	21	810505	17	10	12
2	2	23	810602	17	3	9

Area	Site	Period	Date (yyymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
2	2	24	810617	17	4	11
2	2	25	810630		8	9
2	3 (rep2)	4	800514	12	16	10
2	3	4	800514	14	14	10
2	3 (rep3)	4	800514	16	11	10
2	3	6	800612	22	6	10
2	3	8	800711	16	10	12
2	3	21	810505	16	11	12
2	3	23	810602	17	3	9
2	3	24	810617	16	6	10
2	3	25	810630	17	10	9
2	4	7	800627	18	5	9
2	4	23	810602	18	3	9
2	4	25	810630	17	9	10
2	5	8	800711	16	10	9
2	5	23	810602	17	2	11
2	6	2	800410	10	20	13
2	6	3	800501	14	5	
2	6	4	800514	14	7	10
2	6	5	800529	13	6	11
2	6	6	800612	20	5	10
2	6	7	800627	16	3	15
2	6	8	800711	16	10	9
2	6	10	800809	22	12	9
2	6	12	800923	14	8	9
2	6	13	801029	10	15	9
2	6	15	801210	5	19	10
2	6	16	810119		12	11
2	6	17	810217	6	10	10
2	6	18	810304	7	11	11
2	6	21	810505	15	9	12
2	6	22	810521	14	7	10
2	6	23	810602	14	2	10
2	6	24	810617	15	2	8
2	6	25	810630	15	6	10
3	1	1	800320	10	28	11
3	1	2	800411	10	28	
3	1	3	800501		21	12
3	1	5	800530	14	23	15
3	1	7	800628	18	18	12

Area	Site	Period	Date (yymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
3	1	8	800710	17	19	10
3	1	9	800728	16	26	12
3	1	10	800810	17	26	12
3	1	11	800905	15	21	10
3	1	12	800924	14	26	10
3	1	13	801027	10	26	8
3	1	14	801117	8	22	10
3	1	15	801208	5	25	9
3	1	16	810120	9	24	9
3	1	17	810216	9	25	9
3	1	18	810305	8	26	9
3	1	19	810323	13	26	12
3	1	20	810409	10	25	13
3	1	21	810506	12	22	14
3	1	22	810520	16	22	12
3	1	23	810601	17	14	14
3	1	24	810616	15	16	12
3	1	25	810629	16	19	13
3	2	4	800516			12
3	2	5	800530	17	23	17
3	2	6	800613	22	21	18
3	2	7	800628	18	17	16
3	2	8	800710	18	18	12
3	2	9	800728	21	26	16
3	2	11	800905	16	15	11
3	2	12	800924	15	27	9
3	2	13	801028	10	26	8
3	2	14	801117	8	22	10
3	2	15	801209	3	26	10
3	2	16	810120	10	24	9
3	2	17	810216	10	25	9
3	2	18	810305	7	27	9
3	2	19	810323	12	26	12
3	2	20	810409	11	25	12
3	2	21	810506	15	26	16
3	2	22	810520	18	24	17
3	2	23	810601	18	15	17
3	2	25	810629	17	19	14
3	3	6	800613	20	22	13
3	3	7	800628	19	17	16
3	3	8	800710	19	19	11

Area	Site	Period	Date (yyymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
3	3	9	800728	18	25	10
3	3	21	810506	13	26	14
3	3	25	810629	17		14
3	4	5	800530	16	22	15
3	4	6	800613	18	23	13
3	4	7	800628	18	18	11
3	4	8	800710	18	20	10
3	4	9	800728	18	25	10
3	4	13	801028	10	26	8
3	4	15	801209	2	28	11
3	4	21	810506	13	26	13
3	4	23	810601	17	15	12
3	4	25	810629	17	21	13
3	5	5	800530	18	21	16
3	5	6	800613	18	24	13
3	5	7	800628	20	19	15
3	5	9	800728	18	26	10
3	5	13	801028	11	26	8
3	5	15	801209	2	28	10
3	5	21	810506	13	26	15
3	5	24	810616	17		16
3	6	5	800530	17	21	16
3	6	9	800728	21	26	12
3	6	13	801028	11	27	8
3	6	21	810506	14	26	14
3	6	23	810601	17	20	13
3	7	5	800530	17	23	17
3	7	8	800710	17	21	10
3	7	9	800728	18	26	10
3	7	12	800924	14	27	10
3	7	13	801028	11	27	7
3	7	14	801117	8	24	9
3	7	15	801209	5	28	10
3	7	16	810121	10	27	7
3	7	17	810216	9	27	9
3	7	18	810305	8	28	10
3	7	20	810409	11	25	13
3	7	21	810506	14	26	15
3	7	22	810520	15	24	14
3	7	23	810601	16	17	13
3	7	24	810616	15	14	15

Area	Site	Period	Date (yymmdd)	Water Temperature (C)	Salinity (ppt)	Dissolved Oxygen (mg/l)
3	7	25	810629	17	20	13

APPENDIX II: CATCH DATA

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	3	1	800320	2	35	English sole	Parophrys vetulus	9
3	1	3	1	800320	2	35	Threespine stickleback	Gasterosteus aculeatus	1
3	1	2	1	800320	2	10	Bay pipefish	Syngnathus griseolineatus	2
3	1	1	1	800320	1	25	Threespine stickleback	Gasterosteus aculeatus	3
3	1	3	1	800320	2	35	Staghorn sculpin	Leptocottus armatus	1
3	1	1	1	800320	1	25	English sole	Parophrys vetulus	2
3	1	1	1	800320	1	25	Bay pipefish	Syngnathus griseolineatus	1
3	1	2	1	800320	2	10	Capelin	Mallotus villosus	16
3	1	2	1	800320	2	10	English sole	Parophrys vetulus	7
1	1	1	1	800321	2	5	Starry flounder	Platichthys stellatus	4
1	1	3	1	800321	2	20	Starry flounder	Platichthys stellatus	4
1	1	3	1	800321	2	20	Staghorn sculpin	Leptocottus armatus	2
1	1	3	1	800321	2	20	Unidentified flatfish	Unidentified flatfish	1
1	1	3	1	800321	2	20	Arrow goby	Clevelandia ios	1
1	1	2	1	800321	2	35	Surf smelt	Hypomesus pretiosus pretiosus	23
1	1	2	1	800321	2	35	Starry flounder	Platichthys stellatus	2
1	1	2	1	800321	2	35	Staghorn sculpin	Leptocottus armatus	1
1	1	2	1	800321	2	35	Snake prickleback	Lumpenus sagitta	1
1	1	1	1	800321	2	5	Threespine stickleback	Gasterosteus aculeatus	1
1	1	1	1	800321	2	5	Surf smelt	Hypomesus pretiosus pretiosus	5
1	1	3	1	800321	2	20	Surf smelt	Hypomesus pretiosus pretiosus	1
1	1	2	2	800409	2	37	Chum salmon	Oncorhynchus keta	1
1	1	3	2	800409	2	45	Starry flounder	Platichthys stellatus	3
1	1	3	2	800409	2	45	Pink salmon	Oncorhynchus gorbuscha	1
1	1	3	2	800409	2	45	Chum salmon	Oncorhynchus keta	4
1	1	2	2	800409	2	37	Threespine stickleback	Gasterosteus aculeatus	1
1	1	2	2	800409	2	37	Starry flounder	Platichthys stellatus	1
1	1	2	2	800409	2	37	Pink salmon	Oncorhynchus gorbuscha	1
1	1	3	2	800409	2	45	Threespine stickleback	Gasterosteus aculeatus	1
1	1	1	2	800409	2	25	Starry flounder	Platichthys stellatus	5
1	1	1	2	800409	2	25	Staghorn sculpin	Leptocottus armatus	1
1	1	1	2	800409	2	25	Chinook salmon	Oncorhynchus tshawytscha	2
1	1	2	2	800409	2	37	Staghorn sculpin	Leptocottus armatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	1	2	800410	1	40	Chum salmon	Oncorhynchus keta	1
2	6	1	2	800410	1	40	Pink salmon	Oncorhynchus gorbuscha	14
3	1	2	2	800411	1	80	English sole	Parophrys vetulus	17
3	1	3	2	800411	1	65	Bay pipefish	Syngnathus griseolineatus	1
3	1	3	2	800411	1	65	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	3	2	800411	1	65	Crescent gunnel	Pholis laeta	1
3	1	3	2	800411	1	65	English sole	Parophrys vetulus	6
3	1	3	2	800411	1	65	Pacific sandlance	Ammodytes hexapterus	9
3	1	2	2	800411	1	80	Pacific sandlance	Ammodytes hexapterus	1
3	1	2	2	800411	1	80	Starry flounder	Platichthys stellatus	2
3	1	2	2	800411	1	80	Chum salmon	Oncorhynchus keta	3
3	1	1	2	800411	1	90	Threespine stickleback	Gasterosteus aculeatus	3
3	1	1	2	800411	1	90	Surf smelt	Hypomesus pretiosus pretiosus	12
3	1	3	2	800411	1	65	Threespine stickleback	Gasterosteus aculeatus	1
3	1	1	2	800411	1	90	Starry flounder	Platichthys stellatus	1
2	6	2	2	800415	2	45	Chinook salmon	Oncorhynchus tshawytscha	3
2	6	2	2	800415	2	45	Surf smelt	Hypomesus pretiosus pretiosus	5
2	6	1	2	800415	2	30	Chinook salmon	Oncorhynchus tshawytscha	3
2	6	1	2	800415	2	30	Sand sole	Psettichthys melanosticus	4
2	6	1	2	800415	2	30	Starry flounder	Platichthys stellatus	6
2	6	1	2	800415	2	30	Surf smelt	Hypomesus pretiosus pretiosus	3
2	6	2	2	800415	2	45	Arrow goby	Clevelandia ios	1
2	6	2	2	800415	2	45	Starry flounder	Platichthys stellatus	3
2	6	2	2	800415	2	45	Sand sole	Psettichthys melanosticus	4
2	6	3	2	800415	2	55	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	2	2	800415	2	45	Threespine stickleback	Gasterosteus aculeatus	2
2	6	3	2	800415	2	55	Arrow goby	Clevelandia ios	1
2	6	3	2	800415	2	55	Unidentified flatfish	Unidentified flatfish	2
2	6	3	2	800415	2	55	Pink salmon	Oncorhynchus gorbuscha	1
2	6	3	2	800415	2	55	Sand sole	Psettichthys melanosticus	1
2	6	3	2	800415	2	55	Starry flounder	Platichthys stellatus	3
2	6	2	2	800416	2	35	Staghorn sculpin	Leptocottus armatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	1	2	800416	1	25	Pink salmon	Oncorhynchus gorbuscha	1
2	6	2	2	800416	2	35	Threespine stickleback	Gasterosteus aculeatus	6
2	6	3	2	800416	2	50	Surf smelt	Hypomesus pretiosus pretiosus	19
2	6	1	2	800416	1	25	Chinook salmon	Oncorhynchus tshawytscha	4
2	6	1	2	800416	1	25	Pacific sandlance	Ammodytes hexapterus	2
2	6	1	2	800416	1	25	Sand sole	Psettichthys melanosticus	2
2	6	1	2	800416	1	25	Starry flounder	Platichthys stellatus	5
2	6	1	2	800416	1	25	Surf smelt	Hypomesus pretiosus pretiosus	7
2	6	2	2	800416	2	35	Arrow goby	Clevelandia ios	1
2	6	3	2	800416	2	50	Chum salmon	Oncorhynchus keta	2
2	6	2	2	800416	2	35	Chum salmon	Oncorhynchus keta	1
2	6	2	2	800416	2	35	Pacific sandlance	Ammodytes hexapterus	1
2	6	2	2	800416	2	35	Pink salmon	Oncorhynchus gorbuscha	4
2	6	2	2	800416	2	35	Surf smelt	Hypomesus pretiosus pretiosus	14
2	6	3	2	800416	2	50	Chinook salmon	Oncorhynchus tshawytscha	45
2	6	2	2	800416	2	35	Chinook salmon	Oncorhynchus tshawytscha	17
2	6	1	2	800416	1	25	Unidentified flatfish	Unidentified flatfish	1
2	6	3	2	800416	2	50	Pink salmon	Oncorhynchus gorbuscha	4
3	1	2	2	800417	1	50	Unidentified flatfish	Unidentified flatfish	27
3	1	3	2	800417	1	35	Bay pipefish	Syngnathus griseolineatus	2
3	1	3	2	800417	1	35	Buffalo sculpin	Enophrys bison	10
3	1	3	2	800417	1	35	C-O sole	Pleuronichthys coensus	1
3	1	3	2	800417	1	35	English sole	Parophrys vetulus	21
3	1	3	2	800417	1	35	Unidentified juvenile rockfish	Unidentified juvenile rockfish	2
3	1	3	2	800417	1	35	Penpoint gunnel	Apodichthys flavidus	12
3	1	3	2	800417	1	35	Threespine stickleback	Gasterosteus aculeatus	6
3	1	3	2	800417	1	35	Unidentified larval fish	Unidentified larval fish	1
3	1	2	2	800417	1	50	Unidentified snailfish	Unidentified snailfish	1
3	1	3	2	800417	1	35	Unidentified snailfish	Unidentified snailfish	1
3	1	1	2	800417	1	65	Penpoint gunnel	Apodichthys flavidus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	3	2	800417	1	35	Surf smelt	Hypomesus pretiosus pretiosus	4
3	1	2	2	800417	1	50	Unidentified sculpin	Unidentified sculpin	1
3	1	2	2	800417	1	50	Tubesnout	Aulorhynchus flavidus	4
3	1	2	2	800417	1	50	Starry flounder	Platichthys stellatus	1
3	1	2	2	800417	1	50	Penpoint gunnel	Apodichthys flavidus	10
3	1	2	2	800417	1	50	English sole	Parophrys vetulus	4
3	1	2	2	800417	1	50	Chum salmon	Oncorhynchus keta	3
3	1	2	2	800417	1	50	Buffalo sculpin	Enophrys bison	21
3	1	2	2	800417	1	50	Bay pipefish	Syngnathus griseolineatus	2
3	1	1	2	800417	1	65	Surf smelt	Hypomesus pretiosus pretiosus	4
3	1	1	2	800417	1	65	Unidentified juvenile rockfish	Unidentified juvenile rockfish	1
3	1	1	2	800417	1	65	English sole	Parophrys vetulus	3
3	1	1	2	800417	1	65	Buffalo sculpin	Enophrys bison	8
3	1	3	2	800417	1	35	Unidentified flatfish	Unidentified flatfish	22
3	1	1	2	800417	1	65	Threespine stickleback	Gasterosteus aculeatus	2
3	1	1	2	800417	1	65	Bay pipefish	Syngnathus griseolineatus	1
1	1	3	2	800418	2	35	Starry flounder	Platichthys stellatus	15
1	1	3	2	800418	2	35	Staghorn sculpin	Leptocottus armatus	1
1	1	3	2	800418	2	35	Shiner perch	Cymatogaster aggregata	1
1	1	3	2	800418	2	35	Pink salmon	Oncorhynchus gorbuscha	2
1	1	3	2	800418	2	35	Crescent gunnel	Pholis laeta	1
1	1	3	2	800418	2	35	Chum salmon	Oncorhynchus keta	5
1	1	3	2	800418	2	35	Chinook salmon	Oncorhynchus tshawytscha	1
1	1	3	2	800418	2	35	Arrow goby	Clevelandia ios	4
1	1	2	2	800418	2	15	Threespine stickleback	Gasterosteus aculeatus	6
1	1	2	2	800418	2	15	Surf smelt	Hypomesus pretiosus pretiosus	31
1	1	2	2	800418	2	15	Starry flounder	Platichthys stellatus	16
1	1	3	2	800418	2	35	Surf smelt	Hypomesus pretiosus pretiosus	1
1	1	2	2	800418	2	15	Pink salmon	Oncorhynchus gorbuscha	63
1	1	3	2	800418	2	35	English sole	Parophrys vetulus	1
1	1	2	2	800418	2	15	Unidentified juvenile rockfish	Unidentified juvenile rockfish	1
1	1	2	2	800418	2	15	English sole	Parophrys vetulus	3
1	1	2	2	800418	2	15	Chum salmon	Oncorhynchus keta	54

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	2	2	800418	2	15	Chinook salmon	Oncorhynchus tshawytscha	5
1	1	2	2	800418	2	15	Arrow goby	Clevelandia ios	7
1	1	1	2	800418	1	15	Threespine stickleback	Gasterosteus aculeatus	3
1	1	1	2	800418	1	15	Starry flounder	Platichthys stellatus	16
1	1	1	2	800418	1	15	Staghorn sculpin	Leptocottus armatus	1
1	1	1	2	800418	1	15	Pink salmon	Oncorhynchus gorbuscha	7
1	1	1	2	800418	1	15	Crescent gunnel	Pholis laeta	1
1	1	1	2	800418	1	15	Chum salmon	Oncorhynchus keta	1
1	1	1	2	800418	1	15	Chinook salmon	Oncorhynchus tshawytscha	2
1	1	2	2	800418	2	15	Staghorn sculpin	Leptocottus armatus	1
1	1	3	2	800418	2	35	Threespine stickleback	Gasterosteus aculeatus	5
1	1	1	3	800430	2	1	Surf smelt	Hypomesus pretiosus pretiosus	1
1	1	2	3	800430	2	30	Staghorn sculpin	Leptocottus armatus	3
1	1	2	3	800430	2	30	Crescent gunnel	Pholis laeta	1
1	1	3	3	800430	2	50	Starry flounder	Platichthys stellatus	4
1	1	2	3	800430	2	30	Arrow goby	Clevelandia ios	39
1	1	1	3	800430	2	1	Starry flounder	Platichthys stellatus	8
1	1	1	3	800430	2	1	Staghorn sculpin	Leptocottus armatus	5
1	1	1	3	800430	2	1	Crescent gunnel	Pholis laeta	1
1	1	2	3	800430	2	30	Starry flounder	Platichthys stellatus	16
1	1	3	3	800430	2	50	Arrow goby	Clevelandia ios	21
1	1	3	3	800430	2	50	Crescent gunnel	Pholis laeta	1
1	1	3	3	800430	2	50	Pacific herring	Clupea harengus pallasii	1
1	1	3	3	800430	2	50	Saddleback gunnel	Pholis ornata	1
1	1	3	3	800430	2	50	Staghorn sculpin	Leptocottus armatus	4
1	1	1	3	800430	2	1	Arrow goby	Clevelandia ios	44
1	1	2	3	800430	2	30	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	1	3	800501	1	5	Surf smelt	Hypomesus pretiosus pretiosus	5
3	1	1	3	800501	1	5	Butter sole	Isopsetta isolepis	1
3	1	1	3	800501	1	5	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	1	3	800501	1	5	Chum salmon	Oncorhynchus keta	1
3	1	1	3	800501	1	5	Pacific sandlance	Ammodytes hexapterus	3500
3	1	1	3	800501	1	5	Penpoint gunnel	Apodichthys flavidus	3
3	1	1	3	800501	1	5	Pink salmon	Oncorhynchus gorbuscha	6
3	1	1	3	800501	1	5	Shiner perch	Cymatogaster aggregata	1
3	1	1	3	800501	1	5	Starry flounder	Platichthys stellatus	7

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	3	800501	1	5	Threespine stickleback	Gasterosteus aculeatus	1
2	6	4	3	800501	1	25	Starry flounder	Platichthys stellatus	3
3	1	1	3	800501	1	5	Staghorn sculpin	Leptocottus armatus	15
3	1	1	3	800501	1	5	Buffalo sculpin	Enophrys bison	1
2	6	3	3	800501	1	5	Threespine stickleback	Gasterosteus aculeatus	2
2	6	4	3	800501	1	25	Arrow goby	Clevelandia ios	1
2	6	4	3	800501	1	25	Butter sole	Isopsetta isolepis	5
2	6	4	3	800501	1	25	Chinook salmon	Oncorhynchus tshawytscha	6
2	6	4	3	800501	1	25	Pacific sandlance	Ammodytes hexapterus	1
3	1	3	3	800501	2	55	Buffalo sculpin	Enophrys bison	3
2	6	4	3	800501	1	25	Staghorn sculpin	Leptocottus armatus	1
3	1	2	3	800501	2	25	Buffalo sculpin	Enophrys bison	1
2	6	4	3	800501	1	25	Surf smelt	Hypomesus pretiosus pretiosus	2
2	6	4	3	800501	1	25	Threespine stickleback	Gasterosteus aculeatus	3
3	1	1	3	800501	1	5	Bay pipefish	Syngnathus griseolineatus	2
2	6	4	3	800501	1	25	Pink salmon	Oncorhynchus gorbuscha	1
2	6	1	3	800501	2	55	Starry flounder	Platichthys stellatus	1
3	1	1	3	800501	1	5	Unidentified sculpin	Unidentified sculpin	21
3	1	3	3	800501	2	55	Crescent gunnel	Pholis laeta	1
3	1	3	3	800501	2	55	Kelp greenling	Hexagrammos decogrammus	2
3	1	3	3	800501	2	55	Pacific sandlance	Ammodytes hexapterus	3000
3	1	3	3	800501	2	55	Pink salmon	Oncorhynchus gorbuscha	3
3	1	3	3	800501	2	55	Staghorn sculpin	Leptocottus armatus	27
3	1	3	3	800501	2	55	Threespine stickleback	Gasterosteus aculeatus	2
3	1	3	3	800501	2	55	Unidentified sculpin	Unidentified sculpin	3
3	1	3	3	800501	2	55	Chinook salmon	Oncorhynchus tshawytscha	3
2	6	1	3	800501	2	55	Chinook salmon	Oncorhynchus tshawytscha	6
3	1	3	3	800501	2	55	Butter sole	Isopsetta isolepis	2
2	6	1	3	800501	2	55	Threespine stickleback	Gasterosteus aculeatus	4
2	6	2	3	800501	2	40	Arrow goby	Clevelandia ios	3
2	6	2	3	800501	2	40	Butter sole	Isopsetta isolepis	2
2	6	2	3	800501	2	40	Chinook salmon	Oncorhynchus tshawytscha	31

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	2	3	800501	2	40	Chum salmon	Oncorhynchus keta	4
2	6	2	3	800501	2	40	Pink salmon	Oncorhynchus gorbuscha	1
2	6	2	3	800501	2	40	Starry flounder	Platichthys stellatus	1
2	6	2	3	800501	2	40	Surf smelt	Hypomesus pretiosus pretiosus	2
2	6	1	3	800501	2	55	Arrow goby	Clevelandia ios	4
3	1	2	3	800501	2	25	Unidentified sculpin	Unidentified sculpin	9
2	6	2	3	800501	2	40	Threespine stickleback	Gasterosteus aculeatus	3
3	1	2	3	800501	2	25	Butter sole	Isopsetta isolepis	1
3	1	2	3	800501	2	25	Chinook salmon	Oncorhynchus tshawytscha	8
3	1	2	3	800501	2	25	Chum salmon	Oncorhynchus keta	2
3	1	2	3	800501	2	25	Pacific sandlance	Ammodytes hexapterus	3000
3	1	2	3	800501	2	25	Pink salmon	Oncorhynchus gorbuscha	9
3	1	2	3	800501	2	25	Staghorn sculpin	Leptocottus armatus	5
3	1	2	3	800501	2	25	Starry flounder	Platichthys stellatus	7
3	1	3	3	800501	2	55	Chum salmon	Oncorhynchus keta	2
3	1	2	3	800501	2	25	Threespine stickleback	Gasterosteus aculeatus	2
3	1	2	3	800501	2	25	Bay pipefish	Syngnathus griseolineatus	2
3	1	3	3	800501	2	55	Aleutian sculpin	Cottus aleuticus	15
2	6	3	3	800501	1	5	Surf smelt	Hypomesus pretiosus pretiosus	6
2	6	3	3	800501	1	5	Starry flounder	Platichthys stellatus	3
2	6	3	3	800501	1	5	Staghorn sculpin	Leptocottus armatus	1
2	6	3	3	800501	1	5	Chinook salmon	Oncorhynchus tshawytscha	9
2	6	3	3	800501	1	5	Butter sole	Isopsetta isolepis	2
2	6	3	3	800501	1	5	Arrow goby	Clevelandia ios	3
3	1	2	3	800501	2	25	Surf smelt	Hypomesus pretiosus pretiosus	2
2	3	2	4	800514	2	60	Threespine stickleback	Gasterosteus aculeatus	9
2	6	1	4	800514	2	80	Butter sole	Isopsetta isolepis	1
2	3	1	4	800514	2	40	Crescent gunnel	Pholis laeta	1
2	3	1	4	800514	2	40	Shiner perch	Cymatogaster aggregata	2
2	3	1	4	800514	2	40	Starry flounder	Platichthys stellatus	1
2	3	2	4	800514	2	60	Pink salmon	Oncorhynchus gorbuscha	1
2	3	2	4	800514	2	60	Starry flounder	Platichthys stellatus	4
2	3	3	4	800514	2	20	Arrow goby	Clevelandia ios	4
2	3	3	4	800514	2	20	Butter sole	Isopsetta isolepis	3

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	3	3	4	800514	2	20	Chinook salmon	Oncorhynchus tshawytscha	49
2	3	1	4	800514	2	40	Chinook salmon	Oncorhynchus tshawytscha	400
2	3	3	4	800514	2	20	Starry flounder	Platichthys stellatus	8
2	3	1	4	800514	2	40	Staghorn sculpin	Leptocottus armatus	1
2	6	1	4	800514	2	80	Chinook salmon	Oncorhynchus tshawytscha	21
2	6	1	4	800514	2	80	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	4	800514	2	80	Threespine stickleback	Gasterosteus aculeatus	3
2	6	2	4	800514	2	85	Butter sole	Isopsetta isolepis	1
2	6	2	4	800514	2	85	Chinook salmon	Oncorhynchus tshawytscha	19
2	6	2	4	800514	2	85	Starry flounder	Platichthys stellatus	1
2	6	2	4	800514	2	85	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	3	4	800514	2	90	Chinook salmon	Oncorhynchus tshawytscha	45
2	6	3	4	800514	2	90	Threespine stickleback	Gasterosteus aculeatus	3
2	3	3	4	800514	2	20	Peamouth chub	Mylocheilus caurinus	1
2	3	2	4	800514	2	60	Chinook salmon	Oncorhynchus tshawytscha	49
1	1	3	4	800515	2	85	Crescent gunnel	Pholis laeta	2
1	1	1	4	800515	2	65	Crescent gunnel	Pholis laeta	1
1	1	1	4	800515	2	65	Unidentified flatfish	Unidentified flatfish	9
1	1	1	4	800515	2	65	Staghorn sculpin	Leptocottus armatus	4
1	1	1	4	800515	2	65	Starry flounder	Platichthys stellatus	2
1	1	1	4	800515	2	65	Arrow goby	Clevelandia ios	139
1	1	3	4	800515	2	85	Arrow goby	Clevelandia ios	85
1	1	1	4	800515	2	65	Unidentified sculpin	Unidentified sculpin	3
1	1	2	4	800515	2	75	Arrow goby	Clevelandia ios	164
1	1	2	4	800515	2	75	Chum salmon	Oncorhynchus keta	1
1	1	2	4	800515	2	75	Snake prickleback	Lumpenus sagitta	1
1	1	1	4	800515	2	65	Chinook salmon	Oncorhynchus tshawytscha	1
1	1	2	4	800515	2	75	Staghorn sculpin	Leptocottus armatus	6
1	1	3	4	800515	2	85	Unidentified flatfish	Unidentified flatfish	4
1	1	2	4	800515	2	75	Starry flounder	Platichthys stellatus	3
1	1	3	4	800515	2	85	Unidentified sculpin	Unidentified sculpin	1
1	1	3	4	800515	2	85	Threespine stickleback	Gasterosteus aculeatus	1
1	1	3	4	800515	2	85	Starry flounder	Platichthys stellatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	3	4	800515	2	85	Staghorn sculpin	Leptocottus armatus	2
1	1	3	4	800515	2	85	Snake prickleback	Lumpenus sagitta	1
3	2	1	4	800516	1	195	Unidentified sculpin	Unidentified sculpin	5
3	5	1	4	800516	2	25	Chinook salmon	Oncorhynchus tshawytscha	1
3	5	1	4	800516	2	25	Chum salmon	Oncorhynchus keta	10
3	5	1	4	800516	2	25	Pacific sanddab	Citharichthys sordidus	1
3	5	1	4	800516	2	25	Pink salmon	Oncorhynchus gorbuscha	34
3	5	1	4	800516	2	25	Starry flounder	Platichthys stellatus	7
3	5	1	4	800516	2	25	Butter sole	Isopsetta isolepis	8
3	4	1	4	800516	1	10	Surf smelt	Hypomesus pretiosus pretiosus	1
3	3	1	4	800516	2	45	Chinook salmon	Oncorhynchus tshawytscha	44
3	3	1	4	800516	2	45	Butter sole	Isopsetta isolepis	2
3	3	1	4	800516	2	45	Pink salmon	Oncorhynchus gorbuscha	13
3	3	1	4	800516	2	45	Staghorn sculpin	Leptocottus armatus	2
3	3	1	4	800516	2	45	Threespine stickleback	Gasterosteus aculeatus	1
3	5	1	4	800516	2	25	Tubesnout	Aulorhynchus flavidus	3
3	2	1	4	800516	1	195	Staghorn sculpin	Leptocottus armatus	19
3	3	1	4	800516	2	45	Unidentified larval fish	Unidentified larval fish	10
3	2	1	4	800516	1	195	Chinook salmon	Oncorhynchus tshawytscha	39
3	4	1	4	800516	1	10	Penpoint gunnel	Apodichthys flavidus	1
3	4	1	4	800516	1	10	Pacific sanddab	Citharichthys sordidus	1
3	3	1	4	800516	2	45	Pacific sandlance	Ammodytes hexapterus	1
3	2	1	4	800516	1	195	Surf smelt	Hypomesus pretiosus pretiosus	2
3	2	1	4	800516	1	195	Pink salmon	Oncorhynchus gorbuscha	74
3	2	1	4	800516	1	195	Pacific sandlance	Ammodytes hexapterus	137
3	2	1	4	800516	1	195	Chum salmon	Oncorhynchus keta	13
3	4	1	4	800516	1	10	Unidentified larval fish	Unidentified larval fish	1
3	7	2	4	800516	1	140	Unidentified larval fish	Unidentified larval fish	19
3	7	1	4	800516	1	155	Butter sole	Isopsetta isolepis	2
3	7	1	4	800516	1	155	Chinook salmon	Oncorhynchus tshawytscha	4
3	7	1	4	800516	1	155	Chum salmon	Oncorhynchus keta	2
3	7	1	4	800516	1	155	Pink salmon	Oncorhynchus gorbuscha	13

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	7	1	4	800516	1	155	Unidentified larval fish	Unidentified larval fish	31
3	7	2	4	800516	1	140	Staghorn sculpin	Leptocottus armatus	8
3	7	3	4	800516	1	130	Shiner perch	Cymatogaster aggregata	2
3	7	3	4	800516	1	130	Staghorn sculpin	Leptocottus armatus	30
3	7	3	4	800516	1	130	Threespine stickleback	Gasterosteus aculeatus	1
3	7	3	4	800516	1	130	Unidentified larval fish	Unidentified larval fish	13
3	7	2	4	800516	1	140	Pink salmon	Oncorhynchus gorbuscha	158
1	2	1	5	800528	2	15	Surf smelt	Hypomesus pretiosus pretiosus	1
1	7	1	5	800528	2	70	Arrow goby	Clevelandia ios	27
1	5	1	5	800528	2	55	Arrow goby	Clevelandia ios	22
1	6	1	5	800528	2	80	Threespine stickleback	Gasterosteus aculeatus	1
1	6	1	5	800528	2	80	Staghorn sculpin	Leptocottus armatus	1
1	6	1	5	800528	2	80	Arrow goby	Clevelandia ios	9
1	1	1	5	800528	2	40	Arrow goby	Clevelandia ios	21
1	1	1	5	800528	2	40	Snake prickleback	Lumpenus sagitta	1
1	2	1	5	800528	2	15	Pacific herring	Clupea harengus pallasii	7
1	2	1	5	800528	2	15	Chinook salmon	Oncorhynchus tshawytscha	157
1	1	1	5	800528	2	40	Starry flounder	Platichthys stellatus	12
1	1	1	5	800528	2	40	Staghorn sculpin	Leptocottus armatus	9
1	7	1	5	800528	2	70	Staghorn sculpin	Leptocottus armatus	5
1	4	1	5	800528	2	105	Arrow goby	Clevelandia ios	20
1	4	1	5	800528	2	105	Threespine stickleback	Gasterosteus aculeatus	6
1	4	1	5	800528	2	105	Staghorn sculpin	Leptocottus armatus	10
1	4	1	5	800528	2	105	Starry flounder	Platichthys stellatus	10
1	2	1	5	800528	2	15	Chum salmon	Oncorhynchus keta	4
2	6	3	5	800529	2	55	Shiner perch	Cymatogaster aggregata	1
2	6	3	5	800529	2	55	Snake prickleback	Lumpenus sagitta	2
2	6	3	5	800529	2	55	English sole	Parophrys vetulus	4
2	6	3	5	800529	2	55	Chinook salmon	Oncorhynchus tshawytscha	5
2	6	2	5	800529	2	35	Unidentified flatfish	Unidentified flatfish	1
2	6	2	5	800529	2	35	Threespine stickleback	Gasterosteus aculeatus	100
2	6	2	5	800529	2	35	Snake prickleback	Lumpenus sagitta	4
2	6	2	5	800529	2	35	Pacific sandlance	Ammodytes hexapterus	1
2	6	2	5	800529	2	35	English sole	Parophrys vetulus	3
2	6	2	5	800529	2	35	Chinook salmon	Oncorhynchus tshawytscha	6

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	1	5	800529	2	10	Unidentified flatfish	Unidentified flatfish	1
2	6	1	5	800529	2	10	Threespine stickleback	Gasterosteus aculeatus	222
2	6	1	5	800529	2	10	Staghorn sculpin	Leptocottus armatus	1
2	6	1	5	800529	2	10	Snake prickleback	Lumpenus sagitta	18
2	6	1	5	800529	2	10	Chinook salmon	Oncorhynchus tshawytscha	46
2	6	3	5	800529	2	55	Threespine stickleback	Gasterosteus aculeatus	92
3	5	1	5	800530	2	15	Starry flounder	Platichthys stellatus	15
3	7	1	5	800530	2	75	English sole	Parophrys vetulus	68
3	7	1	5	800530	2	75	Spinynose sculpin	Asemichthys taylori	1
3	4	1	5	800530	1	80	Tubesnout	Aulorhynchus flavidus	4
3	5	1	5	800530	2	15	Chum salmon	Oncorhynchus keta	16
3	2	1	5	800530	2	103	English sole	Parophrys vetulus	84
3	6	1	5	800530	2	40	English sole	Parophrys vetulus	50
3	1	1	5	800530	1	130	Tubesnout	Aulorhynchus flavidus	90
3	1	1	5	800530	1	130	Unidentified flatfish	Unidentified flatfish	1
3	5	1	5	800530	2	15	Unidentified flatfish	Unidentified flatfish	6
3	2	1	5	800530	2	103	Staghorn sculpin	Leptocottus armatus	91
3	1	1	5	800530	1	130	English sole	Parophrys vetulus	3
3	1	1	5	800530	1	130	Tadpole sculpin	Psychrolutes paradoxus	104
3	4	1	5	800530	1	80	Starry flounder	Platichthys stellatus	8
3	4	1	5	800530	1	80	Staghorn sculpin	Leptocottus armatus	7
3	1	1	5	800530	1	130	Pacific sanddab	Citharichthys sordidus	3
3	1	1	5	800530	1	130	Staghorn sculpin	Leptocottus armatus	179
3	1	1	5	800530	1	130	Starry flounder	Platichthys stellatus	4
3	4	1	5	800530	1	80	Pacific sanddab	Citharichthys sordidus	15
3	7	1	5	800530	2	75	Staghorn sculpin	Leptocottus armatus	18
3	7	1	5	800530	2	75	Unidentified sculpin	Unidentified sculpin	1
3	4	1	5	800530	1	80	Bay pipefish	Syngnathus griseolineatus	1
3	5	1	5	800530	2	15	English sole	Parophrys vetulus	15
3	4	1	5	800530	1	80	English sole	Parophrys vetulus	58
1	1	1	6	800611	1	10	Pacific herring	Clupea harengus pallasii	1
1	1	1	6	800611	1	10	Threespine stickleback	Gasterosteus aculeatus	24
1	1	1	6	800611	1	10	Arrow goby	Clevelandia ios	4
1	1	1	6	800611	1	10	Starry flounder	Platichthys stellatus	1
2	3	1	6	800612	2	100	Staghorn sculpin	Leptocottus armatus	6
2	3	1	6	800612	2	100	Shiner perch	Cymatogaster aggregata	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	3	1	6	800612	2	100	Pacific herring	Clupea harengus pallasii	1
2	3	1	6	800612	2	100	Chinook salmon	Oncorhynchus tshawytscha	2
2	3	1	6	800612	2	100	Surf smelt	Hypomesus pretiosus pretiosus	1
2	3	1	6	800612	2	100	Snake pricklyback	Lumpenus sagitta	1
2	3	1	6	800612	2	100	Peamouth chub	Mylocheilus caurinus	1
2	6	1	6	800612	2	135	Threespine stickleback	Gasterosteus aculeatus	31
2	6	2	6	800612	2	160	Chinook salmon	Oncorhynchus tshawytscha	13
2	6	2	6	800612	2	160	English sole	Parophrys vetulus	2
2	6	2	6	800612	2	160	Pacific herring	Clupea harengus pallasii	54
2	6	2	6	800612	2	160	Sand sole	Psettichthys melanostictus	2
2	6	2	6	800612	2	160	Staghorn sculpin	Leptocottus armatus	3
2	3	1	6	800612	2	100	Threespine stickleback	Gasterosteus aculeatus	2
2	6	2	6	800612	2	160	Starry flounder	Platichthys stellatus	3
2	6	2	6	800612	2	160	Surf smelt	Hypomesus pretiosus pretiosus	2
2	6	2	6	800612	2	160	Threespine stickleback	Gasterosteus aculeatus	1
2	6	2	6	800612	2	160	Shiner perch	Cymatogaster aggregata	13
2	2	1	6	800612	2	80	Threespine stickleback	Gasterosteus aculeatus	36
2	3	1	6	800612	2	100	Starry flounder	Platichthys stellatus	1
2	6	1	6	800612	2	135	Staghorn sculpin	Leptocottus armatus	9
2	2	1	6	800612	2	80	Chinook salmon	Oncorhynchus tshawytscha	16
2	2	1	6	800612	2	80	Pacific herring	Clupea harengus pallasii	36
2	2	1	6	800612	2	80	Shiner perch	Cymatogaster aggregata	2
2	2	1	6	800612	2	80	Starry flounder	Platichthys stellatus	2
2	6	1	6	800612	2	135	Chinook salmon	Oncorhynchus tshawytscha	11
2	6	1	6	800612	2	135	Shiner perch	Cymatogaster aggregata	4
2	6	1	6	800612	2	135	Pacific herring	Clupea harengus pallasii	2
2	6	1	6	800612	2	135	Unidentified juvenile rockfish	Unidentified juvenile rockfish	1
3	3	1	6	800613	1	10	Whitespotted greenling	Hexagrammos stelleri	5
3	3	1	6	800613	1	10	Padded sculpin	Artedius fenestralis	4
3	3	1	6	800613	1	10	Penpoint gunnel	Apodichthys flavidus	15
3	3	1	6	800613	1	10	Snake pricklyback	Lumpenus sagitta	50
3	7	1	6	800613	2	170	Pacific herring	Clupea harengus pallasii	35
3	2	1	6	800613	2	200	Surf smelt	Hypomesus pretiosus pretiosus	11
3	7	1	6	800613	2	170	English sole	Parophrys vetulus	16

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	3	1	6	800613	1	10	Tubesnout	Aulorhynchus flavidus	100
3	3	1	6	800613	1	10	Threespine stickleback	Gasterosteus aculeatus	11
3	7	1	6	800613	2	170	Starry flounder	Platichthys stellatus	13
3	7	1	6	800613	2	170	Chinook salmon	Oncorhynchus tshawytscha	1
3	3	1	6	800613	1	10	Bay pipefish	Syngnathus griseolineatus	50
3	7	1	6	800613	2	170	Staghorn sculpin	Leptocottus armatus	23
3	3	1	6	800613	1	10	Pacific herring	Clupea harengus pallasii	100
3	7	1	6	800613	2	170	Shiner perch	Cymatogaster aggregata	38
3	5	1	6	800613	2	50	Chinook salmon	Oncorhynchus tshawytscha	7
3	7	1	6	800613	2	170	Surf smelt	Hypomesus pretiosus pretiosus	2
3	3	1	6	800613	1	10	Sturgeon poacher	Agonus acipenserinus	1
3	5	1	6	800613	2	50	English sole	Parophrys vetulus	61
3	3	1	6	800613	1	10	Tadpole sculpin	Psychrolutes paradoxus	7
3	5	1	6	800613	2	50	Surf smelt	Hypomesus pretiosus pretiosus	16
3	5	1	6	800613	2	50	Tubesnout	Aulorhynchus flavidus	13
3	5	1	6	800613	2	50	Staghorn sculpin	Leptocottus armatus	2
3	5	1	6	800613	2	50	Shiner perch	Cymatogaster aggregata	59
3	5	1	6	800613	2	50	Rock sole	Lepidopsetta bilineata	1
3	2	1	6	800613	2	200	Shiner perch	Cymatogaster aggregata	25
3	5	1	6	800613	2	50	Pacific herring	Clupea harengus pallasii	110
3	3	1	6	800613	1	10	English sole	Parophrys vetulus	80
3	2	1	6	800613	2	200	Chinook salmon	Oncorhynchus tshawytscha	2
3	2	1	6	800613	2	200	English sole	Parophrys vetulus	3
3	2	1	6	800613	2	200	Pacific herring	Clupea harengus pallasii	26
3	5	1	6	800613	2	50	Bay pipefish	Syngnathus griseolineatus	3
3	2	1	6	800613	2	200	Staghorn sculpin	Leptocottus armatus	15
3	3	1	6	800613	1	10	Buffalo sculpin	Enophrys bison	1
3	3	1	6	800613	1	10	Crescent gunnel	Pholis laeta	10
3	5	1	6	800613	2	50	Pacific sandlance	Ammodytes hexapterus	3
3	4	1	6	800613	2	10	Staghorn sculpin	Leptocottus armatus	34
3	3	1	6	800613	1	10	Staghorn sculpin	Leptocottus armatus	65
3	4	1	6	800613	2	10	Saddleback gunnel	Pholis ornata	3
3	6	1	6	800613	2	70	Shiner perch	Cymatogaster aggregata	371
3	6	1	6	800613	2	70	Tubesnout	Aulorhynchus flavidus	15
3	4	1	6	800613	2	10	Snake prickleback	Lumpenus sagitta	17
3	4	1	6	800613	2	10	Shiner perch	Cymatogaster aggregata	97
3	6	1	6	800613	2	70	English sole	Parophrys vetulus	66

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	6	1	6	800613	2	70	Butter sole	Isopsetta isolepis	9
3	4	1	6	800613	2	10	Chinook salmon	Oncorhynchus tshawytscha	7
3	4	1	6	800613	2	10	Spiny dogfish	Squalus suckleyi	1
3	6	1	6	800613	2	70	Padded sculpin	Artemius fenestralis	1
3	4	1	6	800613	2	10	Starry flounder	Platichthys stellatus	125
3	4	1	6	800613	2	10	Surf smelt	Hypomesus pretiosus pretiosus	1
3	4	1	6	800613	2	10	Tubesnout	Aulorhynchus flavidus	16
3	4	1	6	800613	2	10	Whitespotted greenling	Hexagrammos stelleri	4
3	4	1	6	800613	2	10	Rock sole	Lepidopsetta bilineata	1
3	4	1	6	800613	2	10	Penpoint gunnel	Apodichthys flavidus	5
3	4	1	6	800613	2	10	Pacific herring	Clupea harengus pallasii	232
3	4	1	6	800613	2	10	English sole	Parophrys vetulus	108
1	4	1	7	800626	2	115	Staghorn sculpin	Leptocottus armatus	5
1	5	1	7	800626	2	55	Arrow goby	Clevelandia ios	8
1	5	1	7	800626	2	55	Chinook salmon	Oncorhynchus tshawytscha	6
1	7	1	7	800626	2	70	Pacific herring	Clupea harengus pallasii	10
1	7	1	7	800626	2	70	Peamouth chub	Mylocheilus caurinus	5
1	7	1	7	800626	2	70	Chinook salmon	Oncorhynchus tshawytscha	8
1	5	1	7	800626	2	55	Starry flounder	Platichthys stellatus	15
1	4	1	7	800626	2	115	Arrow goby	Clevelandia ios	5
1	5	1	7	800626	2	55	Shiner perch	Cymatogaster aggregata	75
1	4	1	7	800626	2	115	Shiner perch	Cymatogaster aggregata	8
1	5	1	7	800626	2	55	Pacific herring	Clupea harengus pallasii	1
1	7	1	7	800626	2	70	Shiner perch	Cymatogaster aggregata	75
1	5	1	7	800626	2	55	Staghorn sculpin	Leptocottus armatus	38
1	1	1	7	800626	1	5	Starry flounder	Platichthys stellatus	40
1	4	1	7	800626	2	115	Starry flounder	Platichthys stellatus	21
1	3	1	7	800626	2	30	Staghorn sculpin	Leptocottus armatus	5
1	3	1	7	800626	2	30	Starry flounder	Platichthys stellatus	94
1	3	1	7	800626	2	30	Arrow goby	Clevelandia ios	24
1	3	1	7	800626	2	30	Threespine stickleback	Gasterosteus aculeatus	1
1	6	1	7	800626	2	85	Starry flounder	Platichthys stellatus	8
1	6	1	7	800626	2	85	Staghorn sculpin	Leptocottus armatus	4
1	6	1	7	800626	2	85	Pacific herring	Clupea harengus pallasii	2
1	6	1	7	800626	2	85	Threespine stickleback	Gasterosteus aculeatus	2
1	1	1	7	800626	1	5	Staghorn sculpin	Leptocottus armatus	10
1	2	1	7	800626	2	20	Pacific herring	Clupea harengus pallasii	12

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	7	1	7	800626	2	70	Starry flounder	Platichthys stellatus	50
1	1	1	7	800626	1	5	Arrow goby	Clevelandia ios	1
1	2	1	7	800626	2	20	Chinook salmon	Oncorhynchus tshawytscha	14
1	6	1	7	800626	2	85	Arrow goby	Clevelandia ios	4
1	2	1	7	800626	2	20	Largescale sucker	Catostomus macrocheilus	1
1	1	1	7	800626	1	5	Shiner perch	Cymatogaster aggregata	7
1	2	1	7	800626	2	20	Threespine stickleback	Gasterosteus aculeatus	8
1	7	1	7	800626	2	70	Staghorn sculpin	Leptocottus armatus	4
1	7	1	7	800626	2	70	Threespine stickleback	Gasterosteus aculeatus	30
1	1	1	7	800626	1	5	Pacific herring	Clupea harengus pallasii	7
1	1	1	7	800626	1	5	Chinook salmon	Oncorhynchus tshawytscha	2
2	6	3	7	800627	2	70	Staghorn sculpin	Leptocottus armatus	6
2	6	4	7	800627	2	90	Staghorn sculpin	Leptocottus armatus	3
2	6	3	7	800627	2	70	Pacific herring	Clupea harengus pallasii	7
2	6	3	7	800627	2	70	Shiner perch	Cymatogaster aggregata	3
2	6	3	7	800627	2	70	Snake prickleback	Lumpenus sagitta	40
2	2	1	7	800627	2	40	Staghorn sculpin	Leptocottus armatus	7
2	4	1	7	800627	2	50	Staghorn sculpin	Leptocottus armatus	5
2	4	1	7	800627	2	50	Arrow goby	Clevelandia ios	1
2	6	4	7	800627	2	90	Snake prickleback	Lumpenus sagitta	35
2	2	1	7	800627	2	40	Arrow goby	Clevelandia ios	4
2	2	1	7	800627	2	40	Bay pipefish	Syngnathus griseolineatus	1
2	6	4	7	800627	2	90	English sole	Parophrys vetulus	1
2	2	1	7	800627	2	40	Shiner perch	Cymatogaster aggregata	26
2	6	3	7	800627	2	70	Starry flounder	Platichthys stellatus	25
2	6	4	7	800627	2	90	Threespine stickleback	Gasterosteus aculeatus	18
2	4	1	7	800627	2	50	Starry flounder	Platichthys stellatus	34
2	6	4	7	800627	2	90	Pacific herring	Clupea harengus pallasii	1
2	6	4	7	800627	2	90	Chinook salmon	Oncorhynchus tshawytscha	3
2	6	4	7	800627	2	90	Arrow goby	Clevelandia ios	1
2	6	3	7	800627	2	70	Threespine stickleback	Gasterosteus aculeatus	30
2	2	1	7	800627	2	40	Chinook salmon	Oncorhynchus tshawytscha	2
2	6	2	7	800627	2	100	Sand sole	Psettichthys melanosticus	1
2	6	1	7	800627	2	80	English sole	Parophrys vetulus	3
2	6	1	7	800627	2	80	Unidentified flatfish	Unidentified flatfish	8

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	1	7	800627	2	80	Pacific herring	Clupea harengus pallasii	14
2	6	1	7	800627	2	80	Shiner perch	Cymatogaster aggregata	3
2	6	1	7	800627	2	80	Snake prickleback	Lumpenus sagitta	69
2	6	1	7	800627	2	80	Staghorn sculpin	Leptocottus armatus	3
2	6	1	7	800627	2	80	Starry flounder	Platichthys stellatus	60
2	6	1	7	800627	2	80	Threespine stickleback	Gasterosteus aculeatus	2
2	6	1	7	800627	2	80	Chinook salmon	Oncorhynchus tshawytscha	12
2	6	4	7	800627	2	90	Starry flounder	Platichthys stellatus	38
2	6	2	7	800627	2	100	Arrow goby	Clevelandia ios	2
2	6	2	7	800627	2	100	Shiner perch	Cymatogaster aggregata	13
2	2	1	7	800627	2	40	Threespine stickleback	Gasterosteus aculeatus	1
2	2	1	7	800627	2	40	Starry flounder	Platichthys stellatus	54
2	6	2	7	800627	2	100	Snake prickleback	Lumpenus sagitta	8
2	6	2	7	800627	2	100	Staghorn sculpin	Leptocottus armatus	1
2	6	2	7	800627	2	100	Starry flounder	Platichthys stellatus	9
2	6	2	7	800627	2	100	Threespine stickleback	Gasterosteus aculeatus	3
2	6	3	7	800627	2	70	Chinook salmon	Oncorhynchus tshawytscha	13
2	6	2	7	800627	2	100	Chinook salmon	Oncorhynchus tshawytscha	4
2	6	2	7	800627	2	100	Pacific herring	Clupea harengus pallasii	10
3	4	1	7	800628	2	25	Whitespotted greenling	Hexagrammos stelleri	1
3	3	1	7	800628	2	5	Pacific herring	Clupea harengus pallasii	500
3	1	1	7	800628	1	85	Shiner perch	Cymatogaster aggregata	18
3	1	1	7	800628	1	85	Saddleback gunnel	Pholis ornata	6
3	1	1	7	800628	1	85	Penpoint gunnel	Apodichthys flavidus	1
3	1	1	7	800628	1	85	Pacific herring	Clupea harengus pallasii	750
3	4	1	7	800628	2	25	Saddleback gunnel	Pholis ornata	2
3	5	1	7	800628	2	45	English sole	Parophrys vetulus	14
3	5	1	7	800628	2	45	Shiner perch	Cymatogaster aggregata	231
3	5	1	7	800628	2	45	Starry flounder	Platichthys stellatus	17
3	4	1	7	800628	2	25	Penpoint gunnel	Apodichthys flavidus	10
3	4	1	7	800628	2	25	Pacific sandlance	Ammodytes hexapterus	1
3	4	1	7	800628	2	25	Staghorn sculpin	Leptocottus armatus	19
3	4	1	7	800628	2	25	Chinook salmon	Oncorhynchus tshawytscha	24
3	2	1	7	800628	2	105	Tubesnout	Aulorhynchus flavidus	1
3	3	1	7	800628	2	5	Crescent gunnel	Pholis laeta	2
3	4	1	7	800628	2	25	English sole	Parophrys vetulus	6
3	3	1	7	800628	2	5	English sole	Parophrys vetulus	3

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	7	800628	1	85	Chinook salmon	Oncorhynchus tshawytscha	22
3	4	1	7	800628	2	25	Pacific herring	Clupea harengus pallasii	2500
3	1	1	7	800628	1	85	Crescent gunnel	Pholis laeta	4
3	4	1	7	800628	2	25	Threespine stickleback	Gasterosteus aculeatus	1
3	4	1	7	800628	2	25	Starry flounder	Platichthys stellatus	11
3	1	1	7	800628	1	85	Coho salmon	Oncorhynchus kisutch	1
3	1	1	7	800628	1	85	Chum salmon	Oncorhynchus keta	2
3	3	1	7	800628	2	5	Chinook salmon	Oncorhynchus tshawytscha	42
3	3	1	7	800628	2	5	Penpoint gunnel	Apodichthys flavidus	13
3	1	1	7	800628	1	85	Snake prickleback	Lumpenus sagitta	2
3	1	1	7	800628	1	85	Tubesnout	Aulorhynchus flavidus	1
3	1	1	7	800628	1	85	Threespine stickleback	Gasterosteus aculeatus	30
3	1	1	7	800628	1	85	Surf smelt	Hypomesus pretiosus pretiosus	2
3	1	1	7	800628	1	85	Starry flounder	Platichthys stellatus	9
3	1	1	7	800628	1	85	Staghorn sculpin	Leptocottus armatus	13
3	2	1	7	800628	2	105	Crescent gunnel	Pholis laeta	2
3	2	1	7	800628	2	105	Pacific herring	Clupea harengus pallasii	1
3	2	1	7	800628	2	105	Padded sculpin	Arteidius fenestralis	1
3	2	1	7	800628	2	105	Penpoint gunnel	Apodichthys flavidus	18
3	4	1	7	800628	2	25	Shiner perch	Cymatogaster aggregata	277
3	3	1	7	800628	2	5	Padded sculpin	Arteidius fenestralis	3
3	3	1	7	800628	2	5	Saddleback gunnel	Pholis ornata	3
3	3	1	7	800628	2	5	Shiner perch	Cymatogaster aggregata	110
3	3	1	7	800628	2	5	Snake prickleback	Lumpenus sagitta	17
3	3	1	7	800628	2	5	Staghorn sculpin	Leptocottus armatus	11
3	3	1	7	800628	2	5	Starry flounder	Platichthys stellatus	8
3	3	1	7	800628	2	5	Surf smelt	Hypomesus pretiosus pretiosus	2
3	3	1	7	800628	2	5	Tubesnout	Aulorhynchus flavidus	40
3	3	1	7	800628	2	5	Whitespotted greenling	Hexagrammos stelleri	1
3	2	1	7	800628	2	105	Staghorn sculpin	Leptocottus armatus	28
3	2	1	7	800628	2	105	Starry flounder	Platichthys stellatus	7
3	2	1	7	800628	2	105	Threespine stickleback	Gasterosteus aculeatus	135
3	2	1	7	800628	2	105	Shiner perch	Cymatogaster aggregata	152
3	6	1	7	800629	1	5	Penpoint gunnel	Apodichthys flavidus	2
3	7	1	7	800629	2	20	Tubesnout	Aulorhynchus flavidus	1
3	6	1	7	800629	1	5	Pacific sandlance	Ammodytes hexapterus	25
3	6	1	7	800629	1	5	English sole	Parophrys vetulus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	7	1	7	800629	2	20	Starry flounder	Platichthys stellatus	6
3	7	1	7	800629	2	20	Staghorn sculpin	Leptocottus armatus	35
3	7	1	7	800629	2	20	Snake prickleback	Lumpenus sagitta	1
3	7	1	7	800629	2	20	Shiner perch	Cymatogaster aggregata	2
3	7	1	7	800629	2	20	Sand sole	Psettichthys melanosticus	1
3	7	1	7	800629	2	20	Pacific sandlance	Ammodytes hexapterus	1
3	6	1	7	800629	1	5	Shiner perch	Cymatogaster aggregata	11
3	6	1	7	800629	1	5	Pacific herring	Clupea harengus pallasii	4000
3	6	1	7	800629	1	5	Tubesnout	Aulorhynchus flavidus	50
3	6	1	7	800629	1	5	Sand sole	Psettichthys melanosticus	1
3	6	1	7	800629	1	5	Starry flounder	Platichthys stellatus	13
3	7	1	7	800629	2	20	Pacific herring	Clupea harengus pallasii	600
3	7	1	7	800629	2	20	English sole	Parophrys vetulus	13
3	6	1	7	800629	1	5	Chinook salmon	Oncorhynchus tshawytscha	8
3	7	1	7	800629	2	20	Coho salmon	Oncorhynchus kisutch	1
3	7	1	7	800629	2	20	Chinook salmon	Oncorhynchus tshawytscha	3
3	6	1	7	800629	1	5	Surf smelt	Hypomesus pretiosus	7
3	6	1	7	800629	1	5	Threespine stickleback	Gasterosteus aculeatus	4
1	6	1	8	800709	2	125	Staghorn sculpin	Leptocottus armatus	5
1	6	1	8	800709	2	125	Starry flounder	Platichthys stellatus	5
1	2	1	8	800709	2	80	Surf smelt	Hypomesus pretiosus	1
1	5	1	8	800709	2	100	Starry flounder	Platichthys stellatus	50
1	5	1	8	800709	2	100	Staghorn sculpin	Leptocottus armatus	6
1	1	1	8	800709	2	65	Arrow goby	Clevelandia ios	9
1	1	1	8	800709	2	65	Staghorn sculpin	Leptocottus armatus	4
1	4	1	8	800709	2	155	Starry flounder	Platichthys stellatus	1
1	4	1	8	800709	2	155	Arrow goby	Clevelandia ios	1
1	5	1	8	800709	2	100	Shiner perch	Cymatogaster aggregata	1
1	2	1	8	800709	2	80	Staghorn sculpin	Leptocottus armatus	7
1	2	1	8	800709	2	80	Starry flounder	Platichthys stellatus	15
1	1	1	8	800709	2	65	Starry flounder	Platichthys stellatus	5
1	2	1	8	800709	2	80	Pacific herring	Clupea harengus pallasii	400
1	2	1	8	800709	2	80	Shiner perch	Cymatogaster aggregata	1
1	5	1	8	800709	2	100	Surf smelt	Hypomesus pretiosus	1
3	7	2	8	800710	2	135	Shiner perch	Cymatogaster aggregata	117
3	1	1	8	800710	2	180	Bay pipefish	Syngnathus griseolineatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	1	8	800710	2	160	Pacific herring	Clupea harengus pallasii	1
3	2	1	8	800710	2	160	Shiner perch	Cymatogaster aggregata	18
3	2	1	8	800710	2	160	Snake prickleback	Lumpenus sagitta	1
3	2	1	8	800710	2	160	Staghorn sculpin	Leptocottus armatus	39
3	2	1	8	800710	2	160	Starry flounder	Platichthys stellatus	3
3	2	1	8	800710	2	160	Threespine stickleback	Gasterosteus aculeatus	2
3	7	2	8	800710	2	135	English sole	Parophrys vetulus	2
3	7	2	8	800710	2	135	Staghorn sculpin	Leptocottus armatus	51
3	7	1	8	800710	2	95	Tadpole sculpin	Psychrolutes paradoxus	1
3	7	2	8	800710	2	135	Spinynose sculpin	Asemichthys taylori	1
3	7	1	8	800710	2	95	Striped seaperch	Embiotoca lateralis	1
3	7	2	8	800710	2	135	Starry flounder	Platichthys stellatus	2
3	7	1	8	800710	2	95	Starry flounder	Platichthys stellatus	1
3	7	2	8	800710	2	135	Pacific herring	Clupea harengus pallasii	7
3	4	1	8	800710	1	1	Staghorn sculpin	Leptocottus armatus	3
3	1	1	8	800710	2	180	Whitespotted greenling	Hexagrammos stelleri	1
3	3	1	8	800710	2	25	Pacific herring	Clupea harengus pallasii	66
3	3	1	8	800710	2	25	Masked greenling	Hexagrammos octogrammus	1
3	3	1	8	800710	2	25	English sole	Parophrys vetulus	18
3	3	1	8	800710	2	25	Crescent gunnel	Pholis laeta	1
3	3	1	8	800710	2	25	Chinook salmon	Oncorhynchus tshawytscha	5
3	4	1	8	800710	1	1	Threespine stickleback	Gasterosteus aculeatus	1
3	7	1	8	800710	2	95	Spinynose sculpin	Asemichthys taylori	3
3	4	1	8	800710	1	1	Starry flounder	Platichthys stellatus	9
3	3	1	8	800710	2	25	Shiner perch	Cymatogaster aggregata	62
3	1	1	8	800710	2	180	Staghorn sculpin	Leptocottus armatus	33
3	1	1	8	800710	2	180	Spinynose sculpin	Asemichthys taylori	4
3	4	1	8	800710	1	1	Snake prickleback	Lumpenus sagitta	1
3	4	1	8	800710	1	1	Shiner perch	Cymatogaster aggregata	5
3	4	1	8	800710	1	1	Pacific sandlance	Ammodytes hexapterus	6
3	4	1	8	800710	1	1	English sole	Parophrys vetulus	25
3	4	1	8	800710	1	1	Chinook salmon	Oncorhynchus tshawytscha	2
3	4	1	8	800710	1	1	Butter sole	Isopsetta isolepis	3
3	4	1	8	800710	1	1	Surf smelt	Hypomesus pretiosus pretiosus	1
3	7	1	8	800710	2	95	Pacific herring	Clupea harengus pallasii	441
3	7	1	8	800710	2	95	Crescent gunnel	Pholis laeta	4
3	1	1	8	800710	2	180	Shiner perch	Cymatogaster aggregata	64

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	8	800710	2	180	Chinook salmon	Oncorhynchus tshawytscha	1
3	7	2	8	800710	2	135	Tidepool sculpin	Oligocottus maculosus	3
3	1	1	8	800710	2	180	Starry flounder	Platichthys stellatus	10
3	4	1	8	800710	1	1	Buffalo sculpin	Enophrys bison	2
3	1	1	8	800710	2	180	Crescent gunnel	Pholis laeta	11
3	1	1	8	800710	2	180	Penpoint gunnel	Apodichthys flavidus	3
3	3	1	8	800710	2	25	Penpoint gunnel	Apodichthys flavidus	2
3	7	1	8	800710	2	95	English sole	Parophrys vetulus	1
3	7	2	8	800710	2	135	Surf smelt	Hypomesus pretiosus pretiosus	37
3	7	1	8	800710	2	95	Padded sculpin	Artedius fenestralis	1
3	3	1	8	800710	2	25	Unidentified larval fish	Unidentified larval fish	1
3	3	1	8	800710	2	25	Threespine stickleback	Gasterosteus aculeatus	2
3	3	1	8	800710	2	25	Starry flounder	Platichthys stellatus	40
3	3	1	8	800710	2	25	Staghorn sculpin	Leptocottus armatus	4
3	3	1	8	800710	2	25	Snake prickleback	Lumpenus sagitta	1
3	7	1	8	800710	2	95	Shiner perch	Cymatogaster aggregata	113
3	1	1	8	800710	2	180	Sharpnose sculpin	Clinocottus acuticeps	1
2	6	1	8	800711	1	45	Shiner perch	Cymatogaster aggregata	1
2	5	2	8	800711	1	5	Starry flounder	Platichthys stellatus	46
2	5	2	8	800711	1	5	Surf smelt	Hypomesus pretiosus pretiosus	100
2	6	2	8	800711	1	35	Surf smelt	Hypomesus pretiosus pretiosus	10
2	6	2	8	800711	1	35	Starry flounder	Platichthys stellatus	9
2	6	2	8	800711	1	35	Pacific herring	Clupea harengus pallasii	1
2	6	2	8	800711	1	35	Chinook salmon	Oncorhynchus tshawytscha	2
2	6	1	8	800711	1	45	Staghorn sculpin	Leptocottus armatus	4
2	6	1	8	800711	1	45	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	8	800711	1	45	Chinook salmon	Oncorhynchus tshawytscha	3
2	5	1	8	800711	1	20	English sole	Parophrys vetulus	3
2	6	1	8	800711	1	45	Starry flounder	Platichthys stellatus	8
2	5	1	8	800711	1	20	Staghorn sculpin	Leptocottus armatus	6
2	5	2	8	800711	1	5	Shiner perch	Cymatogaster aggregata	4
2	5	2	8	800711	1	5	Pacific herring	Clupea harengus pallasii	2
2	5	2	8	800711	1	5	English sole	Parophrys vetulus	1
2	5	2	8	800711	1	5	Chinook salmon	Oncorhynchus tshawytscha	2
2	5	1	8	800711	1	20	Pacific herring	Clupea harengus pallasii	22
2	5	2	8	800711	1	5	Staghorn sculpin	Leptocottus armatus	13

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	5	1	8	800711	1	20	Starry flounder	Platichthys stellatus	21
2	5	1	8	800711	1	20	Shiner perch	Cymatogaster aggregata	4
2	5	1	8	800711	1	20	Chinook salmon	Oncorhynchus tshawytscha	1
2	5	1	8	800711	1	20	Peamouth chub	Mylocheilus caurinus	1
2	3	1	8	800711	2	10	English sole	Parophrys vetulus	2
2	3	1	8	800711	2	10	Pacific herring	Clupea harengus pallasii	59
2	3	1	8	800711	2	10	Penpoint gunnel	Apodichthys flavidus	1
2	3	1	8	800711	2	10	Sand sole	Psettichthys melanosticus	2
2	3	1	8	800711	2	10	Shiner perch	Cymatogaster aggregata	11
2	3	1	8	800711	2	10	Staghorn sculpin	Leptocottus armatus	15
2	5	1	8	800711	1	20	Pacific sandlance	Ammodytes hexapterus	1
2	3	1	8	800711	2	10	Starry flounder	Platichthys stellatus	76
2	3	1	8	800711	2	10	Chinook salmon	Oncorhynchus tshawytscha	5
2	5	1	8	800711	1	20	Surf smelt	Hypomesus pretiosus pretiosus	50
3	6	1	9	800728	2	65	Crescent gunnel	Pholis laeta	1
3	4	1	9	800728	2	5	English sole	Parophrys vetulus	5
3	7	1	9	800728	2	140	Whitespotted greenling	Hexagrammos stelleri	1
3	7	1	9	800728	2	140	Shiner perch	Cymatogaster aggregata	51
3	7	1	9	800728	2	140	Pile perch	Rhacochilus vacca	1
3	7	1	9	800728	2	140	Penpoint gunnel	Apodichthys flavidus	5
3	7	1	9	800728	2	140	Pacific sandlance	Ammodytes hexapterus	100
3	7	1	9	800728	2	140	Pacific herring	Clupea harengus pallasii	3000
3	7	1	9	800728	2	140	Buffalo sculpin	Enophrys bison	1
3	4	1	9	800728	2	5	Crescent gunnel	Pholis laeta	19
3	3	1	9	800728	1	25	Surf smelt	Hypomesus pretiosus pretiosus	40
3	7	1	9	800728	2	140	Crescent gunnel	Pholis laeta	7
3	3	1	9	800728	1	25	Pile perch	Rhacochilus vacca	20
3	5	1	9	800728	2	35	English sole	Parophrys vetulus	12
3	5	1	9	800728	2	35	Starry flounder	Platichthys stellatus	2
3	1	1	9	800728	1	90	Tubesnout	Aulorhynchus flavidus	19
3	5	1	9	800728	2	35	Pacific herring	Clupea harengus pallasii	1
3	5	1	9	800728	2	35	Rock sole	Lepidopsetta bilineata	1
3	5	1	9	800728	2	35	Shiner perch	Cymatogaster aggregata	1000
3	1	1	9	800728	1	90	Buffalo sculpin	Enophrys bison	1
3	3	1	9	800728	1	25	Crescent gunnel	Pholis laeta	9
3	3	1	9	800728	1	25	Tidepool sculpin	Oligocottus maculosus	1
3	3	1	9	800728	1	25	Penpoint gunnel	Apodichthys flavidus	4
3	6	1	9	800728	2	65	Shiner perch	Cymatogaster aggregata	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	3	1	9	800728	1	25	Shiner perch	Cymatogaster aggregata	261
3	3	1	9	800728	1	25	Staghorn sculpin	Leptocottus armatus	4
3	3	1	9	800728	1	25	Starry flounder	Platichthys stellatus	3
3	1	1	9	800728	1	90	Shiner perch	Cymatogaster aggregata	649
3	3	1	9	800728	1	25	Threespine stickleback	Gasterosteus aculeatus	20
3	1	1	9	800728	1	90	Tidepool sculpin	Oligocottus maculosus	3
3	6	1	9	800728	2	65	Tubesnout	Aulorhynchus flavidus	1
3	6	1	9	800728	2	65	Threespine stickleback	Gasterosteus aculeatus	3
3	6	1	9	800728	2	65	Staghorn sculpin	Leptocottus armatus	3
3	3	1	9	800728	1	25	English sole	Parophrys vetulus	5
3	2	1	9	800728	2	90	Threespine stickleback	Gasterosteus aculeatus	96
3	2	1	9	800728	2	90	Unidentified larval fish	Unidentified larval fish	1
3	1	1	9	800728	1	90	Sharpnose sculpin	Clinocottus acuticeps	3
3	1	1	9	800728	1	90	Threespine stickleback	Gasterosteus aculeatus	185
3	1	1	9	800728	1	90	Penpoint gunnel	Apodichthys flavidus	13
3	1	1	9	800728	1	90	Starry flounder	Platichthys stellatus	4
3	1	1	9	800728	1	90	Padded sculpin	Arteidius fenestralis	7
3	1	1	9	800728	1	90	Pacific sandlance	Ammodytes hexapterus	190
3	1	1	9	800728	1	90	Pacific herring	Clupea harengus pallasii	2
3	2	1	9	800728	2	90	Whitespotted greenling	Hexagrammos stelleri	3
3	2	1	9	800728	2	90	Tubesnout	Aulorhynchus flavidus	20
3	1	1	9	800728	1	90	Pile perch	Rhacochilus vacca	1
3	2	1	9	800728	2	90	Surf smelt	Hypomesus pretiosus pretiosus	20
3	2	1	9	800728	2	90	Silverspotted sculpin	Blepsias cirrhosus	1
3	2	1	9	800728	2	90	Shiner perch	Cymatogaster aggregata	250
3	2	1	9	800728	2	90	Pile perch	Rhacochilus vacca	250
3	2	1	9	800728	2	90	Padded sculpin	Arteidius fenestralis	2
3	2	1	9	800728	2	90	Pacific herring	Clupea harengus pallasii	8
3	2	1	9	800728	2	90	Crescent gunnel	Pholis laeta	7
3	5	1	9	800728	2	35	Staghorn sculpin	Leptocottus armatus	2
3	1	1	9	800728	1	90	Crescent gunnel	Pholis laeta	21
3	4	1	9	800728	2	5	Unidentified larval fish	Unidentified larval fish	1
3	4	1	9	800728	2	5	Staghorn sculpin	Leptocottus armatus	6
3	4	1	9	800728	2	5	Shiner perch	Cymatogaster aggregata	259
3	4	1	9	800728	2	5	Rosylip sculpin	Ascelichthys rhodorus	1
3	4	1	9	800728	2	5	Surf smelt	Hypomesus pretiosus pretiosus	9

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	4	1	9	800728	2	5	Threespine stickleback	Gasterosteus aculeatus	5
3	4	1	9	800728	2	5	Tubesnout	Aulorhynchus flavidus	4
3	4	1	9	800728	2	5	Penpoint gunnel	Apodichthys flavidus	4
3	4	1	9	800728	2	5	Padded sculpin	Artemius fenestralis	5
3	4	1	9	800728	2	5	Pacific herring	Clupea harengus pallasii	141
3	1	1	9	800728	1	90	Staghorn sculpin	Leptocottus armatus	9
3	5	1	9	800728	2	35	Unidentified flatfish	Unidentified flatfish	1
3	4	1	9	800728	2	5	Rock sole	Lepidopsetta bilineata	1
1	6	1	9	800730	1	65	Staghorn sculpin	Leptocottus armatus	32
1	5	1	9	800730	2	25	Threespine stickleback	Gasterosteus aculeatus	18
1	4	1	9	800730	1	5	Arrow goby	Clevelandia ios	14
1	6	1	9	800730	1	65	Threespine stickleback	Gasterosteus aculeatus	199
1	5	1	9	800730	2	25	Starry flounder	Platichthys stellatus	592
1	5	1	9	800730	2	25	Arrow goby	Clevelandia ios	4
1	6	1	9	800730	1	65	Starry flounder	Platichthys stellatus	37
1	6	1	9	800730	1	65	Arrow goby	Clevelandia ios	2
1	6	1	9	800730	1	65	Pacific herring	Clupea harengus pallasii	2
1	5	1	9	800730	2	25	Shiner perch	Cymatogaster aggregata	35
1	5	1	9	800730	2	25	Pacific herring	Clupea harengus pallasii	61
1	2	1	9	800730	2	55	Staghorn sculpin	Leptocottus armatus	3
1	7	1	9	800730	1	40	Threespine stickleback	Gasterosteus aculeatus	10
1	7	1	9	800730	1	40	Starry flounder	Platichthys stellatus	13
1	7	1	9	800730	1	40	Staghorn sculpin	Leptocottus armatus	10
1	7	1	9	800730	1	40	Shiner perch	Cymatogaster aggregata	27
1	7	1	9	800730	1	40	Arrow goby	Clevelandia ios	6
1	5	1	9	800730	2	25	Staghorn sculpin	Leptocottus armatus	133
1	3	1	9	800730	2	45	Arrow goby	Clevelandia ios	3
1	2	1	9	800730	2	55	Shiner perch	Cymatogaster aggregata	1
1	2	1	9	800730	2	55	Pacific herring	Clupea harengus pallasii	58
1	4	1	9	800730	1	5	Shiner perch	Cymatogaster aggregata	1
1	4	1	9	800730	1	5	Threespine stickleback	Gasterosteus aculeatus	68
1	2	1	9	800730	2	55	Arrow goby	Clevelandia ios	6
1	3	1	9	800730	2	45	Starry flounder	Platichthys stellatus	19
1	2	1	9	800730	2	55	Bay pipefish	Syngnathus griseolineatus	1
1	2	1	9	800730	2	55	Threespine stickleback	Gasterosteus aculeatus	8
1	2	1	9	800730	2	55	Starry flounder	Platichthys stellatus	22
1	1	1	9	800730	2	75	Tubesnout	Aulorhynchus flavidus	23

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	1	9	800730	2	75	Starry flounder	Platichthys stellatus	132
1	1	1	9	800730	2	75	Pacific herring	Clupea harengus pallasii	20
1	1	1	9	800730	2	75	Arrow goby	Clevelandia ios	10
1	4	1	9	800730	1	5	Pacific herring	Clupea harengus pallasii	31
1	4	1	9	800730	1	5	Staghorn sculpin	Leptocottus armatus	3
1	4	1	9	800730	1	5	Starry flounder	Platichthys stellatus	65
1	3	1	9	800730	2	45	Threespine stickleback	Gasterosteus aculeatus	3
2	1	1	10	800809	2	15	Threespine stickleback	Gasterosteus aculeatus	1500
2	5	1	10	800809	1	65	Threespine stickleback	Gasterosteus aculeatus	3
2	5	1	10	800809	1	65	Starry flounder	Platichthys stellatus	2
2	5	1	10	800809	1	65	Staghorn sculpin	Leptocottus armatus	11
2	5	1	10	800809	1	65	Pacific herring	Clupea harengus pallasii	10
2	1	1	10	800809	2	15	Starry flounder	Platichthys stellatus	13
2	1	1	10	800809	2	15	Shiner perch	Cymatogaster aggregata	4
2	4	1	10	800809	1	20	Threespine stickleback	Gasterosteus aculeatus	25
2	6	1	10	800809	2	1	Pacific herring	Clupea harengus pallasii	8
2	5	1	10	800809	1	65	Shiner perch	Cymatogaster aggregata	4
2	6	1	10	800809	2	1	Sand sole	Psettichthys melanosticus	5
2	6	1	10	800809	2	1	Shiner perch	Cymatogaster aggregata	8
2	6	1	10	800809	2	1	Staghorn sculpin	Leptocottus armatus	1
2	1	1	10	800809	2	15	Pacific herring	Clupea harengus pallasii	100
2	1	1	10	800809	2	15	English sole	Parophrys vetulus	1
2	1	1	10	800809	2	15	Chinook salmon	Oncorhynchus tshawytscha	13
2	6	1	10	800809	2	1	Starry flounder	Platichthys stellatus	11
2	6	1	10	800809	2	1	Threespine stickleback	Gasterosteus aculeatus	3
2	6	1	10	800809	2	1	Bay pipefish	Syngnathus griseolineatus	2
2	2	1	10	800809	2	30	Sand sole	Psettichthys melanosticus	1
2	2	1	10	800809	2	30	Threespine stickleback	Gasterosteus aculeatus	300
2	4	1	10	800809	1	20	Starry flounder	Platichthys stellatus	28
2	4	1	10	800809	1	20	Chinook salmon	Oncorhynchus tshawytscha	1
2	4	1	10	800809	1	20	Shiner perch	Cymatogaster aggregata	4
2	4	1	10	800809	1	20	Staghorn sculpin	Leptocottus armatus	3
2	2	1	10	800809	2	30	Starry flounder	Platichthys stellatus	32
2	2	1	10	800809	2	30	Shiner perch	Cymatogaster aggregata	2
2	2	1	10	800809	2	30	Pacific herring	Clupea harengus pallasii	500

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	2	1	10	800809	2	30	Bay pipefish	Syngnathus griseolineatus	4
2	2	1	10	800809	2	30	Arrow goby	Clevelandia ios	1
2	5	1	10	800809	1	65	Chinook salmon	Oncorhynchus tshawytscha	11
2	4	1	10	800809	1	20	Sand sole	Psettichthys melanosticus	4
2	4	1	10	800809	1	20	Arrow goby	Clevelandia ios	1
2	2	1	10	800809	2	30	Staghorn sculpin	Leptocottus armatus	12
3	2	1	10	800810	1	35	Starry flounder	Platichthys stellatus	13
3	2	1	10	800810	1	35	Bay pipefish	Syngnathus griseolineatus	6
3	2	1	10	800810	1	35	English sole	Parophrys vetulus	38
3	2	1	10	800810	1	35	Staghorn sculpin	Leptocottus armatus	31
3	1	1	10	800810	1	50	Threespine stickleback	Gasterosteus aculeatus	20
3	2	1	10	800810	1	35	Surf smelt	Hypomesus pretiosus pretiosus	1
3	2	1	10	800810	1	35	Threespine stickleback	Gasterosteus aculeatus	7
3	2	1	10	800810	1	35	Shiner perch	Cymatogaster aggregata	21
3	5	1	10	800810	2	10	Starry flounder	Platichthys stellatus	1
3	1	1	10	800810	1	50	Tidepool sculpin	Oligocottus maculosus	18
3	1	1	10	800810	1	50	Surf smelt	Hypomesus pretiosus pretiosus	3
3	1	1	10	800810	1	50	Staghorn sculpin	Leptocottus armatus	15
3	1	1	10	800810	1	50	Shiner perch	Cymatogaster aggregata	163
3	1	1	10	800810	1	50	Pile perch	Rhacochilus vacca	55
3	1	1	10	800810	1	50	Penpoint gunnel	Apodichthys flavidus	37
3	1	1	10	800810	1	50	Padded sculpin	Arteidius fenestralis	1
3	1	1	10	800810	1	50	Pacific herring	Clupea harengus pallasii	137
3	1	1	10	800810	1	50	Unidentified juvenile rockfish	Unidentified juvenile rockfish	2
3	1	1	10	800810	1	50	Crescent gunnel	Pholis laeta	27
3	1	1	10	800810	1	50	Chinook salmon	Oncorhynchus tshawytscha	6
3	1	1	10	800810	1	50	Tubesnout	Aulorhynchus flavidus	4
3	4	1	10	800810	1	5	Pacific herring	Clupea harengus pallasii	1
3	7	1	10	800810	1	80	Chinook salmon	Oncorhynchus tshawytscha	1
3	7	1	10	800810	1	80	English sole	Parophrys vetulus	1
3	7	1	10	800810	1	80	Pacific herring	Clupea harengus pallasii	3
3	7	1	10	800810	1	80	Pacific sandlance	Ammodytes hexapterus	315
3	7	1	10	800810	1	80	Padded sculpin	Arteidius fenestralis	1
3	7	1	10	800810	1	80	Penpoint gunnel	Apodichthys flavidus	35
3	7	1	10	800810	1	80	Saddleback gunnel	Pholis ornata	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	1	10	800810	1	35	Tubesnout	Aulorhynchus flavidus	3
3	2	1	10	800810	1	35	Tidepool sculpin	Oligocottus maculosus	3
3	4	1	10	800810	1	5	Bay pipefish	Syngnathus griseolineatus	2
3	5	1	10	800810	2	10	Bay pipefish	Syngnathus griseolineatus	1
3	4	1	10	800810	1	5	English sole	Parophrys vetulus	2
3	5	1	10	800810	2	10	Shiner perch	Cymatogaster aggregata	22
3	4	1	10	800810	1	5	Staghorn sculpin	Leptocottus armatus	1
3	4	1	10	800810	1	5	Surf smelt	Hypomesus pretiosus pretiosus	2
3	4	1	10	800810	1	5	Threespine stickleback	Gasterosteus aculeatus	4
3	7	1	10	800810	1	80	Shiner perch	Cymatogaster aggregata	136
3	7	1	10	800810	1	80	Staghorn sculpin	Leptocottus armatus	27
3	7	1	10	800810	1	80	Threespine stickleback	Gasterosteus aculeatus	13
3	5	1	10	800810	2	10	Staghorn sculpin	Leptocottus armatus	11
3	1	1	10	800810	1	50	Buffalo sculpin	Enophrys bison	1
3	7	1	10	800810	1	80	Crescent gunnel	Pholis laeta	15
3	1	1	10	800810	1	50	Bay pipefish	Syngnathus griseolineatus	41
3	5	1	10	800810	2	10	Crescent gunnel	Pholis laeta	1
3	4	1	10	800810	1	5	Crescent gunnel	Pholis laeta	1
1	1	1	10	800811	2	5	Pacific herring	Clupea harengus pallasii	280
1	7	1	10	800811	1	55	Staghorn sculpin	Leptocottus armatus	18
1	7	1	10	800811	1	55	Starry flounder	Platichthys stellatus	3
1	7	1	10	800811	1	55	Threespine stickleback	Gasterosteus aculeatus	35
1	5	1	10	800811	1	25	Arrow goby	Clevelandia ios	10
1	5	1	10	800811	1	25	Staghorn sculpin	Leptocottus armatus	9
1	3	1	10	800811	1	10	Threespine stickleback	Gasterosteus aculeatus	5
1	3	1	10	800811	1	10	Starry flounder	Platichthys stellatus	10
1	3	1	10	800811	1	10	Staghorn sculpin	Leptocottus armatus	3
1	3	1	10	800811	1	10	Arrow goby	Clevelandia ios	70
1	1	1	10	800811	2	5	Chinook salmon	Oncorhynchus tshawytscha	3
1	5	1	10	800811	1	25	Threespine stickleback	Gasterosteus aculeatus	15
1	1	1	10	800811	2	5	Shiner perch	Cymatogaster aggregata	3
1	1	1	10	800811	2	5	Staghorn sculpin	Leptocottus armatus	21
1	1	1	10	800811	2	5	Starry flounder	Platichthys stellatus	12
1	1	1	10	800811	2	5	Tubesnout	Aulorhynchus flavidus	13
1	2	1	10	800811	1	20	Threespine stickleback	Gasterosteus aculeatus	35

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	2	1	10	800811	1	20	Starry flounder	Platichthys stellatus	4
1	2	1	10	800811	1	20	Staghorn sculpin	Leptocottus armatus	21
1	2	1	10	800811	1	20	Pacific herring	Clupea harengus pallasii	4
1	2	1	10	800811	1	20	Arrow goby	Clevelandia ios	18
1	5	1	10	800811	1	25	Starry flounder	Platichthys stellatus	7
1	1	1	10	800811	2	5	Arrow goby	Clevelandia ios	2
1	4	1	11	800904	2	20	Threespine stickleback	Gasterosteus aculeatus	4
1	4	1	11	800904	2	20	Starry flounder	Platichthys stellatus	32
1	1	1	11	800904	2	55	Starry flounder	Platichthys stellatus	10
1	1	1	11	800904	2	55	Staghorn sculpin	Leptocottus armatus	7
1	1	1	11	800904	2	55	Chinook salmon	Oncorhynchus tshawytscha	1
1	1	1	11	800904	2	55	Arrow goby	Clevelandia ios	9
1	3	1	11	800904	2	45	Arrow goby	Clevelandia ios	35
1	3	1	11	800904	2	45	Pacific herring	Clupea harengus pallasii	4
1	3	1	11	800904	2	45	Staghorn sculpin	Leptocottus armatus	1
1	3	1	11	800904	2	45	Threespine stickleback	Gasterosteus aculeatus	75
1	1	1	11	800904	2	55	Threespine stickleback	Gasterosteus aculeatus	3
1	4	1	11	800904	2	20	Staghorn sculpin	Leptocottus armatus	6
1	3	1	11	800904	2	45	Starry flounder	Platichthys stellatus	4
1	7	1	11	800904	1	10	Threespine stickleback	Gasterosteus aculeatus	3
1	7	1	11	800904	1	10	Starry flounder	Platichthys stellatus	9
1	7	1	11	800904	1	10	Staghorn sculpin	Leptocottus armatus	10
1	7	1	11	800904	1	10	Arrow goby	Clevelandia ios	2
1	5	1	11	800904	2	1	Arrow goby	Clevelandia ios	2
1	5	1	11	800904	2	1	Pacific herring	Clupea harengus pallasii	6
1	5	1	11	800904	2	1	Staghorn sculpin	Leptocottus armatus	17
1	5	1	11	800904	2	1	Starry flounder	Platichthys stellatus	23
1	4	1	11	800904	2	20	Pacific herring	Clupea harengus pallasii	12
1	4	1	11	800904	2	20	Arrow goby	Clevelandia ios	1
1	2	1	11	800904	2	35	Threespine stickleback	Gasterosteus aculeatus	300
1	2	1	11	800904	2	35	Starry flounder	Platichthys stellatus	4
1	2	1	11	800904	2	35	Pacific herring	Clupea harengus pallasii	7
3	7	1	11	800905	1	30	Staghorn sculpin	Leptocottus armatus	20
3	1	1	11	800905	2	10	Tubesnout Threespine stickleback	Aulorhynchus flavidus	30
3	1	1	11	800905	2	10	Threespine stickleback	Gasterosteus aculeatus	60
3	1	1	11	800905	2	10	Staghorn sculpin	Leptocottus armatus	41
3	1	1	11	800905	2	10	Shiner perch	Cymatogaster aggregata	130

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	7	1	11	800905	1	30	Bay pipefish	Syngnathus griseolineatus	12
3	7	1	11	800905	1	30	English sole	Parophrys vetulus	3
3	7	1	11	800905	1	30	Penpoint gunnel	Apodichthys flavidus	6
3	1	1	11	800905	2	10	Bay pipefish	Syngnathus griseolineatus	30
3	7	1	11	800905	1	30	Shiner perch	Cymatogaster aggregata	140
3	1	1	11	800905	2	10	Starry flounder	Platichthys stellatus	2
3	7	1	11	800905	1	30	Starry flounder	Platichthys stellatus	4
3	7	1	11	800905	1	30	Threespine stickleback	Gasterosteus aculeatus	60
3	1	1	11	800905	2	10	Penpoint gunnel	Apodichthys flavidus	4
3	1	1	11	800905	2	10	Padded sculpin	Artemis fenestralis	6
3	1	1	11	800905	2	10	English sole	Parophrys vetulus	1
3	1	1	11	800905	2	10	Crescent gunnel	Pholis laeta	8
3	7	1	11	800905	1	30	Saddleback gunnel	Pholis ornata	5
3	2	1	11	800905	2	30	English sole	Parophrys vetulus	10
3	2	1	11	800905	2	30	Penpoint gunnel	Apodichthys flavidus	10
3	2	1	11	800905	2	30	Saddleback gunnel	Pholis ornata	2
3	2	1	11	800905	2	30	Shiner perch	Cymatogaster aggregata	209
3	2	1	11	800905	2	30	Staghorn sculpin	Leptocottus armatus	35
3	2	1	11	800905	2	30	Starry flounder	Platichthys stellatus	1
3	2	1	11	800905	2	30	Threespine stickleback	Gasterosteus aculeatus	60
3	2	1	11	800905	2	30	Tubesnout	Aulorhynchus flavidus	2
2	6	3	12	800923	1	20	Pacific sandlance	Ammodytes hexapterus	1
2	6	2	12	800923	2	5	Arrow goby	Clevelandia ios	8
2	6	2	12	800923	2	5	Chinook salmon	Oncorhynchus tshawytscha	1
2	6	2	12	800923	2	5	English sole	Parophrys vetulus	1
2	6	2	12	800923	2	5	Shiner perch	Cymatogaster aggregata	1
2	6	1	12	800923	1	5	Arrow goby	Clevelandia ios	4
2	6	2	12	800923	2	5	Starry flounder	Platichthys stellatus	17
2	6	2	12	800923	2	5	Surf smelt	Hypomesus pretiosus pretiosus	10
2	6	1	12	800923	1	5	Threespine stickleback	Gasterosteus aculeatus	2
2	6	3	12	800923	1	20	English sole	Parophrys vetulus	2
2	6	2	12	800923	2	5	Sand sole	Psettichthys melanosticus	2
2	6	3	12	800923	1	20	Starry flounder	Platichthys stellatus	3
2	6	3	12	800923	1	20	Surf smelt	Hypomesus pretiosus pretiosus	9
2	6	3	12	800923	1	20	Threespine stickleback	Gasterosteus aculeatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	2	12	800923	2	5	Threespine stickleback	Gasterosteus aculeatus	1
2	6	1	12	800923	1	5	Staghorn sculpin	Leptocottus armatus	1
2	6	1	12	800923	1	5	Pacific sandlance	Ammodytes hexapterus	22
2	6	1	12	800923	1	5	English sole	Parophrys vetulus	4
2	6	2	12	800923	2	5	Staghorn sculpin	Leptocottus armatus	2
2	6	1	12	800923	1	5	Starry flounder	Platichthys stellatus	17
3	7	1	12	800924	2	25	Shiner perch	Cymatogaster aggregata	15
3	1	1	12	800924	1	5	Penpoint gunnel	Apodichthys flavidus	2
3	1	1	12	800924	1	5	Threespine stickleback	Gasterosteus aculeatus	11
3	2	1	12	800924	2	5	Tubesnout	Aulorhynchus flavidus	1
3	2	1	12	800924	2	5	Starry flounder	Platichthys stellatus	1
3	7	1	12	800924	2	25	Bay pipefish	Syngnathus griseolineatus	1
3	2	1	12	800924	2	5	Padded sculpin	Arteidius fenestralis	3
3	7	1	12	800924	2	25	Staghorn sculpin	Leptocottus armatus	4
3	7	1	12	800924	2	25	Tidepool sculpin	Oligocottus maculosus	1
3	7	1	12	800924	2	25	Tubesnout	Aulorhynchus flavidus	118
3	1	1	12	800924	1	5	Tubesnout	Aulorhynchus flavidus	36
3	1	1	12	800924	1	5	Buffalo sculpin	Enophrys bison	2
3	1	1	12	800924	1	5	Bay pipefish	Syngnathus griseolineatus	40
3	2	1	12	800924	2	5	English sole	Parophrys vetulus	25
3	1	1	12	800924	1	5	Pacific herring	Clupea harengus pallasii	71
3	1	1	12	800924	1	5	Staghorn sculpin	Leptocottus armatus	3
3	2	1	12	800924	2	5	Bay pipefish	Syngnathus griseolineatus	3
3	2	1	12	800924	2	5	Staghorn sculpin	Leptocottus armatus	5
1	1	1	12	800925	1	35	Chinook salmon	Oncorhynchus tshawytscha	1
1	1	1	12	800925	1	35	Staghorn sculpin	Leptocottus armatus	6
1	1	1	12	800925	1	35	Shiner perch	Cymatogaster aggregata	16
1	1	1	12	800925	1	35	Pacific herring	Clupea harengus pallasii	9
1	1	1	12	800925	1	35	English sole	Parophrys vetulus	1
1	1	1	12	800925	1	35	Starry flounder	Platichthys stellatus	11
1	4	1	12	800925	1	20	Starry flounder	Platichthys stellatus	18
1	1	1	12	800925	1	35	Threespine stickleback	Gasterosteus aculeatus	50
1	4	1	12	800925	1	20	Spinynose sculpin	Asemichthys taylori	4
1	4	1	12	800925	1	20	Shiner perch	Cymatogaster aggregata	28
1	4	1	12	800925	1	20	Threespine stickleback	Gasterosteus aculeatus	6
3	1	1	13	801027	1	140	Threespine stickleback	Gasterosteus aculeatus	3

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	13	801027	1	140	Buffalo sculpin	Enophrys bison	8
3	1	1	13	801027	1	140	Tubesnout	Aulorhynchus flavidus	1
3	1	1	13	801027	1	140	Starry flounder	Platichthys stellatus	2
3	1	1	13	801027	1	140	Staghorn sculpin	Leptocottus armatus	6
3	1	1	13	801027	1	140	Shiner perch	Cymatogaster aggregata	8
3	1	1	13	801027	1	140	Sharpnose sculpin	Clinocottus acuticeps	1
3	1	1	13	801027	1	140	Crescent gunnel	Pholis laeta	3
3	1	1	13	801027	1	140	Bay pipefish	Syngnathus griseolineatus	9
3	2	1	13	801028	1	75	Shiner perch	Cymatogaster aggregata	6
3	4	1	13	801028	1	50	Shiner perch	Cymatogaster aggregata	10
3	2	1	13	801028	1	75	Crescent gunnel	Pholis laeta	11
3	4	1	13	801028	1	50	Padded sculpin	Arteidius fenestralis	1
3	4	1	13	801028	1	50	Unidentified juvenile rockfish	Unidentified juvenile rockfish	1
3	4	1	13	801028	1	50	English sole	Parophrys vetulus	1
3	4	1	13	801028	1	50	Crescent gunnel	Pholis laeta	5
3	2	1	13	801028	1	75	English sole	Parophrys vetulus	1
3	7	1	13	801028	1	115	Shiner perch	Cymatogaster aggregata	1
3	2	1	13	801028	1	75	Penpoint gunnel	Apodichthys flavidus	3
3	2	1	13	801028	1	75	Whitespotted greenling	Hexagrammos stelleri	3
3	2	1	13	801028	1	75	Staghorn sculpin	Leptocottus armatus	8
3	4	1	13	801028	1	50	Bay pipefish	Syngnathus griseolineatus	11
3	2	1	13	801028	1	75	Starry flounder	Platichthys stellatus	4
3	4	1	13	801028	1	50	Staghorn sculpin	Leptocottus armatus	3
3	2	1	13	801028	1	75	Tubesnout	Aulorhynchus flavidus	8
3	7	1	13	801028	1	115	Slender cockscomb	Anoplarchus insignis	2
3	7	1	13	801028	1	115	Staghorn sculpin	Leptocottus armatus	9
3	2	1	13	801028	1	75	Bay pipefish	Syngnathus griseolineatus	15
3	2	1	13	801028	1	75	Padded sculpin	Arteidius fenestralis	1
3	6	1	13	801028	1	80	Rock sole	Lepidopsetta bilineata	2
3	7	1	13	801028	1	115	Penpoint gunnel	Apodichthys flavidus	1
3	7	1	13	801028	1	115	Padded sculpin	Arteidius fenestralis	3
3	7	1	13	801028	1	115	Pacific herring	Clupea harengus pallasii	1
3	7	1	13	801028	1	115	Flathead sole	Hippoglossoides elassodon	4
3	7	1	13	801028	1	115	Crescent gunnel	Pholis laeta	4
3	7	1	13	801028	1	115	Bay pipefish	Syngnathus griseolineatus	3
3	6	1	13	801028	1	80	Tubesnout	Aulorhynchus flavidus	678
3	6	1	13	801028	1	80	Surf smelt	Hypomesus pretiosus pretiosus	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	6	1	13	801028	1	80	Sturgeon poacher	Agonus acipenserinus	1
3	6	1	13	801028	1	80	Starry flounder	Platichthys stellatus	2
3	4	1	13	801028	1	50	Penpoint gunnel	Apodichthys flavidus	1
3	6	1	13	801028	1	80	Shiner perch	Cymatogaster aggregata	27
3	4	1	13	801028	1	50	Sturgeon poacher	Agonus acipenserinus	1
3	5	1	13	801028	1	85	Threespine stickleback	Gasterosteus aculeatus	2
3	4	1	13	801028	1	50	Threespine stickleback	Gasterosteus aculeatus	3
3	4	1	13	801028	1	50	Tubesnout	Aulorhynchus flavidus	118
3	4	1	13	801028	1	50	Whitespotted greenling	Hexagrammos stelleri	5
3	5	1	13	801028	1	85	Bay pipefish	Syngnathus griseolineatus	45
3	5	1	13	801028	1	85	Buffalo sculpin	Enophrys bison	2
3	5	1	13	801028	1	85	Crescent gunnel	Pholis laeta	1
3	6	1	13	801028	1	80	Speckled sanddab	Citharichthys stigmaeus	1
3	5	1	13	801028	1	85	Starry flounder	Platichthys stellatus	1
3	6	1	13	801028	1	80	Pile perch	Rhacochilus vacca	1
3	5	1	13	801028	1	85	Tubesnout	Aulorhynchus flavidus	21
3	6	1	13	801028	1	80	Bay pipefish	Syngnathus griseolineatus	54
3	6	1	13	801028	1	80	English sole	Parophrys vetulus	6
3	5	1	13	801028	1	85	Shiner perch	Cymatogaster aggregata	13
2	6	1	13	801029	1	125	English sole	Parophrys vetulus	5
2	6	1	13	801029	1	125	Arrow goby	Clevelandia ios	2
2	6	2	13	801029	1	115	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	1	13	801029	1	125	Staghorn sculpin	Leptocottus armatus	11
2	6	1	13	801029	1	125	Starry flounder	Platichthys stellatus	27
2	6	1	13	801029	1	125	Surf smelt	Hypomesus pretiosus pretiosus	31
2	6	2	13	801029	1	115	Arrow goby	Clevelandia ios	3
2	6	2	13	801029	1	115	English sole	Parophrys vetulus	6
2	6	2	13	801029	1	115	Shiner perch	Cymatogaster aggregata	1
2	6	2	13	801029	1	115	Staghorn sculpin	Leptocottus armatus	13
2	6	2	13	801029	1	115	Starry flounder	Platichthys stellatus	12
2	6	3	13	801029	1	105	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	3	13	801029	1	105	Starry flounder	Platichthys stellatus	10
2	6	3	13	801029	1	105	English sole	Parophrys vetulus	1
2	6	2	13	801029	1	115	Threespine stickleback	Gasterosteus aculeatus	3
2	6	3	13	801029	1	105	Arrow goby	Clevelandia ios	1
1	1	1	13	801030	1	55	Bay pipefish	Syngnathus griseolineatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	3	13	801030	1	35	Starry flounder	Platichthys stellatus	12
1	1	1	13	801030	1	55	Arrow goby	Clevelandia ios	23
1	1	1	13	801030	1	55	Staghorn sculpin	Leptocottus armatus	3
1	1	1	13	801030	1	55	Threespine stickleback	Gasterosteus aculeatus	94
1	1	2	13	801030	1	45	Arrow goby	Clevelandia ios	18
1	1	2	13	801030	1	45	Staghorn sculpin	Leptocottus armatus	3
1	1	2	13	801030	1	45	Starry flounder	Platichthys stellatus	5
1	1	2	13	801030	1	45	Threespine stickleback	Gasterosteus aculeatus	20
1	1	3	13	801030	1	35	Arrow goby	Clevelandia ios	6
1	1	1	13	801030	1	55	Starry flounder	Platichthys stellatus	17
1	1	3	13	801030	1	35	Staghorn sculpin	Leptocottus armatus	2
1	1	3	13	801030	1	35	Threespine stickleback	Gasterosteus aculeatus	125
3	2	2	14	801117	2	40	Sharpnose sculpin	Clinocottus acuticeps	7
3	2	1	14	801117	2	30	Buffalo sculpin	Enophrys bison	2
3	2	1	14	801117	2	30	Great sculpin	Myxocephalus polyacanthocephalus	1
3	2	1	14	801117	2	30	High cockscomb	Anoplarchus purpureus	1
3	7	1	14	801117	2	60	Tidepool sculpin	Oligocottus maculosus	1
3	2	1	14	801117	2	30	Padded sculpin	Artemis fenestralis	4
3	1	1	14	801117	1	1	Crescent gunnel	Pholis laeta	1
3	2	1	14	801117	2	30	Sharpnose sculpin	Clinocottus acuticeps	4
3	2	1	14	801117	2	30	Staghorn sculpin	Leptocottus armatus	2
3	2	1	14	801117	2	30	Tidepool sculpin	Oligocottus maculosus	51
3	2	2	14	801117	2	40	Crescent gunnel	Pholis laeta	9
3	2	1	14	801117	2	30	Crescent gunnel	Pholis laeta	5
3	2	2	14	801117	2	40	Padded sculpin	Artemis fenestralis	5
3	1	1	14	801117	1	1	Pacific sandlance	Ammodytes hexapterus	1
3	1	1	14	801117	1	1	Sharpnose sculpin	Clinocottus acuticeps	2
3	1	1	14	801117	1	1	Tubesnout	Aulorhynchus flavidus	1
3	1	2	14	801117	2	10	Crescent gunnel	Pholis laeta	28
3	1	2	14	801117	2	10	Padded sculpin	Artemis fenestralis	2
3	1	2	14	801117	2	10	Sharpnose sculpin	Clinocottus acuticeps	16
3	1	2	14	801117	2	10	Smoothhead sculpin	Artemis lateralis	1
3	1	2	14	801117	2	10	Starry flounder	Platichthys stellatus	1
3	1	2	14	801117	2	10	Threespine stickleback	Gasterosteus aculeatus	3
3	1	2	14	801117	2	10	Tidepool sculpin	Oligocottus maculosus	1
3	1	2	14	801117	2	10	Tubesnout	Aulorhynchus flavidus	2
3	2	2	14	801117	2	40	Tidepool sculpin	Oligocottus maculosus	54

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	2	14	801117	2	40	High cockscomb	Anoplarchus purpureus	1
1	2	1	14	801118	1	5	Threespine stickleback	Gasterosteus aculeatus	10
1	1	1	14	801118	2	65	Surf smelt	Hypomesus pretiosus pretiosus	3
1	2	1	14	801118	1	5	English sole	Parophrys vetulus	1
1	2	2	14	801118	2	5	Threespine stickleback	Gasterosteus aculeatus	60
1	2	2	14	801118	2	5	Starry flounder	Platichthys stellatus	2
1	1	2	14	801118	2	55	Surf smelt	Hypomesus pretiosus pretiosus	1
1	2	1	14	801118	1	5	Starry flounder	Platichthys stellatus	1
1	2	1	14	801118	1	5	Unidentified flatfish	Unidentified flatfish	2
1	1	1	14	801118	2	65	Threespine stickleback	Gasterosteus aculeatus	5
1	1	2	14	801118	2	55	Starry flounder	Platichthys stellatus	1
1	1	1	14	801118	2	65	Staghorn sculpin	Leptocottus armatus	5
1	1	2	14	801118	2	55	Threespine stickleback	Gasterosteus aculeatus	8
1	2	2	14	801118	2	5	Surf smelt	Hypomesus pretiosus pretiosus	4
1	2	1	14	801118	1	5	Staghorn sculpin	Leptocottus armatus	3
3	1	1	15	801208	1	75	Sharpnose sculpin	Clinocottus acuticeps	15
3	1	1	15	801208	1	75	Crescent gunnel	Pholis laeta	5
3	1	1	15	801208	1	75	Padded sculpin	Artedius fenestralis	4
3	1	1	15	801208	1	75	Tidepool sculpin	Oligocottus maculosus	28
3	1	1	15	801208	1	75	High cockscomb	Anoplarchus purpureus	1
3	2	1	15	801209	2	70	Tidepool sculpin	Oligocottus maculosus	3
3	5	1	15	801209	2	30	Threespine stickleback	Gasterosteus aculeatus	2
3	5	1	15	801209	2	30	Starry flounder	Platichthys stellatus	1
3	4	1	15	801209	2	50	Starry flounder	Platichthys stellatus	1
3	4	1	15	801209	2	50	Staghorn sculpin	Leptocottus armatus	1
3	7	1	15	801209	1	5	Shiner perch	Cymatogaster aggregata	9
3	7	1	15	801209	1	5	Surf smelt	Hypomesus pretiosus pretiosus	4
3	7	1	15	801209	1	5	Threespine stickleback	Gasterosteus aculeatus	2
3	7	1	15	801209	1	5	Tubesnout	Aulorhynchus flavidus	22
3	7	1	15	801209	1	5	Padded sculpin	Artedius fenestralis	1
3	7	1	15	801209	1	5	English sole	Parophrys vetulus	1
3	7	1	15	801209	1	5	Bay pipefish	Syngnathus griseolineatus	3
2	6	1	15	801210	1	20	Starry flounder	Platichthys stellatus	6

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	2	15	801210	1	44	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	3	15	801210	1	35	Surf smelt	Hypomesus pretiosus pretiosus	4
2	6	2	15	801210	1	44	Threespine stickleback	Gasterosteus aculeatus	2
2	6	3	15	801210	1	35	Starry flounder	Platichthys stellatus	6
2	6	2	15	801210	1	44	Starry flounder	Platichthys stellatus	8
1	5	1	15	801211	2	50	Threespine stickleback	Gasterosteus aculeatus	3
1	4	1	15	801211	2	30	Starry flounder	Platichthys stellatus	21
1	1	1	15	801211	1	55	Threespine stickleback	Gasterosteus aculeatus	4
1	5	1	15	801211	2	50	Starry flounder	Platichthys stellatus	20
1	4	1	15	801211	2	30	Pacific sandlance	Ammodytes hexapterus	1
1	2	1	15	801211	1	5	Threespine stickleback	Gasterosteus aculeatus	1
1	5	1	15	801211	2	50	Staghorn sculpin	Leptocottus armatus	18
1	4	1	15	801211	2	30	Smoothhead sculpin	Arteidius lateralis	4
1	2	1	15	801211	1	5	Starry flounder	Platichthys stellatus	1
1	2	1	15	801211	1	5	Tubesnout	Aulorhynchus flavidus	1
1	1	1	15	801211	1	55	Starry flounder	Platichthys stellatus	25
1	1	1	15	801211	1	55	Staghorn sculpin	Leptocottus armatus	5
2	5	2	16	810119	2	45	Surf smelt	Hypomesus pretiosus pretiosus	2
2	5	1	16	810119	2	35	Surf smelt	Hypomesus pretiosus pretiosus	2
2	5	1	16	810119	2	35	Threespine stickleback	Gasterosteus aculeatus	2
2	5	2	16	810119	2	45	Starry flounder	Platichthys stellatus	9
2	6	1	16	810119	2	55	Staghorn sculpin	Leptocottus armatus	2
2	6	1	16	810119	2	55	Sand sole	Psettichthys melanosticus	2
2	5	1	16	810119	2	35	Arrow goby	Clevelandia ios	1
2	6	1	16	810119	2	55	Starry flounder	Platichthys stellatus	9
2	6	1	16	810119	2	55	English sole	Parophrys vetulus	1
2	6	1	16	810119	2	55	Capelin	Mallotus villosus	1
2	5	2	16	810119	2	45	Sand sole	Psettichthys melanosticus	1
1	1	2	16	810120	1	25	Tubesnout	Aulorhynchus flavidus	1
1	1	3	16	810120	1	15	Buffalo sculpin	Enophrys bison	1
3	2	1	16	810120	1	5	Staghorn sculpin	Leptocottus armatus	4
3	2	1	16	810120	1	5	Rock sole	Lepidopsetta bilineata	2
1	1	3	16	810120	1	15	Staghorn sculpin	Leptocottus armatus	1
3	2	1	16	810120	1	5	Unidentified flatfish	Unidentified flatfish	11

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	1	16	810120	1	5	Pacific herring	<i>Clupea harengus pallasii</i>	2
3	2	1	16	810120	1	5	Pacific tomcod	<i>Microgadus proximus</i>	2
3	2	1	16	810120	1	5	Sand sole	<i>Psettichthys melanostictus</i>	2
3	2	1	16	810120	1	5	Shiner perch	<i>Cymatogaster aggregata</i>	3
1	1	3	16	810120	1	15	Starry flounder	<i>Platichthys stellatus</i>	9
1	4	1	16	810120	1	5	Starry flounder	<i>Platichthys stellatus</i>	1
3	2	1	16	810120	1	5	Sturgeon poacher	<i>Agonus acipenserinus</i>	7
3	2	1	16	810120	1	5	Surf smelt	<i>Hypomesus pretiosus pretiosus</i>	13
3	2	1	16	810120	1	5	Threespine stickleback	<i>Gasterosteus aculeatus</i>	8
3	2	1	16	810120	1	5	Tidepool sculpin	<i>Oligocottus maculosus</i>	1
3	2	1	16	810120	1	5	Tubesnout	<i>Aulorhynchus flavidus</i>	45
3	2	1	16	810120	1	5	Bay pipefish	<i>Syngnathus griseolineatus</i>	4
3	1	1	16	810120	1	65	Buffalo sculpin	<i>Enophrys bison</i>	2
1	1	3	16	810120	1	15	Threespine stickleback	<i>Gasterosteus aculeatus</i>	6
3	1	1	16	810120	1	65	Sharpnose sculpin	<i>Clinocottus acuticeps</i>	6
1	1	1	16	810120	1	35	Starry flounder	<i>Platichthys stellatus</i>	9
1	1	1	16	810120	1	35	Threespine stickleback	<i>Gasterosteus aculeatus</i>	1
1	1	2	16	810120	1	25	Arrow goby	<i>Clevelandia ios</i>	1
1	1	2	16	810120	1	25	Staghorn sculpin	<i>Leptocottus armatus</i>	6
1	1	2	16	810120	1	25	Starry flounder	<i>Platichthys stellatus</i>	34
1	1	2	16	810120	1	25	Threespine stickleback	<i>Gasterosteus aculeatus</i>	7
3	1	1	16	810120	1	65	High cockscomb	<i>Anoplarchus purpureus</i>	1
3	2	1	16	810120	1	5	English sole	<i>Parophrys vetulus</i>	8
1	1	1	16	810120	1	35	Surf smelt	<i>Hypomesus pretiosus pretiosus</i>	1
3	1	1	16	810120	1	65	Staghorn sculpin	<i>Leptocottus armatus</i>	2
3	1	1	16	810120	1	65	Tidepool sculpin	<i>Oligocottus maculosus</i>	9
1	1	1	16	810120	1	35	Arrow goby	<i>Clevelandia ios</i>	1
3	1	1	16	810120	1	65	Crescent gunnel	<i>Pholis laeta</i>	1
3	7	1	16	810121	2	115	Bay pipefish	<i>Syngnathus griseolineatus</i>	13
3	7	1	16	810121	2	115	Padded sculpin	<i>Artemis fenestralis</i>	1
3	7	1	16	810121	2	115	Sharpnose sculpin	<i>Clinocottus acuticeps</i>	2
3	7	1	16	810121	2	115	Shiner perch	<i>Cymatogaster aggregata</i>	8
3	7	1	16	810121	2	115	Staghorn sculpin	<i>Leptocottus armatus</i>	9
3	7	1	16	810121	2	115	Threespine stickleback	<i>Gasterosteus aculeatus</i>	7
3	7	1	16	810121	2	115	Starry flounder	<i>Platichthys stellatus</i>	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	7	1	16	810121	2	115	Tubesnout	Aulorhynchus flavidus	85
3	2	1	17	810216	2	20	Tubesnout	Aulorhynchus flavidus	1
3	2	1	17	810216	2	20	Tidepool sculpin	Oligocottus maculosus	1
3	7	1	17	810216	2	45	Starry flounder	Platichthys stellatus	5
3	2	1	17	810216	2	20	Unidentified flatfish	Unidentified flatfish	1
3	1	1	17	810216	1	15	High cockscomb	Anoplarchus purpureus	1
3	1	1	17	810216	1	15	Sharpnose sculpin	Clinocottus acuticeps	7
3	1	1	17	810216	1	15	Staghorn sculpin	Leptocottus armatus	3
3	1	1	17	810216	1	15	Starry flounder	Platichthys stellatus	1
3	1	1	17	810216	1	15	Tidepool sculpin	Oligocottus maculosus	9
3	1	1	17	810216	1	15	Tubesnout	Aulorhynchus flavidus	10
3	1	1	17	810216	1	15	Unidentified gunnel	Unidentified gunnel	1
3	7	1	17	810216	2	45	Padded sculpin	Arteidius fenestralis	1
3	1	1	17	810216	1	15	Rock sole	Lepidopsetta bilineata	2
3	7	1	17	810216	2	45	Unidentified flatfish	Unidentified flatfish	3
3	1	1	17	810216	1	15	English sole	Parophrys vetulus	2
3	7	1	17	810216	2	45	Staghorn sculpin	Leptocottus armatus	1
3	7	1	17	810216	2	45	Rock sole	Lepidopsetta bilineata	1
3	1	1	17	810216	1	15	Saddleback sculpin	Oligocottus rimensis	1
2	6	1	17	810217	1	1	Threespine stickleback	Gasterosteus aculeatus	1
2	6	1	17	810217	1	1	Tubesnout	Aulorhynchus flavidus	1
2	6	1	17	810217	1	1	Starry flounder	Platichthys stellatus	8
1	1	1	18	810303	1	10	Starry flounder	Platichthys stellatus	14
1	1	3	18	810303	2	10	Threespine stickleback	Gasterosteus aculeatus	2
1	1	3	18	810303	2	10	Starry flounder	Platichthys stellatus	14
1	1	2	18	810303	2	1	Starry flounder	Platichthys stellatus	15
1	1	1	18	810303	1	10	Staghorn sculpin	Leptocottus armatus	1
1	1	1	18	810303	1	10	Pacific sandlance	Ammodytes hexapterus	1
1	4	3	18	810303	2	75	Staghorn sculpin	Leptocottus armatus	1
1	1	3	18	810303	2	10	Arrow goby	Clevelandia ios	1
1	4	1	18	810303	2	45	Starry flounder	Platichthys stellatus	13
1	4	3	18	810303	2	75	Starry flounder	Platichthys stellatus	18
1	4	2	18	810303	2	60	Starry flounder	Platichthys stellatus	2
1	4	2	18	810303	2	60	Threespine stickleback	Gasterosteus aculeatus	1
1	4	1	18	810303	2	45	Staghorn sculpin	Leptocottus armatus	1
2	6	2	18	810304	1	27	Sand sole	Psettichthys melanosticus	2
2	6	3	18	810304	1	15	Starry flounder	Platichthys stellatus	32

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	6	3	18	810304	1	15	Staghorn sculpin	Leptocottus armatus	1
2	6	3	18	810304	1	15	Sand sole	Psettichthys melanostictus	1
2	6	3	18	810304	1	15	Pacific sandlance	Ammodytes hexapterus	3
2	6	3	18	810304	1	15	English sole	Parophrys vetulus	3
2	6	3	18	810304	1	15	Chum salmon	Oncorhynchus keta	1
2	6	3	18	810304	1	15	Capelin	Mallotus villosus	1
2	6	2	18	810304	1	27	Staghorn sculpin	Leptocottus armatus	2
2	6	3	18	810304	1	15	Threespine stickleback	Gasterosteus aculeatus	1
2	6	2	18	810304	1	27	Pacific sandlance	Ammodytes hexapterus	1
2	6	2	18	810304	1	27	Capelin	Mallotus villosus	1
2	6	1	18	810304	1	40	Threespine stickleback	Gasterosteus aculeatus	1
2	6	1	18	810304	1	40	Starry flounder	Platichthys stellatus	17
2	6	1	18	810304	1	40	Sand sole	Psettichthys melanostictus	2
2	6	1	18	810304	1	40	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	18	810304	1	40	Chum salmon	Oncorhynchus keta	2
2	6	2	18	810304	1	27	Starry flounder	Platichthys stellatus	24
3	7	1	18	810305	2	40	Tidepool sculpin	Oligocottus maculosus	15
3	2	2	18	810305	2	10	Rock sole	Lepidopsetta bilineata	1
3	2	1	18	810305	2	5	Sturgeon poacher	Agonus acipenserinus	1
3	7	1	18	810305	2	40	Staghorn sculpin	Leptocottus armatus	5
3	7	1	18	810305	2	40	High cockscomb	Anoplarchus purpurescens	1
3	7	1	18	810305	2	40	English sole	Parophrys vetulus	6
3	7	1	18	810305	2	40	Crescent gunnel	Pholis laeta	1
3	2	1	18	810305	2	5	Surf smelt	Hypomesus pretiosus pretiosus	1
3	2	1	18	810305	2	5	Unidentified sculpin	Unidentified sculpin	1
3	2	1	18	810305	2	5	English sole	Parophrys vetulus	2
3	2	2	18	810305	2	10	English sole	Parophrys vetulus	5
3	7	2	18	810305	2	50	Tidepool sculpin	Oligocottus maculosus	17
3	2	2	18	810305	2	10	Shiner perch	Cymatogaster aggregata	1
3	2	2	18	810305	2	10	Staghorn sculpin	Leptocottus armatus	2
3	2	2	18	810305	2	10	Starry flounder	Platichthys stellatus	1
3	2	2	18	810305	2	10	Tube snout	Aulorhynchus flavidus	2
3	2	1	18	810305	2	5	Staghorn sculpin	Leptocottus armatus	3
3	2	1	18	810305	2	5	Chinook salmon	Oncorhynchus tshawytscha	1
3	7	2	18	810305	2	50	Starry flounder	Platichthys stellatus	1
3	7	2	18	810305	2	50	Chinook salmon	Oncorhynchus tshawytscha	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	2	18	810305	2	10	Bay pipefish	Syngnathus griseolineatus	1
3	1	2	18	810305	1	10	Tidepool sculpin	Oligocottus maculosus	10
3	1	1	18	810305	1	20	Bay pipefish	Syngnathus griseolineatus	1
3	1	1	18	810305	1	20	Chum salmon	Oncorhynchus keta	4
3	1	1	18	810305	1	20	English sole	Parophrys vetulus	3
3	1	1	18	810305	1	20	Speckled sanddab	Citharichthys stigmaeus	1
3	1	1	18	810305	1	20	Surf smelt	Hypomesus pretiosus pretiosus	1
3	1	1	18	810305	1	20	Threespine stickleback	Gasterosteus aculeatus	4
3	1	1	18	810305	1	20	Tidepool sculpin	Oligocottus maculosus	2
3	1	1	18	810305	1	20	Tubesnout	Aulorhynchus flavidus	3
3	1	2	18	810305	1	10	Buffalo sculpin	Enophrys bison	1
3	1	2	18	810305	1	10	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	2	18	810305	1	10	English sole	Parophrys vetulus	2
3	7	2	18	810305	2	50	English sole	Parophrys vetulus	3
3	1	2	18	810305	1	10	Threespine stickleback	Gasterosteus aculeatus	2
3	1	2	18	810305	1	10	Shiner perch	Cymatogaster aggregata	1
3	1	1	19	810323	2	30	Bay pipefish	Syngnathus griseolineatus	1
3	2	1	19	810323	2	75	Staghorn sculpin	Leptocottus armatus	1
3	1	1	19	810323	2	30	English sole	Parophrys vetulus	1
3	1	1	19	810323	2	30	Staghorn sculpin	Leptocottus armatus	1
3	1	1	19	810323	2	30	Tubesnout	Aulorhynchus flavidus	2
3	2	1	19	810323	2	75	Threespine stickleback	Gasterosteus aculeatus	2
3	1	1	19	810323	2	30	Starry flounder	Platichthys stellatus	4
3	1	1	19	810323	2	30	Threespine stickleback	Gasterosteus aculeatus	1
3	2	1	19	810323	2	75	Starry flounder	Platichthys stellatus	1
1	1	1	19	810325	2	10	Arrow goby	Clevelandia ios	1
1	4	2	19	810325	1	70	Starry flounder	Platichthys stellatus	10
1	4	2	19	810325	1	70	Chum salmon	Oncorhynchus keta	4
1	4	2	19	810325	1	70	Chinook salmon	Oncorhynchus tshawytscha	6
1	4	1	19	810325	2	60	Surf smelt	Hypomesus pretiosus pretiosus	45
1	4	1	19	810325	2	60	Snake prickleback	Lumpenus sagitta	3
1	4	2	19	810325	1	70	Surf smelt	Hypomesus pretiosus pretiosus	44
1	4	1	19	810325	2	60	Chum salmon	Oncorhynchus keta	14
1	1	1	19	810325	2	10	Chinook salmon	Oncorhynchus tshawytscha	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	1	19	810325	2	10	Chum salmon	Oncorhynchus keta	2
1	1	1	19	810325	2	10	Starry flounder	Platichthys stellatus	18
1	1	1	19	810325	2	10	Threespine stickleback	Gasterosteus aculeatus	1
1	1	2	19	810325	2	20	Chum salmon	Oncorhynchus keta	3
1	1	2	19	810325	2	20	Starry flounder	Platichthys stellatus	16
1	4	1	19	810325	2	60	Starry flounder	Platichthys stellatus	8
1	1	2	20	810408	1	45	Threespine stickleback	Gasterosteus aculeatus	4
1	1	1	20	810408	1	50	Pacific sandlance	Ammodytes hexapterus	1
1	1	1	20	810408	1	50	Chinook salmon	Oncorhynchus tshawytscha	3
1	1	1	20	810408	1	50	Starry flounder	Platichthys stellatus	15
1	1	1	20	810408	1	50	Surf smelt	Hypomesus pretiosus pretiosus	4
1	1	1	20	810408	1	50	Staghorn sculpin	Leptocottus armatus	1
1	1	1	20	810408	1	50	Threespine stickleback	Gasterosteus aculeatus	1
1	1	2	20	810408	1	45	Chinook salmon	Oncorhynchus tshawytscha	5
1	4	1	20	810408	2	8	Chinook salmon	Oncorhynchus tshawytscha	2
1	1	2	20	810408	1	45	Starry flounder	Platichthys stellatus	18
1	4	1	20	810408	2	8	Surf smelt	Hypomesus pretiosus pretiosus	1
1	4	2	20	810408	2	10	Starry flounder	Platichthys stellatus	12
1	4	2	20	810408	2	10	Staghorn sculpin	Leptocottus armatus	1
1	4	1	20	810408	2	8	Threespine stickleback	Gasterosteus aculeatus	2
1	4	1	20	810408	2	8	Starry flounder	Platichthys stellatus	9
1	4	2	20	810408	2	10	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	2	20	810409	1	60	Threespine stickleback	Gasterosteus aculeatus	1
3	2	1	20	810409	1	40	Chum salmon	Oncorhynchus keta	1
3	2	1	20	810409	1	40	English sole	Parophrys vetulus	12
3	2	1	20	810409	1	40	Staghorn sculpin	Leptocottus armatus	1
3	2	1	20	810409	1	40	Surf smelt	Hypomesus pretiosus pretiosus	13
3	2	1	20	810409	1	40	Threespine stickleback	Gasterosteus aculeatus	2
3	2	1	20	810409	1	40	Tidepool sculpin	Oligocottus maculosus	1
3	2	1	20	810409	1	40	Tubesnout	Aulorhynchus flavidus	8
3	1	1	20	810409	1	70	Chum salmon	Oncorhynchus keta	2
3	7	1	20	810409	1	10	Chinook salmon	Oncorhynchus tshawytscha	5
3	7	1	20	810409	1	10	Tubesnout	Aulorhynchus flavidus	9

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	2	20	810409	1	60	Bay pipefish	Syngnathus griseolineatus	1
3	1	1	20	810409	1	70	English sole	Parophrys vetulus	3
3	1	2	20	810409	1	60	English sole	Parophrys vetulus	2
3	7	1	20	810409	1	10	Threespine stickleback	Gasterosteus aculeatus	1
3	1	2	20	810409	1	60	Buffalo sculpin	Enophrys bison	1
3	7	1	20	810409	1	10	Surf smelt	Hypomesus pretiosus pretiosus	3
3	7	1	20	810409	1	10	Starry flounder	Platichthys stellatus	1
3	2	1	20	810409	1	40	Chinook salmon	Oncorhynchus tshawytscha	8
3	1	1	20	810409	1	70	Rock sole	Lepidopsetta bilineata	1
3	1	1	20	810409	1	70	Surf smelt	Hypomesus pretiosus pretiosus	1
2	3	1	21	810505	2	80	Surf smelt	Hypomesus pretiosus pretiosus	12
2	6	2	21	810505	2	45	Surf smelt	Hypomesus pretiosus pretiosus	33
2	3	1	21	810505	2	80	Starry flounder	Platichthys stellatus	1
2	3	1	21	810505	2	80	Threespine stickleback	Gasterosteus aculeatus	1
2	2	1	21	810505	2	70	Chinook salmon	Oncorhynchus tshawytscha	182
2	6	1	21	810505	2	35	Snake prickleback	Lumpenus sagitta	2
2	6	1	21	810505	2	35	Starry flounder	Platichthys stellatus	8
2	6	2	21	810505	2	45	Arrow goby	Clevelandia ios	1
2	6	2	21	810505	2	45	Chinook salmon	Oncorhynchus tshawytscha	44
2	1	1	21	810505	2	50	Chinook salmon	Oncorhynchus tshawytscha	18
2	1	1	21	810505	2	50	Chum salmon	Oncorhynchus keta	1
2	1	1	21	810505	2	50	English sole	Parophrys vetulus	2
2	1	1	21	810505	2	50	Pacific sandlance	Ammodytes hexapterus	150
2	6	3	21	810505	2	55	Arrow goby	Clevelandia ios	1
2	1	1	21	810505	2	50	Surf smelt	Hypomesus pretiosus pretiosus	15
2	3	1	21	810505	2	80	Shiner perch	Cymatogaster aggregata	1
2	2	1	21	810505	2	70	Pacific sandlance	Ammodytes hexapterus	100
2	2	1	21	810505	2	70	Snake prickleback	Lumpenus sagitta	1
2	2	1	21	810505	2	70	Surf smelt	Hypomesus pretiosus pretiosus	8
2	6	2	21	810505	2	45	Snake prickleback	Lumpenus sagitta	1
2	6	2	21	810505	2	45	Threespine stickleback	Gasterosteus aculeatus	1
2	6	1	21	810505	2	35	Arrow goby	Clevelandia ios	1
2	6	1	21	810505	2	35	Chinook salmon	Oncorhynchus tshawytscha	106

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	3	1	21	810505	2	80	Chinook salmon	Oncorhynchus tshawytscha	16
2	1	1	21	810505	2	50	Starry flounder	Platichthys stellatus	3
2	6	2	21	810505	2	45	Sand sole	Psettichthys melanosticus	1
2	6	3	21	810505	2	55	Chinook salmon	Oncorhynchus tshawytscha	24
2	6	3	21	810505	2	55	Starry flounder	Platichthys stellatus	1
3	5	1	21	810506	1	50	Tidepool snailfish	Liparis florae	2
3	5	1	21	810506	1	50	Threespine stickleback	Gasterosteus aculeatus	10
3	5	1	21	810506	1	50	Pacific sandlance	Ammodytes hexapterus	60
3	5	1	21	810506	1	50	English sole	Parophrys vetulus	10
3	5	1	21	810506	1	50	Chinook salmon	Oncorhynchus tshawytscha	3
3	4	1	21	810506	1	60	Rock sole	Lepidopsetta bilineata	1
3	4	1	21	810506	1	60	Pacific sandlance	Ammodytes hexapterus	9
3	4	1	21	810506	1	60	English sole	Parophrys vetulus	8
3	5	1	21	810506	1	50	Tubesnout	Aulorhynchus flavidus	2
3	7	1	21	810506	1	15	Shiner perch	Cymatogaster aggregata	9
3	5	1	21	810506	1	50	Chum salmon	Oncorhynchus keta	23
3	7	1	21	810506	1	15	Pacific sandlance	Ammodytes hexapterus	1
3	7	1	21	810506	1	15	Chinook salmon	Oncorhynchus tshawytscha	11
3	3	1	21	810506	1	70	Unidentified sculpin	Unidentified sculpin	1
3	3	1	21	810506	1	70	Tubesnout	Aulorhynchus flavidus	1
3	3	1	21	810506	1	70	Threespine stickleback	Gasterosteus aculeatus	2
3	3	1	21	810506	1	70	Rock sole	Lepidopsetta bilineata	1
3	3	1	21	810506	1	70	Pacific sandlance	Ammodytes hexapterus	1
3	3	1	21	810506	1	70	English sole	Parophrys vetulus	11
3	3	1	21	810506	1	70	Chum salmon	Oncorhynchus keta	2
3	3	1	21	810506	1	70	Chinook salmon	Oncorhynchus tshawytscha	3
3	1	1	21	810506	1	90	Chinook salmon	Oncorhynchus tshawytscha	1
3	1	1	21	810506	1	90	Staghorn sculpin	Leptocottus armatus	16
3	2	1	21	810506	2	50	Surf smelt	Hypomesus pretiosus pretiosus	31
3	2	1	21	810506	2	50	Shiner perch	Cymatogaster aggregata	1
3	2	1	21	810506	2	50	Chum salmon	Oncorhynchus keta	26
3	2	1	21	810506	2	50	Chinook salmon	Oncorhynchus tshawytscha	1
3	6	1	21	810506	1	30	English sole	Parophrys vetulus	60
3	1	1	21	810506	1	90	English sole	Parophrys vetulus	3
3	1	1	21	810506	1	90	Penpoint gunnel	Apodichthys flavidus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	6	1	21	810506	1	30	Pacific sandlance	Ammodytes hexapterus	9
3	6	1	21	810506	1	30	Chinook salmon	Oncorhynchus tshawytscha	1
1	4	1	21	810507	1	20	Starry flounder	Platichthys stellatus	4
1	2	1	21	810507	1	30	Chinook salmon	Oncorhynchus tshawytscha	10
1	5	1	21	810507	1	10	Surf smelt	Hypomesus pretiosus pretiosus	13
1	5	1	21	810507	1	10	Chinook salmon	Oncorhynchus tshawytscha	12
1	5	1	21	810507	1	10	Chum salmon	Oncorhynchus keta	1
1	5	1	21	810507	1	10	Coho salmon	Oncorhynchus kisutch	2
1	5	1	21	810507	1	10	Threespine stickleback	Gasterosteus aculeatus	2
1	2	1	21	810507	1	30	Coho salmon	Oncorhynchus kisutch	4
1	4	1	21	810507	1	20	Coho salmon	Oncorhynchus kisutch	1
1	4	1	21	810507	1	20	Chum salmon	Oncorhynchus keta	1
1	5	1	21	810507	1	10	Snake prickleback	Lumpenus sagitta	1
1	1	1	21	810507	1	50	Surf smelt	Hypomesus pretiosus pretiosus	4
1	1	1	21	810507	1	50	Arrow goby	Clevelandia ios	1
1	4	1	21	810507	1	20	Snake prickleback	Lumpenus sagitta	2
1	2	1	21	810507	1	30	Threespine stickleback	Gasterosteus aculeatus	3
1	4	1	21	810507	1	20	Chinook salmon	Oncorhynchus tshawytscha	4
1	1	1	21	810507	1	50	Coho salmon	Oncorhynchus kisutch	2
1	1	1	21	810507	1	50	Snake prickleback	Lumpenus sagitta	7
1	4	1	21	810507	1	20	Threespine stickleback	Gasterosteus aculeatus	1
1	1	1	21	810507	1	50	Starry flounder	Platichthys stellatus	8
1	4	1	21	810507	1	20	Surf smelt	Hypomesus pretiosus pretiosus	1
1	1	1	21	810507	1	50	Threespine stickleback	Gasterosteus aculeatus	3
1	2	1	21	810507	1	30	Surf smelt	Hypomesus pretiosus pretiosus	2
1	2	1	21	810507	1	30	Starry flounder	Platichthys stellatus	1
1	2	1	21	810507	1	30	Snake prickleback	Lumpenus sagitta	9
1	1	1	21	810507	1	50	Chinook salmon	Oncorhynchus tshawytscha	3
1	2	1	21	810507	1	30	Chum salmon	Oncorhynchus keta	1
1	1	1	21	810507	1	50	Chum salmon	Oncorhynchus keta	1
1	1	1	21	810507	1	50	Staghorn sculpin	Leptocottus armatus	1
1	2	1	21	810507	1	30	Arrow goby	Clevelandia ios	1
1	1	1	22	810519	1	65	Arrow goby	Clevelandia ios	32
1	1	1	22	810519	1	65	Threespine stickleback	Gasterosteus aculeatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	1	22	810519	1	65	Starry flounder	Platichthys stellatus	1
1	5	1	22	810519	1	10	Surf smelt	Hypomesus pretiosus	1
1	4	1	22	810519	1	20	Arrow goby	Clevelandia ios	36
1	4	1	22	810519	1	20	Snake prickleback	Lumpenus sagitta	1
1	4	1	22	810519	1	20	Staghorn sculpin	Leptocottus armatus	5
1	5	1	22	810519	1	10	Starry flounder	Platichthys stellatus	24
1	1	1	22	810519	1	65	English sole	Parophrys vetulus	1
1	3	1	22	810519	1	40	Arrow goby	Clevelandia ios	10
1	2	1	22	810519	1	50	Staghorn sculpin	Leptocottus armatus	3
1	2	1	22	810519	1	50	Snake prickleback	Lumpenus sagitta	8
1	2	1	22	810519	1	50	Chinook salmon	Oncorhynchus tshawytscha	22
1	2	1	22	810519	1	50	Capelin	Mallotus villosus	3
1	1	1	22	810519	1	65	Staghorn sculpin	Leptocottus armatus	11
1	2	1	22	810519	1	50	Arrow goby	Clevelandia ios	2
1	3	1	22	810519	1	40	Snake prickleback	Lumpenus sagitta	6
1	3	1	22	810519	1	40	Starry flounder	Platichthys stellatus	1
1	4	1	22	810519	1	20	Starry flounder	Platichthys stellatus	9
1	5	1	22	810519	1	10	Arrow goby	Clevelandia ios	8
1	5	1	22	810519	1	10	Chinook salmon	Oncorhynchus tshawytscha	60
1	5	1	22	810519	1	10	Chum salmon	Oncorhynchus keta	2
1	5	1	22	810519	1	10	English sole	Parophrys vetulus	2
1	5	1	22	810519	1	10	Snake prickleback	Lumpenus sagitta	14
3	7	1	22	810520	2	80	Capelin	Mallotus villosus	1
3	1	1	22	810520	1	30	Tidepool snailfish	Liparis flarae	1
3	7	1	22	810520	2	80	Chinook salmon	Oncorhynchus tshawytscha	1
3	7	1	22	810520	2	80	Chum salmon	Oncorhynchus keta	5
3	7	1	22	810520	2	80	English sole	Parophrys vetulus	11
3	1	1	22	810520	1	30	Starry flounder	Platichthys stellatus	26
3	1	1	22	810520	1	30	Tidepool sculpin	Oligocottus maculosus	33
3	2	1	22	810520	2	45	Unidentified sculpin	Unidentified sculpin	2
3	7	1	22	810520	2	80	Crescent gunnel	Pholis laeta	1
3	2	1	22	810520	2	45	Tubesnout	Aulorhynchus flavidus	7
3	2	1	22	810520	2	45	Tidepool sculpin	Oligocottus maculosus	1
3	2	1	22	810520	2	45	Threespine stickleback	Gasterosteus aculeatus	1
3	2	1	22	810520	2	45	Surf smelt	Hypomesus pretiosus	4
3	2	1	22	810520	2	45	Staghorn sculpin	Leptocottus armatus	112
3	2	1	22	810520	2	45	Penpoint gunnel	Apodichthys flavidus	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	1	22	810520	2	45	English sole	Parophrys vetulus	14
3	2	1	22	810520	2	45	Crescent gunnel	Pholis laeta	3
3	2	1	22	810520	2	45	Chinook salmon	Oncorhynchus tshawytscha	1
3	7	1	22	810520	2	80	Tidepool sculpin	Oligocottus maculosus	3
3	7	1	22	810520	2	80	Staghorn sculpin	Leptocottus armatus	126
3	7	1	22	810520	2	80	Pacific sanddab	Citharichthys sordidus	1
3	1	1	22	810520	1	30	English sole	Parophrys vetulus	29
3	1	1	22	810520	1	30	Pacific sanddab	Citharichthys sordidus	1
3	1	1	22	810520	1	30	Staghorn sculpin	Leptocottus armatus	118
3	1	1	22	810520	1	30	Crescent gunnel	Pholis laeta	1
2	6	3	22	810521	1	25	Starry flounder	Platichthys stellatus	4
2	6	3	22	810521	1	25	Snake prickleback	Lumpenus sagitta	9
2	6	1	22	810521	1	45	Snake prickleback	Lumpenus sagitta	4
2	6	3	22	810521	1	25	Arrow goby	Clevelandia ios	1
2	6	1	22	810521	1	45	English sole	Parophrys vetulus	4
2	6	2	22	810521	1	35	Starry flounder	Platichthys stellatus	3
2	6	2	22	810521	1	35	Snake prickleback	Lumpenus sagitta	9
2	6	3	22	810521	1	25	Threespine stickleback	Gasterosteus aculeatus	1
2	6	1	22	810521	1	45	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	22	810521	1	45	Chinook salmon	Oncorhynchus tshawytscha	2
2	6	2	22	810521	1	35	Capelin	Mallotus villosus	7
2	6	3	22	810521	1	25	Capelin	Mallotus villosus	1
2	6	1	22	810521	1	45	Sand sole	Psettichthys melanosticus	2
2	6	3	22	810521	1	25	Chinook salmon	Oncorhynchus tshawytscha	7
2	6	2	22	810521	1	35	Arrow goby	Clevelandia ios	2
2	6	3	22	810521	1	25	English sole	Parophrys vetulus	1
2	6	2	22	810521	1	35	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	22	810521	1	45	Capelin	Mallotus villosus	114
2	6	1	22	810521	1	45	Arrow goby	Clevelandia ios	3
2	6	2	22	810521	1	35	Chinook salmon	Oncorhynchus tshawytscha	11
2	6	2	22	810521	1	35	Chum salmon	Oncorhynchus keta	1
2	6	2	22	810521	1	35	English sole	Parophrys vetulus	3
2	6	3	22	810521	1	25	Sand sole	Psettichthys melanosticus	2
2	6	1	22	810521	1	45	Pacific herring	Clupea harengus pallasii	1
3	6	1	23	810601	2	15	Pacific herring	Clupea harengus pallasii	1
3	1	1	23	810601	1	25	Unidentified juvenile rockfish	Unidentified juvenile rockfish	1
3	1	1	23	810601	1	25	English sole	Parophrys vetulus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	23	810601	1	25	Crescent gunnel	Pholis laeta	15
3	6	1	23	810601	2	15	Bay pipefish	Syngnathus griseolineatus	4
3	6	1	23	810601	2	15	Chinook salmon	Oncorhynchus tshawytscha	17
3	6	1	23	810601	2	15	English sole	Parophrys vetulus	30
3	6	1	23	810601	2	15	Pacific sanddab	Citharichthys sordidus	1
3	6	1	23	810601	2	15	Rock sole	Lepidopsetta bilineata	1
3	6	1	23	810601	2	15	Staghorn sculpin	Leptocottus armatus	7
3	6	1	23	810601	2	15	Starry flounder	Platichthys stellatus	7
3	6	1	23	810601	2	15	Threespine stickleback	Gasterosteus aculeatus	3
3	6	1	23	810601	2	15	Tubesnout	Aulorhynchus flavidus	4
3	4	1	23	810601	2	35	Starry flounder	Platichthys stellatus	18
3	7	1	23	810601	2	65	Chinook salmon	Oncorhynchus tshawytscha	42
3	6	1	23	810601	2	15	Chum salmon	Oncorhynchus keta	8
3	1	1	23	810601	1	25	Tubesnout	Aulorhynchus flavidus	66
3	4	1	23	810601	2	35	Threespine stickleback	Gasterosteus aculeatus	1
3	4	1	23	810601	2	35	Bay pipefish	Syngnathus griseolineatus	2
3	2	1	23	810601	2	95	Staghorn sculpin	Leptocottus armatus	14
3	2	1	23	810601	2	95	Starry flounder	Platichthys stellatus	5
3	2	1	23	810601	2	95	Surf smelt	Hypomesus pretiosus pretiosus	1
3	2	1	23	810601	2	95	Threespine stickleback	Gasterosteus aculeatus	2
3	1	1	23	810601	1	25	Tidepool sculpin	Oligocottus maculosus	10
3	4	1	23	810601	2	35	Chum salmon	Oncorhynchus keta	17
3	7	1	23	810601	2	65	Surf smelt	Hypomesus pretiosus pretiosus	4
3	4	1	23	810601	2	35	Coho salmon	Oncorhynchus kisutch	7
3	7	1	23	810601	2	65	Snake prickleback	Lumpenus sagitta	1
3	2	1	23	810601	2	95	Unidentified gunnel	Unidentified gunnel	1
3	2	1	23	810601	2	95	Tubesnout	Aulorhynchus flavidus	2
3	7	1	23	810601	2	65	Shiner perch	Cymatogaster aggregata	36
3	7	1	23	810601	2	65	Pacific herring	Clupea harengus pallasii	1
3	7	1	23	810601	2	65	English sole	Parophrys vetulus	7
3	7	1	23	810601	2	65	Chum salmon	Oncorhynchus keta	4
3	7	1	23	810601	2	65	Staghorn sculpin	Leptocottus armatus	10
3	4	1	23	810601	2	35	Tubesnout	Aulorhynchus flavidus	17
3	1	1	23	810601	1	25	Penpoint gunnel	Apodichthys flavidus	2
3	1	1	23	810601	1	25	Staghorn sculpin	Leptocottus armatus	15
3	1	1	23	810601	1	25	Starry flounder	Platichthys stellatus	8

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	2	1	23	810601	2	95	Crescent gunnel	Pholis laeta	1
3	2	1	23	810601	2	95	English sole	Parophrys vetulus	10
3	2	1	23	810601	2	95	Pacific herring	Clupea harengus pallasii	4
3	2	1	23	810601	2	95	Penpoint gunnel	Apodichthys flavidus	2
3	4	1	23	810601	2	35	Chinook salmon	Oncorhynchus tshawytscha	34
3	2	1	23	810601	2	95	Shiner perch	Cymatogaster aggregata	9
3	1	1	23	810601	1	25	Pacific sanddab	Citharichthys sordidus	2
3	4	1	23	810601	2	35	Surf smelt	Hypomesus pretiosus pretiosus	4
3	4	1	23	810601	2	35	Shiner perch	Cymatogaster aggregata	3
3	4	1	23	810601	2	35	Rock sole	Lepidopsetta bilineata	1
3	4	1	23	810601	2	35	Pacific herring	Clupea harengus pallasii	107
3	4	1	23	810601	2	35	Unidentified juvenile greenling	Unidentified juvenile greenling	8
3	4	1	23	810601	2	35	English sole	Parophrys vetulus	2
3	4	1	23	810601	2	35	Crescent gunnel	Pholis laeta	1
3	2	1	23	810601	2	95	Plainfin midshipman	Porichthys notatus	1
2	6	1	23	810602	1	65	Starry flounder	Platichthys stellatus	2
2	4	1	23	810602	2	10	Chinook salmon	Oncorhynchus tshawytscha	16
2	1	1	23	810602	1	35	Shiner perch	Cymatogaster aggregata	1
2	1	1	23	810602	1	35	Penpoint gunnel	Apodichthys flavidus	1
2	1	1	23	810602	1	35	Pacific herring	Clupea harengus pallasii	20
2	1	1	23	810602	1	35	English sole	Parophrys vetulus	3
2	3	1	23	810602	1	5	Staghorn sculpin	Leptocottus armatus	13
2	3	1	23	810602	1	5	Starry flounder	Platichthys stellatus	52
2	3	1	23	810602	1	5	Chinook salmon	Oncorhynchus tshawytscha	36
2	4	1	23	810602	2	10	Arrow goby	Clevelandia ios	2
2	1	1	23	810602	1	35	Starry flounder	Platichthys stellatus	33
2	4	1	23	810602	2	10	Pacific herring	Clupea harengus pallasii	4
2	4	1	23	810602	2	10	Shiner perch	Cymatogaster aggregata	7
2	4	1	23	810602	2	10	Snake prickleback	Lumpenus sagitta	4
2	4	1	23	810602	2	10	Staghorn sculpin	Leptocottus armatus	20
2	4	1	23	810602	2	10	Starry flounder	Platichthys stellatus	102
2	4	1	23	810602	2	10	Threespine stickleback	Gasterosteus aculeatus	20
2	3	1	23	810602	1	5	Threespine stickleback	Gasterosteus aculeatus	50
2	2	1	23	810602	1	20	Peamouth chub	Mylocheilus caurinus	1
2	3	1	23	810602	1	5	Pacific herring	Clupea harengus pallasii	6
2	3	1	23	810602	1	5	Shiner perch	Cymatogaster aggregata	5
2	3	1	23	810602	1	5	Snake prickleback	Lumpenus sagitta	7

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	2	1	23	810602	1	20	Threespine stickleback	Gasterosteus aculeatus	14
2	2	1	23	810602	1	20	Starry flounder	Platichthys stellatus	13
2	2	1	23	810602	1	20	Staghorn sculpin	Leptocottus armatus	5
2	1	1	23	810602	1	35	Snake prickleback	Lumpenus sagitta	5
2	2	1	23	810602	1	20	Shiner perch	Cymatogaster aggregata	5
2	1	1	23	810602	1	35	Staghorn sculpin	Leptocottus armatus	5
2	2	1	23	810602	1	20	Pacific herring	Clupea harengus pallasii	2
2	2	1	23	810602	1	20	Crescent gunnel	Pholis laeta	1
2	2	1	23	810602	1	20	Chum salmon	Oncorhynchus keta	1
2	2	1	23	810602	1	20	Chinook salmon	Oncorhynchus tshawytscha	42
2	2	1	23	810602	1	20	Arrow goby	Clevelandia ios	4
2	1	1	23	810602	1	35	Threespine stickleback	Gasterosteus aculeatus	7
2	5	1	23	810602	2	35	Chum salmon	Oncorhynchus keta	1
2	2	1	23	810602	1	20	Snake prickleback	Lumpenus sagitta	4
2	5	1	23	810602	2	35	Shiner perch	Cymatogaster aggregata	2
2	6	1	23	810602	1	65	Snake prickleback	Lumpenus sagitta	3
2	6	1	23	810602	1	65	Threespine stickleback	Gasterosteus aculeatus	15
2	6	1	23	810602	1	65	Staghorn sculpin	Leptocottus armatus	2
2	6	1	23	810602	1	65	Peamouth chub	Mylocheilus caurinus	3
2	6	1	23	810602	1	65	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	23	810602	1	65	Pacific herring	Clupea harengus pallasii	19
2	6	1	23	810602	1	65	Chum salmon	Oncorhynchus keta	1
2	6	1	23	810602	1	65	Chinook salmon	Oncorhynchus tshawytscha	8
2	6	1	23	810602	1	65	Capelin	Mallotus villosus	4
2	5	1	23	810602	2	35	Threespine stickleback	Gasterosteus aculeatus	25
2	5	1	23	810602	2	35	Capelin	Mallotus villosus	8
2	5	1	23	810602	2	35	Snake prickleback	Lumpenus sagitta	11
2	5	1	23	810602	2	35	Chinook salmon	Oncorhynchus tshawytscha	17
2	5	1	23	810602	2	35	Pacific herring	Clupea harengus pallasii	8
2	5	1	23	810602	2	35	Coho salmon	Oncorhynchus kisutch	1
2	5	1	23	810602	2	35	English sole	Parophrys vetulus	1
2	5	1	23	810602	2	35	Staghorn sculpin	Leptocottus armatus	2
2	1	1	23	810602	1	35	Arrow goby	Clevelandia ios	2
2	5	1	23	810602	2	35	Peamouth chub	Mylocheilus caurinus	2
2	1	1	23	810602	1	35	Chinook salmon	Oncorhynchus tshawytscha	20
1	2	1	23	810603	1	30	Chinook salmon	Oncorhynchus tshawytscha	20

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	1	23	810603	1	40	Arrow goby	Clevelandia ios	7
1	1	1	23	810603	1	40	Pacific herring	Clupea harengus pallasii	3
1	1	1	23	810603	1	40	Starry flounder	Platichthys stellatus	8
1	1	1	23	810603	1	40	Staghorn sculpin	Leptocottus armatus	36
1	5	1	23	810603	2	10	Chinook salmon	Oncorhynchus tshawytscha	2
1	2	1	23	810603	1	30	Chum salmon	Oncorhynchus keta	1
1	2	1	23	810603	1	30	Staghorn sculpin	Leptocottus armatus	2
1	2	1	23	810603	1	30	Pacific herring	Clupea harengus pallasii	17
1	2	1	23	810603	1	30	Pacific sanddab	Citharichthys sordidus	1
1	2	1	23	810603	1	30	Coho salmon	Oncorhynchus kisutch	1
1	2	1	23	810603	1	30	Shiner perch	Cymatogaster aggregata	1
1	2	1	23	810603	1	30	Threespine stickleback	Gasterosteus aculeatus	1
1	2	1	23	810603	1	30	Starry flounder	Platichthys stellatus	6
1	1	1	23	810603	1	40	Threespine stickleback	Gasterosteus aculeatus	1
1	5	1	23	810603	2	10	Threespine stickleback	Gasterosteus aculeatus	97
1	4	1	23	810603	1	5	Arrow goby	Clevelandia ios	5
1	4	1	23	810603	1	5	Starry flounder	Platichthys stellatus	11
1	5	1	23	810603	2	10	Peamouth chub	Mylocheilus caurinus	1
1	5	1	23	810603	2	10	Snake prickleback	Lumpenus sagitta	4
1	5	1	23	810603	2	10	Staghorn sculpin	Leptocottus armatus	54
1	4	1	23	810603	1	5	Staghorn sculpin	Leptocottus armatus	34
1	5	1	23	810603	2	10	Starry flounder	Platichthys stellatus	24
1	5	1	23	810603	2	10	Pacific herring	Clupea harengus pallasii	9
1	4	1	23	810603	1	5	Tidepool sculpin	Oligocottus maculosus	1
1	4	1	23	810603	1	5	Threespine stickleback	Gasterosteus aculeatus	2
1	1	1	23	810603	1	40	Saddleback gunnel	Pholis ornata	1
3	1	2	24	810616	1	130	Great sculpin	Myoxocephalus polyacanthocephalus	5
3	1	2	24	810616	1	130	Crescent gunnel	Pholis laeta	19
3	1	2	24	810616	1	130	Buffalo sculpin	Enophrys bison	1
3	1	2	24	810616	1	130	Pacific tomcod	Microgadus proximus	9
3	1	2	24	810616	1	130	Padded sculpin	Artedius fenestralis	13
3	1	1	24	810616	1	150	Unidentified gunnel	Unidentified gunnel	1
3	1	2	24	810616	1	130	High cockscomb	Anoplarchus purpureus	1
3	1	1	24	810616	1	150	Tidepool sculpin	Oligocottus maculosus	2
3	1	2	24	810616	1	130	Rock sole	Lepidopsetta bilineata	1
3	1	1	24	810616	1	150	Rosylip sculpin	Ascelichthys rhodorus	1
3	1	2	24	810616	1	130	Rosylip sculpin	Ascelichthys rhodorus	3

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	2	24	810616	1	130	Saddleback gunnel	Pholis ornata	1
3	1	2	24	810616	1	130	Sand sole	Psettichthys melanostictus	1
3	1	2	24	810616	1	130	Sharpnose sculpin	Clinocottus acuticeps	1
3	1	2	24	810616	1	130	Shiner perch	Cymatogaster aggregata	3
3	1	2	24	810616	1	130	Staghorn sculpin	Leptocottus armatus	56
3	1	2	24	810616	1	130	Starry flounder	Platichthys stellatus	3
3	1	2	24	810616	1	130	Threespine stickleback	Gasterosteus aculeatus	15
3	1	2	24	810616	1	130	Penpoint gunnel	Apodichthys flavidus	5
3	1	1	24	810616	1	150	Crescent gunnel	Pholis laeta	24
3	7	1	24	810616	2	100	Saddleback gunnel	Pholis ornata	1
3	7	1	24	810616	2	100	Penpoint gunnel	Apodichthys flavidus	4
3	7	1	24	810616	2	100	Padded sculpin	Arteidius fenestralis	3
3	7	1	24	810616	2	100	Pacific sandlance	Ammodytes hexapterus	8
3	7	1	24	810616	2	100	Pacific herring	Clupea harengus pallasii	105
3	7	1	24	810616	2	100	Crescent gunnel	Pholis laeta	4
3	7	1	24	810616	2	100	Chinook salmon	Oncorhynchus tshawytscha	2
3	7	1	24	810616	2	100	Buffalo sculpin	Enophrys bison	1
3	1	1	24	810616	1	150	Staghorn sculpin	Leptocottus armatus	51
3	1	1	24	810616	1	150	Chum salmon	Oncorhynchus keta	1
3	1	1	24	810616	1	150	Threespine stickleback	Gasterosteus aculeatus	9
3	1	1	24	810616	1	150	Kelp greenling	Hexagrammos decogrammus	1
3	1	1	24	810616	1	150	Pacific sandlance	Ammodytes hexapterus	4
3	1	1	24	810616	1	150	Padded sculpin	Arteidius fenestralis	12
3	1	1	24	810616	1	150	Penpoint gunnel	Apodichthys flavidus	6
3	1	3	24	810616	1	120	Chum salmon	Oncorhynchus keta	3
3	1	1	24	810616	1	150	Shiner perch	Cymatogaster aggregata	2
3	1	2	24	810616	1	130	Tidepool sculpin	Oligocottus maculosus	7
3	1	1	24	810616	1	150	Surf smelt	Hypomesus pretiosus pretiosus	1
3	1	1	24	810616	1	150	Buffalo sculpin	Enophrys bison	4
3	5	2	24	810616	2	25	Starry flounder	Platichthys stellatus	1
3	5	1	24	810616	2	15	Shiner perch	Cymatogaster aggregata	1
3	5	1	24	810616	2	15	Staghorn sculpin	Leptocottus armatus	2
3	5	1	24	810616	2	15	Tubesnout	Aulorhynchus flavidus	1
3	5	2	24	810616	2	25	Chinook salmon	Oncorhynchus tshawytscha	1
3	5	2	24	810616	2	25	Chum salmon	Oncorhynchus keta	1
3	5	2	24	810616	2	25	Crescent gunnel	Pholis laeta	1
3	5	2	24	810616	2	25	English sole	Parophrys vetulus	8

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	5	2	24	810616	2	25	Rock sole	Lepidopsetta bilineata	2
3	5	2	24	810616	2	25	Sand sole	Psettichthys melanosticus	2
3	1	2	24	810616	1	130	Unidentified gunnel	Unidentified gunnel	1
3	5	2	24	810616	2	25	Staghorn sculpin	Leptocottus armatus	9
3	5	1	24	810616	2	15	Chinook salmon	Oncorhynchus tshawytscha	1
3	5	2	24	810616	2	25	Surf smelt	Hypomesus pretiosus pretiosus	1
3	5	2	24	810616	2	25	Tubesnout	Aulorhynchus flavidus	1
3	5	3	24	810616	2	35	English sole	Parophrys vetulus	4
3	5	3	24	810616	2	35	Staghorn sculpin	Leptocottus armatus	5
3	5	3	24	810616	2	35	Starry flounder	Platichthys stellatus	1
3	7	3	24	810616	2	125	Shiner perch	Cymatogaster aggregata	2
3	7	3	24	810616	2	125	Staghorn sculpin	Leptocottus armatus	8
3	7	3	24	810616	2	125	Starry flounder	Platichthys stellatus	1
3	7	3	24	810616	2	125	Tidepool sculpin	Oligocottus maculosus	30
3	5	2	24	810616	2	25	Snake prickleback	Lumpenus sagitta	4
3	1	3	24	810616	1	120	Saddleback gunnel	Pholis ornata	1
3	7	1	24	810616	2	100	Sharpnose sculpin	Clinocottus acuticeps	3
3	1	3	24	810616	1	120	Buffalo sculpin	Enophrys bison	2
3	1	1	24	810616	1	150	Spinynose sculpin	Asemichthys taylori	5
3	1	3	24	810616	1	120	Crescent gunnel	Pholis laeta	22
3	1	3	24	810616	1	120	English sole	Parophrys vetulus	6
3	1	3	24	810616	1	120	Pacific herring	Clupea harengus pallasii	11
3	1	3	24	810616	1	120	Pacific sanddab	Citharichthys sordidus	1
3	1	3	24	810616	1	120	Pacific sandlance	Ammodytes hexapterus	1
3	1	3	24	810616	1	120	Pacific tomcod	Microgadus proximus	13
3	5	1	24	810616	2	15	English sole	Parophrys vetulus	5
3	1	3	24	810616	1	120	Rosylip sculpin	Ascelichthys rhodorus	2
3	5	1	24	810616	2	15	Chum salmon	Oncorhynchus keta	1
3	1	3	24	810616	1	120	Saddleback sculpin	Oligocottus rimensis	2
3	1	3	24	810616	1	120	Shiner perch	Cymatogaster aggregata	2
3	1	3	24	810616	1	120	Snake prickleback	Lumpenus sagitta	17
3	1	3	24	810616	1	120	Staghorn sculpin	Leptocottus armatus	33
3	1	3	24	810616	1	120	Starry flounder	Platichthys stellatus	38
3	1	3	24	810616	1	120	Tadpole sculpin	Psychrolutes paradoxus	1
3	1	3	24	810616	1	120	Threespine stickleback	Gasterosteus aculeatus	41
3	1	3	24	810616	1	120	Tidepool sculpin	Oligocottus maculosus	4
3	1	3	24	810616	1	120	Tubesnout	Aulorhynchus flavidus	68
3	1	2	24	810616	1	130	Tubesnout	Aulorhynchus flavidus	6

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	3	24	810616	1	120	Penpoint gunnel	Apodichthys flavidus	16
3	7	3	24	810616	2	125	High cockscomb	Anoplarchus purpureus	1
3	1	1	24	810616	1	150	Starry flounder	Platichthys stellatus	7
3	7	3	24	810616	2	125	Penpoint gunnel	Apodichthys flavidus	8
3	7	3	24	810616	2	125	Padded sculpin	Artemius fenestralis	2
3	7	3	24	810616	2	125	Pacific sandlance	Ammodytes hexapterus	1
3	7	1	24	810616	2	100	Staghorn sculpin	Leptocottus armatus	5
3	7	3	24	810616	2	125	Pacific herring	Clupea harengus pallasii	34
3	7	3	24	810616	2	125	Crescent gunnel	Pholis laeta	11
3	7	3	24	810616	2	125	Chinook salmon	Oncorhynchus tshawytscha	3
3	7	2	24	810616	2	110	Tidepool sculpin	Oligocottus maculosus	28
3	7	2	24	810616	2	110	Starry flounder	Platichthys stellatus	3
3	7	2	24	810616	2	110	Staghorn sculpin	Leptocottus armatus	5
3	7	2	24	810616	2	110	Shiner perch	Cymatogaster aggregata	1
3	7	1	24	810616	2	100	Tidepool sculpin	Oligocottus maculosus	35
3	7	2	24	810616	2	110	Great sculpin	Myoxocephalus polyacanthocephalus	2
3	7	2	24	810616	2	110	Crescent gunnel	Pholis laeta	9
3	7	2	24	810616	2	110	Chum salmon	Oncorhynchus keta	1
3	7	2	24	810616	2	110	Buffalo sculpin	Enophrys bison	2
3	7	2	24	810616	2	110	Saddleback gunnel	Pholis ornata	1
3	7	2	24	810616	2	110	Penpoint gunnel	Apodichthys flavidus	3
3	7	2	24	810616	2	110	Padded sculpin	Artemius fenestralis	6
3	7	1	24	810616	2	100	Starry flounder	Platichthys stellatus	2
2	2	1	24	810617	2	5	Pacific herring	Clupea harengus pallasii	2
2	3	1	24	810617	2	35	Pacific herring	Clupea harengus pallasii	7
2	6	3	24	810617	1	50	Pacific herring	Clupea harengus pallasii	1
2	6	3	24	810617	1	50	Chinook salmon	Oncorhynchus tshawytscha	11
2	6	3	24	810617	1	50	Snake pricklyback	Lumpenus sagitta	2
2	6	3	24	810617	1	50	Staghorn sculpin	Leptocottus armatus	1
2	3	1	24	810617	2	35	Peamouth chub	Mylocheilus caurinus	3
2	6	3	24	810617	1	50	Sand sole	Psettichthys melanosticus	3
2	3	1	24	810617	2	35	Chinook salmon	Oncorhynchus tshawytscha	38
2	6	3	24	810617	1	50	Arrow goby	Clevelandia ios	1
2	2	1	24	810617	2	5	English sole	Parophrys vetulus	4
2	6	3	24	810617	1	50	Capelin	Mallotus villosus	7
2	2	1	24	810617	2	5	Sand sole	Psettichthys melanosticus	2
2	2	1	24	810617	2	5	Threespine stickleback	Gasterosteus aculeatus	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
2	2	1	24	810617	2	5	Shiner perch	Cymatogaster aggregata	4
2	2	1	24	810617	2	5	Starry flounder	Platichthys stellatus	25
2	2	1	24	810617	2	5	Staghorn sculpin	Leptocottus armatus	4
2	2	1	24	810617	2	5	Snake prickleback	Lumpenus sagitta	4
2	2	1	24	810617	2	5	Chinook salmon	Oncorhynchus tshawytscha	14
2	3	1	24	810617	2	35	Snake prickleback	Lumpenus sagitta	19
2	3	1	24	810617	2	35	Threespine stickleback	Gasterosteus aculeatus	688
2	3	1	24	810617	2	35	Starry flounder	Platichthys stellatus	36
2	3	1	24	810617	2	35	Staghorn sculpin	Leptocottus armatus	33
2	6	1	24	810617	1	70	Chinook salmon	Oncorhynchus tshawytscha	8
2	6	1	24	810617	1	70	English sole	Parophrys vetulus	2
2	6	1	24	810617	1	70	Pacific sandlance	Ammodytes hexapterus	1
2	6	1	24	810617	1	70	Sand sole	Psettichthys melanosticus	3
2	6	1	24	810617	1	70	Snake prickleback	Lumpenus sagitta	2
2	6	1	24	810617	1	70	Staghorn sculpin	Leptocottus armatus	3
2	6	1	24	810617	1	70	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	2	24	810617	1	60	Capelin	Mallotus villosus	1
2	6	3	24	810617	1	50	English sole	Parophrys vetulus	7
2	6	2	24	810617	1	60	English sole	Parophrys vetulus	3
2	6	2	24	810617	1	60	Tidepool sculpin	Oligocottus maculosus	1
2	6	2	24	810617	1	60	Staghorn sculpin	Leptocottus armatus	4
2	6	2	24	810617	1	60	Pacific herring	Clupea harengus pallasii	1
2	3	1	24	810617	2	35	Shiner perch	Cymatogaster aggregata	32
2	6	2	24	810617	1	60	Chinook salmon	Oncorhynchus tshawytscha	7
1	3	1	24	810618	1	60	Starry flounder	Platichthys stellatus	1
1	5	2	24	810618	1	0	Chum salmon	Oncorhynchus keta	1
1	2	1	24	810618	1	75	Staghorn sculpin	Leptocottus armatus	1
1	3	1	24	810618	1	60	Arrow goby	Clevelandia ios	13
1	4	2	24	810618	2	40	Threespine stickleback	Gasterosteus aculeatus	1
1	3	1	24	810618	1	60	Staghorn sculpin	Leptocottus armatus	6
1	4	1	24	810618	2	35	Shiner perch	Cymatogaster aggregata	2
1	4	1	24	810618	2	35	Staghorn sculpin	Leptocottus armatus	30
1	4	2	24	810618	2	40	Arrow goby	Clevelandia ios	9
1	4	2	24	810618	2	40	Staghorn sculpin	Leptocottus armatus	73
1	4	1	24	810618	2	35	Pacific herring	Clupea harengus pallasii	1
1	4	1	24	810618	2	35	Arrow goby	Clevelandia ios	6
1	4	2	24	810618	2	40	Starry flounder	Platichthys stellatus	2

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	5	2	24	810618	1	0	Staghorn sculpin	Leptocottus armatus	111
1	5	2	24	810618	1	0	Pacific herring	Clupea harengus pallasii	65
1	1	1	24	810618	1	110	Staghorn sculpin	Leptocottus armatus	13
1	5	1	24	810618	1	20	Starry flounder	Platichthys stellatus	5
1	5	2	24	810618	1	0	Chinook salmon	Oncorhynchus tshawytscha	19
1	5	1	24	810618	1	20	Threespine stickleback	Gasterosteus aculeatus	1
1	5	1	24	810618	1	20	Arrow goby	Clevelandia ios	2
1	5	1	24	810618	1	20	Staghorn sculpin	Leptocottus armatus	103
1	5	1	24	810618	1	20	Pacific herring	Clupea harengus pallasii	24
1	5	2	24	810618	1	0	Starry flounder	Platichthys stellatus	4
1	5	2	24	810618	1	0	Threespine stickleback	Gasterosteus aculeatus	5
1	5	2	24	810618	1	0	Arrow goby	Clevelandia ios	3
1	5	1	24	810618	1	20	Shiner perch	Cymatogaster aggregata	4
1	5	2	24	810618	1	0	Shiner perch	Cymatogaster aggregata	9
1	5	1	24	810618	1	20	Chinook salmon	Oncorhynchus tshawytscha	19
3	2	1	25	810629	2	195	Staghorn sculpin	Leptocottus armatus	24
3	3	1	25	810629	1	1	Chinook salmon	Oncorhynchus tshawytscha	3
3	3	1	25	810629	1	1	Crescent gunnel	Pholis laeta	29
3	3	1	25	810629	1	1	English sole	Parophrys vetulus	29
3	2	1	25	810629	2	195	Starry flounder	Platichthys stellatus	34
3	3	1	25	810629	1	1	Shiner perch	Cymatogaster aggregata	3
3	4	1	25	810629	1	25	Rock sole	Lepidopsetta bilineata	6
3	4	1	25	810629	1	25	Shiner perch	Cymatogaster aggregata	7
3	4	1	25	810629	1	25	Staghorn sculpin	Leptocottus armatus	8
3	4	1	25	810629	1	25	Starry flounder	Platichthys stellatus	19
3	2	1	25	810629	2	195	Tidepool sculpin	Oligocottus maculosus	9
3	4	1	25	810629	1	25	Pacific herring	Clupea harengus pallasii	1
3	3	1	25	810629	1	1	Threespine stickleback	Gasterosteus aculeatus	1
3	3	1	25	810629	1	1	Tidepool sculpin	Oligocottus maculosus	1
3	3	1	25	810629	1	1	Tubesnout	Aulorhynchus flavidus	171
3	3	1	25	810629	1	1	Whitespotted greenling	Hexagrammos stelleri	5
3	3	1	25	810629	1	1	Starry flounder	Platichthys stellatus	32
3	3	1	25	810629	1	1	Staghorn sculpin	Leptocottus armatus	7
3	4	1	25	810629	1	25	Buffalo sculpin	Enophrys bison	1
3	3	1	25	810629	1	1	Prickly sculpin	Cottus asper	2
3	4	1	25	810629	1	25	English sole	Parophrys vetulus	33
3	3	1	25	810629	1	1	Pacific tomcod	Microgadus proximus	3

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	4	1	25	810629	1	25	Pacific sanddab	Citharichthys sordidus	1
3	4	1	25	810629	1	25	Pacific sandlance	Ammodytes hexapterus	96
3	4	1	25	810629	1	25	Penpoint gunnel	Apodichthys flavidus	4
3	7	1	25	810629	2	75	Staghorn sculpin	Leptocottus armatus	27
3	3	1	25	810629	1	1	Silverspotted sculpin	Blepsias cirrhosus	1
3	3	1	25	810629	1	1	Surf smelt	Hypomesus pretiosus pretiosus	19
3	3	1	25	810629	1	1	Rock sole	Lepidopsetta bilineata	5
3	3	1	25	810629	1	1	Penpoint gunnel	Apodichthys flavidus	14
3	4	1	25	810629	1	25	Crescent gunnel	Pholis laeta	7
3	7	2	25	810629	2	85	Penpoint gunnel	Apodichthys flavidus	4
3	7	1	25	810629	2	75	Crescent gunnel	Pholis laeta	1
3	7	2	25	810629	2	85	Buffalo sculpin	Enophrys bison	2
3	7	2	25	810629	2	85	Crescent gunnel	Pholis laeta	13
3	7	2	25	810629	2	85	English sole	Parophrys vetulus	15
3	7	2	25	810629	2	85	Pacific herring	Clupea harengus pallasii	1
3	7	1	25	810629	2	75	Starry flounder	Platichthys stellatus	7
3	7	2	25	810629	2	85	Padded sculpin	Artemius fenestralis	1
3	1	1	25	810629	1	90	Chum salmon	Oncorhynchus keta	22
3	7	2	25	810629	2	85	Saddleback gunnel	Pholis ornata	1
3	7	2	25	810629	2	85	Shiner perch	Cymatogaster aggregata	4
3	7	2	25	810629	2	85	Staghorn sculpin	Leptocottus armatus	54
3	7	2	25	810629	2	85	Starry flounder	Platichthys stellatus	12
3	7	2	25	810629	2	85	Surf smelt	Hypomesus pretiosus pretiosus	70
3	7	2	25	810629	2	85	Threespine stickleback	Gasterosteus aculeatus	1
3	7	2	25	810629	2	85	Pacific sandlance	Ammodytes hexapterus	1
3	5	1	25	810629	2	35	Rock sole	Lepidopsetta bilineata	9
3	4	1	25	810629	1	25	Threespine stickleback	Gasterosteus aculeatus	1
3	4	1	25	810629	1	25	Tidepool sculpin	Oligocottus maculosus	2
3	4	1	25	810629	1	25	Tubesnout	Aulorhynchus flavidus	30
3	4	1	25	810629	1	25	Whitespotted greenling	Hexagrammos stelleri	1
3	5	1	25	810629	2	35	English sole	Parophrys vetulus	37
3	7	1	25	810629	2	75	Tidepool sculpin	Oligocottus maculosus	8
3	5	1	25	810629	2	35	Penpoint gunnel	Apodichthys flavidus	2
3	4	1	25	810629	1	25	Surf smelt	Hypomesus pretiosus pretiosus	1
3	5	1	25	810629	2	35	Sand sole	Psettichthys melanosticus	5
3	5	1	25	810629	2	35	Staghorn sculpin	Leptocottus armatus	21
3	5	1	25	810629	2	35	Tubesnout	Aulorhynchus flavidus	4

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	7	1	25	810629	2	75	Chinook salmon	Oncorhynchus tshawytscha	1
3	2	1	25	810629	2	195	Shiner perch	Cymatogaster aggregata	1
3	7	1	25	810629	2	75	English sole	Parophrys vetulus	31
3	5	1	25	810629	2	35	Pacific sandlance	Ammodytes hexapterus	1
3	1	1	25	810629	1	90	Crescent gunnel	Pholis laeta	26
3	1	1	25	810629	1	90	Starry flounder	Platichthys stellatus	34
3	1	1	25	810629	1	90	Staghorn sculpin	Leptocottus armatus	32
3	1	1	25	810629	1	90	Snake prickleback	Lumpenus sagitta	11
3	1	1	25	810629	1	90	Shiner perch	Cymatogaster aggregata	130
3	1	1	25	810629	1	90	Rosylip sculpin	Ascelichthys rhodorus	1
3	1	1	25	810629	1	90	Pacific tomcod	Microgadus proximus	7
3	1	1	25	810629	1	90	Surf smelt	Hypomesus pretiosus pretiosus	1
3	1	1	25	810629	1	90	Lobefin snailfish	Polypera greeni	1
3	1	1	25	810629	1	90	Penpoint gunnel	Apodichthys flavidus	14
3	1	1	25	810629	1	90	Chinook salmon	Oncorhynchus tshawytscha	67
3	1	1	25	810629	1	90	Buffalo sculpin	Enophrys bison	2
3	1	1	25	810629	1	90	Bay pipefish	Syngnathus griseolineatus	1
3	1	1	25	810629	1	90	Aleutian sculpin	Cottus aleuticus	1
3	2	1	25	810629	2	195	Pacific sandlance	Ammodytes hexapterus	1
3	1	1	25	810629	1	90	English sole	Parophrys vetulus	1
3	7	2	25	810629	2	85	Tidepool sculpin	Oligocottus maculosus	58
3	1	1	25	810629	1	90	Pacific herring	Clupea harengus pallasii	8
3	1	3	25	810629	2	230	Chinook salmon	Oncorhynchus tshawytscha	1
3	2	1	25	810629	2	195	Crescent gunnel	Pholis laeta	1
3	2	1	25	810629	2	195	Pacific herring	Clupea harengus pallasii	5
3	1	1	25	810629	1	90	Pacific sandlance	Ammodytes hexapterus	1
3	1	1	25	810629	1	90	Tadpole sculpin	Psychrolutes paradoxus	6
3	1	3	25	810629	2	230	Surf smelt	Hypomesus pretiosus pretiosus	14
3	1	3	25	810629	2	230	Starry flounder	Platichthys stellatus	6
3	1	3	25	810629	2	230	Tubesnout	Aulorhynchus flavidus	1
3	1	3	25	810629	2	230	Shiner perch	Cymatogaster aggregata	13
3	1	3	25	810629	2	230	Threespine stickleback	Gasterosteus aculeatus	3
3	1	2	25	810629	2	210	Starry flounder	Platichthys stellatus	16
3	1	2	25	810629	2	210	Staghorn sculpin	Leptocottus armatus	6
3	1	2	25	810629	2	210	Shiner perch	Cymatogaster aggregata	5
3	1	2	25	810629	2	210	Chinook salmon	Oncorhynchus tshawytscha	1

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
3	1	1	25	810629	1	90	Whitespotted greenling	Hexagrammos stelleri	1
3	1	1	25	810629	1	90	Tubesnout	Aulorhynchus flavidus	43
3	1	1	25	810629	1	90	Tidepool sculpin	Oligocottus maculosus	27
3	1	1	25	810629	1	90	Threespine stickleback	Gasterosteus aculeatus	32
3	1	3	25	810629	2	230	Staghorn sculpin	Leptocottus armatus	15
2	2	1	25	810630	1	10	English sole	Parophrys vetulus	7
2	2	1	25	810630	1	10	Pacific herring	Clupea harengus pallasii	12
2	2	1	25	810630	1	10	Brassy minnow	Hybognathus hankinsoni	1
2	4	1	25	810630	2	55	Unidentified flatfish	Unidentified flatfish	3
2	6	1	25	810630	1	45	Surf smelt	Hypomesus pretiosus pretiosus	1
2	6	1	25	810630	1	45	Starry flounder	Platichthys stellatus	2
2	6	1	25	810630	1	45	Staghorn sculpin	Leptocottus armatus	10
2	6	1	25	810630	1	45	Snake prickleback	Lumpenus sagitta	3
2	6	1	25	810630	1	45	Shiner perch	Cymatogaster aggregata	8
2	6	1	25	810630	1	45	Pacific herring	Clupea harengus pallasii	6
2	6	1	25	810630	1	45	English sole	Parophrys vetulus	9
2	6	1	25	810630	1	45	Chinook salmon	Oncorhynchus tshawytscha	4
2	2	1	25	810630	1	10	Shiner perch	Cymatogaster aggregata	596
2	4	1	25	810630	2	55	Pacific herring	Clupea harengus pallasii	7
2	6	1	25	810630	1	45	Crescent gunnel	Pholis laeta	1
2	3	1	25	810630	2	30	Shiner perch	Cymatogaster aggregata	1716
2	4	1	25	810630	2	55	Snake prickleback	Lumpenus sagitta	17
2	4	1	25	810630	2	55	Staghorn sculpin	Leptocottus armatus	15
2	2	1	25	810630	1	10	Snake prickleback	Lumpenus sagitta	18
2	4	1	25	810630	2	55	Shiner perch	Cymatogaster aggregata	294
2	4	1	25	810630	2	55	English sole	Parophrys vetulus	5
2	3	1	25	810630	2	30	Threespine stickleback	Gasterosteus aculeatus	12
2	3	1	25	810630	2	30	Starry flounder	Platichthys stellatus	18
2	4	1	25	810630	2	55	Starry flounder	Platichthys stellatus	23
2	3	1	25	810630	2	30	Snake prickleback	Lumpenus sagitta	5
2	3	1	25	810630	2	30	English sole	Parophrys vetulus	1
2	4	1	25	810630	2	55	Threespine stickleback	Gasterosteus aculeatus	14
2	2	1	25	810630	1	10	Threespine stickleback	Gasterosteus aculeatus	3
2	2	1	25	810630	1	10	Starry flounder	Platichthys stellatus	18
2	2	1	25	810630	1	10	Staghorn sculpin	Leptocottus armatus	5
2	3	1	25	810630	2	30	Staghorn sculpin	Leptocottus armatus	2
1	5	1	25	810702	1	0	Shiner perch	Cymatogaster aggregata	1024

Area	Site	Set	Period	Date (yymmdd)	Ebb(1) Flood(2)	Min from low	Common Name	Genus Species	Abundance
1	1	1	25	810702	1	15	Arrow goby	Clevelandia ios	8
1	1	1	25	810702	1	15	Shiner perch	Cymatogaster aggregata	1
1	1	1	25	810702	1	15	Staghorn sculpin	Leptocottus armatus	17
1	5	1	25	810702	1	0	Arrow goby	Clevelandia ios	1
1	5	1	25	810702	1	0	Chinook salmon	Oncorhynchus tshawytscha	6
1	5	1	25	810702	1	0	Pacific sanddab	Citharichthys sordidus	1
1	5	1	25	810702	1	0	Staghorn sculpin	Leptocottus armatus	120
1	2	1	25	810702	1	40	Chinook salmon	Oncorhynchus tshawytscha	5
1	2	1	25	810702	1	40	Pacific herring	Clupea harengus pallasii	315
1	2	1	25	810702	1	40	Pacific sanddab	Citharichthys sordidus	1
1	2	1	25	810702	1	40	Staghorn sculpin	Leptocottus armatus	14
1	2	1	25	810702	1	40	Starry flounder	Platichthys stellatus	19
1	5	1	25	810702	1	0	Starry flounder	Platichthys stellatus	99
1	5	1	25	810702	1	0	Threespine stickleback	Gasterosteus aculeatus	16
1	4	1	25	810702	2	5	Starry flounder	Platichthys stellatus	9
1	4	1	25	810702	2	5	Staghorn sculpin	Leptocottus armatus	11
1	4	1	25	810702	2	5	Arrow goby	Clevelandia ios	8
1	5	1	25	810702	1	0	Pacific herring	Clupea harengus pallasii	12

APPENDIX III: WEIGHT – LENGTH DATA AND CONDITION FACTORS

i. Aleutian sculpin, *Cottus aleuticus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	25	810629	31	0.7	

ii. Arrow goby, *Clevelandia ios*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	2	2	800418	28	0.1	0.55
1	1	2	2	800418	30	0.1	0.46
1	1	2	2	800418	37	0.1	0.28
1	1	2	2	800418	34	0.1	0.34
1	1	2	2	800418	31	0.1	0.43
1	1	2	2	800418	34	0.1	0.34
1	1	2	2	800418	32	0.1	0.40
1	1	3	2	800418	31	0.2	0.86
1	1	3	2	800418	31	0.2	0.86
1	1	3	2	800418	31	0.2	0.86
1	1	3	2	800418	34	0.2	0.69
1	1	1	3	800430	30	0.2	0.93
1	1	1	3	800430	36	0.2	0.60
1	1	1	3	800430	26	0.1	0.66
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	39	0.5	1.23
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	34	0.2	0.69
1	1	1	3	800430	29	0.2	1.01
1	1	1	3	800430	35	0.3	0.96
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	25	0.1	0.72
1	1	1	3	800430	35	0.3	0.96
1	1	1	3	800430	31	0.2	0.86
1	1	1	3	800430	34	0.2	0.69
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	32	0.2	0.79
1	1	1	3	800430	35	0.3	0.96
1	1	1	3	800430	31	0.2	0.86
1	1	1	3	800430	38	0.3	0.79
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	30	0.2	0.93
1	1	1	3	800430	31	0.2	0.86
1	1	1	3	800430	39	0.4	0.98

1	1	1	3	800430	38	0.4	1.05
1	1	1	3	800430	29	0.2	1.01
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	47	0.6	0.94
1	1	1	3	800430	31	0.2	0.86
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	34	0.2	0.69
1	1	1	3	800430	32	0.2	0.79
1	1	1	3	800430	35	0.3	0.96
1	1	1	3	800430	31	0.2	0.86
1	1	1	3	800430	28	0.1	0.55
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	30	0.3	1.39
1	1	1	3	800430	33	0.2	0.74
1	1	1	3	800430	36	0.3	0.90
1	1	1	3	800430	47	0.6	0.94
1	1	1	3	800430	34	0.2	0.69
1	1	1	3	800430	32	0.2	0.79
1	1	1	3	800430	49	0.4	0.57
1	1	2	3	800430	35	0.3	0.96
1	1	2	3	800430	37	0.4	1.12
1	1	2	3	800430	38	0.4	1.05
1	1	2	3	800430	36	0.4	1.19
1	1	2	3	800430	35	0.3	0.96
1	1	2	3	800430	35	0.4	1.28
1	1	2	3	800430	35	0.4	1.28
1	1	2	3	800430	36	0.3	0.90
1	1	2	3	800430	44	0.6	1.10
1	1	2	3	800430	34	0.3	1.03
1	1	2	3	800430	31	0.2	0.86
1	1	2	3	800430	34	0.3	1.03
1	1	2	3	800430	32	0.2	0.79
1	1	2	3	800430	38	0.4	1.05
1	1	2	3	800430	35	0.4	1.28
1	1	2	3	800430	44	0.6	1.10
1	1	2	3	800430	36	0.3	0.90
1	1	2	3	800430	32	0.3	1.19
1	1	2	3	800430	31	0.3	1.29
1	1	2	3	800430	32	0.3	1.19
1	1	2	3	800430	31	0.2	0.86
1	1	2	3	800430	37	0.4	1.12
1	1	2	3	800430	27	0.2	1.20
1	1	2	3	800430	32	0.2	0.79
1	1	2	3	800430	35	0.3	0.96

1	1	2	3	800430	35	0.3	0.96
1	1	2	3	800430	41	0.4	0.87
1	1	2	3	800430	33	0.2	0.74
1	1	2	3	800430	40	0.5	1.16
1	1	2	3	800430	35	0.3	0.96
1	1	2	3	800430	32	0.2	0.79
1	1	2	3	800430	35	0.3	0.96
1	1	2	3	800430	45	0.6	1.04
1	1	2	3	800430	36	0.3	0.90
1	1	2	3	800430	30	0.2	0.93
1	1	2	3	800430	41	0.4	0.87
1	1	2	3	800430	33	0.3	1.11
1	1	2	3	800430	38	0.4	1.05
1	1	2	3	800430	32	0.3	1.19
1	1	3	3	800430	30	0.2	0.93
1	1	3	3	800430	40	0.6	1.39
1	1	3	3	800430	32	0.3	1.19
1	1	3	3	800430	46	0.8	1.32
1	1	3	3	800430	37	0.4	1.12
1	1	3	3	800430	44	0.7	1.29
1	1	3	3	800430	36	0.4	1.19
1	1	3	3	800430	37	0.4	1.12
1	1	3	3	800430	45	0.7	1.22
1	1	3	3	800430	42	0.6	1.23
1	1	3	3	800430	34	0.3	1.03
1	1	3	3	800430	38	0.4	1.05
1	1	3	3	800430	30	0.2	0.93
1	1	3	3	800430	26	0.2	1.31
1	1	3	3	800430	42	0.6	1.23
1	1	3	3	800430	39	0.5	1.23
1	1	3	3	800430	45	0.6	1.04
1	1	3	3	800430	46	0.8	1.32
1	1	3	3	800430	35	0.3	0.96
1	1	3	3	800430	26	0.2	1.31
1	1	3	3	800430	32	0.3	1.19
1	1	1	4	800515	38	0.4	1.05
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	39	0.4	0.98
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	34	0.3	1.03

1	1	1	4	800515	27	0.2	1.20
1	1	1	4	800515	33	0.3	1.11
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	38	0.3	0.79
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	39	0.3	0.74
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	26	0.2	1.31
1	1	1	4	800515	40	0.4	0.93
1	1	1	4	800515	38	0.4	1.05
1	1	1	4	800515	31	0.4	1.72
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	36	0.4	1.19
1	1	1	4	800515	36	0.4	1.19
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	33	0.2	0.74
1	1	1	4	800515	33	0.3	1.11
1	1	1	4	800515	33	0.2	0.74
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	37	0.4	1.12
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	38	0.4	1.05
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	28	0.2	1.10
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	44	0.45	0.83
1	1	1	4	800515	32	0.3	1.19
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	37	0.4	1.12
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	29	0.2	1.01

1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	38	0.3	0.79
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	29	0.2	1.01
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	40	0.3	0.69
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	32	0.4	1.59
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	38	0.4	1.05
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	33	0.3	1.11
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	39	0.3	0.74
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	26	0.2	1.31
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	37	0.3	0.84
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	41	0.55	1.20
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	32	0.3	1.19
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	34	0.2	0.69
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	33	0.3	1.11

1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	27	0.2	1.20
1	1	1	4	800515	37	0.3	0.84
1	1	1	4	800515	38	0.3	0.79
1	1	1	4	800515	39	0.4	0.98
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	29	0.2	1.01
1	1	1	4	800515	27	0.2	1.20
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	37	0.3	0.84
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	33	0.3	1.11
1	1	1	4	800515	33	0.27	1.00
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	40	0.3	0.69
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	34	0.2	0.69
1	1	1	4	800515	42	0.57	1.17
1	1	1	4	800515	35	0.3	0.96
1	1	1	4	800515	35	0.4	1.28
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	31	0.3	1.29
1	1	1	4	800515	37	0.3	0.84
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	32	0.2	0.79
1	1	1	4	800515	38	0.4	1.05
1	1	1	4	800515	34	0.4	1.37
1	1	1	4	800515	32	0.3	1.19
1	1	1	4	800515	32	0.2	0.79

1	1	1	4	800515	29	0.2	1.01
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	36	0.3	0.90
1	1	1	4	800515	33	0.4	1.47
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	37	0.4	1.12
1	1	1	4	800515	30	0.2	0.93
1	1	1	4	800515	34	0.3	1.03
1	1	1	4	800515	31	0.2	0.86
1	1	1	4	800515	32	0.2	0.79
1	1	2	4	800515	33	0.3	1.11
1	1	2	4	800515	40	0.5	1.16
1	1	2	4	800515	32	0.2	0.79
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	38	0.4	1.05
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	35	0.3	0.96
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	35	0.3	0.96
1	1	2	4	800515	32	0.2	0.79
1	1	2	4	800515	33	0.3	1.11
1	1	2	4	800515	33	0.3	1.11
1	1	2	4	800515	45	0.8	1.39
1	1	2	4	800515	39	0.4	0.98
1	1	2	4	800515	33	0.3	1.11
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	35	0.4	1.28
1	1	2	4	800515	39	0.4	0.98
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	35	0.4	1.28
1	1	2	4	800515	40	0.5	1.16
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	37	0.4	1.12
1	1	2	4	800515	31	0.2	0.86
1	1	2	4	800515	40	0.5	1.16
1	1	2	4	800515	35	0.3	0.96
1	1	2	4	800515	31	0.2	0.86
1	1	2	4	800515	34	0.3	1.03
1	1	2	4	800515	32	0.2	0.79
1	1	2	4	800515	36	0.4	1.19

1	1	3	4	800515	37	0.4	1.12
1	1	3	4	800515	30	0.2	0.93
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	30	0.3	1.39
1	1	3	4	800515	38	0.2	0.52
1	1	3	4	800515	37	0.3	0.84
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	28	0.2	1.10
1	1	3	4	800515	27	0.2	1.20
1	1	3	4	800515	28	0.2	1.10
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	41	0.4	0.87
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	33	0.2	0.74
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	37	0.3	0.84
1	1	3	4	800515	27	0.2	1.20
1	1	3	4	800515	36	0.3	0.90
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	39	0.1	0.25
1	1	3	4	800515	28	0.2	1.10
1	1	3	4	800515	38	0.1	0.26
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	36	0.3	0.90
1	1	3	4	800515	37	0.4	1.12
1	1	3	4	800515	37	0.4	1.12
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	35	0.1	0.32
1	1	3	4	800515	41	0.1	0.22
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	37	0.4	1.12
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	35	0.2	0.64
1	1	3	4	800515	30	0.2	0.93
1	1	3	4	800515	38	0.4	1.05

1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	27	0.2	1.20
1	1	3	4	800515	35	0.4	1.28
1	1	3	4	800515	36	0.3	0.90
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	41	0.4	0.87
1	1	3	4	800515	32	0.3	1.19
1	1	3	4	800515	29	0.2	1.01
1	1	3	4	800515	34	0.2	0.69
1	1	3	4	800515	38	0.3	0.79
1	1	3	4	800515	28	0.2	1.10
1	1	3	4	800515	35	0.2	0.64
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	38	0.2	0.52
1	1	3	4	800515	41	0.2	0.44
1	1	3	4	800515	32	0.2	0.79
1	1	3	4	800515	38	0.3	0.79
1	1	3	4	800515	28	0.2	1.10
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	36	0.4	1.19
1	1	3	4	800515	40	0.2	0.46
1	1	3	4	800515	40	0.2	0.46
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	27	0.2	1.20
1	1	3	4	800515	36	0.3	0.90
1	1	3	4	800515	29	0.2	1.01
1	1	3	4	800515	37	0.3	0.84
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	33	0.3	1.11
1	1	3	4	800515	34	0.2	0.69
1	1	3	4	800515	40	0.2	0.46
1	1	3	4	800515	35	0.3	0.96
1	1	3	4	800515	33	0.2	0.74
1	1	3	4	800515	37	0.3	0.84
1	1	3	4	800515	29	0.2	1.01
1	1	3	4	800515	36	0.4	1.19
1	1	3	4	800515	34	0.3	1.03
1	1	3	4	800515	31	0.2	0.86
1	1	3	4	800515	32	0.2	0.79
1	1	1	5	800528	40	0.4	0.93
1	1	1	5	800528	38	0.4	1.05
1	1	1	5	800528	36	0.3	0.90

1	1	1	5	800528	38	0.4	1.05
1	1	1	5	800528	30	0.2	0.93
1	1	1	5	800528	45	0.6	1.04
1	1	1	5	800528	35	0.3	0.96
1	1	1	5	800528	37	0.3	0.84
1	1	1	5	800528	44	0.6	1.10
1	1	1	5	800528	35	0.3	0.96
1	1	1	5	800528	35	0.3	0.96
1	1	1	5	800528	44	0.6	1.10
1	1	1	5	800528	38	0.4	1.05
1	1	1	6	800611	50	0.8	1.08
1	1	1	6	800611	39	0.5	1.23
1	1	1	6	800611	32	0.4	1.59
1	1	1	6	800611	39	0.5	1.23
1	1	1	7	800626	36	0.2	0.60
1	1	1	8	800709	36	0.4	1.19
1	1	1	8	800709	43	0.6	1.17
1	1	1	8	800709	36	0.5	1.49
1	1	1	8	800709	43	0.3	0.58
1	1	1	8	800709	34	0.4	1.37
1	1	1	8	800709	36	0.4	1.19
1	1	1	8	800709	38	0.4	1.05
1	1	1	8	800709	40	0.5	1.16
1	1	1	8	800709	38	0.5	1.31
1	1	1	9	800730	28	0.13	0.71
1	1	1	9	800730	31	0.2	0.86
1	1	1	9	800730	28	0.13	0.71
1	1	1	9	800730	28	0.13	0.71
1	1	1	9	800730	27	0.2	1.20
1	1	1	9	800730	36	0.2	0.60
1	1	1	9	800730	33	0.2	0.74
1	1	1	9	800730	31	0.2	0.86
1	1	1	9	800730	35	0.3	0.96
1	1	1	9	800730	36	0.2	0.60
1	1	1	10	800811	35	0.2	0.64
1	1	1	10	800811	36	0.2	0.60
1	1	1	11	800904	29	0.2	1.01
1	1	1	11	800904	32	0.3	1.19
1	1	1	11	800904	28	0.1	0.55
1	1	1	11	800904	32	0.2	0.79
1	1	1	11	800904	34	0.3	1.03
1	1	1	11	800904	40	0.4	0.93
1	1	1	11	800904	31	0.2	0.86
1	1	1	11	800904	42	0.5	1.03

1	1	1	11	800904	30	0.2	0.93
1	1	1	16	810120	30	0.16	0.74
1	1	2	16	810120	31	0.18	0.77
1	1	3	18	810303	38	0.4	1.05
1	1	1	19	810325	30	0.2	0.93
1	1	1	21	810507	33	0.3	1.11
1	1	1	22	810519	35	0.4	1.28
1	1	1	22	810519	30	0.2	0.93
1	1	1	22	810519	30	0.2	0.93
1	1	1	22	810519	31	0.2	0.86
1	1	1	22	810519	27	0.2	1.20
1	1	1	22	810519	30	0.2	0.93
1	1	1	22	810519	36	0.2	0.60
1	1	1	22	810519	34	0.3	1.03
1	1	1	22	810519	33	0.2	0.74
1	1	1	22	810519	27	0.2	1.20
1	1	1	22	810519	39	0.5	1.23
1	1	1	22	810519	38	0.4	1.05
1	1	1	22	810519	30	0.2	0.93
1	1	1	22	810519	31	0.2	0.86
1	1	1	22	810519	30	0.2	0.93
1	1	1	22	810519	34	0.2	0.69
1	1	1	22	810519	32	0.3	1.19
1	1	1	22	810519	30	0.3	1.39
1	1	1	22	810519	35	0.4	1.28
1	1	1	22	810519	37	0.4	1.12
1	1	1	22	810519	36	0.4	1.19
1	1	1	22	810519	33	0.3	1.11
1	1	1	23	810603	30	0.3	1.39
1	1	1	23	810603	31	0.3	1.29
1	1	1	23	810603	34	0.4	1.37
1	1	1	23	810603	39	0.4	0.98
1	1	1	23	810603	35	0.4	1.28
1	1	1	23	810603	34	0.3	1.03
1	1	1	23	810603	32	0.3	1.19
1	1	1	25	810702	40	0.5	1.16
1	1	1	25	810702	31	0.3	1.29
1	2	1	9	800730	37	0.6	1.68
1	2	1	9	800730	31	0.5	2.14
1	2	1	9	800730	36	0.5	1.49
1	2	1	9	800730	38	0.6	1.57
1	2	1	9	800730	40	0.7	1.62
1	2	1	9	800730	35	0.5	1.60
1	2	1	10	800811	41	0.3	0.65

1	2	1	10	800811	37	0.5	1.40
1	2	1	10	800811	35	0.3	0.96
1	2	1	10	800811	39	0.5	1.23
1	2	1	10	800811	34	0.4	1.37
1	2	1	10	800811	38	0.3	0.79
1	2	1	10	800811	40	0.3	0.69
1	2	1	10	800811	35	0.3	0.96
1	2	1	10	800811	39	0.5	1.23
1	2	1	21	810507	37	0.4	1.12
1	2	1	22	810519	35	0.4	1.28
1	2	1	22	810519	33	0.3	1.11
1	3	1	7	800626	39	0.5	1.23
1	3	1	7	800626	35	0.4	1.28
1	3	1	7	800626	38	0.5	1.31
1	3	1	7	800626	39	0.5	1.23
1	3	1	7	800626	48	0.8	1.19
1	3	1	7	800626	36	0.4	1.19
1	3	1	7	800626	37	0.4	1.12
1	3	1	7	800626	37	0.4	1.12
1	3	1	7	800626	35	0.4	1.28
1	3	1	7	800626	38	0.5	1.31
1	3	1	7	800626	40	0.6	1.39
1	3	1	7	800626	38	0.5	1.31
1	3	1	7	800626	38	0.5	1.31
1	3	1	7	800626	37	0.4	1.12
1	3	1	7	800626	46	0.7	1.16
1	3	1	7	800626	40	0.6	1.39
1	3	1	7	800626	42	0.6	1.23
1	3	1	7	800626	39	0.5	1.23
1	3	1	7	800626	40	0.6	1.39
1	3	1	7	800626	35	0.4	1.28
1	3	1	7	800626	36	0.5	1.49
1	3	1	9	800730	38	0.4	1.05
1	3	1	9	800730	40	0.4	0.93
1	3	1	9	800730	40	0.5	1.16
1	3	1	10	800811	40	0.4	0.93
1	3	1	10	800811	36	0.3	0.90
1	3	1	10	800811	35	0.3	0.96
1	3	1	10	800811	37	0.3	0.84
1	3	1	10	800811	42	0.5	1.03
1	3	1	10	800811	35	0.3	0.96
1	3	1	10	800811	36	0.3	0.90
1	3	1	10	800811	40	0.2	0.46
1	3	1	10	800811	38	0.6	1.57

1	3	1	10	800811	38	0.4	1.05
1	3	1	11	800904	40	0.5	1.16
1	3	1	11	800904	45	0.6	1.04
1	3	1	11	800904	39	0.5	1.23
1	3	1	11	800904	30	0.3	1.39
1	3	1	11	800904	31	0.3	1.29
1	3	1	11	800904	25	0.2	1.44
1	3	1	11	800904	30	0.3	1.39
1	3	1	11	800904	31	0.3	1.29
1	3	1	11	800904	37	0.4	1.12
1	3	1	22	810519	32	0.3	1.19
1	3	1	22	810519	33	0.3	1.11
1	3	1	22	810519	31	0.3	1.29
1	3	1	22	810519	36	0.5	1.49
1	3	1	22	810519	33	0.3	1.11
1	3	1	22	810519	37	0.5	1.40
1	3	1	22	810519	35	0.4	1.28
1	3	1	22	810519	31	0.3	1.29
1	3	1	22	810519	34	0.3	1.03
1	3	1	22	810519	34	0.3	1.03
1	3	1	24	810618	37	0.4	1.12
1	3	1	24	810618	39	0.5	1.23
1	3	1	24	810618	42	0.6	1.23
1	3	1	24	810618	37	0.4	1.12
1	3	1	24	810618	35	0.3	0.96
1	3	1	24	810618	42	0.6	1.23
1	3	1	24	810618	42	0.6	1.23
1	3	1	24	810618	38	0.5	1.31
1	3	1	24	810618	38	0.5	1.31
1	3	1	24	810618	31	0.3	1.29
1	3	1	24	810618	35	0.3	0.96
1	3	1	24	810618	41	0.5	1.09
1	4	1	5	800528	35	0.3	0.96
1	4	1	5	800528	38	0.3	0.79
1	4	1	5	800528	33	0.3	1.11
1	4	1	5	800528	43	0.5	0.97
1	4	1	5	800528	36	0.2	0.60
1	4	1	5	800528	35	0.2	0.64
1	4	1	5	800528	34	0.3	1.03
1	4	1	5	800528	40	0.3	0.69
1	4	1	5	800528	32	0.2	0.79
1	4	1	5	800528	37	0.2	0.56
1	4	1	5	800528	31	0.2	0.86
1	4	1	5	800528	35	0.3	0.96

1	4	1	5	800528	39	0.3	0.74
1	4	1	5	800528	37	0.3	0.84
1	4	1	5	800528	36	0.3	0.90
1	4	1	5	800528	43	0.5	0.97
1	4	1	5	800528	41	0.4	0.87
1	4	1	5	800528	33	0.2	0.74
1	4	1	5	800528	46	0.5	0.83
1	4	1	5	800528	41	0.4	0.87
1	4	1	7	800626	44	0.7	1.29
1	4	1	7	800626	40	0.4	0.93
1	4	1	7	800626	33	0.1	0.37
1	4	1	7	800626	40	0.4	0.93
1	4	1	7	800626	36	0.3	0.90
1	4	1	8	800709	46	0.7	1.16
1	4	1	9	800730	37	0.4	1.12
1	4	1	9	800730	28	0.1	0.55
1	4	1	9	800730	37	0.2	0.56
1	4	1	9	800730	43	0.3	0.58
1	4	1	11	800904	35	0.5	1.60
1	4	1	22	810519	39	0.5	1.23
1	4	1	22	810519	36	0.4	1.19
1	4	1	22	810519	38	0.3	0.79
1	4	1	22	810519	39	0.5	1.23
1	4	1	22	810519	31	0.3	1.29
1	4	1	22	810519	34	0.3	1.03
1	4	1	22	810519	47	0.7	1.10
1	4	1	22	810519	41	0.5	1.09
1	4	1	22	810519	34	0.3	1.03
1	4	1	22	810519	29	0.2	1.01
1	4	1	22	810519	37	0.4	1.12
1	4	1	22	810519	40	0.5	1.16
1	4	1	22	810519	35	0.4	1.28
1	4	1	22	810519	35	0.3	0.96
1	4	1	22	810519	37	0.5	1.40
1	4	1	22	810519	36	0.4	1.19
1	4	1	22	810519	35	0.3	0.96
1	4	1	22	810519	31	0.3	1.29
1	4	1	22	810519	32	0.3	1.19
1	4	1	22	810519	34	0.4	1.37
1	4	1	23	810603	32	0.5	1.99
1	4	1	23	810603	36	0.4	1.19
1	4	1	23	810603	33	0.4	1.47
1	4	1	23	810603	36	0.4	1.19
1	4	1	23	810603	31	0.4	1.72

1	4	1	24	810618	41	0.5	1.09
1	4	1	24	810618	44	0.6	1.10
1	4	1	24	810618	31	0.2	0.86
1	4	1	24	810618	39	0.5	1.23
1	4	1	24	810618	31	0.2	0.86
1	4	2	24	810618	40	0.6	1.39
1	4	2	24	810618	33	0.3	1.11
1	4	2	24	810618	38	0.5	1.31
1	4	2	24	810618	35	0.4	1.28
1	4	2	24	810618	36	0.5	1.49
1	4	2	24	810618	37	0.4	1.12
1	4	2	24	810618	40	0.5	1.16
1	4	2	24	810618	37	0.4	1.12
1	4	2	24	810618	30	0.3	1.39
1	4	1	25	810702	36	0.5	1.49
1	4	1	25	810702	45	0.7	1.22
1	4	1	25	810702	36	0.5	1.49
1	4	1	25	810702	36	0.6	1.79
1	4	1	25	810702	35	0.5	1.60
1	5	1	5	800528	38	0.5	1.31
1	5	1	5	800528	44	0.6	1.10
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	33	0.4	1.47
1	5	1	5	800528	36	0.4	1.19
1	5	1	5	800528	36	0.4	1.19
1	5	1	5	800528	35	0.4	1.28
1	5	1	5	800528	35	0.4	1.28
1	5	1	5	800528	33	0.4	1.47
1	5	1	5	800528	38	0.5	1.31
1	5	1	5	800528	35	0.4	1.28
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	36	0.5	1.49
1	5	1	5	800528	33	0.4	1.47
1	5	1	5	800528	37	0.5	1.40
1	5	1	5	800528	34	0.4	1.37
1	5	1	5	800528	36	0.4	1.19
1	5	1	5	800528	40	0.6	1.39
1	5	1	5	800528	35	0.5	1.60
1	5	1	7	800626	38	0.3	0.79
1	5	1	7	800626	40	0.4	0.93
1	5	1	7	800626	33	0.2	0.74

1	5	1	7	800626	35	0.2	0.64
1	5	1	7	800626	42	0.5	1.03
1	5	1	7	800626	36	0.2	0.60
1	5	1	7	800626	37	0.4	1.12
1	5	1	7	800626	37	0.4	1.12
1	5	1	9	800730	39	0.4	0.98
1	5	1	9	800730	39	0.4	0.98
1	5	1	10	800811	36	0.2	0.60
1	5	1	10	800811	45	0.5	0.87
1	5	1	10	800811	40	0.4	0.93
1	5	1	10	800811	38	0.3	0.79
1	5	1	10	800811	39	0.5	1.23
1	5	1	10	800811	25	0.1	0.72
1	5	1	10	800811	44	0.7	1.29
1	5	1	10	800811	42	0.5	1.03
1	5	1	10	800811	38	0.6	1.57
1	5	1	10	800811	46	0.6	0.99
1	5	1	11	800904	34	0.2	0.69
1	5	1	11	800904	45	0.6	1.04
1	5	1	22	810519	36	0.4	1.19
1	5	1	22	810519	35	0.3	0.96
1	5	1	22	810519	28	0.2	1.10
1	5	1	22	810519	63	0.7	0.54
1	5	1	22	810519	55	0.5	0.54
1	5	1	22	810519	37	0.4	1.12
1	5	1	22	810519	30	0.3	1.39
1	5	1	24	810618	37	0.4	1.12
1	5	1	24	810618	36	0.5	1.49
1	5	2	24	810618	35	0.5	1.60
1	5	2	24	810618	42	0.6	1.23
1	5	2	24	810618	37	0.4	1.12
1	5	1	25	810702	34	0.3	1.03
1	6	1	5	800528	35	0.2	0.64
1	6	1	5	800528	34	0.3	1.03
1	6	1	5	800528	33	0.3	1.11
1	6	1	5	800528	39	0.73	1.80
1	6	1	5	800528	33	0.3	1.11
1	6	1	5	800528	35	0.2	0.64
1	6	1	5	800528	34	0.3	1.03
1	6	1	5	800528	34	0.3	1.03
1	6	1	5	800528	35	0.2	0.64
1	6	1	7	800626	40	0.4	0.93
1	6	1	7	800626	39	0.4	0.98
1	6	1	7	800626	40	0.4	0.93

1	6	1	7	800626	39	0.4	0.98
1	7	1	5	800528	33	0.2	0.74
1	7	1	5	800528	45	0.6	1.04
1	7	1	5	800528	36	0.3	0.90
1	7	1	5	800528	32	0.2	0.79
1	7	1	5	800528	38	0.4	1.05
1	7	1	5	800528	37	0.3	0.84
1	7	1	5	800528	37	0.3	0.84
1	7	1	5	800528	36	0.3	0.90
1	7	1	5	800528	38	0.4	1.05
1	7	1	9	800730	37	0.4	1.12
1	7	1	9	800730	38	0.4	1.05
1	7	1	9	800730	45	0.6	1.04
1	7	1	9	800730	36	0.4	1.19
1	7	1	9	800730	40	0.5	1.16
1	7	1	9	800730	41	0.5	1.09
1	7	1	11	800904	39	0.7	1.72
1	7	1	11	800904	28	0.4	2.19
2	1	1	23	810602	35	0.3	0.96
2	1	1	23	810602	38	0.4	1.05
2	2	1	7	800627	38	0.5	1.31
2	2	1	7	800627	35	0.5	1.60
2	2	1	7	800627	35	0.5	1.60
2	2	1	7	800627	37	0.6	1.68
2	2	1	10	800809	42	0.2	0.41
2	2	1	23	810602	35	0.3	0.96
2	2	1	23	810602	36	0.4	1.19
2	2	1	23	810602	36	0.4	1.19
2	2	1	23	810602	33	0.3	1.11
2	4	1	7	800627	36	0.5	1.49
2	4	1	10	800809	40	0.3	0.69
2	4	1	23	810602	32	0.3	1.19
2	4	1	23	810602	33	0.4	1.47
2	5	1	16	810119	31	0.2	0.86
2	6	2	7	800627	37	0.5	1.40
2	6	2	7	800627	36	0.5	1.49
2	6	4	7	800627	35	0.4	1.28
2	6	1	12	800923	28	0.2	1.10
2	6	1	12	800923	31	0.3	1.29
2	6	1	12	800923	29	0.3	1.51
2	6	2	12	800923	25	0.1	0.72
2	6	2	12	800923	32	0.3	1.19
2	6	2	12	800923	33	0.3	1.11
2	6	2	12	800923	29	0.2	1.01

2	6	2	12	800923	31	0.2	0.86
2	6	2	12	800923	27	0.2	1.20
2	6	1	22	810521	39	0.5	1.23
2	6	1	22	810521	31	0.2	0.86
2	6	1	22	810521	37	0.3	0.84
2	6	2	22	810521	30	0.2	0.93
2	6	2	22	810521	31	0.2	0.86
2	6	3	22	810521	30	0.2	0.93
2	6	3	24	810617	35	0.6	1.92
1	1	3	1	800321	32		
1	4	1	9	800730	25		

iii. Bay pipefish, *Syngnathus griseolineatus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
2	2	1	7	800627	206	4.6	1.34
2	2	1	10	800809	120	0.4	0.69
2	6	1	10	800809	91	0.1	0.43
2	6	1	10	800809	83	0.1	0.58
3	1	1	1	800320	95	0.5	1.85
3	1	2	1	800320	87	0.17	0.84
3	1	3	2	800411	117	0.55	1.03
3	1	1	2	800417	163	1.35	0.85
3	1	2	2	800417	95	0.35	1.29
3	1	2	2	800417	172	1.7	0.90
3	1	3	2	800417	103	0.5	1.42
3	1	1	8	800710	195	3.7	1.29
3	1	1	10	800810	101	1.4	4.23
3	1	1	12	800924	125	0.3	0.45
3	1	1	12	800924	125	0.2	0.30
3	1	1	13	801027	134	0.8	0.96
3	1	1	13	801027	130	0.8	1.06
3	1	1	13	801027	109	0.6	1.41
3	1	1	13	801027	101	0.4	1.21
3	1	1	13	801027	110	0.5	1.14
3	1	1	13	801027	113	0.7	1.46
3	1	1	13	801027	83	0.3	1.73
3	1	1	13	801027	133	0.8	0.98
3	1	1	13	801027	117	0.6	1.12
3	1	1	18	810305	127	0.7	1.00
3	1	2	20	810409	145	1.2	1.11
3	1	1	25	810629	174	2.4	1.22
3	2	1	13	801028	120	0.6	1.03
3	2	1	13	801028	130	0.7	0.92
3	2	1	13	801028	93	0.3	1.19

3	2	1	13	801028	119	0.6	1.06
3	2	1	13	801028	152	1.3	1.03
3	2	1	13	801028	87	0.2	0.99
3	2	1	13	801028	136	1	1.14
3	2	1	13	801028	115	0.5	0.99
3	2	1	13	801028	126	0.7	1.02
3	2	1	13	801028	136	0.8	0.91
3	2	1	13	801028	153	1.2	0.93
3	2	1	13	801028	138	1	1.09
3	2	1	13	801028	136	0.9	1.03
3	2	1	13	801028	246	5.4	0.88
3	2	1	13	801028	127	0.7	1.00
3	2	1	16	810120	90	0.3	1.32
3	2	1	16	810120	105	0.3	0.80
3	2	1	16	810120	94	0.2	0.77
3	2	1	16	810120	99	0.2	0.65
3	2	2	18	810305	136	0.9	1.03
3	3	1	6	800613	210	3.6	0.99
3	4	1	13	801028	97	0.4	1.38
3	4	1	13	801028	125	0.6	0.90
3	4	1	13	801028	77	0.2	1.47
3	4	1	13	801028	102	0.5	1.46
3	4	1	13	801028	148	1	0.86
3	4	1	13	801028	105	0.4	1.06
3	4	1	13	801028	94	0.6	2.30
3	4	1	13	801028	130	0.8	1.06
3	4	1	13	801028	141	1	1.01
3	4	1	13	801028	145	1	0.92
3	4	1	23	810601	183	2.9	1.25
3	4	1	23	810601	182	3.3	1.45
3	5	1	6	800613	118	0.6	1.09
3	5	1	10	800810	121	0.7	1.17
3	6	1	13	801028	129	1.2	1.63
3	6	1	13	801028	131	0.9	1.16
3	6	1	13	801028	131	0.8	1.03
3	6	1	13	801028	109	0.2	0.47
3	6	1	13	801028	154	1.5	1.14
3	6	1	13	801028	100	0.2	0.62
3	6	1	13	801028	165	1.6	0.97
3	6	1	13	801028	132	0.4	0.50
3	6	1	13	801028	140	0.4	0.41
3	6	1	13	801028	159	1.1	0.75
3	6	1	13	801028	78	0.1	0.71
3	6	1	13	801028	105	0.2	0.53

3	6	1	13	801028	131	0.5	0.64
3	6	1	13	801028	108	0.5	1.21
3	6	1	13	801028	145	1.2	1.11
3	6	1	13	801028	140	1.4	1.45
3	6	1	13	801028	151	1.4	1.13
3	6	1	13	801028	138	1.3	1.41
3	6	1	13	801028	136	0.9	1.03
3	6	1	13	801028	113	0.4	0.84
3	6	1	13	801028	119	0.7	1.24
3	6	1	13	801028	120	0.5	0.86
3	6	1	13	801028	125	0.7	1.05
3	6	1	13	801028	119	0.7	1.24
3	6	1	13	801028	135	0.6	0.70
3	6	1	13	801028	123	0.2	0.32
3	6	1	13	801028	139	1.1	1.17
3	6	1	13	801028	141	0.8	0.81
3	6	1	13	801028	142	0.7	0.69
3	6	1	13	801028	118	0.7	1.27
3	6	1	13	801028	154	1.3	0.99
3	6	1	13	801028	88	0.5	2.38
3	6	1	13	801028	105	0.9	2.40
3	6	1	13	801028	130	0.8	1.06
3	6	1	13	801028	119	0.4	0.71
3	6	1	13	801028	123	1.2	1.90
3	6	1	13	801028	128	0.3	0.42
3	6	1	13	801028	103	0.5	1.42
3	6	1	13	801028	123	0.3	0.48
3	6	1	13	801028	114	0.5	1.02
3	6	1	13	801028	111	1.1	2.44
3	6	1	13	801028	169	1.7	0.95
3	6	1	13	801028	139	1.4	1.49
3	6	1	13	801028	235	6.1	1.16
3	6	1	13	801028	122	0.3	0.49
3	6	1	13	801028	150	1.2	0.99
3	6	1	13	801028	139	0.6	0.64
3	6	1	13	801028	128	0.8	1.11
3	6	1	13	801028	100	0.2	0.62
3	6	1	13	801028	138	1.4	1.52
3	6	1	13	801028	109	0.1	0.24
3	6	1	13	801028	107	0.3	0.75
3	6	1	13	801028	130	0.7	0.92
3	6	1	13	801028	119	1	1.77
3	6	1	23	810601	165	2.7	1.63
3	6	1	23	810601	164	2.6	1.60

3	6	1	23	810601	180	3	1.36
3	6	1	23	810601	151	1.9	1.54
3	7	1	12	800924	115	0.6	1.19
3	7	1	13	801028	136	0.8	0.91
3	7	1	13	801028	115	0.5	0.99
3	7	1	13	801028	109	0.4	0.94
3	7	1	15	801209	246	6.4	1.04
3	7	1	15	801209	237	5.5	1.01
1	2	1	9	800730	51		
2	2	1	10	800809	90		
2	2	1	10	800809	86		
2	2	1	10	800809	86		
3	1	1	10	800810	78		
3	1	1	10	800810	78		
3	1	1	11	800905	99		
3	1	1	11	800905	89		
3	1	1	12	800924	77		
3	2	1	12	800924	85		
3	2	1	12	800924	110		
3	2	1	12	800924	111		
3	5	1	13	801028	141		
3	5	1	13	801028	109		
3	5	1	13	801028	119		
3	5	1	13	801028	118		
3	5	1	13	801028	92		
3	5	1	13	801028	121		
3	5	1	13	801028	105		
3	5	1	13	801028	129		
3	5	1	13	801028	138		
3	5	1	13	801028	115		
3	5	1	13	801028	166		
3	5	1	13	801028	135		
3	5	1	13	801028	121		
3	5	1	13	801028	134		
3	5	1	13	801028	127		
3	5	1	13	801028	116		
3	5	1	13	801028	104		
3	5	1	13	801028	117		
3	5	1	13	801028	132		
3	5	1	13	801028	177		
3	5	1	13	801028	107		
3	5	1	13	801028	129		
3	5	1	13	801028	112		
3	5	1	13	801028	126		

3	5	1	13	801028	109
3	5	1	13	801028	146
3	5	1	13	801028	109
3	5	1	13	801028	110
3	5	1	13	801028	102
3	5	1	13	801028	108
3	5	1	13	801028	141
3	5	1	13	801028	118
3	5	1	13	801028	119
3	5	1	13	801028	103
3	5	1	13	801028	153
3	5	1	13	801028	162
3	5	1	13	801028	144
3	5	1	13	801028	118
3	5	1	13	801028	126
3	5	1	13	801028	106
3	5	1	13	801028	156
3	5	1	13	801028	103
3	5	1	13	801028	107
3	5	1	13	801028	114
3	5	1	13	801028	120
3	7	1	15	801209	121
3	7	1	16	810121	115
3	7	1	16	810121	119
3	7	1	16	810121	122
3	7	1	16	810121	113
3	7	1	16	810121	115
3	7	1	16	810121	124
3	7	1	16	810121	89
3	7	1	16	810121	94
3	7	1	16	810121	109
3	7	1	16	810121	96
3	7	1	16	810121	108
3	7	1	16	810121	109
3	7	1	16	810121	94

iv. Brassy minnow, *Hybognathus hankinsoni*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
2	2	1	25	810630	66	3.7	
2	2	1	25	810630	66	3.7	

v. Buffalo sculpin, *Enophrys bison*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	3	16	810120	148	100.78	1.53

3	1	1	2	800417	19	0.25	1.19
3	1	1	2	800417	21	0.3	1.08
3	1	1	2	800417	20	0.25	1.03
3	1	1	2	800417	19	0.2	0.95
3	1	1	2	800417	20	0.25	1.03
3	1	1	2	800417	20	0.25	1.03
3	1	1	2	800417	17	0.15	0.97
3	1	1	2	800417	21	0.3	1.08
3	1	2	2	800417	21	0.35	1.25
3	1	2	2	800417	20	0.35	1.44
3	1	2	2	800417	20	0.15	0.62
3	1	2	2	800417	20	0.25	1.03
3	1	2	2	800417	66	6.55	0.95
3	1	2	2	800417	21	0.2	0.72
3	1	2	2	800417	21	0.3	1.08
3	1	2	2	800417	21	0.4	1.43
3	1	2	2	800417	18	0.2	1.10
3	1	2	2	800417	19	0.35	1.66
3	1	2	2	800417	19	0.3	1.42
3	1	2	2	800417	17	0.15	0.97
3	1	2	2	800417	54	1.9	0.48
3	1	2	2	800417	20	0.35	1.44
3	1	2	2	800417	21	0.35	1.25
3	1	2	2	800417	22	0.35	1.10
3	1	2	2	800417	20	0.35	1.44
3	1	2	2	800417	22	0.2	0.63
3	1	2	2	800417	19	0.15	0.71
3	1	2	2	800417	20	0.15	0.62
3	1	3	2	800417	23	0.35	0.97
3	1	3	2	800417	22	0.25	0.79
3	1	3	2	800417	20	0.25	1.03
3	1	3	2	800417	18	0.2	1.10
3	1	3	2	800417	20	0.25	1.03
3	1	3	2	800417	21	0.25	0.90
3	1	3	2	800417	22	0.25	0.79
3	1	3	2	800417	20	0.25	1.03
3	1	3	2	800417	20	0.25	1.03
3	1	3	2	800417	20	0.25	1.03
3	1	1	9	800728	34	1.1	1.02
3	1	1	10	800810	32	1.3	1.43
3	1	1	12	800924	80	12.2	1.03
3	1	1	13	801027	49	2.7	0.90
3	1	1	13	801027	45	2.2	0.93
3	1	1	13	801027	44	1.8	0.81

3	1	1	13	801027	41	1.6	0.88
3	1	1	13	801027	50	2.5	0.79
3	1	1	13	801027	55	4.1	0.99
3	1	1	13	801027	44	1.7	0.77
3	1	1	13	801027	51	3.2	0.96
3	1	1	16	810120	62	5.6	0.97
3	1	1	16	810120	45	2	0.85
3	1	2	18	810305	61	5.8	1.05
3	1	2	20	810409	68	7.8	1.04
3	1	1	24	810616	26	0.6	1.18
3	1	1	24	810616	28	0.6	0.96
3	1	1	24	810616	63	8.4	1.39
3	1	1	24	810616	29	0.6	0.87
3	1	2	24	810616	29	0.7	1.02
3	1	3	24	810616	26	0.6	1.18
3	1	3	24	810616	38	1	0.68
3	1	1	25	810629	45	2	0.85
3	2	1	14	801117	56	4.5	1.04
3	2	1	14	801117	68	8.1	1.08
3	3	1	6	800613	113	38.1	1.23
3	4	1	25	810629	26	0.5	0.99
3	5	1	13	801028	55	3.5	0.85
3	7	1	9	800728	128	53.4	1.21
3	7	1	24	810616	47	3.1	1.16
3	7	2	24	810616	21	0.3	1.08
3	7	2	24	810616	26	0.4	0.79
3	1	2	2	800417	15		
3	5	1	13	801028	37		

vi. Butter sole, *Isopetta isolepis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	6	1	6	800613	38	0.6	
3	4	1	8	800710	44		
3	4	1	8	800710	45		
3	4	1	8	800710	44		

vii. Capelin, *Mallotus villosus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	2	1	22	810519	26	0.1	1.13
1	2	1	22	810519	30	0.2	1.44
1	2	1	22	810519	29	0.2	1.60
2	5	1	23	810602	94	5.1	1.04
2	5	1	23	810602	88	4.7	1.18
2	5	1	23	810602	97	7.4	1.37

2	5	1	23	810602	84	4.2	1.22
2	5	1	23	810602	81	3.9	1.27
2	5	1	23	810602	85	4.6	1.29
2	5	1	23	810602	87	5.5	1.43
2	5	1	23	810602	74	3.2	1.38
2	6	1	16	810119	55	1.2	1.30
2	6	2	18	810304	62	2	1.50
2	6	3	18	810304	51	1	1.38
2	6	1	22	810521	29	0.1	0.80
2	6	1	22	810521	33	0.1	0.54
2	6	1	22	810521	30	0.1	0.72
2	6	1	22	810521	27	0.1	1.00
2	6	1	22	810521	32	0.1	0.59
2	6	1	22	810521	24	0.1	1.45
2	6	1	22	810521	30	0.1	0.72
2	6	1	22	810521	28	0.1	0.89
2	6	1	22	810521	27	0.1	1.00
2	6	1	22	810521	25	0.1	1.27
2	6	1	22	810521	28	0.1	0.89
2	6	1	22	810521	20	0.1	2.55
2	6	1	22	810521	25	0.1	1.27
2	6	1	22	810521	27	0.1	1.00
2	6	2	22	810521	31	0.2	1.30
2	6	2	22	810521	39	0.2	0.64
2	6	2	22	810521	30	0.1	0.72
2	6	2	22	810521	35	0.3	1.34
2	6	2	22	810521	31	0.2	1.30
2	6	2	22	810521	25	0.1	1.27
2	6	2	22	810521	32	0.2	1.18
2	6	3	22	810521	26	0.1	1.13
2	6	1	23	810602	39	0.4	1.27
2	6	1	23	810602	27	0.2	2.00
2	6	1	23	810602	44	0.5	1.09
2	6	1	23	810602	29	0.2	1.60
2	6	2	24	810617	95	7.1	1.40
2	6	3	24	810617	34	0.3	1.46
2	6	3	24	810617	42	0.6	1.51
2	6	3	24	810617	42	0.5	1.26
2	6	3	24	810617	32	0.2	1.18
2	6	3	24	810617	30	0.2	1.44
2	6	3	24	810617	38	0.3	1.03
2	6	3	24	810617	32	0.2	1.18
3	1	2	1	800320	39	0.12	0.38
3	1	2	1	800320	44	0.3	0.65

3	1	2	1	800320	42	0.32	0.81
3	1	2	1	800320	45	0.38	0.77
3	1	2	1	800320	49	0.44	0.69
3	1	2	1	800320	40	0.21	0.62
3	1	2	1	800320	37	0.16	0.60
3	1	2	1	800320	42	0.23	0.58
3	1	2	1	800320	41	0.25	0.68
3	1	2	1	800320	41	0.18	0.49
3	1	2	1	800320	45	0.31	0.63
3	1	2	1	800320	44	0.33	0.72
3	1	2	1	800320	42	0.31	0.78
3	1	2	1	800320	42	0.23	0.58
3	1	2	1	800320	44	0.3	0.65
3	1	2	1	800320	42	0.32	0.81
3	7	1	22	810520	27	0.1	1.00

viii. Chinook salmon, *Oncorhynchus tshawytscha*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	2	800409	37	0.3	0.53
1	1	1	2	800409	39	0.5	0.76
1	1	1	2	800418	47	1	0.85
1	1	2	2	800418	53	1.5	0.89
1	1	2	2	800418	41	0.7	0.91
1	1	2	2	800418	61	2.6	1.00
1	1	2	2	800418	46	0.6	0.55
1	1	2	2	800418	60	2	0.81
1	1	3	2	800418	41	0.6	0.78
1	1	2	3	800430	39	0.5	0.76
1	1	1	4	800515	51	1.5	1.00
1	1	1	7	800626	86	8.5	1.15
1	1	1	7	800626	81	6.1	0.99
1	1	1	10	800811	115	19	1.06
1	1	1	10	800811	107	15.4	1.07
1	1	1	10	800811	127	27.1	1.12
1	1	1	11	800904	116	19	1.03
1	1	1	12	800925	121	21.6	1.03
1	1	1	19	810325	42	0.6	0.72
1	1	1	20	810408	40	0.7	0.98
1	1	1	20	810408	36	0.5	0.96
1	1	1	20	810408	39	0.6	0.91
1	1	2	20	810408	88	8.9	1.12
1	1	2	20	810408	85	7.8	1.09
1	1	2	20	810408	90	8.7	1.03
1	1	2	20	810408	84	7.4	1.08

1	1	1	21	810507	36	0.5	0.96
1	1	1	21	810507	49	1.6	1.20
1	1	1	21	810507	50	1.5	1.06
1	2	1	5	800528	55	2	1.06
1	2	1	5	800528	70	3.6	0.91
1	2	1	5	800528	49	1.3	0.98
1	2	1	5	800528	54	1.9	1.06
1	2	1	5	800528	71	4.4	1.07
1	2	1	5	800528	68	3.8	1.05
1	2	1	5	800528	64	3.1	1.03
1	2	1	5	800528	68	3.9	1.08
1	2	1	5	800528	71	1.9	0.46
1	2	1	5	800528	71	4.4	1.07
1	2	1	5	800528	80	6.4	1.08
1	2	1	5	800528	46	1	0.91
1	2	1	5	800528	72	4.5	1.05
1	2	1	5	800528	49	1.5	1.13
1	2	1	5	800528	75	4.8	0.99
1	2	1	5	800528	52	1.7	1.07
1	2	1	5	800528	75	5	1.03
1	2	1	5	800528	50	1.4	0.99
1	2	1	5	800528	67	3.5	1.01
1	2	1	5	800528	60	2.5	1.01
1	2	1	5	800528	61	2.7	1.04
1	2	1	5	800528	83	6.9	1.04
1	2	1	5	800528	77	5.1	0.97
1	2	1	5	800528	69	4.1	1.09
1	2	1	5	800528	63	3	1.05
1	2	1	5	800528	70	4.4	1.12
1	2	1	5	800528	59	2.2	0.94
1	2	1	5	800528	50	1.4	0.99
1	2	1	7	800626	40	0.6	0.84
1	2	1	7	800626	84	7.6	1.11
1	2	1	7	800626	101	14.5	1.20
1	2	1	7	800626	104	15	1.14
1	2	1	7	800626	70	4.3	1.09
1	2	1	7	800626	77	6	1.14
1	2	1	7	800626	84	7.3	1.06
1	2	1	7	800626	120	22.7	1.11
1	2	1	7	800626	41	0.9	1.17
1	2	1	7	800626	58	2.4	1.08
1	2	1	7	800626	80	6.5	1.10
1	2	1	7	800626	68	4	1.11
1	2	1	7	800626	119	22	1.11

1	2	1	7	800626	92	10.3	1.14
1	2	1	21	810507	54	2	1.12
1	2	1	21	810507	49	1.5	1.13
1	2	1	21	810507	51	0.6	0.40
1	2	1	21	810507	44	1	1.05
1	2	1	21	810507	44	1.1	1.15
1	2	1	21	810507	47	1	0.85
1	2	1	21	810507	43	0.9	1.01
1	2	1	21	810507	51	1.5	1.00
1	2	1	21	810507	48	1.3	1.04
1	2	1	21	810507	40	0.8	1.12
1	2	1	22	810519	50	1.5	1.06
1	2	1	22	810519	55	2.4	1.27
1	2	1	22	810519	78	6.6	1.20
1	2	1	22	810519	52	1.8	1.13
1	2	1	22	810519	58	2.5	1.13
1	2	1	22	810519	51	1.9	1.27
1	2	1	22	810519	56	2.6	1.30
1	2	1	22	810519	53	1.9	1.13
1	2	1	22	810519	58	2.8	1.26
1	2	1	22	810519	54	2.1	1.18
1	2	1	22	810519	58	2.4	1.08
1	2	1	22	810519	56	2.1	1.05
1	2	1	22	810519	52	1.9	1.19
1	2	1	22	810519	53	1.9	1.13
1	2	1	22	810519	69	4.2	1.11
1	2	1	22	810519	57	2.3	1.09
1	2	1	22	810519	71	2.8	0.68
1	2	1	22	810519	49	1.5	1.13
1	2	1	22	810519	55	2.3	1.22
1	2	1	22	810519	53	1.9	1.13
1	2	1	22	810519	55	2.2	1.16
1	2	1	23	810603	54	2.2	1.23
1	2	1	23	810603	53	2	1.19
1	2	1	23	810603	72	4.6	1.07
1	2	1	23	810603	54	2	1.12
1	2	1	23	810603	53	2	1.19
1	2	1	23	810603	49	1.5	1.13
1	2	1	23	810603	58	2.7	1.22
1	2	1	23	810603	58	2.7	1.22
1	2	1	23	810603	59	2.8	1.20
1	2	1	23	810603	44	0.9	0.94
1	2	1	23	810603	57	2.1	1.00
1	2	1	23	810603	59	2.6	1.11

1	2	1	23	810603	61	3.2	1.24
1	2	1	23	810603	61	3	1.16
1	2	1	23	810603	68	4.1	1.14
1	2	1	23	810603	57	2.2	1.04
1	2	1	23	810603	69	4.9	1.30
1	2	1	23	810603	55	2.2	1.16
1	2	1	23	810603	54	1.8	1.01
1	2	1	25	810702	88	9.2	1.16
1	2	1	25	810702	88	7.4	0.93
1	2	1	25	810702	95	9.6	0.96
1	2	1	25	810702	76	6.2	1.22
1	2	1	25	810702	100	13.6	1.16
1	4	2	19	810325	41	0.4	0.52
1	4	2	19	810325	39	0.5	0.76
1	4	2	19	810325	43	0.5	0.56
1	4	2	19	810325	39	0.3	0.45
1	4	2	19	810325	42	0.4	0.48
1	4	2	19	810325	36	0.3	0.58
1	4	1	20	810408	40	0.7	0.98
1	4	1	20	810408	49	0.9	0.68
1	4	2	20	810408	39	0.6	0.91
1	4	1	21	810507	43	0.9	1.01
1	4	1	21	810507	56	2.2	1.10
1	4	1	21	810507	43	1.1	1.23
1	4	1	21	810507	61	2.9	1.12
1	5	1	7	800626	78	5.8	1.06
1	5	1	7	800626	94	11.4	1.18
1	5	1	7	800626	84	7.6	1.11
1	5	1	7	800626	72	4.1	0.95
1	5	1	7	800626	74	5.4	1.16
1	5	1	7	800626	85	9.1	1.28
1	5	1	21	810507	46	1.3	1.19
1	5	1	21	810507	43	1.9	2.13
1	5	1	21	810507	50	1.5	1.06
1	5	1	21	810507	48	1.4	1.12
1	5	1	21	810507	79	6.8	1.19
1	5	1	21	810507	45	0.8	0.78
1	5	1	21	810507	52	1.9	1.19
1	5	1	21	810507	47	1.1	0.94
1	5	1	21	810507	46	1.3	1.19
1	5	1	21	810507	53	1.9	1.13
1	5	1	21	810507	39	0.6	0.91
1	5	1	22	810519	54	2.2	1.23
1	5	1	22	810519	44	1.1	1.15

1	5	1	22	810519	46	1.5	1.37
1	5	1	22	810519	62	2.9	1.07
1	5	1	22	810519	53	2	1.19
1	5	1	22	810519	42	1	1.20
1	5	1	22	810519	53	1.8	1.07
1	5	1	22	810519	44	1.1	1.15
1	5	1	22	810519	53	2	1.19
1	5	1	22	810519	49	1.6	1.20
1	5	1	22	810519	55	2	1.06
1	5	1	22	810519	68	4.5	1.25
1	5	1	22	810519	51	1.7	1.13
1	5	1	22	810519	48	1.4	1.12
1	5	1	22	810519	48	1.5	1.20
1	5	1	22	810519	54	2.2	1.23
1	5	1	22	810519	50	1.6	1.13
1	5	1	22	810519	47	1.6	1.37
1	5	1	22	810519	55	2	1.06
1	5	1	22	810519	45	1.3	1.27
1	5	1	22	810519	54	2.2	1.23
1	5	1	23	810603	54	2.3	1.29
1	5	1	23	810603	67	4.1	1.19
1	5	1	24	810618	69	5	1.33
1	5	1	24	810618	75	5.5	1.13
1	5	1	24	810618	70	4	1.01
1	5	1	24	810618	80	6.4	1.08
1	5	1	24	810618	83	6.9	1.04
1	5	1	24	810618	61	3.1	1.20
1	5	1	24	810618	68	3.7	1.03
1	5	1	24	810618	80	6.6	1.11
1	5	1	24	810618	78	4.9	0.89
1	5	2	24	810618	79	6.3	1.11
1	5	2	24	810618	73	4.5	1.00
1	5	2	24	810618	80	7.1	1.20
1	5	2	24	810618	63	3	1.05
1	5	2	24	810618	89	9	1.10
1	5	2	24	810618	81	8.2	1.33
1	5	2	24	810618	65	3.3	1.05
1	5	2	24	810618	81	6.9	1.12
1	5	2	24	810618	68	4.1	1.14
1	5	2	24	810618	60	2.7	1.10
1	5	2	24	810618	69	4.1	1.09
1	5	2	24	810618	75	5.9	1.21
1	5	2	24	810618	79	6.1	1.07
1	5	2	24	810618	67	3.5	1.01

1	5	2	24	810618	72	5.3	1.23
1	5	2	24	810618	78	6.4	1.17
1	5	2	24	810618	80	7.6	1.28
1	5	2	24	810618	76	6.5	1.28
1	5	2	24	810618	69	5	1.33
1	5	1	25	810702	78	5.6	1.02
1	5	1	25	810702	68	3.8	1.05
1	5	1	25	810702	89	8	0.98
1	5	1	25	810702	90	10.3	1.21
1	5	1	25	810702	95	10.1	1.01
1	5	1	25	810702	88	8.1	1.02
1	7	1	7	800626	80	6.4	1.08
1	7	1	7	800626	79	6.7	1.18
1	7	1	7	800626	64	3.6	1.20
1	7	1	7	800626	75	5.4	1.11
1	7	1	7	800626	75	5.4	1.11
1	7	1	7	800626	75	5.4	1.11
1	7	1	7	800626	89	10	1.22
1	7	1	7	800626	81	6.9	1.12
2	1	1	10	800809	115	20.3	1.13
2	1	1	10	800809	113	16.6	0.98
2	1	1	10	800809	90	10.1	1.19
2	1	1	10	800809	110	18.2	1.16
2	1	1	10	800809	116	20.1	1.09
2	1	1	10	800809	128	26.9	1.08
2	1	1	10	800809	105	15.5	1.14
2	1	1	10	800809	121	26.9	1.29
2	1	1	10	800809	117	18.8	1.00
2	1	1	10	800809	110	17.9	1.14
2	1	1	10	800809	99	14	1.23
2	1	1	21	810505	41	0.4	0.52
2	1	1	21	810505	41	0.8	1.04
2	1	1	21	810505	45	1	0.98
2	1	1	21	810505	39	0.6	0.91
2	1	1	21	810505	42	0.7	0.84
2	1	1	21	810505	38	0.4	0.65
2	1	1	21	810505	40	0.7	0.98
2	1	1	21	810505	44	1	1.05
2	1	1	21	810505	41	0.8	1.04
2	1	1	21	810505	44	1.1	1.15
2	1	1	21	810505	42	0.8	0.96
2	1	1	21	810505	36	0.3	0.58
2	1	1	21	810505	43	0.6	0.67
2	1	1	21	810505	41	0.7	0.91

2	1	1	21	810505	52	1.8	1.13
2	1	1	21	810505	50	1.6	1.13
2	1	1	21	810505	45	1	0.98
2	1	1	21	810505	41	0.3	0.39
2	1	1	23	810602	59	2.7	1.15
2	1	1	23	810602	54	1.8	1.01
2	1	1	23	810602	58	2.7	1.22
2	1	1	23	810602	65	2.9	0.92
2	1	1	23	810602	56	2.2	1.10
2	1	1	23	810602	60	2.8	1.14
2	1	1	23	810602	64	3.6	1.20
2	1	1	23	810602	59	2.4	1.03
2	1	1	23	810602	82	6.5	1.02
2	1	1	23	810602	54	2	1.12
2	2	1	6	800612	74	5.3	1.13
2	2	1	6	800612	66	3.9	1.18
2	2	1	6	800612	58	2.3	1.04
2	2	1	6	800612	65	3.3	1.05
2	2	1	6	800612	67	3.6	1.04
2	2	1	6	800612	66	3.7	1.12
2	2	1	6	800612	71	5.2	1.26
2	2	1	6	800612	58	2.2	0.99
2	2	1	7	800627	63	2.7	0.94
2	2	1	7	800627	67	3.7	1.07
2	2	1	21	810505	48	1	0.80
2	2	1	21	810505	40	0.8	1.12
2	2	1	21	810505	47	1.2	1.03
2	2	1	21	810505	55	1.7	0.90
2	2	1	21	810505	49	1.4	1.05
2	2	1	21	810505	41	0.6	0.78
2	2	1	21	810505	47	1.2	1.03
2	2	1	21	810505	43	1.2	1.35
2	2	1	21	810505	47	1.3	1.11
2	2	1	21	810505	59	1.7	0.73
2	2	1	21	810505	47	0.9	0.77
2	2	1	21	810505	41	0.9	1.17
2	2	1	21	810505	44	1	1.05
2	2	1	21	810505	44	0.9	0.94
2	2	1	21	810505	63	2.1	0.73
2	2	1	21	810505	101	13.5	1.12
2	2	1	21	810505	62	3.2	1.18
2	2	1	21	810505	50	1.2	0.85
2	2	1	21	810505	44	0.9	0.94
2	2	1	21	810505	44	1.2	1.25

2	2	1	21	810505	61	2	0.77
2	2	1	21	810505	42	0.8	0.96
2	2	1	21	810505	45	0.9	0.88
2	2	1	21	810505	77	5.5	1.04
2	2	1	21	810505	87	5.4	0.71
2	2	1	21	810505	68	4.4	1.22
2	2	1	21	810505	54	2	1.12
2	2	1	21	810505	74	4.6	0.98
2	2	1	21	810505	55	0.9	0.48
2	2	1	21	810505	54	2	1.12
2	2	1	21	810505	101	13	1.08
2	2	1	21	810505	54	1.1	0.62
2	2	1	23	810602	59	2.2	0.94
2	2	1	23	810602	56	2.2	1.10
2	2	1	23	810602	65	3.6	1.14
2	2	1	23	810602	54	1.9	1.06
2	2	1	23	810602	50	1.8	1.27
2	2	1	23	810602	49	1.5	1.13
2	2	1	23	810602	55	2.3	1.22
2	2	1	23	810602	70	4.2	1.07
2	2	1	23	810602	62	2.8	1.03
2	2	1	23	810602	69	3.9	1.03
2	2	1	23	810602	64	3.4	1.13
2	2	1	23	810602	59	2.3	0.98
2	2	1	23	810602	74	5.2	1.11
2	2	1	23	810602	67	3.8	1.10
2	2	1	23	810602	60	2.6	1.06
2	2	1	23	810602	59	2.4	1.03
2	2	1	23	810602	56	2.3	1.15
2	2	1	23	810602	65	3.1	0.99
2	2	1	24	810617	74	5.8	1.24
2	2	1	24	810617	70	4.3	1.09
2	2	1	24	810617	56	2.4	1.20
2	2	1	24	810617	61	3.6	1.39
2	2	1	24	810617	74	4.7	1.01
2	2	1	24	810617	58	2.5	1.13
2	2	1	24	810617	70	4.4	1.12
2	2	1	24	810617	79	6.2	1.09
2	2	1	24	810617	68	4.4	1.22
2	2	1	24	810617	80	6.4	1.08
2	2	1	24	810617	61	3.1	1.20
2	2	1	24	810617	66	3.7	1.12
2	2	1	24	810617	71	4.4	1.07
2	2	1	24	810617	69	4.4	1.17

2	3	1	4	800514	42	0.9	1.08
2	3	1	4	800514	40	0.8	1.12
2	3	1	4	800514	45	1.1	1.07
2	3	1	4	800514	41	0.7	0.91
2	3	1	4	800514	41	0.7	0.91
2	3	1	4	800514	41	0.7	0.91
2	3	1	4	800514	55	2.1	1.11
2	3	1	4	800514	42	0.9	1.08
2	3	1	4	800514	45	0.9	0.88
2	3	1	4	800514	47	1.2	1.03
2	3	1	4	800514	45	1.1	1.07
2	3	1	4	800514	62	2.7	0.99
2	3	1	4	800514	41	0.8	1.04
2	3	1	4	800514	45	0.8	0.78
2	3	1	4	800514	41	0.9	1.17
2	3	1	4	800514	46	1.2	1.10
2	3	1	4	800514	38	0.6	0.98
2	3	1	4	800514	36	0.7	1.35
2	3	1	4	800514	42	0.8	0.96
2	3	1	4	800514	39	0.7	1.06
2	3	1	4	800514	47	1.5	1.28
2	3	1	4	800514	41	0.7	0.91
2	3	1	4	800514	52	1.4	0.88
2	3	1	4	800514	43	0.8	0.90
2	3	1	4	800514	40	1.1	1.54
2	3	1	4	800514	43	1.1	1.23
2	3	1	4	800514	40	0.7	0.98
2	3	1	4	800514	39	0.8	1.21
2	3	1	4	800514	55	2.1	1.11
2	3	1	4	800514	44	1.4	1.46
2	3	1	4	800514	46	1.1	1.00
2	3	1	4	800514	49	1.6	1.20
2	3	1	4	800514	39	0.7	1.06
2	3	1	4	800514	37	0.9	1.60
2	3	1	4	800514	40	1	1.40
2	3	1	4	800514	44	1.3	1.36
2	3	1	4	800514	37	0.7	1.24
2	3	1	4	800514	43	0.9	1.01
2	3	1	4	800514	39	0.7	1.06
2	3	1	4	800514	80	6.7	1.13
2	3	1	4	800514	49	1.4	1.05
2	3	1	4	800514	43	0.9	1.01
2	3	1	4	800514	48	1	0.80
2	3	1	4	800514	40	1.2	1.68

2	3	1	4	800514	47	0.9	0.77
2	3	1	4	800514	43	0.7	0.78
2	3	1	4	800514	45	1.2	1.17
2	3	1	4	800514	57	2.1	1.00
2	3	1	4	800514	48	1.5	1.20
2	3	1	4	800514	46	1	0.91
2	3	1	4	800514	41	0.7	0.91
2	3	1	4	800514	52	1.8	1.13
2	3	1	4	800514	40	0.8	1.12
2	3	1	4	800514	49	1.5	1.13
2	3	1	4	800514	39	0.7	1.06
2	3	1	4	800514	38	0.5	0.82
2	3	1	4	800514	50	1.4	0.99
2	3	1	4	800514	42	0.9	1.08
2	3	1	4	800514	70	4.5	1.14
2	3	1	4	800514	46	1.1	1.00
2	3	1	4	800514	42	0.8	0.96
2	3	1	4	800514	44	0.8	0.84
2	3	1	4	800514	40	0.9	1.26
2	3	1	4	800514	42	1	1.20
2	3	1	4	800514	40	0.7	0.98
2	3	1	4	800514	36	0.9	1.74
2	3	1	4	800514	47	1.1	0.94
2	3	1	4	800514	38	0.6	0.98
2	3	1	4	800514	46	1.5	1.37
2	3	1	4	800514	44	0.5	0.52
2	3	1	4	800514	42	0.9	1.08
2	3	1	4	800514	45	1.5	1.46
2	3	1	4	800514	52	1.5	0.94
2	3	1	4	800514	50	1.7	1.20
2	3	1	4	800514	43	0.7	0.78
2	3	1	4	800514	43	0.7	0.78
2	3	1	4	800514	40	0.6	0.84
2	3	1	4	800514	52	1.7	1.07
2	3	1	4	800514	42	1	1.20
2	3	1	4	800514	47	1.2	1.03
2	3	1	4	800514	42	1.2	1.45
2	3	1	4	800514	44	0.9	0.94
2	3	1	4	800514	43	1.3	1.46
2	3	1	4	800514	51	1.3	0.87
2	3	1	4	800514	43	1.3	1.46
2	3	1	4	800514	48	1.2	0.96
2	3	1	4	800514	56	2.3	1.15
2	3	1	4	800514	40	0.7	0.98

2	3	1	4	800514	46	1.2	1.10
2	3	1	4	800514	52	1.7	1.07
2	3	1	4	800514	40	0.7	0.98
2	3	1	4	800514	51	1.6	1.07
2	3	1	4	800514	43	1.2	1.35
2	3	1	4	800514	44	1.1	1.15
2	3	1	4	800514	45	1.1	1.07
2	3	1	4	800514	51	1.7	1.13
2	3	1	6	800612	58	2.3	1.04
2	3	1	6	800612	55	2	1.06
2	3	1	8	800711	90	10.3	1.21
2	3	1	8	800711	86	7.4	1.00
2	3	1	8	800711	93	10.1	1.08
2	3	1	8	800711	80	6.3	1.06
2	3	1	8	800711	71	3.9	0.95
2	3	1	21	810505	60	2.8	1.14
2	3	1	21	810505	45	0.8	0.78
2	3	1	21	810505	45	0.8	0.78
2	3	1	21	810505	59	2	0.85
2	3	1	21	810505	45	1.1	1.07
2	3	1	21	810505	49	0.9	0.68
2	3	1	21	810505	47	0.7	0.60
2	3	1	21	810505	49	1.2	0.90
2	3	1	21	810505	56	2.3	1.15
2	3	1	21	810505	60	1.6	0.65
2	3	1	21	810505	52	1.9	1.19
2	3	1	21	810505	71	4.2	1.02
2	3	1	21	810505	44	0.7	0.73
2	3	1	21	810505	44	0.4	0.42
2	3	1	21	810505	49	1.3	0.98
2	3	1	21	810505	68	3.8	1.05
2	3	1	23	810602	54	2.1	1.18
2	3	1	23	810602	59	2.4	1.03
2	3	1	23	810602	60	2.9	1.18
2	3	1	23	810602	59	2.2	0.94
2	3	1	23	810602	51	1.1	0.73
2	3	1	23	810602	54	1.9	1.06
2	3	1	23	810602	57	2.2	1.04
2	3	1	23	810602	67	3.9	1.13
2	3	1	23	810602	59	2.5	1.07
2	3	1	23	810602	53	1.7	1.01
2	3	1	23	810602	57	2.2	1.04
2	3	1	23	810602	56	2.4	1.20
2	3	1	23	810602	55	1.8	0.95

2	3	1	23	810602	62	2.9	1.07
2	3	1	23	810602	56	2.1	1.05
2	3	1	23	810602	52	1.9	1.19
2	3	1	23	810602	73	4.1	0.92
2	3	1	23	810602	60	2.8	1.14
2	3	1	23	810602	50	1.5	1.06
2	3	1	23	810602	53	1.7	1.01
2	3	1	23	810602	59	2.2	0.94
2	3	1	23	810602	56	2.2	1.10
2	3	1	24	810617	69	4.8	1.27
2	3	1	24	810617	79	6	1.05
2	3	1	24	810617	72	6	1.40
2	3	1	24	810617	73	5.3	1.18
2	3	1	24	810617	58	2.5	1.13
2	3	1	24	810617	80	5.6	0.95
2	3	1	24	810617	56	2.4	1.20
2	3	1	24	810617	68	4.7	1.30
2	3	1	24	810617	66	3.6	1.09
2	3	1	24	810617	77	6	1.14
2	3	1	24	810617	70	4.4	1.12
2	3	1	24	810617	81	6.6	1.07
2	3	1	24	810617	79	6.4	1.12
2	3	1	24	810617	80	5.9	1.00
2	3	1	24	810617	64	4.3	1.43
2	3	1	24	810617	56	2.2	1.10
2	3	1	24	810617	80	6.5	1.10
2	3	1	24	810617	81	7	1.14
2	3	1	24	810617	79	7.2	1.26
2	3	1	24	810617	55	2.5	1.32
2	3	1	24	810617	65	4.2	1.34
2	3	1	24	810617	75	5.5	1.13
2	3	1	24	810617	65	3.9	1.24
2	3	1	24	810617	87	8.6	1.12
2	3	1	24	810617	75	6.3	1.29
2	3	1	24	810617	65	4	1.27
2	3	1	24	810617	64	3.6	1.20
2	3	1	24	810617	50	1.8	1.27
2	3	1	24	810617	65	4	1.27
2	3	1	24	810617	75	5.6	1.15
2	3	1	24	810617	61	2.8	1.08
2	3	1	24	810617	75	5.8	1.19
2	3	1	24	810617	77	6	1.14
2	3	1	24	810617	78	6.4	1.17
2	3	1	24	810617	73	5.5	1.23

2	3	1	24	810617	86	8.6	1.16
2	3	1	24	810617	80	6.9	1.16
2	4	1	10	800809	79	5.5	0.96
2	4	1	23	810602	60	2.9	1.18
2	4	1	23	810602	60	2.8	1.14
2	4	1	23	810602	59	2.7	1.15
2	4	1	23	810602	61	3.1	1.20
2	4	1	23	810602	53	1.6	0.95
2	4	1	23	810602	62	2.7	0.99
2	4	1	23	810602	45	1.2	1.17
2	4	1	23	810602	46	1.4	1.28
2	4	1	23	810602	53	2	1.19
2	4	1	23	810602	66	3.3	1.00
2	4	1	23	810602	45	1.2	1.17
2	4	1	23	810602	47	1.3	1.11
2	4	1	23	810602	52	1.7	1.07
2	4	1	23	810602	56	2.1	1.05
2	4	1	23	810602	55	2.4	1.27
2	4	1	23	810602	68	3.6	1.00
2	5	1	8	800711	92	9.5	1.05
2	5	2	8	800711	92	8.9	0.98
2	5	2	8	800711	76	5	0.99
2	5	1	10	800809	89	8.7	1.06
2	5	1	10	800809	95	10.4	1.04
2	5	1	10	800809	102	12.8	1.03
2	5	1	10	800809	99	12.4	1.09
2	5	1	10	800809	111	16.4	1.02
2	5	1	10	800809	100	12	1.03
2	5	1	10	800809	107	17.6	1.22
2	5	1	10	800809	103	13.6	1.06
2	5	1	10	800809	111	17.2	1.07
2	5	1	10	800809	106	14.7	1.05
2	5	1	10	800809	113	18.3	1.08
2	5	1	23	810602	65	3.8	1.21
2	5	1	23	810602	52	1.5	0.94
2	5	1	23	810602	53	1.6	0.95
2	5	1	23	810602	65	3.2	1.02
2	5	1	23	810602	65	3.1	0.99
2	5	1	23	810602	61	3.4	1.31
2	5	1	23	810602	59	2.8	1.20
2	5	1	23	810602	55	2.2	1.16
2	5	1	23	810602	45	1.2	1.17
2	5	1	23	810602	79	5.3	0.93
2	5	1	23	810602	55	2.3	1.22

2	5	1	23	810602	69	3.9	1.03
2	5	1	23	810602	56	2.2	1.10
2	5	1	23	810602	57	2.4	1.14
2	5	1	23	810602	54	1.8	1.01
2	5	1	23	810602	70	3.7	0.94
2	5	1	23	810602	65	3	0.95
2	6	2	5	800529	51	1.6	1.07
2	6	2	5	800529	48	1.2	0.96
2	6	2	5	800529	57	2.7	1.28
2	6	2	5	800529	58	2.5	1.13
2	6	2	5	800529	62	2.9	1.07
2	6	2	5	800529	41	0.7	0.91
2	6	3	5	800529	53	1.7	1.01
2	6	3	5	800529	58	2.3	1.04
2	6	3	5	800529	57	2.2	1.04
2	6	3	5	800529	55	1.8	0.95
2	6	3	5	800529	51	1.3	0.87
2	6	1	6	800612	62	2.7	0.99
2	6	1	6	800612	68	3.5	0.97
2	6	1	6	800612	54	1.8	1.01
2	6	1	6	800612	54	1.8	1.01
2	6	1	6	800612	65	3.4	1.08
2	6	1	6	800612	64	2.8	0.93
2	6	1	6	800612	63	3	1.05
2	6	1	6	800612	65	3.3	1.05
2	6	1	6	800612	56	2.2	1.10
2	6	1	6	800612	66	3.4	1.03
2	6	1	6	800612	61	2.6	1.00
2	6	2	6	800612	55	2.4	1.27
2	6	2	6	800612	69	4.1	1.09
2	6	2	6	800612	66	3.6	1.09
2	6	2	6	800612	68	3	0.83
2	6	2	6	800612	74	4.2	0.90
2	6	2	6	800612	65	3.2	1.02
2	6	2	6	800612	65	3.3	1.05
2	6	2	6	800612	51	1.8	1.20
2	6	2	6	800612	72	4.4	1.02
2	6	2	6	800612	65	3.4	1.08
2	6	2	6	800612	75	5.7	1.17
2	6	2	6	800612	58	2.5	1.13
2	6	2	6	800612	59	2.8	1.20
2	6	1	7	800627	76	4.4	0.87
2	6	1	7	800627	72	4.1	0.95
2	6	1	7	800627	73	4.9	1.09

2	6	1	7	800627	84	7.2	1.05
2	6	1	7	800627	68	3.8	1.05
2	6	1	7	800627	74	5.1	1.09
2	6	1	7	800627	76	5.1	1.01
2	6	1	7	800627	69	4.2	1.11
2	6	1	7	800627	86	7.4	1.00
2	6	1	7	800627	71	3.2	0.78
2	6	1	7	800627	58	2.5	1.13
2	6	1	7	800627	71	3.3	0.80
2	6	2	7	800627	65	3.4	1.08
2	6	2	7	800627	76	5.7	1.13
2	6	2	7	800627	70	4.1	1.04
2	6	2	7	800627	74	5.1	1.09
2	6	3	7	800627	62	2.7	0.99
2	6	3	7	800627	76	5.5	1.09
2	6	3	7	800627	71	4.1	1.00
2	6	3	7	800627	79	6	1.05
2	6	3	7	800627	77	5	0.95
2	6	3	7	800627	77	5.5	1.04
2	6	3	7	800627	65	3.3	1.05
2	6	3	7	800627	84	7	1.02
2	6	3	7	800627	66	3.5	1.06
2	6	3	7	800627	71	4.2	1.02
2	6	3	7	800627	67	3.8	1.10
2	6	3	7	800627	81	6.1	0.99
2	6	3	7	800627	72	3.5	0.81
2	6	4	7	800627	72	4.8	1.12
2	6	4	7	800627	71	4.5	1.09
2	6	4	7	800627	65	3.4	1.08
2	6	1	8	800711	99	12.8	1.13
2	6	1	8	800711	110	17.2	1.10
2	6	1	8	800711	96	10.2	0.99
2	6	2	8	800711	79	6	1.05
2	6	2	8	800711	68	4.1	1.14
2	6	2	12	800923	122	20	0.93
2	6	1	22	810521	52	1.8	1.13
2	6	1	22	810521	52	1.5	0.94
2	6	2	22	810521	48	1.4	1.12
2	6	2	22	810521	55	2.1	1.11
2	6	2	22	810521	55	1.9	1.01
2	6	2	22	810521	59	2.9	1.24
2	6	2	22	810521	59	2.4	1.03
2	6	2	22	810521	66	3.9	1.18
2	6	2	22	810521	47	1.3	1.11

2	6	2	22	810521	63	3.2	1.12
2	6	2	22	810521	48	1.3	1.04
2	6	2	22	810521	51	1.8	1.20
2	6	2	22	810521	53	2.2	1.30
2	6	3	22	810521	54	2.2	1.23
2	6	3	22	810521	65	3.7	1.18
2	6	3	22	810521	85	8.4	1.18
2	6	3	22	810521	63	2.8	0.98
2	6	3	22	810521	57	2.4	1.14
2	6	3	22	810521	58	2.7	1.22
2	6	3	22	810521	58	2.4	1.08
2	6	1	23	810602	53	1.8	1.07
2	6	1	23	810602	58	2.7	1.22
2	6	1	23	810602	57	3.6	1.71
2	6	1	23	810602	67	3.2	0.93
2	6	1	23	810602	62	3	1.10
2	6	1	23	810602	62	3.1	1.14
2	6	1	23	810602	65	3.1	0.99
2	6	1	23	810602	58	2.6	1.17
2	6	1	24	810617	65	3.5	1.11
2	6	1	24	810617	74	5.7	1.22
2	6	1	24	810617	64	3.4	1.13
2	6	1	24	810617	79	7	1.23
2	6	1	24	810617	64	3.6	1.20
2	6	1	24	810617	73	4.5	1.00
2	6	1	24	810617	69	4	1.06
2	6	1	24	810617	79	5.3	0.93
2	6	2	24	810617	65	3.3	1.05
2	6	2	24	810617	81	7	1.14
2	6	2	24	810617	78	5.8	1.06
2	6	2	24	810617	78	5.7	1.04
2	6	2	24	810617	70	5.1	1.29
2	6	2	24	810617	72	4.9	1.14
2	6	2	24	810617	69	4.5	1.19
2	6	3	24	810617	60	2.3	0.93
2	6	3	24	810617	63	3.6	1.26
2	6	3	24	810617	73	4.8	1.07
2	6	3	24	810617	82	6.5	1.02
2	6	3	24	810617	69	4.3	1.14
2	6	3	24	810617	74	4.3	0.92
2	6	3	24	810617	67	4	1.16
2	6	3	24	810617	69	4.2	1.11
2	6	3	24	810617	79	6.3	1.11
2	6	3	24	810617	72	4.7	1.09

2	6	3	24	810617	69	3.8	1.01
2	6	1	25	810630	70	4.5	1.14
2	6	1	25	810630	80	6.9	1.16
2	6	1	25	810630	75	5.3	1.09
2	6	1	25	810630	68	4.2	1.16
3	1	3	2	800411	33	0.1	0.25
3	1	1	3	800501	43	0.7	0.78
3	1	1	7	800628	68	3.7	1.03
3	1	1	7	800628	93	7.05	0.75
3	1	1	7	800628	107	9.43	0.66
3	1	1	7	800628	53	1.24	0.73
3	1	1	7	800628	115	14.3	0.80
3	1	1	7	800628	110	11.39	0.73
3	1	1	7	800628	94	6.65	0.69
3	1	1	7	800628	120	17.36	0.85
3	1	1	7	800628	74	3.7	0.79
3	1	1	7	800628	90	4.55	0.54
3	1	1	7	800628	131	21.16	0.79
3	1	1	7	800628	80	3.12	0.53
3	1	1	7	800628	97	7.78	0.73
3	1	1	7	800628	117	14.63	0.77
3	1	1	7	800628	116	14.38	0.78
3	1	1	7	800628	96	7.63	0.74
3	1	1	7	800628	126	17.34	0.73
3	1	1	7	800628	99	6.78	0.60
3	1	1	7	800628	105	8.55	0.63
3	1	1	7	800628	108	10.89	0.74
3	1	1	8	800710	71	4.4	1.07
3	1	1	10	800810	114	18.8	1.08
3	1	1	10	800810	88	5	0.63
3	1	1	10	800810	88	6.7	0.85
3	1	1	10	800810	91	7.6	0.87
3	1	1	10	800810	83	5.5	0.83
3	1	1	10	800810	91	6.4	0.73
3	1	2	18	810305	38	0.5	0.82
3	1	1	21	810506	60	2.4	0.97
3	1	1	25	810629	122	17.6	0.82
3	1	1	25	810629	52	1.6	1.00
3	1	1	25	810629	64	4.1	1.37
3	1	1	25	810629	98	11.2	1.02
3	1	1	25	810629	48	1.4	1.12
3	1	1	25	810629	49	1.2	0.90
3	1	1	25	810629	74	5.3	1.13
3	1	1	25	810629	54	1.7	0.95

3	1	1	25	810629	62	2.1	0.77
3	1	1	25	810629	48	1.2	0.96
3	1	1	25	810629	74	5.5	1.18
3	1	1	25	810629	68	3.3	0.91
3	1	1	25	810629	78	5.3	0.97
3	1	1	25	810629	89	7.1	0.87
3	1	1	25	810629	58	2.1	0.95
3	1	1	25	810629	67	2.7	0.78
3	1	1	25	810629	94	8.9	0.92
3	1	1	25	810629	48	0.9	0.72
3	1	1	25	810629	90	8.5	1.00
3	1	1	25	810629	65	4.1	1.30
3	1	1	25	810629	52	2.5	1.57
3	1	2	25	810629	52	1.6	1.00
3	2	1	4	800516	56	1.7	0.85
3	2	1	4	800516	64	2.9	0.97
3	2	1	4	800516	58	1.7	0.77
3	2	1	4	800516	48	1.1	0.88
3	2	1	4	800516	74	3.5	0.75
3	2	1	4	800516	52	1.7	1.07
3	2	1	4	800516	50	1.2	0.85
3	2	1	4	800516	98	10.8	0.98
3	2	1	4	800516	53	1.6	0.95
3	2	1	4	800516	53	1.8	1.07
3	2	1	4	800516	49	1	0.75
3	2	1	4	800516	48	1	0.80
3	2	1	4	800516	49	1	0.75
3	2	1	4	800516	57	1.9	0.90
3	2	1	4	800516	46	1	0.91
3	2	1	4	800516	44	0.8	0.84
3	2	1	4	800516	46	0.9	0.82
3	2	1	4	800516	53	1.6	0.95
3	2	1	4	800516	51	1.4	0.93
3	2	1	4	800516	62	2.2	0.81
3	2	1	4	800516	45	1	0.98
3	2	1	4	800516	44	0.7	0.73
3	2	1	4	800516	51	1.3	0.87
3	2	1	4	800516	56	1.7	0.85
3	2	1	6	800613	79	6.4	1.12
3	2	1	6	800613	90	9.4	1.11
3	2	1	18	810305	40	0.5	0.70
3	2	1	20	810409	37	0.5	0.89
3	2	1	20	810409	40	0.6	0.84
3	2	1	20	810409	36	0.4	0.77

3	2	1	20	810409	35	0.3	0.63
3	2	1	20	810409	35	0.3	0.63
3	2	1	20	810409	36	0.5	0.96
3	2	1	20	810409	34	0.2	0.46
3	2	1	20	810409	42	0.9	1.08
3	2	1	21	810506	45	1.1	1.07
3	2	1	22	810520	51	1.7	1.13
3	3	1	4	800516	50	1.2	0.85
3	3	1	4	800516	70	3.6	0.91
3	3	1	4	800516	58	1.9	0.86
3	3	1	4	800516	53	1.5	0.89
3	3	1	4	800516	51	1.3	0.87
3	3	1	7	800628	77	2.7	0.51
3	3	1	7	800628	79	4.2	0.74
3	3	1	7	800628	124	16.5	0.73
3	3	1	7	800628	99	6.6	0.58
3	3	1	7	800628	134	21.6	0.76
3	3	1	7	800628	86	5.7	0.77
3	3	1	7	800628	112	13.5	0.82
3	3	1	7	800628	120	15.4	0.75
3	3	1	7	800628	80	4.7	0.79
3	3	1	7	800628	112	13.2	0.80
3	3	1	7	800628	101	9.1	0.75
3	3	1	7	800628	75	3.6	0.74
3	3	1	7	800628	76	2.7	0.53
3	3	1	7	800628	125	17.5	0.76
3	3	1	7	800628	90	6	0.71
3	3	1	7	800628	114	14.5	0.83
3	3	1	7	800628	123	17.6	0.80
3	3	1	7	800628	110	11.9	0.76
3	3	1	7	800628	99	5.5	0.48
3	3	1	7	800628	119	16.1	0.81
3	3	1	7	800628	69	2.5	0.66
3	3	1	7	800628	85	6.5	0.91
3	3	1	7	800628	88	5.6	0.71
3	3	1	7	800628	86	3.8	0.51
3	3	1	7	800628	81	4	0.65
3	3	1	7	800628	102	7.1	0.57
3	3	1	7	800628	87	5	0.65
3	3	1	7	800628	86	3.1	0.42
3	3	1	7	800628	92	3.5	0.39
3	3	1	7	800628	106	8.4	0.60
3	3	1	7	800628	80	3.4	0.57
3	3	1	7	800628	120	16.8	0.82

3	3	1	7	800628	100	6.8	0.58
3	3	1	7	800628	85	5.2	0.73
3	3	1	7	800628	89	2	0.24
3	3	1	7	800628	95	6.1	0.61
3	3	1	7	800628	122	19.3	0.90
3	3	1	7	800628	80	4.2	0.71
3	3	1	7	800628	96	7.9	0.76
3	3	1	7	800628	81	5.3	0.86
3	3	1	8	800710	105	16.9	1.24
3	3	1	8	800710	80	6.3	1.06
3	3	1	8	800710	85	7.5	1.05
3	3	1	8	800710	100	11.9	1.02
3	3	1	8	800710	99	12.6	1.11
3	3	1	21	810506	43	0.7	0.78
3	3	1	21	810506	46	1.3	1.19
3	3	1	21	810506	44	1	1.05
3	3	1	25	810629	49	1.1	0.83
3	4	1	6	800613	81	7.6	1.24
3	4	1	6	800613	82	6.5	1.02
3	4	1	6	800613	59	2.4	1.03
3	4	1	6	800613	90	9.9	1.17
3	4	1	6	800613	53	1.7	1.01
3	4	1	6	800613	89	8.8	1.07
3	4	1	6	800613	74	5.2	1.11
3	4	1	7	800628	110	15	0.96
3	4	1	7	800628	111	17	1.06
3	4	1	7	800628	85	7	0.98
3	4	1	7	800628	104	12.7	0.96
3	4	1	7	800628	88	8.5	1.07
3	4	1	7	800628	113	18.4	1.08
3	4	1	7	800628	103	14.4	1.12
3	4	1	7	800628	79	7.5	1.32
3	4	1	7	800628	110	17.1	1.09
3	4	1	7	800628	84	7.5	1.09
3	4	1	7	800628	103	10.6	0.83
3	4	1	7	800628	85	8.1	1.14
3	4	1	7	800628	70	3.9	0.99
3	4	1	7	800628	91	8.7	0.99
3	4	1	7	800628	96	11	1.06
3	4	1	7	800628	110	18.9	1.21
3	4	1	7	800628	111	19.1	1.19
3	4	1	7	800628	98	11.8	1.07
3	4	1	7	800628	114	21.6	1.24
3	4	1	7	800628	100	12.8	1.09

3	4	1	7	800628	104	11.3	0.86
3	4	1	7	800628	80	6	1.01
3	4	1	7	800628	106	13.8	0.99
3	4	1	7	800628	96	10.1	0.98
3	4	1	8	800710	72	3.9	0.91
3	4	1	8	800710	111	17	1.06
3	4	1	23	810601	68	4.2	1.16
3	4	1	23	810601	52	1.9	1.19
3	4	1	23	810601	63	3.2	1.12
3	4	1	23	810601	60	3.6	1.46
3	4	1	23	810601	73	5.4	1.21
3	4	1	23	810601	81	6.7	1.09
3	4	1	23	810601	77	6.3	1.19
3	4	1	23	810601	64	3	1.00
3	4	1	23	810601	64	3.7	1.23
3	4	1	23	810601	70	4.8	1.22
3	5	1	6	800613	98	12.6	1.15
3	5	1	6	800613	69	4.6	1.22
3	5	1	6	800613	74	4.9	1.05
3	5	1	6	800613	75	4.9	1.01
3	5	1	6	800613	55	2.2	1.16
3	5	1	6	800613	92	10.3	1.14
3	5	1	6	800613	92	6.8	0.75
3	5	1	21	810506	56	2.1	1.05
3	5	1	21	810506	38	0.6	0.98
3	5	1	21	810506	45	0.7	0.68
3	5	2	24	810616	61	3	1.16
3	6	1	7	800629	77	5	0.95
3	6	1	7	800629	64	2.5	0.83
3	6	1	7	800629	86	6.5	0.88
3	6	1	7	800629	134	30.1	1.05
3	6	1	7	800629	83	6.1	0.92
3	6	1	7	800629	97	8.8	0.83
3	6	1	7	800629	142	38	1.11
3	6	1	7	800629	73	4.6	1.03
3	6	1	21	810506	51	1.6	1.07
3	6	1	23	810601	71	4.9	1.19
3	6	1	23	810601	57	2.6	1.23
3	6	1	23	810601	61	2.9	1.12
3	6	1	23	810601	57	2.1	1.00
3	6	1	23	810601	65	3.6	1.14
3	6	1	23	810601	55	1.9	1.01
3	6	1	23	810601	54	1.8	1.01
3	6	1	23	810601	48	1.1	0.88

3	6	1	23	810601	38	0.6	0.98
3	6	1	23	810601	78	5.9	1.08
3	6	1	23	810601	61	2.6	1.00
3	7	1	4	800516	46	0.8	0.73
3	7	1	4	800516	45	0.8	0.78
3	7	1	4	800516	54	1.4	0.78
3	7	1	4	800516	49	1.4	1.05
3	7	1	6	800613	77	5.8	1.10
3	7	1	7	800629	78	4.8	0.88
3	7	1	7	800629	111	17.5	1.09
3	7	1	7	800629	94	10.7	1.10
3	7	1	10	800810	127	16.8	0.69
3	7	2	18	810305	39	0.4	0.60
3	7	1	20	810409	39	0.4	0.60
3	7	1	20	810409	38	0.3	0.49
3	7	1	20	810409	42	0.6	0.72
3	7	1	20	810409	40	0.5	0.70
3	7	1	20	810409	41	0.5	0.65
3	7	1	21	810506	89	6	0.73
3	7	1	21	810506	63	2.6	0.91
3	7	1	21	810506	80	4.4	0.74
3	7	1	21	810506	77	5	0.95
3	7	1	21	810506	80	5.1	0.86
3	7	1	21	810506	84	6.1	0.89
3	7	1	21	810506	58	2	0.90
3	7	1	21	810506	80	5.4	0.91
3	7	1	21	810506	83	5	0.75
3	7	1	21	810506	78	4.4	0.80
3	7	1	21	810506	79	4	0.70
3	7	1	22	810520	75	4	0.82
3	7	1	23	810601	68	4.6	1.27
3	7	1	23	810601	66	3.9	1.18
3	7	1	23	810601	83	6.8	1.03
3	7	1	23	810601	76	5.9	1.16
3	7	1	23	810601	73	5	1.12
3	7	1	23	810601	74	4.7	1.01
3	7	1	23	810601	90	9.9	1.17
3	7	1	23	810601	78	5.7	1.04
3	7	1	23	810601	75	5.4	1.11
3	7	1	23	810601	61	3.4	1.31
3	7	1	23	810601	65	3.5	1.11
3	7	1	23	810601	70	5.3	1.34
3	7	1	23	810601	69	4	1.06
3	7	1	23	810601	76	4.8	0.95

3	7	1	23	810601	74	5.5	1.18
3	7	1	23	810601	67	4	1.16
3	7	1	23	810601	65	4.2	1.34
3	7	1	23	810601	63	3.2	1.12
3	7	1	23	810601	77	5.7	1.08
3	7	1	23	810601	89	8.8	1.07
3	7	1	24	810616	79	5.6	0.98
3	7	1	24	810616	73	4.9	1.09
3	7	3	24	810616	85	7.1	1.00
3	7	3	24	810616	80	6.1	1.03
3	7	3	24	810616	74	5	1.07
3	7	1	25	810629	89	7.1	0.87

ix. Chum salmon, *Oncorhynchus keta*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	2	2	800409	36	0.4	1.28
1	1	3	2	800409	37	0.2	0.58
1	1	3	2	800409	44	0.5	0.73
1	1	3	2	800409	37	0.2	0.58
1	1	3	2	800409	40	0.2	0.43
1	1	1	2	800418	36	0.5	1.60
1	1	2	2	800418	36	0.1	0.32
1	1	2	2	800418	34	0.4	1.60
1	1	2	2	800418	35	0.3	1.07
1	1	2	2	800418	45	0.7	0.94
1	1	2	2	800418	34	0.2	0.80
1	1	2	2	800418	32	0.1	0.51
1	1	2	2	800418	35	0.4	1.43
1	1	2	2	800418	34	0.4	1.60
1	1	2	2	800418	36	0.4	1.28
1	1	2	2	800418	31	0.2	1.14
1	1	2	2	800418	34	0.3	1.20
1	1	2	2	800418	34	0.3	1.20
1	1	2	2	800418	34	0.1	0.40
1	1	2	2	800418	33	0.3	1.35
1	1	2	2	800418	41	0.4	0.77
1	1	2	2	800418	33	0.3	1.35
1	1	2	2	800418	31	0.1	0.57
1	1	2	2	800418	36	0.3	0.96
1	1	2	2	800418	40	0.4	0.85
1	1	2	2	800418	38	0.4	1.04
1	1	2	2	800418	42	0.4	0.70
1	1	2	2	800418	39	0.4	0.94
1	1	2	2	800418	38	0.3	0.78

1	1	2	2	800418	34	0.2	0.80
1	1	2	2	800418	32	0.2	1.01
1	1	2	2	800418	41	0.4	0.77
1	1	2	2	800418	34	0.2	0.80
1	1	2	2	800418	33	0.1	0.45
1	1	2	2	800418	35	0.1	0.36
1	1	2	2	800418	34	0.1	0.40
1	1	2	2	800418	32	0.1	0.51
1	1	2	2	800418	37	0.3	0.86
1	1	2	2	800418	33	0.1	0.45
1	1	2	2	800418	35	0.1	0.36
1	1	2	2	800418	33	0.1	0.45
1	1	2	2	800418	35	0.3	1.07
1	1	2	2	800418	40	0.5	1.06
1	1	2	2	800418	34	0.1	0.40
1	1	2	2	800418	38	0.5	1.30
1	1	2	2	800418	41	0.4	0.77
1	1	2	2	800418	34	0.3	1.20
1	1	2	2	800418	36	0.2	0.64
1	1	2	2	800418	33	0.3	1.35
1	1	2	2	800418	32	0.3	1.52
1	1	2	2	800418	41	0.3	0.58
1	1	2	2	800418	48	0.9	0.94
1	1	2	2	800418	33	0.1	0.45
1	1	2	2	800418	29	0.1	0.74
1	1	2	2	800418	35	0.2	0.71
1	1	2	2	800418	32	0.3	1.52
1	1	2	2	800418	36	0.3	0.96
1	1	3	2	800418	36	0.3	0.96
1	1	3	2	800418	35	0.2	0.71
1	1	3	2	800418	36	0.3	0.96
1	1	3	2	800418	41	0.6	1.16
1	1	3	2	800418	40	0.6	1.28
1	1	2	4	800515	32	0.4	2.02
1	1	1	19	810325	40	0.4	0.85
1	1	1	19	810325	40	0.4	0.85
1	1	2	19	810325	40	0.7	1.49
1	1	2	19	810325	40	0.7	1.49
1	1	2	19	810325	39	0.7	1.64
1	1	1	21	810507	46	0.8	0.99
1	2	1	5	800528	66	2.8	0.85
1	2	1	5	800528	63	2.5	0.91
1	2	1	5	800528	52	1.6	1.23
1	2	1	5	800528	59	1.6	0.75

1	2	1	21	810507	40	0.6	1.28
1	2	1	23	810603	57	2.1	1.13
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	39	0.4	0.94
1	4	1	19	810325	37	0.5	1.44
1	4	1	19	810325	38	0.5	1.30
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	41	0.6	1.16
1	4	1	19	810325	38	0.5	1.30
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	42	0.6	1.06
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	39	0.5	1.17
1	4	1	19	810325	40	0.6	1.28
1	4	1	19	810325	38	0.5	1.30
1	4	2	19	810325	37	0.2	0.58
1	4	2	19	810325	36	0.2	0.64
1	4	2	19	810325	38	0.3	0.78
1	4	2	19	810325	38	0.2	0.52
1	4	1	21	810507	39	0.6	1.41
1	5	1	21	810507	48	1.2	1.26
1	5	1	22	810519	37	0.5	1.44
1	5	1	22	810519	38	0.6	1.56
1	5	2	24	810618	74	4.4	0.86
2	1	1	21	810505	37	0.5	1.44
2	2	1	23	810602	44	0.8	1.17
2	5	1	23	810602	62	2.5	0.97
2	6	1	18	810304	38	0.5	1.30
2	6	1	18	810304	37	0.4	1.15
2	6	3	18	810304	40	0.6	1.28
2	6	2	22	810521	35	0.4	1.43
2	6	1	23	810602	54	1.6	1.06
3	1	1	3	800501	46	0.8	0.99
3	1	1	7	800628	55	1	0.62
3	1	1	7	800628	49	1.3	1.26
3	1	1	18	810305	36	0.2	0.64
3	1	1	18	810305	39	0.3	0.70
3	1	1	18	810305	40	0.5	1.06
3	1	1	18	810305	42	0.4	0.70
3	1	1	20	810409	40	0.5	1.06
3	1	1	20	810409	37	0.4	1.15
3	1	1	24	810616	64	2.7	0.93
3	1	1	24	810616	53	1.5	1.07

3	1	1	24	810616	57	2	1.08
3	1	1	24	810616	61	2.6	1.08
3	1	1	24	810616	92	8.9	0.75
3	1	1	24	810616	80	6.4	0.92
3	1	1	24	810616	61	2.7	1.12
3	1	1	24	810616	67	3.6	1.03
3	1	1	24	810616	91	9.8	0.86
3	1	1	24	810616	61	2.9	1.20
3	1	1	24	810616	70	4.1	0.99
3	1	1	24	810616	68	4	1.09
3	1	1	24	810616	50	1.2	1.07
3	1	1	24	810616	55	1.6	0.99
3	1	1	24	810616	60	2.5	1.10
3	1	1	24	810616	75	4.8	0.89
3	1	1	24	810616	93	8.8	0.71
3	1	1	24	810616	85	7.9	0.90
3	1	1	24	810616	69	3.9	1.00
3	1	1	24	810616	61	2.6	1.08
3	1	1	24	810616	68	3.3	0.90
3	1	1	24	810616	54	2	1.33
3	1	1	24	810616	68	2.8	0.76
3	1	1	24	810616	55	2	1.24
3	1	1	24	810616	52	1.7	1.31
3	1	1	24	810616	65	2	0.65
3	1	1	24	810616	54	1.7	1.13
3	1	3	24	810616	64	2.7	0.93
3	1	3	24	810616	51	1.4	1.16
3	1	1	25	810629	80	5.5	0.79
3	1	1	25	810629	68	4.8	1.30
3	1	1	25	810629	66	4	1.22
3	1	1	25	810629	84	7	0.84
3	1	1	25	810629	61	3.2	1.32
3	1	1	25	810629	77	6	1.00
3	1	1	25	810629	64	3.5	1.20
3	1	1	25	810629	78	5.5	0.88
3	1	1	25	810629	84	7.3	0.87
3	1	1	25	810629	86	7.7	0.84
3	1	1	25	810629	74	5.6	1.09
3	1	1	25	810629	72	4.9	1.06
3	1	1	25	810629	62	2.6	1.01
3	1	1	25	810629	61	3.3	1.36
3	1	1	25	810629	64	3.3	1.13
3	1	1	25	810629	70	3.7	0.90
3	1	1	25	810629	63	4	1.46

3	1	1	25	810629	65	3.8	1.23
3	1	1	25	810629	68	3.4	0.92
3	1	1	25	810629	63	3.7	1.35
3	2	1	4	800516	64	2.7	0.93
3	2	1	4	800516	44	0.7	1.03
3	2	1	4	800516	59	2.2	1.04
3	2	1	4	800516	45	0.7	0.94
3	2	1	4	800516	48	0.9	0.94
3	2	1	20	810409	48	0.9	0.94
3	2	1	21	810506	43	0.5	0.80
3	2	1	21	810506	60	2.4	1.06
3	2	1	21	810506	50	1.2	1.07
3	2	1	21	810506	46	0.9	1.11
3	2	1	21	810506	42	0.6	1.06
3	2	1	21	810506	47	1.1	1.25
3	2	1	21	810506	45	0.9	1.21
3	2	1	21	810506	40	0.6	1.28
3	2	1	21	810506	39	0.6	1.41
3	2	1	21	810506	43	0.9	1.45
3	2	1	21	810506	50	1.3	1.16
3	2	1	21	810506	43	0.6	0.96
3	2	1	21	810506	43	0.9	1.45
3	2	1	21	810506	39	0.6	1.41
3	2	1	21	810506	40	0.6	1.28
3	2	1	21	810506	36	0.6	1.92
3	2	1	21	810506	46	1	1.24
3	2	1	21	810506	43	0.8	1.28
3	2	1	21	810506	61	2.9	1.20
3	2	1	21	810506	41	0.7	1.35
3	2	1	21	810506	42	0.6	1.06
3	2	1	21	810506	39	0.6	1.41
3	2	1	21	810506	51	1.4	1.16
3	2	1	21	810506	40	0.6	1.28
3	2	1	21	810506	39	0.6	1.41
3	2	1	21	810506	44	0.6	0.88
3	3	1	21	810506	36	0.6	1.92
3	3	1	21	810506	37	0.5	1.44
3	4	1	23	810601	68	3.4	0.92
3	4	1	23	810601	54	1.8	1.19
3	4	1	23	810601	57	2	1.08
3	4	1	23	810601	65	2.8	0.90
3	4	1	23	810601	63	3.1	1.13
3	4	1	23	810601	51	1.4	1.16
3	4	1	23	810601	61	2.4	0.99

3	4	1	23	810601	65	2.8	0.90
3	4	1	23	810601	51	1.4	1.16
3	4	1	23	810601	54	1.3	0.86
3	4	1	23	810601	65	3.2	1.03
3	4	1	23	810601	68	3.4	0.92
3	5	1	4	800516	56	1.4	0.81
3	5	1	4	800516	41	0.6	1.16
3	5	1	4	800516	46	0.8	0.99
3	5	1	4	800516	60	1.7	0.75
3	5	1	4	800516	50	1	0.89
3	5	1	4	800516	53	1.5	1.07
3	5	1	4	800516	56	1.5	0.86
3	5	1	21	810506	46	0.6	0.74
3	5	1	21	810506	50	1.3	1.16
3	5	1	21	810506	47	1.1	1.25
3	5	1	21	810506	45	1.1	1.48
3	5	1	21	810506	59	2	0.94
3	5	1	21	810506	40	0.5	1.06
3	5	1	21	810506	45	1	1.35
3	5	1	21	810506	40	0.4	0.85
3	5	1	21	810506	50	1.3	1.16
3	5	1	21	810506	50	0.7	0.63
3	5	1	21	810506	47	0.9	1.02
3	5	1	21	810506	49	0.7	0.68
3	5	1	21	810506	45	0.5	0.67
3	5	1	21	810506	48	1.1	1.15
3	5	1	21	810506	46	1	1.24
3	5	1	21	810506	43	0.7	1.12
3	5	1	21	810506	41	0.8	1.55
3	5	1	21	810506	60	2.5	1.10
3	5	1	21	810506	52	1.4	1.08
3	5	1	21	810506	66	2.8	0.85
3	5	1	21	810506	44	0.7	1.03
3	5	1	21	810506	51	1.5	1.24
3	5	1	21	810506	48	1	1.05
3	5	1	24	810616	55	1.7	1.05
3	5	2	24	810616	99	11.6	0.73
3	6	1	23	810601	45	1	1.35
3	6	1	23	810601	92	8.7	0.73
3	6	1	23	810601	62	2.6	1.01
3	6	1	23	810601	55	2	1.24
3	6	1	23	810601	61	2.4	0.99
3	6	1	23	810601	58	2.2	1.11
3	6	1	23	810601	45	1.2	1.62

3	6	1	23	810601	53	1.7	1.21
3	7	1	4	800516	33	0.3	1.35
3	7	1	4	800516	48	1	1.05
3	7	1	22	810520	40	0.6	1.28
3	7	1	22	810520	50	1.2	1.07
3	7	1	22	810520	48	1.1	1.15
3	7	1	22	810520	47	1.1	1.25
3	7	1	22	810520	48	1.1	1.15
3	7	1	23	810601	64	2.7	0.93
3	7	1	23	810601	72	4.1	0.89
3	7	1	23	810601	59	2.2	1.04
3	7	1	23	810601	52	1.5	1.15
3	7	2	24	810616	55	1.6	0.99
3	1	2	2	800411	45		
3	1	2	2	800411	40		
3	1	2	2	800411	42		
1	1	2	2	800418	32		
1	1	2	2	800418	32		
1	1	2	2	800418	34		
3	1	2	2	800417	37		
3	1	2	2	800417	41		
3	1	2	2	800417	39		

x. C-O sole, *Pleuronichtys census*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	3	2	800417	48	1.85	

xi. Coho salmon, *Oncorhynchus kisutch*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	21	810507	91	8.8	0.99
1	1	1	21	810507	76	6	1.22
1	2	1	21	810507	57	1.3	0.68
1	2	1	21	810507	63	3.2	1.21
1	2	1	21	810507	64	3.1	1.11
1	2	1	21	810507	75	5.3	1.13
1	2	1	23	810603	85	7.4	1.04
1	4	1	21	810507	105	12.7	0.89
1	5	1	21	810507	86	8.2	1.11
2	5	1	23	810602	76	4.9	1.00
3	1	1	7	800628	93	5.84	0.61
3	4	1	23	810601	75	5.1	1.08
3	4	1	23	810601	120	23.4	1.06
3	4	1	23	810601	115	22.3	1.16
3	4	1	23	810601	69	4	1.12

3 7 1 7 800629 82 5.3 0.84

xii. Crescent gunnel, *Pholis laeta*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	2	800418	95	2.3	0.76
1	1	3	2	800418	112	4.7	0.94
1	1	1	3	800430	107	4.2	0.97
1	1	2	3	800430	96	3.7	1.19
1	1	3	3	800430	100	3.6	1.02
1	1	1	4	800515	79	1.3	0.76
1	1	3	4	800515	124	5.9	0.87
1	1	3	4	800515	107	5.1	1.18
2	2	1	23	810602	150	11.5	0.95
2	3	1	4	800514	107	4.1	0.94
2	6	1	25	810630	141	10.5	1.04
3	1	3	2	800411	92	1.75	0.64
3	1	1	8	800710	136	10.7	1.19
3	1	1	8	800710	128	8.1	1.08
3	1	1	8	800710	145	10.8	0.98
3	1	1	8	800710	79	1.7	0.99
3	1	1	8	800710	117	6.4	1.12
3	1	1	8	800710	136	9.4	1.04
3	1	1	8	800710	105	4.9	1.20
3	1	1	8	800710	100	3.9	1.10
3	1	1	8	800710	142	11.6	1.13
3	1	1	8	800710	110	4.4	0.93
3	1	1	8	800710	55	0.8	1.40
3	1	1	9	800728	113	5.7	1.11
3	1	1	9	800728	135	10.1	1.15
3	1	1	9	800728	147	13.6	1.19
3	1	1	9	800728	121	7.1	1.12
3	1	1	9	800728	86	2.2	0.99
3	1	1	9	800728	80	1.5	0.84
3	1	1	9	800728	89	2.6	1.05
3	1	1	9	800728	130	8.8	1.12
3	1	1	9	800728	76	1.8	1.18
3	1	1	9	800728	122	7.9	1.22
3	1	1	9	800728	67	1.1	1.06
3	1	1	9	800728	127	9.3	1.27
3	1	1	9	800728	78	1.6	0.97
3	1	1	9	800728	56	0.5	0.83
3	1	1	9	800728	159	17.8	1.23
3	1	1	9	800728	114	5.8	1.10
3	1	1	9	800728	59	0.9	1.27

3	1	1	9	800728	140	10.2	1.04
3	1	1	9	800728	66	1	1.01
3	1	1	9	800728	131	9.2	1.14
3	1	1	9	800728	129	8.4	1.09
3	1	1	10	800810	74	0.9	0.64
3	1	1	11	800905	89	2.2	0.89
3	1	1	11	800905	83	2	1.00
3	1	1	13	801027	130	9.3	1.18
3	1	1	13	801027	138	11.6	1.23
3	1	1	13	801027	145	12.5	1.14
3	1	1	14	801117	87	2.5	1.08
3	1	2	14	801117	89	2	0.81
3	1	2	14	801117	99	3.3	0.96
3	1	2	14	801117	106	4	0.95
3	1	2	14	801117	81	1.6	0.86
3	1	2	14	801117	102	4.1	1.09
3	1	2	14	801117	106	3.9	0.92
3	1	2	14	801117	96	2.9	0.93
3	1	2	14	801117	106	4.1	0.97
3	1	2	14	801117	98	2.9	0.87
3	1	2	14	801117	106	4.2	1.00
3	1	2	14	801117	94	2.9	0.99
3	1	2	14	801117	105	3.9	0.95
3	1	2	14	801117	96	2.7	0.87
3	1	2	14	801117	99	3.3	0.96
3	1	2	14	801117	91	2.4	0.91
3	1	2	14	801117	85	2.2	1.02
3	1	2	14	801117	93	2.5	0.88
3	1	2	14	801117	87	2.2	0.95
3	1	2	14	801117	101	3.4	0.93
3	1	2	14	801117	93	2.6	0.92
3	1	2	14	801117	106	3.2	0.76
3	1	2	14	801117	90	2.4	0.94
3	1	2	14	801117	90	2.8	1.09
3	1	2	14	801117	94	2.7	0.92
3	1	2	14	801117	100	3.2	0.91
3	1	2	14	801117	100	3.7	1.05
3	1	2	14	801117	103	3.3	0.85
3	1	2	14	801117	109	3.9	0.85
3	1	1	15	801208	95	3.4	1.13
3	1	1	15	801208	91	2.3	0.87
3	1	1	15	801208	96	2.7	0.87
3	1	1	15	801208	95	2.6	0.86
3	1	1	16	810120	86	2	0.90

3	1	1	22	810520	150	8.9	0.73
3	1	1	23	810601	167	13.1	0.78
3	1	1	23	810601	130	6.4	0.81
3	1	1	23	810601	183	19.1	0.86
3	1	1	23	810601	135	7.6	0.86
3	1	1	23	810601	170	15.3	0.86
3	1	1	23	810601	145	10	0.91
3	1	1	24	810616	103	3.6	0.93
3	1	1	24	810616	97	2.7	0.84
3	1	1	24	810616	94	2.9	0.99
3	1	1	24	810616	120	6.6	1.07
3	1	1	24	810616	98	3.4	1.02
3	1	1	24	810616	105	3.6	0.88
3	1	1	24	810616	86	1.9	0.85
3	1	1	24	810616	119	4.6	0.77
3	1	1	24	810616	100	3.2	0.91
3	1	1	24	810616	105	3.8	0.93
3	1	1	24	810616	96	2.8	0.90
3	1	1	24	810616	100	3.2	0.91
3	1	1	24	810616	87	2	0.87
3	1	1	24	810616	104	3.8	0.95
3	1	1	24	810616	103	3.4	0.88
3	1	1	24	810616	108	4	0.90
3	1	1	24	810616	44	0.4	1.39
3	1	1	24	810616	136	7.4	0.82
3	1	1	24	810616	121	5.6	0.89
3	1	1	24	810616	100	3.7	1.05
3	1	1	24	810616	58	0.6	0.89
3	1	1	24	810616	117	5.8	1.02
3	1	1	24	810616	106	3.9	0.92
3	1	1	24	810616	61	1	1.28
3	1	2	24	810616	108	4.3	0.96
3	1	2	24	810616	104	4.1	1.03
3	1	2	24	810616	102	3.9	1.04
3	1	2	24	810616	95	3	0.99
3	1	2	24	810616	109	4.6	1.00
3	1	2	24	810616	99	3.7	1.08
3	1	2	24	810616	106	3.6	0.85
3	1	2	24	810616	114	5.2	0.99
3	1	2	24	810616	101	3.7	1.02
3	1	2	24	810616	112	4.9	0.98
3	1	2	24	810616	111	4.5	0.93
3	1	2	24	810616	101	3.1	0.85
3	1	3	24	810616	110	5.7	1.21

3	1	3	24	810616	96	2.7	0.87
3	1	3	24	810616	67	0.7	0.67
3	1	3	24	810616	112	4.4	0.88
3	1	3	24	810616	150	10.9	0.90
3	1	3	24	810616	122	3.6	0.56
3	1	3	24	810616	94	2.2	0.75
3	1	3	24	810616	109	2.9	0.63
3	1	3	24	810616	128	7.6	1.01
3	1	3	24	810616	76	1.2	0.78
3	1	3	24	810616	114	4.8	0.91
3	1	3	24	810616	101	4.2	1.15
3	1	3	24	810616	53	0.4	0.79
3	1	3	24	810616	114	4.8	0.91
3	1	3	24	810616	100	3.4	0.96
3	1	3	24	810616	102	3.2	0.85
3	1	3	24	810616	113	4.5	0.88
3	1	3	24	810616	50	0.5	1.17
3	1	3	24	810616	98	3.7	1.11
3	1	3	24	810616	135	8.9	1.01
3	1	3	24	810616	80	1.4	0.78
3	1	3	24	810616	53	0.6	1.18
3	1	1	25	810629	111	6.3	1.30
3	1	1	25	810629	122	7.3	1.13
3	1	1	25	810629	127	8.1	1.11
3	2	1	7	800628	124	7.7	1.13
3	2	1	7	800628	156	16.69	1.22
3	2	1	9	800728	100	1.6	0.45
3	2	1	9	800728	194	27.4	1.03
3	2	1	9	800728	101	1.5	0.41
3	2	1	9	800728	132	7.2	0.87
3	2	1	9	800728	84	1.9	0.92
3	2	1	9	800728	73	1.5	1.11
3	2	1	13	801028	157	16.9	1.21
3	2	1	13	801028	151	14.6	1.18
3	2	1	13	801028	141	11.3	1.12
3	2	1	13	801028	137	11.3	1.23
3	2	1	13	801028	107	4.4	1.01
3	2	1	13	801028	141	12.8	1.27
3	2	1	13	801028	168	18	1.05
3	2	1	13	801028	110	5.9	1.25
3	2	1	13	801028	149	15	1.26
3	2	1	13	801028	95	3.4	1.13
3	2	1	13	801028	154	17.1	1.30
3	2	1	14	801117	91	2.9	1.10

3	2	1	14	801117	97	3.6	1.12
3	2	1	14	801117	100	2.3	0.65
3	2	1	14	801117	96	3.6	1.15
3	2	1	14	801117	95	3	0.99
3	2	2	14	801117	84	1.8	0.87
3	2	2	14	801117	96	3	0.96
3	2	2	14	801117	90	2.5	0.98
3	2	2	14	801117	86	2.4	1.08
3	2	2	14	801117	87	2.2	0.95
3	2	2	14	801117	91	2.9	1.10
3	2	2	14	801117	100	3.7	1.05
3	2	2	14	801117	90	2.6	1.02
3	2	2	14	801117	81	1.7	0.92
3	2	1	22	810520	120	5.7	0.93
3	2	1	22	810520	98	3.1	0.93
3	2	1	22	810520	100	3.5	0.99
3	2	1	23	810601	114	5.6	1.06
3	3	1	6	800613	46	0.4	1.21
3	3	1	6	800613	47	0.4	1.13
3	3	1	6	800613	55	0.7	1.23
3	3	1	6	800613	56	0.8	1.33
3	3	1	6	800613	50	0.5	1.17
3	3	1	6	800613	56	0.7	1.16
3	3	1	6	800613	53	0.6	1.18
3	3	1	6	800613	48	0.4	1.06
3	3	1	6	800613	64	1	1.10
3	3	1	6	800613	50	0.5	1.17
3	3	1	8	800710	172	21.2	1.15
3	3	1	8	800710	117	6.2	1.09
3	3	1	9	800728	88	1.8	0.75
3	3	1	9	800728	67	0.5	0.48
3	3	1	9	800728	76	1	0.65
3	3	1	9	800728	66	0.4	0.40
3	3	1	9	800728	137	8.2	0.89
3	3	1	9	800728	69	0.7	0.61
3	3	1	9	800728	67	0.5	0.48
3	3	1	25	810629	106	5	1.19
3	3	1	25	810629	116	7.2	1.30
3	3	1	25	810629	111	6	1.24
3	3	1	25	810629	71	1.5	1.21
3	3	1	25	810629	61	1	1.28
3	3	1	25	810629	66	1.4	1.41
3	3	1	25	810629	160	14.6	0.99
3	3	1	25	810629	172	20.2	1.09

3	3	1	25	810629	126	8.2	1.15
3	3	1	25	810629	70	1.5	1.26
3	3	1	25	810629	132	10.5	1.28
3	3	1	25	810629	115	6.3	1.16
3	3	1	25	810629	160	16.7	1.13
3	4	1	9	800728	87	2.4	1.04
3	4	1	9	800728	139	11.7	1.21
3	4	1	9	800728	61	0.7	0.90
3	4	1	9	800728	70	1.1	0.92
3	4	1	9	800728	130	9.2	1.17
3	4	1	9	800728	145	13.9	1.27
3	4	1	9	800728	82	1.9	0.99
3	4	1	9	800728	122	3.9	0.60
3	4	1	9	800728	64	1	1.10
3	4	1	9	800728	62	0.8	0.97
3	4	1	9	800728	64	0.8	0.88
3	4	1	9	800728	140	12.8	1.30
3	4	1	9	800728	58	0.7	1.04
3	4	1	9	800728	60	0.8	1.08
3	4	1	9	800728	62	0.8	0.97
3	4	1	9	800728	73	1.5	1.11
3	4	1	9	800728	72	1.2	0.93
3	4	1	9	800728	77	1.6	1.01
3	4	1	9	800728	72	1.3	1.00
3	4	1	10	800810	130	8.4	1.07
3	4	1	13	801028	155	15.4	1.15
3	4	1	13	801028	172	21.4	1.16
3	4	1	13	801028	106	4.2	1.00
3	4	1	13	801028	92	2.6	0.95
3	4	1	13	801028	156	15.3	1.12
3	4	1	23	810601	103	4.4	1.14
3	4	1	25	810629	125	8.7	1.25
3	4	1	25	810629	114	6.1	1.16
3	5	1	10	800810	83	2.2	1.10
3	5	1	13	801028	87	3.1	1.34
3	6	1	9	800728	132	9.8	1.19
3	7	1	8	800710	111	3.4	0.70
3	7	1	8	800710	92	2.5	0.91
3	7	1	8	800710	93	3.8	1.34
3	7	1	8	800710	115	6	1.11
3	7	1	9	800728	121	5.8	0.92
3	7	1	9	800728	130	7.7	0.98
3	7	1	9	800728	130	7.1	0.90
3	7	1	9	800728	116	5.9	1.06

3	7	1	9	800728	126	6.6	0.92
3	7	1	9	800728	135	8.9	1.01
3	7	1	9	800728	136	8.6	0.95
3	7	1	10	800810	122	5.6	0.86
3	7	1	10	800810	63	0.8	0.93
3	7	1	13	801028	77	2.1	1.32
3	7	1	13	801028	84	2.5	1.21
3	7	1	13	801028	79	1.9	1.10
3	7	1	13	801028	83	2.6	1.30
3	7	1	18	810305	60	0.6	0.81
3	7	1	22	810520	41	0.3	1.29
3	7	1	24	810616	36	0.2	1.28
3	7	1	24	810616	90	2.3	0.90
3	7	1	24	810616	86	2.1	0.94
3	7	1	24	810616	101	2.9	0.80
3	7	2	24	810616	96	2.9	0.93
3	7	2	24	810616	115	5.2	0.96
3	7	2	24	810616	125	7	1.00
3	7	2	24	810616	135	9	1.02
3	7	2	24	810616	99	3.2	0.93
3	7	2	24	810616	80	1.7	0.95
3	7	2	24	810616	107	5.7	1.31
3	7	2	24	810616	120	5.5	0.89
3	7	2	24	810616	106	4.3	1.02
3	7	3	24	810616	137	9.1	0.99
3	7	3	24	810616	60	0.8	1.08
3	7	3	24	810616	157	14	1.00
3	7	3	24	810616	96	3.2	1.03
3	7	3	24	810616	112	4.6	0.92
3	7	3	24	810616	54	0.6	1.11
3	7	3	24	810616	156	19.4	1.42
3	7	3	24	810616	81	1.5	0.81
3	7	3	24	810616	178	17.2	0.84
3	7	3	24	810616	57	0.7	1.10
3	7	3	24	810616	127	7.2	0.98
3	7	2	25	810629	56	1.7	2.82
3	7	2	25	810629	127	8.4	1.15
3	7	2	25	810629	117	7.9	1.39
3	7	2	25	810629	82	2.3	1.19
3	7	2	25	810629	62	0.8	0.97
3	7	2	25	810629	62	0.9	1.10

xiii. English sole, *Parophrys vetulus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
------	------	-----	--------	---------------	-------------	------------	------

1	1	2	2	800418	60	1.7	0.75
1	1	3	2	800418	64	2.3	0.84
1	1	3	2	800418	58	1.9	0.93
1	1	1	12	800925	108	11.4	0.93
1	1	1	22	810519	63	2.7	1.04
1	2	1	14	801118	115	16.4	1.11
1	5	1	22	810519	25	0.3	1.65
1	5	1	22	810519	24	0.2	1.24
2	1	1	10	800809	108	11.7	0.95
2	1	1	21	810505	72	3.2	0.84
2	1	1	21	810505	73	4.3	1.08
2	1	1	23	810602	46	1	0.95
2	1	1	23	810602	25	0.1	0.55
2	1	1	23	810602	31	0.3	0.89
2	2	1	24	810617	56	1.9	1.02
2	2	1	24	810617	46	0.9	0.85
2	2	1	24	810617	36	0.5	0.96
2	2	1	24	810617	51	1.5	1.06
2	2	1	25	810630	55	1.8	1.02
2	2	1	25	810630	49	1.4	1.11
2	2	1	25	810630	118	18.1	1.14
2	2	1	25	810630	51	1.4	0.99
2	2	1	25	810630	50	1.4	1.05
2	2	1	25	810630	115	14.7	1.00
2	3	1	8	800711	68	2.1	0.65
2	3	1	8	800711	69	3.4	1.00
2	3	1	25	810630	63	2.9	1.11
2	4	1	25	810630	55	2.8	1.59
2	4	1	25	810630	154	47.8	1.40
2	4	1	25	810630	53	2.5	1.58
2	4	1	25	810630	74	4.9	1.18
2	4	1	25	810630	172	60.8	1.29
2	5	1	8	800711	62	2.3	0.92
2	5	1	23	810602	87	6.2	0.94
2	6	2	5	800529	55	2	1.14
2	6	2	5	800529	57	2.3	1.18
2	6	2	5	800529	97	9.8	1.09
2	6	3	5	800529	32	0.2	0.54
2	6	3	5	800529	82	6.3	1.13
2	6	3	5	800529	75	4.5	1.05
2	6	3	5	800529	53	1.4	0.88
2	6	2	6	800612	86	7.2	1.13
2	6	2	6	800612	83	6.5	1.13
2	6	1	7	800627	107	10.6	0.89

2	6	1	7	800627	73	4.3	1.08
2	6	1	7	800627	71	2.3	0.63
2	6	4	7	800627	37	0.5	0.89
2	6	1	12	800923	79	4.7	0.94
2	6	1	12	800923	53	1.5	0.95
2	6	1	12	800923	95	6.7	0.79
2	6	1	12	800923	50	1.2	0.90
2	6	2	12	800923	68	2.7	0.83
2	6	3	12	800923	52	1.2	0.80
2	6	3	12	800923	76	4.1	0.92
2	6	1	16	810119	80	5	0.96
2	6	3	18	810304	47	1.1	0.98
2	6	3	18	810304	41	0.8	1.06
2	6	3	18	810304	39	0.6	0.92
2	6	1	22	810521	23	0.2	1.40
2	6	1	22	810521	47	1.1	0.98
2	6	1	22	810521	69	3.3	0.97
2	6	1	22	810521	22	0.1	0.79
2	6	2	22	810521	21	0.1	0.91
2	6	2	22	810521	44	0.9	0.97
2	6	2	22	810521	73	4.1	1.03
2	6	3	22	810521	23	0.1	0.70
2	6	1	24	810617	36	0.6	1.15
2	6	1	24	810617	56	1.9	1.02
2	6	2	24	810617	41	0.8	1.06
2	6	2	24	810617	45	0.9	0.91
2	6	2	24	810617	41	1	1.32
2	6	3	24	810617	35	0.6	1.25
2	6	3	24	810617	39	0.8	1.22
2	6	3	24	810617	36	0.6	1.15
2	6	3	24	810617	72	3.8	0.99
2	6	3	24	810617	31	0.4	1.18
2	6	3	24	810617	33	0.5	1.24
2	6	3	24	810617	44	0.9	0.97
2	6	1	25	810630	47	1.1	0.98
2	6	1	25	810630	42	0.7	0.86
2	6	1	25	810630	31	0.3	0.89
2	6	1	25	810630	53	1.7	1.07
2	6	1	25	810630	49	1.2	0.95
2	6	1	25	810630	49	1.2	0.95
2	6	1	25	810630	45	0.9	0.91
2	6	1	25	810630	57	2.1	1.08
2	6	1	25	810630	59	1.9	0.88
3	1	1	1	800320	132	21.2	0.97

3	1	2	1	800320	113	14.67	1.05
3	1	2	1	800320	62	1.47	0.59
3	1	2	1	800320	59	1.51	0.70
3	1	2	1	800320	48	0.77	0.65
3	1	2	1	800320	45	0.45	0.46
3	1	3	1	800320	62	2.24	0.90
3	1	3	1	800320	25	0.09	0.49
3	1	3	1	800320	52	0.91	0.61
3	1	3	1	800320	32	0.38	1.03
3	1	3	1	800320	44	0.71	0.77
3	1	3	1	800320	49	0.68	0.54
3	1	3	1	800320	49	0.68	0.54
3	1	2	2	800411	70	2.8	0.79
3	1	2	2	800411	54	1.1	0.66
3	1	2	2	800411	54	1.15	0.69
3	1	2	2	800411	55	1.1	0.62
3	1	2	2	800411	50	0.85	0.63
3	1	2	2	800411	41	0.45	0.60
3	1	2	2	800411	49	0.75	0.59
3	1	2	2	800411	64	2	0.73
3	1	2	2	800411	57	1.5	0.77
3	1	2	2	800411	47	0.85	0.76
3	1	3	2	800411	57	1.6	0.82
3	1	3	2	800411	59	1.7	0.79
3	1	3	2	800411	31	0.3	0.89
3	1	3	2	800411	46	1	0.95
3	1	3	2	800411	70	2.9	0.82
3	1	3	2	800411	63	2.2	0.84
3	1	1	2	800417	27	0.2	0.88
3	1	1	2	800417	17	0.05	0.83
3	1	1	2	800417	27	0.15	0.66
3	1	2	2	800417	43	0.9	1.04
3	1	2	2	800417	35	0.5	1.04
3	1	2	2	800417	59	2.05	0.95
3	1	2	2	800417	31	0.45	1.33
3	1	3	2	800417	103	13.2	1.23
3	1	3	2	800417	47	1.15	1.03
3	1	3	2	800417	57	1.55	0.79
3	1	3	2	800417	46	1.05	1.00
3	1	3	2	800417	40	0.75	1.07
3	1	3	2	800417	44	1.05	1.13
3	1	3	2	800417	67	2.85	0.92
3	1	3	2	800417	31	0.35	1.04
3	1	3	2	800417	59	2.3	1.07

3	1	3	2	800417	67	2.85	0.92
3	1	3	2	800417	31	0.45	1.33
3	1	3	2	800417	48	1.35	1.13
3	1	3	2	800417	45	1.1	1.11
3	1	3	2	800417	33	0.55	1.36
3	1	3	2	800417	29	0.35	1.26
3	1	3	2	800417	41	0.75	0.99
3	1	3	2	800417	63	2.5	0.96
3	1	3	2	800417	73	3.95	0.99
3	1	3	2	800417	26	0.25	1.23
3	1	3	2	800417	29	0.3	1.08
3	1	1	5	800530	40	0.53	0.75
3	1	1	5	800530	65	2.8	0.98
3	1	1	5	800530	55	1.61	0.91
3	1	1	17	810216	40	0.6	0.85
3	1	1	17	810216	35	0.4	0.83
3	1	1	18	810305	36	0.5	0.96
3	1	1	18	810305	36	0.4	0.77
3	1	1	18	810305	50	1.2	0.90
3	1	2	18	810305	41	1	1.32
3	1	2	18	810305	37	0.7	1.24
3	1	1	19	810323	44	1	1.08
3	1	1	20	810409	23	0.1	0.70
3	1	1	20	810409	51	1.5	1.06
3	1	1	20	810409	34	0.5	1.13
3	1	2	20	810409	25	0.2	1.10
3	1	2	20	810409	33	0.7	1.73
3	1	1	21	810506	42	0.9	1.11
3	1	1	21	810506	32	0.3	0.81
3	1	1	21	810506	31	0.3	0.89
3	1	1	22	810520	65	3	1.05
3	1	1	22	810520	25	0.2	1.10
3	1	1	22	810520	48	0.9	0.76
3	1	1	22	810520	24	0.2	1.24
3	1	1	23	810601	35	0.5	1.04
3	1	3	24	810616	41	0.5	0.66
3	1	3	24	810616	69	3.2	0.95
3	1	3	24	810616	65	3.1	1.09
3	1	3	24	810616	37	0.5	0.89
3	1	3	24	810616	61	2.3	0.97
3	1	3	24	810616	61	2.6	1.10
3	1	1	25	810629	55	2	1.14
3	2	1	6	800613	60	2.2	0.97
3	2	1	6	800613	57	2.2	1.13

3	2	1	6	800613	56	2.2	1.19
3	2	1	10	800810	79	5.1	1.02
3	2	1	10	800810	84	6.3	1.06
3	2	1	10	800810	108	12.1	0.98
3	2	1	10	800810	79	4.8	0.96
3	2	1	10	800810	80	5.3	1.02
3	2	1	10	800810	92	7.6	0.98
3	2	1	10	800810	84	5.2	0.87
3	2	1	10	800810	108	12.9	1.05
3	2	1	10	800810	70	3.6	1.02
3	2	1	10	800810	83	5.3	0.92
3	2	1	11	800905	73	3.8	0.95
3	2	1	11	800905	53	1.3	0.82
3	2	1	11	800905	75	4.2	0.98
3	2	1	11	800905	79	4.8	0.96
3	2	1	11	800905	97	5.5	0.61
3	2	1	11	800905	94	4.4	0.53
3	2	1	11	800905	58	1.8	0.88
3	2	1	12	800924	103	10.7	1.00
3	2	1	12	800924	105	12	1.06
3	2	1	13	801028	86	6	0.94
3	2	1	16	810120	129	22.5	1.10
3	2	1	16	810120	110	13.2	1.02
3	2	1	16	810120	109	12.4	0.98
3	2	1	16	810120	100	8.9	0.90
3	2	1	16	810120	100	11.3	1.15
3	2	1	16	810120	129	22.54	1.10
3	2	1	16	810120	123	18.1	1.01
3	2	1	18	810305	55	2	1.14
3	2	1	18	810305	36	0.6	1.15
3	2	2	18	810305	41	0.6	0.79
3	2	2	18	810305	42	0.8	0.99
3	2	2	18	810305	40	0.8	1.14
3	2	2	18	810305	66	3.2	1.07
3	2	2	18	810305	37	0.4	0.71
3	2	1	20	810409	39	0.7	1.07
3	2	1	20	810409	40	0.7	0.99
3	2	1	20	810409	38	0.7	1.15
3	2	1	20	810409	64	3.3	1.21
3	2	1	20	810409	60	1.9	0.84
3	2	1	20	810409	72	4.3	1.12
3	2	1	20	810409	38	0.5	0.82
3	2	1	20	810409	35	0.4	0.83
3	2	1	20	810409	46	1.3	1.23

3	2	1	20	810409	30	0.2	0.65
3	2	1	20	810409	59	1.9	0.88
3	2	1	20	810409	55	1.9	1.08
3	2	1	22	810520	48	1.3	1.09
3	2	1	22	810520	54	1.8	1.08
3	2	1	22	810520	44	1	1.08
3	2	1	22	810520	35	0.6	1.25
3	2	1	22	810520	49	1.4	1.11
3	2	1	22	810520	56	2.1	1.13
3	2	1	22	810520	88	7.7	1.13
3	2	1	22	810520	58	2.3	1.12
3	2	1	22	810520	51	1.8	1.27
3	2	1	22	810520	50	1.4	1.05
3	2	1	22	810520	93	9.6	1.20
3	2	1	22	810520	61	2.9	1.22
3	2	1	22	810520	77	5.3	1.14
3	2	1	22	810520	65	3.5	1.23
3	2	1	23	810601	41	0.7	0.93
3	2	1	23	810601	46	1.1	1.04
3	2	1	23	810601	55	1.7	0.96
3	2	1	23	810601	39	0.6	0.92
3	2	1	23	810601	44	0.9	0.97
3	2	1	23	810601	55	1.8	1.02
3	2	1	23	810601	49	1.2	0.95
3	2	1	23	810601	51	1.4	0.99
3	2	1	23	810601	56	1.9	1.02
3	2	1	23	810601	53	1.5	0.95
3	3	1	6	800613	44	1.1	1.19
3	3	1	6	800613	75	4.4	1.02
3	3	1	6	800613	62	2.9	1.17
3	3	1	6	800613	52	1.7	1.13
3	3	1	6	800613	74	4.9	1.18
3	3	1	6	800613	96	9.3	1.06
3	3	1	6	800613	32	0.5	1.35
3	3	1	6	800613	65	3.1	1.09
3	3	1	6	800613	43	0.9	1.04
3	3	1	6	800613	73	4.1	1.03
3	3	1	6	800613	34	0.6	1.36
3	3	1	6	800613	38	0.7	1.15
3	3	1	6	800613	38	0.8	1.32
3	3	1	6	800613	65	3.1	1.09
3	3	1	6	800613	32	0.5	1.35
3	3	1	6	800613	42	0.9	1.11
3	3	1	6	800613	39	0.6	0.92

3	3	1	6	800613	49	1.2	0.95
3	3	1	6	800613	44	1.1	1.19
3	3	1	6	800613	62	2.7	1.09
3	3	1	6	800613	70	3.7	1.05
3	3	1	6	800613	46	1.2	1.14
3	3	1	6	800613	110	13.6	1.05
3	3	1	6	800613	48	1.2	1.01
3	3	1	7	800628	73	3.8	0.95
3	3	1	7	800628	105	6.7	0.59
3	3	1	7	800628	60	1.6	0.71
3	3	1	8	800710	121	17.9	1.05
3	3	1	8	800710	109	12.4	0.98
3	3	1	8	800710	109	9.4	0.74
3	3	1	8	800710	57	1	0.51
3	3	1	8	800710	56	1.4	0.75
3	3	1	8	800710	95	7	0.82
3	3	1	8	800710	64	1.7	0.62
3	3	1	8	800710	57	1	0.51
3	3	1	9	800728	137	33.1	1.36
3	3	1	9	800728	128	22.8	1.14
3	3	1	9	800728	168	71.9	1.64
3	3	1	9	800728	144	33.8	1.20
3	3	1	9	800728	149	36.8	1.18
3	3	1	21	810506	55	1.1	0.62
3	3	1	21	810506	59	2.1	0.97
3	3	1	21	810506	67	2.8	0.90
3	3	1	21	810506	72	3.8	0.99
3	3	1	21	810506	37	0.6	1.07
3	3	1	21	810506	63	3	1.15
3	3	1	21	810506	64	2.8	1.03
3	3	1	21	810506	77	4.8	1.03
3	3	1	21	810506	61	1.9	0.80
3	3	1	21	810506	54	1.6	0.96
3	3	1	21	810506	81	6.1	1.14
3	3	1	25	810629	81	6.8	1.27
3	3	1	25	810629	118	17.3	1.09
3	3	1	25	810629	62	3.7	1.49
3	3	1	25	810629	56	2.9	1.56
3	3	1	25	810629	45	1.1	1.11
3	3	1	25	810629	54	2.8	1.68
3	3	1	25	810629	66	3.5	1.18
3	3	1	25	810629	52	2.6	1.73
3	3	1	25	810629	85	7.8	1.26
3	3	1	25	810629	88	7.2	1.06

3	3	1	25	810629	95	10.8	1.27
3	3	1	25	810629	61	3.6	1.52
3	3	1	25	810629	44	1.9	2.05
3	3	1	25	810629	98	11.6	1.25
3	3	1	25	810629	41	1	1.32
3	3	1	25	810629	40	0.8	1.14
3	4	1	6	800613	67	3.1	1.00
3	4	1	7	800628	83	5.5	0.95
3	4	1	7	800628	83	7	1.21
3	4	1	7	800628	55	1.9	1.08
3	4	1	7	800628	62	2.6	1.05
3	4	1	8	800710	55	1.8	1.02
3	4	1	8	800710	64	1.4	0.51
3	4	1	8	800710	45	0.7	0.71
3	4	1	8	800710	60	2	0.88
3	4	1	8	800710	53	1.5	0.95
3	4	1	8	800710	74	4.2	1.01
3	4	1	8	800710	110	13.9	1.07
3	4	1	8	800710	47	1	0.89
3	4	1	8	800710	48	1	0.84
3	4	1	8	800710	48	1.2	1.01
3	4	1	8	800710	48	1.1	0.92
3	4	1	8	800710	60	2.2	0.97
3	4	1	8	800710	55	1.6	0.91
3	4	1	8	800710	66	3.3	1.11
3	4	1	8	800710	47	0.9	0.80
3	4	1	8	800710	58	1.9	0.93
3	4	1	8	800710	57	1.9	0.97
3	4	1	8	800710	50	1.2	0.90
3	4	1	8	800710	63	2.5	0.96
3	4	1	8	800710	43	0.5	0.58
3	4	1	8	800710	62	2.4	0.96
3	4	1	8	800710	68	3.1	0.96
3	4	1	8	800710	66	2.9	0.97
3	4	1	8	800710	50	1.1	0.82
3	4	1	8	800710	72	3.9	1.02
3	4	1	9	800728	85	6.5	1.05
3	4	1	9	800728	64	2.4	0.88
3	4	1	9	800728	40	0.6	0.85
3	4	1	9	800728	67	3	0.96
3	4	1	9	800728	81	5.8	1.08
3	4	1	10	800810	83	5.7	0.99
3	4	1	10	800810	60	2.2	0.97
3	4	1	13	801028	102	10.9	1.04

3	4	1	21	810506	80	5.3	1.02
3	4	1	21	810506	57	1.9	0.97
3	4	1	21	810506	72	3.9	1.02
3	4	1	21	810506	86	6.9	1.08
3	4	1	21	810506	71	3.7	1.01
3	4	1	21	810506	24	0.2	1.24
3	4	1	21	810506	69	3.7	1.09
3	4	1	21	810506	64	2.8	1.03
3	4	1	23	810601	89	8	1.14
3	4	1	23	810601	37	0.6	1.07
3	4	1	25	810629	44	0.9	0.97
3	4	1	25	810629	49	1.5	1.19
3	4	1	25	810629	81	5.9	1.10
3	4	1	25	810629	74	4.5	1.09
3	4	1	25	810629	39	0.6	0.92
3	4	1	25	810629	52	1.6	1.07
3	4	1	25	810629	105	13.5	1.19
3	4	1	25	810629	115	15.3	1.04
3	4	1	25	810629	40	0.8	1.14
3	4	1	25	810629	38	0.5	0.82
3	4	1	25	810629	45	1	1.01
3	4	1	25	810629	36	0.7	1.35
3	4	1	25	810629	42	0.8	0.99
3	4	1	25	810629	93	9	1.13
3	4	1	25	810629	46	1.3	1.23
3	4	1	25	810629	40	0.6	0.85
3	4	1	25	810629	89	7.6	1.08
3	4	1	25	810629	49	1.4	1.11
3	4	1	25	810629	39	0.6	0.92
3	4	1	25	810629	42	0.8	0.99
3	5	1	6	800613	62	2.9	1.17
3	5	1	6	800613	50	1.5	1.12
3	5	1	6	800613	50	1.6	1.20
3	5	1	7	800628	79	4.8	0.96
3	5	1	7	800628	77	4.9	1.06
3	5	1	7	800628	72	4	1.05
3	5	1	7	800628	119	16.5	1.01
3	5	1	7	800628	60	2.4	1.06
3	5	1	7	800628	59	2.3	1.07
3	5	1	7	800628	61	2.3	0.97
3	5	1	7	800628	51	1.5	1.06
3	5	1	7	800628	122	19.8	1.13
3	5	1	7	800628	59	2.3	1.07
3	5	1	9	800728	62	2	0.80

3	5	1	9	800728	75	4.2	0.98
3	5	1	9	800728	73	3.2	0.80
3	5	1	9	800728	78	3.6	0.75
3	5	1	9	800728	72	3.2	0.84
3	5	1	9	800728	54	1.1	0.66
3	5	1	9	800728	69	3.6	1.06
3	5	1	9	800728	73	3.3	0.83
3	5	1	9	800728	79	4.7	0.94
3	5	1	9	800728	69	3.1	0.92
3	5	1	9	800728	77	3.8	0.82
3	5	1	9	800728	52	1.1	0.73
3	5	1	21	810506	57	1.2	0.61
3	5	1	21	810506	49	1.4	1.11
3	5	1	21	810506	67	1.6	0.51
3	5	1	21	810506	54	0.7	0.42
3	5	1	21	810506	76	5.4	1.21
3	5	1	21	810506	54	1.7	1.02
3	5	1	21	810506	52	1	0.67
3	5	1	21	810506	65	2.9	1.02
3	5	1	21	810506	81	5.3	0.99
3	5	1	21	810506	64	1.8	0.66
3	5	2	24	810616	39	0.7	1.07
3	5	2	24	810616	61	2.5	1.05
3	5	2	24	810616	54	1.8	1.08
3	5	2	24	810616	32	0.4	1.08
3	5	2	24	810616	38	0.5	0.82
3	5	3	24	810616	39	0.6	0.92
3	5	3	24	810616	59	2.5	1.16
3	5	3	24	810616	35	0.4	0.83
3	5	1	25	810629	29	0.4	1.43
3	5	1	25	810629	55	2	1.14
3	5	1	25	810629	67	3	0.96
3	5	1	25	810629	31	0.5	1.48
3	5	1	25	810629	48	1.3	1.09
3	5	1	25	810629	39	0.7	1.07
3	5	1	25	810629	55	2	1.14
3	5	1	25	810629	35	0.6	1.25
3	5	1	25	810629	56	1.8	0.97
3	5	1	25	810629	71	4.3	1.17
3	5	1	25	810629	32	0.5	1.35
3	5	1	25	810629	95	9.4	1.11
3	5	1	25	810629	43	1	1.15
3	5	1	25	810629	44	1.1	1.19
3	5	1	25	810629	43	1.1	1.27

3	5	1	25	810629	66	3.4	1.14
3	5	1	25	810629	68	3.7	1.14
3	5	1	25	810629	61	2.7	1.14
3	5	1	25	810629	67	3.4	1.09
3	6	1	6	800613	110	15.1	1.16
3	6	1	6	800613	74	4.1	0.99
3	6	1	6	800613	109	12.8	1.01
3	6	1	6	800613	58	2	0.97
3	6	1	6	800613	49	1.2	0.95
3	6	1	6	800613	60	2.1	0.93
3	6	1	6	800613	59	2.2	1.02
3	6	1	7	800629	63	1.9	0.73
3	6	1	13	801028	90	7.1	0.98
3	6	1	13	801028	70	3.2	0.91
3	6	1	13	801028	48	1.1	0.92
3	6	1	13	801028	114	13.7	0.95
3	6	1	13	801028	79	4.6	0.92
3	6	1	21	810506	61	2.6	1.10
3	6	1	21	810506	76	3.2	0.72
3	6	1	21	810506	67	3.5	1.13
3	6	1	21	810506	66	2.5	0.84
3	6	1	21	810506	80	5	0.96
3	6	1	21	810506	76	3.7	0.83
3	6	1	21	810506	61	2.6	1.10
3	6	1	21	810506	83	6.1	1.06
3	6	1	21	810506	84	6.4	1.07
3	6	1	21	810506	80	4.7	0.91
3	6	1	21	810506	66	1.9	0.64
3	6	1	21	810506	85	6.2	1.00
3	6	1	21	810506	80	5.7	1.10
3	6	1	23	810601	72	4.2	1.10
3	6	1	23	810601	65	2.9	1.02
3	6	1	23	810601	69	3.5	1.03
3	6	1	23	810601	49	1.3	1.03
3	6	1	23	810601	50	1.5	1.12
3	6	1	23	810601	56	1.9	1.02
3	6	1	23	810601	59	2.3	1.07
3	6	1	23	810601	47	1.3	1.16
3	6	1	23	810601	51	1.5	1.06
3	6	1	23	810601	64	2.8	1.03
3	7	1	6	800613	48	1.6	1.34
3	7	1	6	800613	53	1.55	0.98
3	7	1	6	800613	53	1.2	0.76
3	7	1	7	800629	85	5.2	0.84

3	7	1	7	800629	52	1.3	0.87
3	7	1	7	800629	59	1.9	0.88
3	7	1	7	800629	50	1.3	0.97
3	7	1	7	800629	76	4.6	1.03
3	7	1	7	800629	50	0.8	0.60
3	7	1	7	800629	52	1.3	0.87
3	7	1	7	800629	110	11.1	0.86
3	7	1	8	800710	48	1	0.84
3	7	2	8	800710	72	3.9	1.02
3	7	2	8	800710	49	1.3	1.03
3	7	1	10	800810	92	7.8	1.01
3	7	1	11	800905	79	4.8	0.96
3	7	1	11	800905	86	5.6	0.88
3	7	1	11	800905	75	3	0.70
3	7	1	15	801209	140	27.7	1.07
3	7	1	18	810305	36	0.5	0.96
3	7	1	18	810305	29	0.3	1.08
3	7	1	18	810305	36	0.5	0.96
3	7	1	18	810305	40	0.8	1.14
3	7	1	18	810305	29	0.3	1.08
3	7	1	18	810305	38	0.6	0.99
3	7	2	18	810305	37	0.6	1.07
3	7	2	18	810305	38	0.5	0.82
3	7	2	18	810305	24	0.2	1.24
3	7	1	22	810520	105	12	1.06
3	7	1	22	810520	40	0.7	0.99
3	7	1	22	810520	22	0.2	1.59
3	7	1	22	810520	21	0.2	1.82
3	7	1	22	810520	36	0.6	1.15
3	7	1	22	810520	37	0.6	1.07
3	7	1	22	810520	101	12	1.18
3	7	1	22	810520	32	0.4	1.08
3	7	1	22	810520	69	3.9	1.15
3	7	1	22	810520	50	1.4	1.05
3	7	1	23	810601	54	1.9	1.14
3	7	1	23	810601	59	2.3	1.07
3	7	1	23	810601	56	2.1	1.13
3	7	1	23	810601	56	2	1.08
3	7	1	23	810601	54	1.9	1.14
3	7	1	23	810601	24	0.1	0.62
3	7	1	23	810601	61	2.6	1.10
3	7	1	25	810629	60	2.3	1.02
3	7	1	25	810629	68	3.5	1.08
3	7	1	25	810629	46	1.2	1.14

3	7	1	25	810629	65	3.2	1.12
3	7	1	25	810629	46	1	0.95
3	7	1	25	810629	63	2.8	1.07
3	7	1	25	810629	65	3.3	1.16
3	7	1	25	810629	64	2.9	1.06
3	7	1	25	810629	53	1.7	1.07
3	7	1	25	810629	54	2	1.20
3	7	1	25	810629	47	1.2	1.07
3	7	1	25	810629	55	1.8	1.02
3	7	1	25	810629	56	2.1	1.13
3	7	1	25	810629	65	3.2	1.12
3	7	1	25	810629	68	3.6	1.11
3	7	1	25	810629	60	2.4	1.06
3	7	1	25	810629	66	3.1	1.04
3	7	1	25	810629	43	1	1.15
3	7	1	25	810629	44	1	1.08
3	7	1	25	810629	45	0.9	0.91
3	7	1	25	810629	55	1.8	1.02
3	7	2	25	810629	58	2.7	1.32
3	7	2	25	810629	68	4	1.23
3	7	2	25	810629	39	1.2	1.83
3	7	2	25	810629	46	1.7	1.61
3	7	2	25	810629	45	1.4	1.42
3	7	2	25	810629	44	1.5	1.62
3	7	2	25	810629	43	1.5	1.73
3	7	2	25	810629	52	2.1	1.40
3	7	2	25	810629	43	1.5	1.73
3	7	2	25	810629	53	2.2	1.39
3	7	2	25	810629	63	3.4	1.31
3	7	2	25	810629	59	2.7	1.25
3	7	2	25	810629	60	3	1.33
3	1	2	2	800411	25		
3	1	2	2	800411	21		
3	1	2	2	800411	22		
3	1	2	2	800411	23		
3	1	2	2	800411	23		
3	1	2	2	800411	20		
3	1	3	2	800417	26		
3	3	1	8	800710	47		
3	3	1	8	800710	50		
3	3	1	8	800710	50		
3	3	1	8	800710	47		
3	3	1	8	800710	53		
3	3	1	8	800710	46		

3	3	1	8	800710	54
3	3	1	8	800710	55
3	3	1	8	800710	47
3	3	1	8	800710	46

xiv. Flathead sole, *Hippoglossoides elassodon*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	7	1	13	801028	43	1	
3	7	1	13	801028	49	1.7	
3	7	1	13	801028	41	0.9	
3	7	1	13	801028	44	1.2	

xv. Great sculpin, *Myoxocephalus polyacanthocephalus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	2	24	810616	39	1.2	2.86
3	1	2	24	810616	38	0.9	2.29
3	1	2	24	810616	38	0.9	2.29
3	1	2	24	810616	34	0.9	3.05
3	1	2	24	810616	46	1.8	2.80
3	7	2	24	810616	38	1	2.54
3	7	2	24	810616	47	1.8	2.65

xvi. High cockscomb, *Anoplarchus purpurescens*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	15	801208	81	1.8	0.74
3	1	1	16	810120	83	2	0.78
3	1	1	17	810216	76	1.6	0.74
3	1	2	24	810616	69	2.4	1.32
3	2	1	14	801117	60	1.5	1.07
3	2	2	14	801117	77	2.4	1.08
3	7	1	18	810305	89	4.7	1.61
3	7	3	24	810616	56	1.2	0.98

xvii. Kelp greenling, *Hexagrammos decogrammus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	24	810616	42	0.8	

xviii. Largescale sucker, *Catostomus macrocheilus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	2	1	7	800626	110	20.4	
1	2	1	7	800626	110	20.4	

xix. Lobefin snailfish, *Polypera greeni*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	25	810629	152	71.8	

xx. Masked greenling, *Hexagrammos octogrammus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	3	1	8	800710	120	16.5	

xxi. Pacific herring, *Clupea harengus pallasii*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	6	800611	49	1.2	1.26
1	1	1	7	800626	28	0.2	1.21
1	1	1	7	800626	54	1.2	0.93
1	1	1	7	800626	50	1	0.98
1	1	1	7	800626	53	1.3	1.06
1	1	1	7	800626	54	1.3	1.00
1	1	1	7	800626	55	1.8	1.31
1	1	1	7	800626	47	0.8	0.95
1	1	1	9	800730	37	0.3	0.76
1	1	1	9	800730	38	0.3	0.70
1	1	1	9	800730	46	0.5	0.64
1	1	1	9	800730	43	0.4	0.63
1	1	1	9	800730	37	0.3	0.76
1	1	1	9	800730	34	0.3	0.99
1	1	1	9	800730	34	0.2	0.66
1	1	1	9	800730	33	0.2	0.72
1	1	1	9	800730	46	0.6	0.77
1	1	1	9	800730	47	0.7	0.84
1	1	1	9	800730	33	0.2	0.72
1	1	1	9	800730	42	0.5	0.85
1	1	1	9	800730	37	0.2	0.51
1	1	1	9	800730	44	0.3	0.44
1	1	1	9	800730	31	0.1	0.44
1	1	1	9	800730	44	0.6	0.88
1	1	1	10	800811	57	1.5	0.98
1	1	1	10	800811	52	1.1	0.96
1	1	1	10	800811	48	0.8	0.89
1	1	1	10	800811	53	1.3	1.06
1	1	1	10	800811	50	0.9	0.88
1	1	1	10	800811	50	0.9	0.88
1	1	1	10	800811	58	1.6	0.99
1	1	1	10	800811	49	0.6	0.63
1	1	1	10	800811	53	1.1	0.90
1	1	1	10	800811	54	1.2	0.93

1	1	1	10	800811	48	0.9	1.01
1	1	1	10	800811	55	1.5	1.09
1	1	1	10	800811	54	1.3	1.00
1	1	1	12	800925	53	1.5	1.23
1	1	1	12	800925	57	2.4	1.56
1	1	1	12	800925	78	4	0.97
1	1	1	12	800925	56	2	1.38
1	1	1	12	800925	55	2	1.46
1	1	1	12	800925	59	2.5	1.46
1	1	1	12	800925	60	2.5	1.39
1	1	1	12	800925	57	2.2	1.43
1	1	1	12	800925	55	2.2	1.60
1	1	1	23	810603	33	0.3	1.09
1	1	1	23	810603	34	0.3	0.99
1	1	1	23	810603	26	0.2	1.53
1	2	1	5	800528	114	13.6	1.00
1	2	1	5	800528	107	12.7	1.14
1	2	1	5	800528	118	15.6	1.03
1	2	1	5	800528	92	7.3	1.06
1	2	1	5	800528	114	15.8	1.17
1	2	1	5	800528	111	13.1	1.05
1	2	1	5	800528	107	11.8	1.06
1	2	1	7	800626	44	0.9	1.32
1	2	1	7	800626	49	1.2	1.26
1	2	1	7	800626	45	1	1.37
1	2	1	7	800626	48	1.1	1.23
1	2	1	7	800626	54	1.6	1.23
1	2	1	7	800626	51	1.2	1.11
1	2	1	7	800626	50	1.2	1.18
1	2	1	7	800626	51	1.5	1.39
1	2	1	7	800626	48	1.2	1.34
1	2	1	7	800626	50	1.2	1.18
1	2	1	7	800626	51	1.4	1.29
1	2	1	7	800626	59	1.9	1.11
1	2	1	8	800709	55	1.4	1.02
1	2	1	8	800709	48	1.1	1.23
1	2	1	8	800709	59	2	1.17
1	2	1	8	800709	70	3.6	1.23
1	2	1	8	800709	50	1	0.98
1	2	1	8	800709	52	1.2	1.04
1	2	1	8	800709	50	1.1	1.08
1	2	1	8	800709	43	0.7	1.10
1	2	1	8	800709	53	1.1	0.90
1	2	1	8	800709	45	0.6	0.82

1	2	1	8	800709	48	0.6	0.67
1	2	1	8	800709	56	1.5	1.03
1	2	1	8	800709	51	1.1	1.02
1	2	1	8	800709	50	1.1	1.08
1	2	1	8	800709	56	1.6	1.10
1	2	1	8	800709	126	20.9	1.13
1	2	1	8	800709	54	1.3	1.00
1	2	1	9	800730	54	1.4	1.08
1	2	1	9	800730	58	2.1	1.29
1	2	1	9	800730	56	1.6	1.10
1	2	1	9	800730	48	1	1.12
1	2	1	9	800730	41	0.6	1.10
1	2	1	9	800730	42	0.7	1.19
1	2	1	9	800730	49	1.1	1.15
1	2	1	9	800730	49	1.1	1.15
1	2	1	9	800730	53	1.3	1.06
1	2	1	9	800730	48	1.1	1.23
1	2	1	9	800730	49	1.1	1.15
1	2	1	9	800730	55	1.8	1.31
1	2	1	9	800730	48	1.1	1.23
1	2	1	9	800730	46	0.8	1.02
1	2	1	9	800730	45	0.7	0.96
1	2	1	9	800730	43	0.8	1.26
1	2	1	9	800730	48	1	1.12
1	2	1	9	800730	58	2.1	1.29
1	2	1	9	800730	44	0.8	1.17
1	2	1	9	800730	37	0.5	1.26
1	2	1	10	800811	26	0.16	1.23
1	2	1	10	800811	43	0.8	1.26
1	2	1	10	800811	29	0.2	1.09
1	2	1	10	800811	28	0.2	1.21
1	2	1	11	800904	106	12.6	1.17
1	2	1	11	800904	104	13.3	1.31
1	2	1	11	800904	33	0.2	0.72
1	2	1	11	800904	32	0.2	0.80
1	2	1	11	800904	34	0.2	0.66
1	2	1	11	800904	32	0.2	0.80
1	2	1	11	800904	104	11.2	1.10
1	2	1	23	810603	36	0.4	1.10
1	2	1	23	810603	32	0.2	0.80
1	2	1	23	810603	36	0.3	0.83
1	2	1	23	810603	33	0.3	1.09
1	2	1	23	810603	30	0.2	0.98
1	2	1	23	810603	28	0.1	0.61

1	2	1	23	810603	34	0.3	0.99
1	2	1	23	810603	29	0.2	1.09
1	2	1	23	810603	25	0.1	0.87
1	2	1	23	810603	30	0.2	0.98
1	2	1	23	810603	33	0.4	1.45
1	2	1	23	810603	32	0.3	1.20
1	2	1	23	810603	30	0.2	0.98
1	2	1	23	810603	27	0.1	0.68
1	2	1	23	810603	34	0.4	1.32
1	2	1	23	810603	37	0.4	1.01
1	2	1	23	810603	31	0.2	0.88
1	2	1	25	810702	48	1.1	1.23
1	2	1	25	810702	55	1.9	1.38
1	2	1	25	810702	58	1.8	1.11
1	2	1	25	810702	56	1.9	1.31
1	2	1	25	810702	59	2	1.17
1	2	1	25	810702	59	2.3	1.34
1	2	1	25	810702	54	1.6	1.23
1	2	1	25	810702	62	2.3	1.15
1	2	1	25	810702	63	2.8	1.33
1	2	1	25	810702	59	1.8	1.05
1	2	1	25	810702	56	1.9	1.31
1	2	1	25	810702	48	1.1	1.23
1	2	1	25	810702	57	2	1.30
1	2	1	25	810702	66	3.2	1.32
1	2	1	25	810702	52	1.6	1.39
1	2	1	25	810702	69	3.5	1.25
1	2	1	25	810702	65	3	1.29
1	2	1	25	810702	47	1.1	1.31
1	3	1	11	800904	36	0.2	0.55
1	4	1	9	800730	32	0.18	0.72
1	4	1	9	800730	35	0.4	1.20
1	4	1	9	800730	33	0.2	0.72
1	4	1	9	800730	32	0.2	0.80
1	4	1	9	800730	39	0.6	1.29
1	4	1	9	800730	33	0.2	0.72
1	4	1	9	800730	34	0.3	0.99
1	4	1	9	800730	32	0.18	0.72
1	4	1	9	800730	31	0.2	0.88
1	4	1	9	800730	33	0.18	0.65
1	4	1	9	800730	32	0.2	0.80
1	4	1	9	800730	33	0.2	0.72
1	4	1	9	800730	32	0.18	0.72
1	4	1	9	800730	32	0.2	0.80

1	4	1	9	800730	35	0.4	1.20
1	4	1	9	800730	32	0.2	0.80
1	4	1	9	800730	33	0.2	0.72
1	4	1	9	800730	32	0.2	0.80
1	4	1	9	800730	33	0.18	0.65
1	4	1	11	800904	35	0.2	0.60
1	4	1	11	800904	36	0.3	0.83
1	4	1	11	800904	36	0.3	0.83
1	4	1	11	800904	36	0.3	0.83
1	4	1	11	800904	32	0.2	0.80
1	4	1	11	800904	33	0.2	0.72
1	4	1	24	810618	48	1.2	1.34
1	5	1	7	800626	63	2.2	1.05
1	5	1	9	800730	46	0.8	1.02
1	5	1	9	800730	41	0.6	1.10
1	5	1	9	800730	45	0.8	1.09
1	5	1	9	800730	43	0.7	1.10
1	5	1	9	800730	39	0.5	1.07
1	5	1	9	800730	45	0.8	1.09
1	5	1	9	800730	36	0.3	0.83
1	5	1	9	800730	48	0.7	0.78
1	5	1	9	800730	43	0.7	1.10
1	5	1	9	800730	41	0.7	1.28
1	5	1	9	800730	40	0.6	1.19
1	5	1	9	800730	43	0.7	1.10
1	5	1	9	800730	40	0.6	1.19
1	5	1	9	800730	32	0.2	0.80
1	5	1	9	800730	40	0.5	0.99
1	5	1	9	800730	35	0.3	0.90
1	5	1	9	800730	34	0.3	0.99
1	5	1	9	800730	53	1.4	1.15
1	5	1	9	800730	39	0.6	1.29
1	5	1	9	800730	41	0.6	1.10
1	5	1	11	800904	31	0.1	0.44
1	5	1	11	800904	37	0.2	0.51
1	5	1	23	810603	32	0.3	1.20
1	5	1	23	810603	37	0.5	1.26
1	5	1	23	810603	37	0.5	1.26
1	5	1	23	810603	30	0.4	1.95
1	5	1	23	810603	29	0.2	1.09
1	5	1	23	810603	34	0.4	1.32
1	5	1	23	810603	30	0.3	1.47
1	5	1	23	810603	33	0.3	1.09
1	5	1	23	810603	25	0.2	1.73

1	5	2	24	810618	36	0.5	1.38
1	5	2	24	810618	39	0.5	1.07
1	5	2	24	810618	45	0.9	1.23
1	5	2	24	810618	42	0.8	1.36
1	5	2	24	810618	37	0.5	1.26
1	5	2	24	810618	45	1.1	1.50
1	5	2	24	810618	43	0.8	1.26
1	5	2	24	810618	49	1.4	1.47
1	5	2	24	810618	35	0.5	1.51
1	5	2	24	810618	44	0.7	1.03
1	5	2	24	810618	50	1.2	1.18
1	5	2	24	810618	49	1.4	1.47
1	5	2	24	810618	43	0.9	1.42
1	5	2	24	810618	33	0.3	1.09
1	5	2	24	810618	39	0.7	1.50
1	5	2	24	810618	40	0.5	0.99
1	5	2	24	810618	50	1.2	1.18
1	5	2	24	810618	32	0.2	0.80
1	5	2	24	810618	43	0.7	1.10
1	5	2	24	810618	32	0.3	1.20
1	5	1	25	810702	55	1.6	1.17
1	6	1	7	800626	32	0.2	0.80
1	6	1	7	800626	31	0.1	0.44
1	7	1	7	800626	37	1	2.53
1	7	1	7	800626	43	1.3	2.05
1	7	1	7	800626	43	1.4	2.21
1	7	1	7	800626	51	1.7	1.57
1	7	1	7	800626	52	1.9	1.65
1	7	1	7	800626	51	1.7	1.57
1	7	1	7	800626	53	1.8	1.47
1	7	1	7	800626	36	1	2.76
1	7	1	7	800626	46	1.6	2.04
1	7	1	7	800626	42	1.2	2.04
2	1	1	10	800809	36	0.2	0.55
2	1	1	10	800809	31	0.2	0.88
2	1	1	10	800809	44	0.7	1.03
2	1	1	10	800809	86	6.9	1.24
2	1	1	10	800809	98	9.3	1.10
2	1	1	10	800809	75	3.9	1.07
2	1	1	10	800809	94	9.7	1.31
2	1	1	10	800809	89	7.7	1.24
2	1	1	10	800809	92	8.9	1.29
2	1	1	10	800809	90	8.3	1.29
2	1	1	10	800809	28	0.1	0.61

2	1	1	10	800809	39	0.5	1.07
2	1	1	10	800809	33	0.2	0.72
2	1	1	10	800809	90	7.9	1.23
2	1	1	10	800809	29	0.2	1.09
2	1	1	10	800809	92	7.8	1.13
2	1	1	10	800809	33	0.2	0.72
2	1	1	10	800809	31	0.2	0.88
2	1	1	10	800809	32	0.2	0.80
2	1	1	10	800809	85	4.6	0.85
2	1	1	10	800809	92	8.6	1.25
2	1	1	10	800809	91	8.6	1.29
2	1	1	10	800809	86	6.3	1.13
2	1	1	10	800809	81	5.9	1.27
2	1	1	10	800809	94	8	1.08
2	1	1	10	800809	85	5.9	1.10
2	1	1	10	800809	91	8.3	1.24
2	1	1	10	800809	32	0.2	0.80
2	1	1	10	800809	32	0.4	1.60
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	45	0.8	1.09
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	28	0.2	1.21
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	25	0.2	1.73
2	1	1	23	810602	49	0.5	0.52
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	28	0.2	1.21
2	1	1	23	810602	29	0.2	1.09
2	1	1	23	810602	26	0.2	1.53
2	1	1	23	810602	31	0.2	0.88
2	1	1	23	810602	27	0.1	0.68
2	1	1	23	810602	34	0.2	0.66
2	1	1	23	810602	30	0.2	0.98
2	1	1	23	810602	26	0.2	1.53
2	1	1	23	810602	28	0.2	1.21
2	2	1	6	800612	28	0.1	0.61
2	2	1	6	800612	36	0.4	1.10
2	2	1	6	800612	42	0.6	1.02
2	2	1	6	800612	35	0.3	0.90
2	2	1	6	800612	39	0.4	0.86
2	2	1	6	800612	47	0.9	1.07

2	2	1	6	800612	34	0.3	0.99
2	2	1	6	800612	44	0.7	1.03
2	2	1	6	800612	36	0.4	1.10
2	2	1	6	800612	32	0.2	0.80
2	2	1	6	800612	39	0.6	1.29
2	2	1	6	800612	49	1.1	1.15
2	2	1	6	800612	29	0.2	1.09
2	2	1	6	800612	33	0.2	0.72
2	2	1	6	800612	52	1.2	1.04
2	2	1	6	800612	35	0.3	0.90
2	2	1	6	800612	33	0.3	1.09
2	2	1	6	800612	37	0.5	1.26
2	2	1	6	800612	32	0.3	1.20
2	2	1	23	810602	32	0.3	1.20
2	2	1	23	810602	31	0.3	1.32
2	2	1	24	810617	39	0.4	0.86
2	2	1	24	810617	30	0.1	0.49
2	2	1	25	810630	31	0.2	0.88
2	2	1	25	810630	30	0.2	0.98
2	2	1	25	810630	30	0.2	0.98
2	2	1	25	810630	32	0.2	0.80
2	2	1	25	810630	31	0.2	0.88
2	2	1	25	810630	34	0.2	0.66
2	2	1	25	810630	28	0.2	1.21
2	2	1	25	810630	26	0.2	1.53
2	2	1	25	810630	28	0.2	1.21
2	3	1	6	800612	41	0.5	0.92
2	3	1	8	800711	34	1.1	3.63
2	3	1	23	810602	33	0.2	0.72
2	3	1	23	810602	31	0.3	1.32
2	3	1	23	810602	39	0.4	0.86
2	3	1	23	810602	33	0.3	1.09
2	3	1	23	810602	37	0.4	1.01
2	3	1	24	810617	50	1.4	1.38
2	3	1	24	810617	49	1.1	1.15
2	3	1	24	810617	40	0.7	1.39
2	3	1	24	810617	50	1.2	1.18
2	3	1	24	810617	48	0.9	1.01
2	3	1	24	810617	42	0.8	1.36
2	3	1	24	810617	49	0.9	0.94
2	4	1	23	810602	34	0.4	1.32
2	4	1	23	810602	34	0.3	0.99
2	4	1	23	810602	36	0.4	1.10
2	4	1	23	810602	33	0.3	1.09

2	5	1	10	800809	37	0.4	1.01
2	5	1	10	800809	34	0.4	1.32
2	5	1	10	800809	41	0.5	0.92
2	5	1	10	800809	36	0.5	1.38
2	5	1	10	800809	46	1	1.28
2	5	1	10	800809	41	0.8	1.47
2	5	1	10	800809	38	0.5	1.16
2	5	1	10	800809	44	0.9	1.32
2	5	1	10	800809	34	0.6	1.98
2	5	1	10	800809	89	7.3	1.17
2	5	1	23	810602	33	0.3	1.09
2	5	1	23	810602	29	0.3	1.63
2	5	1	23	810602	34	0.3	0.99
2	5	1	23	810602	32	0.3	1.20
2	5	1	23	810602	29	0.1	0.54
2	5	1	23	810602	34	0.3	0.99
2	5	1	23	810602	33	0.3	1.09
2	5	1	23	810602	34	0.3	0.99
2	6	1	6	800612	58	1.7	1.05
2	6	1	6	800612	50	0.7	0.69
2	6	2	6	800612	55	1.5	1.09
2	6	2	6	800612	45	1	1.37
2	6	2	6	800612	58	1	0.62
2	6	2	6	800612	56	0.9	0.62
2	6	2	6	800612	56	1.6	1.10
2	6	2	6	800612	55	1.3	0.95
2	6	2	6	800612	56	1.9	1.31
2	6	2	6	800612	55	1.7	1.24
2	6	2	6	800612	54	1.5	1.16
2	6	2	6	800612	36	0.4	1.10
2	6	2	6	800612	46	0.9	1.15
2	6	2	6	800612	54	1.8	1.39
2	6	2	6	800612	57	1.4	0.91
2	6	2	6	800612	43	0.7	1.10
2	6	2	6	800612	45	1	1.37
2	6	2	6	800612	60	1.9	1.05
2	6	2	6	800612	57	1.7	1.11
2	6	2	6	800612	56	1.7	1.17
2	6	2	6	800612	58	1.7	1.05
2	6	2	6	800612	57	1.6	1.04
2	6	2	6	800612	54	1.3	1.00
2	6	2	6	800612	44	0.7	1.03
2	6	2	6	800612	53	1.4	1.15
2	6	2	6	800612	54	1.6	1.23

2	6	2	6	800612	56	2	1.38
2	6	2	6	800612	46	0.9	1.15
2	6	2	6	800612	56	1.5	1.03
2	6	2	6	800612	45	0.9	1.23
2	6	2	6	800612	55	1.5	1.09
2	6	2	6	800612	54	0.7	0.54
2	6	2	6	800612	50	1	0.98
2	6	2	6	800612	56	1.4	0.96
2	6	2	6	800612	47	0.8	0.95
2	6	2	6	800612	51	1.2	1.11
2	6	2	6	800612	57	1.7	1.11
2	6	2	6	800612	50	1.2	1.18
2	6	2	6	800612	53	1.2	0.98
2	6	2	6	800612	57	1.9	1.24
2	6	2	6	800612	54	1.5	1.16
2	6	2	6	800612	53	0.9	0.74
2	6	2	6	800612	55	1.7	1.24
2	6	2	6	800612	55	1.7	1.24
2	6	2	6	800612	54	1.6	1.23
2	6	2	6	800612	53	0.7	0.57
2	6	2	6	800612	56	1.6	1.10
2	6	2	6	800612	58	1.9	1.17
2	6	2	6	800612	45	0.9	1.23
2	6	2	6	800612	48	0.8	0.89
2	6	2	6	800612	46	1	1.28
2	6	2	6	800612	38	0.4	0.93
2	6	2	6	800612	52	1.2	1.04
2	6	2	6	800612	47	0.9	1.07
2	6	2	6	800612	44	0.7	1.03
2	6	1	7	800627	44	0.6	0.88
2	6	1	7	800627	37	0.2	0.51
2	6	1	7	800627	53	1.4	1.15
2	6	1	7	800627	44	0.8	1.17
2	6	1	7	800627	43	0.7	1.10
2	6	1	7	800627	42	0.6	1.02
2	6	1	7	800627	45	0.6	0.82
2	6	1	7	800627	50	1.1	1.08
2	6	1	7	800627	46	0.8	1.02
2	6	1	7	800627	43	0.6	0.95
2	6	2	7	800627	48	1	1.12
2	6	2	7	800627	45	0.9	1.23
2	6	2	7	800627	52	1.2	1.04
2	6	2	7	800627	44	0.9	1.32
2	6	2	7	800627	52	1.3	1.13

2	6	2	7	800627	41	0.7	1.28
2	6	2	7	800627	46	0.8	1.02
2	6	2	7	800627	37	0.5	1.26
2	6	2	7	800627	41	0.8	1.47
2	6	2	7	800627	56	1.7	1.17
2	6	3	7	800627	48	0.9	1.01
2	6	3	7	800627	42	0.6	1.02
2	6	3	7	800627	52	1.2	1.04
2	6	3	7	800627	44	0.6	0.88
2	6	3	7	800627	48	0.9	1.01
2	6	3	7	800627	47	0.7	0.84
2	6	3	7	800627	58	1.7	1.05
2	6	4	7	800627	41	0.6	1.10
2	6	1	10	800809	27	0.1	0.68
2	6	1	10	800809	31	0.1	0.44
2	6	1	10	800809	31	0.1	0.44
2	6	1	10	800809	37	0.4	1.01
2	6	1	10	800809	31	0.1	0.44
2	6	1	10	800809	30	0.1	0.49
2	6	1	10	800809	30	0.1	0.49
2	6	1	22	810521	90	6.1	0.95
2	6	1	23	810602	30	0.2	0.98
2	6	1	23	810602	32	0.2	0.80
2	6	1	23	810602	35	0.4	1.20
2	6	1	23	810602	36	0.4	1.10
2	6	1	23	810602	32	0.3	1.20
2	6	1	23	810602	32	0.2	0.80
2	6	1	23	810602	29	0.2	1.09
2	6	1	23	810602	40	0.4	0.79
2	6	1	23	810602	32	0.2	0.80
2	6	1	23	810602	30	0.2	0.98
2	6	1	23	810602	32	0.2	0.80
2	6	1	23	810602	27	0.2	1.36
2	6	1	23	810602	34	0.3	0.99
2	6	1	23	810602	29	0.2	1.09
2	6	1	23	810602	30	0.2	0.98
2	6	1	23	810602	33	0.3	1.09
2	6	1	23	810602	33	0.3	1.09
2	6	1	23	810602	32	0.3	1.20
2	6	1	23	810602	34	0.3	0.99
2	6	2	24	810617	31	0.1	0.44
2	6	3	24	810617	40	0.3	0.59
2	6	1	25	810630	29	0.1	0.54
2	6	1	25	810630	29	0.1	0.54

2	6	1	25	810630	29	0.1	0.54
2	6	1	25	810630	28	0.1	0.61
2	6	1	25	810630	29	0.1	0.54
2	6	1	25	810630	29	0.1	0.54
3	1	1	7	800628	62	1.58	0.79
3	1	1	7	800628	67	1.67	0.65
3	1	1	7	800628	74	1.6	0.46
3	1	1	7	800628	69	2.02	0.72
3	1	1	7	800628	68	1.79	0.67
3	1	1	7	800628	81	3.55	0.77
3	1	1	7	800628	66	1.88	0.77
3	1	1	7	800628	81	4.13	0.89
3	1	1	7	800628	73	2.41	0.72
3	1	1	7	800628	71	2.04	0.67
3	1	1	9	800728	60	1.9	1.05
3	1	1	10	800810	67	2.1	0.82
3	1	1	10	800810	66	2.4	0.99
3	1	1	10	800810	63	1.9	0.90
3	1	1	10	800810	64	1.2	0.54
3	1	1	10	800810	63	1.7	0.81
3	1	1	10	800810	72	2.9	0.91
3	1	1	10	800810	71	2.9	0.95
3	1	1	10	800810	58	1.6	0.99
3	1	1	10	800810	63	1.1	0.52
3	1	1	10	800810	66	2.4	0.99
3	1	1	12	800924	71	1.9	0.62
3	1	1	12	800924	70	2.2	0.75
3	1	1	12	800924	67	2	0.78
3	1	1	12	800924	79	3.2	0.75
3	1	1	12	800924	73	2.7	0.81
3	1	1	12	800924	72	2.2	0.69
3	1	1	12	800924	74	3	0.86
3	1	1	12	800924	73	2.3	0.69
3	1	1	12	800924	72	2.4	0.75
3	1	1	12	800924	73	2.5	0.75
3	1	3	24	810616	41	0.4	0.73
3	1	3	24	810616	31	0.3	1.32
3	1	3	24	810616	40	0.3	0.59
3	1	3	24	810616	36	0.4	1.10
3	1	3	24	810616	29	0.2	1.09
3	1	3	24	810616	31	0.3	1.32
3	1	3	24	810616	39	0.5	1.07
3	1	3	24	810616	31	0.2	0.88
3	1	3	24	810616	40	0.5	0.99

3	1	3	24	810616	37	0.3	0.76
3	1	3	24	810616	41	0.6	1.10
3	1	1	25	810629	48	1	1.12
3	1	1	25	810629	52	1.2	1.04
3	1	1	25	810629	90	6.7	1.04
3	1	1	25	810629	50	1.2	1.18
3	1	1	25	810629	51	1.2	1.11
3	1	1	25	810629	51	1.2	1.11
3	1	1	25	810629	52	1.2	1.04
3	1	1	25	810629	56	1.5	1.03
3	2	1	6	800613	128	24.1	1.24
3	2	1	6	800613	132	27.9	1.30
3	2	1	6	800613	130	22.1	1.08
3	2	1	6	800613	128	22.7	1.17
3	2	1	6	800613	125	24.8	1.37
3	2	1	7	800628	50	0.96	0.94
3	2	1	8	800710	48	1	1.12
3	2	1	16	810120	67	2.6	1.02
3	2	1	16	810120	76	3.8	1.00
3	2	1	23	810601	41	0.5	0.92
3	2	1	23	810601	36	0.3	0.83
3	2	1	23	810601	42	0.6	1.02
3	2	1	23	810601	38	0.5	1.16
3	2	1	25	810629	42	0.5	0.85
3	2	1	25	810629	33	0.2	0.72
3	2	1	25	810629	29	0.1	0.54
3	2	1	25	810629	41	0.6	1.10
3	2	1	25	810629	44	0.6	0.88
3	3	1	6	800613	63	2.2	1.05
3	3	1	6	800613	59	2	1.17
3	3	1	6	800613	65	2.7	1.16
3	3	1	6	800613	64	2.8	1.27
3	3	1	6	800613	57	1.9	1.24
3	3	1	6	800613	62	2.3	1.15
3	3	1	6	800613	64	2.5	1.13
3	3	1	6	800613	63	2.6	1.24
3	3	1	6	800613	61	2.4	1.26
3	3	1	6	800613	66	2.6	1.07
3	3	1	7	800628	74	2.4	0.69
3	3	1	7	800628	65	1.8	0.78
3	3	1	7	800628	72	2.5	0.78
3	3	1	7	800628	71	2.7	0.88
3	3	1	7	800628	71	2.1	0.69
3	3	1	7	800628	64	1.8	0.81

3	3	1	7	800628	69	1.3	0.46
3	3	1	7	800628	70	3	1.02
3	3	1	7	800628	77	2	0.51
3	3	1	7	800628	73	2.3	0.69
3	3	1	7	800628	72	2.8	0.88
3	3	1	8	800710	54	1.4	1.08
3	3	1	8	800710	67	1.2	0.47
3	3	1	8	800710	63	1.8	0.86
3	3	1	8	800710	65	1.2	0.52
3	3	1	8	800710	63	2	0.95
3	3	1	8	800710	53	1.1	0.90
3	3	1	8	800710	53	0.9	0.74
3	3	1	8	800710	66	1.4	0.58
3	3	1	8	800710	59	1.6	0.93
3	3	1	8	800710	65	2.4	1.03
3	3	1	8	800710	64	1.5	0.68
3	3	1	8	800710	72	2.4	0.75
3	3	1	8	800710	59	0.8	0.47
3	3	1	8	800710	57	1.1	0.72
3	3	1	8	800710	62	1.8	0.90
3	3	1	8	800710	55	0.8	0.58
3	3	1	8	800710	48	0.8	0.89
3	3	1	8	800710	61	2	1.05
3	3	1	8	800710	64	2.2	1.00
3	3	1	8	800710	69	2.6	0.93
3	3	1	8	800710	65	1.3	0.56
3	3	1	8	800710	59	1.2	0.70
3	3	1	8	800710	64	1.9	0.86
3	3	1	8	800710	56	0.9	0.62
3	3	1	8	800710	57	0.9	0.59
3	3	1	8	800710	54	2.1	1.62
3	3	1	8	800710	56	1.1	0.76
3	3	1	8	800710	62	2	1.00
3	3	1	8	800710	64	1.5	0.68
3	3	1	8	800710	59	1.3	0.76
3	3	1	8	800710	62	1.2	0.60
3	3	1	8	800710	77	2.6	0.66
3	3	1	8	800710	56	1.3	0.89
3	3	1	8	800710	53	1	0.82
3	3	1	8	800710	57	0.9	0.59
3	3	1	8	800710	56	1.2	0.83
3	3	1	8	800710	69	2.9	1.04
3	3	1	8	800710	68	1.3	0.49
3	3	1	8	800710	68	2.3	0.86

3	3	1	8	800710	54	0.6	0.46
3	3	1	8	800710	65	1.5	0.65
3	3	1	8	800710	64	1.8	0.81
3	3	1	8	800710	70	2.9	0.99
3	3	1	8	800710	66	2.5	1.03
3	3	1	8	800710	58	1	0.62
3	3	1	8	800710	66	2.4	0.99
3	4	1	6	800613	52	1.9	1.65
3	4	1	6	800613	58	1.2	0.74
3	4	1	6	800613	59	1.6	0.93
3	4	1	6	800613	61	1.8	0.95
3	4	1	6	800613	62	2.2	1.10
3	4	1	6	800613	61	2.2	1.16
3	4	1	6	800613	52	1.1	0.96
3	4	1	6	800613	51	1.2	1.11
3	4	1	6	800613	65	2.6	1.12
3	4	1	6	800613	56	2.1	1.45
3	4	1	7	800628	83	5.4	1.08
3	4	1	7	800628	58	1.5	0.92
3	4	1	7	800628	60	1.9	1.05
3	4	1	7	800628	55	1.3	0.95
3	4	1	7	800628	66	2.7	1.11
3	4	1	7	800628	67	3	1.18
3	4	1	7	800628	76	4.3	1.13
3	4	1	7	800628	64	2.3	1.04
3	4	1	7	800628	62	2.4	1.20
3	4	1	7	800628	65	3.2	1.38
3	4	1	9	800728	61	2.1	1.11
3	4	1	9	800728	73	2.9	0.87
3	4	1	9	800728	72	3.1	0.97
3	4	1	9	800728	65	2.5	1.08
3	4	1	9	800728	61	2	1.05
3	4	1	9	800728	62	1.8	0.90
3	4	1	9	800728	63	2	0.95
3	4	1	9	800728	66	2.2	0.90
3	4	1	9	800728	60	1.7	0.94
3	4	1	9	800728	62	2.1	1.05
3	4	1	9	800728	65	2.5	1.08
3	4	1	9	800728	69	2.7	0.97
3	4	1	9	800728	59	1.8	1.05
3	4	1	9	800728	69	2.7	0.97
3	4	1	9	800728	60	1.9	1.05
3	4	1	9	800728	67	2.5	0.98
3	4	1	9	800728	60	1.9	1.05

3	4	1	9	800728	65	2.4	1.03
3	4	1	9	800728	63	1.9	0.90
3	4	1	9	800728	61	1.6	0.84
3	4	1	9	800728	61	2	1.05
3	4	1	10	800810	49	1	1.05
3	4	1	23	810601	43	1	1.58
3	4	1	23	810601	45	1	1.37
3	4	1	23	810601	43	0.9	1.42
3	4	1	23	810601	41	0.9	1.65
3	4	1	23	810601	32	0.3	1.20
3	4	1	23	810601	49	1.2	1.26
3	4	1	23	810601	35	0.7	2.11
3	5	1	6	800613	52	1.4	1.22
3	5	1	6	800613	54	1.4	1.08
3	5	1	6	800613	48	0.9	1.01
3	5	1	6	800613	59	2	1.17
3	5	1	6	800613	62	2.3	1.15
3	5	1	6	800613	63	3.9	1.85
3	5	1	6	800613	51	1.2	1.11
3	5	1	6	800613	62	2.7	1.35
3	5	1	6	800613	69	2.5	0.89
3	5	1	6	800613	55	2.3	1.68
3	5	1	6	800613	60	2.2	1.22
3	5	1	9	800728	67	2.3	0.90
3	6	1	7	800629	43	0.6	0.95
3	6	1	7	800629	47	0.6	0.72
3	6	1	7	800629	42	0.6	1.02
3	6	1	7	800629	29	0.2	1.09
3	6	1	7	800629	58	1.7	1.05
3	6	1	7	800629	51	1	0.92
3	6	1	7	800629	29	0.2	1.09
3	6	1	7	800629	30	0.2	0.98
3	6	1	7	800629	37	0.5	1.26
3	6	1	7	800629	31	0.2	0.88
3	6	1	7	800629	33	0.3	1.09
3	6	1	7	800629	27	0.2	1.36
3	6	1	7	800629	31	0.2	0.88
3	6	1	7	800629	31	0.3	1.32
3	6	1	7	800629	29	0.2	1.09
3	6	1	7	800629	30	0.2	0.98
3	6	1	7	800629	30	0.2	0.98
3	6	1	7	800629	31	0.2	0.88
3	6	1	7	800629	29	0.2	1.09
3	6	1	7	800629	31	0.2	0.88

3	6	1	7	800629	30	0.2	0.98
3	6	1	7	800629	29	0.2	1.09
3	6	1	7	800629	28	0.2	1.21
3	6	1	7	800629	31	0.2	0.88
3	6	1	7	800629	30	0.2	0.98
3	6	1	7	800629	31	0.2	0.88
3	6	1	7	800629	34	0.3	0.99
3	6	1	7	800629	33	0.4	1.45
3	6	1	7	800629	67	3.2	1.25
3	6	1	7	800629	66	2.75	1.13
3	6	1	7	800629	71	3.1	1.01
3	6	1	7	800629	63	2.6	1.24
3	6	1	7	800629	63	2.25	1.07
3	6	1	7	800629	69	2.9	1.04
3	6	1	7	800629	76	4.3	1.13
3	6	1	7	800629	65	2.4	1.03
3	6	1	7	800629	72	2.9	0.91
3	6	1	7	800629	72	3.1	0.97
3	6	1	23	810601	45	1.1	1.50
3	7	1	6	800613	119	21.4	1.38
3	7	1	6	800613	122	22.85	1.36
3	7	1	6	800613	127	26.5	1.39
3	7	1	7	800629	65	2.5	1.08
3	7	1	7	800629	70	3	1.02
3	7	1	7	800629	70	3	1.02
3	7	1	7	800629	69	2.7	0.97
3	7	1	7	800629	73	3.4	1.02
3	7	1	7	800629	73	3.2	0.96
3	7	1	7	800629	60	1.8	1.00
3	7	1	7	800629	73	3.3	0.99
3	7	1	7	800629	73	3	0.90
3	7	1	8	800710	64	2.3	1.04
3	7	1	8	800710	76	2.5	0.66
3	7	1	8	800710	61	2.1	1.11
3	7	1	8	800710	59	2.1	1.23
3	7	1	8	800710	61	2.1	1.11
3	7	1	8	800710	71	2.4	0.78
3	7	1	8	800710	60	1.9	1.05
3	7	1	8	800710	62	1.4	0.70
3	7	1	8	800710	69	1.4	0.50
3	7	1	8	800710	68	2.7	1.01
3	7	1	8	800710	68	2.8	1.05
3	7	1	8	800710	85	5.6	1.04
3	7	1	8	800710	63	2.2	1.05

3	7	1	8	800710	63	1.4	0.67
3	7	1	8	800710	73	3.1	0.93
3	7	1	8	800710	74	2.3	0.66
3	7	1	8	800710	74	2.7	0.77
3	7	1	8	800710	71	2.1	0.69
3	7	1	8	800710	73	1.5	0.45
3	7	1	8	800710	66	1.5	0.62
3	7	1	8	800710	65	2.5	1.08
3	7	1	8	800710	70	2.8	0.96
3	7	1	8	800710	85	3.3	0.61
3	7	1	8	800710	69	2.2	0.79
3	7	1	8	800710	80	3.8	0.85
3	7	1	8	800710	69	1.4	0.50
3	7	1	8	800710	73	1.5	0.45
3	7	1	8	800710	73	2.2	0.66
3	7	1	8	800710	80	4.6	1.03
3	7	1	8	800710	73	3	0.90
3	7	1	8	800710	70	2.8	0.96
3	7	1	8	800710	69	1.6	0.57
3	7	1	8	800710	61	2	1.05
3	7	1	8	800710	72	2	0.63
3	7	1	8	800710	63	2.3	1.09
3	7	1	8	800710	84	5.8	1.12
3	7	1	8	800710	71	1.5	0.49
3	7	2	8	800710	40	1	1.98
3	7	2	8	800710	38	1	2.33
3	7	2	8	800710	57	1.2	0.78
3	7	2	8	800710	34	1	3.30
3	7	2	8	800710	51	1	0.92
3	7	2	8	800710	36	1	2.76
3	7	2	8	800710	45	0.8	1.09
3	7	1	9	800728	65	2.8	1.21
3	7	1	9	800728	65	2.3	0.99
3	7	1	9	800728	69	2.6	0.93
3	7	1	9	800728	79	4.2	0.98
3	7	1	9	800728	58	1.6	0.99
3	7	1	9	800728	78	4.1	1.00
3	7	1	9	800728	66	2.3	0.95
3	7	1	9	800728	64	2.2	1.00
3	7	1	9	800728	73	3.4	1.02
3	7	1	9	800728	70	2.9	0.99
3	7	1	9	800728	68	2.5	0.94
3	7	1	9	800728	69	2.6	0.93
3	7	1	9	800728	60	2	1.11

3	7	1	9	800728	62	2.1	1.05
3	7	1	9	800728	65	2.1	0.91
3	7	1	9	800728	66	2.6	1.07
3	7	1	9	800728	64	2.2	1.00
3	7	1	9	800728	57	1.6	1.04
3	7	1	9	800728	58	1.6	0.99
3	7	1	9	800728	63	2.2	1.05
3	7	1	9	800728	61	2.2	1.16
3	7	1	13	801028	55	0.7	0.51
3	7	1	23	810601	45	0.8	1.09
3	7	1	24	810616	44	0.8	1.17
3	7	1	24	810616	52	1.1	0.96
3	7	1	24	810616	55	1.6	1.17
3	7	1	24	810616	44	0.8	1.17
3	7	1	24	810616	49	1	1.05
3	7	1	24	810616	44	0.9	1.32
3	7	1	24	810616	48	1.2	1.34
3	7	1	24	810616	41	0.6	1.10
3	7	1	24	810616	45	0.7	0.96
3	7	1	24	810616	51	1.3	1.20
3	7	1	24	810616	60	2	1.11
3	7	1	24	810616	49	1	1.05
3	7	1	24	810616	39	0.5	1.07
3	7	1	24	810616	50	1.2	1.18
3	7	1	24	810616	45	1.1	1.50
3	7	1	24	810616	43	0.7	1.10
3	7	1	24	810616	50	1	0.98
3	7	1	24	810616	53	1.2	0.98
3	7	1	24	810616	49	1.1	1.15
3	7	1	24	810616	60	2.5	1.39
3	7	1	24	810616	53	1.4	1.15
3	7	1	24	810616	45	0.8	1.09
3	7	1	24	810616	57	1.8	1.17
3	7	1	24	810616	43	0.8	1.26
3	7	3	24	810616	50	1.2	1.18
3	7	3	24	810616	45	1	1.37
3	7	3	24	810616	43	0.7	1.10
3	7	3	24	810616	40	0.6	1.19
3	7	3	24	810616	48	1	1.12
3	7	3	24	810616	40	0.7	1.39
3	7	3	24	810616	45	0.5	0.68
3	7	3	24	810616	47	1.1	1.31
3	7	3	24	810616	48	1.1	1.23
3	7	3	24	810616	48	0.9	1.01

3	7	3	24	810616	45	0.5	0.68
3	7	3	24	810616	46	1	1.28
3	7	3	24	810616	41	0.8	1.47
3	7	3	24	810616	40	0.6	1.19
3	7	3	24	810616	44	0.8	1.17
3	7	3	24	810616	43	0.7	1.10
3	7	3	24	810616	49	1	1.05
3	7	3	24	810616	42	0.8	1.36
3	7	3	24	810616	39	0.6	1.29
3	7	2	25	810629	65	3	1.29
1	1	3	3	800430	21		
2	3	1	8	800711	31		
2	3	1	8	800711	34		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	30		
2	3	1	8	800711	33		
2	3	1	8	800711	30		
2	3	1	8	800711	28		
2	3	1	8	800711	34		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	31		
2	3	1	8	800711	29		
2	3	1	8	800711	33		
2	3	1	8	800711	32		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	33		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	30		
2	3	1	8	800711	32		
2	3	1	8	800711	32		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	32		
2	3	1	8	800711	31		
2	3	1	8	800711	31		
2	3	1	8	800711	32		
2	3	1	8	800711	32		

2	3	1	8	800711	32
2	3	1	8	800711	32
2	3	1	8	800711	32
2	3	1	8	800711	31
2	3	1	8	800711	29
2	3	1	8	800711	30
2	3	1	8	800711	32
2	3	1	8	800711	32
2	3	1	8	800711	30
2	3	1	8	800711	32
2	3	1	8	800711	30
2	3	1	8	800711	31
2	3	1	8	800711	32
2	3	1	8	800711	32
2	3	1	8	800711	31
2	3	1	8	800711	32
2	3	1	8	800711	31
2	3	1	8	800711	32
2	3	1	8	800711	28
2	3	1	8	800711	32
2	3	1	8	800711	29
2	3	1	8	800711	31
2	3	1	8	800711	32
2	3	1	8	800711	30
2	3	1	8	800711	33
2	3	1	8	800711	31
2	3	1	8	800711	32
2	3	1	8	800711	32
2	3	1	8	800711	33
2	3	1	8	800711	30
2	3	1	8	800711	28
2	3	1	8	800711	32
2	3	1	8	800711	31
2	5	1	8	800711	41
2	5	1	8	800711	32
2	5	1	8	800711	33
2	5	1	8	800711	31
2	5	1	8	800711	30
2	5	1	8	800711	32
2	5	1	8	800711	32
2	5	1	8	800711	27
2	5	1	8	800711	33
2	5	1	8	800711	36
2	5	1	8	800711	31

2	5	1	8	800711	32
2	5	1	8	800711	37
2	5	1	8	800711	29
2	5	1	8	800711	27
2	5	1	8	800711	33
2	5	1	8	800711	33
2	5	1	8	800711	32
2	5	1	8	800711	34
2	5	1	8	800711	30
2	5	1	8	800711	34
2	6	2	8	800711	35
3	3	1	8	800710	63
3	3	1	8	800710	58
3	3	1	8	800710	37
1	4	1	9	800730	29
1	4	1	9	800730	29
2	1	1	10	800809	28
2	1	1	10	800809	28
2	1	1	10	800809	30
2	1	1	10	800809	32
2	1	1	10	800809	32
2	1	1	10	800809	31
2	1	1	10	800809	30
2	1	1	10	800809	31
2	1	1	10	800809	29
2	1	1	10	800809	30
2	1	1	10	800809	29
2	1	1	10	800809	31
2	1	1	10	800809	29
2	1	1	10	800809	30
2	1	1	10	800809	32
2	1	1	10	800809	29
2	1	1	10	800809	31
2	1	1	10	800809	29
2	1	1	10	800809	29
2	1	1	10	800809	32
2	1	1	10	800809	30
2	1	1	10	800809	34
2	1	1	10	800809	31
2	1	1	10	800809	29
2	1	1	10	800809	32
2	1	1	10	800809	29
2	1	1	10	800809	32
2	1	1	10	800809	30

2	1	1	10	800809	32
2	1	1	10	800809	30
2	1	1	10	800809	28
2	1	1	10	800809	30
2	1	1	10	800809	32
2	1	1	10	800809	30
2	1	1	10	800809	31
2	1	1	10	800809	30
2	1	1	10	800809	29
2	1	1	10	800809	31
2	1	1	10	800809	28
2	1	1	10	800809	30
2	1	1	10	800809	32
2	1	1	10	800809	32
2	1	1	10	800809	30
2	1	1	10	800809	32
2	1	1	10	800809	31
2	1	1	10	800809	30
2	1	1	10	800809	31
2	1	1	10	800809	30
2	1	1	10	800809	31
3	7	1	10	800810	36
3	7	1	10	800810	38

xxii. Pacific sanddab, *Citharichthys sordidus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	2	1	23	810603	33	0.5	1.12
1	2	1	25	810702	45	1.4	1.31
1	5	1	25	810702	28	0.2	0.71
3	1	1	5	800530	27	0.2	0.79
3	1	1	5	800530	26	0.18	0.79
3	1	1	5	800530	19	0.12	1.28
3	1	1	22	810520	22	0.2	1.41
3	1	1	23	810601	35	0.6	1.14
3	1	1	23	810601	30	0.3	0.88
3	1	3	24	810616	91	7.8	1.00
3	4	1	25	810629	33	0.4	0.90
3	6	1	23	810601	33	0.4	0.90
3	7	1	22	810520	25	0.2	0.98

xxiii. Pacific sandlance, *Ammodytes hexapterus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	20	810408	89	2.2	0.88
1	4	1	15	801211	89	2.2	0.88
2	6	3	12	800923	77	1.3	0.81
2	6	1	18	810304	93	2.4	0.84

2	6	2	18	810304	115	4.3	0.78
2	6	3	18	810304	116	4.5	0.80
2	6	3	18	810304	92	2.3	0.83
2	6	3	18	810304	118	4.9	0.82
2	6	1	22	810521	42	0.2	0.80
2	6	2	22	810521	39	0.2	1.01
2	6	1	23	810602	46	0.3	0.91
2	6	1	24	810617	41	0.3	1.30
3	1	2	2	800411	95	2.7	0.88
3	1	3	2	800411	97	3.31	1.02
3	1	3	2	800411	90	1.9	0.73
3	1	3	2	800411	100	3.3	0.92
3	1	3	2	800411	100	3.35	0.94
3	1	3	2	800411	113	5	0.96
3	1	3	2	800411	112	4.45	0.88
3	1	3	2	800411	97	2.9	0.89
3	1	3	2	800411	91	2.6	0.97
3	1	3	2	800411	89	2.25	0.90
3	1	1	9	800728	79	2.1	1.21
3	1	1	9	800728	76	1.9	1.23
3	1	1	9	800728	97	3.2	0.98
3	1	1	9	800728	89	3	1.20
3	1	1	9	800728	86	2.4	1.07
3	1	1	9	800728	82	2.3	1.18
3	1	1	9	800728	75	1.6	1.08
3	1	1	9	800728	93	3.2	1.12
3	1	1	9	800728	92	2.9	1.05
3	1	1	9	800728	75	1.8	1.22
3	1	1	9	800728	87	2.9	1.24
3	1	1	9	800728	100	3.5	0.98
3	1	1	9	800728	87	2.3	0.99
3	1	1	9	800728	83	2.4	1.19
3	1	1	9	800728	96	3.1	0.98
3	1	1	9	800728	94	3.1	1.05
3	1	1	9	800728	86	2.6	1.15
3	1	1	9	800728	90	2.9	1.12
3	1	1	9	800728	90	2.7	1.04
3	1	1	9	800728	74	1.7	1.20
3	1	1	9	800728	94	3.3	1.12
3	1	1	9	800728	100	3.4	0.95
3	1	1	9	800728	95	3.2	1.05
3	1	1	14	801117	86	2.2	0.98
3	1	1	24	810616	64	0.9	0.99
3	1	1	24	810616	57	0.6	0.94

3	1	1	24	810616	50	0.5	1.17
3	1	1	24	810616	51	0.5	1.10
3	1	3	24	810616	34	0.1	0.77
3	1	1	25	810629	71	1.3	1.04
3	2	1	4	800516	103	4.7	1.20
3	2	1	4	800516	78	2	1.20
3	2	1	4	800516	77	1.6	1.00
3	2	1	4	800516	89	2.4	0.96
3	2	1	4	800516	96	2.7	0.86
3	2	1	4	800516	74	1.4	0.99
3	2	1	4	800516	84	2.4	1.15
3	2	1	4	800516	77	1.7	1.06
3	2	1	4	800516	79	1.7	0.98
3	2	1	4	800516	86	2.4	1.07
3	2	1	4	800516	87	2.1	0.90
3	2	1	4	800516	90	2.4	0.93
3	2	1	4	800516	86	2.2	0.98
3	2	1	4	800516	79	1.7	0.98
3	2	1	4	800516	89	2.5	1.00
3	2	1	4	800516	84	2.2	1.05
3	2	1	4	800516	84	2.5	1.19
3	2	1	4	800516	82	2.1	1.08
3	2	1	4	800516	90	1.8	0.70
3	2	1	4	800516	89	2.4	0.96
3	2	1	4	800516	86	1.5	0.67
3	2	1	4	800516	94	2.6	0.88
3	2	1	4	800516	80	2.2	1.22
3	2	1	4	800516	90	2.3	0.89
3	2	1	4	800516	101	4	1.08
3	2	1	4	800516	84	2.1	1.00
3	2	1	4	800516	90	2.9	1.12
3	2	1	4	800516	87	2.4	1.03
3	2	1	4	800516	75	1.3	0.88
3	2	1	4	800516	80	1.6	0.89
3	2	1	4	800516	89	2.2	0.88
3	2	1	4	800516	82	1.7	0.87
3	2	1	4	800516	82	2.3	1.18
3	2	1	4	800516	86	2	0.89
3	2	1	4	800516	88	1.7	0.70
3	2	1	4	800516	81	2	1.07
3	2	1	4	800516	104	4.1	1.02
3	2	1	4	800516	87	2.2	0.94
3	2	1	4	800516	80	1.6	0.89
3	2	1	4	800516	80	1.6	0.89

3	2	1	4	800516	89	2.7	1.08
3	2	1	4	800516	100	3.6	1.01
3	2	1	4	800516	92	2	0.72
3	2	1	4	800516	80	1.4	0.78
3	3	1	21	810506	48	0.3	0.80
3	4	1	7	800628	110	4.8	1.00
3	4	1	21	810506	52	0.3	0.62
3	4	1	21	810506	47	0.4	1.14
3	4	1	21	810506	57	0.7	1.10
3	4	1	21	810506	51	0.4	0.88
3	4	1	21	810506	50	0.4	0.94
3	4	1	21	810506	52	0.5	1.04
3	4	1	21	810506	45	0.3	0.97
3	4	1	21	810506	51	0.4	0.88
3	4	1	21	810506	51	0.4	0.88
3	4	1	25	810629	73	1.5	1.10
3	4	1	25	810629	100	3.7	1.03
3	4	1	25	810629	64	1	1.10
3	4	1	25	810629	70	1.5	1.25
3	4	1	25	810629	71	1.4	1.12
3	4	1	25	810629	81	2.1	1.12
3	4	1	25	810629	68	1.2	1.10
3	4	1	25	810629	70	1.7	1.42
3	4	1	25	810629	98	3.7	1.10
3	4	1	25	810629	72	1.4	1.07
3	4	1	25	810629	104	4.1	1.02
3	4	1	25	810629	69	1.4	1.22
3	4	1	25	810629	72	1.4	1.07
3	4	1	25	810629	68	1.2	1.10
3	4	1	25	810629	64	1.1	1.21
3	4	1	25	810629	99	3.5	1.01
3	4	1	25	810629	68	1.1	1.00
3	4	1	25	810629	63	0.9	1.04
3	4	1	25	810629	96	3.3	1.05
3	4	1	25	810629	66	1.4	1.40
3	4	1	25	810629	96	3.2	1.01
3	5	1	6	800613	73	1.6	1.18
3	5	1	21	810506	48	0.3	0.80
3	5	1	21	810506	45	0.3	0.97
3	5	1	21	810506	46	0.3	0.91
3	5	1	21	810506	46	0.3	0.91
3	5	1	21	810506	43	0.3	1.12
3	5	1	21	810506	50	0.3	0.70
3	5	1	21	810506	54	0.7	1.30

3	5	1	21	810506	46	0.2	0.61
3	5	1	21	810506	45	0.3	0.97
3	5	1	21	810506	45	0.3	0.97
3	5	1	25	810629	77	1.6	1.00
3	6	1	7	800629	83	1.7	0.84
3	6	1	7	800629	73	1.2	0.88
3	6	1	21	810506	106	3.9	0.91
3	6	1	21	810506	103	3.9	1.00
3	6	1	21	810506	99	3.9	1.12
3	6	1	21	810506	114	5.1	0.95
3	6	1	21	810506	112	5.1	1.01
3	6	1	21	810506	100	3.9	1.09
3	7	1	7	800629	77	1.6	1.00
3	7	1	9	800728	83	2	0.99
3	7	1	9	800728	79	1.6	0.92
3	7	1	9	800728	81	2.2	1.17
3	7	1	9	800728	84	2	0.95
3	7	1	9	800728	72	1.4	1.07
3	7	1	9	800728	70	1.3	1.09
3	7	1	9	800728	80	1.8	1.00
3	7	1	9	800728	71	1.3	1.04
3	7	1	9	800728	82	2.3	1.18
3	7	1	9	800728	79	1.8	1.04
3	7	1	9	800728	90	2.5	0.97
3	7	1	9	800728	69	1.2	1.05
3	7	1	9	800728	79	2	1.15
3	7	1	9	800728	77	2	1.25
3	7	1	9	800728	74	1.4	0.99
3	7	1	9	800728	81	1.9	1.01
3	7	1	9	800728	77	1.9	1.18
3	7	1	9	800728	90	2.6	1.00
3	7	1	9	800728	71	1.2	0.96
3	7	1	9	800728	75	1.6	1.08
3	7	1	10	800810	86	2.1	0.93
3	7	1	10	800810	88	2.3	0.95
3	7	1	10	800810	81	1.5	0.80
3	7	1	10	800810	86	1.5	0.67
3	7	1	21	810506	44	0.2	0.70
3	7	1	24	810616	50	0.6	1.41
3	7	1	24	810616	55	0.6	1.05
3	7	1	24	810616	64	1.3	1.43
3	7	1	24	810616	62	1	1.21
3	7	1	24	810616	56	0.6	0.99
3	7	1	24	810616	57	0.7	1.10

3	7	1	24	810616	63	0.9	1.04
3	7	1	24	810616	60	0.8	1.07
3	7	3	24	810616	65	0.9	0.94
3	7	2	25	810629	75	1.4	0.95
3	7	1	10	800810	74		

xxiv. Pacific tomcod, *Microgadus Proximus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	2	24	810616	40	0.5	0.70
3	1	2	24	810616	40	0.6	0.84
3	1	2	24	810616	48	1.2	0.97
3	1	2	24	810616	39	0.6	0.91
3	1	2	24	810616	36	0.6	1.15
3	1	2	24	810616	41	0.7	0.91
3	1	2	24	810616	53	1.3	0.78
3	1	2	24	810616	39	0.7	1.06
3	1	3	24	810616	44	0.9	0.94
3	1	3	24	810616	40	0.7	0.98
3	1	3	24	810616	37	0.6	1.06
3	1	3	24	810616	41	0.7	0.91
3	1	3	24	810616	47	1	0.86
3	1	3	24	810616	31	0.2	0.60
3	1	3	24	810616	33	0.5	1.25
3	1	3	24	810616	36	0.5	0.96
3	1	3	24	810616	37	0.5	0.88
3	1	3	24	810616	44	0.9	0.94
3	1	3	24	810616	50	1.3	0.93
3	1	3	24	810616	40	0.7	0.98
3	1	3	24	810616	38	0.6	0.98
3	1	1	25	810629	50	1	0.71
3	1	1	25	810629	49	1.4	1.06
3	1	1	25	810629	41	1.3	1.69
3	1	1	25	810629	43	1.5	1.69
3	1	1	25	810629	42	1.4	1.69
3	1	1	25	810629	51	2.1	1.41
3	1	1	25	810629	64	3.1	1.05
3	3	1	25	810629	49	1.2	0.91
3	3	1	25	810629	53	1.6	0.96
3	3	1	25	810629	37	0.8	1.41

xxv. Padded sculpin, *Artedius fenestralis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	9	800728	67	5	1.12
3	1	1	9	800728	50	1.6	0.87

3	1	1	9	800728	65	3.7	0.91
3	1	1	9	800728	53	1.7	0.78
3	1	1	9	800728	71	5.1	0.96
3	1	1	9	800728	50	1.6	0.87
3	1	1	9	800728	64	3.8	0.98
3	1	1	10	800810	57	3.2	1.17
3	1	1	11	800905	50	1	0.54
3	1	2	14	801117	85	10.3	1.12
3	1	2	14	801117	79	9	1.22
3	1	1	15	801208	88	11.3	1.11
3	1	1	15	801208	84	9.7	1.10
3	1	1	15	801208	74	7.1	1.18
3	1	1	15	801208	69	4.7	0.96
3	1	1	24	810616	43	1.3	1.12
3	1	1	24	810616	43	1.4	1.20
3	1	1	24	810616	45	1.4	1.05
3	1	1	24	810616	42	1.2	1.11
3	1	1	24	810616	45	1.5	1.12
3	1	1	24	810616	47	1.5	0.98
3	1	1	24	810616	47	1.7	1.12
3	1	1	24	810616	41	1	0.99
3	1	1	24	810616	38	1	1.25
3	1	1	24	810616	39	1.3	1.50
3	1	1	24	810616	41	1	0.99
3	1	2	24	810616	41	1.1	1.09
3	1	2	24	810616	38	1	1.25
3	1	2	24	810616	35	0.6	0.96
3	1	2	24	810616	42	1	0.92
3	1	2	24	810616	30	0.3	0.77
3	1	2	24	810616	32	0.5	1.05
3	1	2	24	810616	31	0.4	0.93
3	1	2	24	810616	41	1	0.99
3	1	2	24	810616	46	1.1	0.77
3	1	2	24	810616	36	0.8	1.18
3	1	2	24	810616	45	1.3	0.97
3	1	2	24	810616	39	0.8	0.92
3	1	2	24	810616	38	0.7	0.87
3	2	1	7	800628	64	3.7	0.95
3	2	1	12	800924	63	3.8	1.03
3	2	1	12	800924	68	5.2	1.11
3	2	1	12	800924	70	5.1	1.00
3	2	1	13	801028	60	2.6	0.81
3	2	1	14	801117	92	9.8	0.84
3	2	1	14	801117	70	4.8	0.94

3	2	1	14	801117	79	6	0.82
3	2	1	14	801117	76	6.8	1.04
3	2	2	14	801117	87	11.7	1.19
3	2	2	14	801117	75	6.7	1.07
3	2	2	14	801117	96	16	1.21
3	2	2	14	801117	96	12.4	0.93
3	2	2	14	801117	65	4.2	1.03
3	3	1	6	800613	35	0.5	0.80
3	3	1	6	800613	38	0.7	0.87
3	3	1	6	800613	35	0.8	1.28
3	3	1	6	800613	34	0.5	0.88
3	3	1	7	800628	56	3	1.16
3	3	1	7	800628	46	1.4	0.98
3	3	1	7	800628	60	3.1	0.97
3	4	1	9	800728	60	3	0.94
3	4	1	9	800728	53	1.9	0.87
3	4	1	9	800728	76	5.9	0.90
3	4	1	9	800728	42	1	0.92
3	4	1	9	800728	63	3.1	0.84
3	4	1	13	801028	77	6	0.88
3	6	1	6	800613	39	0.9	1.04
3	7	1	8	800710	29	0.2	0.57
3	7	1	10	800810	68	4.9	1.05
3	7	1	13	801028	80	5.9	0.77
3	7	1	13	801028	67	4.3	0.96
3	7	1	13	801028	64	3.6	0.93
3	7	1	15	801209	80	7.9	1.03
3	7	1	16	810121	75	7.9	1.26
3	7	1	17	810216	95	12.4	0.96
3	7	1	24	810616	26	0.3	1.18
3	7	1	24	810616	38	1	1.25
3	7	2	24	810616	40	1	1.07
3	7	2	24	810616	44	1.6	1.28
3	7	2	24	810616	44	1.5	1.20
3	7	2	24	810616	40	1.2	1.28
3	7	2	24	810616	37	0.8	1.08
3	7	2	24	810616	36	0.8	1.18
3	7	3	24	810616	100	17.2	1.15
3	7	3	24	810616	45	1.5	1.12
3	7	2	25	810629	42	1.2	1.11

xxvi. Peamouth chub, *Mylocheilus caurinus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	5	1	23	810603	234	143.3	1.10

1	7	1	7	800626	84	9.2	1.06
1	7	1	7	800626	91	10.9	1.02
1	7	1	7	800626	89	11.3	1.12
1	7	1	7	800626	88	9.2	0.94
1	7	1	7	800626	91	12	1.12
2	2	1	23	810602	61	3.3	0.89
2	3	1	6	800612	121	21	0.92
2	3	1	24	810617	170	62.3	1.11
2	3	1	24	810617	180	69.4	1.06
2	3	1	24	810617	150	37.6	0.94
2	5	1	23	810602	290	202.7	0.88
2	5	1	23	810602	250	159.6	1.03
2	6	1	23	810602	130	26.8	0.97
2	6	1	23	810602	131	27.7	0.99
2	6	1	23	810602	120	22	0.99

xxvii. Penpoint gunnel, *Apodichthys flavidus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
2	1	1	23	810602	134	8.3	0.99
3	1	1	2	800417	109	3.05	0.63
3	1	2	2	800417	19	0.15	3.55
3	1	2	2	800417	26	0.15	1.52
3	1	2	2	800417	23	0.05	0.70
3	1	2	2	800417	108	3.3	0.70
3	1	2	2	800417	29	0.15	1.13
3	1	2	2	800417	124	5.45	0.80
3	1	2	2	800417	27	0.15	1.37
3	1	2	2	800417	28	0.15	1.24
3	1	2	2	800417	123	5.05	0.76
3	1	2	2	800417	27	0.15	1.37
3	1	3	2	800417	34	0.15	0.73
3	1	3	2	800417	32	0.02	0.12
3	1	3	2	800417	118	4.15	0.70
3	1	3	2	800417	31	1.5	9.41
3	1	1	8	800710	105	4.9	1.13
3	1	1	8	800710	106	4.5	1.01
3	1	1	8	800710	66	1.2	0.97
3	1	1	9	800728	56	0.8	1.01
3	1	1	9	800728	75	1.6	0.92
3	1	1	9	800728	88	2.4	0.89
3	1	1	9	800728	99	3.6	0.97
3	1	1	9	800728	82	2	0.90
3	1	1	9	800728	97	3.6	1.03
3	1	1	9	800728	121	7.3	1.14

3	1	1	9	800728	71	1.5	1.00
3	1	1	9	800728	97	3.3	0.94
3	1	1	9	800728	127	8.2	1.13
3	1	1	9	800728	94	3	0.93
3	1	1	9	800728	74	1.5	0.89
3	1	1	11	800905	117	6.2	1.06
3	1	1	12	800924	119	6	0.98
3	1	1	12	800924	90	2.2	0.77
3	1	1	21	810506	31	0.1	0.63
3	1	1	23	810601	116	5.4	0.95
3	1	1	24	810616	138	10.6	1.16
3	1	1	24	810616	239	47.1	1.17
3	1	1	24	810616	62	1	0.96
3	1	1	24	810616	162	12	0.85
3	1	1	24	810616	73	1.8	1.11
3	1	1	24	810616	219	36.2	1.14
3	1	2	24	810616	72	1.5	0.96
3	1	2	24	810616	182	8.2	0.42
3	1	2	24	810616	190	28.4	1.31
3	1	2	24	810616	169	17.2	1.09
3	1	2	24	810616	194	24.8	1.08
3	1	3	24	810616	47	0.3	0.61
3	1	3	24	810616	29	0.1	0.75
3	1	3	24	810616	58	0.8	0.92
3	1	3	24	810616	42	0.3	0.83
3	1	3	24	810616	69	1.5	1.08
3	1	3	24	810616	41	0.3	0.88
3	1	3	24	810616	44	0.4	0.97
3	1	3	24	810616	212	37	1.27
3	1	3	24	810616	207	27.8	1.02
3	1	3	24	810616	312	133.1	1.60
3	1	3	24	810616	46	0.4	0.86
3	1	3	24	810616	41	0.3	0.88
3	1	3	24	810616	33	0.2	1.06
3	1	3	24	810616	40	0.3	0.94
3	1	3	24	810616	205	32.6	1.22
3	1	3	24	810616	187	23.2	1.12
3	1	1	25	810629	49	0.6	1.09
3	1	1	25	810629	144	8.9	0.87
3	2	1	7	800628	64	1.25	1.10
3	2	1	7	800628	85	2.66	1.08
3	2	1	7	800628	89	2.84	1.02
3	2	1	7	800628	68	1.26	0.94
3	2	1	13	801028	135	10.3	1.20

3	2	1	13	801028	137	11.7	1.31
3	2	1	13	801028	125	7.3	1.05
3	2	1	22	810520	140	9.4	0.99
3	2	1	22	810520	145	12.7	1.22
3	2	1	23	810601	127	7.7	1.06
3	2	1	23	810601	208	32.5	1.17
3	3	1	6	800613	75	1.9	1.09
3	3	1	25	810629	72	1.5	0.96
3	4	1	9	800728	95	3.3	1.00
3	4	1	9	800728	85	2.2	0.90
3	4	1	9	800728	125	7.9	1.13
3	4	1	9	800728	112	5.3	1.02
3	4	1	13	801028	140	12.4	1.31
3	7	1	9	800728	100	3.5	0.92
3	7	1	9	800728	165	16.8	1.14
3	7	1	9	800728	103	3.9	0.94
3	7	1	9	800728	94	2.7	0.84
3	7	1	9	800728	113	5	0.94
3	7	1	10	800810	101	3.9	1.00
3	7	1	10	800810	90	2.4	0.84
3	7	1	13	801028	138	10.9	1.20
3	7	1	24	810616	145	10.8	1.04
3	7	1	24	810616	150	11.7	1.02
3	7	1	24	810616	130	7.6	0.98
3	7	1	24	810616	152	12.1	1.02
3	7	2	24	810616	151	11.2	0.96
3	7	2	24	810616	130	7.5	0.97
3	7	2	24	810616	132	9.6	1.19
3	7	3	24	810616	138	9.4	1.03
3	7	3	24	810616	145	9.1	0.87
3	7	3	24	810616	121	5.2	0.81
3	7	3	24	810616	194	22.5	0.98
3	7	3	24	810616	149	9.1	0.81
3	7	3	24	810616	68	1.1	0.82
3	7	3	24	810616	201	29.5	1.17
3	7	3	24	810616	138	8.6	0.94
3	1	3	2	800417	22		
3	1	3	2	800417	21		
3	1	3	2	800417	25		
3	1	3	2	800417	24		
3	1	3	2	800417	22		
3	1	3	2	800417	23		
3	1	3	2	800417	21		
3	1	3	2	800417	22		

3	3	1	9	800728	106
3	3	1	9	800728	106

xxviii. Pile perch, *Rhacochilus vacca*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	9	800728	70	4.7	0.91
3	1	1	10	800810	65	3.2	0.81
3	3	1	9	800728	71	5.8	1.07
3	3	1	9	800728	70	5.1	0.99
3	3	1	9	800728	74	6.5	1.04
3	3	1	9	800728	75	6.3	0.96
3	3	1	9	800728	71	5.1	0.94
3	3	1	9	800728	71	5	0.93
3	3	1	9	800728	74	6.4	1.02
3	3	1	9	800728	70	5.4	1.05
3	3	1	9	800728	76	6.1	0.88
3	3	1	9	800728	70	5.4	1.05
3	3	1	9	800728	70	5.5	1.07
3	3	1	9	800728	74	6.4	1.02
3	3	1	9	800728	76	6.7	0.97
3	3	1	9	800728	69	5.1	1.05
3	3	1	9	800728	70	5.3	1.03
3	3	1	9	800728	68	4.5	0.97
3	3	1	9	800728	69	5.4	1.11
3	3	1	9	800728	70	5.1	0.99
3	3	1	9	800728	70	5.5	1.07
3	7	1	9	800728	65	4.1	1.04

xxix. Pink salmon, *Oncorhynchus gorbuscha*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	2	2	800409	36	0.3	0.85
1	1	1	2	800418	34	0.4	1.37
1	1	1	2	800418	38	0.5	1.19
1	1	1	2	800418	31	0.3	1.38
1	1	1	2	800418	31	0.3	1.38
1	1	1	2	800418	34	0.3	1.02
1	1	1	2	800418	34	0.3	1.02
1	1	1	2	800418	38	0.5	1.19
1	1	2	2	800418	43	0.6	0.95
1	1	2	2	800418	42	0.5	0.86
1	1	2	2	800418	46	0.8	1.02
1	1	2	2	800418	39	0.3	0.65
1	1	2	2	800418	52	1.3	1.11
1	1	2	2	800418	46	0.9	1.15

1	1	2	2	800418	47	1	1.19
1	1	2	2	800418	38	0.3	0.71
1	1	2	2	800418	37	0.4	1.04
1	1	2	2	800418	36	0.2	0.57
1	1	2	2	800418	51	1.4	1.27
1	1	2	2	800418	41	0.4	0.74
1	1	2	2	800418	52	1.3	1.11
1	1	2	2	800418	44	0.6	0.88
1	1	2	2	800418	51	1.3	1.18
1	1	2	2	800418	47	1	1.19
1	1	2	2	800418	50	1.2	1.17
1	1	2	2	800418	49	1.1	1.14
1	1	2	2	800418	39	0.3	0.65
1	1	2	2	800418	46	0.7	0.89
1	1	2	2	800418	37	0.4	1.04
1	1	2	2	800418	38	0.3	0.71
1	1	2	2	800418	47	0.9	1.07
1	1	2	2	800418	35	0.3	0.93
1	1	2	2	800418	51	0.9	0.82
1	1	2	2	800418	39	0.3	0.65
1	1	2	2	800418	48	1	1.11
1	1	2	2	800418	41	0.4	0.74
1	1	2	2	800418	43	0.5	0.79
1	1	2	2	800418	38	0.4	0.95
1	1	2	2	800418	40	0.4	0.80
1	1	2	2	800418	51	1.3	1.18
1	1	2	2	800418	37	0.4	1.04
1	1	2	2	800418	40	0.4	0.80
1	1	2	2	800418	37	0.4	1.04
1	1	2	2	800418	39	0.5	1.09
1	1	2	2	800418	46	0.7	0.89
1	1	2	2	800418	43	0.5	0.79
1	1	2	2	800418	32	0.1	0.42
1	1	2	2	800418	43	0.4	0.64
1	1	2	2	800418	43	0.6	0.95
1	1	2	2	800418	53	1.5	1.20
1	1	2	2	800418	36	0.3	0.85
1	1	2	2	800418	38	0.3	0.71
1	1	2	2	800418	39	0.3	0.65
1	1	2	2	800418	37	0.3	0.78
1	1	2	2	800418	44	0.6	0.88
1	1	2	2	800418	39	0.4	0.87
1	1	2	2	800418	47	1	1.19
1	1	2	2	800418	38	0.3	0.71

1	1	2	2	800418	52	1.3	1.11
1	1	2	2	800418	38	0.3	0.71
1	1	2	2	800418	39	0.4	0.87
1	1	2	2	800418	43	0.4	0.64
1	1	2	2	800418	38	0.2	0.48
1	1	2	2	800418	39	0.4	0.87
1	1	2	2	800418	30	0.4	2.05
1	1	2	2	800418	39	0.4	0.87
1	1	2	2	800418	38	0.3	0.71
1	1	2	2	800418	35	0.3	0.93
1	1	2	2	800418	50	1.2	1.17
1	1	3	2	800418	32	0.2	0.83
1	1	3	2	800418	36	0.3	0.85
3	1	1	3	800501	43	0.9	1.43
3	1	1	3	800501	40	0.9	1.81
3	1	1	3	800501	40	0.7	1.41
3	1	1	3	800501	43	0.9	1.43
3	1	1	3	800501	51	1	0.91
3	1	1	3	800501	41	0.6	1.11
3	2	1	4	800516	36	0.4	1.13
3	2	1	4	800516	59	2	1.13
3	2	1	4	800516	44	0.5	0.74
3	2	1	4	800516	44	0.7	1.03
3	2	1	4	800516	40	0.8	1.61
3	2	1	4	800516	37	0.5	1.30
3	2	1	4	800516	34	0.2	0.68
3	2	1	4	800516	40	0.7	1.41
3	2	1	4	800516	44	0.6	0.88
3	2	1	4	800516	44	1	1.47
3	2	1	4	800516	39	0.7	1.53
3	2	1	4	800516	40	0.9	1.81
3	2	1	4	800516	31	0.3	1.38
3	2	1	4	800516	44	0.8	1.18
3	2	1	4	800516	45	0.9	1.23
3	2	1	4	800516	40	0.4	0.80
3	2	1	4	800516	40	0.4	0.80
3	2	1	4	800516	39	0.6	1.31
3	2	1	4	800516	42	0.8	1.37
3	2	1	4	800516	41	0.9	1.67
3	2	1	4	800516	49	1	1.04
3	2	1	4	800516	42	0.8	1.37
3	2	1	4	800516	46	0.9	1.15
3	2	1	4	800516	43	0.5	0.79
3	2	1	4	800516	44	0.7	1.03

3	2	1	4	800516	39	0.7	1.53
3	2	1	4	800516	43	0.9	1.43
3	2	1	4	800516	48	0.9	1.00
3	2	1	4	800516	43	0.7	1.11
3	2	1	4	800516	46	0.7	0.89
3	2	1	4	800516	42	0.8	1.37
3	2	1	4	800516	61	2	1.02
3	2	1	4	800516	45	0.8	1.10
3	2	1	4	800516	43	0.9	1.43
3	2	1	4	800516	44	0.6	0.88
3	2	1	4	800516	39	0.7	1.53
3	2	1	4	800516	36	0.3	0.85
3	2	1	4	800516	40	0.7	1.41
3	2	1	4	800516	50	1	0.97
3	2	1	4	800516	41	0.7	1.30
3	2	1	4	800516	49	1.2	1.24
3	2	1	4	800516	46	0.9	1.15
3	3	1	4	800516	55	1.4	1.00
3	3	1	4	800516	55	1.2	0.85
3	3	1	4	800516	56	1.4	0.94
3	3	1	4	800516	57	1.4	0.89
3	3	1	4	800516	57	1.7	1.08
3	5	1	4	800516	45	0.5	0.68
3	5	1	4	800516	37	0.4	1.04
3	5	1	4	800516	50	1.1	1.07
3	5	1	4	800516	39	0.4	0.87
3	5	1	4	800516	37	0.4	1.04
3	5	1	4	800516	66	2.9	1.14
3	5	1	4	800516	43	0.5	0.79
3	5	1	4	800516	38	0.4	0.95
3	5	1	4	800516	52	1.4	1.20
3	5	1	4	800516	61	2	1.02
3	5	1	4	800516	46	1	1.27
3	5	1	4	800516	48	1.2	1.33
3	5	1	4	800516	50	1.4	1.36
3	5	1	4	800516	57	1.8	1.14
3	5	1	4	800516	40	0.5	1.01
3	5	1	4	800516	41	0.5	0.93
3	5	1	4	800516	52	1	0.85
3	5	1	4	800516	48	1.1	1.22
3	5	1	4	800516	48	0.8	0.89
3	5	1	4	800516	45	0.8	1.10
3	5	1	4	800516	44	0.6	0.88
3	5	1	4	800516	48	0.8	0.89

3	5	1	4	800516	40	0.7	1.41
3	5	1	4	800516	46	0.7	0.89
3	5	1	4	800516	43	0.7	1.11
3	5	1	4	800516	42	0.6	1.03
3	5	1	4	800516	36	0.3	0.85
3	5	1	4	800516	41	0.4	0.74
3	5	1	4	800516	42	0.7	1.20
3	5	1	4	800516	56	1.6	1.07
3	5	1	4	800516	45	0.6	0.82
3	5	1	4	800516	34	0.3	1.02
3	5	1	4	800516	65	2.4	0.99
3	7	1	4	800516	56	1.2	0.81
3	7	1	4	800516	62	1.3	0.63
3	7	1	4	800516	57	1.3	0.82
3	7	1	4	800516	60	1.4	0.75
3	7	1	4	800516	41	0.5	0.93
3	7	1	4	800516	49	0.9	0.93
3	7	1	4	800516	38	0.5	1.19
3	7	1	4	800516	37	0.5	1.30
3	7	1	4	800516	62	1.6	0.77
3	7	1	4	800516	43	0.7	1.11
3	7	1	4	800516	68	2.6	0.93
3	7	1	4	800516	63	2.1	0.96
3	7	1	4	800516	57	1.8	1.14
3	7	1	4	800516	57	1.2	0.76
1	1	2	2	800418	27		
1	1	2	2	800418	35		

xxx. Plainfin midshipman, *Porichthys notatus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	2	1	23	810601	154	38.9	
3	2	1	23	810601	154	38.9	

xxxi. Rock sole, *Lepidopsetta bilineata*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	17	810216	110	13.3	0.84
3	1	1	17	810216	124	19.3	0.85
3	1	1	20	810409	122	25.7	1.19
3	1	2	24	810616	143	36.5	1.06
3	2	1	16	810120	110	14.7	0.93
3	2	1	16	810120	103	12.9	0.99
3	2	2	18	810305	119	21.7	1.09
3	3	1	21	810506	140	35.5	1.09
3	3	1	25	810629	48	1.3	0.97

3	3	1	25	810629	48	1.4	1.05
3	3	1	25	810629	37	0.6	0.98
3	3	1	25	810629	44	1	0.97
3	3	1	25	810629	49	1.3	0.92
3	4	1	6	800613	156	52.1	1.16
3	4	1	9	800728	57	1.9	0.85
3	4	1	21	810506	155	48.9	1.11
3	4	1	23	810601	38	0.7	1.05
3	4	1	25	810629	49	1.3	0.92
3	4	1	25	810629	54	1.8	0.95
3	4	1	25	810629	49	1.5	1.06
3	4	1	25	810629	49	1.5	1.06
3	4	1	25	810629	46	1	0.85
3	5	1	6	800613	40	0.9	1.16
3	5	1	9	800728	67	2.6	0.72
3	5	1	25	810629	51	1.9	1.19
3	5	1	25	810629	42	1	1.11
3	5	1	25	810629	47	1.4	1.12
3	5	1	25	810629	45	1.2	1.09
3	5	1	25	810629	45	1.2	1.09
3	5	1	25	810629	57	2.1	0.94
3	5	1	25	810629	52	1.9	1.12
3	5	1	25	810629	45	1.1	1.00
3	5	1	25	810629	44	1.1	1.07
3	6	1	13	801028	85	6.4	0.87
3	6	1	13	801028	77	5.4	0.99
3	6	1	23	810601	33	0.4	0.91
3	7	1	17	810216	111	14	0.86

xxxii. Rosylip sculpin, *Ascelichthys rhodorus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	24	810616	27	0.4	1.19
3	1	2	24	810616	27	0.3	0.89
3	1	2	24	810616	29	0.5	1.20
3	1	2	24	810616	25	0.2	0.75
3	1	3	24	810616	27	0.3	0.89
3	1	3	24	810616	23	0.2	0.97
3	1	1	25	810629	30	0.7	1.51
3	4	1	9	800728	40	0.9	0.81

xxxiii. Saddleback sculpin, *Oligocottus rimensis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	17	810216	38	0.5	
3	1	3	24	810616	29	0.2	

xxxiv. Saddleback gunnel, *Pholis ornate*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	3	3	800430	83	1.8	0.86
1	1	1	23	810603	43	0.3	0.83
3	1	2	24	810616	66	1	0.88
3	1	3	24	810616	109	3.8	0.88
3	7	1	24	810616	109	4.7	1.08
3	7	2	24	810616	34	0.2	1.04
3	7	2	25	810629	67	2	1.69

xxxv. Sand sole, *Psettichthys melanosticus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
2	2	1	10	800809	77	5.7	1.15
2	2	1	24	810617	39	0.6	0.82
2	2	1	24	810617	138	30.7	1.20
2	3	1	8	800711	60	2.7	1.10
2	3	1	8	800711	63	3.1	1.10
2	4	1	10	800809	65	2.8	0.91
2	5	2	16	810119	95	8.5	0.95
2	6	2	6	800612	38	0.6	0.89
2	6	2	6	800612	179	68.7	1.28
2	6	2	7	800627	50	1.4	0.95
2	6	1	10	800809	71	3.4	0.86
2	6	1	10	800809	51	1	0.64
2	6	1	10	800809	66	2.7	0.84
2	6	1	10	800809	62	2.1	0.78
2	6	2	12	800923	45	1	0.92
2	6	2	12	800923	81	4.9	0.86
2	6	1	16	810119	103	10.2	0.91
2	6	1	16	810119	54	1.6	0.88
2	6	1	18	810304	65	3	0.98
2	6	1	18	810304	63	2.5	0.89
2	6	2	18	810304	101	11.5	1.08
2	6	2	18	810304	100	10.7	1.03
2	6	3	18	810304	80	4.1	0.74
2	6	1	22	810521	101	11.3	1.06
2	6	1	22	810521	93	8.8	1.04
2	6	3	22	810521	135	29.7	1.23
2	6	3	22	810521	85	6.6	1.01
2	6	1	24	810617	43	1	1.04
2	6	1	24	810617	32	0.5	1.20
2	6	1	24	810617	86	6	0.89
2	6	3	24	810617	30	0.5	1.44
2	6	3	24	810617	34	0.5	1.01

2	6	3	24	810617	35	0.8	1.49
3	1	2	24	810616	55	1.6	0.83
3	2	1	16	810120	57	2	0.94
3	2	1	16	810120	44	0.9	0.88
3	5	1	25	810629	35	0.7	1.31
3	5	1	25	810629	51	1.5	0.97
3	5	1	25	810629	36	0.7	1.21
3	5	1	25	810629	40	0.9	1.15
3	5	1	25	810629	30	0.4	1.15
3	6	1	7	800629	124	17	0.89
3	7	1	7	800629	212	115.3	1.34

xxxvi. Sharpnose sculpin, *Clinocottus acuticeps*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	8	800710	32	0.4	1.10
3	1	1	9	800728	37	0.6	1.09
3	1	1	9	800728	37	0.8	1.45
3	1	1	9	800728	40	0.6	0.87
3	1	1	13	801027	41	0.8	1.08
3	1	1	14	801117	47	1.1	1.01
3	1	1	14	801117	48	1.3	1.12
3	1	2	14	801117	46	0.9	0.88
3	1	2	14	801117	47	1.1	1.01
3	1	2	14	801117	47	0.7	0.64
3	1	2	14	801117	43	0.7	0.83
3	1	2	14	801117	46	1.1	1.07
3	1	2	14	801117	41	0.4	0.54
3	1	2	14	801117	44	1.1	1.22
3	1	2	14	801117	46	1.1	1.07
3	1	2	14	801117	42	0.4	0.51
3	1	2	14	801117	45	0.8	0.83
3	1	2	14	801117	52	1.4	0.96
3	1	2	14	801117	47	0.9	0.83
3	1	2	14	801117	41	0.8	1.08
3	1	2	14	801117	46	1.1	1.07
3	1	2	14	801117	44	0.9	1.00
3	1	2	14	801117	43	1	1.18
3	1	1	15	801208	44	1	1.11
3	1	1	15	801208	47	1.1	1.01
3	1	1	15	801208	51	1.6	1.16
3	1	1	15	801208	46	1.2	1.17
3	1	1	15	801208	47	0.8	0.73
3	1	1	15	801208	53	1.8	1.17
3	1	1	15	801208	44	0.9	1.00

3	1	1	15	801208	45	0.9	0.93
3	1	1	15	801208	42	1.2	1.52
3	1	1	15	801208	51	1.5	1.09
3	1	1	15	801208	48	1.7	1.47
3	1	1	15	801208	46	1.2	1.17
3	1	1	15	801208	48	1.3	1.12
3	1	1	15	801208	54	2.1	1.29
3	1	1	16	810120	55	2	1.17
3	1	1	16	810120	52	1.4	0.96
3	1	1	16	810120	50	1.3	1.00
3	1	1	16	810120	46	1.2	1.17
3	1	1	16	810120	51	1.5	1.09
3	1	1	16	810120	45	1.1	1.14
3	1	1	17	810216	45	1.1	1.14
3	1	1	17	810216	53	1.8	1.17
3	1	1	17	810216	48	1.2	1.04
3	1	1	17	810216	46	1.2	1.17
3	1	1	17	810216	48	1.4	1.21
3	1	1	17	810216	45	1	1.04
3	1	1	17	810216	46	1.1	1.07
3	1	2	24	810616	24	0.1	0.63
3	2	1	14	801117	43	0.5	0.59
3	2	1	14	801117	49	0.8	0.65
3	2	1	14	801117	47	0.9	0.83
3	2	1	14	801117	48	0.6	0.52
3	2	2	14	801117	45	1.1	1.14
3	2	2	14	801117	44	0.8	0.89
3	2	2	14	801117	46	1	0.98
3	2	2	14	801117	49	1.4	1.14
3	2	2	14	801117	44	0.9	1.00
3	2	2	14	801117	45	0.8	0.83
3	2	2	14	801117	45	1.2	1.25
3	7	1	16	810121	53	1.5	0.98
3	7	1	16	810121	52	1.5	1.03
3	7	1	24	810616	28	0.4	1.61
3	7	1	24	810616	26	0.2	1.00
3	7	1	24	810616	31	0.5	1.51

xxxvii. Shiner perch, *Cymatogaster aggregate*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel	
1	1	1	3	2	800418	76	6.6	0.89
1	1	1	1	7	800626	45	1.6	1.11
1	1	1	1	7	800626	49	2	1.07
1	1	1	1	7	800626	39	1	1.09

1	1	1	7	800626	45	1.5	1.04
1	1	1	7	800626	39	0.9	0.98
1	1	1	7	800626	48	1.8	1.02
1	1	1	7	800626	42	1.3	1.12
1	1	1	10	800811	68	5.1	0.97
1	1	1	10	800811	59	3.6	1.07
1	1	1	10	800811	58	3.1	0.97
1	1	1	12	800925	72	7	1.12
1	1	1	12	800925	72	6.6	1.05
1	1	1	12	800925	72	6.6	1.05
1	1	1	25	810702	39	0.3	0.33
1	2	1	8	800709	42	1	0.86
1	2	1	9	800730	60	3.5	0.99
1	4	1	7	800626	48	2.7	1.53
1	4	1	7	800626	40	1	1.01
1	4	1	7	800626	52	1.9	0.84
1	4	1	7	800626	48	1.5	0.85
1	4	1	7	800626	39	0.9	0.98
1	4	1	7	800626	37	0.5	0.64
1	4	1	7	800626	38	0.6	0.71
1	4	1	9	800730	49	1.3	0.69
1	4	1	12	800925	71	5.6	0.93
1	4	1	12	800925	88	11.5	0.98
1	4	1	12	800925	86	10.9	1.00
1	4	1	12	800925	72	4.8	0.77
1	4	1	12	800925	77	7.2	0.93
1	4	1	12	800925	78	8	0.99
1	4	1	12	800925	78	7.2	0.90
1	4	1	12	800925	78	6.5	0.81
1	4	1	12	800925	77	7.4	0.96
1	4	1	12	800925	73	6	0.92
1	4	1	24	810618	40	0.9	0.90
1	4	1	24	810618	42	1.1	0.95
1	5	1	7	800626	49	2	1.07
1	5	1	7	800626	48	1.7	0.97
1	5	1	7	800626	44	1.4	1.04
1	5	1	7	800626	45	1.6	1.11
1	5	1	7	800626	46	1.7	1.10
1	5	1	7	800626	43	1.4	1.12
1	5	1	7	800626	48	1.9	1.08
1	5	1	8	800709	44	1.1	0.82
1	5	1	9	800730	44	0.9	0.67
1	5	1	9	800730	51	1.9	0.89
1	5	1	9	800730	57	3.3	1.10

1	5	1	9	800730	53	2.1	0.88
1	5	1	9	800730	52	2.5	1.11
1	5	1	9	800730	60	4.1	1.16
1	5	1	9	800730	63	4.8	1.16
1	5	1	9	800730	45	1.7	1.18
1	5	1	9	800730	60	3.8	1.07
1	5	1	9	800730	62	4.4	1.12
1	5	1	9	800730	54	2.9	1.14
1	5	1	9	800730	54	2.9	1.14
1	5	1	9	800730	59	3.5	1.04
1	5	1	9	800730	45	1.6	1.11
1	5	1	9	800730	55	3.1	1.15
1	5	1	9	800730	52	2.7	1.19
1	5	1	9	800730	43	1.3	1.04
1	5	1	9	800730	57	2.4	0.80
1	5	1	9	800730	57	3	1.00
1	5	1	9	800730	57	3.4	1.13
1	5	1	24	810618	38	1	1.18
1	5	1	24	810618	36	0.7	0.98
1	5	1	24	810618	38	1	1.18
1	5	1	24	810618	39	1	1.09
1	5	2	24	810618	42	1.2	1.04
1	5	2	24	810618	39	1.2	1.31
1	5	2	24	810618	40	1.1	1.11
1	5	2	24	810618	40	1.1	1.11
1	5	2	24	810618	38	0.9	1.06
1	5	2	24	810618	38	1	1.18
1	5	2	24	810618	38	0.9	1.06
1	5	2	24	810618	41	1.2	1.12
1	5	2	24	810618	40	1.1	1.11
1	5	1	25	810702	40	1	1.01
1	5	1	25	810702	47	1.6	0.97
1	5	1	25	810702	43	1.5	1.20
1	5	1	25	810702	45	1.5	1.04
1	5	1	25	810702	48	1.7	0.97
1	5	1	25	810702	41	1.3	1.21
1	5	1	25	810702	44	2.2	1.64
1	5	1	25	810702	42	1.5	1.29
1	5	1	25	810702	48	1.8	1.02
1	5	1	25	810702	44	1.7	1.27
1	5	1	25	810702	38	1.2	1.42
1	5	1	25	810702	44	1.6	1.19
1	5	1	25	810702	42	1.6	1.38
1	5	1	25	810702	42	1.6	1.38

1	5	1	25	810702	42	1.5	1.29
1	5	1	25	810702	47	2	1.21
1	5	1	25	810702	48	2	1.14
1	5	1	25	810702	42	1.4	1.21
1	5	1	25	810702	40	1.4	1.41
1	5	1	25	810702	52	2.5	1.11
1	7	1	7	800626	44	1.8	1.34
1	7	1	7	800626	44	1.8	1.34
1	7	1	7	800626	42	1.5	1.29
1	7	1	7	800626	53	3.1	1.29
1	7	1	7	800626	44	2.3	1.72
1	7	1	7	800626	43	1.8	1.44
1	7	1	7	800626	42	1.5	1.29
1	7	1	7	800626	45	2	1.39
1	7	1	7	800626	47	2.2	1.34
1	7	1	7	800626	46	2	1.30
1	7	1	9	800730	48	1.9	1.08
1	7	1	9	800730	48	1.5	0.85
1	7	1	9	800730	53	2.4	1.00
1	7	1	9	800730	45	1.3	0.90
1	7	1	9	800730	53	2.3	0.96
1	7	1	9	800730	44	1.3	0.97
1	7	1	9	800730	50	1.9	0.95
1	7	1	9	800730	48	1.4	0.80
1	7	1	9	800730	58	3	0.94
1	7	1	9	800730	45	1.5	1.04
1	7	1	9	800730	53	2.2	0.92
1	7	1	9	800730	55	2.8	1.04
1	7	1	9	800730	51	1.7	0.80
1	7	1	9	800730	48	1.9	1.08
1	7	1	9	800730	54	2.6	1.02
1	7	1	9	800730	47	2.1	1.27
1	7	1	9	800730	53	1.9	0.79
1	7	1	9	800730	47	1.9	1.15
1	7	1	9	800730	48	1.8	1.02
1	7	1	9	800730	54	2.6	1.02
2	1	1	23	810602	97	16.1	1.01
2	2	1	7	800627	42	1.3	1.12
2	2	1	7	800627	42	1.2	1.04
2	2	1	7	800627	43	1.2	0.96
2	2	1	7	800627	39	0.8	0.87
2	2	1	7	800627	41	0.9	0.84
2	2	1	7	800627	39	1.1	1.20
2	2	1	7	800627	46	1.4	0.91

2	2	1	7	800627	41	1	0.93
2	2	1	7	800627	41	1.2	1.12
2	2	1	7	800627	44	1.4	1.04
2	2	1	10	800809	57	3.2	1.06
2	2	1	10	800809	69	5.8	1.06
2	2	1	23	810602	84	9.2	0.91
2	2	1	23	810602	130	37.5	0.94
2	2	1	23	810602	90	12.7	1.01
2	2	1	23	810602	80	8.6	0.99
2	2	1	23	810602	101	18.7	1.04
2	2	1	24	810617	41	1.1	1.02
2	2	1	24	810617	39	1	1.09
2	2	1	24	810617	37	0.9	1.15
2	2	1	24	810617	36	0.9	1.26
2	2	1	25	810630	40	1.2	1.21
2	2	1	25	810630	38	0.8	0.94
2	2	1	25	810630	41	1.2	1.12
2	2	1	25	810630	42	1.2	1.04
2	2	1	25	810630	41	1	0.93
2	2	1	25	810630	39	1.1	1.20
2	2	1	25	810630	40	1.3	1.31
2	2	1	25	810630	43	1.2	0.96
2	2	1	25	810630	40	1.1	1.11
2	2	1	25	810630	41	1.1	1.02
2	2	1	25	810630	43	1.8	1.44
2	3	1	4	800514	71	5.8	0.97
2	3	1	4	800514	92	12.7	0.94
2	3	1	8	800711	54	2.9	1.14
2	3	1	8	800711	45	1.3	0.90
2	3	1	8	800711	55	2.9	1.08
2	3	1	8	800711	94	15.9	1.10
2	3	1	8	800711	51	2.4	1.13
2	3	1	8	800711	53	2.3	0.96
2	3	1	8	800711	57	3.2	1.06
2	3	1	8	800711	46	1.8	1.17
2	3	1	8	800711	96	15.6	1.01
2	3	1	8	800711	48	2.1	1.19
2	3	1	21	810505	123	29.2	0.87
2	3	1	23	810602	146	74.6	1.30
2	3	1	23	810602	145	60.3	1.08
2	3	1	23	810602	144	69.1	1.26
2	3	1	23	810602	87	12.1	1.07
2	3	1	23	810602	104	28.5	1.44
2	3	1	24	810617	127	43	1.16

2	3	1	24	810617	86	12.3	1.13
2	3	1	24	810617	91	15.9	1.22
2	3	1	24	810617	90	13	1.03
2	3	1	24	810617	95	12.5	0.84
2	3	1	24	810617	92	17.3	1.28
2	3	1	24	810617	90	16.1	1.28
2	3	1	24	810617	91	12.9	0.99
2	3	1	24	810617	85	12.3	1.17
2	3	1	24	810617	89	12.1	1.00
2	3	1	24	810617	40	1	1.01
2	3	1	24	810617	85	11.8	1.12
2	3	1	24	810617	100	18.8	1.07
2	3	1	24	810617	85	10.1	0.96
2	3	1	24	810617	90	14.9	1.18
2	3	1	24	810617	35	0.9	1.37
2	3	1	24	810617	87	14.8	1.31
2	3	1	24	810617	35	0.9	1.37
2	3	1	24	810617	79	11	1.31
2	3	1	24	810617	99	21.4	1.26
2	3	1	24	810617	35	0.9	1.37
2	3	1	24	810617	81	9.9	1.09
2	3	1	24	810617	141	62.5	1.22
2	3	1	24	810617	82	10.2	1.08
2	3	1	24	810617	92	15.4	1.14
2	3	1	24	810617	105	21.7	1.06
2	3	1	24	810617	77	9.7	1.26
2	3	1	24	810617	86	14.1	1.29
2	3	1	24	810617	39	0.8	0.87
2	3	1	25	810630	41	1.2	1.12
2	3	1	25	810630	43	1.3	1.04
2	3	1	25	810630	40	1.1	1.11
2	3	1	25	810630	46	1.9	1.23
2	3	1	25	810630	39	1.2	1.31
2	3	1	25	810630	39	1.3	1.41
2	3	1	25	810630	42	1.1	0.95
2	3	1	25	810630	43	1.3	1.04
2	4	1	23	810602	141	63.7	1.24
2	4	1	23	810602	74	5.9	0.86
2	4	1	23	810602	94	14.3	0.99
2	4	1	23	810602	113	33.5	1.31
2	4	1	23	810602	105	22.3	1.09
2	4	1	23	810602	86	10.9	1.00
2	4	1	23	810602	110	30.2	1.28
2	5	1	10	800809	61	4.1	1.10

2	5	1	10	800809	63	4.5	1.09
2	5	1	10	800809	65	5.3	1.17
2	5	1	10	800809	67	5.8	1.16
2	5	1	23	810602	77	6.8	0.88
2	5	1	23	810602	132	39.2	0.94
2	6	3	5	800529	82	9.2	0.98
2	6	1	6	800612	102	18.7	1.00
2	6	1	6	800612	97	19.4	1.22
2	6	1	6	800612	92	13	0.96
2	6	2	6	800612	78	9.6	1.19
2	6	2	6	800612	106	26.8	1.28
2	6	2	6	800612	107	26.7	1.23
2	6	1	7	800627	105	20.1	0.99
2	6	1	7	800627	34	0.6	1.00
2	6	1	7	800627	38	0.4	0.47
2	6	2	7	800627	40	1.1	1.11
2	6	2	7	800627	36	0.8	1.12
2	6	2	7	800627	40	1.2	1.21
2	6	2	7	800627	40	1	1.01
2	6	2	7	800627	44	1.3	0.97
2	6	2	7	800627	39	1.1	1.20
2	6	2	7	800627	40	1	1.01
2	6	2	7	800627	41	1.1	1.02
2	6	2	7	800627	41	1.1	1.02
2	6	2	7	800627	41	1.2	1.12
2	6	2	7	800627	39	1	1.09
2	6	2	7	800627	40	1	1.01
2	6	2	7	800627	41	1	0.93
2	6	3	7	800627	136	62.6	1.37
2	6	3	7	800627	118	37.6	1.28
2	6	3	7	800627	94	20.6	1.43
2	6	1	10	800809	55	5.4	2.00
2	6	1	10	800809	62	4.2	1.07
2	6	1	10	800809	55	3.4	1.26
2	6	1	10	800809	104	19	0.96
2	6	1	10	800809	57	3.1	1.03
2	6	1	10	800809	68	2.5	0.48
2	6	1	10	800809	52	1.8	0.80
2	6	2	12	800923	67	4.2	0.84
2	6	1	25	810630	39	1	1.09
2	6	1	25	810630	90	14	1.11
2	6	1	25	810630	40	1.1	1.11
2	6	1	25	810630	39	1.1	1.20
2	6	1	25	810630	40	1.2	1.21

2	6	1	25	810630	50	1.9	0.95
2	6	1	25	810630	40	1	1.01
2	6	1	25	810630	40	1.1	1.11
3	1	1	8	800710	108	22	0.99
3	1	1	10	800810	58	2.6	0.82
3	1	1	10	800810	59	2.7	0.80
3	1	1	10	800810	65	4.1	0.90
3	1	1	11	800905	46	0.8	0.52
3	1	1	11	800905	66	2.7	0.57
3	1	1	11	800905	63	1.6	0.39
3	1	1	11	800905	66	2.8	0.59
3	1	1	11	800905	68	2.4	0.46
3	1	1	11	800905	70	3.4	0.59
3	1	1	13	801027	65	4.5	0.99
3	1	1	13	801027	61	4.1	1.10
3	1	1	13	801027	67	5.1	1.02
3	1	1	13	801027	68	5.1	0.97
3	1	1	13	801027	78	7	0.87
3	1	1	13	801027	78	7.8	0.97
3	1	1	13	801027	76	7.2	0.97
3	1	1	13	801027	65	4.6	1.01
3	1	2	18	810305	83	9.1	0.93
3	1	1	24	810616	119	44.3	1.47
3	1	1	24	810616	110	28.1	1.19
3	1	2	24	810616	100	23	1.31
3	1	3	24	810616	87	10.5	0.93
3	1	3	24	810616	74	6.7	0.98
3	1	1	25	810629	39	1.3	1.41
3	1	1	25	810629	95	12.7	0.85
3	1	1	25	810629	99	17.7	1.04
3	1	1	25	810629	69	4.7	0.86
3	1	1	25	810629	98	18.3	1.11
3	1	1	25	810629	86	11.3	1.03
3	1	1	25	810629	39	1.3	1.41
3	1	1	25	810629	41	1.3	1.21
3	1	1	25	810629	102	25.1	1.35
3	1	1	25	810629	86	14.4	1.32
3	1	1	25	810629	41	1.4	1.30
3	2	1	6	800613	94	18.6	1.29
3	2	1	7	800628	114	16.1	0.61
3	2	1	7	800628	52	1.62	0.72
3	2	1	7	800628	114	24.19	0.92
3	2	1	7	800628	51	1.37	0.64
3	2	1	7	800628	114	25.38	0.96

3	2	1	7	800628	96	10.51	0.68
3	2	1	7	800628	112	18.22	0.73
3	2	1	7	800628	53	1.16	0.48
3	2	1	9	800728	56	0.9	0.32
3	2	1	9	800728	60	1.7	0.48
3	2	1	9	800728	54	0.9	0.35
3	2	1	9	800728	56	1	0.35
3	2	1	9	800728	57	1.1	0.37
3	2	1	10	800810	55	2.8	1.04
3	2	1	10	800810	59	3.6	1.07
3	2	1	10	800810	59	3.8	1.13
3	2	1	10	800810	52	2.3	1.02
3	2	1	10	800810	49	1.7	0.91
3	2	1	10	800810	45	1.4	0.97
3	2	1	10	800810	64	4.2	0.97
3	2	1	10	800810	64	4.5	1.04
3	2	1	10	800810	51	2.1	0.99
3	2	1	10	800810	50	2.2	1.10
3	2	1	11	800905	77	8	1.04
3	2	1	11	800905	62	4.1	1.05
3	2	1	11	800905	61	3.6	0.97
3	2	1	11	800905	66	5.4	1.13
3	2	1	11	800905	57	3.8	1.26
3	2	1	11	800905	73	6.4	0.98
3	2	1	11	800905	68	5.6	1.07
3	2	1	11	800905	61	3.6	0.97
3	2	1	11	800905	69	5.8	1.06
3	2	1	11	800905	64	4.6	1.06
3	2	1	13	801028	63	4	0.97
3	2	1	13	801028	73	6.4	0.98
3	2	1	13	801028	72	6.5	1.04
3	2	1	13	801028	70	6	1.05
3	2	1	13	801028	58	3.2	1.01
3	2	1	13	801028	62	4.1	1.05
3	2	1	16	810120	72	6.3	1.01
3	2	1	16	810120	81	8.1	0.89
3	2	1	16	810120	74	6.6	0.97
3	2	2	18	810305	76	8.2	1.11
3	2	1	21	810506	141	52.9	1.03
3	2	1	23	810601	101	19.6	1.09
3	2	1	23	810601	83	9.8	1.00
3	2	1	23	810601	84	7.1	0.70
3	2	1	23	810601	78	7.6	0.94
3	2	1	23	810601	91	11.9	0.91

3	2	1	23	810601	79	8.3	0.99
3	2	1	23	810601	87	10.7	0.95
3	2	1	23	810601	86	10.2	0.93
3	2	1	23	810601	78	8.2	1.02
3	3	1	8	800710	110	23.3	0.99
3	3	1	8	800710	118	22.8	0.78
3	3	1	9	800728	49	2.1	1.12
3	3	1	9	800728	53	2	0.83
3	3	1	9	800728	58	3.4	1.07
3	3	1	9	800728	45	1.6	1.11
3	3	1	9	800728	64	4.4	1.02
3	3	1	9	800728	60	3.4	0.96
3	3	1	9	800728	58	2.9	0.91
3	3	1	9	800728	49	2.1	1.12
3	3	1	9	800728	58	3.3	1.04
3	3	1	9	800728	61	3.9	1.05
3	3	1	9	800728	54	2.4	0.94
3	3	1	9	800728	53	2.8	1.17
3	3	1	9	800728	59	3.5	1.04
3	3	1	9	800728	50	2.2	1.10
3	3	1	9	800728	50	2.3	1.15
3	3	1	9	800728	50	2.4	1.20
3	3	1	9	800728	54	2.7	1.06
3	3	1	9	800728	58	2.8	0.88
3	3	1	9	800728	44	1.5	1.12
3	3	1	9	800728	52	2.1	0.93
3	3	1	25	810629	42	1	0.86
3	3	1	25	810629	42	1.1	0.95
3	3	1	25	810629	39	0.9	0.98
3	4	1	6	800613	99	18.8	1.11
3	4	1	6	800613	102	13.5	0.72
3	4	1	9	800728	60	3.8	1.07
3	4	1	9	800728	56	2.9	1.02
3	4	1	9	800728	55	3	1.11
3	4	1	9	800728	62	4.4	1.12
3	4	1	9	800728	61	4.9	1.31
3	4	1	9	800728	58	3.3	1.04
3	4	1	9	800728	59	3.2	0.95
3	4	1	9	800728	59	3.8	1.13
3	4	1	9	800728	54	3.3	1.30
3	4	1	9	800728	59	3.2	0.95
3	4	1	9	800728	55	3.4	1.26
3	4	1	9	800728	46	1.9	1.23
3	4	1	9	800728	52	2.4	1.06

3	4	1	9	800728	60	3.5	0.99
3	4	1	9	800728	55	3	1.11
3	4	1	9	800728	62	3.5	0.89
3	4	1	9	800728	55	3	1.11
3	4	1	9	800728	60	3.9	1.10
3	4	1	9	800728	66	6	1.26
3	4	1	9	800728	59	3.7	1.10
3	4	1	13	801028	68	4.5	0.86
3	4	1	13	801028	74	5.6	0.82
3	4	1	13	801028	68	5.5	1.05
3	4	1	13	801028	74	5.8	0.85
3	4	1	13	801028	67	4.8	0.96
3	4	1	13	801028	64	4.2	0.97
3	4	1	13	801028	81	6.8	0.75
3	4	1	13	801028	75	6.9	0.97
3	4	1	13	801028	58	3.1	0.97
3	4	1	13	801028	79	7.9	0.94
3	4	1	23	810601	92	11.7	0.87
3	4	1	23	810601	83	9.1	0.93
3	4	1	23	810601	115	25.5	0.94
3	4	1	25	810629	49	1.8	0.96
3	5	1	6	800613	88	10.2	0.87
3	5	1	6	800613	109	20.7	0.90
3	5	1	7	800628	80	9.1	1.05
3	5	1	7	800628	96	21.9	1.42
3	5	1	7	800628	104	24.1	1.22
3	5	1	7	800628	88	11.8	1.01
3	5	1	9	800728	46	1.5	0.97
3	5	1	9	800728	56	2.5	0.88
3	5	1	9	800728	62	3.9	0.99
3	5	1	9	800728	61	3.1	0.83
3	5	1	9	800728	51	1.8	0.85
3	5	1	9	800728	47	1.3	0.79
3	5	1	9	800728	63	4.2	1.02
3	5	1	9	800728	52	2	0.88
3	5	1	9	800728	61	3.8	1.02
3	5	1	9	800728	50	2.2	1.10
3	5	1	9	800728	55	2.5	0.93
3	5	1	9	800728	59	3.9	1.16
3	5	1	9	800728	61	2.9	0.78
3	5	1	9	800728	65	4	0.88
3	5	1	9	800728	54	2.1	0.83
3	5	1	9	800728	51	2	0.94
3	5	1	9	800728	55	2.5	0.93

3	5	1	9	800728	57	2.9	0.96
3	5	1	9	800728	50	1.9	0.95
3	5	1	9	800728	59	3.3	0.98
3	5	1	10	800810	52	2.4	1.06
3	5	1	10	800810	59	4.3	1.28
3	5	1	10	800810	61	4.2	1.13
3	5	1	10	800810	63	4.6	1.12
3	5	1	10	800810	66	4.1	0.86
3	5	1	10	800810	61	4	1.07
3	5	1	10	800810	61	4.3	1.15
3	5	1	10	800810	66	5.2	1.09
3	5	1	10	800810	60	3.8	1.07
3	5	1	10	800810	67	5.9	1.18
3	5	1	13	801028	72	5.9	0.94
3	5	1	13	801028	82	9.1	0.97
3	5	1	13	801028	74	5.9	0.86
3	5	1	13	801028	63	3.8	0.92
3	5	1	13	801028	75	5.9	0.83
3	5	1	13	801028	75	4.9	0.69
3	5	1	13	801028	68	5.4	1.03
3	5	1	13	801028	76	6.1	0.82
3	5	1	13	801028	71	4.4	0.73
3	5	1	13	801028	77	6.4	0.83
3	5	1	13	801028	65	3.3	0.73
3	5	1	13	801028	76	5.9	0.80
3	5	1	13	801028	74	5.6	0.82
3	5	1	24	810616	84	10	0.99
3	6	1	6	800613	117	37.6	1.31
3	6	1	6	800613	95	17.2	1.15
3	6	1	6	800613	100	19.7	1.13
3	6	1	6	800613	89	16.8	1.38
3	6	1	6	800613	85	12	1.14
3	6	1	6	800613	104	23.5	1.19
3	6	1	6	800613	102	20.5	1.10
3	6	1	6	800613	90	14.2	1.13
3	6	1	6	800613	98	18.2	1.11
3	6	1	6	800613	87	12.2	1.08
3	6	1	9	800728	41	0.9	0.84
3	6	1	13	801028	69	4.7	0.86
3	6	1	13	801028	71	5.6	0.93
3	6	1	13	801028	70	6	1.05
3	6	1	13	801028	74	6.9	1.01
3	6	1	13	801028	100	17.5	1.00
3	6	1	13	801028	85	10	0.95

3	6	1	13	801028	70	5.8	1.01
3	6	1	13	801028	73	7.3	1.12
3	6	1	13	801028	76	7.8	1.05
3	6	1	13	801028	75	7.8	1.10
3	6	1	13	801028	67	4.6	0.92
3	6	1	13	801028	73	7.7	1.18
3	6	1	13	801028	68	4.9	0.94
3	6	1	13	801028	71	6.4	1.07
3	6	1	13	801028	68	5.1	0.97
3	6	1	13	801028	77	7	0.91
3	6	1	13	801028	68	4.6	0.88
3	6	1	13	801028	65	4.5	0.99
3	6	1	13	801028	70	6	1.05
3	6	1	13	801028	62	3.4	0.87
3	6	1	13	801028	82	9.3	0.99
3	6	1	13	801028	76	7.5	1.01
3	6	1	13	801028	95	14.8	0.99
3	6	1	13	801028	73	6.5	0.99
3	6	1	13	801028	78	7.7	0.96
3	6	1	13	801028	75	6.1	0.86
3	6	1	13	801028	67	4.8	0.96
3	7	1	6	800613	82	11.2	1.19
3	7	1	6	800613	92	12.7	0.94
3	7	1	6	800613	73	7	1.07
3	7	1	7	800629	85	11.1	1.05
3	7	1	7	800629	94	15.5	1.07
3	7	1	8	800710	50	1.7	0.85
3	7	1	9	800728	50	1.6	0.80
3	7	1	9	800728	54	2.1	0.83
3	7	1	9	800728	52	2.1	0.93
3	7	1	9	800728	55	2.2	0.82
3	7	1	9	800728	48	1.6	0.91
3	7	1	9	800728	42	1	0.86
3	7	1	9	800728	46	1.3	0.84
3	7	1	9	800728	43	1.1	0.88
3	7	1	9	800728	39	0.9	0.98
3	7	1	9	800728	45	1.3	0.90
3	7	1	9	800728	43	1.1	0.88
3	7	1	9	800728	43	1.4	1.12
3	7	1	9	800728	49	1.9	1.01
3	7	1	9	800728	53	2.1	0.88
3	7	1	9	800728	51	2	0.94
3	7	1	9	800728	45	1.2	0.83
3	7	1	9	800728	49	1.3	0.69

3	7	1	9	800728	43	1.1	0.88
3	7	1	9	800728	49	1.7	0.91
3	7	1	9	800728	44	1.2	0.90
3	7	1	9	800728	46	1.8	1.17
3	7	1	10	800810	64	4.6	1.06
3	7	1	10	800810	45	1.1	0.76
3	7	1	10	800810	55	2.2	0.82
3	7	1	10	800810	52	1.2	0.53
3	7	1	10	800810	44	1.9	1.42
3	7	1	10	800810	53	1.4	0.58
3	7	1	10	800810	54	2.6	1.02
3	7	1	10	800810	46	0.8	0.52
3	7	1	10	800810	45	1.3	0.90
3	7	1	10	800810	54	2.5	0.98
3	7	1	10	800810	47	1.7	1.03
3	7	1	11	800905	67	4.2	0.84
3	7	1	11	800905	69	5	0.91
3	7	1	11	800905	63	3.8	0.92
3	7	1	11	800905	64	3.8	0.88
3	7	1	11	800905	64	3.7	0.85
3	7	1	11	800905	71	5.7	0.95
3	7	1	11	800905	67	4.9	0.98
3	7	1	11	800905	50	1.9	0.95
3	7	1	11	800905	56	2.5	0.88
3	7	1	11	800905	70	5.2	0.91
3	7	1	12	800924	72	6.2	0.99
3	7	1	12	800924	70	5.4	0.94
3	7	1	12	800924	69	5.5	1.00
3	7	1	12	800924	67	4.6	0.92
3	7	1	12	800924	67	5.2	1.04
3	7	1	12	800924	73	5.3	0.81
3	7	1	12	800924	69	5.2	0.95
3	7	1	12	800924	66	4.9	1.03
3	7	1	12	800924	69	5.7	1.04
3	7	1	12	800924	67	5.8	1.16
3	7	1	13	801028	69	5.2	0.95
3	7	1	15	801209	73	6.5	0.99
3	7	1	15	801209	84	9.4	0.93
3	7	1	15	801209	71	6.3	1.05
3	7	1	15	801209	76	4.5	0.61
3	7	1	15	801209	83	10	1.02
3	7	1	15	801209	66	6.3	1.32
3	7	1	15	801209	69	3.3	0.60
3	7	1	15	801209	83	9.6	0.98

3	7	1	15	801209	75	5.8	0.82
3	7	1	16	810121	77	8.2	1.06
3	7	1	16	810121	80	9.9	1.14
3	7	1	16	810121	77	7.1	0.92
3	7	1	16	810121	73	8.2	1.25
3	7	1	16	810121	84	10.2	1.01
3	7	1	16	810121	82	8.3	0.88
3	7	1	16	810121	86	12.2	1.12
3	7	1	16	810121	82	9.7	1.03
3	7	1	21	810506	126	39.2	1.09
3	7	1	21	810506	108	22.5	1.01
3	7	1	21	810506	137	53.6	1.14
3	7	1	21	810506	120	30.6	0.99
3	7	1	21	810506	110	27	1.14
3	7	1	21	810506	122	37.8	1.16
3	7	1	21	810506	126	29.2	0.81
3	7	1	21	810506	123	37.4	1.12
3	7	1	21	810506	111	25.1	1.03
3	7	1	23	810601	78	9.4	1.17
3	7	1	23	810601	85	9.7	0.92
3	7	1	23	810601	84	12	1.18
3	7	1	23	810601	73	6.8	1.04
3	7	1	23	810601	109	29.5	1.29
3	7	1	23	810601	85	12.3	1.17
3	7	1	23	810601	89	12	0.99
3	7	1	23	810601	134	44.5	1.02
3	7	1	23	810601	105	19.5	0.96
3	7	1	23	810601	77	8.6	1.11
3	7	1	23	810601	120	36.3	1.17
3	7	1	23	810601	77	9	1.16
3	7	1	23	810601	88	11.1	0.95
3	7	1	23	810601	84	7.9	0.78
3	7	1	23	810601	87	10.7	0.95
3	7	1	23	810601	70	6.5	1.13
3	7	2	24	810616	115	26.3	0.97
3	7	3	24	810616	86	11.4	1.04
3	7	3	24	810616	86	13.9	1.27
3	2	1	9	800728	48		
3	2	1	9	800728	43		
3	2	1	9	800728	43		
3	2	1	9	800728	41		
3	2	1	9	800728	46		
3	2	1	9	800728	48		
3	2	1	9	800728	51		

3	2	1	9	800728	46
3	2	1	9	800728	52
3	2	1	9	800728	47
3	2	1	9	800728	53
3	2	1	9	800728	48
3	2	1	9	800728	52
3	5	1	9	800728	44

xxxviii. Silverspotted sculpin, *Blepsias cirrhosis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	2	1	9	800728	47	1.4	
3	3	1	25	810629	58	2.2	

xxxix. Slender cockscomb, *Anoplarchus insignis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	7	1	13	801028	75	2.6	
3	7	1	13	801028	74	2.4	

xl. Smoothhead sculpin, *Artedius lateralis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	4	1	15	801211	118	21.9	
1	4	1	15	801211	130	27.6	
1	4	1	15	801211	118	22.7	
3	1	2	14	801117	73	5.3	

xli. Snake prickleback, *Lumpenus sagitta*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	2	1	800321	82	1.2	0.77
1	1	2	4	800515	47	0.4	1.17
1	1	1	5	800528	67	0.9	1.00
1	1	1	21	810507	56	0.5	0.91
1	1	1	21	810507	52	0.4	0.89
1	1	1	21	810507	49	0.3	0.79
1	1	1	21	810507	52	0.4	0.89
1	1	1	21	810507	53	0.4	0.85
1	1	1	21	810507	54	0.4	0.80
1	1	1	21	810507	59	0.5	0.79
1	2	1	21	810507	53	0.4	0.85
1	2	1	21	810507	52	0.3	0.67
1	2	1	21	810507	49	0.2	0.52
1	2	1	21	810507	54	0.3	0.60
1	2	1	21	810507	49	0.2	0.52
1	2	1	21	810507	52	0.5	1.11

1	2	1	21	810507	55	0.5	0.96
1	2	1	21	810507	50	0.2	0.50
1	2	1	21	810507	50	0.3	0.74
1	2	1	22	810519	55	0.5	0.96
1	2	1	22	810519	67	1.1	1.23
1	2	1	22	810519	49	0.3	0.79
1	2	1	22	810519	52	0.5	1.11
1	2	1	22	810519	63	0.8	1.05
1	2	1	22	810519	56	0.6	1.09
1	2	1	22	810519	69	1.1	1.13
1	2	1	22	810519	63	0.9	1.19
1	3	1	22	810519	55	0.5	0.96
1	3	1	22	810519	44	0.2	0.70
1	3	1	22	810519	67	0.9	1.00
1	3	1	22	810519	62	0.8	1.10
1	3	1	22	810519	61	0.7	1.01
1	4	1	21	810507	52	0.5	1.11
1	4	1	21	810507	61	0.6	0.86
1	4	1	22	810519	55	0.5	0.96
1	5	1	21	810507	52	0.4	0.89
1	5	1	22	810519	53	0.4	0.85
1	5	1	22	810519	56	0.6	1.09
1	5	1	22	810519	34	0.3	2.13
1	5	1	22	810519	55	0.5	0.96
1	5	1	22	810519	70	1	0.99
1	5	1	22	810519	61	0.8	1.15
1	5	1	22	810519	35	0.3	1.97
1	5	1	22	810519	48	0.4	1.11
1	5	1	22	810519	51	0.3	0.70
1	5	1	22	810519	57	0.6	1.04
1	5	1	22	810519	68	0.9	0.96
1	5	1	22	810519	32	0.3	2.51
1	5	1	22	810519	62	0.8	1.10
1	5	1	22	810519	49	0.3	0.79
1	5	1	23	810603	180	13	0.98
1	5	1	23	810603	198	14.4	0.83
1	5	1	23	810603	189	14.1	0.93
1	5	1	23	810603	205	16.7	0.88
2	1	1	23	810602	68	0.9	0.96
2	1	1	23	810602	65	0.9	1.09
2	1	1	23	810602	65	0.7	0.85
2	1	1	23	810602	78	1.4	1.03
2	1	1	23	810602	60	0.6	0.90
2	2	1	21	810505	52	0.4	0.89

2	2	1	23	810602	59	0.6	0.95
2	2	1	23	810602	62	0.8	1.10
2	2	1	23	810602	66	0.9	1.05
2	2	1	23	810602	72	1.3	1.19
2	2	1	24	810617	65	0.8	0.97
2	2	1	24	810617	75	1.3	1.07
2	2	1	24	810617	85	1.8	1.05
2	2	1	24	810617	85	1.9	1.11
2	2	1	25	810630	79	1.6	1.14
2	2	1	25	810630	90	2.2	1.10
2	3	1	6	800612	68	0.9	0.96
2	3	1	23	810602	208	17.1	0.87
2	3	1	23	810602	219	27.8	1.22
2	3	1	23	810602	73	1.3	1.15
2	3	1	23	810602	247	22.2	0.70
2	3	1	23	810602	69	0.9	0.93
2	3	1	23	810602	190	16.9	1.09
2	3	1	23	810602	145	8.3	1.12
2	3	1	24	810617	95	2.5	1.07
2	3	1	24	810617	159	9.2	0.97
2	3	1	24	810617	160	10.6	1.10
2	3	1	24	810617	155	9.5	1.07
2	3	1	24	810617	79	1.6	1.14
2	3	1	24	810617	188	14.2	0.95
2	3	1	24	810617	140	7.1	1.06
2	3	1	24	810617	95	2.7	1.16
2	3	1	24	810617	94	2.4	1.06
2	3	1	24	810617	150	8.4	1.04
2	3	1	24	810617	91	2.2	1.06
2	3	1	24	810617	191	16.6	1.06
2	3	1	24	810617	75	1.2	0.98
2	3	1	24	810617	132	6.8	1.19
2	3	1	24	810617	153	10.2	1.19
2	3	1	24	810617	92	2.6	1.22
2	3	1	24	810617	82	1.6	1.03
2	3	1	24	810617	142	7.3	1.05
2	3	1	24	810617	149	8.6	1.08
2	4	1	23	810602	76	1.4	1.11
2	4	1	23	810602	176	13.4	1.07
2	4	1	23	810602	63	0.8	1.05
2	4	1	23	810602	72	1.1	1.01
2	5	1	23	810602	300	32.6	0.61
2	5	1	23	810602	199	15.2	0.87
2	5	1	23	810602	205	17.6	0.93

2	5	1	23	810602	82	2	1.28
2	5	1	23	810602	77	1.6	1.22
2	5	1	23	810602	208	17.1	0.87
2	5	1	23	810602	139	6.6	1.00
2	5	1	23	810602	200	20.9	1.18
2	5	1	23	810602	205	17.6	0.93
2	5	1	23	810602	260	22.7	0.62
2	5	1	23	810602	190	17.5	1.13
2	6	1	5	800529	58	0.5	0.83
2	6	1	5	800529	58	0.6	0.99
2	6	1	5	800529	66	0.8	0.93
2	6	1	5	800529	64	0.8	1.01
2	6	1	5	800529	59	0.7	1.10
2	6	1	5	800529	65	0.8	0.97
2	6	1	5	800529	54	0.5	1.00
2	6	1	5	800529	67	0.8	0.89
2	6	1	5	800529	57	0.5	0.87
2	6	1	5	800529	56	0.5	0.91
2	6	1	5	800529	62	0.6	0.83
2	6	1	5	800529	69	1.1	1.13
2	6	1	5	800529	64	0.7	0.88
2	6	1	5	800529	75	1.4	1.15
2	6	1	5	800529	66	0.9	1.05
2	6	1	5	800529	65	0.8	0.97
2	6	1	5	800529	57	0.6	1.04
2	6	1	5	800529	63	0.5	0.66
2	6	2	5	800529	63	0.8	1.05
2	6	2	5	800529	65	0.7	0.85
2	6	2	5	800529	56	0.6	1.09
2	6	2	5	800529	66	0.8	0.93
2	6	3	5	800529	59	0.6	0.95
2	6	3	5	800529	64	0.8	1.01
2	6	1	7	800627	76	1.3	1.03
2	6	1	7	800627	93	2.2	1.00
2	6	1	7	800627	163	12.5	1.23
2	6	1	7	800627	92	2.5	1.17
2	6	1	7	800627	90	2.3	1.15
2	6	1	7	800627	172	13.5	1.15
2	6	1	7	800627	87	1.9	1.04
2	6	1	7	800627	86	1.9	1.07
2	6	1	7	800627	168	12.5	1.13
2	6	1	7	800627	94	2.4	1.06
2	6	1	7	800627	86	2	1.13
2	6	2	7	800627	89	2.3	1.18

2	6	2	7	800627	87	2.1	1.15
2	6	2	7	800627	88	2.1	1.11
2	6	2	7	800627	81	1.8	1.20
2	6	2	7	800627	92	2.4	1.13
2	6	2	7	800627	93	2.5	1.14
2	6	2	7	800627	91	2.6	1.26
2	6	2	7	800627	92	2.7	1.27
2	6	3	7	800627	91	2.4	1.16
2	6	3	7	800627	175	13.8	1.12
2	6	3	7	800627	263	24.3	0.65
2	6	3	7	800627	84	1.8	1.08
2	6	3	7	800627	75	1.2	0.98
2	6	3	7	800627	238	23.8	0.83
2	6	3	7	800627	81	1.5	1.00
2	6	3	7	800627	85	1.7	0.99
2	6	4	7	800627	96	2.8	1.17
2	6	4	7	800627	89	2.5	1.28
2	6	4	7	800627	96	2.9	1.21
2	6	4	7	800627	97	3.1	1.26
2	6	4	7	800627	81	1.8	1.20
2	6	4	7	800627	258	37.4	1.05
2	6	4	7	800627	68	1.1	1.18
2	6	4	7	800627	82	2	1.28
2	6	4	7	800627	230	31.6	1.21
2	6	1	22	810521	56	0.5	0.91
2	6	1	22	810521	48	0.3	0.83
2	6	1	22	810521	57	0.5	0.87
2	6	1	22	810521	59	0.7	1.10
2	6	2	22	810521	54	0.5	1.00
2	6	2	22	810521	55	0.6	1.15
2	6	2	22	810521	51	0.4	0.94
2	6	2	22	810521	42	0.2	0.80
2	6	2	22	810521	51	0.4	0.94
2	6	2	22	810521	62	0.7	0.96
2	6	2	22	810521	60	0.7	1.05
2	6	2	22	810521	63	0.8	1.05
2	6	2	22	810521	55	0.5	0.96
2	6	3	22	810521	57	0.6	1.04
2	6	3	22	810521	49	0.3	0.79
2	6	3	22	810521	55	0.3	0.57
2	6	3	22	810521	55	0.3	0.57
2	6	3	22	810521	57	0.7	1.21
2	6	3	22	810521	50	0.5	1.24
2	6	3	22	810521	59	0.7	1.10

2	6	3	22	810521	53	0.5	1.06
2	6	3	22	810521	59	0.7	1.10
2	6	1	23	810602	151	7.6	0.92
2	6	1	23	810602	72	1.1	1.01
2	6	1	23	810602	75	1.3	1.07
2	6	1	24	810617	90	2.4	1.20
2	6	1	24	810617	83	1.8	1.12
2	6	3	24	810617	75	1.6	1.31
2	6	3	24	810617	76	1.4	1.11
2	6	1	25	810630	90	2.1	1.05
2	6	1	25	810630	93	2.4	1.09
2	6	1	25	810630	92	2.2	1.03
3	1	3	24	810616	72	1.2	1.10
3	1	3	24	810616	85	1.7	0.99
3	1	3	24	810616	82	1.8	1.16
3	1	3	24	810616	74	1.5	1.27
3	1	3	24	810616	80	1.8	1.24
3	1	3	24	810616	78	1.6	1.18
3	1	3	24	810616	85	1.5	0.87
3	1	3	24	810616	83	1.9	1.18
3	1	3	24	810616	78	1.5	1.10
3	1	3	24	810616	82	1.5	0.96
3	1	3	24	810616	93	2.3	1.05
3	1	3	24	810616	78	1.4	1.03
3	1	3	24	810616	78	1.4	1.03
3	1	3	24	810616	68	1	1.07
3	1	3	24	810616	74	1	0.85
3	1	3	24	810616	72	1.3	1.19
3	1	3	24	810616	74	1.3	1.10
3	3	1	8	800710	95	2.2	0.95
3	4	1	6	800613	64	0.7	0.88
3	7	1	7	800629	135	6.9	1.14
3	7	1	23	810601	72	1.2	1.10

xlii. Speckled sanddab, *Citharichthys stigmaeus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	18	810305	81	6	
3	6	1	13	801028	127	25.5	

xliii. Spinynose sculpin, *Asemichthys taylori*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	8	800710	31	0.3	0.80
3	1	1	8	800710	46	1.3	1.01
3	1	1	8	800710	34	0.4	0.80
3	1	1	8	800710	34	0.5	1.00

3	7	1	8	800710	58	2.7	1.02
3	7	1	8	800710	62	2.9	0.89
3	7	1	8	800710	60	3.2	1.08
3	7	2	8	800710	34	0.8	1.60

xliv. Staghorn sculpin, *Leptocottus armatus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	2	1	800321	105	11.5	0.79
1	1	3	1	800321	99	9.3	0.76
1	1	3	1	800321	141	33	0.96
1	1	1	2	800409	86	7.4	0.91
1	1	2	2	800409	93	7.7	0.76
1	1	1	2	800418	108	13.7	0.87
1	1	2	2	800418	146	32	0.84
1	1	3	2	800418	113	18.7	1.04
1	1	1	3	800430	123	22.4	0.97
1	1	1	3	800430	115	20.1	1.06
1	1	1	3	800430	84	6.2	0.82
1	1	1	3	800430	126	23.3	0.94
1	1	1	3	800430	160	56.5	1.14
1	1	2	3	800430	123	25	1.09
1	1	2	3	800430	119	22.2	1.06
1	1	2	3	800430	115	21	1.11
1	1	3	3	800430	147	45.3	1.17
1	1	3	3	800430	127	28.9	1.14
1	1	3	3	800430	130	30.4	1.12
1	1	1	4	800515	82	6.7	0.95
1	1	1	4	800515	79	6	0.95
1	1	1	4	800515	105	13.3	0.92
1	1	2	4	800515	18	0.1	1.19
1	1	2	4	800515	141	36.1	1.05
1	1	2	4	800515	125	23.8	0.99
1	1	2	4	800515	22	0.1	0.66
1	1	2	4	800515	118	19.5	0.96
1	1	3	4	800515	140	33.5	1.00
1	1	1	5	800528	61	3.5	1.18
1	1	1	5	800528	43	1.3	1.22
1	1	1	5	800528	31	0.6	1.46
1	1	1	5	800528	47	1.7	1.23
1	1	1	5	800528	129	30	1.13
1	1	1	5	800528	152	53.3	1.25
1	1	1	5	800528	51	2.1	1.19
1	1	1	5	800528	52	2	1.07
1	1	1	5	800528	133	34.3	1.19

1	1	1	7	800626	54	2.2	1.06
1	1	1	7	800626	91	10.1	1.06
1	1	1	7	800626	40	1.2	1.39
1	1	1	7	800626	50	2	1.20
1	1	1	7	800626	61	3.2	1.08
1	1	1	7	800626	59	2.9	1.08
1	1	1	7	800626	52	2.2	1.18
1	1	1	7	800626	61	3.3	1.11
1	1	1	7	800626	33	0.7	1.42
1	1	1	7	800626	105	16.2	1.12
1	1	1	10	800811	85	6.9	0.88
1	1	1	10	800811	86	7.3	0.90
1	1	1	10	800811	97	10.7	0.93
1	1	1	10	800811	83	5.9	0.81
1	1	1	10	800811	83	5.7	0.78
1	1	1	10	800811	98	10.1	0.85
1	1	1	10	800811	95	11.1	1.03
1	1	1	10	800811	95	9.2	0.85
1	1	1	11	800904	124	18.7	0.79
1	1	1	11	800904	90	7.2	0.78
1	1	1	11	800904	128	21.8	0.84
1	1	1	11	800904	101	10.9	0.84
1	1	1	12	800925	106	13.2	0.89
1	1	1	12	800925	79	4.7	0.74
1	1	1	12	800925	86	6.1	0.75
1	1	1	12	800925	91	7.7	0.81
1	1	1	14	801118	136	32.6	1.06
1	1	1	14	801118	105	13.2	0.91
1	1	1	14	801118	130	26.8	0.99
1	1	1	14	801118	119	19.1	0.91
1	1	1	14	801118	134	29.2	0.99
1	1	1	15	801211	97	10.4	0.90
1	1	1	15	801211	110	17.1	1.03
1	1	1	15	801211	123	21.8	0.95
1	1	2	16	810120	113	17.31	0.96
1	1	2	16	810120	139	39.78	1.21
1	1	2	16	810120	119	20.69	0.99
1	1	2	16	810120	201	117.23	1.21
1	1	2	16	810120	115	21.13	1.12
1	1	2	16	810120	105	12.79	0.88
1	1	3	16	810120	130	29.44	1.09
1	1	1	18	810303	112	18.2	1.04
1	1	1	20	810408	107	18.7	1.22
1	1	1	21	810507	31	0.3	0.73

1	1	1	22	810519	30	0.5	1.34
1	1	1	22	810519	27	0.3	1.09
1	1	1	22	810519	18	0.1	1.19
1	1	1	22	810519	132	30.5	1.08
1	1	1	22	810519	50	1.3	0.78
1	1	1	22	810519	26	0.3	1.22
1	1	1	22	810519	27	0.3	1.09
1	1	1	22	810519	20	0.2	1.75
1	1	1	22	810519	29	0.4	1.18
1	1	1	22	810519	25	0.3	1.37
1	1	1	22	810519	27	0.4	1.46
1	1	1	23	810603	54	2.9	1.39
1	1	1	23	810603	63	3.4	1.04
1	1	1	23	810603	54	2.4	1.15
1	1	1	23	810603	56	2.3	0.99
1	1	1	23	810603	65	3.8	1.06
1	1	1	23	810603	57	2.5	1.03
1	1	1	23	810603	60	3.3	1.17
1	1	1	23	810603	65	2.7	0.76
1	1	1	23	810603	58	2.5	0.98
1	1	1	23	810603	58	2.7	1.05
1	1	1	23	810603	60	3	1.06
1	1	1	23	810603	74	5.2	1.00
1	1	1	23	810603	56	2.4	1.04
1	1	1	23	810603	62	3.5	1.12
1	1	1	23	810603	53	1.9	0.96
1	1	1	23	810603	65	3.4	0.95
1	1	1	24	810618	74	6.4	1.23
1	1	1	24	810618	67	4.3	1.10
1	1	1	24	810618	72	5.1	1.06
1	1	1	24	810618	76	5.9	1.05
1	1	1	24	810618	65	4.3	1.20
1	1	1	24	810618	51	1.8	1.02
1	1	1	24	810618	66	4.2	1.12
1	1	1	24	810618	61	3.4	1.14
1	1	1	24	810618	75	6.1	1.12
1	1	1	24	810618	82	8.9	1.26
1	1	1	24	810618	49	2.2	1.40
1	1	1	24	810618	64	4.7	1.38
1	1	1	24	810618	76	5.7	1.01
1	1	1	25	810702	67	3.8	0.97
1	1	1	25	810702	50	1.7	1.02
1	1	1	25	810702	62	3	0.96
1	2	1	8	800709	61	3.1	1.04

1	2	1	8	800709	89	10.7	1.20
1	2	1	8	800709	69	4.7	1.10
1	2	1	8	800709	76	5.3	0.94
1	2	1	8	800709	89	8.6	0.96
1	2	1	8	800709	75	4.9	0.90
1	2	1	8	800709	82	7.5	1.06
1	2	1	10	800811	105	13.5	0.93
1	2	1	10	800811	68	3.2	0.78
1	2	1	10	800811	82	6.1	0.87
1	2	1	10	800811	95	8.3	0.77
1	2	1	10	800811	74	4.8	0.92
1	2	1	14	801118	102	14.8	1.11
1	2	1	14	801118	100	11.2	0.89
1	2	1	14	801118	83	6	0.82
1	2	1	22	810519	23	0.2	1.16
1	2	1	22	810519	27	0.2	0.73
1	2	1	22	810519	25	0.2	0.91
1	2	1	23	810603	51	1.9	1.08
1	2	1	23	810603	55	2.5	1.14
1	2	1	24	810618	63	3.7	1.13
1	3	1	7	800626	37	0.8	1.16
1	3	1	7	800626	46	1.4	1.07
1	3	1	7	800626	65	4.3	1.20
1	3	1	7	800626	72	6	1.24
1	3	1	7	800626	40	1	1.15
1	3	1	10	800811	87	7	0.84
1	3	1	10	800811	75	4.9	0.90
1	3	1	10	800811	88	7.1	0.82
1	3	1	11	800904	127	23	0.91
1	3	1	24	810618	68	5	1.23
1	3	1	24	810618	73	6.4	1.28
1	3	1	24	810618	60	3.5	1.24
1	3	1	24	810618	66	4.6	1.23
1	3	1	24	810618	58	3.2	1.25
1	3	1	24	810618	57	2.6	1.07
1	4	1	5	800528	27	0.3	1.09
1	4	1	5	800528	58	2.7	1.05
1	4	1	5	800528	89	9.2	1.03
1	4	1	5	800528	32	0.3	0.66
1	4	1	5	800528	65	4.2	1.17
1	4	1	5	800528	105	18.1	1.25
1	4	1	5	800528	27	0.3	1.09
1	4	1	5	800528	27	0.3	1.09
1	4	1	5	800528	26	0.3	1.22

1	4	1	5	800528	27	0.3	1.09
1	4	1	7	800626	80	6.5	0.99
1	4	1	7	800626	58	3.1	1.21
1	4	1	7	800626	56	2.7	1.17
1	4	1	7	800626	60	3.7	1.31
1	4	1	7	800626	67	4.7	1.20
1	4	1	9	800730	85	6.8	0.87
1	4	1	9	800730	95	9.7	0.90
1	4	1	9	800730	85	7	0.89
1	4	1	18	810303	83	8.5	1.16
1	4	3	18	810303	123	26.2	1.14
1	4	2	20	810408	96	12.6	1.13
1	4	1	22	810519	29	0.3	0.89
1	4	1	22	810519	23	0.2	1.16
1	4	1	22	810519	23	0.2	1.16
1	4	1	22	810519	28	0.3	0.98
1	4	1	22	810519	29	0.3	0.89
1	4	1	23	810603	35	0.7	1.19
1	4	1	23	810603	57	2.9	1.19
1	4	1	23	810603	55	2.4	1.09
1	4	1	23	810603	61	3.2	1.08
1	4	1	23	810603	50	1.8	1.08
1	4	1	23	810603	25	0.4	1.82
1	4	1	23	810603	58	2.1	0.82
1	4	1	23	810603	54	2.4	1.15
1	4	1	23	810603	58	2.7	1.05
1	4	1	23	810603	52	2.3	1.23
1	4	1	23	810603	53	2	1.02
1	4	1	23	810603	55	2.7	1.23
1	4	1	23	810603	58	2.6	1.01
1	4	1	23	810603	25	0.4	1.82
1	4	1	23	810603	51	1.9	1.08
1	4	1	23	810603	51	1.8	1.02
1	4	1	23	810603	65	3.6	1.01
1	4	1	23	810603	35	0.7	1.19
1	4	1	23	810603	42	1.1	1.10
1	4	1	23	810603	49	1.9	1.21
1	4	1	23	810603	55	2.5	1.14
1	4	1	23	810603	54	3.3	1.59
1	4	1	23	810603	44	1.1	0.96
1	4	1	23	810603	58	2.6	1.01
1	4	1	23	810603	45	1.5	1.23
1	4	1	23	810603	42	1	1.00
1	4	1	23	810603	44	1.1	0.96

1	4	1	23	810603	55	2.1	0.96
1	4	1	23	810603	60	3.1	1.10
1	4	1	23	810603	55	2.3	1.05
1	4	1	23	810603	48	1.3	0.88
1	4	1	23	810603	40	1	1.15
1	4	1	23	810603	63	3.3	1.01
1	4	1	23	810603	61	3.4	1.14
1	4	1	24	810618	85	8.7	1.11
1	4	1	24	810618	35	0.5	0.85
1	4	1	24	810618	70	4.6	1.04
1	4	1	24	810618	62	3.5	1.12
1	4	1	24	810618	50	1.5	0.90
1	4	1	24	810618	87	9.5	1.13
1	4	1	24	810618	62	3.3	1.06
1	4	1	24	810618	60	3.1	1.10
1	4	1	24	810618	62	3.1	1.00
1	4	1	24	810618	72	5.5	1.14
1	4	1	24	810618	61	3.4	1.14
1	4	1	24	810618	57	2.7	1.11
1	4	1	24	810618	68	4.9	1.20
1	4	1	24	810618	47	1.5	1.08
1	4	1	24	810618	67	4.4	1.13
1	4	1	24	810618	69	4.2	0.99
1	4	1	24	810618	65	4.2	1.17
1	4	1	24	810618	43	1.1	1.03
1	4	1	24	810618	60	2.7	0.95
1	4	1	24	810618	63	3.8	1.16
1	4	1	25	810702	82	7.8	1.11
1	4	1	25	810702	102	14.4	1.08
1	4	1	25	810702	81	7.1	1.04
1	5	1	7	800626	95	14.4	1.33
1	5	1	7	800626	85	7.8	1.00
1	5	1	7	800626	75	5.9	1.09
1	5	1	7	800626	78	6.7	1.10
1	5	1	7	800626	79	7.2	1.14
1	5	1	7	800626	73	5.4	1.08
1	5	1	7	800626	75	4.9	0.90
1	5	1	7	800626	79	6.6	1.04
1	5	1	7	800626	60	3	1.06
1	5	1	8	800709	57	1.9	0.78
1	5	1	8	800709	64	2.9	0.85
1	5	1	8	800709	78	5.7	0.94
1	5	1	8	800709	56	1.8	0.78
1	5	1	8	800709	61	2.8	0.94

1	5	1	8	800709	76	5.5	0.97
1	5	1	9	800730	68	4	0.98
1	5	1	9	800730	74	5.3	1.02
1	5	1	9	800730	57	2.7	1.11
1	5	1	9	800730	67	3.8	0.97
1	5	1	9	800730	69	3.9	0.92
1	5	1	9	800730	93	10.1	0.99
1	5	1	9	800730	76	6	1.06
1	5	1	9	800730	89	10.6	1.18
1	5	1	9	800730	76	5.6	0.99
1	5	1	9	800730	91	8.6	0.90
1	5	1	9	800730	94	11.2	1.07
1	5	1	9	800730	80	6.6	1.01
1	5	1	9	800730	80	6.7	1.02
1	5	1	9	800730	89	9.2	1.03
1	5	1	9	800730	95	11.8	1.09
1	5	1	9	800730	65	3.6	1.01
1	5	1	9	800730	63	3.4	1.04
1	5	1	9	800730	90	10	1.08
1	5	1	9	800730	99	13.3	1.09
1	5	1	9	800730	75	5.7	1.05
1	5	1	10	800811	110	15.7	0.95
1	5	1	10	800811	78	5.4	0.89
1	5	1	10	800811	86	6.6	0.82
1	5	1	10	800811	82	6.4	0.91
1	5	1	10	800811	73	4.2	0.84
1	5	1	10	800811	76	5	0.89
1	5	1	10	800811	91	8.5	0.89
1	5	1	10	800811	73	4.5	0.90
1	5	1	10	800811	68	3.5	0.86
1	5	1	11	800904	105	13.3	0.92
1	5	1	11	800904	89	9.1	1.02
1	5	1	11	800904	80	6.4	0.98
1	5	1	11	800904	86	7.3	0.90
1	5	1	15	801211	112	18.8	1.07
1	5	1	15	801211	101	13.4	1.03
1	5	1	15	801211	105	15.7	1.08
1	5	1	15	801211	103	13.4	0.98
1	5	1	15	801211	104	15.6	1.11
1	5	1	15	801211	100	13	1.03
1	5	1	15	801211	99	13.1	1.07
1	5	1	15	801211	89	9.7	1.08
1	5	1	15	801211	102	13.8	1.04
1	5	1	23	810603	70	4.6	1.04

1	5	1	23	810603	61	3.7	1.25
1	5	1	23	810603	59	2.8	1.04
1	5	1	23	810603	53	2.1	1.07
1	5	2	24	810618	53	2.4	1.22
1	5	2	24	810618	76	7.1	1.26
1	5	2	24	810618	61	3.7	1.25
1	5	2	24	810618	63	4.1	1.26
1	5	2	24	810618	58	2.8	1.09
1	5	2	24	810618	71	7	1.51
1	5	2	24	810618	52	1.9	1.02
1	5	2	24	810618	61	3.7	1.25
1	5	2	24	810618	64	4.5	1.32
1	5	2	24	810618	74	6.2	1.19
1	5	2	24	810618	59	2.9	1.08
1	5	2	24	810618	67	4.8	1.23
1	5	2	24	810618	46	1.4	1.07
1	5	2	24	810618	64	3.6	1.05
1	5	2	24	810618	75	6	1.11
1	5	2	24	810618	66	4.2	1.12
1	5	2	24	810618	69	5.1	1.20
1	5	2	24	810618	55	2.4	1.09
1	5	2	24	810618	59	3	1.11
1	5	2	24	810618	70	5.3	1.19
1	6	1	7	800626	66	3.7	0.99
1	6	1	7	800626	64	3.8	1.11
1	6	1	7	800626	77	5.4	0.92
1	6	1	7	800626	53	2.1	1.07
1	6	1	8	800709	43	0.8	0.75
1	6	1	8	800709	46	1.2	0.92
1	6	1	8	800709	53	1.7	0.86
1	6	1	8	800709	63	3.6	1.10
1	6	1	9	800730	102	12.6	0.95
1	6	1	9	800730	74	6.8	1.30
1	6	1	9	800730	83	7	0.96
1	6	1	9	800730	115	18.8	0.99
1	6	1	9	800730	88	8	0.92
1	6	1	9	800730	90	9.6	1.04
1	6	1	9	800730	91	9.4	0.98
1	6	1	9	800730	70	4	0.90
1	6	1	9	800730	95	10.9	1.01
1	6	1	9	800730	63	3.1	0.95
1	6	1	9	800730	110	16.2	0.98
1	6	1	9	800730	86	6.9	0.85
1	6	1	9	800730	66	3.4	0.91

1	6	1	9	800730	96	9.9	0.89
1	6	1	9	800730	83	6.9	0.95
1	6	1	9	800730	90	6.9	0.75
1	6	1	9	800730	83	5.2	0.71
1	6	1	9	800730	97	10.7	0.93
1	6	1	9	800730	90	8.7	0.94
1	6	1	9	800730	84	5.6	0.74
1	7	1	7	800626	78	6.7	1.10
1	7	1	7	800626	77	6.4	1.09
1	7	1	7	800626	99	13.5	1.11
1	7	1	7	800626	89	9.5	1.06
1	7	1	9	800730	70	3.9	0.88
1	7	1	9	800730	78	6.2	1.02
1	7	1	9	800730	80	6.7	1.02
1	7	1	9	800730	90	8.4	0.91
1	7	1	9	800730	94	9.6	0.91
1	7	1	9	800730	78	5.6	0.92
1	7	1	9	800730	74	5	0.96
1	7	1	9	800730	60	2.6	0.92
1	7	1	9	800730	73	4.7	0.94
1	7	1	9	800730	73	5.1	1.02
1	7	1	10	800811	90	7.8	0.84
1	7	1	10	800811	81	5.5	0.81
1	7	1	10	800811	64	3.2	0.94
1	7	1	10	800811	68	3.8	0.93
1	7	1	10	800811	95	10.5	0.97
1	7	1	10	800811	86	6.5	0.80
1	7	1	10	800811	75	5.2	0.96
1	7	1	10	800811	77	5.1	0.87
1	7	1	10	800811	75	4.9	0.90
1	7	1	10	800811	63	2.7	0.83
1	7	1	10	800811	95	8.4	0.78
1	7	1	11	800904	73	4	0.80
1	7	1	11	800904	85	8	1.02
1	7	1	11	800904	104	13.1	0.93
1	7	1	11	800904	87	6.8	0.81
1	7	1	11	800904	99	11.5	0.94
2	1	1	23	810602	48	1.6	1.08
2	1	1	23	810602	47	1.3	0.94
2	1	1	23	810602	55	1.9	0.87
2	1	1	23	810602	50	2.3	1.38
2	1	1	23	810602	53	2	1.02
2	2	1	7	800627	60	2.6	0.92
2	2	1	7	800627	61	2.9	0.98

2	2	1	7	800627	75	6	1.11
2	2	1	7	800627	74	4.9	0.94
2	2	1	7	800627	63	2.9	0.89
2	2	1	10	800809	86	7.3	0.90
2	2	1	10	800809	78	6.3	1.03
2	2	1	10	800809	109	14.2	0.88
2	2	1	10	800809	90	10.2	1.10
2	2	1	10	800809	94	10.5	1.00
2	2	1	10	800809	92	8.8	0.89
2	2	1	10	800809	84	5.9	0.78
2	2	1	10	800809	100	11.6	0.92
2	2	1	23	810602	60	2.2	0.78
2	2	1	23	810602	53	2	1.02
2	2	1	23	810602	157	46.3	0.99
2	2	1	23	810602	55	2.4	1.09
2	2	1	23	810602	61	3	1.01
2	2	1	24	810617	64	3.6	1.05
2	2	1	24	810617	60	2.7	0.95
2	2	1	24	810617	56	2.4	1.04
2	3	1	4	800514	112	21.6	1.23
2	3	1	6	800612	86	8.2	1.01
2	3	1	6	800612	57	2.6	1.07
2	3	1	6	800612	86	8.5	1.05
2	3	1	6	800612	60	2.9	1.02
2	3	1	6	800612	60	2.7	0.95
2	3	1	8	800711	60	2.7	0.95
2	3	1	8	800711	115	19.2	1.02
2	3	1	8	800711	97	9.7	0.84
2	3	1	8	800711	77	5	0.85
2	3	1	8	800711	90	8.2	0.89
2	3	1	8	800711	67	3.6	0.92
2	3	1	8	800711	78	5.6	0.92
2	3	1	8	800711	93	9.3	0.91
2	3	1	8	800711	74	4.9	0.94
2	3	1	8	800711	70	4	0.90
2	3	1	8	800711	79	5.7	0.90
2	3	1	8	800711	64	2.9	0.85
2	3	1	8	800711	72	4.1	0.85
2	3	1	8	800711	66	3.1	0.83
2	3	1	23	810602	47	1.3	0.94
2	3	1	23	810602	53	2.3	1.17
2	3	1	23	810602	54	2.1	1.01
2	3	1	23	810602	45	1.1	0.90
2	3	1	23	810602	48	1.1	0.75

2	3	1	23	810602	44	1.1	0.96
2	3	1	23	810602	40	0.9	1.04
2	3	1	23	810602	50	1.6	0.96
2	3	1	23	810602	51	1.6	0.91
2	3	1	23	810602	53	2.3	1.17
2	3	1	23	810602	54	2.1	1.01
2	3	1	23	810602	49	1.6	1.02
2	3	1	23	810602	46	1.1	0.84
2	3	1	24	810617	69	3.7	0.87
2	3	1	24	810617	60	3.2	1.13
2	3	1	24	810617	60	2.6	0.92
2	3	1	24	810617	66	3.5	0.94
2	3	1	24	810617	76	5.1	0.90
2	3	1	24	810617	68	4.2	1.03
2	3	1	24	810617	100	13.8	1.10
2	3	1	24	810617	63	3.1	0.95
2	3	1	24	810617	60	2.8	0.99
2	3	1	24	810617	69	4.3	1.01
2	3	1	24	810617	64	3.5	1.02
2	3	1	24	810617	58	2.5	0.98
2	3	1	24	810617	60	2.7	0.95
2	3	1	24	810617	74	5.3	1.02
2	3	1	24	810617	64	3.3	0.97
2	3	1	24	810617	66	2.5	0.67
2	3	1	24	810617	84	6.8	0.90
2	3	1	24	810617	55	2.1	0.96
2	3	1	24	810617	63	3	0.92
2	3	1	24	810617	62	3	0.96
2	3	1	24	810617	68	3.6	0.88
2	3	1	24	810617	72	4.9	1.02
2	3	1	24	810617	66	3.4	0.91
2	3	1	24	810617	64	3.1	0.91
2	3	1	24	810617	70	4.4	0.99
2	3	1	24	810617	74	5.4	1.03
2	3	1	24	810617	69	4.2	0.99
2	3	1	24	810617	69	4.3	1.01
2	3	1	24	810617	62	3.1	1.00
2	3	1	24	810617	62	3.3	1.06
2	3	1	24	810617	60	2.7	0.95
2	3	1	24	810617	82	7.3	1.04
2	3	1	24	810617	58	2.7	1.05
2	4	1	7	800627	63	3.1	0.95
2	4	1	7	800627	65	3.2	0.90
2	4	1	7	800627	65	3.3	0.92

2	4	1	7	800627	77	5.3	0.90
2	4	1	23	810602	50	1.5	0.90
2	4	1	23	810602	56	2.2	0.95
2	4	1	23	810602	51	1.5	0.85
2	4	1	23	810602	50	1.4	0.84
2	4	1	23	810602	98	14.1	1.19
2	4	1	23	810602	57	2.6	1.07
2	4	1	23	810602	54	1.9	0.91
2	4	1	23	810602	57	2.3	0.94
2	4	1	23	810602	49	1.4	0.89
2	4	1	23	810602	129	31.3	1.18
2	4	1	23	810602	50	1.5	0.90
2	4	1	23	810602	48	1.2	0.81
2	4	1	23	810602	127	30.3	1.20
2	4	1	23	810602	112	19.7	1.13
2	4	1	23	810602	47	1.2	0.87
2	4	1	23	810602	48	1.2	0.81
2	4	1	23	810602	56	2.1	0.91
2	4	1	23	810602	45	1.3	1.06
2	4	1	23	810602	48	1.4	0.95
2	4	1	23	810602	59	2.3	0.85
2	5	1	10	800809	116	18.1	0.93
2	5	1	23	810602	167	65.5	1.17
2	5	1	23	810602	57	2.5	1.03
2	6	1	5	800529	122	26.5	1.18
2	6	1	6	800612	67	4.3	1.10
2	6	1	6	800612	58	2.1	0.82
2	6	1	6	800612	48	1.2	0.81
2	6	1	6	800612	93	10.7	1.05
2	6	1	6	800612	77	6.4	1.09
2	6	1	6	800612	61	2.9	0.98
2	6	1	6	800612	78	6.8	1.12
2	6	1	6	800612	72	4.7	0.98
2	6	2	6	800612	58	2.7	1.05
2	6	2	6	800612	86	8	0.99
2	6	1	7	800627	74	6.1	1.17
2	6	1	7	800627	73	4.6	0.92
2	6	1	7	800627	65	3.5	0.98
2	6	2	7	800627	75	5.2	0.96
2	6	3	7	800627	66	4.3	1.15
2	6	3	7	800627	87	7.8	0.93
2	6	4	7	800627	69	4.5	1.06
2	6	4	7	800627	55	2.3	1.05
2	6	4	7	800627	66	3.5	0.94

2	6	1	12	800923	119	17.7	0.85
2	6	1	16	810119	139	42.7	1.30
2	6	1	16	810119	93	8.3	0.82
2	6	2	18	810304	180	72.2	1.03
2	6	2	18	810304	225	145.5	1.08
2	6	3	18	810304	215	147.2	1.25
2	6	1	23	810602	129	27.7	1.05
2	6	1	23	810602	45	1.2	0.98
2	6	1	24	810617	63	2.9	0.89
2	6	1	24	810617	71	4.4	0.95
2	6	1	24	810617	62	3.2	1.03
2	6	2	24	810617	76	5.8	1.03
2	6	2	24	810617	69	4.1	0.96
2	6	2	24	810617	159	50	1.03
2	6	2	24	810617	76	5.2	0.92
2	6	3	24	810617	70	4.4	0.99
2	6	1	25	810630	76	5.4	0.96
2	6	1	25	810630	73	5.2	1.04
2	6	1	25	810630	45	0.9	0.74
2	6	1	25	810630	99	13	1.06
2	6	1	25	810630	71	4.8	1.04
2	6	1	25	810630	71	4.8	1.04
2	6	1	25	810630	75	5.1	0.94
2	6	1	25	810630	84	8.4	1.11
2	6	1	25	810630	74	5.8	1.11
2	6	1	25	810630	76	6.5	1.15
3	1	3	1	800320	51	1.05	0.60
3	1	1	5	800530	40	0.66	0.76
3	1	1	5	800530	49	1.21	0.77
3	1	1	5	800530	44	0.93	0.81
3	1	1	5	800530	39	0.66	0.82
3	1	1	5	800530	50	1.49	0.90
3	1	1	5	800530	37	0.5	0.72
3	1	1	5	800530	40	0.71	0.82
3	1	1	5	800530	45	0.97	0.79
3	1	1	5	800530	42	0.79	0.79
3	1	1	5	800530	49	1.22	0.78
3	1	1	5	800530	35	0.45	0.77
3	1	1	5	800530	36	0.58	0.91
3	1	1	5	800530	46	1.07	0.82
3	1	1	5	800530	32	0.28	0.62
3	1	1	5	800530	62	2.82	0.91
3	1	1	5	800530	45	1.12	0.92
3	1	1	5	800530	55	1.82	0.83

3	1	1	5	800530	50	1.47	0.88
3	1	1	5	800530	47	1.17	0.84
3	1	1	5	800530	32	0.32	0.71
3	1	1	7	800628	150	44.22	1.08
3	1	1	9	800728	68	3	0.74
3	1	1	9	800728	91	9.2	0.96
3	1	1	9	800728	76	5.3	0.94
3	1	1	9	800728	75	5	0.92
3	1	1	9	800728	48	1.3	0.88
3	1	1	9	800728	77	6.1	1.04
3	1	1	9	800728	68	3.8	0.93
3	1	1	9	800728	54	1.8	0.87
3	1	1	9	800728	42	0.6	0.60
3	1	1	10	800810	63	3.2	0.98
3	1	1	10	800810	122	21.6	0.96
3	1	1	10	800810	87	7.8	0.93
3	1	1	10	800810	64	3.5	1.02
3	1	1	10	800810	89	8.5	0.95
3	1	1	10	800810	99	10.7	0.88
3	1	1	11	800905	97	7.1	0.62
3	1	1	12	800924	42	1.3	1.30
3	1	1	12	800924	108	14.2	0.90
3	1	1	13	801027	169	58.8	1.01
3	1	1	13	801027	169	62.2	1.07
3	1	1	13	801027	111	16.7	0.98
3	1	1	13	801027	155	51.7	1.14
3	1	1	13	801027	86	7	0.86
3	1	1	13	801027	103	12.5	0.91
3	1	1	16	810120	285	361.5	1.35
3	1	1	16	810120	282	398.6	1.54
3	1	1	17	810216	101	11.2	0.87
3	1	1	17	810216	208	95.9	0.90
3	1	1	17	810216	112	15	0.86
3	1	1	19	810323	42	0.9	0.90
3	1	1	21	810506	36	0.5	0.79
3	1	1	21	810506	31	0.5	1.22
3	1	1	21	810506	41	0.5	0.54
3	1	1	21	810506	60	2.4	0.85
3	1	1	21	810506	31	0.5	1.22
3	1	1	21	810506	29	0.3	0.89
3	1	1	21	810506	30	0.5	1.34
3	1	1	21	810506	28	0.3	0.98
3	1	1	21	810506	25	0.3	1.37
3	1	1	21	810506	34	0.5	0.93

3	1	1	21	810506	33	0.5	1.01
3	1	1	21	810506	29	0.3	0.89
3	1	1	21	810506	28	0.3	0.98
3	1	1	21	810506	30	0.5	1.34
3	1	1	21	810506	34	0.5	0.93
3	1	1	22	810520	35	0.5	0.85
3	1	1	22	810520	36	0.5	0.79
3	1	1	22	810520	35	0.6	1.02
3	1	1	22	810520	36	0.6	0.94
3	1	1	22	810520	39	0.8	0.99
3	1	1	22	810520	37	0.7	1.01
3	1	1	22	810520	40	0.9	1.04
3	1	1	22	810520	51	1.7	0.97
3	1	1	22	810520	26	0.2	0.81
3	1	1	22	810520	38	0.8	1.07
3	1	1	22	810520	58	2.5	0.98
3	1	1	22	810520	33	0.5	1.01
3	1	1	22	810520	31	0.4	0.97
3	1	1	22	810520	44	1.1	0.96
3	1	1	22	810520	31	0.5	1.22
3	1	1	22	810520	36	0.6	0.94
3	1	1	22	810520	41	1	1.07
3	1	1	22	810520	33	0.5	1.01
3	1	1	22	810520	35	0.5	0.85
3	1	1	22	810520	44	1.1	0.96
3	1	1	23	810601	50	1.7	1.02
3	1	1	23	810601	37	0.8	1.16
3	1	1	23	810601	59	2.4	0.89
3	1	1	23	810601	130	30.7	1.13
3	1	1	23	810601	33	0.5	1.01
3	1	1	23	810601	53	1.9	0.96
3	1	1	24	810616	36	0.7	1.10
3	1	1	24	810616	51	1.7	0.97
3	1	1	24	810616	49	1.4	0.89
3	1	1	24	810616	47	1.8	1.30
3	1	1	24	810616	47	1.4	1.01
3	1	1	24	810616	49	1.6	1.02
3	1	1	24	810616	34	0.5	0.93
3	1	1	24	810616	33	0.5	1.01
3	1	1	24	810616	40	0.7	0.81
3	1	1	24	810616	50	1.6	0.96
3	1	1	24	810616	41	0.9	0.97
3	1	1	24	810616	47	1.3	0.94
3	1	1	24	810616	48	1.6	1.08

3	1	1	24	810616	42	0.9	0.90
3	1	1	24	810616	60	2.9	1.02
3	1	1	24	810616	47	1.3	0.94
3	1	1	24	810616	36	0.6	0.94
3	1	1	24	810616	59	2.3	0.85
3	1	1	24	810616	42	1	1.00
3	1	1	24	810616	52	1.6	0.86
3	1	1	24	810616	47	1.2	0.87
3	1	1	24	810616	45	1	0.82
3	1	1	24	810616	45	1.2	0.98
3	1	1	24	810616	59	2.6	0.96
3	1	3	24	810616	62	2.7	0.87
3	1	3	24	810616	67	3.4	0.87
3	1	3	24	810616	46	1.1	0.84
3	1	3	24	810616	49	3.4	2.17
3	1	3	24	810616	32	0.3	0.66
3	1	3	24	810616	60	2.7	0.95
3	1	3	24	810616	49	1.7	1.09
3	1	3	24	810616	22	0.3	1.98
3	1	3	24	810616	67	4.1	1.05
3	1	3	24	810616	50	1.9	1.14
3	1	3	24	810616	31	0.5	1.22
3	1	3	24	810616	46	1.3	1.00
3	1	3	24	810616	49	1.3	0.83
3	1	3	24	810616	47	1.3	0.94
3	1	3	24	810616	45	0.9	0.74
3	1	3	24	810616	60	3	1.06
3	1	3	24	810616	50	1.6	0.96
3	1	3	24	810616	57	1.9	0.78
3	1	3	24	810616	35	0.5	0.85
3	1	3	24	810616	48	1.5	1.02
3	1	3	24	810616	24	0.2	1.03
3	1	3	24	810616	39	0.8	0.99
3	1	3	24	810616	39	0.7	0.87
3	1	3	24	810616	45	0.8	0.65
3	1	3	24	810616	53	2	1.02
3	1	3	24	810616	66	3.8	1.02
3	1	3	24	810616	45	1.1	0.90
3	1	3	24	810616	53	1.7	0.86
3	1	3	24	810616	37	0.5	0.72
3	1	1	25	810629	61	3.7	1.25
3	1	1	25	810629	45	1.7	1.39
3	1	1	25	810629	36	0.8	1.26
3	1	1	25	810629	55	2.3	1.05

3	1	1	25	810629	47	1.9	1.37
3	1	1	25	810629	59	3.3	1.22
3	1	1	25	810629	70	5.3	1.19
3	1	1	25	810629	62	3.7	1.19
3	1	1	25	810629	60	2.8	0.99
3	1	1	25	810629	57	3.6	1.48
3	1	1	25	810629	58	2.8	1.09
3	1	1	25	810629	42	1.7	1.70
3	1	1	25	810629	47	1.8	1.30
3	1	1	25	810629	48	2	1.36
3	1	1	25	810629	55	2.4	1.09
3	1	1	25	810629	47	2	1.44
3	1	1	25	810629	68	2.9	0.71
3	1	1	25	810629	57	3.3	1.35
3	2	1	4	800516	41	0.9	0.97
3	2	1	4	800516	40	0.7	0.81
3	2	1	4	800516	36	0.9	1.41
3	2	1	4	800516	46	1.1	0.84
3	2	1	4	800516	31	0.7	1.70
3	2	1	4	800516	31	0.7	1.70
3	2	1	4	800516	35	0.9	1.53
3	2	1	6	800613	55	2.1	0.96
3	2	1	6	800613	120	21.7	1.01
3	2	1	7	800628	73	4.61	0.92
3	2	1	7	800628	129	25.63	0.97
3	2	1	7	800628	66	3.11	0.83
3	2	1	7	800628	176	68.07	1.04
3	2	1	7	800628	58	2.66	1.04
3	2	1	7	800628	60	3.61	1.28
3	2	1	7	800628	86	7.45	0.92
3	2	1	7	800628	61	3.68	1.24
3	2	1	10	800810	124	20.2	0.86
3	2	1	10	800810	130	28	1.03
3	2	1	10	800810	129	28.2	1.07
3	2	1	11	800905	90	7.1	0.77
3	2	1	11	800905	77	3.3	0.56
3	2	1	12	800924	87	8.9	1.06
3	2	1	12	800924	83	7.5	1.03
3	2	1	13	801028	139	34.1	1.04
3	2	1	13	801028	176	80.1	1.22
3	2	1	13	801028	115	16	0.85
3	2	1	13	801028	93	9.3	0.91
3	2	1	13	801028	120	22.8	1.06
3	2	1	13	801028	102	12	0.90

3	2	1	13	801028	165	60.5	1.11
3	2	1	13	801028	229	189.1	1.34
3	2	1	14	801117	116	23.5	1.21
3	2	1	14	801117	139	36.6	1.11
3	2	1	16	810120	95	10.82	1.00
3	2	1	16	810120	105	13.53	0.93
3	2	1	16	810120	117	21.19	1.07
3	2	1	16	810120	99	12.09	0.99
3	2	1	18	810305	95	10.5	0.97
3	2	1	18	810305	84	9.7	1.28
3	2	1	18	810305	86	10.2	1.26
3	2	2	18	810305	79	5.9	0.93
3	2	2	18	810305	98	12.3	1.04
3	2	1	19	810323	36	0.7	1.10
3	2	1	20	810409	44	1.1	0.96
3	2	1	22	810520	89	9.9	1.11
3	2	1	22	810520	39	0.8	0.99
3	2	1	22	810520	56	2.4	1.04
3	2	1	22	810520	38	0.8	1.07
3	2	1	22	810520	40	0.9	1.04
3	2	1	22	810520	31	0.5	1.22
3	2	1	22	810520	36	0.7	1.10
3	2	1	22	810520	89	9.1	1.02
3	2	1	22	810520	55	2.5	1.14
3	2	1	22	810520	41	1.2	1.29
3	2	1	22	810520	38	0.8	1.07
3	2	1	23	810601	48	1	0.68
3	2	1	23	810601	43	0.9	0.84
3	2	1	23	810601	43	0.9	0.84
3	2	1	23	810601	45	1.1	0.90
3	2	1	23	810601	154	45.4	1.02
3	2	1	23	810601	43	0.8	0.75
3	2	1	23	810601	66	3	0.80
3	2	1	23	810601	46	1	0.77
3	2	1	23	810601	53	1.8	0.91
3	2	1	23	810601	41	0.6	0.64
3	2	1	23	810601	46	1.2	0.92
3	2	1	23	810601	38	0.6	0.80
3	2	1	23	810601	45	0.9	0.74
3	2	1	23	810601	44	0.8	0.70
3	2	1	25	810629	45	1.3	1.06
3	2	1	25	810629	43	1.2	1.12
3	2	1	25	810629	60	2.6	0.92
3	2	1	25	810629	40	1	1.15

3	2	1	25	810629	40	1	1.15
3	3	1	6	800613	59	2.7	1.00
3	3	1	6	800613	72	4.4	0.91
3	3	1	6	800613	72	4.3	0.89
3	3	1	6	800613	55	2.2	1.00
3	3	1	6	800613	70	4.1	0.92
3	3	1	7	800628	62	2.7	0.87
3	3	1	9	800728	82	5.1	0.72
3	3	1	9	800728	77	2.7	0.46
3	3	1	9	800728	94	8.6	0.82
3	3	1	9	800728	65	3.6	1.01
3	4	1	6	800613	81	7	1.03
3	4	1	9	800728	171	65.6	1.09
3	4	1	9	800728	76	4.9	0.87
3	4	1	9	800728	97	10.9	0.95
3	4	1	9	800728	72	3.9	0.81
3	4	1	9	800728	83	6.2	0.85
3	4	1	10	800810	91	8.7	0.91
3	4	1	13	801028	91	9.6	1.01
3	4	1	13	801028	141	42	1.22
3	4	1	13	801028	253	295.5	1.56
3	4	1	15	801209	145	46.2	1.24
3	4	1	25	810629	74	4.9	0.94
3	4	1	25	810629	60	2.9	1.02
3	4	1	25	810629	68	4.2	1.03
3	5	1	6	800613	58	2.4	0.94
3	5	1	6	800613	70	4.6	1.04
3	5	1	9	800728	125	26.2	1.09
3	5	1	9	800728	100	13.1	1.04
3	5	1	10	800810	93	8.6	0.85
3	5	1	10	800810	74	4.8	0.92
3	5	1	10	800810	64	3.5	1.02
3	5	1	10	800810	71	4.3	0.93
3	5	1	10	800810	76	4.6	0.82
3	5	1	10	800810	69	4	0.94
3	5	1	10	800810	90	8.3	0.90
3	5	1	10	800810	91	8.7	0.91
3	5	1	10	800810	69	3.8	0.89
3	5	1	10	800810	93	9.7	0.95
3	5	1	10	800810	102	12	0.90
3	5	2	24	810616	67	3.3	0.84
3	5	2	24	810616	50	1.3	0.78
3	5	3	24	810616	57	2.2	0.90
3	5	3	24	810616	61	2.7	0.91

3	5	3	24	810616	60	2.5	0.88
3	5	3	24	810616	70	4.3	0.97
3	5	3	24	810616	69	4	0.94
3	5	1	25	810629	59	2.7	1.00
3	6	1	9	800728	94	10.8	1.03
3	6	1	9	800728	73	4.2	0.84
3	6	1	9	800728	92	9.8	0.99
3	6	1	23	810601	35	0.7	1.19
3	6	1	23	810601	33	0.5	1.01
3	6	1	23	810601	35	0.8	1.36
3	6	1	23	810601	44	1.1	0.96
3	6	1	23	810601	50	1.7	1.02
3	6	1	23	810601	40	1.1	1.27
3	6	1	23	810601	35	0.6	1.02
3	7	1	6	800613	52	1.4	0.75
3	7	1	6	800613	57	2	0.82
3	7	1	6	800613	52	1.4	0.75
3	7	1	6	800613	57	2.1	0.86
3	7	1	7	800629	94	10.3	0.98
3	7	1	7	800629	85	7.5	0.96
3	7	1	7	800629	95	9.5	0.88
3	7	1	7	800629	105	13.1	0.90
3	7	1	7	800629	82	6.7	0.95
3	7	1	10	800810	122	18.7	0.83
3	7	1	11	800905	98	10.6	0.89
3	7	1	11	800905	86	7.9	0.98
3	7	1	13	801028	163	57.7	1.10
3	7	1	13	801028	117	17.6	0.88
3	7	1	13	801028	197	103.4	1.14
3	7	1	13	801028	190	92.4	1.13
3	7	1	13	801028	184	74.8	1.00
3	7	1	13	801028	162	53.6	1.04
3	7	1	13	801028	165	58	1.07
3	7	1	16	810121	97	13.2	1.15
3	7	1	16	810121	294	498.5	1.70
3	7	1	16	810121	198	117.9	1.28
3	7	1	16	810121	83	8.5	1.16
3	7	1	16	810121	240	227.2	1.40
3	7	1	16	810121	99	13.6	1.11
3	7	1	16	810121	73	7.4	1.47
3	7	1	16	810121	166	58.3	1.06
3	7	1	16	810121	194	88.2	1.01
3	7	1	17	810216	182	66.2	0.92
3	7	1	18	810305	48	1.9	1.29

3	7	1	18	810305	83	9.7	1.33
3	7	1	18	810305	53	2.3	1.17
3	7	1	18	810305	53	2.3	1.17
3	7	1	18	810305	55	2.3	1.05
3	7	1	22	810520	31	0.4	0.97
3	7	1	22	810520	35	0.5	0.85
3	7	1	22	810520	35	0.5	0.85
3	7	1	22	810520	34	0.5	0.93
3	7	1	22	810520	32	0.4	0.89
3	7	1	22	810520	39	0.7	0.87
3	7	1	22	810520	43	1	0.93
3	7	1	22	810520	38	0.7	0.94
3	7	1	22	810520	39	0.9	1.12
3	7	1	22	810520	35	0.5	0.85
3	7	1	22	810520	30	0.4	1.07
3	7	1	22	810520	33	0.5	1.01
3	7	1	22	810520	32	0.4	0.89
3	7	1	22	810520	35	0.6	1.02
3	7	1	22	810520	36	0.6	0.94
3	7	1	22	810520	32	0.5	1.11
3	7	1	22	810520	38	0.7	0.94
3	7	1	22	810520	34	0.5	0.93
3	7	1	22	810520	35	0.6	1.02
3	7	1	22	810520	41	0.9	0.97
3	7	1	22	810520	20	0.1	0.87
3	7	1	22	810520	26	0.2	0.81
3	7	1	22	810520	35	0.6	1.02
3	7	1	22	810520	27	0.3	1.09
3	7	1	22	810520	33	0.5	1.01
3	7	1	22	810520	32	0.4	0.89
3	7	1	23	810601	46	1.1	0.84
3	7	1	23	810601	35	0.6	1.02
3	7	1	23	810601	36	0.7	1.10
3	7	1	23	810601	36	0.6	0.94
3	7	1	23	810601	38	0.8	1.07
3	7	1	23	810601	39	0.8	0.99
3	7	1	23	810601	23	0.2	1.16
3	7	1	23	810601	35	0.6	1.02
3	7	1	23	810601	40	0.8	0.92
3	7	1	23	810601	45	1.3	1.06
3	7	1	24	810616	79	6.6	1.04
3	7	1	24	810616	57	2.3	0.94
3	7	1	24	810616	53	2.3	1.17
3	7	2	24	810616	51	1.9	1.08

3	7	2	24	810616	40	0.8	0.92
3	7	2	24	810616	77	5.1	0.87
3	7	2	24	810616	36	0.7	1.10
3	7	2	24	810616	55	2.2	1.00
3	7	3	24	810616	52	1.9	1.02
3	7	3	24	810616	46	1.2	0.92
3	7	3	24	810616	42	1	1.00
3	7	3	24	810616	48	1.5	1.02
3	7	3	24	810616	45	1.2	0.98
3	7	1	25	810629	60	3.1	1.10
3	7	2	25	810629	41	1.7	1.83
3	7	2	25	810629	44	1	0.87
3	7	2	25	810629	44	1.8	1.57
3	7	2	25	810629	44	1.6	1.40
3	7	2	25	810629	45	1.5	1.23
3	7	2	25	810629	50	1.9	1.14
3	7	2	25	810629	69	4.2	0.99
1	1	1	4	800515	21		
1	1	2	4	800515	11		
1	6	1	5	800528	16		

xlv. Starry flounder, *Platichthys stellatus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	1	800321	94	8.3	0.82
1	1	1	1	800321	78	5	0.86
1	1	1	1	800321	76	5.4	1.01
1	1	2	1	800321	131	19.6	0.73
1	1	2	1	800321	79	4.6	0.76
1	1	3	1	800321	94	9.2	0.91
1	1	3	1	800321	79	5.3	0.88
1	1	3	1	800321	81	6.4	0.99
1	1	3	1	800321	107	13.9	0.94
1	1	1	2	800409	285	225	0.84
1	1	1	2	800409	318	363.4	0.98
1	1	1	2	800409	302	313.2	0.98
1	1	1	2	800409	278	235.9	0.95
1	1	1	2	800409	264	203.6	0.95
1	1	2	2	800409	150	39.5	0.98
1	1	3	2	800409	81	5.7	0.88
1	1	3	2	800409	86	7.1	0.92
1	1	3	2	800409	85	7	0.94
1	1	1	2	800418	82	7.7	1.15
1	1	1	2	800418	87	7.3	0.91
1	1	1	2	800418	96	8.5	0.79

1	1	2	2	800418	93	7.7	0.79
1	1	2	2	800418	87	5	0.62
1	1	3	2	800418	215	113.1	0.97
1	1	3	2	800418	207	101.5	0.97
1	1	3	2	800418	91	8.6	0.94
1	1	3	2	800418	181	54.8	0.78
1	1	3	2	800418	204	105.8	1.06
1	1	3	2	800418	183	76.1	1.05
1	1	1	3	800430	218	115.9	0.95
1	1	1	3	800430	223	110.2	0.85
1	1	1	3	800430	81	7	1.08
1	1	1	3	800430	81	7	1.08
1	1	1	3	800430	79	5.8	0.96
1	1	1	3	800430	108	13	0.86
1	1	1	3	800430	210	94.8	0.87
1	1	1	3	800430	88	7.7	0.93
1	1	2	3	800430	71	4.1	0.93
1	1	2	3	800430	163	44.3	0.86
1	1	2	3	800430	95	11.3	1.09
1	1	2	3	800430	86	7.9	1.02
1	1	2	3	800430	114	17	0.95
1	1	2	3	800430	94	10.8	1.07
1	1	2	3	800430	102	13.5	1.05
1	1	2	3	800430	215	105	0.90
1	1	2	3	800430	89	8.6	1.00
1	1	2	3	800430	77	5.3	0.95
1	1	2	3	800430	207	104.1	1.00
1	1	2	3	800430	107	16.3	1.10
1	1	2	3	800430	76	4.6	0.86
1	1	2	3	800430	120	18.7	0.90
1	1	2	3	800430	81	6.6	1.02
1	1	2	3	800430	228	140.4	1.01
1	1	3	3	800430	225	125.5	0.94
1	1	3	3	800430	147	39.8	1.05
1	1	3	3	800430	77	5.2	0.93
1	1	3	3	800430	205	102.3	1.01
1	1	1	4	800515	148	39.7	1.03
1	1	1	4	800515	104	12.4	0.91
1	1	2	4	800515	125	25.4	1.08
1	1	2	4	800515	90	7.8	0.88
1	1	2	4	800515	135	29.5	1.00
1	1	2	4	800515	82	7.5	1.12
1	1	3	4	800515	93	9.6	0.98
1	1	1	6	800611	34	0.5	1.01

1	1	1	7	800626	44	1	0.94
1	1	1	7	800626	43	0.9	0.90
1	1	1	7	800626	50	1.6	1.03
1	1	1	7	800626	47	1.3	1.00
1	1	1	7	800626	50	1.6	1.03
1	1	1	7	800626	41	0.8	0.93
1	1	1	7	800626	50	1.6	1.03
1	1	1	8	800709	29	0.2	0.65
1	1	1	8	800709	100	14.7	1.22
1	1	1	8	800709	42	0.9	0.97
1	1	1	8	800709	60	2.9	1.09
1	1	1	8	800709	50	1.5	0.96
1	1	1	9	800730	55	2.1	1.02
1	1	1	9	800730	65	4	1.18
1	1	1	9	800730	73	5.9	1.24
1	1	1	9	800730	48	1.2	0.87
1	1	1	9	800730	48	1.2	0.87
1	1	1	9	800730	67	4.3	1.16
1	1	1	9	800730	62	3.9	1.33
1	1	1	9	800730	60	2.9	1.09
1	1	1	9	800730	40	0.5	0.62
1	1	1	9	800730	61	3	1.07
1	1	1	9	800730	56	2.2	1.01
1	1	1	9	800730	69	4.5	1.12
1	1	1	9	800730	58	3	1.24
1	1	1	9	800730	62	3.4	1.16
1	1	1	9	800730	60	2.7	1.01
1	1	1	9	800730	69	4.7	1.17
1	1	1	9	800730	52	1.8	1.03
1	1	1	9	800730	53	1.9	1.03
1	1	1	9	800730	125	25.6	1.09
1	1	1	9	800730	66	4.3	1.22
1	1	1	10	800811	55	1.2	0.58
1	1	1	10	800811	125	24.4	1.04
1	1	1	10	800811	60	2.6	0.97
1	1	1	10	800811	67	3.6	0.97
1	1	1	10	800811	53	1.1	0.60
1	1	1	10	800811	58	2.5	1.04
1	1	1	10	800811	65	3.5	1.04
1	1	1	10	800811	66	3.3	0.93
1	1	1	10	800811	65	3.6	1.07
1	1	1	10	800811	63	3	0.97
1	1	1	11	800904	78	6.6	1.14
1	1	1	11	800904	73	4.8	1.01

1	1	1	11	800904	64	2.9	0.90
1	1	1	11	800904	78	5.9	1.02
1	1	1	11	800904	65	3.2	0.95
1	1	1	11	800904	51	1.4	0.85
1	1	1	11	800904	75	5.1	0.99
1	1	1	11	800904	68	3.8	0.98
1	1	1	12	800925	86	7.7	0.99
1	1	1	12	800925	68	3.4	0.88
1	1	1	12	800925	70	4.6	1.09
1	1	1	12	800925	82	6.6	0.98
1	1	1	12	800925	80	6.1	0.98
1	1	2	14	801118	55	1.7	0.82
1	1	1	15	801211	60	2.8	1.05
1	1	1	15	801211	73	4.5	0.94
1	1	1	15	801211	67	4.4	1.19
1	1	1	15	801211	63	3	0.97
1	1	1	15	801211	61	2.5	0.89
1	1	1	15	801211	76	6	1.12
1	1	1	15	801211	76	5.4	1.01
1	1	1	15	801211	64	3.1	0.96
1	1	1	15	801211	88	6.7	0.81
1	1	1	15	801211	63	1.3	0.42
1	1	1	15	801211	66	4.2	1.19
1	1	1	15	801211	67	4.4	1.19
1	1	1	15	801211	70	4.5	1.07
1	1	1	15	801211	73	4.9	1.03
1	1	1	15	801211	78	5.5	0.95
1	1	1	15	801211	76	5.2	0.97
1	1	1	16	810120	65	3.13	0.93
1	1	1	16	810120	62	3.2	1.09
1	1	1	16	810120	69	3.88	0.96
1	1	1	16	810120	215	112.03	0.96
1	1	1	16	810120	79	5.81	0.97
1	1	1	16	810120	131	25.85	0.96
1	1	1	16	810120	70	4.06	0.96
1	1	1	16	810120	75	4.6	0.89
1	1	1	16	810120	58	2.28	0.95
1	1	2	16	810120	66	3.29	0.93
1	1	2	16	810120	86	7.47	0.97
1	1	2	16	810120	72	4.55	0.99
1	1	2	16	810120	67	3.7	1.00
1	1	2	16	810120	78	5.81	1.00
1	1	2	16	810120	76	4.76	0.89
1	1	2	16	810120	75	5.22	1.01

1	1	2	16	810120	60	2.81	1.05
1	1	2	16	810120	66	3.53	1.00
1	1	2	16	810120	25	0.16	0.80
1	1	2	16	810120	68	4	1.04
1	1	2	16	810120	72	4.63	1.01
1	1	2	16	810120	64	3.08	0.95
1	1	2	16	810120	95	10.5	1.01
1	1	2	16	810120	215	128.07	1.10
1	1	2	16	810120	72	4.44	0.97
1	1	2	16	810120	77	6.18	1.11
1	1	2	16	810120	70	3.95	0.94
1	1	2	16	810120	73	4.52	0.95
1	1	2	16	810120	84	6.33	0.88
1	1	2	16	810120	69	3.91	0.97
1	1	2	16	810120	108	15.92	1.05
1	1	2	16	810120	73	4.61	0.97
1	1	2	16	810120	61	2.64	0.94
1	1	2	16	810120	68	3.66	0.95
1	1	2	16	810120	72	4.43	0.97
1	1	2	16	810120	66	3.42	0.97
1	1	3	16	810120	74	4.9	0.99
1	1	3	16	810120	64	3.19	0.99
1	1	3	16	810120	83	6.7	0.96
1	1	3	16	810120	68	4.09	1.06
1	1	3	16	810120	72	4.53	0.99
1	1	3	16	810120	59	2.39	0.94
1	1	3	16	810120	74	4.54	0.92
1	1	3	16	810120	76	5.12	0.95
1	1	3	16	810120	70	4.23	1.01
1	1	1	18	810303	64	3.1	0.96
1	1	1	18	810303	73	4.3	0.90
1	1	1	18	810303	70	4.9	1.16
1	1	1	18	810303	88	8.8	1.06
1	1	1	18	810303	80	6.3	1.01
1	1	1	18	810303	58	2.2	0.91
1	1	1	18	810303	59	2.4	0.95
1	1	1	18	810303	68	4	1.04
1	1	1	18	810303	86	7.8	1.01
1	1	1	18	810303	63	2.8	0.91
1	1	1	18	810303	61	2.5	0.89
1	1	1	18	810303	55	2	0.97
1	1	1	18	810303	70	4	0.95
1	1	1	18	810303	85	6.9	0.92
1	1	2	18	810303	75	5.6	1.08

1	1	2	18	810303	84	7.7	1.07
1	1	2	18	810303	61	3.1	1.11
1	1	2	18	810303	62	3.1	1.05
1	1	2	18	810303	72	5.2	1.14
1	1	2	18	810303	74	5.2	1.05
1	1	2	18	810303	78	5.6	0.97
1	1	2	18	810303	84	8.6	1.19
1	1	2	18	810303	68	4	1.04
1	1	2	18	810303	71	4.3	0.98
1	1	2	18	810303	76	5.5	1.02
1	1	2	18	810303	84	7.6	1.05
1	1	2	18	810303	66	3.8	1.07
1	1	2	18	810303	70	4.1	0.97
1	1	2	18	810303	82	7.2	1.07
1	1	3	18	810303	63	3	0.97
1	1	3	18	810303	69	4.2	1.04
1	1	3	18	810303	80	6.4	1.02
1	1	3	18	810303	78	6.1	1.05
1	1	3	18	810303	83	7.7	1.11
1	1	3	18	810303	80	6.5	1.04
1	1	3	18	810303	69	4.3	1.07
1	1	3	18	810303	67	3.8	1.03
1	1	3	18	810303	54	2.3	1.18
1	1	3	18	810303	74	4.8	0.97
1	1	3	18	810303	69	3.8	0.94
1	1	3	18	810303	91	10.1	1.10
1	1	3	18	810303	62	3.2	1.09
1	1	3	18	810303	87	6.8	0.85
1	1	1	19	810325	128	20.4	0.81
1	1	1	19	810325	76	4.9	0.91
1	1	1	19	810325	153	27.5	0.65
1	1	1	19	810325	77	4.7	0.84
1	1	1	19	810325	67	3.5	0.95
1	1	2	19	810325	71	3.5	0.80
1	1	2	19	810325	80	4.6	0.74
1	1	2	19	810325	73	3.5	0.73
1	1	2	19	810325	69	2.9	0.72
1	1	1	20	810408	108	18.5	1.22
1	1	1	20	810408	85	7.3	0.98
1	1	1	20	810408	88	8.3	1.00
1	1	1	20	810408	158	42.4	0.91
1	1	1	20	810408	132	30.3	1.10
1	1	1	20	810408	65	3.9	1.15
1	1	1	20	810408	76	5.7	1.06

1	1	1	20	810408	91	11.5	1.26
1	1	1	20	810408	70	4.5	1.07
1	1	1	20	810408	147	41.9	1.11
1	1	2	20	810408	198	90.1	0.99
1	1	2	20	810408	135	29	0.99
1	1	2	20	810408	84	8.5	1.18
1	1	2	20	810408	80	6.8	1.09
1	1	2	20	810408	82	6	0.89
1	1	2	20	810408	76	6	1.12
1	1	2	20	810408	91	8.4	0.92
1	1	2	20	810408	176	57.9	0.90
1	1	2	20	810408	82	7.1	1.06
1	1	2	20	810408	88	8.9	1.07
1	1	2	20	810408	73	4.8	1.01
1	1	2	20	810408	213	104.2	0.92
1	1	1	21	810507	101	13.6	1.09
1	1	1	21	810507	90	8.6	0.97
1	1	1	21	810507	81	6.9	1.06
1	1	1	21	810507	82	7.3	1.09
1	1	1	21	810507	98	12.5	1.10
1	1	1	21	810507	79	6.8	1.13
1	1	1	22	810519	95	9.6	0.92
1	1	1	23	810603	110	16.6	1.04
1	1	1	23	810603	91	10.3	1.13
1	1	1	23	810603	101	12.8	1.03
1	1	1	23	810603	96	11.4	1.06
1	2	1	8	800709	51	1.2	0.73
1	2	1	8	800709	55	1.8	0.87
1	2	1	8	800709	55	1.5	0.73
1	2	1	8	800709	64	3.3	1.02
1	2	1	8	800709	45	1.1	0.97
1	2	1	8	800709	49	1.1	0.75
1	2	1	8	800709	52	1.4	0.80
1	2	1	8	800709	50	1.1	0.71
1	2	1	8	800709	50	1.2	0.77
1	2	1	8	800709	65	3.6	1.07
1	2	1	9	800730	58	3.1	1.29
1	2	1	9	800730	47	1.3	1.00
1	2	1	9	800730	58	2.8	1.16
1	2	1	9	800730	42	1	1.08
1	2	1	9	800730	52	1.6	0.92
1	2	1	9	800730	68	4.2	1.09
1	2	1	9	800730	73	5.1	1.07
1	2	1	9	800730	74	5.8	1.17

1	2	1	9	800730	60	2.6	0.97
1	2	1	9	800730	52	1.6	0.92
1	2	1	9	800730	63	3.4	1.10
1	2	1	9	800730	61	2.9	1.04
1	2	1	9	800730	53	1.7	0.92
1	2	1	9	800730	42	0.8	0.86
1	2	1	9	800730	62	3.4	1.16
1	2	1	9	800730	53	2	1.08
1	2	1	9	800730	60	2	0.75
1	2	1	9	800730	47	1.3	1.00
1	2	1	9	800730	52	0.9	0.52
1	2	1	9	800730	49	1.2	0.82
1	2	1	9	800730	51	1.2	0.73
1	2	1	9	800730	66	4	1.13
1	2	1	10	800811	57	2.3	1.00
1	2	1	10	800811	58	2.5	1.04
1	2	1	10	800811	57	2.4	1.05
1	2	1	10	800811	51	1.5	0.91
1	2	1	11	800904	69	3.5	0.87
1	2	1	11	800904	74	4.8	0.97
1	2	1	11	800904	75	5	0.97
1	2	1	11	800904	79	5.9	0.98
1	2	1	14	801118	59	2.3	0.91
1	2	2	14	801118	63	3.1	1.01
1	2	1	15	801211	62	3	1.02
1	2	1	23	810603	99	12.7	1.08
1	2	1	23	810603	86	8.5	1.10
1	2	1	25	810702	58	2.6	1.08
1	2	1	25	810702	50	1.8	1.16
1	3	1	7	800626	34	0.5	1.01
1	3	1	7	800626	32	0.4	0.96
1	3	1	7	800626	27	0.3	1.20
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	37	0.7	1.10
1	3	1	7	800626	40	0.9	1.12
1	3	1	7	800626	47	1.7	1.31
1	3	1	7	800626	19	0.1	1.13
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	36	0.6	1.02
1	3	1	7	800626	39	0.8	1.07
1	3	1	7	800626	27	0.3	1.20
1	3	1	7	800626	30	0.3	0.88

1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	44	1.1	1.03
1	3	1	7	800626	38	0.8	1.16
1	3	1	7	800626	48	1.7	1.23
1	3	1	7	800626	37	0.7	1.10
1	3	1	7	800626	28	0.3	1.07
1	3	1	7	800626	47	1.7	1.31
1	3	1	7	800626	42	0.9	0.97
1	3	1	7	800626	38	0.8	1.16
1	3	1	7	800626	28	0.3	1.07
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	59	3.1	1.22
1	3	1	7	800626	41	0.9	1.04
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	24	0.2	1.13
1	3	1	7	800626	33	0.5	1.10
1	3	1	7	800626	34	0.5	1.01
1	3	1	7	800626	33	0.5	1.10
1	3	1	7	800626	44	1.4	1.31
1	3	1	7	800626	40	0.9	1.12
1	3	1	7	800626	36	0.6	1.02
1	3	1	7	800626	37	0.7	1.10
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	44	1.2	1.13
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	36	0.6	1.02
1	3	1	7	800626	48	1.6	1.16
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	32	0.4	0.96
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	40	0.9	1.12
1	3	1	7	800626	39	0.8	1.07
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	45	1.2	1.05
1	3	1	7	800626	22	0.2	1.46
1	3	1	7	800626	45	1.2	1.05
1	3	1	7	800626	24	0.2	1.13
1	3	1	7	800626	106	15.6	1.09
1	3	1	7	800626	23	0.2	1.28
1	3	1	7	800626	27	0.3	1.20

1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	49	1.9	1.30
1	3	1	7	800626	39	0.8	1.07
1	3	1	7	800626	32	0.4	0.96
1	3	1	7	800626	28	0.3	1.07
1	3	1	7	800626	33	0.5	1.10
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	36	0.7	1.19
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	43	1.3	1.31
1	3	1	7	800626	37	0.7	1.10
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	85	8.8	1.18
1	3	1	7	800626	38	0.8	1.16
1	3	1	7	800626	32	0.4	0.96
1	3	1	7	800626	44	1.1	1.03
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	30	0.3	0.88
1	3	1	7	800626	50	2	1.29
1	3	1	7	800626	41	0.9	1.04
1	3	1	7	800626	28	0.3	1.07
1	3	1	7	800626	39	0.8	1.07
1	3	1	7	800626	28	0.3	1.07
1	3	1	7	800626	40	0.9	1.12
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	35	0.6	1.11
1	3	1	7	800626	32	0.4	0.96
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	43	1.1	1.11
1	3	1	7	800626	25	0.2	1.00
1	3	1	7	800626	33	0.5	1.10
1	3	1	7	800626	34	0.5	1.01
1	3	1	9	800730	45	1	0.88
1	3	1	9	800730	57	2.2	0.96
1	3	1	9	800730	53	1.8	0.97
1	3	1	9	800730	61	2.5	0.89
1	3	1	9	800730	40	0.8	1.00
1	3	1	9	800730	50	1.4	0.90
1	3	1	9	800730	44	1	0.94
1	3	1	9	800730	52	1.7	0.97
1	3	1	9	800730	46	1.1	0.91
1	3	1	9	800730	33	0.7	1.54

1	3	1	9	800730	42	0.8	0.86
1	3	1	9	800730	41	0.9	1.04
1	3	1	9	800730	41	0.8	0.93
1	3	1	9	800730	60	2.7	1.01
1	3	1	9	800730	53	2	1.08
1	3	1	9	800730	49	1.6	1.09
1	3	1	9	800730	52	1.7	0.97
1	3	1	9	800730	50	1.2	0.77
1	3	1	9	800730	63	3.1	1.01
1	3	1	10	800811	55	2	0.97
1	3	1	10	800811	64	3.3	1.02
1	3	1	10	800811	50	1.5	0.96
1	3	1	10	800811	51	1.7	1.03
1	3	1	10	800811	52	1.6	0.92
1	3	1	10	800811	54	2	1.02
1	3	1	10	800811	52	1.4	0.80
1	3	1	10	800811	52	1.6	0.92
1	3	1	10	800811	50	1.4	0.90
1	3	1	10	800811	64	3.1	0.96
1	3	1	11	800904	64	3.1	0.96
1	3	1	11	800904	73	4.3	0.90
1	3	1	11	800904	68	3.6	0.93
1	3	1	22	810519	81	7.5	1.16
1	3	1	24	810618	43	1.1	1.11
1	4	1	7	800626	49	1.6	1.09
1	4	1	7	800626	38	0.6	0.87
1	4	1	7	800626	46	1.1	0.91
1	4	1	7	800626	42	0.4	0.43
1	4	1	7	800626	46	0.9	0.74
1	4	1	7	800626	35	0.6	1.11
1	4	1	7	800626	38	0.6	0.87
1	4	1	7	800626	47	0.8	0.62
1	4	1	7	800626	134	35.2	1.22
1	4	1	7	800626	50	1.3	0.84
1	4	1	7	800626	38	0.6	0.87
1	4	1	7	800626	51	1.5	0.91
1	4	1	8	800709	55	2.3	1.12
1	4	1	9	800730	63	3.7	1.20
1	4	1	9	800730	66	4	1.13
1	4	1	9	800730	57	2.8	1.22
1	4	1	9	800730	60	2.8	1.05
1	4	1	9	800730	67	4.3	1.16
1	4	1	9	800730	62	3.2	1.09
1	4	1	9	800730	49	0.7	0.48

1	4	1	9	800730	55	2.2	1.07
1	4	1	9	800730	61	3.1	1.11
1	4	1	9	800730	54	1.4	0.72
1	4	1	9	800730	51	2	1.21
1	4	1	9	800730	54	2.4	1.23
1	4	1	9	800730	63	2.8	0.91
1	4	1	9	800730	53	1.3	0.70
1	4	1	9	800730	55	2.3	1.12
1	4	1	9	800730	71	5.3	1.21
1	4	1	9	800730	52	2.1	1.20
1	4	1	9	800730	60	2.3	0.86
1	4	1	9	800730	65	3.9	1.15
1	4	1	12	800925	63	3	0.97
1	4	1	12	800925	68	3.6	0.93
1	4	1	12	800925	82	5.8	0.86
1	4	1	12	800925	78	4.8	0.83
1	4	1	12	800925	83	6.6	0.95
1	4	1	12	800925	76	5.3	0.99
1	4	1	12	800925	68	2.8	0.72
1	4	1	12	800925	73	4.3	0.90
1	4	1	12	800925	76	5.2	0.97
1	4	1	12	800925	78	6	1.03
1	4	1	12	800925	68	3.7	0.96
1	4	1	15	801211	72	4.4	0.96
1	4	1	15	801211	78	9	1.55
1	4	1	15	801211	80	6.2	0.99
1	4	1	15	801211	79	6.9	1.15
1	4	1	15	801211	72	4.5	0.98
1	4	1	15	801211	76	5.4	1.01
1	4	1	15	801211	75	4.9	0.95
1	4	1	15	801211	78	5.2	0.90
1	4	1	15	801211	71	4.7	1.07
1	4	1	15	801211	64	3.2	0.99
1	4	1	15	801211	57	1.9	0.83
1	4	1	15	801211	77	5.7	1.02
1	4	1	16	810120	90	9.49	1.07
1	4	1	18	810303	74	4.9	0.99
1	4	1	18	810303	57	2.3	1.00
1	4	1	18	810303	66	3.7	1.05
1	4	1	18	810303	75	5.3	1.03
1	4	1	18	810303	65	3.5	1.04
1	4	1	18	810303	63	2.9	0.94
1	4	1	18	810303	64	3.1	0.96
1	4	1	18	810303	70	4.3	1.02

1	4	1	18	810303	99	12.4	1.06
1	4	1	18	810303	70	3.7	0.88
1	4	1	18	810303	65	3.6	1.07
1	4	1	18	810303	62	2.9	0.99
1	4	1	18	810303	62	3.1	1.05
1	4	2	18	810303	58	2.6	1.08
1	4	2	18	810303	79	6.3	1.05
1	4	3	18	810303	65	3.4	1.01
1	4	3	18	810303	70	4.4	1.05
1	4	3	18	810303	71	5.4	1.23
1	4	3	18	810303	80	6.4	1.02
1	4	3	18	810303	72	5.1	1.11
1	4	3	18	810303	70	4.4	1.05
1	4	3	18	810303	84	8.9	1.23
1	4	3	18	810303	84	7.6	1.05
1	4	3	18	810303	65	3.9	1.15
1	4	3	18	810303	75	5.1	0.99
1	4	3	18	810303	78	5.9	1.02
1	4	3	18	810303	71	4.8	1.09
1	4	3	18	810303	70	4.9	1.16
1	4	3	18	810303	62	3	1.02
1	4	3	18	810303	61	2.9	1.04
1	4	3	18	810303	68	4.2	1.09
1	4	3	18	810303	62	3	1.02
1	4	3	18	810303	89	9.2	1.07
1	4	1	19	810325	85	7.6	1.02
1	4	1	19	810325	81	6.3	0.97
1	4	1	19	810325	81	5.7	0.88
1	4	1	19	810325	86	7.3	0.94
1	4	2	19	810325	90	8.6	0.97
1	4	2	19	810325	92	9.7	1.03
1	4	2	19	810325	79	5.5	0.91
1	4	2	19	810325	81	5	0.77
1	4	2	19	810325	67	3.7	1.00
1	4	1	20	810408	80	7.2	1.15
1	4	1	20	810408	79	7.3	1.21
1	4	1	20	810408	95	12	1.15
1	4	1	20	810408	94	11.7	1.16
1	4	1	20	810408	85	7.2	0.96
1	4	1	20	810408	74	5.2	1.05
1	4	1	20	810408	77	5.9	1.06
1	4	1	20	810408	91	11	1.20
1	4	1	20	810408	88	8.6	1.04
1	4	2	20	810408	81	7.5	1.16

1	4	2	20	810408	95	11.4	1.10
1	4	2	20	810408	121	20.6	0.97
1	4	2	20	810408	90	10	1.13
1	4	2	20	810408	70	5	1.19
1	4	2	20	810408	136	29.4	0.98
1	4	2	20	810408	87	9.3	1.16
1	4	1	21	810507	83	7.8	1.12
1	4	1	21	810507	90	9.2	1.04
1	4	1	21	810507	87	8.4	1.05
1	4	1	21	810507	93	10.4	1.07
1	4	1	23	810603	119	19.4	0.96
1	4	1	23	810603	160	53.1	1.09
1	4	1	23	810603	93	11.2	1.15
1	4	1	23	810603	118	21.4	1.08
1	4	1	23	810603	125	25.8	1.10
1	4	1	23	810603	104	14.1	1.04
1	4	1	23	810603	109	16.8	1.08
1	4	1	23	810603	107	16.1	1.09
1	4	1	23	810603	136	31.1	1.03
1	4	1	23	810603	83	7.7	1.11
1	4	2	24	810618	38	0.8	1.16
1	4	2	24	810618	43	1.3	1.31
1	5	1	7	800626	101	13.3	1.07
1	5	1	7	800626	52	1.6	0.92
1	5	1	7	800626	42	1	1.08
1	5	1	7	800626	43	1.1	1.11
1	5	1	7	800626	45	1.2	1.05
1	5	1	7	800626	44	1.1	1.03
1	5	1	7	800626	52	1.8	1.03
1	5	1	7	800626	34	0.8	1.61
1	5	1	7	800626	46	1.2	0.99
1	5	1	7	800626	45	1.1	0.97
1	5	1	8	800709	59	2.3	0.91
1	5	1	8	800709	48	1.3	0.94
1	5	1	8	800709	37	0.7	1.10
1	5	1	8	800709	70	4.7	1.12
1	5	1	8	800709	45	1.4	1.23
1	5	1	8	800709	75	5.4	1.05
1	5	1	8	800709	51	1.8	1.09
1	5	1	8	800709	58	3.2	1.33
1	5	1	8	800709	64	3.3	1.02
1	5	1	8	800709	41	0.9	1.04
1	5	1	8	800709	44	0.9	0.85
1	5	1	8	800709	40	0.9	1.12

1	5	1	8	800709	47	0.8	0.62
1	5	1	8	800709	63	4.2	1.36
1	5	1	8	800709	46	1.3	1.07
1	5	1	8	800709	41	0.9	1.04
1	5	1	8	800709	42	0.9	0.97
1	5	1	8	800709	59	2.2	0.87
1	5	1	8	800709	37	0.6	0.94
1	5	1	8	800709	54	2.5	1.28
1	5	1	8	800709	61	2.3	0.82
1	5	1	8	800709	53	1.5	0.81
1	5	1	8	800709	42	0.7	0.75
1	5	1	8	800709	36	0.7	1.19
1	5	1	8	800709	41	0.9	1.04
1	5	1	8	800709	50	1.7	1.09
1	5	1	8	800709	66	3.5	0.99
1	5	1	8	800709	43	0.9	0.90
1	5	1	9	800730	58	3	1.24
1	5	1	9	800730	148	44.1	1.14
1	5	1	9	800730	65	4.1	1.21
1	5	1	9	800730	58	2.3	0.95
1	5	1	9	800730	68	4.9	1.27
1	5	1	9	800730	68	4.5	1.17
1	5	1	9	800730	55	2.3	1.12
1	5	1	9	800730	58	2.6	1.08
1	5	1	9	800730	69	5.1	1.26
1	5	1	9	800730	42	0.8	0.86
1	5	1	9	800730	80	7.9	1.26
1	5	1	9	800730	77	7.5	1.34
1	5	1	9	800730	73	5.1	1.07
1	5	1	9	800730	77	6.7	1.20
1	5	1	9	800730	85	9.3	1.24
1	5	1	9	800730	76	6.9	1.29
1	5	1	9	800730	112	18.8	1.11
1	5	1	9	800730	66	4.2	1.19
1	5	1	9	800730	67	4.5	1.22
1	5	1	9	800730	64	3.6	1.12
1	5	1	10	800811	45	1	0.88
1	5	1	10	800811	53	1.9	1.03
1	5	1	10	800811	50	1.5	0.96
1	5	1	10	800811	45	1.1	0.97
1	5	1	10	800811	45	1.3	1.14
1	5	1	10	800811	52	2	1.15
1	5	1	10	800811	59	2.4	0.95
1	5	1	11	800904	65	3.8	1.12

1	5	1	11	800904	63	3.2	1.04
1	5	1	11	800904	76	5.6	1.04
1	5	1	11	800904	64	3.1	0.96
1	5	1	11	800904	51	1.6	0.97
1	5	1	11	800904	83	7.1	1.02
1	5	1	11	800904	70	4.2	1.00
1	5	1	11	800904	89	9.4	1.10
1	5	1	11	800904	70	4.7	1.12
1	5	1	11	800904	53	1.8	0.97
1	5	1	15	801211	79	6.6	1.10
1	5	1	15	801211	100	12.2	1.01
1	5	1	15	801211	71	4.5	1.03
1	5	1	15	801211	62	3.2	1.09
1	5	1	15	801211	86	7.2	0.93
1	5	1	15	801211	65	3.2	0.95
1	5	1	15	801211	76	5.3	0.99
1	5	1	15	801211	95	11.3	1.09
1	5	1	15	801211	87	7.2	0.90
1	5	1	15	801211	81	6.4	0.99
1	5	1	15	801211	78	5.8	1.00
1	5	1	23	810603	127	28.7	1.17
1	5	1	23	810603	124	25.9	1.13
1	5	1	23	810603	111	17.6	1.07
1	5	1	23	810603	104	16	1.18
1	5	1	24	810618	42	1.2	1.29
1	5	1	24	810618	50	1.6	1.03
1	5	1	24	810618	44	1.2	1.13
1	5	1	24	810618	41	0.7	0.81
1	5	1	24	810618	42	1	1.08
1	5	2	24	810618	32	0.6	1.45
1	5	2	24	810618	58	1.9	0.79
1	5	2	24	810618	41	1	1.16
1	5	2	24	810618	41	1.1	1.27
1	6	1	7	800626	40	0.7	0.87
1	6	1	7	800626	36	0.6	1.02
1	6	1	7	800626	36	0.6	1.02
1	6	1	7	800626	44	1.3	1.22
1	6	1	7	800626	36	0.6	1.02
1	6	1	7	800626	42	0.9	0.97
1	6	1	7	800626	35	0.6	1.11
1	6	1	7	800626	31	0.5	1.32
1	6	1	8	800709	43	0.4	0.40
1	6	1	8	800709	53	1.9	1.03
1	6	1	8	800709	49	1.1	0.75

1	6	1	8	800709	63	3	0.97
1	6	1	8	800709	58	2.1	0.87
1	7	1	7	800626	45	1.8	1.58
1	7	1	7	800626	49	2.1	1.43
1	7	1	7	800626	46	1.9	1.56
1	7	1	7	800626	49	2.2	1.50
1	7	1	7	800626	49	2.4	1.64
1	7	1	7	800626	43	1.5	1.51
1	7	1	7	800626	44	1.6	1.50
1	7	1	7	800626	43	1.6	1.61
1	7	1	7	800626	50	2.3	1.48
1	7	1	7	800626	47	1.9	1.47
1	7	1	9	800730	53	1.9	1.03
1	7	1	9	800730	55	1.9	0.92
1	7	1	9	800730	63	4.6	1.49
1	7	1	9	800730	68	4.7	1.22
1	7	1	9	800730	56	2.4	1.10
1	7	1	9	800730	72	5.7	1.25
1	7	1	9	800730	58	2.9	1.20
1	7	1	9	800730	57	2.8	1.22
1	7	1	9	800730	50	1.3	0.84
1	7	1	9	800730	51	2	1.21
1	7	1	9	800730	49	2	1.37
1	7	1	9	800730	56	2.4	1.10
1	7	1	9	800730	55	2.3	1.12
1	7	1	11	800904	63	3.3	1.07
1	7	1	11	800904	65	3.4	1.01
1	7	1	11	800904	48	1.5	1.09
1	7	1	11	800904	78	6.1	1.05
1	7	1	11	800904	72	4.9	1.07
1	7	1	11	800904	80	6.5	1.04
1	7	1	11	800904	60	2.8	1.05
1	7	1	11	800904	60	3	1.12
1	7	1	11	800904	61	2.8	1.00
2	1	1	10	800809	62	3.1	1.05
2	1	1	10	800809	58	2.4	0.99
2	1	1	21	810505	83	6.1	0.88
2	1	1	21	810505	90	8.2	0.93
2	1	1	21	810505	72	2.5	0.55
2	1	1	23	810602	160	48.4	1.00
2	1	1	23	810602	101	13.3	1.07
2	1	1	23	810602	78	5.9	1.02
2	1	1	23	810602	89	8.8	1.03
2	1	1	23	810602	101	14.1	1.13

2	1	1	23	810602	81	6.4	0.99
2	1	1	23	810602	123	26.3	1.18
2	1	1	23	810602	99	12.6	1.07
2	1	1	23	810602	101	13.9	1.12
2	2	1	6	800612	36	0.8	1.36
2	2	1	6	800612	41	1.1	1.27
2	2	1	7	800627	119	20.3	1.00
2	2	1	7	800627	115	18.8	1.03
2	2	1	7	800627	50	1.7	1.09
2	2	1	7	800627	55	2.1	1.02
2	2	1	7	800627	54	2.1	1.08
2	2	1	7	800627	71	4.2	0.96
2	2	1	7	800627	108	16.7	1.10
2	2	1	7	800627	55	2.1	1.02
2	2	1	7	800627	45	1.2	1.05
2	2	1	7	800627	49	1.3	0.89
2	2	1	10	800809	57	2.4	1.05
2	2	1	10	800809	47	1.2	0.93
2	2	1	10	800809	50	1.3	0.84
2	2	1	10	800809	61	2.8	1.00
2	2	1	10	800809	47	1.3	1.00
2	2	1	10	800809	48	1.4	1.02
2	2	1	10	800809	55	1.8	0.87
2	2	1	10	800809	57	2.1	0.92
2	2	1	10	800809	68	3.3	0.85
2	2	1	10	800809	55	1.7	0.82
2	2	1	10	800809	48	1.1	0.80
2	2	1	10	800809	67	3.8	1.03
2	2	1	10	800809	54	1.8	0.92
2	2	1	10	800809	61	2.8	1.00
2	2	1	10	800809	63	3	0.97
2	2	1	10	800809	59	2.8	1.10
2	2	1	10	800809	74	5.4	1.09
2	2	1	10	800809	71	4.7	1.07
2	2	1	10	800809	56	2.3	1.06
2	2	1	10	800809	87	7.8	0.97
2	2	1	23	810602	107	15	1.02
2	2	1	23	810602	109	15.8	1.01
2	2	1	23	810602	102	13.8	1.08
2	2	1	23	810602	100	14	1.16
2	2	1	23	810602	94	10.8	1.07
2	2	1	23	810602	90	9	1.02
2	2	1	23	810602	75	4.8	0.93
2	2	1	23	810602	96	10.2	0.95

2	2	1	23	810602	116	19.1	1.02
2	2	1	23	810602	88	7.5	0.91
2	2	1	23	810602	97	11.3	1.02
2	2	1	23	810602	104	13.8	1.02
2	2	1	23	810602	85	7.2	0.96
2	2	1	24	810617	119	19.8	0.98
2	2	1	24	810617	105	15.6	1.12
2	2	1	24	810617	104	13	0.96
2	2	1	24	810617	90	9	1.02
2	2	1	24	810617	104	14.2	1.05
2	2	1	24	810617	100	12.8	1.06
2	2	1	24	810617	101	12.6	1.01
2	2	1	24	810617	145	34.5	0.95
2	2	1	24	810617	113	18	1.04
2	2	1	25	810630	99	11.4	0.97
2	3	1	4	800514	150	36.2	0.90
2	3	3	4	800514	103	12.7	0.96
2	3	3	4	800514	97	11	1.00
2	3	3	4	800514	120	22.2	1.07
2	3	3	4	800514	177	72.2	1.10
2	3	3	4	800514	117	19	0.99
2	3	3	4	800514	170	65.5	1.13
2	3	3	4	800514	149	40.1	1.02
2	3	3	4	800514	91	8.4	0.92
2	3	1	6	800612	99	12	1.02
2	3	1	8	800711	34	0.5	1.01
2	3	1	8	800711	38	1	1.45
2	3	1	8	800711	58	1.6	0.66
2	3	1	8	800711	36	0.6	1.02
2	3	1	8	800711	39	0.4	0.54
2	3	1	8	800711	39	0.5	0.67
2	3	1	8	800711	47	1.5	1.16
2	3	1	8	800711	35	0.4	0.74
2	3	1	8	800711	49	1.6	1.09
2	3	1	8	800711	52	1.9	1.09
2	3	1	8	800711	56	2.2	1.01
2	3	1	8	800711	45	1.3	1.14
2	3	1	8	800711	46	0.9	0.74
2	3	1	8	800711	50	1.3	0.84
2	3	1	8	800711	34	0.6	1.21
2	3	1	8	800711	52	2.2	1.26
2	3	1	8	800711	117	18.9	0.98
2	3	1	8	800711	48	1.3	0.94
2	3	1	8	800711	55	2.5	1.21

2	3	1	8	800711	52	2.1	1.20
2	3	1	8	800711	53	1.9	1.03
2	3	1	8	800711	54	1.7	0.87
2	3	1	8	800711	26	0.2	0.89
2	3	1	8	800711	52	1.5	0.86
2	3	1	8	800711	70	3.2	0.76
2	3	1	8	800711	70	3.4	0.81
2	3	1	8	800711	55	2.2	1.07
2	3	1	8	800711	56	2.3	1.06
2	3	1	8	800711	36	0.4	0.68
2	3	1	8	800711	23	0.2	1.28
2	3	1	8	800711	34	0.3	0.60
2	3	1	8	800711	57	2.5	1.09
2	3	1	8	800711	53	1.5	0.81
2	3	1	8	800711	56	1.8	0.83
2	3	1	8	800711	36	0.3	0.51
2	3	1	8	800711	34	0.4	0.81
2	3	1	8	800711	52	1.6	0.92
2	3	1	8	800711	53	2	1.08
2	3	1	8	800711	35	0.5	0.92
2	3	1	8	800711	32	0.2	0.48
2	3	1	8	800711	60	2.1	0.79
2	3	1	8	800711	45	1.4	1.23
2	3	1	8	800711	45	0.9	0.79
2	3	1	8	800711	60	2.5	0.94
2	3	1	8	800711	44	1.6	1.50
2	3	1	8	800711	56	1.6	0.74
2	3	1	8	800711	37	0.7	1.10
2	3	1	8	800711	49	1.3	0.89
2	3	1	8	800711	44	1.3	1.22
2	3	1	8	800711	45	1	0.88
2	3	1	8	800711	40	0.5	0.62
2	3	1	8	800711	53	2.1	1.14
2	3	1	8	800711	47	1	0.77
2	3	1	8	800711	49	1.4	0.96
2	3	1	8	800711	50	1.9	1.22
2	3	1	8	800711	48	1.7	1.23
2	3	1	8	800711	49	1.2	0.82
2	3	1	8	800711	48	1.1	0.80
2	3	1	8	800711	35	0.4	0.74
2	3	1	8	800711	51	1.3	0.79
2	3	1	8	800711	57	2	0.87
2	3	1	8	800711	52	0.9	0.52
2	3	1	8	800711	48	1.6	1.16

2	3	1	8	800711	28	0.2	0.72
2	3	1	8	800711	38	0.5	0.72
2	3	1	8	800711	39	0.7	0.94
2	3	1	8	800711	56	2.1	0.97
2	3	1	8	800711	54	2.2	1.13
2	3	1	8	800711	51	1.4	0.85
2	3	1	21	810505	74	2.7	0.54
2	3	1	23	810602	83	6.5	0.93
2	3	1	23	810602	105	16.2	1.16
2	3	1	23	810602	143	36.6	1.05
2	3	1	23	810602	87	8.5	1.06
2	3	1	23	810602	84	7.1	0.98
2	3	1	23	810602	87	8.3	1.04
2	3	1	23	810602	110	17.1	1.07
2	3	1	23	810602	101	14	1.12
2	3	1	23	810602	93	10	1.02
2	3	1	23	810602	90	9.1	1.03
2	3	1	23	810602	99	12	1.02
2	3	1	23	810602	92	10.6	1.12
2	3	1	23	810602	102	14.1	1.10
2	3	1	23	810602	96	11.4	1.06
2	3	1	23	810602	89	9.3	1.09
2	3	1	23	810602	95	11.2	1.08
2	3	1	23	810602	99	13.3	1.13
2	3	1	23	810602	84	7.1	0.98
2	3	1	23	810602	77	5.7	1.02
2	3	1	23	810602	106	15.5	1.08
2	3	1	23	810602	99	11.9	1.01
2	3	1	24	810617	100	13.1	1.08
2	3	1	24	810617	114	18.3	1.03
2	3	1	24	810617	97	12.1	1.09
2	3	1	24	810617	106	14.4	1.00
2	3	1	24	810617	101	12.3	0.99
2	3	1	24	810617	107	15.8	1.07
2	3	1	24	810617	90	9.8	1.11
2	3	1	24	810617	89	9.7	1.13
2	3	1	24	810617	95	9.1	0.88
2	3	1	24	810617	106	14	0.97
2	3	1	24	810617	92	9.5	1.01
2	3	1	24	810617	120	20.5	0.99
2	3	1	24	810617	96	9.9	0.92
2	3	1	24	810617	115	20.3	1.11
2	3	1	24	810617	88	8.5	1.03
2	3	1	24	810617	94	9.9	0.98

2	3	1	24	810617	96	11.5	1.07
2	3	1	24	810617	163	51.4	1.00
2	3	1	24	810617	97	10.1	0.91
2	3	1	24	810617	122	23	1.06
2	3	1	24	810617	109	14.9	0.95
2	4	1	7	800627	38	0.8	1.16
2	4	1	7	800627	44	1.3	1.22
2	4	1	7	800627	33	0.6	1.32
2	4	1	7	800627	59	2.5	0.99
2	4	1	7	800627	28	0.3	1.07
2	4	1	7	800627	35	0.7	1.29
2	4	1	7	800627	42	1	1.08
2	4	1	7	800627	43	1	1.01
2	4	1	7	800627	45	1.3	1.14
2	4	1	7	800627	49	1.6	1.09
2	4	1	7	800627	22	0.2	1.46
2	4	1	7	800627	56	2.3	1.06
2	4	1	7	800627	33	0.5	1.10
2	4	1	7	800627	39	0.9	1.21
2	4	1	7	800627	42	0.9	0.97
2	4	1	7	800627	39	0.8	1.07
2	4	1	7	800627	43	1.2	1.21
2	4	1	7	800627	22	0.2	1.46
2	4	1	7	800627	46	1.4	1.15
2	4	1	7	800627	42	1	1.08
2	4	1	7	800627	39	0.8	1.07
2	4	1	7	800627	45	1.2	1.05
2	4	1	7	800627	25	0.3	1.50
2	4	1	7	800627	42	1.1	1.19
2	4	1	7	800627	45	1.2	1.05
2	4	1	7	800627	45	1.3	1.14
2	4	1	7	800627	46	1.2	0.99
2	4	1	7	800627	47	1.4	1.08
2	4	1	7	800627	46	1.3	1.07
2	4	1	7	800627	27	0.3	1.20
2	4	1	7	800627	35	0.6	1.11
2	4	1	7	800627	47	1.4	1.08
2	4	1	23	810602	90	8.8	0.99
2	4	1	23	810602	100	12.8	1.06
2	4	1	23	810602	91	10.2	1.11
2	4	1	23	810602	92	9.5	1.01
2	4	1	23	810602	97	11.8	1.07
2	4	1	23	810602	96	12.7	1.18
2	4	1	23	810602	92	9.7	1.03

2	4	1	23	810602	105	16.2	1.16
2	4	1	23	810602	85	8.1	1.08
2	4	1	23	810602	87	9.4	1.17
2	4	1	23	810602	90	10.1	1.14
2	4	1	23	810602	101	14.8	1.19
2	4	1	23	810602	100	11.9	0.98
2	4	1	23	810602	149	38.4	0.98
2	4	1	23	810602	95	11.1	1.07
2	4	1	23	810602	104	14.8	1.09
2	4	1	23	810602	109	16	1.02
2	4	1	23	810602	101	13.4	1.08
2	4	1	23	810602	86	8.7	1.12
2	4	1	23	810602	83	7.2	1.03
2	4	1	23	810602	106	15.8	1.10
2	5	1	8	800711	56	2.2	1.01
2	5	1	8	800711	54	1.8	0.92
2	5	1	8	800711	56	2.2	1.01
2	5	1	8	800711	46	1.2	0.99
2	5	1	8	800711	54	2	1.02
2	5	1	8	800711	40	0.6	0.75
2	5	1	8	800711	51	1.6	0.97
2	5	1	8	800711	42	0.8	0.86
2	5	1	8	800711	51	1.5	0.91
2	5	1	8	800711	44	0.9	0.85
2	5	1	8	800711	50	1.5	0.96
2	5	1	8	800711	41	0.8	0.93
2	5	2	8	800711	48	1.4	1.02
2	5	2	8	800711	44	1	0.94
2	5	2	8	800711	54	1.8	0.92
2	5	2	8	800711	53	1.5	0.81
2	5	2	8	800711	53	1.8	0.97
2	5	2	8	800711	98	11.2	0.98
2	5	2	8	800711	61	2.7	0.96
2	5	2	8	800711	61	2.7	0.96
2	5	2	8	800711	48	0.9	0.65
2	5	2	8	800711	49	1.3	0.89
2	5	2	8	800711	52	1.6	0.92
2	5	2	8	800711	47	1.1	0.85
2	5	2	8	800711	59	2.1	0.83
2	5	2	8	800711	56	2	0.92
2	5	2	8	800711	55	1.9	0.92
2	5	2	8	800711	47	1.1	0.85
2	5	2	8	800711	51	1.6	0.97
2	5	2	8	800711	53	1.6	0.87

2	5	1	10	800809	43	0.8	0.80
2	5	1	10	800809	65	3.1	0.92
2	5	2	16	810119	76	4.8	0.89
2	5	2	16	810119	73	4.5	0.94
2	5	2	16	810119	58	2.4	0.99
2	5	2	16	810119	68	3.6	0.93
2	5	2	16	810119	58	2.2	0.91
2	5	2	16	810119	72	4.5	0.98
2	5	2	16	810119	58	2	0.83
2	5	2	16	810119	57	2.1	0.92
2	5	2	16	810119	64	3.1	0.96
2	6	2	6	800612	64	3	0.93
2	6	2	6	800612	64	3.1	0.96
2	6	1	7	800627	48	1.7	1.23
2	6	1	7	800627	48	1.6	1.16
2	6	1	7	800627	45	1.4	1.23
2	6	1	7	800627	44	1.4	1.31
2	6	2	7	800627	196	97.2	1.10
2	6	2	7	800627	39	0.8	1.07
2	6	2	7	800627	51	1.8	1.09
2	6	2	7	800627	33	0.4	0.88
2	6	2	7	800627	88	7.8	0.94
2	6	2	7	800627	28	0.3	1.07
2	6	2	7	800627	26	0.2	0.89
2	6	2	7	800627	58	2.3	0.95
2	6	2	7	800627	38	0.8	1.16
2	6	3	7	800627	98	11	0.97
2	6	3	7	800627	99	14.3	1.22
2	6	3	7	800627	96	9.3	0.87
2	6	3	7	800627	34	0.6	1.21
2	6	3	7	800627	70	3.5	0.83
2	6	3	7	800627	46	1.2	0.99
2	6	3	7	800627	36	0.6	1.02
2	6	3	7	800627	32	0.4	0.96
2	6	3	7	800627	29	0.3	0.97
2	6	3	7	800627	106	14	0.97
2	6	4	7	800627	119	21.2	1.05
2	6	4	7	800627	132	28.8	1.05
2	6	4	7	800627	34	0.6	1.21
2	6	4	7	800627	34	0.4	0.81
2	6	4	7	800627	104	13.2	0.97
2	6	4	7	800627	114	17.8	1.00
2	6	4	7	800627	53	2.2	1.19
2	6	4	7	800627	34	0.5	1.01

2	6	4	7	800627	49	1.6	1.09
2	6	4	7	800627	32	0.4	0.96
2	6	1	8	800711	45	0.9	0.79
2	6	1	8	800711	41	0.7	0.81
2	6	1	8	800711	45	1	0.88
2	6	1	8	800711	56	2.2	1.01
2	6	1	8	800711	49	1.1	0.75
2	6	1	8	800711	53	1.6	0.87
2	6	2	8	800711	38	0.6	0.87
2	6	2	8	800711	43	0.8	0.80
2	6	2	8	800711	39	0.7	0.94
2	6	2	8	800711	52	1.6	0.92
2	6	2	8	800711	53	1.9	1.03
2	6	2	8	800711	43	0.7	0.70
2	6	1	10	800809	54	1.7	0.87
2	6	1	10	800809	57	2.1	0.92
2	6	1	10	800809	37	0.5	0.78
2	6	1	10	800809	54	1.7	0.87
2	6	1	10	800809	54	1.8	0.92
2	6	1	10	800809	59	2.2	0.87
2	6	1	10	800809	55	2	0.97
2	6	1	12	800923	68	3.4	0.88
2	6	1	12	800923	62	2.5	0.85
2	6	1	12	800923	68	3.7	0.96
2	6	1	12	800923	57	2.2	0.96
2	6	1	12	800923	69	3.4	0.84
2	6	1	12	800923	66	3.2	0.91
2	6	1	12	800923	80	5.7	0.91
2	6	1	12	800923	62	2.5	0.85
2	6	1	12	800923	62	2.7	0.92
2	6	1	12	800923	65	3.1	0.92
2	6	2	12	800923	60	2.4	0.90
2	6	2	12	800923	54	1.6	0.82
2	6	2	12	800923	63	2.4	0.78
2	6	2	12	800923	60	2.8	1.05
2	6	2	12	800923	64	2.6	0.81
2	6	2	12	800923	64	2.9	0.90
2	6	2	12	800923	71	3.7	0.84
2	6	2	12	800923	67	2.9	0.78
2	6	2	12	800923	67	3	0.81
2	6	3	12	800923	57	2	0.87
2	6	3	12	800923	60	2.4	0.90
2	6	3	12	800923	71	3.9	0.89
2	6	1	15	801210	74	4.4	0.89

2	6	1	15	801210	84	6.3	0.87
2	6	1	15	801210	74	5	1.01
2	6	1	15	801210	64	2.6	0.81
2	6	1	15	801210	69	3.6	0.89
2	6	1	15	801210	64	2.7	0.84
2	6	2	15	801210	61	2.5	0.89
2	6	2	15	801210	67	3.7	1.00
2	6	2	15	801210	67	3.7	1.00
2	6	2	15	801210	70	5.2	1.24
2	6	2	15	801210	64	2.8	0.87
2	6	2	15	801210	56	2.3	1.06
2	6	2	15	801210	70	4.3	1.02
2	6	3	15	801210	61	2.3	0.82
2	6	3	15	801210	83	6.4	0.92
2	6	3	15	801210	60	2.3	0.86
2	6	3	15	801210	64	2.9	0.90
2	6	3	15	801210	67	3.1	0.84
2	6	3	15	801210	57	1.8	0.79
2	6	1	16	810119	57	2	0.87
2	6	1	16	810119	56	2	0.92
2	6	1	16	810119	62	2.9	0.99
2	6	1	16	810119	107	14.4	0.97
2	6	1	16	810119	64	2.8	0.87
2	6	1	16	810119	70	4.2	1.00
2	6	1	16	810119	74	4.4	0.89
2	6	1	16	810119	69	3.6	0.89
2	6	1	16	810119	74	4.8	0.97
2	6	1	17	810217	62	2.7	0.92
2	6	1	17	810217	76	4.8	0.89
2	6	1	17	810217	67	3.2	0.87
2	6	1	17	810217	68	3.4	0.88
2	6	1	17	810217	60	2.3	0.86
2	6	1	17	810217	67	3.5	0.95
2	6	1	17	810217	68	3.2	0.83
2	6	1	18	810304	57	2.2	0.96
2	6	1	18	810304	79	5.2	0.86
2	6	1	18	810304	73	4.9	1.03
2	6	1	18	810304	65	3.4	1.01
2	6	1	18	810304	72	3.7	0.81
2	6	1	18	810304	66	2.9	0.82
2	6	1	18	810304	54	1.7	0.87
2	6	1	18	810304	80	6.2	0.99
2	6	1	18	810304	69	3.5	0.87
2	6	1	18	810304	60	2.3	0.86

2	6	1	18	810304	74	4.8	0.97
2	6	1	18	810304	72	4.2	0.92
2	6	1	18	810304	66	3.1	0.88
2	6	1	18	810304	63	3	0.97
2	6	1	18	810304	70	4	0.95
2	6	2	18	810304	62	2.7	0.92
2	6	2	18	810304	56	2	0.92
2	6	2	18	810304	65	3.5	1.04
2	6	2	18	810304	65	3.5	1.04
2	6	2	18	810304	61	2.5	0.89
2	6	2	18	810304	75	4.7	0.91
2	6	2	18	810304	63	3	0.97
2	6	2	18	810304	64	2.6	0.81
2	6	2	18	810304	58	2.3	0.95
2	6	2	18	810304	55	2	0.97
2	6	2	18	810304	62	2.5	0.85
2	6	2	18	810304	65	3	0.89
2	6	2	18	810304	60	2.4	0.90
2	6	2	18	810304	71	4.1	0.93
2	6	2	18	810304	82	5.8	0.86
2	6	2	18	810304	79	6	1.00
2	6	2	18	810304	73	4.6	0.97
2	6	2	18	810304	64	3.3	1.02
2	6	2	18	810304	67	3.5	0.95
2	6	2	18	810304	71	4.1	0.93
2	6	2	18	810304	75	4.8	0.93
2	6	2	18	810304	77	5.4	0.97
2	6	2	18	810304	60	2.6	0.97
2	6	2	18	810304	70	3.9	0.93
2	6	3	18	810304	61	2.6	0.93
2	6	3	18	810304	58	2.3	0.95
2	6	3	18	810304	72	4.3	0.94
2	6	3	18	810304	66	3.3	0.93
2	6	3	18	810304	63	2.8	0.91
2	6	3	18	810304	63	3	0.97
2	6	3	18	810304	74	4.3	0.87
2	6	3	18	810304	62	2.6	0.88
2	6	3	18	810304	55	1.9	0.92
2	6	3	18	810304	64	3.1	0.96
2	6	3	18	810304	65	3.1	0.92
2	6	3	18	810304	60	2.5	0.94
2	6	3	18	810304	72	4.6	1.01
2	6	3	18	810304	62	2.6	0.88
2	6	3	18	810304	65	3.1	0.92

2	6	3	18	810304	55	2.2	1.07
2	6	3	18	810304	88	3.1	0.37
2	6	3	18	810304	67	3.2	0.87
2	6	3	18	810304	75	5.2	1.01
2	6	3	18	810304	65	3	0.89
2	6	3	18	810304	80	5.5	0.88
2	6	3	18	810304	62	2.5	0.85
2	6	3	18	810304	82	5.8	0.86
2	6	3	18	810304	58	2.1	0.87
2	6	3	18	810304	80	5.6	0.90
2	6	3	18	810304	71	3.9	0.89
2	6	3	18	810304	72	4	0.87
2	6	3	18	810304	56	1.9	0.87
2	6	3	18	810304	54	1.8	0.92
2	6	3	18	810304	61	2.5	0.89
2	6	3	18	810304	67	3.4	0.92
2	6	3	18	810304	63	2.8	0.91
2	6	1	23	810602	86	7.9	1.02
2	6	1	23	810602	159	55.5	1.16
2	6	1	25	810630	63	3.1	1.01
2	6	1	25	810630	45	1.1	0.97
3	1	2	2	800411	95	8.3	0.80
3	1	2	2	800417	85	7.85	1.05
3	1	1	5	800530	106	14.38	1.00
3	1	1	8	800710	52	1.9	1.09
3	1	1	8	800710	38	0.8	1.16
3	1	1	8	800710	49	1.7	1.16
3	1	1	9	800728	53	1.4	0.76
3	1	1	9	800728	63	3.2	1.04
3	1	1	9	800728	57	1.8	0.79
3	1	1	9	800728	54	2.2	1.13
3	1	1	13	801027	77	6	1.08
3	1	1	13	801027	82	6.7	1.00
3	1	1	17	810216	223	126.6	0.97
3	1	1	19	810323	107	14.7	0.99
3	1	1	19	810323	80	5.8	0.93
3	1	1	19	810323	70	5.3	1.26
3	1	1	22	810520	98	11.3	0.99
3	1	1	23	810601	46	1.2	0.99
3	1	1	24	810616	35	0.6	1.11
3	1	1	24	810616	36	0.5	0.85
3	1	1	24	810616	44	1.1	1.03
3	1	1	24	810616	32	0.6	1.45
3	1	1	24	810616	47	1.7	1.31

3	1	1	24	810616	33	0.4	0.88
3	1	1	24	810616	33	0.6	1.32
3	1	2	24	810616	33	0.5	1.10
3	1	2	24	810616	37	0.6	0.94
3	1	3	24	810616	31	0.4	1.06
3	1	3	24	810616	53	2.1	1.14
3	1	3	24	810616	45	1	0.88
3	1	3	24	810616	45	0.5	0.44
3	1	3	24	810616	45	1.1	0.97
3	1	1	25	810629	54	2.2	1.13
3	2	1	8	800710	52	1.8	1.03
3	2	1	8	800710	52	1.7	0.97
3	2	1	8	800710	47	1.4	1.08
3	2	1	11	800905	80	2.6	0.42
3	2	1	12	800924	85	9	1.20
3	2	1	13	801028	305	305	0.93
3	2	1	13	801028	345	658.3	1.39
3	2	1	13	801028	267	231.4	1.05
3	2	1	13	801028	65	3.5	1.04
3	2	2	18	810305	92	10.9	1.15
3	2	1	23	810601	47	1.4	1.08
3	2	1	23	810601	41	0.9	1.04
3	2	1	23	810601	46	1.3	1.07
3	2	1	23	810601	45	1.1	0.97
3	2	1	23	810601	48	1.5	1.09
3	2	1	25	810629	56	2.4	1.10
3	2	1	25	810629	56	2.3	1.06
3	2	1	25	810629	49	1.7	1.16
3	2	1	25	810629	54	2.2	1.13
3	2	1	25	810629	62	3.2	1.09
3	2	1	25	810629	50	1.8	1.16
3	2	1	25	810629	53	1.9	1.03
3	2	1	25	810629	49	1.5	1.02
3	2	1	25	810629	51	1.7	1.03
3	2	1	25	810629	60	3.3	1.24
3	2	1	25	810629	50	1.7	1.09
3	2	1	25	810629	52	1.9	1.09
3	2	1	25	810629	51	1.6	0.97
3	2	1	25	810629	50	1.7	1.09
3	2	1	25	810629	55	2.3	1.12
3	2	1	25	810629	55	2.6	1.26
3	2	1	25	810629	45	1.2	1.05
3	2	1	25	810629	55	2.6	1.26
3	2	1	25	810629	47	1.4	1.08

3	2	1	25	810629	50	1.8	1.16
3	3	1	9	800728	51	1.2	0.73
3	4	1	15	801209	77	6.5	1.16
3	4	1	25	810629	35	0.7	1.29
3	5	1	9	800728	53	1.6	0.87
3	5	1	9	800728	160	48.6	1.00
3	5	1	10	800810	49	1.4	0.96
3	5	1	13	801028	238	187.4	1.19
3	5	1	15	801209	71	4.7	1.07
3	5	3	24	810616	50	1.6	1.03
3	6	1	13	801028	285	314.9	1.17
3	6	1	13	801028	353	649.5	1.28
3	7	2	8	800710	48	1.4	1.02
3	7	2	8	800710	56	2.4	1.10
3	7	1	11	800905	69	3.5	0.87
3	7	1	16	810121	230	175.6	1.23
3	7	1	16	810121	107	18	1.22
3	7	1	20	810409	95	11.3	1.09
3	7	1	24	810616	47	1.6	1.24
3	7	1	24	810616	60	2.9	1.09
3	7	2	24	810616	50	1.7	1.09
3	7	2	24	810616	50	1.4	0.90
3	7	1	25	810629	46	1.4	1.15
3	7	1	25	810629	50	2.1	1.35
3	7	1	25	810629	54	2.4	1.23
3	7	1	25	810629	55	2.5	1.21
3	7	1	25	810629	55	2.4	1.16
3	7	1	25	810629	54	2.2	1.13
3	7	2	25	810629	55	2.1	1.02
3	7	2	25	810629	60	2.9	1.09
3	7	2	25	810629	60	2.5	0.94
3	7	2	25	810629	52	2.3	1.32
3	7	2	25	810629	51	2.1	1.27
2	6	1	7	800627	35		
2	6	1	7	800627	31		
2	3	1	8	800711	30		
2	5	1	8	800711	30		
2	5	1	8	800711	41		
2	5	1	8	800711	39		
2	5	1	8	800711	31		
2	6	2	8	800711	23		
2	6	2	8	800711	28		

xlvi. Striped seaperch, *Embiotoca lateralis*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	7	1	8	800710	142	23.4	
3	7	1	8	800710	142	23.4	

xlvii. Sturgeon poacher, *Agonus acipenserinus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	2	1	16	810120	90	3.25	0.98
3	2	1	16	810120	92	3.78	1.07
3	2	1	16	810120	99	4.82	1.10
3	2	1	16	810120	87	3.1	1.03
3	2	1	16	810120	105	5.59	1.08
3	2	1	16	810120	80	2.3	0.97
3	2	1	16	810120	87	2.84	0.94
3	2	1	18	810305	90	3.8	1.14
3	3	1	6	800613	33	0.2	1.06
3	4	1	13	801028	82	2.1	0.82
3	6	1	13	801028	81	2.3	0.93

xlviii. Surf smelt, *Hypomesus pretiosus pretiosus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	1	800321	48	0.5	0.70
1	1	1	1	800321	50	0.8	0.97
1	1	1	1	800321	41	0.3	0.73
1	1	1	1	800321	42	0.3	0.67
1	1	2	1	800321	42	0.3	0.67
1	1	2	1	800321	44	0.4	0.76
1	1	2	1	800321	44	0.4	0.76
1	1	2	1	800321	47	0.5	0.75
1	1	2	1	800321	46	0.4	0.65
1	1	2	1	800321	49	0.5	0.65
1	1	2	1	800321	40	0.3	0.79
1	1	2	1	800321	44	0.3	0.57
1	1	2	1	800321	45	0.3	0.52
1	1	2	1	800321	44	0.4	0.76
1	1	2	1	800321	47	0.5	0.75
1	1	2	1	800321	41	0.2	0.48
1	1	2	1	800321	42	0.3	0.67
1	1	2	1	800321	42	0.2	0.44
1	1	2	1	800321	43	0.3	0.61
1	1	2	1	800321	47	0.5	0.75
1	1	2	1	800321	46	0.5	0.81
1	1	2	1	800321	43	0.3	0.61
1	1	2	1	800321	47	0.4	0.60

1	1	2	1	800321	44	0.3	0.57
1	1	2	1	800321	42	0.3	0.67
1	1	3	1	800321	45	0.5	0.87
1	1	2	2	800418	60	1.6	1.03
1	1	2	2	800418	66	2.3	1.07
1	1	2	2	800418	47	0.6	0.90
1	1	2	2	800418	59	1.4	0.96
1	1	2	2	800418	54	1.1	1.02
1	1	2	2	800418	58	1.3	0.94
1	1	2	2	800418	66	1.9	0.88
1	1	2	2	800418	63	2	1.09
1	1	2	2	800418	53	0.9	0.89
1	1	2	2	800418	54	1.1	1.02
1	1	2	2	800418	53	1.8	1.79
1	1	2	2	800418	72	3.2	1.10
1	1	2	2	800418	59	1.6	1.09
1	1	2	2	800418	56	1.3	1.07
1	1	2	2	800418	67	2.2	0.97
1	1	2	2	800418	58	1.3	0.94
1	1	2	2	800418	63	1.8	0.98
1	1	2	2	800418	63	1.7	0.93
1	1	2	2	800418	62	1.62	0.93
1	1	2	2	800418	59	1.6	1.09
1	1	2	2	800418	52	1.1	1.17
1	1	2	2	800418	66	2.1	0.97
1	1	2	2	800418	61	1.5	0.91
1	1	2	2	800418	56	1.2	0.98
1	1	2	2	800418	59	1.4	0.96
1	1	2	2	800418	50	0.7	0.85
1	1	2	2	800418	63	2	1.09
1	1	2	2	800418	58	1.8	1.31
1	1	2	2	800418	67	2.2	0.97
1	1	2	2	800418	57	1.3	1.00
1	1	2	2	800418	59	1.5	1.03
1	1	3	2	800418	50	0.8	0.97
1	1	1	3	800430	65	2	0.98
1	1	1	14	801118	45	0.4	0.70
1	1	1	14	801118	53	0.6	0.60
1	1	1	14	801118	49	0.9	1.17
1	1	2	14	801118	52	0.8	0.85
1	1	1	16	810120	55	1.12	0.98
1	1	1	20	810408	46	0.6	0.97
1	1	1	20	810408	47	0.6	0.90
1	1	1	20	810408	114	11.1	0.77

1	1	1	20	810408	46	0.6	0.97
1	1	1	21	810507	52	0.8	0.85
1	1	1	21	810507	76	3.4	0.97
1	1	1	21	810507	78	3.5	0.91
1	1	1	21	810507	56	1	0.82
1	2	1	5	800528	66	2	0.93
1	2	1	8	800709	85	5.4	1.04
1	2	2	14	801118	54	1.1	1.02
1	2	2	14	801118	59	1.6	1.09
1	2	2	14	801118	59	1.5	1.03
1	2	2	14	801118	58	1.4	1.02
1	2	1	21	810507	69	2.5	0.99
1	2	1	21	810507	62	1.9	1.09
1	4	1	19	810325	55	1.3	1.13
1	4	1	19	810325	52	1	1.06
1	4	1	19	810325	49	0.8	1.04
1	4	1	19	810325	56	1.2	0.98
1	4	1	19	810325	52	1	1.06
1	4	1	19	810325	58	1.4	1.02
1	4	1	19	810325	54	0.9	0.84
1	4	1	19	810325	61	1.6	0.97
1	4	1	19	810325	47	0.8	1.20
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	56	1.1	0.90
1	4	1	19	810325	54	1.2	1.12
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	58	1.4	1.02
1	4	1	19	810325	62	2	1.15
1	4	1	19	810325	56	0.8	0.66
1	4	1	19	810325	55	1	0.87
1	4	1	19	810325	57	1.3	1.00
1	4	1	19	810325	60	1.7	1.10
1	4	1	19	810325	54	1	0.93
1	4	1	19	810325	56	1.4	1.15
1	4	1	19	810325	60	1.7	1.10
1	4	1	19	810325	52	0.9	0.95
1	4	1	19	810325	59	1.4	0.96
1	4	1	19	810325	57	1.5	1.16
1	4	1	19	810325	55	1.1	0.96
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	64	2.1	1.08
1	4	1	19	810325	63	2.1	1.14
1	4	1	19	810325	61	1.5	0.91
1	4	1	19	810325	53	1.1	1.09

1	4	1	19	810325	56	1.4	1.15
1	4	1	19	810325	60	1.8	1.16
1	4	1	19	810325	56	1.3	1.07
1	4	1	19	810325	58	1.5	1.09
1	4	1	19	810325	51	0.9	1.02
1	4	1	19	810325	48	0.7	0.98
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	66	2.1	0.97
1	4	1	19	810325	48	0.8	1.12
1	4	1	19	810325	65	1.8	0.88
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	54	1.2	1.12
1	4	1	19	810325	52	0.9	0.95
1	4	1	19	810325	69	2.5	0.99
1	4	1	19	810325	57	1.4	1.08
1	4	1	19	810325	55	1.2	1.05
1	4	1	19	810325	58	1.3	0.94
1	4	1	19	810325	58	1.4	1.02
1	4	1	19	810325	63	2	1.09
1	4	1	19	810325	60	1.6	1.03
1	4	1	19	810325	55	1.2	1.05
1	4	2	19	810325	64	2	1.03
1	4	2	19	810325	63	1.5	0.82
1	4	2	19	810325	55	1.3	1.13
1	4	2	19	810325	64	1.9	0.98
1	4	2	19	810325	54	1.2	1.12
1	4	2	19	810325	59	1.8	1.23
1	4	2	19	810325	63	1.8	0.98
1	4	2	19	810325	67	2.1	0.92
1	4	2	19	810325	53	1.2	1.19
1	4	2	19	810325	57	1.6	1.23
1	4	2	19	810325	61	1.8	1.10
1	4	2	19	810325	50	1	1.21
1	4	2	19	810325	57	1.5	1.16
1	4	2	19	810325	57	1.6	1.23
1	4	2	19	810325	53	1.2	1.19
1	4	2	19	810325	64	2.2	1.13
1	4	2	19	810325	58	1.6	1.16
1	4	2	19	810325	64	2.2	1.13
1	4	2	19	810325	63	1.8	0.98
1	4	2	19	810325	64	2.1	1.08
1	4	2	19	810325	59	1.5	1.03
1	4	2	19	810325	60	1.4	0.90
1	4	2	19	810325	57	1.6	1.23

1	4	2	19	810325	58	1.5	1.09
1	4	2	19	810325	51	1.1	1.25
1	4	2	19	810325	54	1.3	1.21
1	4	2	19	810325	63	1.9	1.03
1	4	2	19	810325	54	1.4	1.30
1	4	2	19	810325	70	2.4	0.91
1	4	2	19	810325	59	1.4	0.96
1	4	2	19	810325	50	0.8	0.97
1	4	2	19	810325	57	1.4	1.08
1	4	2	19	810325	62	1.9	1.09
1	4	2	19	810325	59	1.4	0.96
1	4	2	19	810325	58	1.3	0.94
1	4	2	19	810325	56	1.3	1.07
1	4	2	19	810325	62	1.7	0.98
1	4	2	19	810325	53	1.2	1.19
1	4	2	19	810325	59	1.5	1.03
1	4	2	19	810325	60	1.5	0.97
1	4	2	19	810325	52	1	1.06
1	4	2	19	810325	56	1.2	0.98
1	4	2	19	810325	48	0.9	1.26
1	4	2	19	810325	53	1	0.99
1	4	1	20	810408	100	10.6	1.16
1	4	1	21	810507	52	1.1	1.17
1	5	1	8	800709	32	0.2	1.14
1	5	1	21	810507	61	1.4	0.85
1	5	1	21	810507	56	1.3	1.07
1	5	1	21	810507	59	1.3	0.89
1	5	1	21	810507	50	0.9	1.09
1	5	1	21	810507	54	1.1	1.02
1	5	1	21	810507	60	1.3	0.84
1	5	1	21	810507	62	1.4	0.81
1	5	1	21	810507	54	1.1	1.02
1	5	1	21	810507	52	0.9	0.95
1	5	1	21	810507	54	1.1	1.02
1	5	1	21	810507	55	1.1	0.96
1	5	1	21	810507	62	1.4	0.81
1	5	1	21	810507	59	1.3	0.89
1	5	1	22	810519	52	1.2	1.27
2	1	1	21	810505	60	1.9	1.23
2	1	1	21	810505	51	0.9	1.02
2	1	1	21	810505	58	1.8	1.31
2	1	1	21	810505	60	1.8	1.16
2	1	1	21	810505	54	1.2	1.12
2	1	1	21	810505	64	1.9	0.98

2	1	1	21	810505	54	1.2	1.12
2	1	1	21	810505	63	1.8	0.98
2	1	1	21	810505	49	0.9	1.17
2	1	1	21	810505	55	1.2	1.05
2	1	1	21	810505	51	0.9	1.02
2	1	1	21	810505	57	1.3	1.00
2	1	1	21	810505	58	1.2	0.87
2	1	1	21	810505	54	0.9	0.84
2	1	1	21	810505	63	1.9	1.03
2	2	1	21	810505	54	1	0.93
2	2	1	21	810505	62	1.9	1.09
2	2	1	21	810505	68	2.7	1.13
2	2	1	21	810505	71	2.7	0.97
2	2	1	21	810505	50	1	1.21
2	2	1	21	810505	53	1	0.99
2	2	1	21	810505	56	0.8	0.66
2	2	1	21	810505	58	1.6	1.16
2	3	1	21	810505	66	2	0.93
2	3	1	21	810505	64	2	1.03
2	3	1	21	810505	72	2.7	0.92
2	3	1	21	810505	69	2.4	0.95
2	3	1	21	810505	70	2.7	1.02
2	3	1	21	810505	67	2.4	1.06
2	3	1	21	810505	67	2	0.88
2	3	1	21	810505	68	2.7	1.13
2	3	1	21	810505	65	2	0.98
2	3	1	21	810505	63	2	1.09
2	3	1	21	810505	60	1.8	1.16
2	3	1	21	810505	66	2.4	1.11
2	5	1	16	810119	52	0.8	0.85
2	5	1	16	810119	50	0.7	0.85
2	5	2	16	810119	101	7.8	0.83
2	5	2	16	810119	56	1.2	0.98
2	6	2	6	800612	69	2.8	1.11
2	6	2	6	800612	61	1.8	1.10
2	6	2	12	800923	44	0.7	1.32
2	6	2	12	800923	40	0.7	1.84
2	6	2	12	800923	41	0.5	1.21
2	6	2	12	800923	41	0.5	1.21
2	6	2	12	800923	45	0.7	1.22
2	6	2	12	800923	44	0.7	1.32
2	6	2	12	800923	39	0.6	1.72
2	6	2	12	800923	43	0.7	1.43
2	6	2	12	800923	43	0.6	1.23

2	6	2	12	800923	43	0.6	1.23
2	6	3	12	800923	40	0.6	1.58
2	6	3	12	800923	46	0.8	1.30
2	6	3	12	800923	45	0.6	1.05
2	6	3	12	800923	42	0.7	1.56
2	6	3	12	800923	42	0.6	1.33
2	6	3	12	800923	42	0.6	1.33
2	6	3	12	800923	42	0.6	1.33
2	6	3	12	800923	37	0.4	1.38
2	6	3	12	800923	43	0.7	1.43
2	6	2	15	801210	52	1.2	1.27
2	6	3	15	801210	56	0.9	0.74
2	6	3	15	801210	53	0.7	0.69
2	6	3	15	801210	50	0.5	0.61
2	6	3	15	801210	61	1.5	0.91
2	6	1	24	810617	94	6.9	0.94
2	6	1	25	810630	99	8.7	0.99
3	1	1	2	800411	44	0.65	1.23
3	1	1	2	800411	40	0.45	1.18
3	1	1	2	800411	39	0.4	1.15
3	1	1	2	800411	49	0.75	0.98
3	1	1	2	800411	44	0.55	1.04
3	1	1	2	800411	40	0.5	1.32
3	1	1	2	800411	43	0.45	0.92
3	1	1	2	800411	47	0.65	0.98
3	1	1	2	800411	48	0.85	1.19
3	1	1	2	800417	46	0.55	0.89
3	1	1	2	800417	43	0.45	0.92
3	1	1	2	800417	45	0.6	1.05
3	1	1	2	800417	46	0.55	0.89
3	1	3	2	800417	46	0.65	1.05
3	1	3	2	800417	38	0.35	1.10
3	1	3	2	800417	47	0.65	0.98
3	1	3	2	800417	44	0.45	0.85
3	1	1	7	800628	98	5.81	0.68
3	1	1	7	800628	83	3.87	0.81
3	1	1	10	800810	77	3.3	0.90
3	1	1	10	800810	74	3.1	0.97
3	1	1	10	800810	67	2	0.88
3	1	1	18	810305	41	0.4	0.97
3	1	1	20	810409	42	0.5	1.11
3	1	1	24	810616	42	0.5	1.11
3	1	1	25	810629	45	0.7	1.22
3	2	1	4	800516	53	0.9	0.89

3	2	1	6	800613	75	3.4	1.01
3	2	1	6	800613	82	4.1	0.89
3	2	1	6	800613	80	3.5	0.83
3	2	1	10	800810	46	0.5	0.81
3	2	1	16	810120	53	1	0.99
3	2	1	16	810120	105	9.4	0.87
3	2	1	16	810120	49	0.5	0.65
3	2	1	16	810120	54	1	0.93
3	2	1	16	810120	63	1.6	0.87
3	2	1	16	810120	47	0.7	1.05
3	2	1	16	810120	109	10.2	0.83
3	2	1	16	810120	49	0.6	0.78
3	2	1	16	810120	41	0.4	0.97
3	2	1	16	810120	96	8.4	1.06
3	2	1	16	810120	111	12.2	0.93
3	2	1	16	810120	120	12.9	0.75
3	2	1	16	810120	46	0.7	1.13
3	2	1	18	810305	103	11.5	1.14
3	2	1	20	810409	42	0.5	1.11
3	2	1	20	810409	40	0.5	1.32
3	2	1	20	810409	50	0.8	0.97
3	2	1	20	810409	44	0.5	0.95
3	2	1	20	810409	51	0.8	0.91
3	2	1	20	810409	49	0.8	1.04
3	2	1	20	810409	48	0.8	1.12
3	2	1	20	810409	61	1.9	1.16
3	2	1	20	810409	50	0.8	0.97
3	2	1	20	810409	44	0.5	0.95
3	2	1	20	810409	47	0.5	0.75
3	2	1	20	810409	48	0.8	1.12
3	2	1	20	810409	46	0.5	0.81
3	2	1	21	810506	60	1.7	1.10
3	2	1	21	810506	53	1.1	1.09
3	2	1	21	810506	49	0.7	0.91
3	2	1	21	810506	50	0.7	0.85
3	2	1	21	810506	53	1.1	1.09
3	2	1	21	810506	57	1.3	1.00
3	2	1	21	810506	50	0.7	0.85
3	2	1	21	810506	60	1.7	1.10
3	2	1	21	810506	67	2.2	0.97
3	2	1	21	810506	51	0.7	0.79
3	2	1	21	810506	54	1.1	1.02
3	2	1	21	810506	55	1.1	0.96
3	2	1	21	810506	55	1.1	0.96

3	2	1	21	810506	54	1.1	1.02
3	2	1	21	810506	50	0.7	0.85
3	2	1	21	810506	54	1.1	1.02
3	2	1	21	810506	56	1.1	0.90
3	2	1	21	810506	54	1.3	1.21
3	2	1	21	810506	52	1.1	1.17
3	2	1	21	810506	70	2.8	1.06
3	2	1	21	810506	52	1.1	1.17
3	2	1	21	810506	59	1.3	0.89
3	2	1	21	810506	56	1.3	1.07
3	2	1	21	810506	54	1.1	1.02
3	2	1	21	810506	52	1.1	1.17
3	2	1	21	810506	61	1.3	0.79
3	2	1	21	810506	53	1.1	1.09
3	2	1	21	810506	54	1.1	1.02
3	2	1	21	810506	55	1.3	1.13
3	2	1	21	810506	47	0.7	1.05
3	2	1	22	810520	50	1.1	1.34
3	2	1	22	810520	49	1	1.30
3	2	1	22	810520	51	0.9	1.02
3	2	1	22	810520	53	1	0.99
3	2	1	23	810601	35	0.1	0.42
3	3	1	7	800628	82	2.7	0.59
3	3	1	7	800628	90	4.9	0.77
3	3	1	9	800728	78	3.2	0.83
3	3	1	9	800728	79	3.9	0.97
3	3	1	9	800728	73	3.5	1.14
3	3	1	9	800728	74	2.7	0.84
3	3	1	9	800728	72	2.6	0.89
3	3	1	9	800728	80	3.7	0.88
3	3	1	9	800728	71	2.6	0.93
3	3	1	9	800728	46	0.7	1.13
3	3	1	9	800728	82	4.9	1.07
3	3	1	9	800728	75	3.4	1.01
3	3	1	9	800728	76	1.9	0.54
3	3	1	9	800728	67	2.1	0.92
3	3	1	9	800728	75	3.1	0.92
3	3	1	9	800728	72	2.3	0.79
3	3	1	9	800728	69	2	0.79
3	3	1	9	800728	75	2.8	0.83
3	3	1	9	800728	75	3.1	0.92
3	3	1	9	800728	69	1.8	0.71
3	3	1	9	800728	74	3.1	0.97
3	3	1	9	800728	74	2.9	0.90

3	3	1	9	800728	74	2.7	0.84
3	3	1	9	800728	78	3.3	0.86
3	3	1	9	800728	76	3.3	0.94
3	3	1	9	800728	68	2.7	1.13
3	3	1	9	800728	73	2.5	0.82
3	3	1	9	800728	67	1.8	0.79
3	3	1	9	800728	64	1.9	0.98
3	3	1	9	800728	73	3.7	1.21
3	3	1	25	810629	44	0.6	1.13
3	4	1	6	800613	73	2.8	0.91
3	4	1	9	800728	81	4	0.91
3	4	1	9	800728	70	2.1	0.79
3	4	1	9	800728	82	4.9	1.07
3	4	1	9	800728	77	4.1	1.11
3	4	1	9	800728	75	3.8	1.13
3	4	1	9	800728	76	3.8	1.08
3	4	1	9	800728	74	3	0.93
3	4	1	9	800728	76	2.5	0.71
3	4	1	9	800728	82	4.7	1.03
3	4	1	10	800810	76	3.8	1.08
3	4	1	10	800810	86	5.8	1.07
3	4	1	23	810601	67	2.6	1.14
3	4	1	23	810601	71	2.8	1.01
3	4	1	23	810601	60	1.8	1.16
3	4	1	23	810601	68	2.7	1.13
3	4	1	25	810629	51	1.1	1.25
3	5	1	6	800613	78	4.2	1.09
3	5	1	6	800613	79	4.6	1.14
3	5	1	6	800613	86	5.5	1.02
3	6	1	13	801028	110	10.1	0.79
3	6	1	13	801028	104	9.2	0.88
3	7	1	15	801209	121	13.8	0.78
3	7	1	15	801209	112	12.3	0.91
3	7	1	15	801209	111	12.6	0.96
3	7	1	20	810409	45	0.4	0.70
3	7	1	20	810409	47	0.6	0.90
3	7	1	20	810409	42	0.4	0.89
3	7	1	23	810601	60	1.6	1.03
3	7	1	23	810601	66	2.4	1.11
3	7	1	23	810601	73	3.1	1.01
3	7	1	23	810601	67	2.7	1.19
3	7	2	25	810629	79	4.1	1.02
3	7	2	25	810629	75	6.2	1.84
3	7	2	25	810629	62	2.6	1.50

3	7	2	25	810629	80	5.1	1.21
3	7	2	25	810629	77	4	1.09
3	7	2	25	810629	70	4.3	1.62
3	7	2	25	810629	63	2	1.09
3	7	2	25	810629	65	3.3	1.61
3	7	2	25	810629	80	5.2	1.24
3	7	2	25	810629	83	6.7	1.40
3	7	2	25	810629	74	3.8	1.18
3	7	2	25	810629	79	5.2	1.29
3	7	2	25	810629	74	4.6	1.43
3	7	2	25	810629	81	5.7	1.30
3	7	2	25	810629	79	5.6	1.39
3	7	2	25	810629	90	6.3	0.99
3	7	2	25	810629	72	4.4	1.51
3	7	2	25	810629	83	5.9	1.23
3	7	2	25	810629	66	3.9	1.81
3	7	2	25	810629	80	5.6	1.33
3	7	2	25	810629	70	3.7	1.40
3	1	1	2	800411	16		
3	1	1	2	800411	22		
3	1	1	2	800411	19		

xlix. Threespine stickleback, *Gasterosteus aculeatus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	1	800321	45	0.8	0.78
1	1	2	2	800409	43	0.8	0.90
1	1	3	2	800409	48	0.9	0.72
1	1	1	2	800418	62	3	1.09
1	1	1	2	800418	46	1.1	1.00
1	1	1	2	800418	36	0.3	0.58
1	1	2	2	800418	44	0.8	0.84
1	1	2	2	800418	38	0.2	0.33
1	1	2	2	800418	51	1.1	0.73
1	1	2	2	800418	36	0.2	0.39
1	1	2	2	800418	44	0.4	0.42
1	1	3	2	800418	40	0.6	0.84
1	1	3	2	800418	56	1.7	0.84
1	1	3	2	800418	50	1.5	1.05
1	1	3	2	800418	43	0.7	0.78
1	1	3	2	800418	52	1.7	1.06
1	1	3	4	800515	52	1.6	1.00
1	1	1	6	800611	43	1.2	1.35
1	1	1	6	800611	60	2.6	1.04
1	1	1	6	800611	47	1.3	1.11

1	1	1	6	800611	49	1.3	0.97
1	1	1	6	800611	58	2.4	1.07
1	1	1	6	800611	55	2.3	1.20
1	1	1	6	800611	55	2.3	1.20
1	1	1	6	800611	52	2	1.25
1	1	1	6	800611	52	1.8	1.12
1	1	1	6	800611	62	3.1	1.12
1	1	1	6	800611	55	2.1	1.10
1	1	1	6	800611	48	1.5	1.20
1	1	1	6	800611	56	2.2	1.09
1	1	1	6	800611	52	2.1	1.31
1	1	1	6	800611	58	2.9	1.29
1	1	1	6	800611	54	2.5	1.39
1	1	1	6	800611	55	2.2	1.15
1	1	1	6	800611	54	2	1.11
1	1	1	6	800611	58	2.8	1.24
1	1	1	6	800611	54	1.6	0.89
1	1	1	6	800611	49	1.6	1.20
1	1	1	6	800611	59	2.7	1.14
1	1	1	6	800611	49	2.2	1.65
1	1	1	6	800611	50	1.8	1.27
1	1	1	11	800904	26	0.2	1.06
1	1	1	11	800904	29	0.2	0.76
1	1	1	11	800904	30	0.3	1.02
1	1	1	12	800925	33	0.4	1.02
1	1	1	12	800925	33	0.4	1.02
1	1	1	12	800925	39	0.6	0.91
1	1	1	12	800925	37	0.5	0.89
1	1	1	12	800925	38	0.6	0.99
1	1	1	12	800925	26	0.3	1.59
1	1	1	12	800925	32	0.4	1.12
1	1	1	12	800925	33	0.4	1.02
1	1	1	12	800925	31	0.4	1.23
1	1	1	12	800925	30	0.4	1.36
1	1	1	14	801118	30	0.4	1.36
1	1	1	14	801118	36	0.5	0.97
1	1	1	14	801118	38	0.6	0.99
1	1	1	14	801118	34	0.4	0.93
1	1	1	14	801118	30	0.4	1.36
1	1	2	14	801118	34	0.4	0.93
1	1	2	14	801118	31	0.3	0.92
1	1	2	14	801118	30	0.2	0.68
1	1	2	14	801118	32	0.2	0.56
1	1	2	14	801118	30	0.3	1.02

1	1	2	14	801118	34	0.2	0.46
1	1	2	14	801118	29	0.2	0.76
1	1	1	15	801211	33	0.3	0.76
1	1	1	15	801211	32	0.3	0.84
1	1	1	15	801211	34	0.4	0.93
1	1	1	15	801211	37	0.4	0.71
1	1	1	16	810120	31	0.27	0.83
1	1	2	16	810120	35	0.35	0.74
1	1	2	16	810120	33	0.33	0.84
1	1	2	16	810120	29	0.21	0.80
1	1	2	16	810120	35	0.4	0.85
1	1	2	16	810120	41	0.64	0.83
1	1	2	16	810120	38	0.53	0.87
1	1	2	16	810120	30	0.23	0.78
1	1	3	16	810120	32	0.25	0.70
1	1	3	16	810120	33	0.29	0.74
1	1	3	16	810120	39	0.48	0.73
1	1	3	16	810120	42	0.59	0.71
1	1	3	16	810120	44	0.79	0.82
1	1	3	16	810120	32	0.23	0.64
1	1	3	18	810303	37	0.6	1.07
1	1	3	18	810303	38	0.7	1.15
1	1	1	19	810325	46	0.9	0.82
1	1	1	20	810408	53	1.7	1.00
1	1	2	20	810408	39	0.8	1.21
1	1	2	20	810408	41	0.6	0.78
1	1	2	20	810408	41	0.8	1.04
1	1	2	20	810408	42	0.7	0.84
1	1	1	21	810507	45	1.1	1.07
1	1	1	21	810507	41	0.7	0.91
1	1	1	21	810507	45	1	0.97
1	1	1	22	810519	50	1.4	0.98
1	1	1	23	810603	49	1.2	0.90
1	2	1	7	800626	61	3.1	1.18
1	2	1	7	800626	40	0.9	1.26
1	2	1	7	800626	57	2.9	1.36
1	2	1	7	800626	57	2.3	1.08
1	2	1	7	800626	57	2.5	1.17
1	2	1	7	800626	55	2	1.05
1	2	1	7	800626	50	1.9	1.34
1	2	1	7	800626	58	2.9	1.29
1	2	1	9	800730	50	1.7	1.20
1	2	1	9	800730	62	2	0.72
1	2	1	9	800730	60	3.1	1.24

1	2	1	9	800730	56	1.6	0.79
1	2	1	9	800730	43	0.9	1.01
1	2	1	9	800730	55	2	1.05
1	2	1	9	800730	66	2.7	0.81
1	2	1	9	800730	26	0.2	1.06
1	2	1	10	800811	27	0.17	0.80
1	2	1	10	800811	30	0.16	0.55
1	2	1	10	800811	25	0.17	1.02
1	2	1	10	800811	27	0.16	0.76
1	2	1	10	800811	29	0.16	0.61
1	2	1	10	800811	28	0.17	0.72
1	2	1	10	800811	28	0.2	0.84
1	2	1	10	800811	32	0.4	1.12
1	2	1	10	800811	26	0.17	0.90
1	2	1	10	800811	29	0.16	0.61
1	2	1	11	800904	29	0.2	0.76
1	2	1	11	800904	30	0.2	0.68
1	2	1	11	800904	30	0.2	0.68
1	2	1	11	800904	37	0.5	0.89
1	2	1	11	800904	45	0.8	0.78
1	2	1	11	800904	31	0.3	0.92
1	2	1	11	800904	44	0.7	0.73
1	2	1	11	800904	31	0.3	0.92
1	2	1	11	800904	31	0.3	0.92
1	2	1	11	800904	31	0.3	0.92
1	2	1	14	801118	30	0.1	0.34
1	2	1	14	801118	34	0.3	0.69
1	2	1	14	801118	36	0.3	0.58
1	2	1	14	801118	31	0.1	0.31
1	2	1	14	801118	39	0.8	1.21
1	2	1	14	801118	30	0.2	0.68
1	2	1	14	801118	31	0.1	0.31
1	2	1	14	801118	31	0.2	0.62
1	2	1	14	801118	31	0.1	0.31
1	2	2	14	801118	30	0.4	1.36
1	2	2	14	801118	30	0.5	1.70
1	2	2	14	801118	26	0.2	1.06
1	2	2	14	801118	27	0.4	1.89
1	2	2	14	801118	33	0.4	1.02
1	2	2	14	801118	32	0.5	1.40
1	2	2	14	801118	37	0.7	1.25
1	2	2	14	801118	33	0.4	1.02
1	2	2	14	801118	31	0.4	1.23
1	2	2	14	801118	28	0.2	0.84

1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	33	0.7	1.78
1	2	2	14	801118	37	0.8	1.43
1	2	2	14	801118	28	0.2	0.84
1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	35	0.6	1.27
1	2	2	14	801118	36	0.6	1.16
1	2	2	14	801118	35	0.6	1.27
1	2	2	14	801118	36	0.7	1.36
1	2	2	14	801118	31	0.7	2.16
1	2	2	14	801118	30	0.4	1.36
1	2	2	14	801118	37	0.7	1.25
1	2	2	14	801118	33	0.5	1.27
1	2	2	14	801118	36	0.7	1.36
1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	30	0.4	1.36
1	2	2	14	801118	34	0.5	1.16
1	2	2	14	801118	27	0.2	0.94
1	2	2	14	801118	31	0.4	1.23
1	2	2	14	801118	31	0.4	1.23
1	2	2	14	801118	39	0.7	1.06
1	2	2	14	801118	29	0.3	1.14
1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	32	0.5	1.40
1	2	2	14	801118	27	0.3	1.42
1	2	2	14	801118	31	0.4	1.23
1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	37	0.7	1.25
1	2	2	14	801118	24	0.2	1.36
1	2	2	14	801118	34	0.7	1.62
1	2	2	14	801118	34	0.8	1.85
1	2	2	14	801118	30	0.4	1.36
1	2	2	14	801118	36	0.8	1.55
1	2	2	14	801118	42	0.7	0.84
1	2	2	14	801118	28	0.4	1.69
1	2	2	14	801118	30	0.6	2.05
1	2	2	14	801118	33	0.5	1.27
1	2	2	14	801118	33	0.6	1.52
1	2	2	14	801118	30	0.6	2.05
1	2	2	14	801118	30	0.3	1.02
1	2	2	14	801118	39	0.8	1.21
1	2	2	14	801118	29	0.3	1.14
1	2	2	14	801118	40	0.8	1.12
1	2	2	14	801118	32	0.6	1.68

1	2	2	14	801118	42	0.8	0.96
1	2	2	14	801118	33	0.4	1.02
1	2	2	14	801118	31	0.5	1.54
1	2	2	14	801118	29	0.4	1.51
1	2	2	14	801118	29	0.5	1.89
1	2	1	15	801211	30	0.3	1.02
1	2	1	21	810507	47	0.7	0.60
1	2	1	21	810507	47	0.7	0.60
1	2	1	21	810507	50	1.4	0.98
1	2	1	23	810603	51	1.8	1.19
1	3	1	7	800626	54	2.7	1.50
1	3	1	9	800730	21	0.1	1.03
1	3	1	9	800730	17	0.1	1.97
1	3	1	9	800730	61	2.7	1.03
1	3	1	10	800811	23	0.12	0.93
1	3	1	10	800811	25	0.12	0.72
1	3	1	10	800811	23	0.12	0.93
1	3	1	10	800811	24	0.17	1.15
1	3	1	10	800811	25	0.12	0.72
1	3	1	11	800904	27	0.2	0.94
1	3	1	11	800904	28	0.2	0.84
1	3	1	11	800904	25	0.2	1.20
1	3	1	11	800904	30	0.3	1.02
1	3	1	11	800904	33	0.4	1.02
1	3	1	11	800904	25	0.2	1.20
1	3	1	11	800904	29	0.2	0.76
1	3	1	11	800904	28	0.2	0.84
1	3	1	11	800904	30	0.3	1.02
1	3	1	11	800904	28	0.2	0.84
1	3	1	11	800904	28	0.2	0.84
1	3	1	11	800904	38	0.5	0.82
1	4	1	5	800528	49	1.7	1.27
1	4	1	5	800528	55	2.1	1.10
1	4	1	5	800528	52	1.8	1.12
1	4	1	5	800528	53	1.6	0.94
1	4	1	5	800528	52	1.9	1.18
1	4	1	5	800528	46	1.7	1.55
1	4	1	9	800730	27	0.2	0.94
1	4	1	9	800730	44	0.8	0.84
1	4	1	9	800730	31	0.4	1.23
1	4	1	9	800730	36	0.5	0.97
1	4	1	9	800730	35	0.5	1.06
1	4	1	9	800730	27	0.2	0.94
1	4	1	9	800730	30	0.2	0.68

1	4	1	9	800730	25	0.1	0.60
1	4	1	9	800730	43	0.7	0.78
1	4	1	9	800730	34	0.4	0.93
1	4	1	9	800730	30	0.2	0.68
1	4	1	9	800730	33	0.4	1.02
1	4	1	9	800730	38	0.6	0.99
1	4	1	9	800730	32	0.4	1.12
1	4	1	9	800730	41	0.8	1.04
1	4	1	9	800730	27	0.2	0.94
1	4	1	9	800730	29	0.2	0.76
1	4	1	9	800730	27	0.1	0.47
1	4	1	9	800730	30	0.2	0.68
1	4	1	9	800730	30	0.2	0.68
1	4	1	9	800730	30	0.2	0.68
1	4	1	9	800730	28	0.2	0.84
1	4	1	9	800730	30	0.2	0.68
1	4	1	9	800730	28	0.1	0.42
1	4	1	9	800730	29	0.2	0.76
1	4	1	9	800730	27	0.1	0.47
1	4	1	9	800730	29	0.2	0.76
1	4	1	12	800925	32	0.6	1.68
1	4	1	12	800925	36	1	1.94
1	4	1	12	800925	31	0.9	2.77
1	4	1	12	800925	40	1.2	1.68
1	4	1	12	800925	37	1.1	1.96
1	4	1	12	800925	35	1	2.12
1	4	2	18	810303	49	1	0.75
1	4	1	20	810408	43	0.8	0.90
1	4	1	20	810408	34	0.4	0.93
1	4	1	21	810507	59	2.4	1.01
1	4	1	23	810603	50	1.6	1.13
1	4	1	23	810603	56	1.9	0.94
1	4	2	24	810618	68	2.8	0.76
1	5	1	9	800730	62	4.2	1.52
1	5	1	9	800730	58	2.5	1.11
1	5	1	9	800730	28	0.2	0.84
1	5	1	9	800730	63	3	1.03
1	5	1	9	800730	57	2.7	1.27
1	5	1	9	800730	59	2.5	1.05
1	5	1	9	800730	55	2.4	1.26
1	5	1	9	800730	57	2.3	1.08
1	5	1	9	800730	55	2.6	1.36
1	5	1	9	800730	34	0.5	1.16
1	5	1	9	800730	61	2	0.76

1	5	1	9	800730	58	2.3	1.02
1	5	1	9	800730	60	2.7	1.08
1	5	1	9	800730	30	0.4	1.36
1	5	1	9	800730	29	0.3	1.14
1	5	1	9	800730	29	0.3	1.14
1	5	1	9	800730	26	0.2	1.06
1	5	1	9	800730	30	0.3	1.02
1	5	1	10	800811	28	0.2	0.84
1	5	1	10	800811	26	0.2	1.06
1	5	1	15	801211	38	0.4	0.66
1	5	1	15	801211	25	0.1	0.60
1	5	1	15	801211	34	0.3	0.69
1	5	1	21	810507	46	1	0.91
1	5	1	21	810507	46	1	0.91
1	5	1	23	810603	50	1.6	1.13
1	5	1	23	810603	45	1.1	1.07
1	5	1	23	810603	59	2.8	1.18
1	5	1	23	810603	51	1.5	0.99
1	5	1	23	810603	47	1.3	1.11
1	5	1	23	810603	53	2.1	1.23
1	5	1	23	810603	55	2.1	1.10
1	5	1	23	810603	49	1.7	1.27
1	5	1	23	810603	46	1.1	1.00
1	5	1	23	810603	55	2	1.05
1	5	1	23	810603	53	2.2	1.29
1	5	1	23	810603	49	1.6	1.20
1	5	1	23	810603	63	3.2	1.10
1	5	1	23	810603	50	1.7	1.20
1	5	1	23	810603	41	0.8	1.04
1	5	1	23	810603	55	2.2	1.15
1	5	1	23	810603	49	1.8	1.35
1	5	1	23	810603	50	1.5	1.05
1	5	1	23	810603	52	2	1.25
1	5	1	23	810603	57	2.9	1.36
1	5	1	23	810603	52	1.9	1.18
1	5	1	23	810603	53	1.9	1.12
1	5	1	24	810618	60	2.4	0.96
1	5	2	24	810618	53	1.6	0.94
1	5	2	24	810618	53	2.2	1.29
1	5	2	24	810618	55	1.7	0.89
1	5	2	24	810618	61	3.2	1.22
1	5	2	24	810618	49	1.2	0.90
1	6	1	5	800528	47	1.7	1.45
1	6	1	7	800626	61	2.9	1.10

1	6	1	7	800626	56	2.4	1.19
1	7	1	7	800626	56	3.4	1.68
1	7	1	7	800626	59	3.3	1.39
1	7	1	7	800626	61	3.5	1.33
1	7	1	7	800626	59	3.5	1.48
1	7	1	7	800626	55	2.8	1.47
1	7	1	7	800626	59	3.5	1.48
1	7	1	7	800626	55	3.1	1.62
1	7	1	7	800626	57	3.2	1.50
1	7	1	7	800626	57	3	1.41
1	7	1	7	800626	60	3	1.20
1	7	1	9	800730	24	0.18	1.22
1	7	1	9	800730	19	0.07	0.98
1	7	1	9	800730	25	0.2	1.20
1	7	1	9	800730	25	0.18	1.08
1	7	1	9	800730	29	0.3	1.14
1	7	1	9	800730	19	0.07	0.98
1	7	1	9	800730	23	0.18	1.39
1	7	1	9	800730	24	0.18	1.22
1	7	1	9	800730	25	0.2	1.20
1	7	1	9	800730	25	0.18	1.08
1	7	1	10	800811	31	0.2	0.62
1	7	1	10	800811	23	0.1	0.77
1	7	1	10	800811	26	0.1	0.53
1	7	1	10	800811	28	0.1	0.42
1	7	1	10	800811	33	0.3	0.76
1	7	1	10	800811	25	0.1	0.60
1	7	1	10	800811	31	0.2	0.62
1	7	1	10	800811	22	0.1	0.89
1	7	1	10	800811	30	0.1	0.34
1	7	1	11	800904	22	0.3	2.67
1	7	1	11	800904	29	0.4	1.51
2	1	1	23	810602	43	0.8	0.90
2	1	1	23	810602	37	0.6	1.07
2	1	1	23	810602	51	1.6	1.06
2	1	1	23	810602	40	0.8	1.12
2	1	1	23	810602	49	1.6	1.20
2	1	1	23	810602	51	1.4	0.93
2	1	1	23	810602	49	1.1	0.82
2	2	1	6	800612	54	2.3	1.28
2	2	1	6	800612	55	1.9	1.00
2	2	1	6	800612	53	1.5	0.88
2	2	1	6	800612	43	0.8	0.90
2	2	1	6	800612	62	2.9	1.05

2	2	1	6	800612	52	1.8	1.12
2	2	1	6	800612	58	2.2	0.98
2	2	1	6	800612	58	2.3	1.02
2	2	1	6	800612	51	1.4	0.93
2	2	1	6	800612	57	2.4	1.13
2	2	1	6	800612	57	2.3	1.08
2	2	1	6	800612	54	1.7	0.94
2	2	1	6	800612	56	1.8	0.89
2	2	1	6	800612	56	2.3	1.14
2	2	1	6	800612	52	1.9	1.18
2	2	1	6	800612	54	2	1.11
2	2	1	7	800627	55	2	1.05
2	2	1	10	800809	28	0.3	1.27
2	2	1	10	800809	59	2.4	1.01
2	2	1	10	800809	29	0.3	1.14
2	2	1	10	800809	34	0.2	0.46
2	2	1	10	800809	32	0.3	0.84
2	2	1	10	800809	34	0.2	0.46
2	2	1	10	800809	27	0.4	1.89
2	2	1	23	810602	43	1.1	1.23
2	2	1	23	810602	44	1.1	1.15
2	2	1	23	810602	52	1.8	1.12
2	2	1	23	810602	37	0.6	1.07
2	2	1	23	810602	52	1.5	0.93
2	2	1	23	810602	41	0.9	1.17
2	2	1	23	810602	52	1.8	1.12
2	2	1	23	810602	55	2.2	1.15
2	2	1	23	810602	41	0.8	1.04
2	2	1	23	810602	45	1.2	1.17
2	2	1	23	810602	49	1.7	1.27
2	2	1	23	810602	56	2.5	1.24
2	2	1	23	810602	51	1.7	1.12
2	2	1	23	810602	49	1.5	1.12
2	2	1	24	810617	47	1.2	1.02
2	2	1	25	810630	60	2.7	1.08
2	3	1	6	800612	41	0.9	1.17
2	3	1	6	800612	54	1.7	0.94
2	3	1	21	810505	53	1.5	0.88
2	3	1	23	810602	38	0.7	1.15
2	3	1	23	810602	42	1.1	1.33
2	3	1	23	810602	43	0.8	0.90
2	3	1	23	810602	44	1.2	1.25
2	3	1	23	810602	52	2	1.25
2	3	1	23	810602	50	1.5	1.05

2	3	1	23	810602	42	0.7	0.84
2	3	1	23	810602	48	1.1	0.88
2	3	1	23	810602	52	1.8	1.12
2	3	1	23	810602	49	1.2	0.90
2	3	1	23	810602	48	1.3	1.04
2	3	1	23	810602	56	2	0.99
2	3	1	23	810602	49	1.8	1.35
2	3	1	23	810602	46	1.3	1.18
2	3	1	23	810602	45	1.3	1.27
2	3	1	23	810602	44	1.1	1.15
2	3	1	23	810602	44	0.8	0.84
2	3	1	23	810602	52	1.3	0.81
2	3	1	23	810602	38	0.8	1.31
2	3	1	23	810602	55	1.9	1.00
2	3	1	23	810602	44	1.1	1.15
2	3	1	23	810602	46	1.2	1.09
2	3	1	23	810602	53	1.8	1.06
2	3	1	23	810602	50	1.5	1.05
2	3	1	23	810602	40	0.8	1.12
2	3	1	23	810602	51	1.8	1.19
2	3	1	23	810602	52	1.7	1.06
2	3	1	23	810602	51	1.5	0.99
2	3	1	23	810602	52	1.7	1.06
2	3	1	23	810602	54	2	1.11
2	3	1	23	810602	50	1.3	0.91
2	3	1	23	810602	47	1.3	1.11
2	3	1	23	810602	54	2.1	1.16
2	3	1	23	810602	52	1.8	1.12
2	3	1	23	810602	52	1.8	1.12
2	3	1	23	810602	48	1.5	1.20
2	3	1	23	810602	50	1.5	1.05
2	3	1	23	810602	58	2.6	1.16
2	3	1	23	810602	40	0.8	1.12
2	3	1	23	810602	47	1.3	1.11
2	3	1	23	810602	50	1.5	1.05
2	3	1	23	810602	46	0.9	0.82
2	3	1	23	810602	50	1.8	1.27
2	3	1	23	810602	44	1.1	1.15
2	3	1	23	810602	64	3.4	1.12
2	3	1	23	810602	46	1.2	1.09
2	3	1	23	810602	54	2	1.11
2	3	1	23	810602	55	1.8	0.94
2	3	1	23	810602	49	1.5	1.12
2	3	1	23	810602	42	1.1	1.33

2	3	1	24	810617	45	0.9	0.88
2	3	1	24	810617	49	1.2	0.90
2	3	1	24	810617	51	1.3	0.86
2	3	1	24	810617	53	1.8	1.06
2	3	1	24	810617	54	1.9	1.05
2	3	1	24	810617	55	2.1	1.10
2	3	1	24	810617	52	1.6	1.00
2	3	1	24	810617	63	2.7	0.93
2	3	1	24	810617	51	1.4	0.93
2	3	1	24	810617	52	1.6	1.00
2	3	1	24	810617	51	1.4	0.93
2	3	1	24	810617	51	1.7	1.12
2	3	1	24	810617	57	2.3	1.08
2	3	1	24	810617	52	1.8	1.12
2	3	1	24	810617	52	1.5	0.93
2	3	1	24	810617	56	2.2	1.09
2	3	1	24	810617	46	1.2	1.09
2	3	1	24	810617	52	2	1.25
2	3	1	24	810617	52	2.3	1.43
2	3	1	24	810617	47	1.6	1.36
2	3	1	24	810617	51	1.7	1.12
2	3	1	24	810617	55	1.8	0.94
2	3	1	24	810617	55	2.1	1.10
2	3	1	24	810617	48	1.1	0.88
2	3	1	24	810617	53	1.7	1.00
2	3	1	24	810617	54	2.2	1.22
2	3	1	24	810617	48	1.4	1.12
2	3	1	24	810617	44	0.9	0.94
2	3	1	24	810617	43	0.7	0.78
2	3	1	24	810617	55	2	1.05
2	3	1	24	810617	56	2.2	1.09
2	3	1	24	810617	51	2	1.32
2	3	1	24	810617	44	0.9	0.94
2	3	1	24	810617	53	2	1.17
2	3	1	24	810617	50	1.6	1.13
2	3	1	24	810617	54	2.2	1.22
2	3	1	24	810617	54	1.9	1.05
2	3	1	24	810617	57	2.5	1.17
2	3	1	24	810617	46	1	0.91
2	3	1	24	810617	47	1.4	1.19
2	3	1	24	810617	49	1.8	1.35
2	4	1	10	800809	24	0.1	0.68
2	4	1	10	800809	32	0.2	0.56
2	4	1	10	800809	35	0.3	0.64

2	4	1	10	800809	26	0.1	0.53
2	4	1	10	800809	30	0.2	0.68
2	4	1	10	800809	23	0.1	0.77
2	4	1	10	800809	31	0.2	0.62
2	4	1	10	800809	25	0.1	0.60
2	4	1	10	800809	22	0.1	0.89
2	4	1	10	800809	31	0.2	0.62
2	4	1	10	800809	31	0.1	0.31
2	4	1	10	800809	37	0.3	0.53
2	4	1	23	810602	43	1.1	1.23
2	4	1	23	810602	53	1.9	1.12
2	4	1	23	810602	42	0.8	0.96
2	4	1	23	810602	52	1.8	1.12
2	4	1	23	810602	47	1.2	1.02
2	4	1	23	810602	49	1.5	1.12
2	4	1	23	810602	54	1.9	1.05
2	4	1	23	810602	41	0.7	0.91
2	4	1	23	810602	50	1.7	1.20
2	4	1	23	810602	53	1.6	0.94
2	4	1	23	810602	49	1.3	0.97
2	4	1	23	810602	42	1	1.21
2	4	1	23	810602	54	1.8	1.00
2	4	1	23	810602	47	1.4	1.19
2	4	1	23	810602	50	1.8	1.27
2	4	1	23	810602	56	2	0.99
2	4	1	23	810602	57	2.4	1.13
2	5	1	10	800809	61	2.7	1.03
2	5	1	10	800809	27	0.3	1.42
2	5	1	16	810119	33	0.3	0.76
2	5	1	16	810119	36	0.5	0.97
2	5	1	23	810602	50	1.7	1.20
2	5	1	23	810602	48	1.3	1.04
2	5	1	23	810602	45	1.2	1.17
2	5	1	23	810602	49	1.3	0.97
2	5	1	23	810602	45	1.4	1.36
2	5	1	23	810602	47	1.2	1.02
2	5	1	23	810602	43	1.1	1.23
2	5	1	23	810602	38	0.7	1.15
2	5	1	23	810602	53	2.1	1.23
2	5	1	23	810602	52	1.3	0.81
2	5	1	23	810602	41	0.8	1.04
2	5	1	23	810602	49	1.8	1.35
2	5	1	23	810602	42	1.1	1.33
2	5	1	23	810602	53	1.7	1.00

2	5	1	23	810602	48	1.4	1.12
2	5	1	23	810602	57	2.3	1.08
2	5	1	23	810602	49	1.6	1.20
2	5	1	23	810602	52	1.9	1.18
2	5	1	23	810602	44	1	1.04
2	5	1	23	810602	54	1.6	0.89
2	5	1	23	810602	51	1.7	1.12
2	5	1	23	810602	45	1	0.97
2	5	1	23	810602	41	0.9	1.17
2	5	1	23	810602	46	1.1	1.00
2	5	1	23	810602	47	1.3	1.11
2	6	1	5	800529	55	1.4	0.73
2	6	1	5	800529	42	1.2	1.45
2	6	1	5	800529	48	1.6	1.28
2	6	1	5	800529	49	1.8	1.35
2	6	1	5	800529	50	1.3	0.91
2	6	1	5	800529	51	1.6	1.06
2	6	1	5	800529	49	1.9	1.42
2	6	1	5	800529	51	2	1.32
2	6	1	5	800529	50	1.3	0.91
2	6	1	5	800529	60	2.4	0.96
2	6	1	5	800529	46	1.2	1.09
2	6	1	5	800529	57	2.3	1.08
2	6	1	5	800529	52	1.7	1.06
2	6	1	5	800529	45	1.5	1.46
2	6	1	5	800529	56	2	0.99
2	6	1	5	800529	56	2.2	1.09
2	6	1	5	800529	46	0.9	0.82
2	6	1	5	800529	61	2.4	0.91
2	6	1	5	800529	55	1.7	0.89
2	6	1	5	800529	53	1.5	0.88
2	6	1	5	800529	55	2.2	1.15
2	6	1	5	800529	53	1.6	0.94
2	6	1	5	800529	53	1.6	0.94
2	6	1	5	800529	46	1.4	1.27
2	6	1	5	800529	44	1.4	1.46
2	6	1	5	800529	55	2.4	1.26
2	6	1	5	800529	51	1.8	1.19
2	6	1	5	800529	47	1.6	1.36
2	6	1	5	800529	54	1.7	0.94
2	6	1	5	800529	49	1.8	1.35
2	6	1	5	800529	52	1.9	1.18
2	6	1	5	800529	57	2.1	0.99
2	6	1	5	800529	52	2	1.25

2	6	1	5	800529	52	2.1	1.31
2	6	1	5	800529	49	1.8	1.35
2	6	1	5	800529	50	2	1.41
2	6	1	5	800529	52	2	1.25
2	6	1	5	800529	48	1.8	1.44
2	6	1	5	800529	43	1.3	1.46
2	6	2	5	800529	45	1	0.97
2	6	2	5	800529	56	1.9	0.94
2	6	2	5	800529	52	1.7	1.06
2	6	2	5	800529	56	1.9	0.94
2	6	2	5	800529	55	2.1	1.10
2	6	2	5	800529	52	1.5	0.93
2	6	2	5	800529	49	1.3	0.97
2	6	2	5	800529	53	1.5	0.88
2	6	2	5	800529	51	1.7	1.12
2	6	2	5	800529	49	1.4	1.05
2	6	2	5	800529	53	1.6	0.94
2	6	2	5	800529	57	2.5	1.17
2	6	2	5	800529	54	1.7	0.94
2	6	2	5	800529	53	1.4	0.82
2	6	2	5	800529	57	2.4	1.13
2	6	2	5	800529	56	1.9	0.94
2	6	2	5	800529	57	2	0.94
2	6	2	5	800529	62	3.2	1.16
2	6	2	5	800529	50	1.3	0.91
2	6	3	5	800529	49	1	0.75
2	6	3	5	800529	50	1	0.70
2	6	3	5	800529	55	2.1	1.10
2	6	3	5	800529	51	1.3	0.86
2	6	3	5	800529	53	1.5	0.88
2	6	3	5	800529	50	1.2	0.84
2	6	3	5	800529	52	1.1	0.69
2	6	3	5	800529	57	2	0.94
2	6	3	5	800529	55	1.8	0.94
2	6	3	5	800529	54	1.9	1.05
2	6	3	5	800529	54	1.7	0.94
2	6	3	5	800529	48	1.1	0.88
2	6	3	5	800529	49	1.2	0.90
2	6	3	5	800529	51	1.7	1.12
2	6	3	5	800529	50	0.9	0.63
2	6	3	5	800529	60	2.5	1.00
2	6	3	5	800529	51	1.2	0.79
2	6	3	5	800529	49	1.1	0.82
2	6	3	5	800529	61	2.4	0.91

2	6	3	5	800529	49	1.3	0.97
2	6	1	6	800612	51	1.7	1.12
2	6	1	6	800612	51	1.4	0.93
2	6	1	6	800612	51	2.2	1.46
2	6	1	6	800612	57	2.1	0.99
2	6	1	6	800612	56	2	0.99
2	6	1	6	800612	57	2.2	1.03
2	6	1	6	800612	56	2.1	1.04
2	6	1	6	800612	60	2.3	0.92
2	6	1	6	800612	54	1.8	1.00
2	6	1	6	800612	57	2	0.94
2	6	1	6	800612	57	2.2	1.03
2	6	1	6	800612	46	1.2	1.09
2	6	1	6	800612	56	2.6	1.29
2	6	1	6	800612	48	1.6	1.28
2	6	1	6	800612	52	1.6	1.00
2	6	1	6	800612	52	1.5	0.93
2	6	1	6	800612	51	1.4	0.93
2	6	1	6	800612	55	1.8	0.94
2	6	1	6	800612	52	1.5	0.93
2	6	1	6	800612	51	1.4	0.93
2	6	1	6	800612	55	1.8	0.94
2	6	1	6	800612	52	1.7	1.06
2	6	1	6	800612	53	1.7	1.00
2	6	1	6	800612	53	1.8	1.06
2	6	1	6	800612	54	1.8	1.00
2	6	1	6	800612	58	2.5	1.11
2	6	1	6	800612	48	1.1	0.88
2	6	1	6	800612	58	2.4	1.07
2	6	1	6	800612	57	2.3	1.08
2	6	1	6	800612	53	1.7	1.00
2	6	1	6	800612	58	1.8	0.80
2	6	2	6	800612	53	1.5	0.88
2	6	1	7	800627	58	2.5	1.11
2	6	1	7	800627	57	2.1	0.99
2	6	2	7	800627	60	2.5	1.00
2	6	2	7	800627	59	2.6	1.10
2	6	2	7	800627	57	2.3	1.08
2	6	3	7	800627	57	2.1	0.99
2	6	3	7	800627	51	1.6	1.06
2	6	3	7	800627	58	2.3	1.02
2	6	3	7	800627	57	2.5	1.17
2	6	3	7	800627	62	2.9	1.05
2	6	3	7	800627	56	2.4	1.19

2	6	3	7	800627	57	2.3	1.08
2	6	3	7	800627	59	2.5	1.05
2	6	3	7	800627	55	2.2	1.15
2	6	3	7	800627	55	2.4	1.26
2	6	3	7	800627	57	2.4	1.13
2	6	3	7	800627	60	3	1.20
2	6	3	7	800627	56	2.3	1.14
2	6	3	7	800627	55	2	1.05
2	6	3	7	800627	56	2.1	1.04
2	6	3	7	800627	54	1.9	1.05
2	6	3	7	800627	52	1.5	0.93
2	6	3	7	800627	59	2.4	1.01
2	6	3	7	800627	53	1.8	1.06
2	6	3	7	800627	53	1.7	1.00
2	6	4	7	800627	55	2.2	1.15
2	6	4	7	800627	55	2.1	1.10
2	6	4	7	800627	56	2.5	1.24
2	6	4	7	800627	57	2.5	1.17
2	6	4	7	800627	54	2.1	1.16
2	6	4	7	800627	54	2.2	1.22
2	6	4	7	800627	54	1.8	1.00
2	6	1	10	800809	32	0.3	0.84
2	6	1	10	800809	25	0.2	1.20
2	6	1	10	800809	59	1.6	0.67
2	6	1	12	800923	24	0.2	1.36
2	6	1	12	800923	60	2	0.80
2	6	2	12	800923	56	2	0.99
2	6	3	12	800923	34	0.4	0.93
2	6	2	15	801210	36	0.6	1.16
2	6	2	15	801210	36	0.6	1.16
2	6	1	17	810217	43	0.8	0.90
2	6	1	18	810304	36	0.5	0.97
2	6	3	18	810304	33	0.3	0.76
2	6	3	22	810521	32	0.3	0.84
2	6	1	23	810602	56	2.1	1.04
2	6	1	23	810602	54	1.9	1.05
2	6	1	23	810602	50	1.2	0.84
2	6	1	23	810602	48	1.3	1.04
2	6	1	23	810602	55	2.3	1.20
2	6	1	23	810602	47	1.1	0.94
2	6	1	23	810602	51	1.5	0.99
2	6	1	23	810602	55	2.2	1.15
2	6	1	23	810602	46	0.9	0.82
2	6	1	23	810602	54	1.7	0.94

2	6	1	23	810602	53	1.6	0.94
2	6	1	23	810602	53	1.6	0.94
2	6	1	23	810602	54	1.7	0.94
2	6	1	23	810602	55	2	1.05
2	6	1	23	810602	42	0.8	0.96
3	1	1	1	800320	53	1.36	0.80
3	1	1	1	800320	39	0.36	0.55
3	1	1	1	800320	32	0.28	0.78
3	1	3	1	800320	40	0.38	0.53
3	1	1	2	800411	55	0.85	0.45
3	1	1	2	800411	45	0.8	0.78
3	1	1	2	800411	58	1.25	0.56
3	1	3	2	800411	62	1.8	0.65
3	1	1	2	800417	26	0.2	1.06
3	1	1	2	800417	48	0.85	0.68
3	1	3	2	800417	40	0.5	0.70
3	1	3	2	800417	44	0.85	0.89
3	1	3	2	800417	41	0.65	0.84
3	1	3	2	800417	68	2.1	0.57
3	1	3	2	800417	57	1.7	0.80
3	1	3	2	800417	46	0.95	0.86
3	1	1	7	800628	65	2.59	0.81
3	1	1	7	800628	74	2.7	0.57
3	1	1	7	800628	74	4.11	0.86
3	1	1	11	800905	34	0.5	1.16
3	1	1	11	800905	36	0.4	0.78
3	1	1	11	800905	27	0.2	0.94
3	1	1	11	800905	34	0.4	0.93
3	1	1	11	800905	65	1.7	0.53
3	1	1	11	800905	42	0.9	1.08
3	1	1	11	800905	41	0.7	0.91
3	1	1	11	800905	27	0.2	0.94
3	1	1	11	800905	48	1.1	0.88
3	1	1	11	800905	39	0.8	1.21
3	1	1	12	800924	44	0.5	0.52
3	1	1	12	800924	27	0.2	0.94
3	1	1	12	800924	39	0.2	0.30
3	1	1	12	800924	39	0.3	0.45
3	1	1	12	800924	32	0.2	0.56
3	1	1	12	800924	34	0.3	0.69
3	1	1	12	800924	34	0.3	0.69
3	1	1	12	800924	27	0.2	0.94
3	1	1	12	800924	35	0.3	0.64
3	1	1	12	800924	34	0.3	0.69

3	1	1	12	800924	36	0.4	0.78
3	1	1	13	801027	30	0.3	1.02
3	1	1	13	801027	30	0.3	1.02
3	1	1	13	801027	29	0.3	1.14
3	1	2	14	801117	30	0.1	0.34
3	1	1	18	810305	44	0.8	0.84
3	1	1	18	810305	37	0.4	0.71
3	1	1	18	810305	39	0.6	0.91
3	1	1	18	810305	55	1.2	0.63
3	1	2	18	810305	27	0.2	0.94
3	1	2	18	810305	38	0.5	0.82
3	1	1	19	810323	67	2.8	0.80
3	1	2	20	810409	65	2.9	0.91
3	1	1	24	810616	25	0.3	1.80
3	1	1	24	810616	26	0.3	1.59
3	1	1	24	810616	26	0.2	1.06
3	1	1	24	810616	27	0.3	1.42
3	1	1	24	810616	40	0.8	1.12
3	1	1	24	810616	25	0.3	1.80
3	1	1	24	810616	26	0.3	1.59
3	1	1	24	810616	29	0.3	1.14
3	1	1	24	810616	24	0.2	1.36
3	1	2	24	810616	26	0.1	0.53
3	1	2	24	810616	27	0.2	0.94
3	1	2	24	810616	25	0.1	0.60
3	1	2	24	810616	26	0.2	1.06
3	1	2	24	810616	21	0.1	1.03
3	1	2	24	810616	28	0.2	0.84
3	1	2	24	810616	25	0.2	1.20
3	1	2	24	810616	30	0.3	1.02
3	1	2	24	810616	24	0.1	0.68
3	1	2	24	810616	26	0.2	1.06
3	1	2	24	810616	25	0.2	1.20
3	1	2	24	810616	25	0.1	0.60
3	1	2	24	810616	26	0.1	0.53
3	1	2	24	810616	20	0.1	1.19
3	1	2	24	810616	28	0.2	0.84
3	1	3	24	810616	27	0.2	0.94
3	1	3	24	810616	27	0.3	1.42
3	1	3	24	810616	21	0.1	1.03
3	1	3	24	810616	25	0.1	0.60
3	1	3	24	810616	44	0.9	0.94
3	1	3	24	810616	23	0.2	1.55
3	1	3	24	810616	70	2.3	0.57

3	1	3	24	810616	56	2.2	1.09
3	1	3	24	810616	30	0.2	0.68
3	1	3	24	810616	24	0.2	1.36
3	1	3	24	810616	23	0.1	0.77
3	1	3	24	810616	23	0.3	2.32
3	1	3	24	810616	60	2.2	0.88
3	1	3	24	810616	29	0.3	1.14
3	1	3	24	810616	25	0.2	1.20
3	1	3	24	810616	75	5	1.00
3	1	3	24	810616	26	0.2	1.06
3	1	3	24	810616	24	0.1	0.68
3	1	3	24	810616	23	0.2	1.55
3	1	3	24	810616	25	0.2	1.20
3	1	3	24	810616	30	0.2	0.68
3	1	3	24	810616	24	0.3	2.04
3	1	3	24	810616	24	0.2	1.36
3	1	3	24	810616	27	0.3	1.42
3	1	3	24	810616	54	2.4	1.33
3	1	3	24	810616	25	0.1	0.60
3	1	3	24	810616	24	0.2	1.36
3	1	3	24	810616	23	0.2	1.55
3	1	3	24	810616	25	0.3	1.80
3	1	3	24	810616	54	2	1.11
3	1	3	24	810616	30	0.3	1.02
3	1	3	24	810616	27	0.3	1.42
3	1	3	24	810616	19	0.2	2.80
3	1	3	24	810616	26	0.3	1.59
3	1	3	24	810616	24	0.2	1.36
3	1	1	25	810629	31	0.4	1.23
3	1	1	25	810629	33	0.6	1.52
3	1	1	25	810629	35	0.5	1.06
3	1	1	25	810629	35	0.4	0.85
3	1	1	25	810629	25	0.3	1.80
3	1	1	25	810629	20	0.2	2.39
3	1	1	25	810629	33	0.4	1.02
3	1	1	25	810629	36	0.5	0.97
3	1	1	25	810629	25	0.3	1.80
3	1	1	25	810629	31	0.4	1.23
3	1	1	25	810629	29	0.4	1.51
3	1	1	25	810629	34	0.5	1.16
3	1	1	25	810629	32	0.4	1.12
3	1	1	25	810629	35	0.6	1.27
3	1	1	25	810629	31	0.4	1.23
3	1	1	25	810629	29	0.4	1.51

3	1	1	25	810629	31	0.4	1.23
3	1	1	25	810629	34	0.5	1.16
3	1	1	25	810629	35	0.5	1.06
3	1	1	25	810629	29	0.3	1.14
3	2	1	7	800628	62	3.16	1.14
3	2	1	7	800628	53	1.08	0.63
3	2	1	7	800628	73	3.81	0.83
3	2	1	7	800628	76	4.19	0.81
3	2	1	7	800628	54	1.99	1.10
3	2	1	7	800628	55	0.92	0.48
3	2	1	7	800628	72	3.12	0.71
3	2	1	7	800628	71	3.66	0.87
3	2	1	7	800628	72	3.22	0.73
3	2	1	16	810120	27	0.2	0.94
3	2	1	16	810120	38	0.5	0.82
3	2	1	16	810120	50	1.1	0.77
3	2	1	16	810120	29	0.3	1.14
3	2	1	16	810120	37	0.4	0.71
3	2	1	16	810120	27	0.2	0.94
3	2	1	16	810120	37	0.4	0.71
3	2	1	16	810120	34	0.4	0.93
3	2	1	19	810323	30	0.4	1.36
3	2	1	19	810323	30	0.5	1.70
3	2	1	20	810409	61	2.4	0.91
3	2	1	20	810409	60	2.4	0.96
3	2	1	22	810520	57	2.1	0.99
3	2	1	23	810601	41	0.6	0.78
3	2	1	23	810601	69	3.7	0.96
3	3	1	6	800613	68	3.5	0.95
3	3	1	6	800613	76	4.4	0.85
3	3	1	6	800613	75	4	0.80
3	3	1	6	800613	60	2.7	1.08
3	3	1	25	810629	72	4	0.91
3	4	1	7	800628	74	4.4	0.92
3	4	1	9	800728	41	0.4	0.52
3	4	1	9	800728	30	0.4	1.36
3	4	1	9	800728	33	0.4	1.02
3	4	1	9	800728	35	0.4	0.85
3	4	1	10	800810	22	0.1	0.89
3	4	1	10	800810	34	0.4	0.93
3	4	1	10	800810	26	0.2	1.06
3	4	1	10	800810	33	0.4	1.02
3	4	1	13	801028	48	1	0.80
3	4	1	13	801028	33	0.3	0.76

3	4	1	13	801028	48	1	0.80
3	4	1	23	810601	63	2.8	0.96
3	4	1	25	810629	68	3.7	1.01
3	5	1	13	801028	37	0.6	1.07
3	5	1	13	801028	48	0.7	0.56
3	5	1	15	801209	31	0.2	0.62
3	5	1	15	801209	32	0.2	0.56
3	6	1	7	800629	68	2.5	0.68
3	6	1	7	800629	74	3.7	0.77
3	6	1	7	800629	68	3.2	0.87
3	6	1	7	800629	80	4.2	0.69
3	6	1	9	800728	35	0.6	1.27
3	6	1	9	800728	33	0.3	0.76
3	6	1	9	800728	31	0.3	0.92
3	7	1	10	800810	71	3.5	0.83
3	7	1	15	801209	46	0.7	0.64
3	7	1	15	801209	55	1.3	0.68
3	7	1	16	810121	49	0.7	0.52
3	7	1	16	810121	45	0.5	0.49
3	7	1	16	810121	45	0.5	0.49
3	7	1	16	810121	54	0.9	0.50
3	7	1	16	810121	44	0.5	0.52
3	7	1	16	810121	53	0.9	0.53
3	7	1	16	810121	53	0.9	0.53
1	1	2	2	800418	32		
3	2	1	9	800728	32		
3	2	1	9	800728	37		
3	2	1	9	800728	35		
3	2	1	9	800728	32		
3	2	1	9	800728	36		
3	2	1	9	800728	35		
3	2	1	9	800728	33		
3	2	1	9	800728	32		
3	2	1	9	800728	33		
3	2	1	9	800728	37		
3	2	1	9	800728	37		
3	2	1	9	800728	35		
3	2	1	9	800728	36		
3	2	1	9	800728	36		
3	2	1	9	800728	36		
3	2	1	9	800728	31		
3	2	1	9	800728	21		
3	2	1	9	800728	35		
3	2	1	9	800728	32		

3	2	1	9	800728	33
3	3	1	9	800728	30
3	3	1	9	800728	79
3	3	1	9	800728	89
3	3	1	9	800728	86
3	3	1	9	800728	83
3	3	1	9	800728	94
3	3	1	9	800728	84
3	3	1	9	800728	56
3	3	1	9	800728	102
3	3	1	9	800728	88
3	3	1	9	800728	90
3	3	1	9	800728	74
3	3	1	9	800728	81
3	3	1	9	800728	86
3	3	1	9	800728	75
3	3	1	9	800728	90
3	3	1	9	800728	32
3	3	1	9	800728	66
3	3	1	9	800728	73
3	3	1	9	800728	76
3	1	1	10	800810	34
3	1	1	10	800810	30
3	1	1	10	800810	35
3	7	1	10	800810	29
3	7	1	10	800810	35
3	1	1	11	800905	28
3	1	1	11	800905	28
3	2	1	11	800905	28
3	2	1	11	800905	39
3	2	1	11	800905	32
3	2	1	11	800905	29
3	2	1	11	800905	34
3	7	1	11	800905	39
3	7	1	11	800905	35
3	7	1	11	800905	33
3	7	1	11	800905	38
3	7	1	11	800905	42
3	7	1	11	800905	38
3	7	1	11	800905	32
3	7	1	11	800905	42
3	7	1	11	800905	33
3	7	1	11	800905	39
1	2	1	14	801118	26

3	1	2	14	801117	29
---	---	---	----	--------	----

I. Tidepool sculpin, *Oligocottus maculosus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	4	1	23	810603	30	0.4	0.99
2	6	2	24	810617	30	0.2	0.49
3	1	1	9	800728	75	6.7	0.96
3	1	1	9	800728	42	1.2	1.04
3	1	1	9	800728	35	0.7	1.07
3	1	2	14	801117	52	2.2	0.98
3	1	1	15	801208	46	1.7	1.11
3	1	1	15	801208	54	1.8	0.71
3	1	1	15	801208	46	1.7	1.11
3	1	1	15	801208	40	1	1.01
3	1	1	15	801208	57	2.4	0.80
3	1	1	15	801208	48	1.8	1.03
3	1	1	15	801208	49	1.6	0.86
3	1	1	15	801208	52	2	0.89
3	1	1	15	801208	50	2	1.01
3	1	1	15	801208	35	0.6	0.92
3	1	1	15	801208	45	1.5	1.05
3	1	1	15	801208	49	1.7	0.91
3	1	1	15	801208	43	1.6	1.29
3	1	1	15	801208	47	1.8	1.10
3	1	1	15	801208	39	0.9	0.98
3	1	1	15	801208	50	1.6	0.81
3	1	1	15	801208	44	1.3	0.97
3	1	1	15	801208	44	1.6	1.20
3	1	1	15	801208	47	1.6	0.98
3	1	1	15	801208	39	0.8	0.87
3	1	1	15	801208	50	1.9	0.96
3	1	1	15	801208	44	1.5	1.12
3	1	1	15	801208	40	0.8	0.81
3	1	1	15	801208	42	1.2	1.04
3	1	1	15	801208	41	1	0.93
3	1	1	15	801208	52	2.2	0.98
3	1	1	15	801208	40	0.9	0.91
3	1	1	16	810120	47	1.7	1.04
3	1	1	16	810120	44	1.2	0.90
3	1	1	16	810120	49	1.9	1.02
3	1	1	16	810120	46	1.3	0.85
3	1	1	16	810120	44	1.4	1.05
3	1	1	16	810120	42	1.1	0.95
3	1	1	16	810120	40	1	1.01

3	1	1	16	810120	43	1	0.81
3	1	1	16	810120	45	1.2	0.84
3	1	1	17	810216	57	2.3	0.77
3	1	1	17	810216	52	1.8	0.80
3	1	1	17	810216	45	1	0.70
3	1	1	17	810216	56	2.3	0.81
3	1	1	17	810216	51	1.6	0.76
3	1	1	17	810216	43	1.1	0.89
3	1	1	17	810216	52	1.8	0.80
3	1	1	17	810216	41	1	0.93
3	1	1	17	810216	47	1.4	0.86
3	1	1	18	810305	42	1.3	1.13
3	1	1	18	810305	49	1.7	0.91
3	1	2	18	810305	52	2.6	1.16
3	1	2	18	810305	56	2.5	0.89
3	1	2	18	810305	37	0.7	0.90
3	1	2	18	810305	57	2.7	0.91
3	1	2	18	810305	51	1.7	0.81
3	1	2	18	810305	46	1.4	0.91
3	1	2	18	810305	48	1.5	0.86
3	1	2	18	810305	42	1	0.87
3	1	2	18	810305	40	0.9	0.91
3	1	2	18	810305	51	2.1	0.99
3	1	1	22	810520	59	3.5	1.05
3	1	1	22	810520	64	4	0.94
3	1	1	22	810520	62	4.2	1.08
3	1	1	22	810520	52	2.2	0.98
3	1	1	22	810520	37	1.2	1.54
3	1	1	22	810520	57	2.9	0.97
3	1	1	22	810520	66	4.9	1.04
3	1	1	22	810520	53	2.2	0.92
3	1	1	22	810520	62	3.8	0.98
3	1	1	23	810601	53	2.5	1.05
3	1	1	23	810601	51	2.1	0.99
3	1	1	23	810601	57	3	1.01
3	1	1	23	810601	50	2	1.01
3	1	1	24	810616	27	0.4	1.37
3	1	1	24	810616	27	0.4	1.37
3	1	2	24	810616	20	0.1	0.87
3	1	2	24	810616	26	0.2	0.77
3	1	2	24	810616	52	2	0.89
3	1	2	24	810616	23	0.2	1.13
3	1	2	24	810616	50	1.6	0.81
3	1	2	24	810616	30	0.4	0.99

3	1	2	24	810616	27	0.4	1.37
3	1	3	24	810616	32	0.5	1.01
3	1	3	24	810616	37	0.8	1.03
3	1	3	24	810616	28	0.3	0.92
3	1	1	25	810629	55	3.2	1.20
3	1	1	25	810629	49	2.3	1.23
3	1	1	25	810629	49	2.4	1.29
3	1	1	25	810629	48	2.2	1.26
3	1	1	25	810629	51	2.1	0.99
3	1	1	25	810629	51	2.8	1.33
3	1	1	25	810629	52	2.7	1.20
3	1	1	25	810629	51	2.8	1.33
3	1	1	25	810629	42	1.4	1.21
3	1	1	25	810629	47	1.8	1.10
3	1	1	25	810629	66	4.1	0.87
3	1	1	25	810629	48	1.7	0.97
3	1	1	25	810629	44	1.8	1.35
3	1	1	25	810629	53	2.4	1.01
3	1	1	25	810629	45	2	1.40
3	1	1	25	810629	54	2.7	1.07
3	1	1	25	810629	46	1.7	1.11
3	2	1	14	801117	51	2.2	1.04
3	2	1	14	801117	57	3	1.01
3	2	1	14	801117	42	1.3	1.13
3	2	1	14	801117	50	2.3	1.16
3	2	1	14	801117	51	2.4	1.14
3	2	1	14	801117	54	2.7	1.07
3	2	1	14	801117	55	2.9	1.09
3	2	1	14	801117	52	2.5	1.12
3	2	1	14	801117	39	1.3	1.42
3	2	1	14	801117	58	3.3	1.05
3	2	1	14	801117	52	2.2	0.98
3	2	1	14	801117	56	2.9	1.03
3	2	1	14	801117	50	2.3	1.16
3	2	1	14	801117	44	1.8	1.35
3	2	1	14	801117	54	3	1.19
3	2	1	14	801117	57	3.3	1.11
3	2	1	14	801117	43	1.5	1.21
3	2	1	14	801117	37	1	1.29
3	2	1	14	801117	50	2.1	1.06
3	2	1	14	801117	53	2.5	1.05
3	2	1	14	801117	55	2.8	1.05
3	2	1	14	801117	51	2.6	1.23
3	2	1	14	801117	56	2.8	0.99

3	2	1	14	801117	50	2.4	1.21
3	2	1	14	801117	53	2.7	1.13
3	2	1	14	801117	55	2.8	1.05
3	2	1	14	801117	45	1.6	1.12
3	2	1	14	801117	54	2.9	1.15
3	2	1	14	801117	56	2.9	1.03
3	2	1	14	801117	51	1.9	0.90
3	2	1	14	801117	49	1.7	0.91
3	2	1	14	801117	54	3.1	1.23
3	2	1	14	801117	43	1.5	1.21
3	2	1	14	801117	53	2.5	1.05
3	2	1	14	801117	53	2.2	0.92
3	2	1	14	801117	55	3	1.12
3	2	1	14	801117	47	1.9	1.16
3	2	1	14	801117	47	2.1	1.28
3	2	1	14	801117	47	2.1	1.28
3	2	1	14	801117	56	3.1	1.10
3	2	1	14	801117	42	1.2	1.04
3	2	1	14	801117	58	3.3	1.05
3	2	1	14	801117	51	2.5	1.18
3	2	1	14	801117	48	2.4	1.37
3	2	1	14	801117	42	1.6	1.39
3	2	1	14	801117	43	1.3	1.05
3	2	1	14	801117	56	2.9	1.03
3	2	1	14	801117	46	1.8	1.18
3	2	1	14	801117	52	2.4	1.07
3	2	1	14	801117	55	2.6	0.97
3	2	1	14	801117	55	2.5	0.94
3	2	2	14	801117	46	1.6	1.04
3	2	2	14	801117	53	2.3	0.97
3	2	2	14	801117	49	2	1.07
3	2	2	14	801117	35	0.9	1.38
3	2	2	14	801117	51	1.9	0.90
3	2	2	14	801117	60	3.1	0.89
3	2	2	14	801117	55	2.6	0.97
3	2	2	14	801117	53	2.4	1.01
3	2	2	14	801117	53	2.5	1.05
3	2	2	14	801117	60	3.3	0.94
3	2	2	14	801117	59	3	0.90
3	2	2	14	801117	50	1.9	0.96
3	2	2	14	801117	47	1.8	1.10
3	2	2	14	801117	48	2	1.14
3	2	2	14	801117	51	2	0.95
3	2	2	14	801117	54	2.6	1.03

3	2	2	14	801117	47	1.7	1.04
3	2	2	14	801117	55	2.7	1.01
3	2	2	14	801117	54	2.7	1.07
3	2	2	14	801117	47	1.9	1.16
3	2	2	14	801117	54	2.6	1.03
3	2	2	14	801117	49	1.9	1.02
3	2	2	14	801117	44	1.4	1.05
3	2	2	14	801117	48	1.8	1.03
3	2	2	14	801117	53	2.3	0.97
3	2	2	14	801117	52	2.5	1.12
3	2	2	14	801117	40	1.2	1.21
3	2	2	14	801117	45	1.6	1.12
3	2	2	14	801117	56	3	1.06
3	2	2	14	801117	46	1.5	0.98
3	2	2	14	801117	53	2.4	1.01
3	2	2	14	801117	56	2.8	0.99
3	2	2	14	801117	52	1.5	0.67
3	2	2	14	801117	51	2	0.95
3	2	2	14	801117	56	2.8	0.99
3	2	2	14	801117	53	2.4	1.01
3	2	2	14	801117	52	2.1	0.94
3	2	2	14	801117	52	2.3	1.03
3	2	2	14	801117	51	2.1	0.99
3	2	2	14	801117	40	1.2	1.21
3	2	2	14	801117	58	2.7	0.86
3	2	2	14	801117	53	2.5	1.05
3	2	2	14	801117	50	2	1.01
3	2	2	14	801117	54	2.2	0.87
3	2	2	14	801117	51	2.1	0.99
3	2	2	14	801117	57	2.7	0.91
3	2	2	14	801117	52	2.1	0.94
3	2	2	14	801117	51	2.1	0.99
3	2	2	14	801117	49	1.8	0.97
3	2	2	14	801117	48	1.8	1.03
3	2	2	14	801117	51	2.2	1.04
3	2	2	14	801117	44	1.7	1.27
3	2	2	14	801117	50	1.9	0.96
3	2	1	15	801209	48	1.5	0.86
3	2	1	15	801209	45	1.2	0.84
3	2	1	15	801209	48	1.6	0.92
3	2	1	16	810120	46	1.3	0.85
3	2	1	17	810216	53	1.8	0.76
3	2	1	20	810409	47	1.5	0.92
3	2	1	22	810520	54	2.4	0.95

3	2	1	25	810629	29	0.4	1.10
3	2	1	25	810629	34	0.7	1.17
3	2	1	25	810629	25	0.3	1.31
3	2	1	25	810629	30	0.5	1.23
3	2	1	25	810629	32	0.5	1.01
3	2	1	25	810629	26	0.4	1.54
3	2	1	25	810629	26	0.4	1.54
3	2	1	25	810629	26	0.4	1.54
3	2	1	25	810629	33	0.6	1.10
3	3	1	9	800728	53	1.9	0.80
3	3	1	25	810629	34	0.6	1.00
3	4	1	25	810629	45	1.3	0.91
3	4	1	25	810629	22	0.1	0.65
3	7	2	8	800710	36	0.53	0.74
3	7	2	8	800710	36	0.51	0.71
3	7	2	8	800710	36	0.56	0.78
3	7	1	14	801117	41	0.7	0.65
3	7	1	18	810305	39	0.5	0.55
3	7	1	18	810305	65	5	1.11
3	7	1	18	810305	48	1.4	0.80
3	7	1	18	810305	47	1.4	0.86
3	7	1	18	810305	49	1.4	0.75
3	7	1	18	810305	48	1.4	0.80
3	7	1	18	810305	49	2	1.07
3	7	1	18	810305	47	2	1.22
3	7	1	18	810305	50	2	1.01
3	7	1	18	810305	39	0.5	0.55
3	7	1	18	810305	44	1.2	0.90
3	7	1	18	810305	40	0.5	0.50
3	7	1	18	810305	47	1.2	0.73
3	7	1	18	810305	50	2	1.01
3	7	1	18	810305	44	1.2	0.90
3	7	2	18	810305	42	1.2	1.04
3	7	2	18	810305	63	3.6	0.88
3	7	2	18	810305	41	1	0.93
3	7	2	18	810305	43	1.2	0.97
3	7	2	18	810305	38	1	1.18
3	7	2	18	810305	38	0.9	1.06
3	7	2	18	810305	43	1.2	0.97
3	7	2	18	810305	42	1.2	1.04
3	7	2	18	810305	52	2.6	1.16
3	7	2	18	810305	37	1	1.29
3	7	2	18	810305	42	1.2	1.04
3	7	2	18	810305	48	1.5	0.86

3	7	2	18	810305	51	2.1	0.99
3	7	2	18	810305	40	1	1.01
3	7	2	18	810305	54	2.4	0.95
3	7	2	18	810305	46	1.5	0.98
3	7	2	18	810305	68	4.7	0.91
3	7	1	22	810520	54	2.1	0.83
3	7	1	22	810520	55	2.1	0.79
3	7	1	22	810520	57	2.9	0.97
3	7	1	24	810616	46	1.3	0.85
3	7	1	24	810616	56	2.6	0.92
3	7	1	24	810616	54	2.6	1.03
3	7	1	24	810616	26	0.3	1.16
3	7	1	24	810616	55	2.8	1.05
3	7	1	24	810616	30	0.3	0.74
3	7	1	24	810616	62	3.3	0.85
3	7	1	24	810616	55	2.8	1.05
3	7	1	24	810616	54	2.6	1.03
3	7	1	24	810616	56	2.8	0.99
3	7	1	24	810616	56	3	1.06
3	7	1	24	810616	58	3	0.95
3	7	1	24	810616	28	0.3	0.92
3	7	1	24	810616	51	2.2	1.04
3	7	1	24	810616	26	0.2	0.77
3	7	1	24	810616	51	2.9	1.37
3	7	1	24	810616	54	2.3	0.91
3	7	1	24	810616	25	0.2	0.87
3	7	1	24	810616	60	3	0.86
3	7	1	24	810616	53	2.8	1.18
3	7	2	24	810616	55	2.3	0.86
3	7	3	24	810616	55	2.8	1.05
3	7	3	24	810616	22	0.1	0.65
3	7	3	24	810616	20	0.1	0.87
3	7	3	24	810616	26	0.3	1.16
3	7	3	24	810616	26	0.3	1.16
3	7	3	24	810616	55	2.7	1.01
3	7	3	24	810616	54	2.7	1.07
3	7	3	24	810616	30	0.4	0.99
3	7	3	24	810616	60	3.4	0.97
3	7	3	24	810616	23	0.2	1.13
3	7	3	24	810616	22	0.2	1.29
3	7	3	24	810616	25	0.2	0.87
3	7	3	24	810616	57	2.6	0.87
3	7	3	24	810616	24	0.2	0.99
3	7	3	24	810616	33	0.4	0.73

3	7	3	24	810616	23	0.2	1.13
3	7	3	24	810616	59	3.3	0.99
3	7	3	24	810616	23	0.2	1.13
3	7	3	24	810616	24	0.2	0.99
3	7	3	24	810616	29	0.4	1.10
3	7	3	24	810616	57	3.2	1.07
3	7	3	24	810616	61	3.4	0.92
3	7	3	24	810616	25	0.3	1.31
3	7	3	24	810616	56	2.9	1.03
3	7	3	24	810616	57	2.8	0.94
3	7	1	25	810629	28	0.3	0.92
3	7	1	25	810629	52	2.2	0.98
3	7	1	25	810629	54	2.4	0.95
3	7	1	25	810629	28	0.3	0.92
3	7	1	25	810629	26	0.3	1.16
3	7	1	25	810629	47	1.6	0.98
3	7	1	25	810629	28	0.3	0.92
3	7	1	25	810629	60	3.4	0.97
3	7	2	25	810629	62	4.3	1.11
3	7	2	25	810629	28	0.3	0.92
3	7	2	25	810629	64	5.1	1.19
3	7	2	25	810629	59	4	1.20
3	7	2	25	810629	61	4.3	1.17
3	7	2	25	810629	60	4.1	1.17
3	7	2	25	810629	70	6.6	1.17
3	7	2	25	810629	66	5.1	1.08
3	7	2	25	810629	31	0.4	0.89
3	7	2	25	810629	64	4.4	1.03
3	7	2	25	810629	62	4.4	1.14
3	7	2	25	810629	60	3.9	1.11
3	7	2	25	810629	64	4.8	1.12
3	7	2	25	810629	31	0.4	0.89
3	7	2	25	810629	64	5.1	1.19
3	7	2	25	810629	56	3.7	1.31
3	7	2	25	810629	64	4.7	1.10
3	7	2	25	810629	60	4.5	1.29
3	7	2	25	810629	28	0.3	0.92
3	7	2	25	810629	61	4.1	1.11
3	7	2	25	810629	53	2.9	1.22
3	7	2	25	810629	26	0.3	1.16
3	7	2	25	810629	30	0.4	0.99
3	7	2	25	810629	59	4	1.20
3	7	2	25	810629	59	3.9	1.17
3	7	2	25	810629	29	0.3	0.82

3	7	2	25	810629	64	4.7	1.10
---	---	---	----	--------	----	-----	------

li. Tidepool snailfish, *Liparis florae*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	5	1	21	810506	32	0.4	
3	5	1	21	810506	17	0.1	

lii. Tubesnot, *Aulorhynchus flavidus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
1	1	1	9	800730	27	0.18	2.55
1	1	1	9	800730	25	0.1	1.70
1	1	1	9	800730	22	0.1	2.29
1	1	1	9	800730	28	0.18	2.34
1	1	1	9	800730	25	0.1	1.70
1	1	1	9	800730	26	0.1	1.55
1	1	1	9	800730	28	0.18	2.34
1	1	1	9	800730	32	0.3	2.85
1	1	1	9	800730	25	0.18	3.05
1	1	1	9	800730	24	0.1	1.87
1	1	1	9	800730	28	0.18	2.34
1	1	1	9	800730	26	0.1	1.55
1	1	1	9	800730	26	0.1	1.55
1	1	1	9	800730	25	0.1	1.70
1	1	1	10	800811	32	0.3	2.85
1	1	1	10	800811	33	0.4	3.53
1	1	1	10	800811	29	0.17	2.03
1	1	1	10	800811	25	0.2	3.39
1	1	1	10	800811	25	0.2	3.39
1	1	1	10	800811	30	0.17	1.88
1	1	1	10	800811	31	0.3	3.07
1	1	1	10	800811	26	0.1	1.55
1	1	1	10	800811	30	0.3	3.32
1	1	1	10	800811	25	0.2	3.39
1	1	1	10	800811	30	0.17	1.88
1	1	1	10	800811	27	0.17	2.41
1	1	2	16	810120	91	2.34	1.91
1	2	1	15	801211	81	1.6	1.71
2	6	1	17	810217	100	2.7	1.76
3	1	2	2	800417	126	3.65	1.38
3	1	2	2	800417	131	4.1	1.42
3	1	2	2	800417	136	4.4	1.39
3	1	2	2	800417	130	3.9	1.37
3	1	1	7	800628	54	0.16	0.44
3	1	1	9	800728	95	1	0.74

3	1	1	9	800728	44	0.1	0.45
3	1	1	9	800728	68	0.5	0.81
3	1	1	9	800728	92	0.9	0.71
3	1	1	9	800728	77	0.6	0.72
3	1	1	9	800728	79	0.8	0.91
3	1	1	9	800728	83	0.7	0.71
3	1	1	9	800728	89	0.8	0.69
3	1	1	9	800728	99	1.2	0.80
3	1	1	9	800728	98	1.3	0.89
3	1	1	9	800728	78	0.7	0.82
3	1	1	9	800728	71	0.6	0.88
3	1	1	9	800728	88	0.7	0.62
3	1	1	9	800728	77	0.6	0.72
3	1	1	9	800728	80	0.8	0.88
3	1	1	9	800728	46	0.3	1.21
3	1	1	9	800728	94	1	0.75
3	1	1	9	800728	89	0.8	0.69
3	1	1	9	800728	85	0.7	0.67
3	1	1	10	800810	100	0.8	0.52
3	1	1	10	800810	67	0.4	0.67
3	1	1	10	800810	66	0.2	0.35
3	1	1	10	800810	85	0.7	0.67
3	1	1	11	800905	92	1.1	0.87
3	1	1	11	800905	92	0.8	0.64
3	1	1	11	800905	86	0.7	0.65
3	1	1	11	800905	88	0.9	0.79
3	1	1	11	800905	92	0.9	0.71
3	1	1	11	800905	79	0.5	0.57
3	1	1	11	800905	92	0.9	0.71
3	1	1	11	800905	83	0.6	0.61
3	1	1	11	800905	84	0.6	0.59
3	1	1	12	800924	102	0.8	0.50
3	1	1	12	800924	101	0.9	0.57
3	1	1	12	800924	92	0.8	0.64
3	1	1	12	800924	89	0.6	0.51
3	1	1	13	801027	124	2.9	1.14
3	1	1	14	801117	134	4	1.31
3	1	2	14	801117	113	2.2	1.08
3	1	2	14	801117	120	2.9	1.23
3	1	1	17	810216	125	3.3	1.27
3	1	1	17	810216	128	3.6	1.32
3	1	1	17	810216	133	3.9	1.30
3	1	1	17	810216	117	2.7	1.22
3	1	1	17	810216	128	3.6	1.32

3	1	1	17	810216	132	3.5	1.19
3	1	1	17	810216	140	4.6	1.36
3	1	1	17	810216	131	3.4	1.18
3	1	1	17	810216	116	2.7	1.24
3	1	1	17	810216	129	3.8	1.36
3	1	1	18	810305	124	4.2	1.65
3	1	1	18	810305	120	2.9	1.23
3	1	1	18	810305	132	4.2	1.43
3	1	1	19	810323	126	3.6	1.36
3	1	1	19	810323	120	3.1	1.32
3	1	1	23	810601	54	0.2	0.56
3	1	1	23	810601	70	0.4	0.60
3	1	1	23	810601	55	0.2	0.53
3	1	1	23	810601	41	0.2	1.06
3	1	1	23	810601	48	0.2	0.73
3	1	1	23	810601	69	0.5	0.78
3	1	1	23	810601	55	0.2	0.53
3	1	1	23	810601	50	0.2	0.67
3	1	1	23	810601	50	0.2	0.67
3	1	1	23	810601	48	0.2	0.73
3	1	1	23	810601	44	0.2	0.90
3	1	1	23	810601	43	0.2	0.95
3	1	1	23	810601	55	0.2	0.53
3	1	1	23	810601	45	0.2	0.85
3	1	1	23	810601	48	0.2	0.73
3	1	1	23	810601	54	0.2	0.56
3	1	2	24	810616	87	0.3	0.27
3	1	2	24	810616	25	0.1	1.70
3	1	2	24	810616	69	0.5	0.78
3	1	2	24	810616	46	0.1	0.40
3	1	2	24	810616	39	0.1	0.60
3	1	3	24	810616	36	0.2	1.44
3	1	3	24	810616	68	0.5	0.81
3	1	3	24	810616	67	0.4	0.67
3	1	3	24	810616	90	0.9	0.75
3	1	3	24	810616	55	0.2	0.53
3	1	3	24	810616	70	0.5	0.75
3	1	3	24	810616	72	0.4	0.56
3	1	3	24	810616	48	0.2	0.73
3	1	3	24	810616	53	0.3	0.87
3	1	3	24	810616	40	0.2	1.12
3	1	3	24	810616	15	0.1	5.63
3	1	3	24	810616	33	0.1	0.88
3	1	3	24	810616	26	0.2	3.09

3	1	3	24	810616	55	0.4	1.06
3	1	3	24	810616	73	0.6	0.82
3	1	3	24	810616	48	0.3	1.10
3	1	3	24	810616	41	0.2	1.06
3	1	3	24	810616	28	0.1	1.30
3	1	3	24	810616	42	0.1	0.50
3	1	3	24	810616	60	0.4	0.87
3	1	3	24	810616	35	0.1	0.77
3	1	3	24	810616	32	0.1	0.95
3	1	3	24	810616	63	0.4	0.77
3	1	3	24	810616	55	0.2	0.53
3	1	3	24	810616	69	0.3	0.47
3	1	3	24	810616	42	0.2	1.00
3	1	3	24	810616	50	0.2	0.67
3	1	3	24	810616	66	0.6	1.04
3	1	3	24	810616	44	0.1	0.45
3	1	3	24	810616	48	0.1	0.37
3	1	3	24	810616	50	0.2	0.67
3	1	3	24	810616	70	0.3	0.45
3	1	3	24	810616	49	0.3	1.05
3	1	3	24	810616	59	0.3	0.68
3	1	3	24	810616	68	0.3	0.48
3	1	3	24	810616	67	0.5	0.84
3	1	3	24	810616	42	0.2	1.00
3	1	1	25	810629	45	0.1	0.43
3	1	1	25	810629	64	0.4	0.75
3	1	1	25	810629	133	4.5	1.50
3	1	1	25	810629	80	0.5	0.55
3	1	1	25	810629	140	4.1	1.21
3	1	1	25	810629	63	0.3	0.58
3	1	1	25	810629	55	0.3	0.80
3	1	1	25	810629	80	0.6	0.66
3	1	1	25	810629	60	0.2	0.43
3	1	1	25	810629	59	0.3	0.68
3	1	1	25	810629	45	0.2	0.85
3	1	1	25	810629	79	1.6	1.82
3	1	1	25	810629	59	0.5	1.13
3	1	1	25	810629	144	6.3	1.75
3	1	1	25	810629	55	0.2	0.53
3	1	1	25	810629	50	0.2	0.67
3	1	1	25	810629	69	0.9	1.40
3	1	1	25	810629	52	0.2	0.61
3	2	1	7	800628	80	0.16	0.18
3	2	1	12	800924	86	0.6	0.56

3	2	1	13	801028	122	2.5	1.02
3	2	1	13	801028	111	1.9	0.97
3	2	1	13	801028	125	3	1.16
3	2	1	13	801028	119	2.5	1.08
3	2	1	13	801028	126	2.7	1.02
3	2	1	13	801028	105	1.7	0.99
3	2	1	13	801028	111	1.8	0.92
3	2	1	13	801028	109	1.7	0.91
3	2	1	16	810120	112	2.46	1.23
3	2	1	16	810120	127	3.85	1.43
3	2	1	16	810120	124	3.19	1.26
3	2	1	16	810120	131	3.41	1.18
3	2	1	16	810120	118	2.62	1.16
3	2	1	16	810120	120	2.82	1.20
3	2	1	16	810120	112	2.16	1.08
3	2	1	16	810120	140	4.3	1.27
3	2	1	16	810120	107	2.16	1.20
3	2	1	16	810120	111	2.11	1.08
3	2	1	16	810120	109	2.42	1.29
3	2	1	16	810120	120	2.75	1.17
3	2	1	16	810120	120	3.19	1.36
3	2	1	16	810120	128	3.25	1.19
3	2	1	16	810120	125	3.2	1.24
3	2	1	16	810120	127	3.79	1.41
3	2	1	16	810120	131	3.57	1.24
3	2	1	16	810120	129	3.67	1.32
3	2	1	16	810120	128	3.88	1.42
3	2	1	16	810120	117	2.57	1.16
3	2	1	16	810120	143	5.21	1.47
3	2	1	16	810120	125	3.19	1.23
3	2	1	16	810120	136	4.18	1.32
3	2	1	16	810120	131	4.05	1.40
3	2	1	16	810120	127	3.47	1.29
3	2	1	16	810120	132	4.16	1.41
3	2	1	16	810120	116	2.64	1.22
3	2	1	16	810120	133	3.6	1.20
3	2	1	16	810120	129	4.09	1.47
3	2	1	16	810120	133	4.31	1.44
3	2	1	16	810120	135	4.09	1.32
3	2	1	16	810120	121	3.12	1.30
3	2	1	16	810120	115	2.67	1.25
3	2	1	16	810120	115	2.47	1.16
3	2	1	16	810120	127	3.36	1.25
3	2	1	16	810120	133	3.79	1.27

3	2	1	16	810120	137	3.71	1.16
3	2	1	16	810120	132	4.36	1.48
3	2	1	16	810120	133	3.95	1.32
3	2	1	16	810120	130	4.2	1.48
3	2	1	16	810120	122	3.01	1.23
3	2	1	16	810120	140	4.4	1.30
3	2	1	16	810120	128	3.68	1.34
3	2	1	16	810120	147	4.88	1.29
3	2	1	17	810216	116	2.3	1.06
3	2	2	18	810305	122	3.6	1.47
3	2	2	18	810305	120	3.6	1.53
3	2	1	20	810409	122	3.2	1.31
3	2	1	20	810409	147	5.7	1.50
3	2	1	20	810409	140	5.7	1.69
3	2	1	20	810409	141	5.7	1.66
3	2	1	20	810409	127	3.2	1.19
3	2	1	20	810409	143	5.7	1.60
3	2	1	20	810409	127	5.7	2.12
3	2	1	22	810520	33	0.1	0.88
3	2	1	22	810520	40	0.1	0.56
3	2	1	22	810520	37	0.1	0.68
3	2	1	22	810520	33	0.1	0.88
3	2	1	22	810520	112	0.9	0.45
3	2	1	22	810520	31	0.1	1.02
3	3	1	6	800613	61	0.3	0.63
3	3	1	6	800613	60	0.4	0.87
3	3	1	6	800613	42	0.12	0.60
3	3	1	6	800613	45	0.12	0.51
3	3	1	6	800613	55	0.3	0.80
3	3	1	6	800613	34	0.12	0.99
3	3	1	6	800613	45	0.12	0.51
3	3	1	21	810506	46	0.2	0.81
3	3	1	25	810629	94	1.2	0.91
3	3	1	25	810629	60	0.4	0.87
3	3	1	25	810629	55	0.3	0.80
3	3	1	25	810629	25	0.1	1.70
3	3	1	25	810629	68	0.5	0.81
3	3	1	25	810629	125	3.3	1.27
3	3	1	25	810629	57	0.3	0.73
3	4	1	9	800728	87	0.6	0.54
3	4	1	9	800728	74	0.4	0.53
3	4	1	9	800728	85	0.6	0.57
3	4	1	9	800728	49	0.2	0.70
3	4	1	13	801028	128	2.6	0.95

3	4	1	13	801028	102	1.7	1.06
3	4	1	13	801028	106	1.6	0.91
3	4	1	13	801028	105	1.3	0.76
3	4	1	13	801028	109	1.5	0.80
3	4	1	13	801028	115	2.5	1.17
3	4	1	13	801028	115	2	0.94
3	4	1	13	801028	123	3.5	1.40
3	4	1	13	801028	102	1.4	0.87
3	4	1	13	801028	120	2.6	1.11
3	4	1	13	801028	112	2.1	1.05
3	4	1	13	801028	119	2.3	1.00
3	4	1	13	801028	132	4	1.36
3	4	1	13	801028	110	2	1.04
3	4	1	13	801028	128	2.4	0.88
3	4	1	13	801028	111	1.9	0.97
3	4	1	13	801028	119	2.8	1.21
3	4	1	13	801028	118	2.5	1.11
3	4	1	13	801028	127	3.6	1.34
3	4	1	13	801028	114	2.2	1.06
3	4	1	13	801028	109	2.3	1.23
3	4	1	13	801028	100	1.3	0.85
3	4	1	13	801028	119	2.5	1.08
3	4	1	13	801028	124	3.9	1.54
3	4	1	13	801028	107	1.7	0.95
3	4	1	13	801028	111	1.8	0.92
3	4	1	13	801028	116	3.3	1.52
3	4	1	13	801028	113	1.8	0.88
3	4	1	13	801028	121	3.2	1.33
3	4	1	13	801028	109	2.2	1.17
3	4	1	13	801028	108	1.6	0.87
3	4	1	13	801028	110	3.1	1.62
3	4	1	13	801028	110	2	1.04
3	4	1	13	801028	118	2.1	0.93
3	4	1	13	801028	113	2	0.98
3	4	1	13	801028	109	1.8	0.96
3	4	1	13	801028	99	2.2	1.47
3	4	1	13	801028	127	3	1.12
3	4	1	13	801028	113	1.9	0.93
3	4	1	13	801028	119	2.3	1.00
3	4	1	13	801028	112	1.7	0.85
3	4	1	13	801028	115	2.4	1.13
3	4	1	13	801028	116	2.5	1.15
3	4	1	13	801028	108	2	1.09
3	4	1	13	801028	109	2.5	1.33

3	4	1	13	801028	109	2	1.07
3	4	1	13	801028	118	2.3	1.02
3	4	1	13	801028	118	2.2	0.97
3	4	1	13	801028	136	3.9	1.24
3	4	1	13	801028	115	2.3	1.08
3	4	1	13	801028	123	4.2	1.68
3	4	1	13	801028	107	1.7	0.95
3	4	1	13	801028	111	1.9	0.97
3	4	1	13	801028	98	1.2	0.82
3	4	1	13	801028	110	1.8	0.94
3	4	1	13	801028	112	2.3	1.15
3	4	1	13	801028	111	2.1	1.07
3	4	1	13	801028	119	2.2	0.95
3	4	1	13	801028	105	1.4	0.81
3	4	1	13	801028	123	2.6	1.04
3	4	1	13	801028	110	1.8	0.94
3	4	1	13	801028	105	1.5	0.87
3	4	1	13	801028	119	2.4	1.04
3	4	1	13	801028	103	1.6	0.97
3	4	1	13	801028	118	2.1	0.93
3	4	1	13	801028	102	1.6	1.00
3	4	1	13	801028	117	2.8	1.26
3	4	1	13	801028	112	2	1.00
3	4	1	13	801028	106	1.8	1.02
3	4	1	13	801028	118	2.6	1.15
3	4	1	13	801028	118	3.1	1.37
3	4	1	13	801028	114	2.3	1.10
3	4	1	13	801028	100	1.4	0.91
3	4	1	13	801028	131	3	1.04
3	4	1	13	801028	107	1.8	1.00
3	4	1	13	801028	117	2	0.90
3	4	1	13	801028	111	2	1.02
3	4	1	13	801028	107	2.1	1.17
3	4	1	13	801028	109	1.7	0.91
3	4	1	13	801028	115	2.1	0.99
3	4	1	13	801028	110	1.9	0.99
3	4	1	13	801028	101	1.3	0.83
3	4	1	13	801028	130	3.4	1.20
3	4	1	13	801028	119	2.5	1.08
3	4	1	13	801028	110	1.9	0.99
3	4	1	13	801028	120	2.6	1.11
3	4	1	13	801028	110	1.8	0.94
3	4	1	13	801028	107	2.3	1.28
3	4	1	13	801028	127	2.7	1.00

3	4	1	13	801028	117	2.5	1.13
3	4	1	13	801028	125	3.2	1.24
3	4	1	13	801028	103	2.4	1.46
3	4	1	13	801028	122	2.6	1.06
3	4	1	13	801028	109	2.7	1.44
3	4	1	13	801028	125	2.9	1.12
3	4	1	13	801028	103	2.4	1.46
3	4	1	13	801028	108	2.9	1.58
3	4	1	13	801028	98	1.2	0.82
3	4	1	13	801028	111	2.1	1.07
3	4	1	13	801028	112	1.9	0.95
3	4	1	13	801028	108	2.8	1.52
3	4	1	13	801028	110	2	1.04
3	4	1	13	801028	115	1.9	0.89
3	4	1	13	801028	115	2.2	1.03
3	4	1	13	801028	115	2.7	1.27
3	4	1	13	801028	109	1.9	1.01
3	4	1	13	801028	98	2.3	1.57
3	4	1	13	801028	116	2.6	1.20
3	4	1	13	801028	101	1.3	0.83
3	4	1	13	801028	109	1.6	0.85
3	4	1	13	801028	108	1.8	0.98
3	4	1	13	801028	111	2.2	1.12
3	4	1	13	801028	108	2.3	1.25
3	4	1	13	801028	118	2.9	1.28
3	4	1	13	801028	116	1.8	0.83
3	4	1	13	801028	118	2.5	1.11
3	4	1	13	801028	108	1.9	1.03
3	4	1	23	810601	54	0.3	0.83
3	4	1	23	810601	153	5.3	1.27
3	4	1	23	810601	54	0.3	0.83
3	4	1	23	810601	62	0.3	0.60
3	4	1	23	810601	37	0.1	0.68
3	4	1	23	810601	56	0.3	0.76
3	4	1	23	810601	56	0.3	0.76
3	4	1	23	810601	48	0.3	1.10
3	4	1	23	810601	59	0.3	0.68
3	4	1	23	810601	68	0.4	0.65
3	4	1	23	810601	64	0.3	0.56
3	4	1	23	810601	53	0.3	0.87
3	4	1	23	810601	22	0.1	2.29
3	4	1	23	810601	63	0.3	0.58
3	4	1	23	810601	53	0.3	0.87
3	4	1	23	810601	55	0.3	0.80

3	4	1	25	810629	82	0.9	0.94
3	4	1	25	810629	55	0.3	0.80
3	4	1	25	810629	84	0.9	0.88
3	4	1	25	810629	84	0.8	0.79
3	4	1	25	810629	86	0.9	0.84
3	4	1	25	810629	56	0.3	0.76
3	4	1	25	810629	57	0.3	0.73
3	4	1	25	810629	84	1	0.98
3	4	1	25	810629	71	0.5	0.73
3	4	1	25	810629	58	0.7	1.64
3	4	1	25	810629	76	0.8	0.99
3	4	1	25	810629	74	0.7	0.93
3	5	1	6	800613	68	0.6	0.97
3	5	1	13	801028	114	1.3	0.62
3	5	1	13	801028	108	0.9	0.49
3	5	1	13	801028	114	1.3	0.62
3	5	1	13	801028	114	1.4	0.67
3	5	1	13	801028	113	1.3	0.64
3	5	1	13	801028	110	0.6	0.31
3	5	1	13	801028	114	1.2	0.58
3	5	1	13	801028	110	1	0.52
3	5	1	13	801028	108	0.7	0.38
3	5	1	13	801028	124	1.3	0.51
3	5	1	13	801028	110	1.1	0.57
3	5	1	13	801028	117	1.2	0.54
3	5	1	13	801028	112	1.1	0.55
3	5	1	13	801028	108	0.8	0.44
3	5	1	13	801028	118	1.8	0.80
3	5	1	13	801028	109	0.8	0.43
3	5	1	13	801028	112	1.3	0.65
3	5	1	13	801028	115	1.3	0.61
3	5	1	13	801028	129	1.9	0.68
3	5	1	13	801028	116	1.4	0.64
3	5	1	13	801028	115	1.3	0.61
3	5	1	21	810506	48	0.3	1.10
3	5	1	21	810506	119	2.9	1.26
3	5	2	24	810616	65	0.5	0.90
3	5	1	25	810629	49	0.3	1.05
3	5	1	25	810629	49	0.2	0.70
3	6	1	6	800613	52	0.3	0.91
3	6	1	6	800613	59	0.2	0.45
3	6	1	6	800613	51	0.3	0.95
3	6	1	6	800613	65	0.4	0.72
3	6	1	7	800629	83	0.5	0.51

3	6	1	7	800629	61	0.3	0.63
3	6	1	7	800629	74	0.3	0.40
3	6	1	7	800629	65	0.4	0.72
3	6	1	7	800629	84	0.4	0.39
3	6	1	7	800629	60	0.4	0.87
3	6	1	7	800629	66	0.4	0.69
3	6	1	7	800629	66	0.3	0.52
3	6	1	7	800629	71	0.4	0.58
3	6	1	9	800728	47	0.3	1.15
3	6	1	13	801028	116	2.3	1.06
3	6	1	13	801028	126	2.7	1.02
3	6	1	13	801028	117	2.6	1.17
3	6	1	13	801028	112	1.8	0.90
3	6	1	13	801028	112	2.1	1.05
3	6	1	13	801028	110	2.1	1.10
3	6	1	13	801028	123	2.4	0.96
3	6	1	13	801028	127	2.5	0.93
3	6	1	13	801028	122	2.3	0.94
3	6	1	13	801028	131	3	1.04
3	6	1	13	801028	115	2.2	1.03
3	6	1	13	801028	159	6.5	1.43
3	6	1	13	801028	123	2.7	1.08
3	6	1	13	801028	113	1.9	0.93
3	6	1	13	801028	121	2.6	1.08
3	6	1	13	801028	122	2.6	1.06
3	6	1	13	801028	123	2.3	0.92
3	6	1	13	801028	111	1.7	0.87
3	6	1	13	801028	122	2.2	0.90
3	6	1	13	801028	115	1	0.47
3	6	1	13	801028	122	2.4	0.98
3	6	1	13	801028	119	1.6	0.69
3	6	1	13	801028	114	2.2	1.06
3	6	1	13	801028	120	2.3	0.98
3	6	1	13	801028	107	1.6	0.89
3	6	1	13	801028	122	2.1	0.86
3	6	1	13	801028	113	2.1	1.03
3	6	1	13	801028	140	3.7	1.10
3	6	1	13	801028	114	2	0.96
3	6	1	13	801028	128	3.3	1.21
3	6	1	13	801028	123	2.8	1.12
3	6	1	13	801028	113	2.1	1.03
3	6	1	13	801028	123	1.9	0.76
3	6	1	13	801028	114	1.9	0.91
3	6	1	13	801028	118	2.3	1.02

3	6	1	13	801028	110	1.6	0.83
3	6	1	13	801028	110	2.1	1.10
3	6	1	13	801028	121	1.9	0.79
3	6	1	13	801028	117	2.3	1.04
3	6	1	13	801028	100	1.2	0.78
3	6	1	13	801028	118	2.2	0.97
3	6	1	13	801028	116	1.9	0.87
3	6	1	13	801028	119	2	0.87
3	6	1	13	801028	120	2.2	0.94
3	6	1	13	801028	116	2	0.92
3	6	1	13	801028	116	2.5	1.15
3	6	1	13	801028	120	1.8	0.77
3	6	1	13	801028	112	2	1.00
3	6	1	13	801028	116	2.3	1.06
3	6	1	13	801028	114	2.1	1.01
3	6	1	13	801028	115	1.7	0.80
3	6	1	23	810601	129	3.7	1.33
3	6	1	23	810601	58	0.3	0.70
3	6	1	23	810601	26	0.1	1.55
3	6	1	23	810601	49	0.3	1.05
3	7	1	7	800629	63	0.3	0.58
3	7	1	12	800924	106	1	0.57
3	7	1	12	800924	96	0.6	0.43
3	7	1	12	800924	101	1	0.64
3	7	1	12	800924	109	1.1	0.59
3	7	1	12	800924	111	1.5	0.77
3	7	1	12	800924	105	0.9	0.52
3	7	1	12	800924	105	1.1	0.64
3	7	1	12	800924	112	1.1	0.55
3	7	1	12	800924	104	1.1	0.65
3	7	1	15	801209	123	3.1	1.24
3	7	1	15	801209	125	2.6	1.00
3	7	1	15	801209	119	2.7	1.17
3	7	1	15	801209	122	2.7	1.10
3	7	1	15	801209	117	2.2	0.99
3	7	1	15	801209	127	3.4	1.27
3	7	1	15	801209	125	3	1.16
3	7	1	15	801209	120	2.9	1.23
3	7	1	15	801209	124	3	1.18
3	7	1	15	801209	126	3.2	1.21
3	7	1	15	801209	119	3.1	1.34
3	7	1	15	801209	122	3	1.23
3	7	1	15	801209	121	2.9	1.21
3	7	1	15	801209	115	2.4	1.13

3	7	1	15	801209	121	2.5	1.04
3	7	1	15	801209	106	2	1.14
3	7	1	15	801209	129	3.8	1.36
3	7	1	15	801209	119	2.5	1.08
3	7	1	15	801209	109	2	1.07
3	7	1	15	801209	122	2.7	1.10
3	7	1	15	801209	122	2.5	1.02
3	7	1	15	801209	119	2.4	1.04
3	7	1	16	810121	115	2.3	1.08
3	7	1	16	810121	130	3.3	1.16
3	7	1	16	810121	138	4	1.22
3	7	1	16	810121	115	2.1	0.99
3	7	1	16	810121	133	3.4	1.14
3	7	1	16	810121	137	3.2	1.00
3	7	1	16	810121	115	2.4	1.13
3	7	1	16	810121	127	3	1.12
3	7	1	16	810121	120	2.7	1.15
3	7	1	16	810121	128	3.6	1.32
3	7	1	16	810121	139	4.5	1.35
3	7	1	16	810121	124	2.6	1.02
3	7	1	16	810121	125	2.6	1.00
3	7	1	16	810121	132	3.4	1.16
3	7	1	16	810121	121	2.1	0.88
3	7	1	16	810121	122	2	0.82
3	7	1	16	810121	143	4.2	1.18
3	7	1	16	810121	143	4.7	1.32
3	7	1	16	810121	114	1.8	0.86
3	7	1	16	810121	122	2.4	0.98
3	7	1	16	810121	127	3.3	1.23
3	7	1	16	810121	128	3.3	1.21
3	7	1	16	810121	125	3.1	1.20
3	7	1	16	810121	126	2.8	1.06
3	7	1	16	810121	129	3.4	1.22
3	7	1	16	810121	137	3.6	1.12
3	7	1	16	810121	136	3.2	1.01
3	7	1	16	810121	122	2.3	0.94
3	7	1	16	810121	127	3.2	1.19
3	7	1	16	810121	127	3	1.12
3	7	1	16	810121	127	3.1	1.15
3	7	1	16	810121	135	4.1	1.32
3	7	1	16	810121	135	4.7	1.52
3	7	1	16	810121	126	3.1	1.18
3	7	1	16	810121	125	3.3	1.27
3	7	1	16	810121	133	3.3	1.10

3	7	1	16	810121	124	3.1	1.22
3	7	1	16	810121	124	2.6	1.02
3	7	1	16	810121	125	3	1.16
3	7	1	16	810121	134	3	0.98
3	7	1	16	810121	123	3.3	1.32
3	7	1	16	810121	135	3.6	1.16
3	7	1	16	810121	119	2	0.87
3	7	1	16	810121	121	3.2	1.33
3	7	1	16	810121	130	3.6	1.27
3	7	1	16	810121	115	1.7	0.80
3	7	1	16	810121	124	3.3	1.30
3	7	1	16	810121	122	2.9	1.19
3	7	1	16	810121	143	4.3	1.21
3	7	1	16	810121	127	3.1	1.15
3	7	1	16	810121	123	3.2	1.28
3	7	1	16	810121	137	3.9	1.21
3	7	1	16	810121	119	2.4	1.04
3	7	1	16	810121	133	2.5	0.83
3	7	1	16	810121	122	2.7	1.10
3	7	1	16	810121	131	3.7	1.28
3	7	1	16	810121	126	2.6	0.99
3	7	1	16	810121	127	2.6	0.97
3	7	1	16	810121	115	2.7	1.27
3	7	1	16	810121	121	2.4	1.00
3	7	1	16	810121	122	3.3	1.35
3	7	1	16	810121	128	3.3	1.21
3	7	1	16	810121	122	2.9	1.19
3	7	1	16	810121	125	3.3	1.27
3	7	1	16	810121	114	2.7	1.29
3	7	1	16	810121	139	4.3	1.29
3	7	1	16	810121	133	3.4	1.14
3	7	1	16	810121	143	5.8	1.63
3	7	1	16	810121	119	3.1	1.34
3	7	1	16	810121	123	2.8	1.12
3	7	1	16	810121	123	3.6	1.44
3	7	1	16	810121	136	3.7	1.17
3	7	1	16	810121	117	2.4	1.08
3	7	1	16	810121	126	3	1.14
3	7	1	16	810121	126	2.2	0.83
3	7	1	16	810121	133	3.7	1.24
3	7	1	16	810121	130	3.8	1.34
3	7	1	16	810121	143	4.8	1.35
3	7	1	16	810121	119	2.3	1.00
3	7	1	16	810121	108	1.8	0.98

3	7	1	16	810121	127	3.4	1.27
3	7	1	16	810121	128	2.5	0.91
3	7	1	16	810121	139	3.3	0.99
3	7	1	16	810121	136	2.9	0.92
3	7	1	16	810121	143	5	1.41
3	7	1	20	810409	124	3.8	1.50
3	7	1	20	810409	133	5.2	1.74
3	7	1	20	810409	139	5.9	1.78
3	7	1	20	810409	138	5.2	1.59
3	7	1	20	810409	126	4	1.52
3	7	1	20	810409	146	6.9	1.85
3	7	1	20	810409	124	4.2	1.65
3	7	1	20	810409	123	3.8	1.52
3	7	1	20	810409	123	3.7	1.48
1	1	1	10	800811	22		
3	1	1	12	800924	89		

liii. Whitespotted greenling, *Hexagrammos stelleri*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	1	1	8	800710	109	14.8	1.06
3	1	1	25	810629	122	22	1.11
3	2	1	13	801028	194	88	1.04
3	2	1	13	801028	170	57.7	1.03
3	2	1	13	801028	170	55.5	0.99
3	3	1	6	800613	105	12.9	1.04
3	3	1	7	800628	57	1.5	0.82
3	3	1	25	810629	65	3.2	1.16
3	3	1	25	810629	80	5.4	1.02
3	3	1	25	810629	80	5	0.95
3	3	1	25	810629	68	3.3	1.04
3	3	1	25	810629	79	5.6	1.10
3	4	1	6	800613	89	6.9	0.93
3	4	1	6	800613	138	25.9	0.89
3	4	1	7	800628	114	17.2	1.07
3	4	1	13	801028	207	106.7	1.03
3	4	1	13	801028	189	69.6	0.89
3	4	1	13	801028	200	97.5	1.05
3	4	1	13	801028	190	75.9	0.96
3	7	1	9	800728	152	42	1.06

liv. Tadpole sculpin, *Psychrolutes paradoxus*

Area	Site	Set	Period	Date (yymmdd)	Length (mm)	Weight (g)	Krel
3	3	1	6	800613	42	0.4	1.32
3	3	1	6	800613	43	0.4	1.23
3	3	1	6	800613	66	1.3	1.10

3	3	1	6	800613	50	0.5	0.97
3	3	1	6	800613	45	0.5	1.34
3	3	1	6	800613	46	0.4	1.00
3	1	3	24	810616	37	0.13	0.63
3	1	1	25	810629	31	0.14	1.15
3	1	1	25	810629	34	0.16	1.00
3	1	1	25	810629	35	0.16	0.91
3	1	1	5	800530	25	0.06	0.95
3	1	1	5	800530	23	0.06	1.22
3	1	1	5	800530	28	0.09	1.01
3	1	1	5	800530	26	0.07	0.98
3	1	1	5	800530	24	0.07	1.25
3	1	1	5	800530	30	0.11	1.00
3	1	1	5	800530	25	0.06	0.95
3	1	1	5	800530	27	0.08	1.00
3	1	1	5	800530	25	0.08	1.26
3	1	1	5	800530	26	0.08	1.12
3	1	1	5	800530	31	0.1	0.82
3	1	1	5	800530	27	0.09	1.13
3	1	1	5	800530	27	0.07	0.88
3	1	1	5	800530	23	0.06	1.22
3	1	1	5	800530	29	0.1	1.01
3	1	1	5	800530	27	0.07	0.88
3	1	1	5	800530	27	0.08	1.00
3	1	1	5	800530	29	0.09	0.91
3	1	1	5	800530	23	0.06	1.22
3	1	1	5	800530	26	0.07	0.98
3	1	1	5	800530	27	0.06	0.75
3	1	1	5	800530	24	0.07	1.25
3	1	1	5	800530	28	0.09	1.01
3	3	1	6	800613	30	0.07	0.64
3	7	1	8	800710	22	0.06	1.39
3	1	1	25	810629	31	0.11	0.91
3	1	1	25	810629	28	0.08	0.90
3	1	1	25	810629	26	0.09	1.26