

Wild Juvenile Salmonid Monitoring Program Clayoquot Sound, BC 2016

Prepared for

Cermaq Canada
203-919 Island Highway
Campbell River, BC
V9W 2C2



1310 Marwalk Crescent
Campbell River, BC. V9W 5X1
info@mainstreambio.ca

June 2016

Summary

Beach seine sampling was conducted on behalf of Cermaq Canada in Clayoquot Sound, BC in 2016. Sampling was completed to monitor sea lice abundance, prevalence and intensity on juvenile wild salmon within Clayoquot Sound in support of the Aquaculture Stewardship Certification process for Cermaq Canada finfish aquaculture sites in the area.

Sampling was conducted during three separate sampling events in April and May 2016, selected to coincide with the peak outmigration period of juvenile salmonids. Sampling was completed at 17 sites within Clayoquot Sound, BC. The sites were selected based on their locations relative to existing aquaculture sites located in the area. Sampling was completed with the support of the Ahousaht First Nation and the Nuu-chah-nulth Tribal Council.

The focus of this monitoring program was specifically wild chum salmon and this was the only species that was retained for laboratory analysis of sea lice infection rates. Total catch numbers of each salmonid species were recorded. Thirty individuals or the total number of captured chum salmon (if less than 30 were captured) were collected at each of the 17 sites during the sampling events. Water quality measurements including temperature and salinity were recorded at each site during each sampling event.

Collected sample fish were frozen and analyzed in the lab for the presence of sea lice by Mainstream Biological Consulting. Sea lice observed on the individual fish specimens during laboratory analysis were initially identified as either non-motile chalimus, or motile pre-adults and adults. Lice identified as being in any of the four chalimus stages were identified as *Lepeophtheirus spp.* or *Caligus clemensi*. Motile lice, either pre-adults or adults, were identified as either *Lepeophtheirus spp.* or *Caligus clemensi* and the sex of the louse was determined. Motile *Lepeophtheirus spp.* sea lice found on salmonid specimens were not identified to species, but have been assumed to be *L. salmonis* due to the lack of documented infections of Pacific salmon by other *Lepeophtheirus* lice species (Jones and Nemec, 2004).

This data summary report documents the observed sea lice infection rate on retained wild chum salmon collected in Clayoquot Sound in 2016. A total of 836 juvenile chum

salmon (*Oncorhynchus keta*) underwent analysis for sea lice infection. A total of 314 chum smolts were found to be infected with sea lice, resulting in a calculated sample prevalence of 37.5% in 2016. A total of 726 sea lice were found during laboratory analysis resulting in an abundance of 0.87 for the sample population. A total of 676 *Lepeophtheirus salmonis* lice of various life stages were identified on 302 chum salmon and 50 *Caligus clemensi* lice were identified on 42 fish. There were 30 sample fish that were infected by at least one louse of each species.

Table of Contents

Summary.....	ii
Table of Contents.....	iv
List of Figures.....	v
List of Tables.....	vi
1.0 Introduction.....	1
2.0 Methods.....	4
2.1 Site Locations.....	4
2.2 Field Procedures.....	6
2.3 Laboratory Procedures.....	8
2.4 Data Analysis.....	10
3.0 Results.....	11
3.1 Water Quality Parameters.....	11
3.2 Fish Sample Composition.....	13
3.3 Chum Salmon Size.....	15
3.4 Sea Lice Infection.....	15
3.4.1 Infection Rates.....	15
3.4.2 Infection Rates by Sea Lice Species.....	19
4.0 Conclusions.....	20
5.0 References.....	21
Appendix I – Field Data.....	I
Appendix II – Capture and Collection Sample Totals.....	III
Appendix III – Sea Lice Analysis Data.....	V

List of Figures

Figure 1:	An overview map showing the location of Clayoquot Sound on the west coast of Vancouver Island, BC.....	3
Figure 2:	The locations of the 17 beach seine sites in Clayoquot Sound sampled in 2016.....	5
Figure 3:	Surface water temperature recorded at 17 beach seine sites in Clayoquot Sound, BC between April 7, 2016 and May 6, 2016.	12
Figure 4:	Salinity measurements recorded at 17 beach seine sites in Clayoquot Sound, BC between April 7, 2016 and May 6, 2016.....	12

List of Tables

Table 1:	The site number and location of the 17 beach seine sites where fish were collected for sea lice analysis in Clayoquot Sound in 2016.....	4
Table 2:	The total of collected individuals of each fish species captured in Clayoquot Sound, BC in April and May 2016, and the percentage of the total capture population that they represent.	13
Table 3:	The number of captured fish (Capture Total) and the corrected number of individual fish collected (Sample Total) from each of the 17 sample sites in Clayoquot Sound, BC in April and May 2016.....	14
Table 4:	The number of sea lice found on chum salmon collected in Clayoquot Sound in 2016 summarized by the 17 sites where beach seining was conducted. .	17
Table 5:	Calculated sea lice prevalence and abundance by site as determined for chum salmon collected in Clayoquot Sound, BC in 2016.....	18
Table 6:	The number of sealice in each life stage by species identified on sample fish from Clayoquot Sound 2016. LEP = <i>Lepeophtheirus salmonis</i> CAL = <i>Caligus clemensi</i>	19

1.0 Introduction

At the request of Cermaq Canada, beach seine sampling to capture wild juvenile chum salmon to be analyzed for sea lice infection took place at 17 sites located in Clayoquot Sound, BC (Figure 1). The sample collection occurred during three sample events in 2016 on April 7/8, April 21/22 and May 5/6. These weeks were selected to coincide with the estimated peak outmigration dates of juvenile salmonids. Sampling was completed with the support of the Ahousaht First Nation and the Nuu-chah-nulth Tribal Council.

Parasitic copepods from the family Caligidae (sea lice) found in the coastal waters of British Columbia are divided into two genera: *Lepeophtheirus* and *Caligus*. Eleven species of *Lepeophtheirus* have been identified infecting fish in the Pacific Ocean, while only one species of *Caligus* (*Caligus clemensi*) have been identified (Margolis and Arthur 1979; McDonald and Margolis, 1995). Motile *Lepeophtheirus* spp. sea lice found on salmonid specimens were assumed to be *L. salmonis* due to the lack of documented infections of Pacific salmon by other *Lepeophtheirus* lice species (Jones and Nemeč, 2004). Both of these genera have similar life histories and developmental stages (Kabata, 1972; Johnson and Albright, 1991a). The sea lice hatch from eggs and develop through two free-swimming naupilii stages before developing into an infectious free-swimming copepodid. At this point, the sea lice attach to their host and develop through four chalimus stages. The chalimus are “non-motile” and are attached to their host by a frontal filament. The final chalimus stage terminates as the sea lice become “motile” and are no longer attached to their hosts by the frontal filament. The sea lice can now move freely on the fish as they develop through a pre-adult stage before becoming reproductively viable adults.

Interest in sea lice and their interaction with juvenile salmonids in near shore environments has been the ongoing focus of both media reports and scientific study in coastal British Columbia. This interest followed claims, made in 2001 and 2002, of high levels of sea lice infections on salmonids in the Broughton Archipelago (Morton *et al.*, 2004). Morton *et al.* (2004) concluded that sea lice abundance on juvenile pink (*Oncorhynchus gorboscha*) and chum (*O. keta*) salmon were higher at sample sites located near salmon farms. These results led to the speculation by Morton *et al.* (2004)

and others that sea lice infections may be negatively contributing to the survival of juvenile salmonids in the Broughton Archipelago.

Cermaq Canada requested monitoring of sea lice abundance, prevalence and intensity on juvenile wild salmon within Clayoquot Sound in support of Aquaculture Stewardship Certification for their aquaculture sites within the area. The focus of this monitoring program was specifically wild chum salmon and this was the only species that was retained for laboratory analysis of sea lice infection rates. This data summary report documents the observed sea lice infection rates on retained chum salmon collected in Clayoquot Sound in 2016. This represents the second year of wild juvenile salmonid monitoring in Clayoquot Sound conducted solely by Cermaq Canada. This monitoring program has been adapted from previous sea lice monitoring completed by the Clayoquot Sound Sea Lice Working Group and represents a continuation of the sampling they conducted between 2003 and 2011.

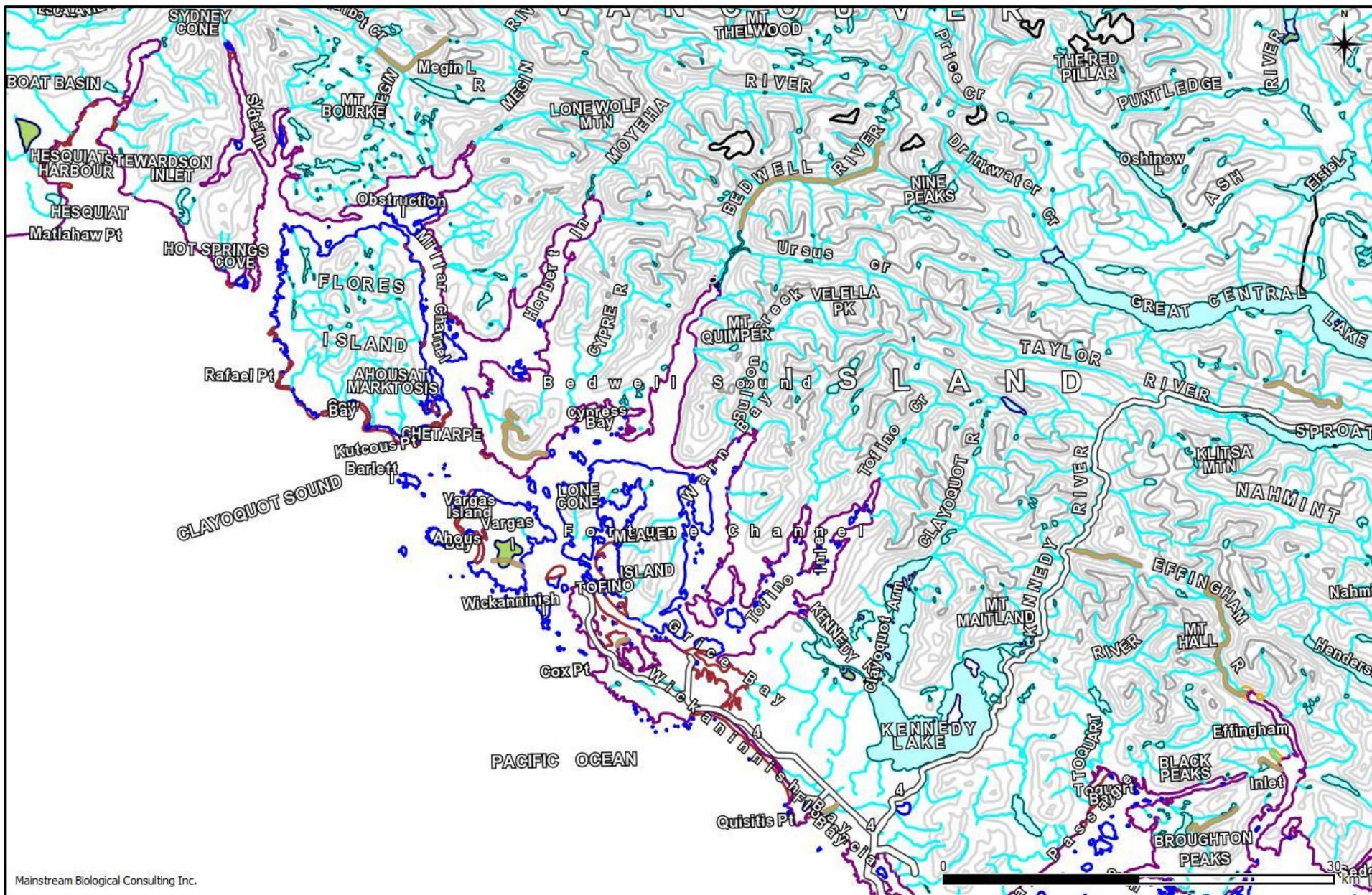


Figure 1: An overview map showing the location of Clayoquot Sound on the west coast of Vancouver Island, BC.

2.0 Methods

The fish inspected for sea lice infection were collected from 17 sites in Clayoquot Sound, BC. These sites were chosen based on their locations relative to existing Cermaq Canada aquaculture sites in the area (Figure 2). The sites were sampled three times in 2016 on April 7/8, April 21/22 and May 5/6.

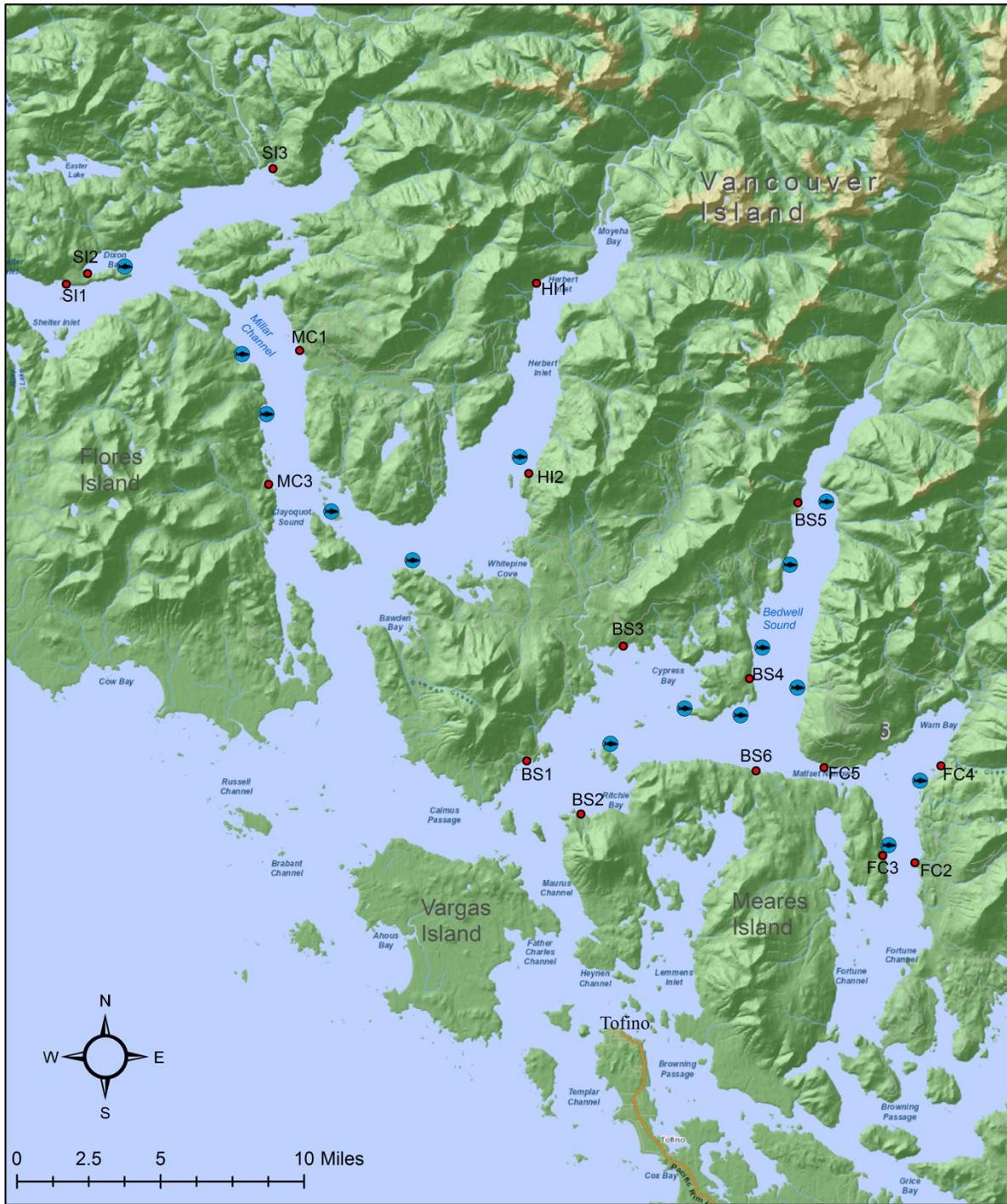
2.1 Site Locations

The 17 sites at which beach seining was conducted to collect specimens for sea lice analysis consisted of three sites in Shelter Inlet, two sites in Milar Channel, two sites in Herbert Inlet, six sites in Bedwell Sound and four sites in Fortune Channel. The approximate locations of the 17 beach seine sites are shown in Figure 2. GPS coordinates collected in the field for the sites are presented in Table 1.

Table 1: The site number and location of the 17 beach seine sites where fish were collected for sea lice analysis in Clayoquot Sound in 2016.

Site #	UTM Coordinates (NAD 83)		
	UTM Zone	Easting	Northing
SI1	9	705006	5475521
SI2	9	705188	5476034
SI3	9	711762	5480267
MC1	9	713430	5472219
MC3	9	712344	5468390
HI1	9	2885820	5474681
HI2	10	285829	5468979
BS1	10	285272	5458561
BS2	10	287224	5456470
BS3	10	288916	5462484
BS4	9	657346	5459486
BS5	10	295628	5467503
BS6	10	294024	5457784
FC2	10	299449	5454460
FC3	10	300347	5457616
FC4	10	298327	5454544
FC5	10	297106	5457859

Clayoquot Sound Wild Smolt Monitoring Program



cermaq

Legend	
	Cermaq Finfish Facilities
	Beach Seine Location

Figure 2: The locations of the 17 beach seine sites in Clayoquot Sound sampled in 2016.

2.2 Field Procedures

In house procedures, adapted from procedures utilized by the Department of Fisheries and Oceans (DFO) for beach seining, fish collection and field data recording in place since 2004 for juvenile salmon sampling were used by Mainstream Biological Consulting staff during sampling in Clayoquot Sound in 2016.

Boats and drivers were supplied by Ahousaht First Nations for beach sampling in Clayoquot Sound in 2016. A 150 ft (45.7 m) long by 12 ft (3.7 m) deep beach seine net was used to capture specimens. The net was constructed in three 50 ft (15.2 m) sections. The centre bunt section consisted of one-quarter inch diameter diamond mesh, while the two side panels (wings) were half-inch diameter diamond mesh. Floats were located every 30 cm along the top-line and a lead line weighted the bottom of the net.

A four-person crew was utilized to conduct the beach seine sets and retrieve samples in a consistent manner at each of the 17 selected sites. All beaches were approached slowly by boat and one crewmember was put ashore with the towline from one end of the beach seine net. The onshore crewmember held the towline at one side of the sample site, while the second and third crewmembers ensured the net deployed smoothly off the bow or side of the boat. The fourth crewmember, the boat operator, backed the boat in a wide semicircle towards the opposite side of the sample site and remained on the boat. When the net was fully deployed, the second and third crewmembers stepped into the shallow water with the towline or tossed it to the awaiting crewmember on shore. A slow retrieval of the net began immediately.

As the net was slowly retrieved, the probe of a YSI85 water meter was placed just below the water surface at the stern end of the boat, to collect salinity and water temperature data. The YSI85 meter was calibrated weekly with de-ionized water while traveling to the sample sites.

The crewmembers retrieved the net evenly from opposite ends ensuring that the lead line remained as close to the bottom as possible. All retrieved netting was piled on the beach above the water level. As the retrieval reached the net bunt, the lead line was retrieved at a faster rate than the floats to allow the netting of the bunt to form a bag under the captured fish. The lead line was then pulled up onto the beach above the

water level. One crewmember worked their way around the outside of the net in the shallow water to ensure the floats stayed above the surface of the water. In this manner a small, shallow bag formed from the bunt of the net held the captured fish in the water.

The three shore crewmembers participated in the collection of individual fish to ensure that captured fish remained in the net for as short a period of time as possible. The net was manipulated, if necessary, in response to rising or falling tides in order to ensure the captured fish remained in the net and were held in sufficient water to minimize stress. The level of sufficient water was dependant on the size and numbers of captured fish, but was generally thought of as enough water to minimize fish contact with the net or with other fish.

A total of 30 chum salmon individuals or all of the individuals present (if less than 30) were collected as samples for sea lice infection analysis. Individual fish were “swam” into an appropriately sized whirlpac bag. All handling of fish was kept to a minimum.

When all the fish for retention were collected, a total catch number for each species was recorded. The fish remaining in the net were counted out of the seine net, or an estimate of the remaining fish was made (estimates were used when it appeared that more than 500 individuals from any given species remained in the net). The total of fish remaining in the net was added to the number of retained individuals to calculate a total capture number for a given species.

A crewmember recorded all the information from each beach seine set in a standardized field form. The information recorded included the following:

- The site number (Site 1-17);
- The date;
- The time at the end of the individual fish collection;
- Comments on weather and oceanic conditions;
- Comments regarding wildlife present near the sample site;
- Total capture and retained fish numbers for each specimen group; and
- Water temperature (°C) and salinity (ppt) to one decimal place.

The retained fish from each site were packaged separately in re-sealable bags and labelled with the site number (Site 1-17) and the week number (Week 1, 2 or 3). Site

sample bags were placed in a portable freezer, which was plugged into the boat's battery. The specimens were transferred to a freezer immediately upon return from the field.

The beach seine net was reloaded onto the bow of the boat. Crewmembers scanned the net for obvious holes, which were repaired immediately if found. The YSI85 meter was shut off and stored, and all gear and coolers were reloaded into the boat.

The above procedures for beach seine net deployment and retrieval, as well as those described for fish collection, were repeated at all 17 sample sites.

2.3 Laboratory Procedures

The laboratory procedures for sea lice analysis have been adapted from the procedures demonstrated by Sheila Dawe and Eliah Kim at the Pacific Biological Station in Nanaimo, BC, during sea lice identification training that was conducted on April 1, 2004. Additional sea lice identification training by Paul Callow was conducted at the Pacific Biological Station in September 2007.

Fish samples were thawed immediately prior to lab analysis. Individual fish were identified to species and counted. The results of this identification and count were compared to the reported data found on the field data sheets.

A standardized data sheet was used to record sea lice analysis results from each site. The site and week number, sample date and number of fish were recorded. The date and time of the start of the analysis was also noted on the data sheet. Data from individual fish was recorded as the analysis proceeded.

Individual fish, when thawed, were removed from their bag, using a pair of forceps at the caudal peduncle, and placed in a petri dish. Each bag was labelled chronologically with an individual identification number (1 – 836). Each fish was then scanned for the presence of sea lice under a stereoscopic dissection microscope. The microscope was set at a magnification of 20X for the preliminary survey of each fish sample, but magnification was occasionally increased to 40X during individual sea lice identification.

Microscopic analysis of each individual fish began at the anterior end of the left side of the specimen. The head was examined first, after which a scan was made along the

dorsal half of the specimen working towards the posterior end and the tail. The dorsal fin was lifted and expanded, as was the caudal fin, with a pair of forceps. From the posterior end a return scan was made along the ventral half of the specimen back to the head. The anal fin, pelvic fin and pectoral fin were also lifted and expanded using a pair of forceps. The fish was then flipped using a pair of forceps at the caudal peduncle and the procedure was repeated on the right hand side of the specimen. Additional scans were made longitudinally down the fish if the entire depth of the fish could not be seen in a single pass. Any sea lice observed on the fish were removed and placed in a petri dish with saline solution.

Each individual bag was visually inspected after the removal of the fish for the presence of pre-adult or adult sea lice that may have become dislodged during handling. These “loose” sea lice were recorded on the data sheet with the data for the corresponding specimen and it was assumed that the lice had come from that individual.

Sea lice were identified using characteristics outlined by Kabata (1972) and Johnson and Albright (1991a). Sea lice observed on individual fish were identified as either non-motile chalimus (including copepodid), or motile pre-adults and adults. Sea lice identified as being non-motile were identified as either *Lepeophtheirus spp.* or *Caligus clemensi* and then identified as either copepodid or chalimus I, II, III or IV. Motile sea lice were identified as *Lepeophtheirus spp.* or *Caligus clemensi*, pre-adults or adults, and males or females.

Chalimus were identified to species primarily by characteristics of the frontal filament. However, size, shape, genital development, and leg development were used as secondary identifying characteristics for speciation as well as primary indicators for life stage identification. Motile sea lice were identified to species by the presence or absence of lunules. If lunules were absent the louse was identified as *Lepeophtheirus spp.* The louse was identified as *Caligus clemensi* if lunules were present.

Lepeophtheirus spp. sea lice found on captured specimens were not identified to species, but have been assumed to be *L. salmonis* due to the lack of documented infections of Pacific salmon by other *Lepeophtheirus* species of sea lice (Jones and Nemeč, 2004).

After microscopic analysis individual fish specimens were measured (fork length) in millimetres and weighed (recorded to the nearest tenth of a gram). Lengths and weights were also recorded on the data sheet with the specimen's corresponding sea lice analysis results. The fish were then returned to their respective individual bags and the fish from each site were repackaged in the large re-sealable bags. All samples were then refrozen.

In order to allow for quality assurance of sea lice identification, all sea lice were placed in labelled vials and preserved in 70% isopropyl alcohol. Ten percent of the deloused fish specimens were randomly selected by specimen number and retained. Both the preserved lice and retained deloused fish specimens will be kept at the office of Mainstream Biological Consulting in Campbell River for five years.

2.4 Data Analysis

Surface water quality data collected for temperature and salinity was summarized to report the minimum and maximum values as well as the calculated averages. The data was graphed for report presentation.

Beach seine fish sample composition was summarized by species and site for each week. Retained specimens were limited to chum salmon. The recorded fork lengths and weights of the chum salmon sample population were summarized to present minimum and maximum values as well as calculated averages. Sea lice infection rates, including the number of infected fish and the number of sea lice identified, were determined for the chum salmon sample population. Prevalence, as defined as the number of host fish found to have one or more sea lice compared to the total number of host fish examined, was determined for chum salmon. Abundance, as defined as the total number of sea lice observed compared to the total number of host fish examined, was also determined for chum salmon. The intensity of sea lice infection, as described by the number of sea lice found on a single salmon was summarized.

Statistical analysis of the spatial and temporal distribution of sea lice was not conducted. Spatial and temporal analysis has been limited to the simple presentation and discussion of the number of sea lice found on fish specimens collected from each site during each of the sampling events.

3.0 Results

The following sections outline the results of beach seine collection and subsequent sea lice inspection of juvenile salmonids collected from Clayoquot Sound, BC, in 2016. Water quality field data is presented in Appendix I, beach seine fish capture data is included in Appendix II and data on the chum salmon sample population including sea lice lab analysis results are located in Appendix III

3.1 Water Quality Parameters

Surface measurements of temperature and salinity, taken during beach seining at each of the 17 sites during the three sample periods, are presented in Figures 3 and 4 respectively. The field data recorded at each site is included in Appendix I.

Surface water temperature readings taken at the 17 sample sites showed a gradual increasing trend over the sample period (Figure 3). Recorded surface water temperatures ranged from a low of 9.2 °C recorded at site BS5 on April 8, 2016, to a high of 15.6 °C recorded at site HI1 on May 5, 2016 (Appendix I). Calculated weekly average surface water temperatures increased from 10.3 °C for April 7/8, 2016, to 11.9 °C for April 21/22, 2016 to the high of 12.7 °C for May 7/8, 2016.

Surface water salinity readings taken at the 17 sample sites also showed an increase from the first sample week to the last, with a dip in salinity recorded during sampling completed on April 21/22, 2016 at some sites (Figure 4). Recorded surface water salinity ranged from a low of 4.6 ppt recorded at site HI1 on April 21, 2016, to a high of 28.7 ppt recorded at site SI1 on May 5, 2016 (Appendix I). The calculated weekly average surface water salinity increased from 18.5 ppt for April 7/8, 2016, to 20.5 ppt for April 21/22, 2016, to 25.0 ppt for May 5/6, 2016.

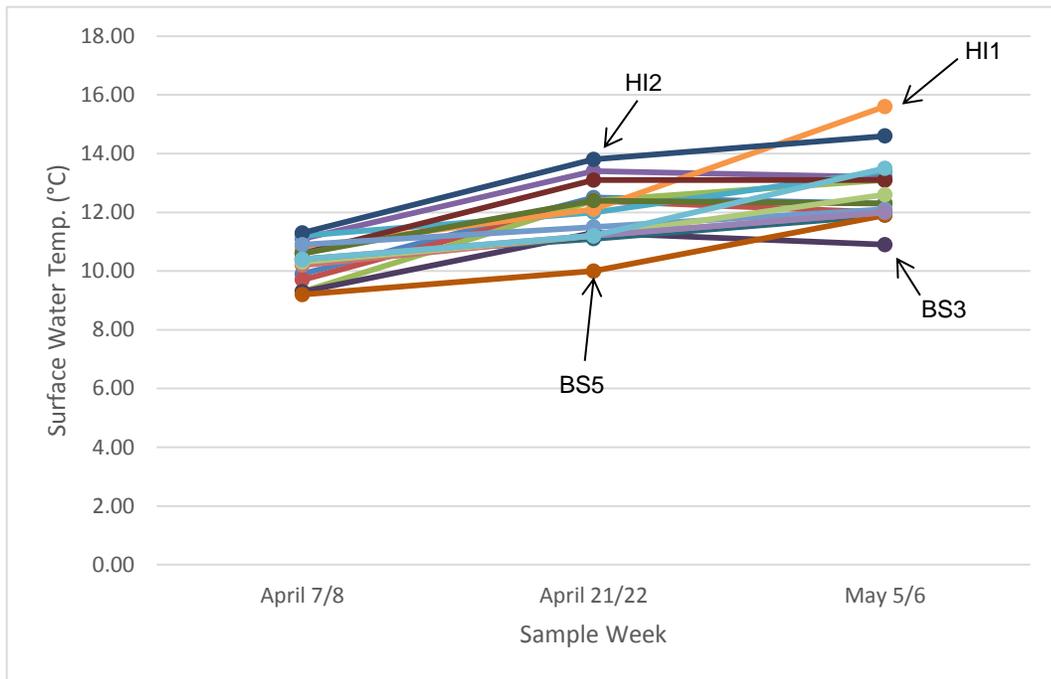


Figure 3: Surface water temperature recorded at 17 beach seine sites in Clayoquot Sound, BC between April 7, 2016 and May 6, 2016.

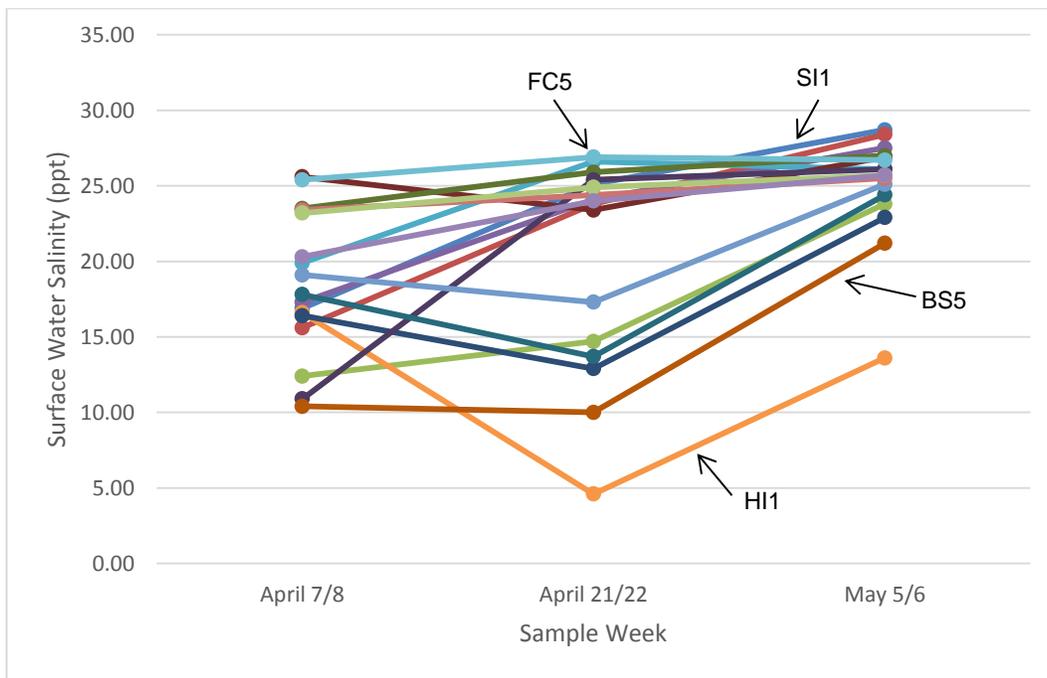


Figure 4: Salinity measurements recorded at 17 beach seine sites in Clayoquot Sound, BC between April 7, 2016 and May 6, 2016.

3.2 Fish Sample Composition

A total of 2146 fish were captured during beach seine sampling conducted in Clayoquot Sound, BC in 2016 (Table 2). A summary of the total number of fish captured and collected as specimens at each site over the collection period can be found in Table 3. Totals of fish captured and collected specimens at each site over the entire collection period can be found in Appendix II. Only chum salmon were retained as sample specimens and underwent analysis for sea lice infection. Of the 1992 chum salmon captured, 836 individual chum salmon (42.0 %) were retained and underwent lab analysis.

Chum salmon (*O. keta*) smolts were captured in significantly greater numbers than any other species. A total of 1992 chum salmon were captured, representing 92.8 % of all captured salmonids. Chinook salmon were the next most commonly caught species with a total capture of 111 fish followed by coho salmon (Table 2).

Table 2: The total of collected individuals of each fish species captured in Clayoquot Sound, BC in April and May 2016, and the percentage of the total capture population that they represent.

Common Name	Total of each species captured at all sites (% of total capture population)
threespine stickleback	3 (0.1%)
chum salmon	1992 (92.8%)
coho salmon	39 (1.8%)
sockeye salmon	0
chinook salmon	111 (5.2%)
pink salmon	1 (0.04%)
All species	2146

Table 3: The number of captured fish (Capture Total) and the corrected number of individual fish collected (Sample Total) from each of the 17 sample sites in Clayoquot Sound, BC in April and May 2016.

SITE	Chum		Coho		Pink		Chinook		TSB		Capture Total	Sample Total
	Capture Total	Sample Total										
SL1	431	90	0	0	0	0	0	0	0	0	431	90
SL2	101	61	1	0	0	0	0	0	0	0	102	61
SL3	32	32	16	0	0	0	9	0	1	0	58	32
MC1	164	63	0	0	0	0	0	0	0	0	164	63
MC3	20	20	0	0	0	0	0	0	0	0	20	20
HI1	42	42	0	0	0	0	0	0	0	0	42	42
HI2	15	15	0	0	0	0	0	0	0	0	15	15
BS1	56	56	0	0	1	0	0	0	0	0	57	56
BS2	159	90	7	0	0	0	3	0	0	0	169	90
BS3	65	15	12	0	0	0	99	0	0	0	176	15
BS4	141	79	3	0	0	0	0	0	0	0	144	79
BS5	347	90	0	0	0	0	0	0	0	0	347	90
BS6	267	64	0	0	0	0	0	0	0	0	267	64
FC2	0	0	0	0	0	0	0	0	2	0	2	0
FC3	43	35	0	0	0	0	0	0	0	0	43	35
FC4	86	61	0	0	0	0	0	0	0	0	86	61
FC5	23	23	0	0	0	0	0	0	0	0	23	23
Total	1992	836	39	0	1	0	111	0	3	0	2146	836

3.3 Chum Salmon Size

Analysis of weight and fork length data was completed for chum salmon only as they were the only species of fish retained for laboratory analysis. The weight of 836 chum smolts collected during the three sample events ranged from 0.2 g to 5.3 g and averaged 1.1 g (SD = 0.8). The fork length of the chum smolts ranged from 28 mm to 74 mm and averaged 43.9 mm (SD = 8.2).

3.4 Sea Lice Infection

3.4.1 Infection Rates

A total of 836 chum salmon collected at 17 sites within Clayoquot Sound over three sample weeks were inspected for sea lice infection. The results of the laboratory analysis are presented in Table 4 for each sample period by site for chum salmon. The data recorded for each fish in the sample population during lab analysis is included in Appendix III. A total of 314 chum salmon were found to be infected with 726 sea lice. This data reflects the identification of sea lice of either species (*L. salmonis* and *C. clemensi*) on inspected chum salmon. The largest number of chum salmon infected with sea lice (136 chum) and the greatest number of sea lice (335 sea lice) were found on samples collected on April 21/22, 2016 (Table 4). Site SL1 had the highest number of infected chum salmon (57 of a total of 90 chum salmon), while site BS2 had the highest number of sea lice found on collected fish (125 sea lice found on 90 chum salmon). Both SL1 and BS2 had 90 sample fish collected, as well as site BS5, which was the largest possible sample size for a site.

Sea lice counts of both species observed (*L. salmonis* and *C. clemensi*) were added together for the presentation of prevalence, abundance and intensity calculations.

Prevalence was defined as the number of fish found to have one or more sea louse compared to the total number of fish. A total of 314 chum salmon were found to be infected with at least one louse. The prevalence of sea lice on the chum salmon sample (n=836) collected in Clayoquot Sound in 2016 was 37.6%. Sea lice prevalence was also calculated by site and is presented in Table 5. Sea lice prevalence calculated by site was highly variable ranging from 0 at sites SL3 and HI1 to a high of 78.6% at site BS1.

A total of 726 sea lice were identified during laboratory analysis of retained chum salmon. Abundance was defined as the total number of sea lice observed compared to the total number of fish. The abundance of sea lice on the chum salmon sample population (n=836) collected in Clayoquot Sound in 2016 was 0.87. Sea lice abundance was calculated by site and is presented in Table 5. Sea lice abundance calculated by site was also highly variable ranging from 0 at sites SL3 and HI1 to a high of 1.96 at BS1. Site BS1 had the highest sea lice prevalence and abundance of any of the sites in Clayoquot Sound where juvenile wild salmon monitoring was conducted in 2016.

The intensity of sea lice infection, as defined as the number of sea lice on a single salmon, ranged from one louse found on 128 individuals to a maximum of 12 lice found on one juvenile chum salmon. There were 78 chum salmon infected with two lice, followed by three lice found on 54 chum salmon, four lice found on 23 chum salmon, five lice found on 14 chum salmon, six lice found on nine chum salmon, seven lice were found on four chum salmon, and eight lice were found on three chum salmon.

Table 4: The number of sea lice found on chum salmon collected in Clayoquot Sound in 2016 summarized by the 17 sites where beach seining was conducted.

Site	Sample Week									TOTAL		
	April 7/8, 2016			April 21/22, 2016			May 5/6, 2016					
	# of Chum Analyzed	# of Infected Chum	# of Lice	# of Chum Analyzed	# of Infected Chum	# of Lice	# of Chum Analyzed	# of Infected Chum	# of Lice	# of Chum Analyzed	# of Infected Chum	# of Lice
SL1	31	15	21	30	27	73	29	15	26	90	57	120
SL2	26	1	1	5	4	20	30	22	59	61	27	80
SL3	28	0	0	1	0	0	3	0	0	32	0	0
MC1	30	6	6	15	5	6	18	1	1	63	12	13
MC3	2	1	1	0	0	0	18	4	8	20	5	9
HI1	12	0	0	15	0	0	15	4	5	42	4	5
HI2	15	0	0	0	0	0	0	0	0	15	0	0
BS1	25	19	42	23	18	47	8	7	21	56	44	110
BS2	30	12	25	30	22	62	30	16	38	90	50	125
BS3	4	2	9	6	0	0	5	1	1	15	3	10
BS4	30	1	1	30	23	61	19	15	32	79	39	94
BS5	30	3	5	30	3	5	30	0	0	90	6	10
BS6	30	9	20	4	3	12	30	21	65	64	33	97
FC2	0	0	0	0	0	0	0	0	0	0	0	0
FC3	5	0	0	30	15	19	0	0	0	35	15	19
FC4	30	0	0	23	4	4	8	2	2	61	5	5
FC5	3	2	3	20	12	26	0	0	0	23	14	29
TOTAL	331	71	134	262	136	335	243	107	257	836	314	726

Table 5: Calculated sea lice prevalence and abundance by site as determined for chum salmon collected in Clayoquot Sound, BC in 2016.

Site	# of Chum Analyzed	# of Infected Chum	# of Lice	Sea Lice Prevalence	Sea Lice Abundance
SL1	90	57	120	63.3%	1.33
SL2	61	27	80	44.3%	1.31
SL3	32	0	0	0	0
MC1	63	12	13	19.0%	0.21
MC3	20	5	9	25.0%	0.45
HI1	42	4	5	9.5%	0.12
HI2	15	0	0	0	0
BS1	56	44	110	78.6%	1.96
BS2	90	50	125	55.6%	1.39
BS3	15	3	10	20.0%	0.67
BS4	79	39	94	49.4%	1.19
BS5	90	6	10	6.7%	0.11
BS6	64	33	97	51.6%	1.52
FC2	0	0	0	-	-
FC3	35	15	19	42.9%	0.54
FC4	61	5	5	8.2%	0.08
FC5	23	14	29	60.9%	1.26
TOTAL	836	314	726	37.6%	0.87

3.4.2 Infection Rates by Sea Lice Species

A total of 676 *Lepeophtheirus salmonis* sea lice of various life stages were identified on 302 chum salmon and 50 *Caligus clemensi* sea lice were found on 42 of the 836 chum salmon analyzed in the lab (Table 6; Appendix III). There were 30 chum salmon that were infected with both a *L. salmonis* and a *C. clemensi* sea louse.

Table 6: The number of sealice in each life stage by species identified on sample fish from Clayoquot Sound 2016. LEP = *Lepeophtheirus salmonis* CAL = *Caligus clemensi*

Life Stage ¹	Number of lice
LEP Co	104
LEP C1	41
LEP C2	191
LEP C3	108
LEP C4	70
LEP non-motile not identified to a life stage	26
LEP PAM	50
LEP PAF	46
LEP AM	36
LEP AF	4
TOTAL LEP	676
CAL Co	7
CAL C1	18
CAL C2	15
CAL C3	5
CAL C4	2
CAL non-motile not identified to a life stage	1
CAL PAM	0
CAL PAF	1
CAL AM	0
CAL AF	0
CAL motile lice not identified to a life stage or sex	1
TOTAL CAL	50

¹ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

4.0 Conclusions

This report presents the data from the second year of beach seining and sea lice analysis conducted for wild juvenile salmonid monitoring in Clayoquot Sound, BC by Cermaq Canada. This report is limited to the summary and presentation of the 2016 collected data. A total of 836 juvenile chum salmon (*Oncorhynchus keta*) underwent analysis for sea lice infection. A total of 314 chum smolts were found to be infected with sea lice, resulting in a calculated prevalence of 37.6% in 2016. A total of 726 sea lice were found during laboratory analysis resulting in an abundance of 0.87 for the sample population. A total of 676 *Lepeophtheirus salmonis* lice of various life stages were identified on 302 chum salmon and 50 *Caligus clemensi* lice were identified on 42 chum salmon. There were 30 chum salmon that were infected by at least one louse of each species.

5.0 References

- Healey M.C. 1991. Life history of chinook salmon (*Oncorhynchus tshawytscha*). In: Pacific Salmon Life Histories. C Grott, L Margolis (eds). UBC Press, Vancouver. Pp 313-393.
- Jones S. and A. Nemeč. 2004. Pink Salmon Action Plan Research. Part II: Sea Lice on Juvenile Salmon and on Three-spine Sticklebacks in 2003. PSARC Working Paper H2004-01.
- Johnson S.C. and L.J. Albright. 1991a. The developmental stages of *Lepeophtheirus salmonis* (Kroyer, 1837) (Copepoda: Caligidae). Canadian Journal of Zoology 69: 929-950.
- Johnson S.C. and L.J. Albright. 1991b. Development, growth and survival of *Lepeophtheirus salmonis* (Copepoda: Caligidae) under laboratory conditions. Journal of the Marine Biological Association of the UK 71: 425-436.
- Kabata Z. 1972. Developmental stages of *Caligus clemensi* (Copepoda: Caligidae) from fishes of British Columbia. Journal of the Fisheries Research Board of Canada 29: 1571-1593.
- Kabata Z. 1974. The species of *Lepeophtheirus* (Copepoda: Caligidae), from fishes of British Columbia. Journal of the Fisheries Research Board of Canada 30: 729-759.
- Margolis L., J.R. Arthur. 1979. Synopsis of the parasites of fishes of Canada. Bulletin of the Fisheries Research Board of Canada, Number 199. Ottawa. 269 pages.
- McDonald T.E., and L. Margolis. 1995. Synopsis of the parasites of fishes of Canada (1978-1993). Canadian Special Publication of Fisheries and Aquatic Sciences No. 122. National Research Council of Canada, Ottawa. 265 pages.
- Morton A., R. Routledge, C. Peet and A. Ladwig. 2004. Sea Lice (*Lepeophtheirus salmonis*) infection rates on juvenile pink (*Oncorhynchus gorbuscha*) and chum (*Oncorhynchus keta*) salmon in the near shore marine environment of British Columbia, Canada. Canadian Journal of Fisheries and Aquatic Sciences 61: 147-157.
- Parker R.R. and L. Margolis. 1964. A new species of parasitic copepod, *Caligus clemensi* sp. nov. (Clogoida: Caligidae), from pelagic fishes in the coastal waters of British Columbia. Journal of Fisheries Research Board of Canada 21: 873-889.
- Pollard W.R., G.F. Hartman, C. Groot, and P. Edgell. 1997. Field Identification of Coastal Juvenile Salmonids. Published by Harbour Publishing for the Federal Department of Fisheries and Oceans and MacMillan Bloedel Ltd. Madeira Park, BC Canada.
- Salo E.O. 1991. Life history of chum salmon (*Oncorhynchus keta*). In: Pacific Salmon Life Histories. C Grott, L Margolis (eds). UBC Press, Vancouver. Pp 233-309.
- Sandercock F.K. 1991. Life history of coho salmon (*Oncorhynchus kisutch*). In: Pacific Salmon Life Histories. C. Grott, L. Margolis (eds). UBC Press, Vancouver. Pp 397-445.

Appendix I – Field Data

Date	Time	Site Name	Salinity (ppt)	Temperature (°C)
			0.2m	0.2m
07/04/2016	9:10	SI1	16.9	9.9
07/04/2016	9:46	SI2	15.6	9.7
07/04/2016	10:15	SI3	12.4	9.3
07/04/2016	10:50	MC1	17.3	11.1
07/04/2016	11:28	MC3	19.9	11.2
07/04/2016	12:05	HI1	16.6	10.8
07/04/2016	12:42	HI2	16.4	11.3
07/04/2016	13:35	BS1	25.6	10.6
07/04/2016	14:00	BS2	23.5	10.6
08/04/2016	8:30	BS3	10.9	9.3
08/04/2016	9:02	BS4	17.8	10.4
08/04/2016	9:30	BS5	10.4	9.2
08/04/2016	10:10	FC4	20.3	10.4
08/04/2016	10:35	FC2	23.4	10.2
08/04/2016	11:00	FC3	23.2	10.3
08/04/2016	11:20	FC5	25.4	10.4
08/04/2016	11:45	BS6	19.1	10.9
21/04/2016	9:50	SI1	25.1	12.5
21/04/2016	10:25	SI2	23.8	12.4
21/04/2016	10:55	SI3	14.7	12.4
21/04/2016	11:35	MC1	24.1	13.4
21/04/2016	12:05	MC3	26.6	12.0
21/04/2016	12:50	HI1	4.6	12.1
21/04/2016	13:15	HI2	12.9	13.8
21/04/2016	14:05	BS1	23.4	13.1
21/04/2016	14:30	BS2	25.9	12.4
22/04/2016	9:00	BS3	25.4	11.3
22/04/2016	9:30	BS4	13.7	11.1
22/04/2016	10:00	BS5	10.0	10.0
22/04/2016	10:40	FC4	24.0	11.5
22/04/2016	11:10	FC2	24.4	11.2
22/04/2016	11:30	FC3	24.9	11.2
22/04/2016	11:55	FC5	26.9	11.2
22/04/2016	12:15	BS6	17.3	11.2
05/05/2016	9:45	SI1	28.7	12.3
05/05/2016	10:15	SI2	28.4	12.0
05/05/2016	10:45	SI3	23.8	13.1
05/05/2016	11:25	MC1	27.5	13.2
05/05/2016	11:50	MC3	26.1	13.4
05/05/2016	NA	HI1	13.6	15.6
05/05/2016	12:55	HI2	22.9	14.6
05/05/2016	13:40	BS1	26.9	13.1
05/05/2016	13:50	BS2	27.0	12.3
06/05/2016	8:18	BS3	26.1	10.9
06/05/2016	9:04	BS4	24.4	11.9

Date	Time	Site Name	Salinity (ppt)	Temperature (°C)
			0.2m	0.2m
06/05/2016	9:34	BS5	21.2	11.9
06/05/2016	10:14	FC4	25.7	12.1
06/05/2016	10:27	FC2	25.5	12.0
06/05/2016	10:48	FC3	25.7	12.6
06/05/2016	11:06	FC5	26.7	12.0
06/05/2016	11:25	BS6	25.1	13.5

Appendix II – Capture and Collection Sample Totals

Date	Time	Site Name	Weather Comments	Tide Stage	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	TSB Captured	TSB Retained	Salmonid Mortalities	Comments
2016-04-07	9:10	SI1	Clear, calm	Low	0	0	156	31	0	0	0	0	0	0	0	0	15	20 sole. 5 chum retained for fish health analysis
2016-04-07	9:46	SI2	Clear, calm	Low	0	0	26	26	1	0	0	0	0	0	0	0	0	Abundant bycatch
2016-04-07	10:15	SI3	Clear, calm	Low	0	0	28	28	0	0	0	0	0	0	1	0	0	
2016-04-07	10:50	MC1	Clear, calm	Low	0	0	131	30	0	0	0	0	0	0	0	0	1	5 chum retained for fish health analysis
2016-04-07	11:28	MC3	Clear, calm	Mid	0	0	2	2	0	0	0	0	0	0	0	0	0	15 tube snout, 6 flounder, 2 sculpin, 3 sand lance
2016-04-07	12:05	HI1	1ft chop at beach	High	0	0	12	12	0	0	0	0	0	0	0	0	0	
2016-04-07	12:42	HI2	Clear, calm	High	0	0	15	15	0	0	0	0	0	0	0	0	0	
2016-04-07	13:35	BS1	Clear, calm	High	1	0	25	25	0	0	0	0	0	0	0	0	0	50 sand dabs
2016-04-07	14:00	BS2	Clear, calm	High	0	0	81	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis
2016-04-08	8:30	BS3	Calm, high overcast	Low	0	0	4	4	0	0	0	0	0	0	0	0	0	1 CT approx. 200mm
2016-04-08	9:02	BS4	Calm, high overcast	Low	0	0	75	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. Abundant pipefish and sculpins
2016-04-08	9:30	BS5	Calm, high overcast	Low	0	0	90	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis
2016-04-08	10:10	FC4	Calm, high overcast	Low	0	0	55	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 2 sculpin
2016-04-08	10:35	FC2	Calm, high overcast	Low	0	0	0	0	0	0	0	0	0	0	2	0	0	Cabezon rockfish
2016-04-08	11:00	FC3	Calm, high overcast	Low	0	0	5	5	0	0	0	0	0	0	0	0	0	60 surf perch, 15 rockfish, 2 goby, 1 RB approx. 180mm
2016-04-08	11:20	FC5	High overcast light breeze	Low	0	0	3	3	0	0	0	0	0	0	0	0	0	
2016-04-08	11:45	BS6	Clear, calm	Low	0	0	155	30	0	0	0	0	0	0	0	0	1	5 chum retained for fish health analysis
2016-04-21	9:50	SI1	Overcast, calm	Low	0	0	198	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 2 rockfish
2016-04-21	10:25	SI2	Overcast, calm	Low	0	0	5	5	0	0	0	0	0	0	0	0	0	1 pipefish
2016-04-21	10:55	SI3	Overcast, calm	Low	0	0	1	1	16	0	0	0	0	0	0	0	0	16 CO, shrimp, crab, pipefish
2016-04-21	11:35	MC1	Overcast, chop	Mid	0	0	15	15	0	0	0	0	0	0	0	0	0	crab, shrimp
2016-04-21	12:05	MC3	Overcast, chop	High	0	0	0	0	0	0	0	0	0	0	0	0	0	2 pipefish
2016-04-21	12:50	HI1	Overcast, calm	High	0	0	15	15	0	0	0	0	0	0	0	0	0	
2016-04-21	13:15	HI2	Overcast, calm	High	0	0	0	0	0	0	0	0	0	0	0	0	0	1 rockfish, 1 pipefish
2016-04-21	14:05	BS1	Overcast, chop	Mid	0	0	23	23	0	0	0	0	0	0	0	0	0	
2016-04-21	14:30	BS2	Overcast, calm	Mid	0	0	48	30	7	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 7 CO, 2 shiner perch
2016-04-22	9:00	BS3	Overcast, calm, rain	Low	0	0	56	6	2	0	0	0	0	0	0	0	0	2 CO. 5 chum retained for fish health analysis
2016-04-22	9:30	BS4	Overcast, calm, rain	Low	0	0	47	30	3	0	0	0	0	0	0	0	0	3 CO. 5 chum retained for fish health analysis
2016-04-22	10:00	BS5	Overcast, calm	Mid	0	0	143	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis

Date	Time	Site Name	Weather Comments	Tide Stage	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	TSB Captured	TSB Retained	Salmonid Mortalities	Comments
2016-04-22	10:40	FC4	Overcast, calm	Mid	0	0	23	23	0	0	0	0	0	0	0	0	0	2 red rock crab, 1 starry flounder, hermit crab, sculpin
2016-04-22	11:10	FC2	Overcast, calm	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	CT (95m), 1 starry flounder
2016-04-22	11:30	FC3	Overcast, calm, rain	Mid	0	0	38	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 3 red rock crab, 1 pipefish, 1 decorator crab
2016-04-22	11:55	FC5	Overcast, calm	High	0	0	20	20	0	0	0	0	0	0	0	0	0	
2016-04-22	12:15	BS6	Overcast, calm	High	0	0	4	4	0	0	0	0	0	0	0	0	0	1 unknown fish
2016-05-05	9:45	SI1	Clear, calm	Mid	0	0	77	29	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 1 starry flounder
2016-05-05	10:15	SI2	Clear, calm	Mid	0	0	70	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis. 1 striped perch, 2 starry flounder, 1 pile perch, 12 tube snout
2016-05-05	10:45	SI3	Clear, calm	Mid	0	0	3	3	0	0	9	0	0	0	0	0	0	9 chinook retained for Miller lab. 1 pile perch
2016-05-05	11:25	MC1	Clear, calm	High	0	0	18	18	0	0	0	0	0	0	0	0	0	3 pile perch
2016-05-05	11:50	MC3	Clear, calm	High	0	0	18	18	0	0	0	0	0	0	0	0	0	1 striped perch
2016-05-05	NA	HI1	Clear, calm	High	0	0	15	15	0	0	0	0	0	0	0	0	0	
2016-05-05	12:55	HI2	Clear, calm	High	0	0	0	0	0	0	0	0	0	0	0	0	0	1 pile perch
2016-05-05	13:40	BS1	Windy, clear	High	0	0	8	8	0	0	0	0	0	0	0	0	0	
2016-05-05	13:50	BS2	Clear, calm	High	0	0	30	30	0	0	3	0	0	0	0	0	0	3 chinook retained for Miller lab
2016-05-06	8:18	BS3	Clear, calm	Low	0	0	5	5	10	0	75	0	0	0	0	0	0	9 Coho. 34 chinook retained for Miller lab.
2016-05-06	9:04	BS4	Clear, calm	Low	0	0	19	19	0	0	0	0	0	0	0	0	0	1 adult sand lance
2016-05-06	9:34	BS5	Clear, calm	Low	0	0	114	30	0	0	0	0	0	0	0	0	0	
2016-05-06	10:14	FC4	Clear, calm	Low	0	0	8	8	0	0	0	0	0	0	0	0	0	1 gunnel, 1 flounder
2016-05-06	10:27	FC2	Clear, calm	Low	0	0	0	0	0	0	0	0	0	0	0	0	0	2 pile perch, 2 surf perch, 2 gunnel
2016-05-06	10:48	FC3	Clear, calm	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	1 shiner perch, 2 gunnel, 2 striped perch
2016-05-06	11:06	FC5	Clear, calm	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	Net abandoned due to strong tide
2016-05-06	11:25	BS6	Clear, calm	Mid	0	0	108	30	0	0	0	0	0	0	0	0	0	5 chum retained for fish health analysis

Appendix III – Sea Lice Analysis Data

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/07/16	BS-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	51	1.5	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-1	chum	45	1.1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-1	chum	47	1.2	2	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6	5	1
04/07/16	BS-1	chum	48	1.2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-1	chum	46	1.1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	45	1.1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	43	1.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	47	1.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	49	1.4	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-1	chum	42	1.3	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	1
04/07/16	BS-1	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	44	1.0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-1	chum	73	3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	55	1.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
04/07/16	BS-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	59	2.1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	50	1.5	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-1	chum	45	1.0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
04/07/16	BS-1	chum	40	0.6	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-1	chum	51	1.5	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-1	chum	55	2.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-1	chum	40	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-1	chum	44	1.0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-2	chum	40	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	38	0.6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-2	chum	35	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-2	chum	43	1.0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	43	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	43	0.8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	41	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	41	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	4	1
04/07/16	BS-2	chum	41	0.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	40	0.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	BS-2	chum	42	0.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	43	0.9	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-2	chum	40	0.7	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
04/07/16	BS-2	chum	45	1.1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	BS-2	chum	33	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	46	1.3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	BS-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	44	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HC-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	33	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	30	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	34	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	33	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	HI-1	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	40	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	42	0.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	MC-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/07/16	MC-1	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	35	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
04/07/16	MC-1	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	37	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	MC-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	38	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	MC-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	MC-1	chum	43	1.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	MC-3	chum	35	0.6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	MC-3	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	38	0.5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	58	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	42	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	32	0.3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	39	0.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	35	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	37	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	45	1.1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	SI-1	chum	39	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	38	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	44	0.9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	40	0.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	42	0.8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	SI-1	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
04/07/16	SI-1	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	39	0.5	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/07/16	SI-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	41	0.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/07/16	SI-1	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
04/07/16	SI-1	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-1	chum	43	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
04/07/16	SI-1	chum	46	1.0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/07/16	SI-1	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/07/16	SI-2	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	39	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	37	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	34	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	33	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	34	0.4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
04/07/16	SI-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-2	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	41	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	28	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	42	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	43	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/07/16	SI-3	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/16	SI-3	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-3	chum	48	1.5	1	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	
04/08/16	BS-3	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-3	chum	73	3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-3	chum	54	1.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
04/08/16	BS-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	48	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
04/08/16	BS-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	38	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	38	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	42	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	39	0.6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/08/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	42	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	42	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	40	0.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/08/16	BS-5	chum	38	0.6	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/08/16	BS-5	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	37	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	37	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-5	chum	38	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	43	0.8	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/08/16	BS-6	chum	41	0.8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/08/16	BS-6	chum	44	1.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/08/16	BS-6	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	41	0.8	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/08/16	BS-6	chum	38	0.5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/08/16	BS-6	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.6	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/08/16	BS-6	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	40	0.8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/08/16	BS-6	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	42	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	40	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	BS-6	chum	41	0.9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/08/16	BS-6	chum	43	0.9	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/08/16	FC-3	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-3	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-3	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-3	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-3	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	44	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	34	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	41	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	43	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	44	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/16	FC-5	chum	43	1.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/08/16	FC-5	chum	44	1.1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/08/16	FC-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	BS-1	chum	56	1.9	2	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	
04/21/16	BS-1	chum	43	1.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	44	0.9	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	49	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	BS-1	chum	48	1.5	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	53	1.9	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	47	1.1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	52	1.4	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	1	
04/21/16	BS-1	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	BS-1	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/21/16	BS-1	chum	38	0.6	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	
04/21/16	BS-1	chum	47	1.3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	50	1.4	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-1	chum	52	1.8	0	0	2	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	6	4	2	
04/21/16	BS-1	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-1	chum	42	1.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-1	chum	50	1.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2	
04/21/16	BS-1	chum	38	0.6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-1	chum	43	0.9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-1	chum	40	0.8	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-1	chum	52	1.8	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-1	chum	44	1.1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-2	chum	54	1.8	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-2	chum	55	1.8	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	64	3.0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	49	1.4	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-2	chum	50	1.4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-2	chum	44	0.9	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/21/16	BS-2	chum	56	2.1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-2	chum	45	1.0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	58	2.4	1	1	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	
04/21/16	BS-2	chum	57	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	52	1.6	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	1	
04/21/16	BS-2	chum	56	2.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-2	chum	50	1.5	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	43	1.0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	54	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	59	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	49	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	50	1.6	1	0	1	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	5	1	
04/21/16	BS-2	chum	59	2.4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-2	chum	51	1.7	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	BS-2	chum	49	1.4	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/21/16	BS-2	chum	51	1.9	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/21/16	BS-2	chum	46	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	54	2.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	BS-2	chum	62	3.0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/21/16	BS-2	chum	44	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	45	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	BS-2	chum	37	0.5	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	BS-2	chum	50	1.6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/21/16	HI-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	HI-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	HI-1	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	HI-1	chum	44	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	HI-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	HI-1	chum	45	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/21/16	HI-1	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	44	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	42	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	HI-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	47	1.0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/21/16	MC-1	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	40	0.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	MC-1	chum	39	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	36	0.6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	MC-1	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	39	0.6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	MC-1	chum	40	0.7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	MC-1	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	MC-1	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	SI-1	chum	38	0.6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	40	0.8	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	42	0.8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	2	1
04/21/16	SI-1	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/16	SI-1	chum	40	1.0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	50	1.6	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	51	1.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	42	0.9	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
04/21/16	SI-1	chum	50	1.4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/21/16	SI-1	chum	45	1.2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	43	0.9	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	46	1.3	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	42	1.0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	50	1.5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	42	0.9	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	45	1.2	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	42	0.9	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/21/16	SI-1	chum	50	1.4	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
04/21/16	SI-1	chum	40	1.0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
04/21/16	SI-1	chum	44	0.9	0	0	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0
04/21/16	SI-1	chum	51	1.8	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
04/21/16	SI-1	chum	53	1.8	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/21/16	SI-1	chum	42	0.9	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/21/16	SI-1	chum	42	0.8	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	3	1
04/21/16	SI-1	chum	38	0.7	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/21/16	SI-1	chum	40	0.8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	SI-1	chum	44	1.0	1	0	0	3	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	6	5	1	
04/21/16	SI-1	chum	50	1.5	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/21/16	SI-1	chum	44	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	SI-1	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	SI-2	chum	45	0.9	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	SI-2	chum	50	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/16	SI-2	chum	39	0.8	0	3	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	
04/21/16	SI-2	chum	35	0.7	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	
04/21/16	SI-2	chum	39	0.9	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/21/16	SI-3	chum	48	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	39	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	44	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-3	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	41	0.8	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	45	1.1	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	
04/22/16	BS-4	chum	45	1.1	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	
04/22/16	BS-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	47	1.2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	43	1.0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	39	0.6	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	43	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	
04/22/16	BS-4	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	43	0.8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	39	0.7	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/22/16	BS-4	chum	40	0.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-4	chum	45	1.3	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	
04/22/16	BS-4	chum	40	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	45	1.0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
04/22/16	BS-4	chum	42	0.8	1	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	
04/22/16	BS-4	chum	45	1.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-4	chum	42	1.0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	44	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	40	0.7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-4	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	43	1.0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	43	0.8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-4	chum	43	0.8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	46	1.2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/22/16	BS-4	chum	45	1.0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-4	chum	41	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-4	chum	40	0.6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-4	chum	40	0.8	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/22/16	BS-5	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/22/16	BS-5	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/22/16	BS-5	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	40	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	40	0.7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	40	0.8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	37	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	46	1.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	BS-5	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	38	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	BS-6	chum	42	0.8	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	
04/22/16	BS-6	chum	52	1.7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/22/16	BS-6	chum	52	1.7	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	BS-6	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	52	1.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	51	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	52	1.6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	50	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	48	1.2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	45	1.2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
04/22/16	FC-3	chum	44	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	49	1.3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	44	0.9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	46	1.2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
04/22/16	FC-3	chum	43	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	44	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	44	1.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	
04/22/16	FC-3	chum	45	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	49	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	45	1.1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
04/22/16	FC-3	chum	48	1.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/22/16	FC-3	chum	48	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	45	1.2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-3	chum	45	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	51	1.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-3	chum	41	0.9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-3	chum	45	1.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-3	chum	49	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-3	chum	54	1.8	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-3	chum	44	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	39	0.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-4	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	37	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	41	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	43	1.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-4	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-4	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	36	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	37	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-4	chum	38	0.7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-4	chum	39	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	56	1.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-5	chum	52	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	55	1.8	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/22/16	FC-5	chum	51	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	52	1.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-5	chum	56	2.1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/22/16	FC-5	chum	52	1.7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-5	chum	52	1.7	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/22/16	FC-5	chum	50	1.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
04/22/16	FC-5	chum	52	1.8	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
04/22/16	FC-5	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	53	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	54	1.8	0	0	2	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0
04/22/16	FC-5	chum	53	2.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
04/22/16	FC-5	chum	58	2.6	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0
04/22/16	FC-5	chum	55	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/16	FC-5	chum	58	2.5	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	BS-1	chum	52	2.1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	3	1
05/05/16	BS-1	chum	65	3.9	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	1
05/05/16	BS-1	chum	54	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-1	chum	60	2.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-1	chum	55	2.4	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	3	1
05/05/16	BS-1	chum	70	4.8	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	2	1
05/05/16	BS-1	chum	58	2.7	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	BS-1	chum	66	3.8	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	5	3	2
05/05/16	BS-2	chum	54	1.8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-2	chum	52	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	53	2.0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1
05/05/16	BS-2	chum	60	2.7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-2	chum	58	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	49	1.7	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/05/16	BS-2	chum	61	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	56	2.4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-2	chum	59	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	56	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	49	1.5	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/05/16	BS-2	chum	60	2.5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-2	chum	52	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	47	1.3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	BS-2	chum	52	1.5	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	BS-2	chum	56	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	46	1.3	2	0	2	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	7	6	1
05/05/16	BS-2	chum	56	2.3	0	0	1	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0
05/05/16	BS-2	chum	52	2.0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	BS-2	chum	62	3.5	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
05/05/16	BS-2	chum	51	1.7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1
05/05/16	BS-2	chum	55	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	54	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	58	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	58	2.6	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	BS-2	chum	66	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	58	3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	57	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	57	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	BS-2	chum	60	3.0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/05/16	HC-2	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	68	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	56	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	43	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
05/05/16	HI-1	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	37	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	53	1.9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	HI-1	chum	44	1.1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	HI-1	chum	54	2.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	HI-1	chum	38	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	51	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	61	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	48	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	44	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	46	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	HI-1	chum	57	2.3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/05/16	MC-1	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	48	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	45	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	44	1.1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	MC-1	chum	46	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	50	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	48	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	46	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	45	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	50	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	47	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	45	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	40	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	46	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	43	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	47	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	48	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-1	chum	48	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	58	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	46	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	45	1.2	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/05/16	MC-3	chum	46	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	53	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	51	1.7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	MC-3	chum	52	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	45	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	53	1.8	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/05/16	MC-3	chum	52	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	35	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	54	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	47	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	60	2.7	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/05/16	MC-3	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	MC-3	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	SI-1	chum	49	1.7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
05/05/16	SI-1	chum	53	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/05/16	SI-1	chum	46	1.2	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	4	3	1
05/05/16	SI-1	chum	55	2.2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	56	2.1	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/05/16	SI-1	chum	54	1.9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	58	2.6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	50	1.7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	56	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	54	1.9	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/05/16	SI-1	chum	58	2.1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	51	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	45	1.1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-1	chum	57	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	52	1.5	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-1	chum	55	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	55	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	57	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	55	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	53	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	60	3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	62	3.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	
05/05/16	SI-1	chum	53	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	50	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	60	3.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	55	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-1	chum	54	2.3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	66	4.0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-1	chum	60	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	55	2.1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/05/16	SI-2	chum	48	1.5	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/05/16	SI-2	chum	60	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	54	1.8	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-2	chum	48	1.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	44	1.0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-2	chum	61	2.6	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/05/16	SI-2	chum	56	2.3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	50	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	51	1.9	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	1	
05/05/16	SI-2	chum	59	2.4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	51	2.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	54	2.1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	56	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	59	2.6	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-2	chum	48	1.7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	46	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	54	2.3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-2	chum	49	1.5	0	0	1	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	
05/05/16	SI-2	chum	51	2.0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	1	
05/05/16	SI-2	chum	50	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
05/05/16	SI-2	chum	50	1.9	0	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	
05/05/16	SI-2	chum	44	1.2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
05/05/16	SI-2	chum	50	1.7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	1	
05/05/16	SI-2	chum	52	2.1	0	0	0	0	2	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7	6	1	
05/05/16	SI-2	chum	50	1.9	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/05/16	SI-2	chum	34	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	54	1.8	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/05/16	SI-2	chum	56	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-2	chum	46	1.4	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
05/05/16	SI-3	chum	51	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-3	chum	55	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/05/16	SI-3	chum	56	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-3	chum	59	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-3	chum	57	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-3	chum	56	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-3	chum	59	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	
05/06/16	BS-3	chum	51	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-4	chum	51	1.6	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/06/16	BS-4	chum	45	1.2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/06/16	BS-4	chum	55	1.8	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	
05/06/16	BS-4	chum	48	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-4	chum	50	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-4	chum	49	1.3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/06/16	BS-4	chum	53	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-4	chum	53	1.5	1	0	2	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	
05/06/16	BS-4	chum	50	1.8	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	2	1	
05/06/16	BS-4	chum	52	1.7	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/06/16	BS-4	chum	58	2.2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	
05/06/16	BS-4	chum	39	0.8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/06/16	BS-4	chum	45	1.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	
05/06/16	BS-4	chum	50	1.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	
05/06/16	BS-4	chum	46	1.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/06/16	BS-4	chum	55	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-4	chum	56	2.3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/06/16	BS-4	chum	59	2.7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
05/06/16	BS-4	chum	51	1.8	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
05/06/16	BS-5	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	34	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	36	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	43	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	46	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	48	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	33	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05/06/16	BS-5	chum	31	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
05/06/16	BS-5	chum	34	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	45	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	41	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	39	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	37	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	38	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	38	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	38	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	45	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	39	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	41	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	33	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	35	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	40	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-5	chum	53	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	36	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	52	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	52	1.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
05/06/16	BS-6	chum	64	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	59	2.5	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	1	2
05/06/16	BS-6	chum	66	3.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
05/06/16	BS-6	chum	59	2.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	BS-6	chum	60	2.5	1	0	0	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	5	4	1
05/06/16	BS-6	chum	56	2.1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/06/16	BS-6	chum	74	5.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	BS-6	chum	53	1.8	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/06/16	BS-6	chum	54	2.0	3	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0
05/06/16	BS-6	chum	56	2.3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/06/16	BS-6	chum	35	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	66	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	40	0.8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	BS-6	chum	61	3.2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	1
05/06/16	BS-6	chum	64	3.4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	BS-6	chum	58	2.5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	BS-6	chum	55	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	48	1.6	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	4	1
05/06/16	BS-6	chum	51	3.0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/06/16	BS-6	chum	61	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	54	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	BS-6	chum	55	2.2	3	0	0	3	0	0	0	2	3	0	0	0	0	1	0	0	0	0	0	0	0	0	12	11	1
05/06/16	BS-6	chum	51	2.9	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
05/06/16	BS-6	chum	65	3.9	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
05/06/16	BS-6	chum	54	3.7	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	3	1
05/06/16	BS-6	chum	65	3.4	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	3	2
05/06/16	BS-6	chum	52	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	56	1.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
05/06/16	FC-4	chum	50	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SAMPLE DATE	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP C3	LEP C4	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP MOT NOT ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL MOT NOT ID	TOTAL LICE	TOTAL LEP	TOTAL CAL
05/06/16	FC-4	chum	52	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	53	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	51	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	53	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	51	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/06/16	FC-4	chum	58	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0