Wild Juvenile Salmonid Monitoring Program 2024
Clayoquot Sound, BC

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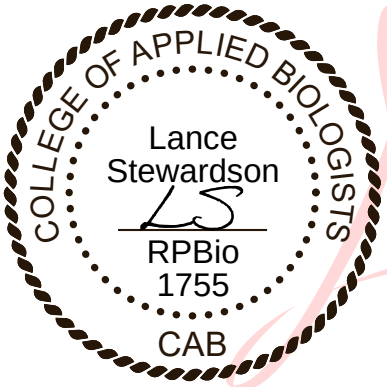

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Summary

Beach seine sampling was conducted on behalf of Cermaq Canada, with permission from Maaqutusiis Hahoulthee Stewardship Society (MHSS) to conduct operations in Ahousaht Territory, in Clayoquot Sound, BC in 2024. Sampling was completed to monitor sea lice abundance, prevalence, and intensity on juvenile wild salmon within Clayoquot Sound, BC. This data report represents the ninth year of wild juvenile salmonid monitoring within Clayoquot Sound conducted solely by Cermaq Canada.

Sampling was conducted during three separate sampling events in April and May 2024, selected to coincide with the peak outmigration period of juvenile wild salmonids. Sampling was completed at 20 sites within Clayoquot Sound, BC in 2024. 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 Fisheries.

Total catch numbers of each salmonid species were recorded. Fifteen individuals or the total number of captured samples (if less than 15 were captured) were collected at each of the 20 sites during the sampling events. Water quality measurements including surface and one meter water temperature, salinity, and dissolved oxygen 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 *Lepeophtheirus spp.* or *Caligus sp*. These lice are assumed to be *L. salmonis* and *C. clemensi* due to the lack of documented infestation of Pacific salmon by other species. The lice were recorded by life stage and the sex of pre-adult or adult motile lice was determined.

This data summary report documents the observed sea lice infestation rate on retained wild juvenile salmon collected in Clayoquot Sound, BC in 2024. A total of 322 fish samples underwent lab analysis for sea lice infestation in 2024 including only 322 chum salmon (*Oncorhynchus keta).* No coho (*Oncorhynchus kisutch*), pink (*Oncorhynchus gorbuscha*), or Atlantic salmon were captured during sampling completed in Clayoquot Sound, BC in 2024. The chinook (*Oncorhynchus tshawytscha*) and sockeye (*Oncorhynchus nerka*) salmon captured were not retained for sea lice analysis.

Chum salmon smolts were captured in significantly greater numbers than any other species. A total of 2365 chum salmon were captured, representing 99.6% of all captured salmonids. Of the 2365 chum captured, 322 were retained for lab analysis for sea lice infestation. A total of 89 chum smolts were found to be infested with a total of 187 sea lice resulting in a calculated prevalence of 27.7%, abundance of 0.58 and an average intensity of 2.1 for the chum salmon sample population.

A total of 174 *Lepeophtheirus salmonis* sea lice of various life stages were identified on 82 juvenile chum salmon and 13 *Caligus clemensi* sea lice of various life stages were identified on 11 juvenile chum salmon (Appendix III). Of the infested chum, four were found to be infested with at least one *L. salmonis* and *C. clemensi* sea louse.

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1.0 Introduction

Beach seine sampling was conducted on behalf of Cermaq Canada, with permission from Maaqutusiis Hahoulthee Stewardship Society (MHSS) to conduct operations in Ahousaht Territory, in Clayoquot Sound, BC in 2024. Three sampling events were completed at 20 locations (Figure 1) on April 11/12, April 25/26, and May 23/24, 2024. Timing was selected to coincide with the estimated peak outmigration of juvenile salmonids in Clayoquot Sound, BC. Sampling was completed with the support of the Ahousaht Fisheries.

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 infesting fish in the Pacific Ocean, while only one species of *Caligus* (*Caligus clemensi*) has been identified (Margolis and Arthur 1979; McDonald and Margolis, 1995). *C. clemensi* infest an extremely wide range of natural hosts in the marine environment including salmonids and non-salmonids; while *L. salmonis* natural hosts on the Pacific coast have been found to include Pacific salmon, threespine stickleback and Pacific herring. During this analysis, *Lepeophtheirus spp.* sea lice found on salmonid specimens were assumed to be *L. salmonis* due to the lack of documented infestations of Pacific salmon by other *Lepeophtheirus* lice species (Jones and Nemec, 2004).

Both Caligidae genera have similar life histories and developmental stages (Kabata, 1972; Johnson and Albright, 1991a). Sea lice hatch from eggs and go through two free-swimming naupilii stages before developing into an infectious free-swimming copepodid. The copepodids attach to their host and develop through several 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.

Water temperature and salinity are two environmental variables known to influence sea lice development, growth, survival and reproductive rate. In British Columbia, surface seawater temperatures range from approximately 6 °C to 13 °C. Research on sea lice abundance conducted in the Broughton Archipelago and elsewhere on the coast of British Columbia indicates that surface water temperature during the winter months does not appear to hinder the season abundance of *L. salmonis* (Saksida et al. 2007a, b). The rate of development and the generation times for *C. elongates* are strongly temperature dependent (Tully, 1992) and although this research has not been conducted, similar relationships with water temperature may be expected for *C. clemensi* (Jones and Johnson, 2015). Survival and development of *L. salmonis* is optimal in high salinity seawater. Under laboratory conditions copepodid survival was limited to conditions where salinity was greater than 10 ppt (Johnson and Albright, 1991b).

Cermaq Canada originally requested monitoring of sea lice abundance, prevalence, and intensity on wild juvenile salmon in Clayoquot Sound in support of Aquaculture Stewardship Council's Salmon Standard, but the monitoring program has evolved to be a standard annual monitoring event in cooperation with Ahousaht Fisheries.

This data summary report documents the observed sea lice infestation rates on retained samples collected in Clayoquot Sound in 2024. This represents the ninth 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.

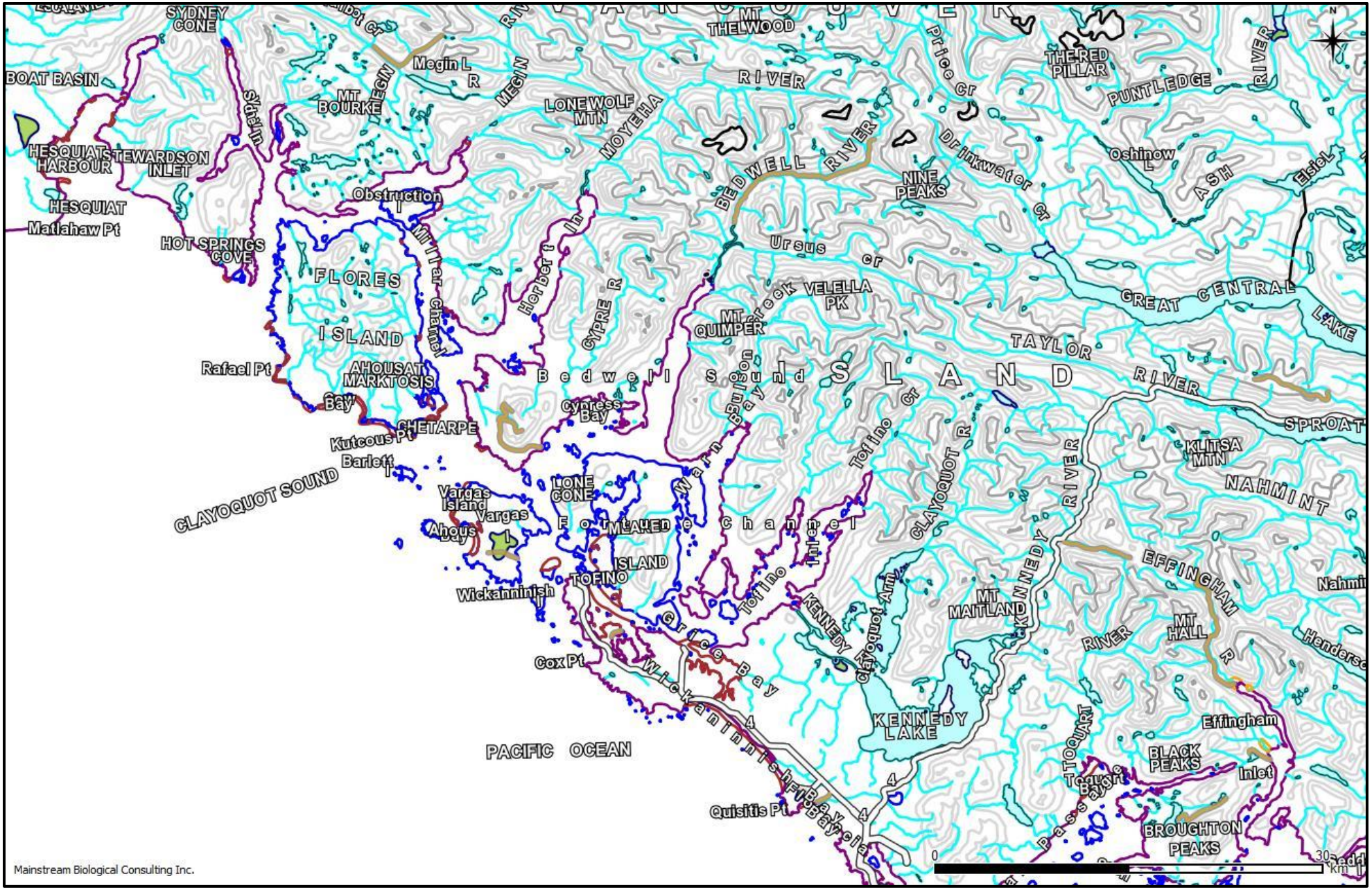

Figure 1: An overview map showing the location of Clayoquot Sound, BC on the west coast of Vancouver Island, BC.

2.0 Methods

Juvenile salmonids were collected from 20 sites in in Clayoquot Sound, BC in 2024. Two additional sites were added to the sampling program in 2022. One site was added in Millar Channel and one site was added in Herbert Inlet to gather additional information and obtain a more robust geographic coverage of both areas. All 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 2024 on April 11 and 12, April 25 and 26, May 23 and 24. The final fourth sampling event planned for June 6 and June 7, was cancelled due the low capture numbers during sampling on the third sampling event, on May 23 and May 24, 2024.

2.1 Site Locations

The 20 beach seining sites consisted of three sites in Shelter Inlet, three sites in Millar Channel, three sites in Herbert Inlet, six sites in Bedwell Sound, four sites in Fortune Channel and one in Sydney Inlet. The approximate locations of the 20 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 locations of the 20 beach seine sites where fish were collected for sea lice analysis in Clayoquot Sound, BC in 2024.

Site Name	Latitude	Longitude
BS1	49 14.520	125 56.995
BS2	49 13.460	125 55.316
BS3	49 16.765	125 54.061
BS4	49 16.078	125 50.219
BS5	49 19.560	125 48.761
BS6	49 14.282	125 50.034
FC1	49 12.656	125 46.192
FC2	49 12.621	125 45.205
FC3	49 14.039	125 47.085
FC4	49 14.326	125 44.583
HI1	49 23.212	125 57.087
HI2	49 20.162	125 56.878
HI3	49 16.977	126 00.654
MC1	49 22.598	126 03.801
MC3	49 19.890	126 04.619
MC4	49 18.846	126 06.751
SD1	49 26.332	126 15.290
SI1	49 23.908	126 10.888
SI2	49 24.136	126 09.976
SI3	49 26.280	126 04.755

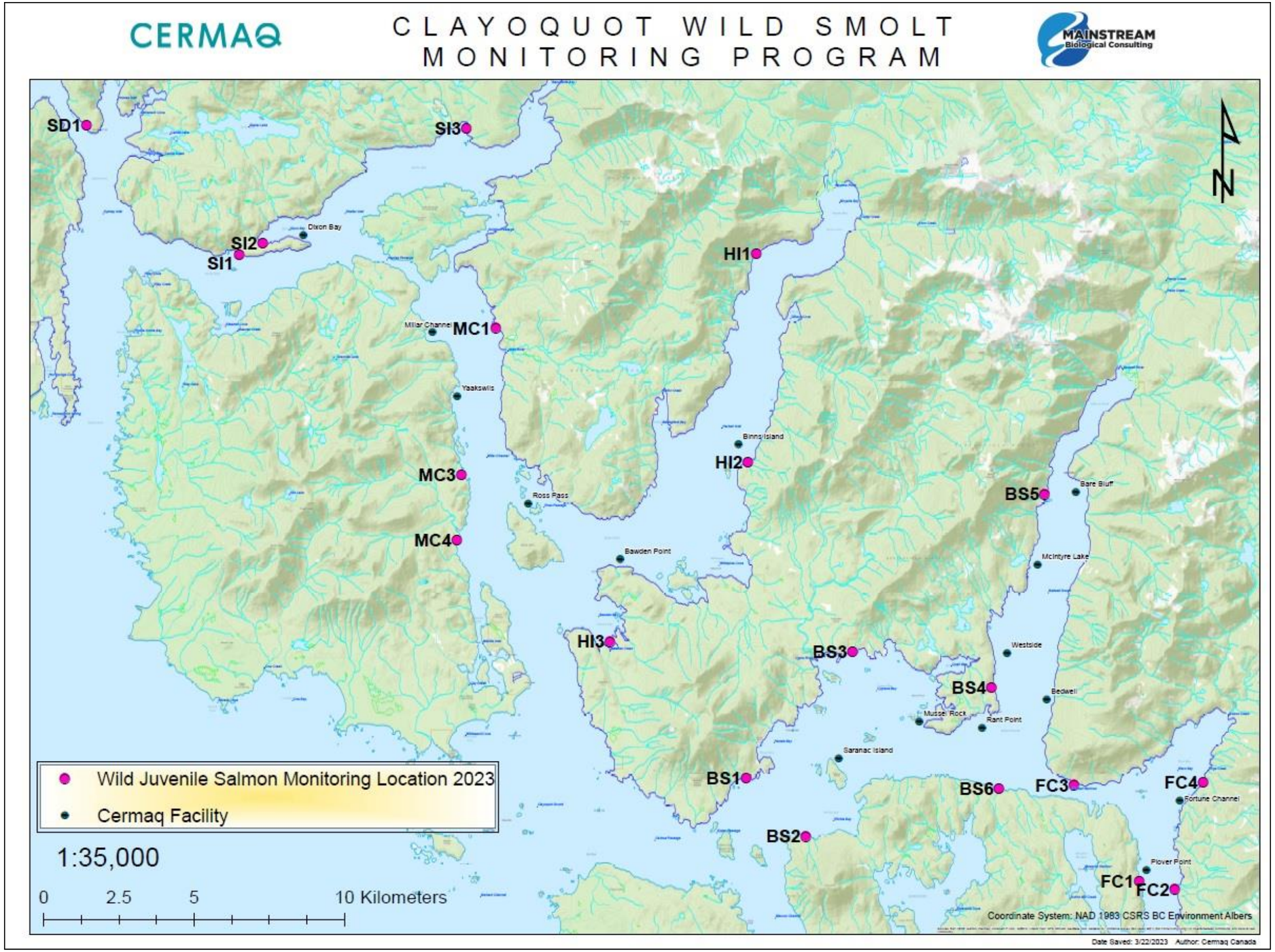

Figure 2: The locations of the 20 beach seine sites in Clayoquot Sound, BC sampled in 2024.

2.2 Field Procedures

Procedures used by Mainstream Biological Consulting during 2024 sampling were adapted from procedures for beach seining, fish collection and field data recording utilized by the Department of Fisheries and Oceans (DFO).

An Ahousaht Fisheries Guardian vessel was used to access sampling sites. 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, with the centre bunt consisting of one-quarter inch diameter diamond mesh, and two side panels (wings) consisting of half-inch diameter diamond mesh. Floats were attached every 30 cm along the top-line and a lead line provided weight along the bottom of the net.

A three person crew conducted the beach seine sets. All beaches were approached slowly by boat and one crewmember was put ashore with one end of the net towline. The onshore crewmember held the towline at one side of the sample site, while the second crewmember ensured the net deployed smoothly off the bow or side of the boat as the third crewmember backed the boat in a wide semicircle towards the opposite side of the sample site. When the net was fully deployed, the second crewmember 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, surface and one meter water quality data was collected for temperature, salinity and dissolved oxygen using a YSI Pro Quatro Probe. Five meter water quality data could not be obtained due to shallow site locations during sampling in April and May 2024.

Crewmembers retrieved the net evenly from opposite ends, ensuring that the lead line remained as close to the bottom as possible. 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 any 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 contained the captured fish in the water so that they could be sampled.

The crew members collected individual fish from the bunt to ensure that captured fish remained in the net for as short a period as possible. The net was manipulated as necessary in response to changing tides to ensure the captured fish remained in sufficient water to minimize contact with the net or with other fish.

Where possible, a total of 15 individuals from each target species were retained for sea lice infestation analysis. If less than 15 individuals of a target species were captured, all the captured fish were retained. Individual fish were randomly “swam” into an appropriately sized Whirlpac bag. Handling of fish was kept to a minimum.

Once all the fish for retention were collected, a total catch number was recorded for each species. Any fish remaining in the net were counted or estimated (if more than 300 individuals were present) and released. 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 standardized field form was used to record the following information for each beach seine set:

- Site name or number
- Date
- Time at the end of the individual fish collection
- Comments on weather and oceanic conditions
- Total capture and retained fish numbers for each specimen group
- Water temperature (°C), salinity (ppt) and dissolved oxygen (mg/l) to one decimal place
- GPS coordinates
- The number of salmon mortalities.

Retained fish from each site were packaged separately in re-sealable bags and labelled with the site name or number, the date and sample numbers of each species. Sample bags were stored on ice in a cooler while on board the boat and transferred to a portable freezer on the support boat immediately following completion of the set.

Following each set the net was reloaded onto the boat. Crewmembers scanned the net for obvious holes, which were repaired immediately if found.

The above sampling procedures were repeated at each of the sample sites.

2.3 Laboratory Procedures

Laboratory procedures for sea lice analysis were adapted from 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 analysis. Individual fish were identified to species and counted. Results of the lab identification and count were compared to the reported data found on the field data sheets to identify any errors.

A standardized data sheet was used to record sea lice analysis results for each site. The site and week number, sample date and number of fish and specimen groups present were recorded. The date of the lab analysis was also noted.

Once thawed, individual fish were removed from their bag using a pair of forceps at the caudal peduncle and placed in a petri dish. Each bag was labelled with an individual fish identification number. 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, and magnification was increased to up to 40X during individual sea lice identification.

Microscopic analysis of each individual fish began at the anterior end of the right 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 and caudal fin were lifted and expanded with a pair of forceps to check for lice. 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 lifted and expanded, and the operculum was lifted. The fish was then flipped using a pair of forceps at the caudal peduncle and the procedure was repeated on the opposite 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 of saline solution.

Each Whirlpac 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. Any sea lice found in the sample bags were identified under the microscope using the same characteristics outlined above. 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. Non-motile sea lice were identified as one of two chalimus stages for *L. salmonis* (Hamre et al., 2013) or three chalimus stages for *C. clemensi*. Motile lice, either pre-adults or adults, were identified as either *L. salmonis* or *C. clemensi* and the sex of the louse was determined.

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 spp.* if lunules were present.

Sea lice found on captured specimens have been assumed to be either *L. salmonis* or *C. clemensi* due to the lack of documented infestations of Pacific salmon by other species of sea lice (Jones and Nemec, 2004).

After microscopic analysis individual fish specimens were measured (fork length) in millimetres and weighed to the nearest tenth of a gram. Lengths and weights were 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 repackaged in the large re-sealable bags by site before being refrozen.

To allow for quality assurance of sea lice identification, all sea lice were placed in vials labelled with the corresponding fish identification number 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 and one meter water quality data collected for temperature, salinity and dissolved oxygen was summarized to report the minimum and maximum values and averages for each sample week.

Beach seine fish sample composition was summarized by species and site for each sample period. The fork lengths and weights of the samples were summarized to present minimum and maximum values as well as averages. Sea lice infestation rates, including the overall number of infested fish and the number of sea lice identified, were determined for the sample population, and prevalence and abundance of sea lice were calculated. Prevalence was defined as the number of host fish found to have one or

more sea lice compared to the total number of host fish examined, while abundance was defined as the total number of sea lice observed compared to the total number of host fish examined. The intensity of sea lice infestation, as described by the average number of sea lice found on a single salmon infested was summarized. Average intensity was calculated by dividing the total number of sea lice identified by the number of infested fish.

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 inspection of juvenile salmonids collected from Clayoquot Sound, BC in 2024. Water quality field data is presented in Appendix I, beach seine fish capture data is included in Appendix II and data on the fish sample population including sea lice lab analysis results are listed in Appendix III.

3.1 Water Quality Parameters

Surface and one meter depth measurements of water temperature salinity and dissolved oxygen taken during beach seining at each of the 20 sites during the three sample periods are summarized in Table 2 and Table 3 respectively and the complete dataset is included in Appendix I.

Recorded surface water temperature ranged from a low of 8.1°C recorded at BS3 on April 12, 2024, to a high of 15.5 °C recorded at HI2 on May 23, 2024 (Table 2; Appendix I). Average surface water temperature increased from 9.5 °C to 12.8 °C, over the sampling period.

Recorded surface water salinity ranged from a low of 11.1 ppt recorded at BS5 on April 12, 2024, to a high of 29.4 ppt recorded at SI1 on May 23, 2024 (Table 2; Appendix I). Average surface water salinity increased from 21.1 ppt on to 25.4 ppt, over the sampling period.

Recorded surface dissolved oxygen ranged from a low of 7.5 mg/L recorded at FC3 on May 24, 2024, to a high of 16.5 mg/L recorded at BS3 on April 26, 2024 (Table 2; Appendix I). Average surface dissolved oxygen varied from 8.9 mg/L on May 23/24, 2024, to 10.1 mg/L on April 25/26, 2024.

Recorded one meter water temperature ranged from a low of 8.8°C recorded at BS4 on April 12, 2024, to a high of 15.8 °C recorded at HI2 on May 23, 2024 (Table 3; Appendix I). Average one meter water temperature increased from 9.0°C to 13.3°C, over the sampling period.

Recorded one meter water salinity ranged from 22.7 ppt recorded at HI1 on April 25, 2024, and BS5 on April 26, 2024, to a high of 28.8 ppt recorded at SD1 on May 23, 2024 (Table 3: Appendix I). Average one meter water salinity increased from 25.3 ppt to 27.3 ppt, over the sampling period.

Recorded one meter dissolved oxygen ranged from 8.1 mg/L recorded at BS6 on April 12, 2024, to a high of 15.5 mg/L recorded at BS3 on April 26, 2024 (Table 3: Appendix I). Average one meter dissolved oxygen ranged from 9.0 mg/L on April 11/12, 2024, and May 23/24, 2024 to 10.2 mg/L on April 25/26, 2024.

Table 2: Surface water quality parameters collected during 2024 beach seine sampling in Clayoquot Sound, BC.

Site	April 11/12			April 25/26			May 23/24		
	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)
BS1	25.0	9.7	8.6	26.4	10.7	9.9	28.1	12.3	9.1
BS2	25.7	9.7	8.8	27.4	10.6	10.3	28.3	12.2	8.7
BS3	13.3	8.1	10.1	23.4	10.3	16.5	24.3	11.8	7.9
BS4	22.6	9.0	10.1	26.9	10.2	8.9	23.9	12.2	8.5
BS5	11.1	8.2	10.4	22.6	9.5	9.5	12.3	11.4	9.4
BS6	26.1	9.9	8.5	26.8	11.0	9.1	28.0	12.1	8.7
FC1	24.6	11.3	9.3	24.8	10.9	9.5	26.7	12.2	8.2
FC2	24.4	10.5	9.1	25.0	10.7	10.8	26.5	12.2	8.1
FC3	26.2	10.1	8.6	26.0	10.6	9.1	27.5	12.1	7.5
FC4	15.2	9.4	9.5	21.8	10.3	8.6	25.4	12.3	7.6
HI1	15.3	9.3	9.5	22.5	11.6	9.9	18.2	14.8	8.9
HI2	20.0	9.7	9.5	25.2	12.1	9.4	23.2	15.5	8.7
HI3	14.8	8.9	9.5	22.5	10.8	10.1	27.4	13.7	9.3
MC1	23.7	9.7	9.0	26.8	11.5	9.1	27.3	13.8	8.9
MC3	25.6	9.8	8.8	25.6	10.8	12.5	27.7	12.5	9.0
MC4	26.1	10.1	8.7	27.1	10.5	9.1	28.0	-	13.0
SD1	20.8	9.5	9.6	26.9	11.1	12.1	28.7	13.5	9.3
SI1	26.3	9.8	8.7	28.2	10.8	9.9	29.4	12.2	8.6
SI2	23.0	9.4	9.4	24.6	10.7	9.4	27.0	12.9	9.1
SI3	12.2	8.6	9.6	25.0	11.3	8.6	20.0	12.7	9.6
Average	**21.1**	**9.5**	**9.3**	**25.3**	**10.8**	**10.1**	**25.4**	**12.8**	**8.9**

Table 3: One meter water quality parameters collected during 2024 beach seine sampling in Clayoquot Sound, BC.

Site	April 11/12			April 25/26			May 23/24		
	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)
BS1	26.2	9.8	8.2	-	-	-	28.4	12.1	9.2
BS2	-	-	-	27.5	10.6	9.8	28.4	12.0	8.8
BS3	-	-	-	26.6	10.6	15.5	-	-	-
BS4	22.8	8.8	10.4	26.1	10.2	9.3	-	-	-
BS5	25.4	9.5	9.0	22.7	9.6	9.2	23.9	12.4	8.8
BS6	26.2	9.9	8.1	26.8	10.7	8.9	-	-	-
FC1	-	-	-	24.8	10.8	9.4	-	-	-
FC2	-	-	-	25.1	10.7	9.9	-	-	-
FC3	-	-	-	26.2	10.6	8.7	-	-	-
FC4	-	-	-	25.1	10.8	8.8	-	-	-
HI1	-	-	-	22.7	11.6	9.8	-	-	-
HI2	-	-	-	26.6	12.0	9.3	25.9	15.8	8.6
HI3	25.0	9.7	9.2	27.5	11.3	15.0	28.1	13.2	9.3
MC1	-	-	-	27.1	11.5	9.3	27.4	13.8	9.0
MC3	25.7	9.9	8.6	-	-	-	-	-	-
MC4	26.9	10.1	9.0	27.6	10.2	9.7	-	-	-
SD1	24.8	10.0	9.4	27.5	11.3	11.6	28.8	13.5	9.5
SI1	26.6	9.8	8.5	-	-	-	-	-	-
SI2	23.1	9.4	9.3	-	-	-	-	-	-
SI3	-	-	-	26.2	11.4	8.6	-	-	-
Average	**25.3**	**9.7**	**9.0**	**26.0**	**10.9**	**10.2**	**27.3**	**13.3**	**9.0**

3.2 Fish Sample Composition

A total of 2374 fish were captured during beach seine sampling conducted in Clayoquot Sound, BC, in 2024 (Table 4). A summary of the total number of fish captured and collected as specimens at each site over the collection period is presented in Table 5, with a complete dataset provided in Appendix II. Of the 2374 captured, 322 individual chum salmon were retained for lab analysis (Table 4). No coho, pink, or Atlantic salmon were captured during sampling completed in Clayoquot Sound, BC in 2024. Chum salmon (*O. keta*) smolts were captured in significantly greater numbers than any other species. A total of 2365 chum salmon were captured, representing 99.6 % of all captured fish.

Table 4: The total of collected individuals of each fish species captured in Clayoquot Sound, BC between April 11, 2024, and May 24, 2024, and the percentage of the total capture population that they represent.

Common Name	Capture Totals (% of total capture population)	Collection Totals	Collection %
chum salmon	2365 (99.6 %)	322	13.6
chinook salmon	4 (0.2 %)	0	0
sockeye salmon	5 (0.2 %)	0	0
coho salmon	0 (0.00 %)	0	0
pink salmon	0 (0.0 %)	0	0
Atlantic salmon	0 (0.0 %)	0	0
All species	**2374**	**322**	**13.6**

Table 5: The number of captured fish (Capture Total) and the number of individual fish collected (Sample Total) from each of the 20 sample sites in Clayoquot Sound, BC between April 11, 2024, and May 24, 2024.

Site	Chum		Coho		Chinook		Sockeye		Pink		Capture Total	Sample Total
	Capture Total	Sample Total	Capture Total	Sample Total	Capture Total	Sample Total	Capture Total	Sample Total	Capture Total	Sample Total		
BS1	486	30	0	0	0	0	0	0	0	0	**486**	**30**
BS2	405	40	0	0	0	0	0	0	0	0	**405**	**40**
BS3	7	7	0	0	1	0	0	0	0	0	**8**	**7**
BS4	33	25	0	0	0	0	0	0	0	0	**33**	**25**
BS5	2	2	0	0	0	0	0	0	0	0	**2**	**2**
BS6	137	15	0	0	0	0	0	0	0	0	**137**	**15**
FC1	940	30	0	0	0	0	0	0	0	0	**940**	**30**
FC2	28	16	0	0	0	0	0	0	0	0	**28**	**16**
FC3	40	17	0	0	0	0	0	0	0	0	**40**	**17**
FC4	31	15	0	0	0	0	0	0	0	0	**31**	**15**
HI1	63	17	0	0	0	0	0	0	0	0	**63**	**17**
HI2	3	3	0	0	0	0	0	0	0	0	**3**	**3**
HI3	0	0	0	0	0	0	0	0	0	0	**0**	**0**
MC1	17	16	0	0	3	0	0	0	0	0	**20**	**16**
MC3	43	17	0	0	0	0	0	0	0	0	**43**	**17**
MC4	6	6	0	0	0	0	0	0	0	0	**6**	**6**
SD1	70	22	0	0	0	0	0	0	0	0	**70**	**22**
SI1	41	31	0	0	0	0	0	0	0	0	**41**	**31**
SI2	10	10	0	0	0	0	0	0	0	0	**10**	**10**
SI3	3	3	0	0	0	0	5	0	0	0	**8**	**3**
Total	**2365**	**322**	**0**	**0**	**4**	**0**	**5**	**0**	**0**	**0**	**2374**	**322**

3.3 Fish Sample Size Statistics

Summary statistics for weight and fork length were calculated for the sample population of juvenile salmonids. Length (Table 6) and weight (Table 7) data were summarized by sampling event for each species.

3.3.1 Chum Salmon

Individual weight of the 322 chum smolts collected during the three sample events ranged from 0.2 g to 20.2 g and averaged 1.0 g (SD = 1.4). Fork length of the chum smolts ranged from 24 mm to 128 mm and averaged 43 mm (SD = 10).

Table 6: Average lengths of chum salmon collected in Clayoquot Sound, BC in 2024, summarized by sampling event.

Species	Average Length (mm)		
	April 11/12	April 25/26	May 23/24
chum	39	43	65

Table 7: Average weights of chum salmon collected in Clayoquot Sound, BC in 2024, summarized by sampling event.

Species	Average Weight (g)		
	April 11/12	April 25/26	May 23/24
chum	0.7	1.0	3.3

3.4 Sea Lice Infestation Rates

3.4.1 Infestation on Chum Salmon

The results of laboratory analysis for the presence of sea lice on the fish sample population collected in Clayoquot Sound, BC in 2024 are presented in Table 8. A complete dataset is included in Appendix III. A total of 322 juvenile chum salmon samples were collected at 19 of the 20 sites in Clayoquot Sound, BC and inspected for sea lice infestation.

Table 8: Results of analysis for sea lice infestation on fish collected by beach seine in Clayoquot Sound, BC in 2024.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	322	187	89	27.6	0.58	2.1
Total	**322**	**187**	**89**	**27.6**	**0.58**	**2.1**

The results of the laboratory analysis for sea lice infestation for chum salmon are presented by site in Table 9. A total of 89 chum salmon were found to be infested with 187 sea lice (Table 8). The largest number of chum salmon infested with sea lice (27

chum) and the largest number of total sea lice (54 lice) found on samples, were at BS1 and SI1, respectively (Table 9). Sea lice were found on fish at every site except for BS5, FC4, HI1, and HI2. Zero chum were collected from HI3 but at least one chum was collected from the other 19 sites (Table 9).

A total of 89 chum salmon were found to be infested with at least one sea louse. The prevalence of sea lice on the chum salmon sample population (n=322) collected in Clayoquot Sound, BC in 2024 was 27.6 %. Sea lice prevalence calculated by site for chum salmon and is presented in Table 9. The highest sea lice prevalence (81.3 %) was at MC1.

A total of 187 sea lice were identified during laboratory analysis of retained chum salmon. The abundance of sea lice on the chum salmon sample population (n=322) collected in Clayoquot Sound, BC in 2024 was 0.58. The 187 sea lice identified were observed on 89 individual chum salmon resulting in an average intensity of 2.1 for the chum sample population. Sea lice abundance and intensity were calculated by site and are presented in Table 9. The highest sea lice abundance (2.20) was at SI2, and the highest intensity (3.9) was at SI1.

Table 9: Total number, prevalence, abundance, and intensity of sea lice infestation on chum salmon collected in Clayoquot Sound, BC in 2024 summarized by sampling site.

Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity
BS1	30	17	0.8	27	56.7	0.90	1.6
BS2	40	11	1.3	13	27.5	0.33	1.2
BS3	7	2	0.7	3	28.6	0.43	1.5
BS4	25	6	4.3	8	24.0	0.32	1.3
BS5	2	0	-	0	0.0	0.00	0.0
BS6	15	1	1.3	1	6.7	0.07	1.0
FC1	30	6	1.4	10	20.0	0.33	1.7
FC2	16	1	1.5	1	6.3	0.06	1.0
FC3	17	4	1.3	5	23.5	0.29	1.3
FC4	15	0	-	0	0.0	0.00	0.0
HI1	17	0	-	0	0.0	0.00	0.0
HI2	3	0	-	0	0.0	0.00	0.0
HI3	0	0	-	0	0.0	0.00	0.0
MC1	16	13	1.4	32	81.3	2.00	2.5
MC3	17	4	0.6	6	23.5	0.35	1.5
MC4	6	1	0.5	3	16.7	0.50	3.0
SD1	22	1	1.4	1	4.5	0.05	1.0
SI1	31	14	0.8	54	45.2	1.74	3.9
SI2	10	7	0.5	22	70.0	2.20	3.1
SI3	3	1	0.5	1	33.3	0.33	1.0
TOTAL	**322**	**89**	**1.2**	**187**	**27.6**	**0.58**	**2.1**

3.5 Infestation by Sea Lice Species

3.5.1 Infestation by Life Stage on Chum Salmon

An analysis of the species of sea lice identified on the 89 infested chum salmon is presented in Table 10. A total of 174 *Lepeophtheirus salmonis* sea lice of various life stages were identified on 82 juvenile chum salmon and 13 *Caligus clemensi* sea lice of various life stages were found on 11 chum salmon. Of the infested chum four were found to be infested with at least one *L. salmonis* and *C. clemensi* sea louse (Appendix III). The sea lice species identified on chum salmon are also presented by site in Table 11.

Table 10: The number of *Lepeophtheirus salmonis* and *Caligus clemensi* in each life stage identified on the chum salmon sample population from Clayoquot Sound, BC in 2024. LEP = *Lepeophtheirus salmonis* CAL= *Caligus clemensi*

Life Stage[1]	April 11/12	April 25/26	May 23/24
LEP Co	39	22	1
LEP C1	47	15	6
LEP C2	19	21	0
LEP NM No ID	0	0	0
LEP PAM	1	1	0
LEP PAF	0	0	0
LEP AM	1	0	0
LEP AF	0	0	1
TOTAL LEP	**107**	**59**	**8**
CAL Co	1	0	0
CAL C1	0	3	3
CAL C2	0	1	0
CAL C3	1	1	0
CAL C4	0	1	0
CAL NM No ID	0	0	0
CAL PAM	0	1	1
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
TOTAL CAL	**2**	**7**	**4**

[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.

Table 11: The number of sea lice found on chum salmon collected in Clayoquot Sound, BC in 2024 summarized by sampling site. LEP = *Lepeophtheirus salmonis* CAL= *Caligus clemensi*

Site	Sample Period												TOTAL		
	April 11/12				April 25/26				May 23/24						
	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	**# of Chum Analyzed**	**# of Infested Chum**	**# of Lice**
BS1	15	11	18	0	15	6	5	4	0	0	0	0	**30**	**17**	**27**
BS2	16	1	1	0	15	6	6	2	9	4	3	1	**40**	**11**	**13**
BS3	0	0	0	0	7	2	3	0	0	0	0	0	**7**	**2**	**3**
BS4	1	0	0	0	15	3	4	0	9	3	3	1	**25**	**6**	**8**
BS5	2	0	0	0	-	0	0	0	0	0	0	0	**2**	**0**	**0**
BS6	0	0	0	0	15	1	1	0	0	0	0	0	**15**	**1**	**1**
FC1	15	5	7	2	15	1	1	0	0	0	0	0	**30**	**6**	**10**
FC2	15	1	1	0	-	0	0	0	1	0	0	0	**16**	**1**	**1**
FC3	0	0	0	0	15	3	3	0	2	1	1	1	**17**	**4**	**5**
FC4	15	0	0	0	-	0	0	0	0	0	0	0	**15**	**0**	**0**
HI1	15	0	0	0	2	0	0	0	0	0	0	0	**17**	**0**	**0**
HI2	2	0	0	0	1	0	0	0	0	0	0	0	**3**	**0**	**0**
HI3	0	0	0	0	-	0	0	0	0	0	0	0	**0**	**0**	**0**
MC1	15	12	31	0	-	0	0	0	1	1	1	0	**16**	**13**	**32**
MC3	15	2	3	0	2	2	3	0	0	0	0	0	**17**	**4**	**6**
MC4	5	1	3	0	1	0	0	0	0	0	0	0	**6**	**1**	**3**
SD1	5	0	0	0	15	0	0	0	2	1	0	1	**22**	**1**	**1**
SI1	16	8	32	0	15	6	21	1	0	0	0	0	**31**	**14**	**54**
SI2	6	4	10	0	4	3	12	0	0	0	0	0	**10**	**7**	**22**
SI3	2	1	1	0	1	0	0	0	0	0	0	0	**3**	**1**	**1**
Total	**160**	**46**	**107**	**2**	**138**	**33**	**59**	**7**	**24**	**10**	**8**	**4**	**322**	**89**	**187**

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Appendix I – Field Data

Date	Time	Site Name	Salinity (ppt)	Temperature (deg C.)	DO (mg/ L)	Salinity (ppt)	Temperature (deg C.)	DO (mg/ L)
			0.2m	0.2m	0.2m	1.0m	1.0m	1.0m
2024-04-11	14:27	BS1	25	9.7	8.6	26.2	9.8	8.2
2024-04-11	15:00	BS2	25.7	9.7	8.8	-	-	-
2024-04-12	9:17	BS3	13.3	8.1	10.1	-	-	-
2024-04-12	11:07	BS4	22.6	9	10.1	22.8	8.8	10.4
2024-04-12	11:28	BS5	11.1	8.2	10.4	25.4	9.5	9
2024-04-12	10:44	BS6	26.1	9.9	8.5	26.2	9.9	8.1
2024-04-12	12:58	FC1	24.6	11.3	9.3	-	-	-
2024-04-12	12:34	FC2	24.4	10.5	9.1	-	-	-
2024-04-12	13:30	FC3	26.2	10.1	8.6	-	-	-
2024-04-12	11:59	FC4	15.2	9.4	9.5	-	-	-
2024-04-11	12:57	HI1	15.3	9.3	9.5	-	-	-
2024-04-11	13:32	HI2	20	9.7	9.5	-	-	-
2024-04-11	13:56	HI3	14.8	8.9	9.5	25	9.7	9.2
2024-04-11	12:13	MC1	23.7	9.7	9	-	-	-
2024-04-11	9:06	MC3	25.6	9.8	8.8	25.7	9.9	8.6
2024-04-11	8:50	MC4	26.1	10.1	8.7	26.9	10.1	9
2024-04-11	10:15	SD1	20.8	9.5	9.6	24.8	10	9.4
2024-04-11	10:42	SI1	26.3	9.8	8.7	26.6	9.8	8.5
2024-04-11	11:18	SI2	23	9.4	9.4	23.1	9.4	9.3
2024-04-11	11:45	SI3	12.2	8.6	9.6	-	-	-
2024-04-25	13:08	BS1	26.4	10.7	9.9	-	-	-
2024-04-25	13:46	BS2	27.4	10.6	10.3	27.5	10.6	9.8
2024-04-26	07:55	BS3	23.4	10.3	16.5	26.6	10.6	15.5
2024-04-26	08:20	BS4	26.9	10.2	8.9	26.1	10.2	9.3
2024-04-26	08:53	BS5	22.6	9.5	9.5	22.7	9.6	9.2
2024-04-26	11:10	BS6	26.8	11	9.1	26.8	10.7	8.9
2024-04-26	09:58	FC2	24.8	10.9	9.5	24.8	10.8	9.4
2024-04-26	09:45	FC1	25	10.7	10.8	25.1	10.7	9.9
2024-04-26	10:35	FC4	26	10.6	9.1	26.2	10.6	8.7
2024-04-26	09:24	FC3	21.8	10.3	8.6	25.1	10.8	8.8
2024-04-25	12:00	HI1	22.5	11.6	9.9	22.7	11.6	9.8
2024-04-25	12:17	HI2	25.2	12.1	9.4	26.6	12	9.3
2024-04-25	12:42	HI3	22.5	10.8	10.1	27.5	11.3	15
2024-04-25	11:27	MC1	26.8	11.5	9.1	27.1	11.5	9.3
2024-04-25	08:42	MC3	25.6	10.8	12.5	-	-	-
2024-04-25	08:25	MC4	27.1	10.5	9.1	27.6	10.2	9.7

Date	Time	Site Name	Salinity (ppt)	Temperature (deg C.)	DO (mg/ L)	Salinity (ppt)	Temperature (deg C.)	DO (mg/ L)
			0.2m	0.2m	0.2m	1.0m	1.0m	1.0m
2024-04-25	09:18	SD1	26.9	11.1	12.1	27.5	11.3	11.6
2024-04-25	10:08	SI1	28.2	10.8	9.9	-	-	-
2024-04-25	10:38	SI2	24.6	10.7	9.4	-	-	-
2024-04-25	11:02	SI3	25	11.3	8.6	26.2	11.4	8.6
2024-05-23	13:41	BS1	28.1	12.3	9.1	28.4	12.1	9.2
2024-05-23	14:03	BS2	28.3	12.2	8.7	28.4	12	8.8
2024-05-24	8:04	BS3	24.3	11.8	7.9	-	-	-
2024-05-24	8:41	BS4	23.9	12.2	8.5	-	-	-
2024-05-24	9:11	BS5	12.3	11.4	9.4	23.9	12.4	8.8
2024-05-24	11:03	BS6	28	12.1	8.7	-	-	-
2024-05-24	10:22	FC2	26.7	12.2	8.2	-	-	-
2024-05-24	10:04	FC1	26.5	12.2	8.1	-	-	-
2024-05-24	10:43	FC4	27.5	12.1	7.5	-	-	-
2024-05-24	9:42	FC3	25.4	12.3	7.6	-	-	-
2024-05-23	12:20	HI1	18.2	14.8	8.9	-	-	-
2024-05-23	12:40	HI2	23.2	15.5	8.7	25.9	15.8	8.6
2024-05-23	13:09	HI3	27.4	13.7	9.3	28.1	13.2	9.3
2024-05-23	11:42	MC1	27.3	13.8	8.9	27.4	13.8	9
2024-05-23	9:16	MC3	27.7	12.5	9	-	-	-
2024-05-23	8:51	MC4	28	-	13	-	-	-
2024-05-23	10:07	SD1	28.7	13.5	9.3	28.8	13.5	9.5
2024-05-23	10:37	SI1	29.4	12.2	8.6	-	-	-
2024-05-23	10:55	SI2	27	12.9	9.1	-	-	-
2024-05-23	11:16	SI3	20	12.7	9.6	-	-	-

Appendix II – Capture and Collection Sample Totals

Date	Time	Site Name	Tide Stage	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	Salmonid Mortalities	Weather Comments	Comments
2024-04-11	14:27	BS1	High	0	0	273	15	0	0	0	0	0	0	0	Calm, rain	300 sanddabs
2024-04-11	15:00	BS2	High	0	0	162	16	0	0	0	0	0	0	0	Calm, rain	No bycatch
2024-04-12	9:17	BS3	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, clear	15 flatfish, 3 sculpin, 2 gunnel, 2 green crab (killed). Having boat issues, comes up on plane then begins to die.
2024-04-12	11:07	BS4	Low	0	0	1	1	0	0	0	0	0	0	0	Calm, clear	9 pipefish, 2 tubesnout, 3 sculpin, california sea cucumber
2024-04-12	11:28	BS5	Low	0	0	2	2	0	0	0	0	0	0	0	Calm, clear	2 leather stars, sculpin
2024-04-12	10:44	BS6	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, clear	Flounder, kelp crab, 3 kelp perch, 1 kelp greenling
2024-04-12	12:58	FC1	Mid	0	0	900	15	0	0	0	0	0	0	1	Calm, clear	Flatfish
2024-04-12	12:34	FC2	Mid	0	0	27	15	0	0	0	0	0	0	0	Calm, clear	Pipefish
2024-04-12	13:30	FC3	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, light wind	1 leather star, 1 sculpin
2024-04-12	11:59	FC4	Mid	0	0	31	15	0	0	0	0	0	0	0	Calm, clear	4 tubesnouts, 3 harbour seals present
2024-04-11	12:57	HI1	Mid	0	0	61	15	0	0	0	0	0	0	0	Wind, rain	Sculpin
2024-04-11	13:32	HI2	Mid	0	0	2	2	0	0	0	0	0	0	0	Calm, rain	Ctenophores
2024-04-11	13:56	HI3	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, rain	No bycatch, good set
2024-04-11	12:13	MC1	Low	0	0	16	15	0	0	3	0	0	0	0	Calm, rain	No bycatch
2024-04-11	9:06	MC3	Low	0	0	41	15	0	0	0	0	0	0	0	Wind, rain	20 pipefish, 4 unknown species, 3 sculpin, 1 juvenile rockfish, 1 kelp greenling
2024-04-11	8:50	MC4	Low	0	0	5	5	0	0	0	0	0	0	0	Light wind, rain	35 flatfish, 1 pipefish, 2 dungeness crabs
2024-04-11	10:15	SD1	Low	0	0	5	5	0	0	0	0	0	0	0	Wind, rain	1 juvenile rockfish, ctenophores, jellyfish. Stream nearby.
2024-04-11	10:42	SI1	Low	0	0	22	16	0	0	0	0	0	0	0	Wind, rain	60 pile perch, 3 sculpin
2024-04-11	11:18	SI2	Mid	0	0	6	6	0	0	0	0	0	0	0	Rain	13 flatfish, 2 sculpin, 2 california sea cucumber
2024-04-11	11:45	SI3	Low	0	0	2	2	0	0	0	0	3	0	1	Wind, rain	3 pipefish, jellyfish, 1 sculpin
2024-04-25	13:08	BS1	High	0	0	213	15	0	0	0	0	0	0	0	Calm, rain, light breeze	Ctenophores, jellies
2024-04-25	13:46	BS2	High	0	0	234	15	0	0	0	0	0	0	0	Calm, rain	Ctenophores
2024-04-26	07:55	BS3	Low	0	0	7	7	0	0	1	0	0	0	0	Calm, light rain	2 sculpin, stickleback, 10 pipe fish, 3 green crab
2024-04-26	08:20	BS4	Low	0	0	23	15	0	0	0	0	0	0	0	Calm, light rain	1 sculpin, 1 sea cucumber, 1 kelp greenling, 10 pipe fish, juvenile greenling, 1 nudibranch
2024-04-26	08:53	BS5	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud and sun	3 sea stars, 1 gunnel
2024-04-26	11:10	BS6	Mid	0	0	137	15	0	0	0	0	0	0	0	Calm, cloud	6 kelp perch, shrimp
2024-04-26	09:58	FC1	Low	0	0	40	15	0	0	0	0	0	0	0	Calm, cloud	3 gunnel, shrimp, 1 sculpin
2024-04-26	09:45	FC2	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	1 Stickleback, shrimp, strong tide
2024-04-26	10:35	FC3	Mid	0	0	38	15	0	0	0	0	0	0	0	Calm, cloud	3 sculpin, sea stars
2024-04-26	09:24	FC4	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	3 gunnel, 5 tube snout, 5 pipe fish, 2 crabs, sculpin, jellies
2024-04-25	12:00	HI1	Mid	0	0	2	2	0	0	0	0	0	0	0	Calm, rain	1 flatfish

Date	Time	Site Name	Tide Stage	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	Salmonid Mortalities	Weather Comments	Comments
2024-04-25	12:17	HI2	Mid	0	0	1	1	0	0	0	0	0	0	0	Calm, light rain	Ctenophores, jellies
2024-04-25	12:42	HI3	High	0	0	0	0	0	0	0	0	0	0	0	Calm, rain	Ctenophores
2024-04-25	11:27	MC1	Mid	0	0	0	0	0	0	0	0	0	0	0	Cakm, rain	Sculpin
2024-04-25	08:42	MC3	Low	0	0	2	2	0	0	0	0	0	0	0	Calm, rain	2 sculpin, 6 pipe fish, 1 gunnel, 2 juvenile greenling, 1 midshipman, 1 California sea cucumber
2024-04-25	08:25	MC4	Low	0	0	1	1	0	0	0	0	0	0	0	Calm, rain	2 dungeness crabs, 5 pipe fish, 1 sculpin, 1 flatfish, 2 juvenile greenlings
2024-04-25	09:18	SD1	Low	0	0	63	15	0	0	0	0	0	0	2	Calm, rain	6 pile perch, 20 kelp perch, 1 sculpin
2024-04-25	10:08	SI1	Mid	0	0	19	15	0	0	0	0	0	0	0	Calm, rain	2 crabs, 1 moon snail
2024-04-25	10:38	SI2	Mid	0	0	4	4	0	0	0	0	0	0	0	Calm. rain	Sand dabs, pipe fish, tube snout, shrimp
2024-04-25	11:02	SI3	Mid	0	0	1	1	0	0	0	0	1	0	0	Calm, light rain	Jellies, green crab
2024-05-23	13:41	BS1	High	0	0	0	0	0	0	0	0	0	0	0	Calm, light swell, cloud	30 sculpin, sanddabs, 2 red crabs
2024-05-23	14:03	BS2	High	0	0	9	9	0	0	0	0	0	0	0	Calm, cloud	1 gunnel
2024-05-24	8:04	BS3	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud/fog	40 green crabs (killed), 15 tubesnouts, 10 gunnel, 3 perch, 5 shrimp, 2 sculpin
2024-05-24	8:41	BS4	Low	0	0	9	9	0	0	0	0	0	0	0	Calm, fog	20 tubesnouts, 5 sculpin, 10 gunnels
2024-05-24	9:11	BS5	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	1 goby, 5 green crabs (killed), 4 fried egg jellies
2024-05-24	11:03	BS6	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, drizzle	5 sculpin, 4 surf perch, 2 kelp perch, 2 gunnel
2024-05-24	10:22	FC1	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	kelp crab, gunnels, 15 perch
2024-05-24	10:04	FC2	Low	0	0	1	1	0	0	0	0	0	0	0	Calm, cloud	7 kelp crabs, 1 gunnel, 5 tubesnouts, 10 surf perch
2024-05-24	10:43	FC3	Low	0	0	2	2	0	0	0	0	0	0	0	Calm, cloud	1 kelp crab, 5 gunnel, tubesnouts, 1 goby
2024-05-24	9:42	FC4	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	tubesnouts, gunnel, 10 kelp crab, 70 surf perch
2024-05-23	12:20	HI1	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	1 flatfish
2024-05-23	12:40	HI2	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	2 lion's mane jellyfish
2024-05-23	13:09	HI3	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	10 surf perch, 3 tubesnouts
2024-05-23	11:42	MC1	Mid	0	0	1	1	0	0	0	0	0	0	0	Calm, cloud, wind	1 flatfish. Water very blue-green and opaque/murky
2024-05-23	9:16	MC3	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	800 surf perch, 10 rockfish, lingcod, 3 dungeness crab, 1 striped surf perch. YSI working again
2024-05-23	8:51	MC4	Low	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud	Sanddabs, herring, rockfish, fried egg jellies. YSI not working
2024-05-23	10:07	SD1	Low	0	0	2	2	0	0	0	0	0	0	0	Calm, cloud	1 lingcod, 30 surf perch, 20 kelp perch, 1 tubesnout
2024-05-23	10:37	SI1	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud, light wind	10 sanddab, 1 surf perch, 4 sculpin
2024-05-23	10:55	SI2	Mid	0	0	0	0	0	0	0	0	0	0	0	Calm, cloud, light wind	7 green crabs (killed), sanddabs, 4 sculpin, 1 surf perch
2024-05-23	11:16	SI3	Mid	0	0	0	0	0	0	0	0	1	0	0	Calm, cloud	3 green crab (killed), 2 gunnel, 1 tubesnout, 1 juvenile ling

Appendix III – Sea Lice Analysis

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-25	BS2	chum	50	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS2	chum	46	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS2	chum	53	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS2	chum	49	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS2	chum	48	1.3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	BS2	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
2024-04-25	BS2	chum	45	1.0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	BS2	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
2024-04-25	BS2	chum	45	1.0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
2024-04-25	BS2	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
2024-04-25	BS2	chum	39	0.7	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-25	BS2	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
2024-04-25	BS2	chum	50	1.4	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-25	BS2	chum	50	1.4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
2024-04-25	BS2	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
2024-04-26	BS6	chum	32	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	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
2024-04-26	BS6	chum	42	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	45	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	46	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	50	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	35	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	42	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	47	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	52	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	33	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS6	chum	44	1.3	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	BS6	chum	43	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC1	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
2024-04-26	FC1	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
2024-04-26	FC1	chum	53	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC1	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
2024-04-26	FC1	chum	51	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC1	chum	45	1.0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	FC1	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
2024-04-26	FC1	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
2024-04-26	FC1	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
2024-04-26	FC1	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

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-26	FC1	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
2024-04-26	FC1	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
2024-04-26	FC1	chum	49	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC1	chum	60	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC1	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
2024-04-11	BS1	chum	42	0.7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	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
2024-04-11	BS1	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
2024-04-11	BS1	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
2024-04-11	BS1	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
2024-04-11	BS1	chum	42	0.8	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	45	0.8	1	3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2024-04-11	BS1	chum	40	0.5	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	40	0.6	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	BS1	chum	42	0.7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	40	0.7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	40	0.6	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	BS1	chum	45	0.9	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	41	0.7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS1	chum	41	0.7	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	BS2	chum	44	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	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
2024-04-11	BS2	chum	34	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	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
2024-04-11	BS2	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	chum	36	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	chum	34	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	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
2024-04-11	BS2	chum	41	1.0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	BS2	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
2024-04-11	BS2	chum	36	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	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
2024-04-11	BS2	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
2024-04-11	BS2	chum	34	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	BS2	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
2024-04-11	SI1	chum	40	0.6	4	4	4	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
2024-04-11	SI1	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
2024-04-11	SI1	chum	40	0.6	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	SI1	chum	39	0.5	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-11	SI1	chum	42	0.6	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	SI1	chum	42	0.6	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	SI1	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
2024-04-11	SI1	chum	35	0.5	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	SI1	chum	42	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	SI1	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
2024-04-11	SI1	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
2024-04-11	SI1	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
2024-04-11	SI1	chum	44	0.8	1	5	4	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
2024-04-11	SI1	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
2024-04-11	SI1	chum	35	0.4	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	SI1	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
2024-04-11	MC3	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
2024-04-11	MC3	chum	37	0.5	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	chum	37	0.5	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	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
2024-04-11	MC3	chum	41	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	MC3	chum	30	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	MC3	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
2024-04-25	SI1	chum	40	1.1	1	0	4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2024-04-25	SI1	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
2024-04-25	SI1	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SI1	chum	38	0.9	2	0	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2024-04-25	SI1	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
2024-04-25	SI1	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SI1	chum	38	0.9	2	1	1	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2024-04-25	SI1	chum	40	1.1	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	1	4
2024-04-25	SI1	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
2024-04-25	SI1	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
2024-04-25	SI1	chum	41	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SI1	chum	40	0.9	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	SI1	chum	41	1.2	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-25	SI1	chum	36	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SI1	chum	39	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS4	chum	47	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS4	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
2024-04-26	BS4	chum	46	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	BS4	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
2024-04-26	BS4	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
2024-04-26	BS4	chum	44	0.8	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-26	BS4	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
2024-04-26	BS4	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
2024-04-26	BS4	chum	42	0.7	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	BS4	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
2024-04-26	BS4	chum	52	1.3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	BS4	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
2024-04-26	BS4	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
2024-04-26	BS4	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
2024-04-26	BS4	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
2024-04-11	MC4	chum	40	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	MC4	chum	39	0.5	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	MC4	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
2024-04-11	MC4	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
2024-04-11	MC4	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
2024-04-11	MC1	chum	41	1.0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	MC1	chum	36	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	MC1	chum	35	0.7	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	MC1	chum	41	1.1	0	2	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2024-04-11	MC1	chum	37	0.8	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	MC1	chum	36	0.6	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	MC1	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	MC1	chum	34	0.7	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2024-04-11	MC1	chum	35	0.6	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	MC1	chum	39	0.9	0	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	MC1	chum	42	1.0	0	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2024-04-11	MC1	chum	43	1.3	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	MC1	chum	47	1.5	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	MC1	chum	43	1.2	0	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2024-04-11	MC1	chum	35	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	MC3	chum	39	0.5	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-25	MC3	chum	42	0.7	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	BS3	chum	46	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-26	BS3	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
2024-04-26	BS3	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
2024-04-26	BS3	chum	42	0.7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	BS3	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
2024-04-26	BS3	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
2024-04-26	BS3	chum	40	0.6	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-25	SI2	chum	32	0.4	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-25	SI2	chum	42	0.8	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-25	SI2	chum	40	0.7	1	3	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2024-04-25	SI2	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
2024-04-12	FC2	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
2024-04-12	FC2	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
2024-04-12	FC2	chum	32	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	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
2024-04-12	FC2	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
2024-04-12	FC2	chum	36	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	chum	47	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	chum	47	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	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
2024-04-12	FC2	chum	47	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	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
2024-04-12	FC2	chum	48	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	chum	48	1.5	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-12	FC2	chum	49	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC2	chum	47	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC4	chum	44	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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
2024-04-12	FC4	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

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-26	FC3	chum	47	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	50	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	50	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	49	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	50	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	49	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	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
2024-04-26	FC3	chum	48	1.1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	FC3	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
2024-04-26	FC3	chum	43	1.0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	FC3	chum	52	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	chum	52	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-26	FC3	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
2024-04-26	FC3	chum	50	1.2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-26	FC3	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
2024-04-11	SI2	chum	36	0.4	2	2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2024-04-11	SI2	chum	39	0.5	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	SI2	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
2024-04-11	SI2	chum	34	0.3	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-04-11	SI2	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
2024-04-11	SI2	chum	38	0.5	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2024-04-11	HI1	chum	31	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	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
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	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
2024-04-11	HI1	chum	30	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	30	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	31	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	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
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	HI1	chum	29	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC1	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
2024-04-12	FC1	chum	54	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC1	chum	58	2.1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-12	FC1	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

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-12	FC1	chum	49	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC1	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
2024-04-12	FC1	chum	52	1.5	1	2	1	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	1	5
2024-04-12	FC1	chum	47	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	FC1	chum	38	0.5	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-12	FC1	chum	58	2.0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-12	FC1	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
2024-04-12	FC1	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
2024-04-12	FC1	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
2024-04-12	FC1	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
2024-04-12	FC1	chum	48	1.2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
2024-04-25	SD1	chum	47	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SD1	chum	43	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	SD1	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
2024-04-25	BS1	chum	34	0.7	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2
2024-04-25	BS1	chum	42	1.2	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	3	3
2024-04-25	BS1	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
2024-04-25	BS1	chum	37	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	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
2024-04-25	BS1	chum	39	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	chum	39	1.0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	BS1	chum	36	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	chum	39	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	chum	38	0.9	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	BS1	chum	39	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	chum	38	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	BS1	chum	40	1.0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	BS1	chum	39	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-04-25	BS1	chum	41	1.2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-11	SD1	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
2024-04-11	SD1	chum	32	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	SD1	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
2024-04-11	SD1	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
2024-04-11	SD1	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
2024-04-25	HI1	chum	39	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-25	HI1	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
2024-04-25	MC4	chum	65	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-12	BS5	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
2024-04-12	BS5	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
2024-04-25	HI2	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
2024-04-12	BS4	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
2024-04-11	HI2	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
2024-04-11	HI2	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
2024-04-11	SI3	chum	43	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-11	SI3	chum	39	0.5	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-04-25	SI3	chum	24	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	FC3	chum	62	2.0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	2
2024-05-24	FC3	chum	59	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	chum	128	20.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
2024-05-24	BS4	chum	57	1.6	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2024-05-24	BS4	chum	53	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	chum	58	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	chum	56	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	chum	63	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	chum	56	1.4	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-05-24	BS4	chum	55	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-24	BS4	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
2024-05-23	BS2	chum	67	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-23	BS2	chum	61	1.8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
2024-05-23	BS2	chum	58	1.8	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-05-23	BS2	chum	57	1.5	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-05-23	BS2	chum	72	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-23	BS2	chum	67	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-23	BS2	chum	77	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-23	BS2	chum	57	1.7	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-05-23	BS2	chum	60	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024-05-23	SD1	chum	54	1.4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
2024-05-23	SD1	chum	52	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE COLLECTED	SITE	FISH SPECIES	LENGTH IN MM	WEIGHT IN G	LEP Co	LEP C1	LEP C2	LEP NM NOT ID	LEP PAM	LEP PAF	LEP AM	LEP AF	TOT LEP ID	CAL Co	CAL C1	CAL C2	CAL C3	CAL C4	CAL NM NOT ID	CAL PAM	CAL_PAF	CAL AM	CAL AF	TOT CAL ID	TOT LICE ID
2024-05-23	MC1	chum	87	6.7	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
2024-05-24	FC2	chum	109	12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0