Wild Juvenile Salmonid Monitoring Program 2021 Discovery Islands, BC

Report Date: July 14, 2021

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Summary

Beach seine sampling was conducted on behalf of MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. in the Discovery Islands, BC in 2021. The intent of the sampling program was to monitor sea lice abundance, prevalence and intensity on juvenile wild salmon within the Discovery Islands in support of the Aquaculture Stewardship Certification process for finfish aquaculture sites in the area. Despite many of the aquaculture sites becoming inactive after the December 2020 decision by DFO to issue 18 month licenses to finfish farms in the Discovery Islands region and not permit re-stocking as part of the strategy to phase out open net pen fish farms, the wild juvenile salmon monitoring program continued over the entire region in 2021.

Sampling was conducted at 29 sites within the Discovery Islands, BC during two separate sampling events in April and May 2021, selected to coincide with the peak outmigration period of juvenile salmonids. The sampling sites were chosen based on their locations relative to existing aquaculture sites in the area and adapted from historical purse seine sites sampled by Fisheries and Oceans Canada (DFO) with three additional new sites.

The data presented, including water quality, fish sample composition, fish size and sea lice infestation rates, has in previous years (2017-2020) been divided into two sections based on the locations of the sample sites relative to aquaculture sites in the area and salmon migration routes. Due to the December 2020 decision to not allow many of the sites to restock, the data for 2021 has been divided into three sub-areas, the south area without farms (Pre-exposure), the central area where farms were not active in the 2021 sample period (Inactive) and the north area where farms were active during the 2021 sample period (Post-exposure).

A total of 29 sites were sampled in 2021. Seven of the sites were in locations on the salmon migration route where out-migrating juvenile salmon would be unlikely to be exposed to existing aquaculture sites. These are considered 'pre-exposure' sites. Twelve sites were in locations where aquaculture sites were not restocked after December 2020 due to the change in licensing and inability to obtain a transfer permit to introduce new fish after being harvested or fallowed. These are situated in the 'Inactive' sub-area. Ten sites were in locations where migrating salmon would be exposed to existing aquaculture sites at some point along their migration route. These are considered 'post-exposure' sites.

Thirty individuals from each target fish species or the total number of captured individuals from each target species (if less than 30 were captured) were collected from each of the 29 sites during the sampling events. Total catch numbers of each species were recorded. Surface water temperature and salinity were recorded at each site during each sampling event.

Retained fish were frozen and delivered to the Center for Aquatic Health Sciences (CAHS) for laboratory analysis. Sea lice infestation data was tabulated by CAHS and provided to Mainstream Biological Consulting for analysis and reporting. Sea lice observed on the individual fish specimens during laboratory analysis were identified as either *Lepeophtheirus spp.* or *Caligus sp.* These lice are assumed to be *Lepeophtheirus salmonis* and *Caligus 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 report documents the observed sea lice infestation rate on wild juvenile salmon retained in the Pre-Exposure, Inactive and Post-Exposure sub-areas in the Discovery Islands in 2021.

A total of 342 individual samples from Pre-Exposure beach seine sites underwent lab analysis for sea lice infestation in 2021. This included 203 chum (*Oncorhynchus keta*) and 139 pink (O. nerka) salmon. Of the 342 fish collected from Pre-Exposure sites, 76 individuals were infested with 98 sea lice. The calculated prevalence for the total Pre-Exposure sample population was 22.2 %. The sea lice abundance was 0.29 and the average intensity was 1.3 for the Pre-Exposure sample population collected in the Discovery Islands in 2021.

A total of 967 chum salmon were captured, representing 63.8 % of all captured Pre-Exposure fish. Of the 967 chum captured, 203 were retained for lab analysis for sea lice infestation. A total of 42 chum smolts were found to be infested with 58 lice resulting in a calculated prevalence of 20.7 %, an abundance of 0.29 and an average intensity of 1.4 for the Pre-Exposure chum salmon sample population.

A total of 548 pink salmon were captured at Pre-Exposure sites, representing 36.2 % of all fish in the Pre-Exposure sub-area. Of the 548 pinks captured, 139 were kept for lab analysis for sea lice infestation. A total of 34 pink salmon were found to be infested with 40 lice resulting in a calculated prevalence of 24.4 %, an abundance of 0.29 and an average intensity of 1.2 for the Pre-Exposure pink salmon sample population.

For the total Pre-Exposure sample population (n=342), a total of 21 *L. salmonis* sea lice of various life stages were identified on 32 individuals and 77 *C. clemensi* sea lice were found on 65 of the samples analyzed in the lab. There were eight samples infested with both *L. salmonis* and *C. clemensi*.

For the Pre-Exposure chum salmon sample population, a total of 11 *L. salmonis* sea lice of various life stages were identified on 11 juvenile chum salmon and 47 *C. clemensi* sea lice were found on 35 of the juvenile chum salmon. Four juvenile chum salmon were infested with both *L. salmonis* and *C. clemensi*.

For the Pre-Exposure pink salmon sample population, a total of 30 *C. clemensi* sea lice were found on 26 of the juvenile pink salmon and 10 *L. salmonis* sea lice were identified on 10 juvenile pink salmon. There were two pink salmon infested with both species of sea lice.

A total of 815 individual samples from the beach seine sites within the Inactive sub-area underwent lab analysis for sea lice infestation including 435 chum and 380 pink salmon. From the total Inactive sub-area sample population, 94 individuals were infested with 111 sea lice. The calculated prevalence for the total Inactive sub-area sample population collected in 2021 was 11.5 %; the sea lice abundance was 0.14 and the average intensity was 1.1.

A total of 2823 Inactive chum salmon were captured in the Inactive sub-area, representing 32.0 % of all captured fish for that area. Of the 2823 chum captured, 435 were retained for lab analysis for sea lice infestation. A total of 48 chum smolts were found to be infested with 55 lice resulting in a calculated prevalence of 11.0 %, an abundance of 0.13 and an average intensity of 1.1 for the Inactive sub-area chum salmon sample population.

A total of 5985 pink salmon were captured, representing 67.7 % of all fish captured in the Inactive sub-area sampling. Of the 5985 pinks captured, 380 were kept for lab analysis

for sea lice infestation. A total of 46 pink salmon were found to be infested with 56 lice resulting in a calculated prevalence of 12.1 %, an abundance of 0.15 and an average intensity of 1.2 for the pink salmon sample population in the Inactive sub-area.

For the combined Inactive sub-area sample population, a total of 46 *L. salmonis* sea lice of various life stages were identified on 45 individuals and 65 *C. clemensi* sea lice were found on 57 of the samples analyzed in the lab. There were eight samples that were infested with both *L. salmonis* and *C. clemensi*.

For the Inactive sub-area chum salmon sample population, a total of 24 *L.salmonis* sea lice of various life stages were identified on 24 juvenile chum salmon and 31 *C. clemensi* sea lice were found on 28 of the juvenile chum salmon. There were four juvenile chum salmon infested with both *L. salmonis* and *C. clemensi*.

For the Inactive sub-area pink salmon sample population, a total of 22 *L. salmonis* sea lice of various life stages were identified on 21 juvenile pink salmon and 34 *C.clemensi* sea lice were found on 29 of the juvenile pink salmon. There were four juvenile pink salmon infested with both *L. salmonis* and *C. clemensi*.

A total of 609 individual samples from the Post-Exposure beach seine sites underwent lab analysis for sea lice infestation including 280 chum and 329 pink salmon. From the total Post-Exposure sample population, 77 individuals were infested with 98 sea lice. The calculated prevalence for the total Post-Exposure sample population collected in the Discovery Islands in 2021 was 12.6 %; the sea lice abundance was 0.16 and the average intensity was 1.3.

A total of 1492 chum salmon were captured in the Post-Exposure sub-area, representing 37.9 % of all captured fish in that area. Of the 1492 chum captured, 280 were retained for lab analysis for sea lice infestation. A total of 48 chum smolts were found to be infested with 65 lice resulting in a calculated prevalence of 17.1 %, an abundance of 0.23 and an average intensity of 1.4 for the Post-Exposure chum salmon sample population.

A total of 2281 pink salmon were captured in the Post-Exposure sub-area, representing 58.0 % of all captured fish in that area. Of the 2281 pink salmon captured, 329 were kept for lab analysis for sea lice infestation. A total of 29 pink salmon were found to be infested with 33 lice resulting in a calculated prevalence of 8.8 % and an abundance of 0.10 and an average intensity of 1.1 for the Post-Exposure pink salmon sample population.

For the Post-Exposure combined sample population, a total of 51 *L. salmonis* sea lice of various life stages were identified on 44 individuals and 47 *C. clemensi* sea lice were found on 42 of the samples analyzed in the lab. There were nine samples that were infested with both *L. salmonis* and *C. clemensi*.

For the Post-Exposure sub-area chum salmon sample population, a total of 39 *L.* salmonis sea lice of various life stages were identified on 32 juvenile chum salmon and 26 *C. clemensi* sea lice were found on 23 of the juvenile chum salmon. There were seven juvenile chum salmon infested with both *L. salmonis* and *C. clemensi*.

For the Post-Exposure pink salmon sample population, a total of 12 *L. salmonis* sea lice of various life stages were identified on 12 juvenile pink salmon and 21 *C. clemensi* sea lice were found on 19 of the juvenile pink salmon. There were two juvenile pink salmon infested with both *L. salmonis* and *C. clemensi*.

The following summary tables provide a comparison of Pre-Exposure, Inactive and Post-Exposure sub areas sea lice infestation statistics on pink and chum salmon collected in the Discovery Islands in 2021.

Species	Sample Sub-area	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
	Pre- Exposure	203	58	42	20.7	0.29	1.4
chum	Inactive	435	55	48	11.0	0.13	1.1
	Post- Exposure	280	65	48	17.1	0.23	1.4
	Pre- Exposure	139	40	34	24.4	0.29	1.2
pink	Inactive	380	56	46	12.1	0.15	1.2
	Post- Exposure	329	33	29	8.8	0.10	1.1

A breakdown of the sea lice species infestation statistics for pink and chum salmon captured in each sub-area in 2021 is presented below.

Fish Sample		Caligus clemensi			Lepeophtheirus salmonis		
Species	Sub-area	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
chum (n=203)	Pre- Exposure	17.2	0.23	1.3	5.4	0.05	1.0
chum (n=435)	Inactive	6.4	0.07	1.1	5.5	0.06	1.0
chum (n=280)	Post- Exposure	8.2	0.09	1.1	11.4	0.13	1.2
pink (n=139)	Pre- Exposure	18.7	0.22	1.2	7.2	0.07	1.0
pink (n=380)	Inactive	7.6	0.9	1.2	5.5	0.06	1.0
pink (n=329)	Post- Exposure	5.8	0.6	1.1	3.6	0.04	1.0

A comparison of the prevalence, abundance and average intensity of sea lice species found on chum and pink salmon was also completed for sample data collected in the Discovery Islands between 2017 and 2021.

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1.0 Introduction

At the request of MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. beach seine sampling to capture wild juvenile salmon to be analyzed for sea lice infestation took place at 29 sites in the Discovery Islands, BC (Figure 1). The sample collection occurred on April 19/20 and May 25/26, 2021. These dates were selected to coincide with the estimated peak outmigration dates of juvenile chum (*Oncorhynchus keta*) and pink (*O. nerka*) salmon.

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* (*C. 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 the natural hosts of *L. salmonis* on the Pacific coast have been found to include Pacific salmon, threespine stickleback and Pacific herring. *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 genera have similar life histories and developmental stages (Kabata, 1972; Johnson and Albright, 1991a). The sea lice hatch from eggs and go 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 a number of 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 detach from their hosts and can 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 that influence sea lice development, growth, survival and reproductive rate. In British Columbia, surface seawater temperatures generally range from approximately 6 °C to 13 °C. Research on sea lice abundance conducted in the Discovery Islands and elsewhere on the coast of British Columbia indicates that surface water temperature during the winter months does not appear to hinder the seasonal abundance of *L. salmonis* (Saksida et al., 2007a, b). The rate of development and generation times for *C. elongates* are strongly temperature dependent (Tully, 1992) and although this research has not been conducted, similar relationships with temperature are to 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).

MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. have undertaken annual monitoring of sea lice abundance, prevalence and intensity on juvenile wild salmon within the Discovery Islands in support of the Aquaculture Stewardship Certification for their active aquaculture sites within the region since 2017. In December 2020, DFO implemented a strategy to phase out 19 finfish farms in the Discovery Islands by issuing 18 month licenses that would allow active farms to complete their production cycles but not allow harvested or fallowed farms to restock¹. While this resulted ina

¹ https://www.canada.ca/en/fisheries-oceans/news/2020/12/measures-to-phase-out-salmon-farming-in-the-discovery-islands-area.html

many previously active sites to be inactive in the 2021 sampling season, the decision was made to continue with the annual wild juvenile salmon monitoring over the entire region in 2021.

This data report documents the observed sea lice infestation statistics on retained juvenile salmonids collected in the Discovery Islands in 2021. Data presented, including water quality, fish sample composition, fish size and sea lice infestation rates, have in previous years (2017-2020) been divided into two areas based on the locations of the sample sites relative to aquaculture sites in the area and salmon migration routes. With many of the sites in the area inactive in 2021 the data for this year has been divided into three sub-areas, including the southern area without farms (Pre-exposure), the central area where farms were not active in the 2021 sample period (Inactive) and the north area where farms were active during the 2021 sample period (Post-exposure) (Table 1; Figure 2).

A total of 29 sites were sampled in 2021. Seven of the sites were in locations on the salmon migration route where out-migrating juvenile salmon would be unlikely to be exposed to existing aquaculture sites. These are considered 'pre-exposure' sites. Twelve sites were in locations where aquaculture sites were inactive due to the recent DFO licensing conditions. These are in the 'Inactive' sub-area. Ten sites were in locations where migrating salmon would be exposed to existing (active) aquaculture sites at some point along their migration route. These are considered 'post-exposure' sites.

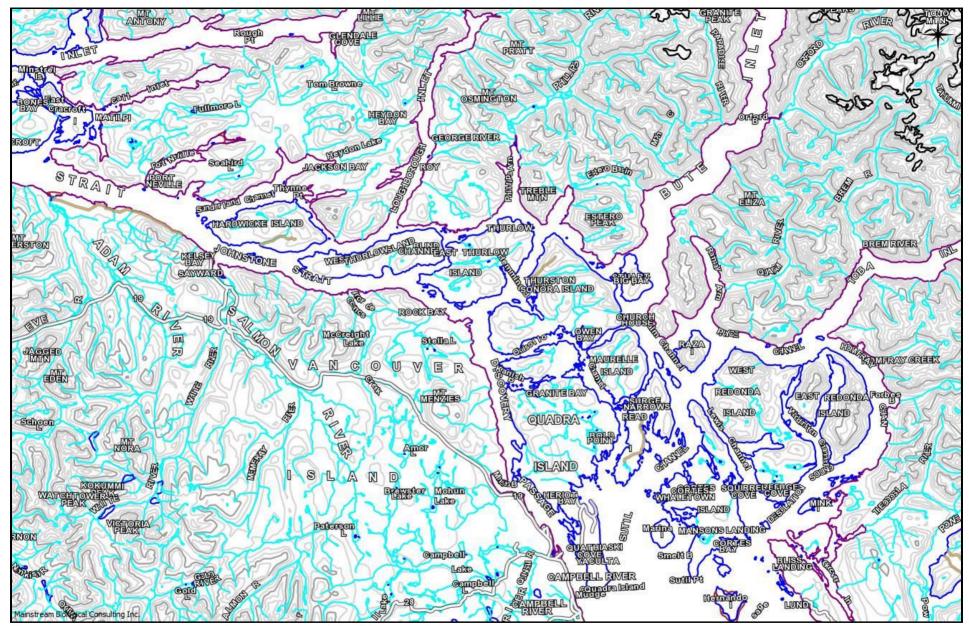


Figure 1: An overview map showing the extent of the Discovery Islands survey area.

2.0 Methods

The fish inspected for sea lice infestation were collected from 29 sites in the Discovery Islands, BC (Figure 2). These sites were chosen based on their locations relative to active or inactive aquaculture sites in the area and adapted from historical purse seine sites sampled by Fisheries and Oceans Canada with three sites added. Two sampling events were completed in 2021, with the goal of sampling each site once during each sampling event. Sampling was conducted on April 19/20 and May 25/26, 2021.

2.1 Site Locations

The approximate locations of the 29 sampling sites are shown in Figure 2. GPS coordinates collected in the field for the sites are presented in Table 1.

Table 1: The site name and location coordinates of the 29 beach seine sites where fish were collected for sea lice analysis in the Discovery Islands in 2021.

Sub-area	Site Name	Latitude	Longitude
	Francisco Point	50 00.467	125 09.031
	Marina Island	50 04.708	125 04.225
	Rebecca Spit	50 05.823	125 11.061
Pre-Exposure	Viner Point	50 07.886	125 07.809
	SE Hill Island	50 09.573	125 03.600
	Penn Island	50 11.018	125 01.449
	Deepwater Bay	50 10.669	125 19.641
	Raza	50 19.184	124 58.959
	Raza North	50 21.057	125 02.542
	Okisollo	50 18.499	125 19.865
	Owen Bay	50 19.192	125 14.042
	Rock Bay	50 19.659	125 28.380
Inactivo	Discovery	50 20.507	125 23.968
Inactive	Nodales	50 24.092	125 20.943
	Shoal Bay	50 27.467	125 22.061
	Fanny Bay	50 31.182	125 23.210
	Bickley Bay	50 26.684	125 23.825
	Knox Bay	50 23.618	125 36.348
	Francisco Point 50 00.467 Marina Island 50 04.708 Rebecca Spit 50 05.823 Viner Point 50 07.886 SE Hill Island 50 09.573 Penn Island 50 11.018 Deepwater Bay 50 10.669 Raza 50 19.184 Raza North 50 21.057 Okisollo 50 18.499 Owen Bay 50 19.192 Rock Bay 50 19.659 Discovery 50 20.507 Nodales 50 24.092 Shoal Bay 50 27.467 Fanny Bay 50 31.182 Bickley Bay 50 26.684	125 38.099	
	Cordero	50 26.953	125 32.677
	Chancellor	50 24.563	125 43.797
	Race Passage	50 23.076	125 53.227
	Wellbore	50 27.167	125 46.127
Doct Evacure	Bessborough Bay	50 29.519	125 46.443
Post-Exposure		50 28.212	125 50.607
	Blenkinsop Bay	50 28.732	125 59.983
		50 28.546	126 03.880
		50 25.805	126 01.769
	Beautiful Bay	50 26.895	126 05.066

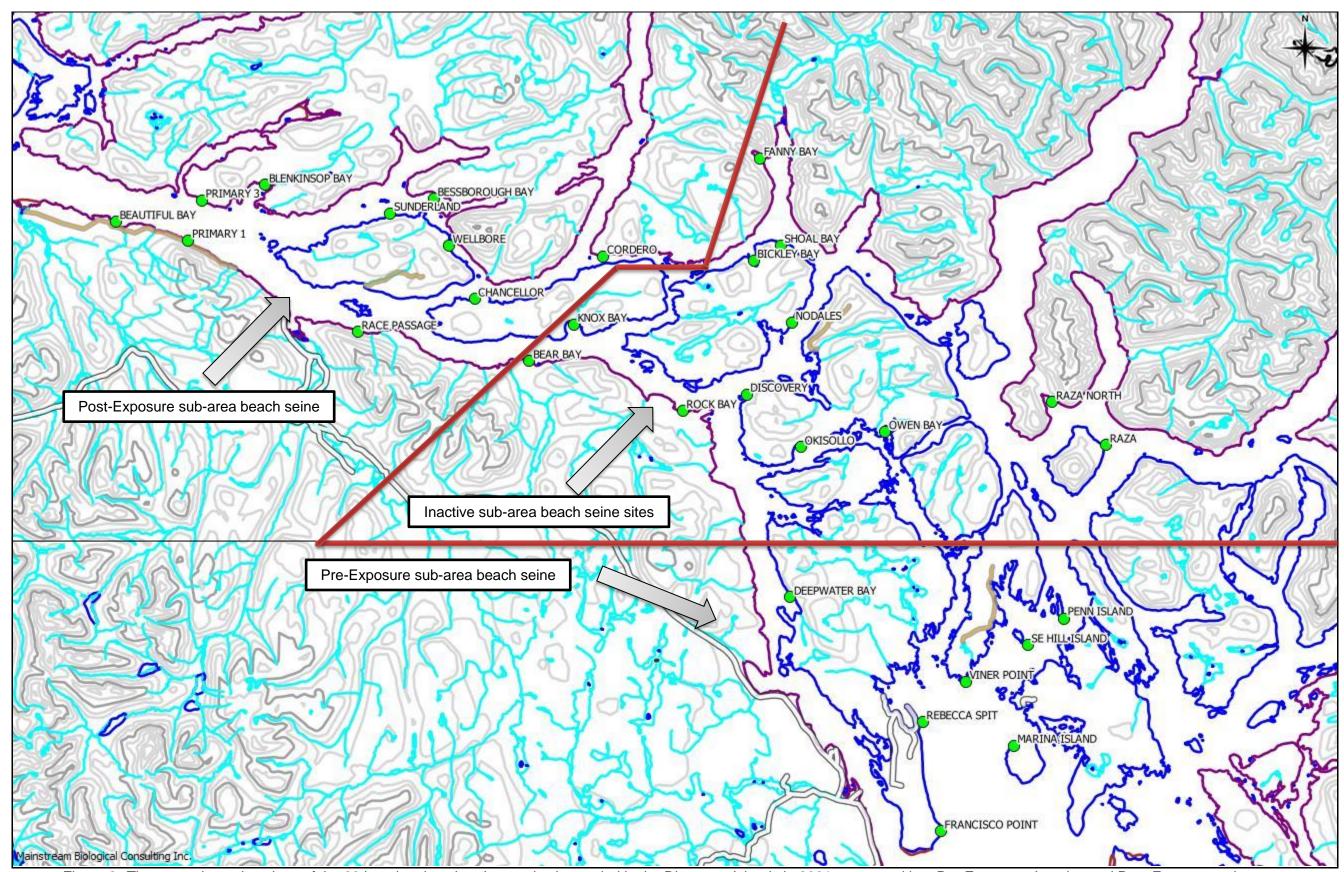


Figure 2: The approximate locations of the 29 beach seine sites (green dots) sampled in the Discovery Islands in 2021, separated into Pre-Exposure, Inactive and Post-Exposure sub-areas.

2.2 Field Procedures

The procedures implemented for beach seining, fish collection and field data recording in the Discovery Islands during the 2021 sampling period were adapted from those utilized by Fisheries and Oceans Canada (DFO).

An 18 ft Boston Whaler powered by a 70 horsepower outboard motor was used to access the beach seine 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. The centre bunt section consisted of one-quarter inch diameter diamond mesh, with two side panels (wings) of 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.

Sampling was completed at some sites with assistance of a Wei Wai Kum Fisheries Guardian.

A three or four-person crew conducted the beach seine sets. All sampling sites were approached slowly by boat and the first 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 another crewmember ensured the net deployed smoothly off the bow or side of the boat. 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 crewmember on the bow of the boat 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, a sample of surface water was collected to measure salinity and water temperature data using an Oakton® SALT 6+ meter.

Crewmembers retrieved the net evenly from both 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.

All crew members participated in the collection of individual fish to ensure that captured fish remained in the net for as short a period as possible. The net was manipulated as needed in response to changing tides to ensure the captured fish remained in the net and were held in sufficient water to minimize contact with the net or with other fish.

A total of 30 individuals from each target species (chum and pink) captured or all of the individuals present (if less than 30) were collected as samples for sea lice infestation analysis. Individual fish were "swam" into an appropriately sized whirl-pak bag. All handling of fish was kept to a minimum.

Once all fish for retention were bagged, 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.

Information from each beach seine set was recorded in a standardized field form. The information recorded included the following:

- Site name;
- 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) and salinity (ppt) to one decimal place;
- Exact GPS coordinates: and
- The number of salmonid mortalities.

The retained fish from each site were packaged separately in re-sealable bags and labelled with the site name, the date, sample numbers and species. Site sample bags were placed in a cooler with sufficient ice packs during sampling. A portable freezer, which was plugged into the truck was used to transport the specimens from the boat launch to the office. 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.

A fourth person remained on a crew boat for additional support. Two out of the three shore crew were transferred to the crew boat for transportation between sites.

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

2.3 Laboratory Procedures

Collected sample fish were frozen and delivered to the Center for Aquatic Health Sciences (CAHS) for laboratory analysis. Sea lice observed on the individual fish specimens during laboratory analysis were identified as either non-motile chalimus, or motile pre-adults and adults. Lice were identified as either of the two chalimus stages for *Lepeophtheirus salmonis* (Hamre et al., 2013) or four chalimus stages for *Caligus 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. Sea lice infestation data was tabulated by CAHS and provided to Mainstream Biological Consulting for reporting.

Data provided by CAHS also included measured fork length in millimetres and weight (recorded to the nearest hundredth of a gram). Lengths and weights were recorded with the specimen's corresponding sea lice analysis results.

2.4 Data Analysis

All data collected was analysed and has been summarized into three separate sub-areas based on location of the sample sites: Pre-Exposure, Inactive and Post-Exposure. Pre-Exposure sites included the seven southernmost sites where no fish farm tenures currently exist. These included Francisco Point, Marina Island, Rebecca Spit, Viner Point, SE Hill Island, Penn Island and Deepwater Bay. Fish collected from this area are considered to not have been exposed to fish farms (Table 1, Figure 2). Post-Exposure sites included the 10 northernmost sites in the vicinity of existing active farm tenures. Fish captured at these sites may or may not have migrated past fish farms (Table 1.

Figure 2). The remaining 12 Removed Farm sites are located in the area of the Discovery Islands between the Pre-Exposure and Post-Exposure sites where farms did not restock prior to and during the 2021 sampling period.

Surface water quality data collected for temperature and salinity was summarized to report the minimum and maximum values as well as the calculated averages for each sample week.

Beach seine fish sample composition was summarized by species and site for each week. The fork lengths and weights of the juvenile salmon sample population were summarized to present minimum and maximum values as well as calculated averages. Sea lice infestation rates, including the number of infested fish and the number of sea lice identified, were determined for the Pre-Exposure, Inactive and Post-Exposure subareas 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 the combined sample population and for chum and pink 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 the combined sample population and chum and pink salmon.

The intensity of sea lice infestation, as described by the number of sea lice found on a single salmon 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 presentation and discussion of the number of sea lice found on fish specimens collected from each site within the Pre-Exposure, Inactive Post-Exposure sub-areas during each of the sampling events in 2021.

3.0 Results

The following sections outline the results of beach seine collection and subsequent sea lice infestation analysis of juvenile salmonids collected from the Discovery Islands, BC, in 2021. The results are presented in three separate sections based on whether data was collected from Pre-Exposure (southern), Inactive (central) or Post-Exposure (northern) sites.

Water quality field data is presented in Appendix I, beach seine fish capture data is included in Appendix II and data on the sample population including sea lice lab analysis results provided by CAHS are provided in Appendix III.

3.1 Pre-Exposure Water Quality Parameters

Surface measurements of water temperature and salinity collected at each of the seven Pre-Exposure sites are presented in Table 2. The complete environmental dataset is also included in Appendix I.

Recorded surface water temperatures at Pre-Exposure sub-area sites ranged from a low of 10.5°C recorded at Francisco Point on May 25, 2021, to a high of 15.1°C recorded at SE Hill Island also on May 25, 2021 (Table 2; Appendix I). Average surface water temperatures increased from 12.3 °C for April 19/20, 2021, to 13.7 °C for May 25/26, 2021.

Recorded surface water salinity at Pre-Exposure sites ranged from a low of 27.9 ppt recorded at Deepwater Bay on April 20, 2021, to a high of 31.6 ppt recorded at Francisco Point on May 25, 2021 (Table 2; Appendix I). The average surface water salinity remained constant over the two sample periods averaging 29.7 ppt for April 19/20, 2021, and 29.8 ppt for May 25/26, 2021.

Table 2:	Surface water quality parameters collected at Pre-Exposure beach seine sites
	in the Discovery Islands in 2021.

Site Name	April	April 19/20		25/26
Site Name	Temp. (°C)	Salinity (ppt)	Temp. (°C)	Salinity (ppt)
Francisco Point	11.3	29.9	10.5	31.6
Marina Island	12.7	30.6	13.7	29.9
Rebecca Spit	11.8	30.0	15.0	29.3
Viner Point	12.1	30.1	13.7	28.8
SE Hill Island	12.2	29.8	15.1	29.8
Penn Island	12.0	29.7	14.6	29.2
Deepwater Bay	13.9	27.9	13.0	29.9
Average	12.3	29.7	13.7	29.8

3.2 Inactive Sub-area Water Quality Parameters

Surface measurements of water temperature and salinity collected at each of the 12 sites in the Inactive sub-area are presented in Table 3. The complete environmental dataset is also included in Appendix I.

Recorded surface water temperatures at sites in this sub-area ranged from a low of 8.5°C recorded at Rock Bay on April 20, 2021, to a high of 17.7°C recorded at Raza

North on May 25, 2021 (Table 2; Appendix I). Average surface water temperatures increased from 11.9 °C for April 19/20, 2021, to 12.6 °C for May 25/26, 2021.

Recorded surface water salinity at the Inactive sub-area sites ranged from a low of 2.6 ppt recorded at Fanny Bay on April 20, 2021, to a high of 31.7 ppt recorded at Rock Bay on May 26, 2021 (Table 2; Appendix I). The average surface water salinity increased from 22.5 ppt on April 19/20, 2021, to 26.5 ppt on May 25/26, 2021.

Table 3: Surface water quality parameters collected at the Inactive sub-area beach seine sites in the Discovery Islands in 2021.

Cita Nama	April	April 19/20		May 25/26	
Site Name	Temp. (°C)	Salinity (ppt)	Temp. (°C)	Salinity (ppt)	
Raza	12.2	28.7	15.9	22.7	
Raza North	14.1	26.5	17.7	21.7	
Rock Bay	8.5	28.4	9.8	31.7	
Bear Bay	8.6	29.7	10.1	31.5	
Knox Bay	9.0	29.1	10.6	31.2	
Bickley Bay	11.2	6.9	11.2	30.3	
Fanny Bay	11.5	2.6	12.7	5.3	
Shoal Bay	13.4	5.9	11.5	26.9	
Nodales	14.8	25.3	12.8	28.7	
Discovery	12.5	28.9	12.5	29.4	
Owen Bay	13.9	29.2	13.3	29.3	
Okisollo	13.5	28.5	13.3	29.0	
Average	11.9	22.5	12.6	26.5	

3.3 Post-Exposure Water Quality Parameters

Surface measurements of water temperature and salinity collected at each of the 10 Post-Exposure sub-area sites are presented in Table 4. A complete dataset is also included in Appendix I.

Recorded surface water temperatures at Post-Exposure sites ranged from a low of 8.5°C recorded at Primary 1 and Primary 3 (April 19 and May 25, 2021), to a high of 14.7 °C recorded at Chancellor on April 19, 2021 (Table 3; Appendix I). Calculated weekly average surface water temperatures decreased from 10.4 °C for April 19/20, 2021, to 9.4 °C for May 25/26, 2021.

Recorded surface water salinity at Post-Exposure sites ranged from a low of 13.2 ppt recorded at Chancellor on May 25, 2021, to a high of 30.3 ppt recorded at Cordero also on May 25, 2021 (Table 3; Appendix I). The calculated weekly average surface water salinity remained consistent with a slight decrease from 27.3 ppt for April 19/20, 2021, to 26.8 ppt for May 25/26, 2021.

Table 4: Surface water quality parameters collected at the Post-Exposure beach seine sites in the Discovery Islands in 2021.

Site Name	April	19/20	May 25/26			
Site Name	Temp. (°C)	Salinity (ppt)	Temp. (°C)	Salinity (ppt)		
Primary 1	8.5	26.4	8.5	24.5		
Beautiful Bay	9.0	29.6	8.7	29.2		
Primary 3	8.5	29.9	8.7	30.1		
Blenkinsop Bay	10.2	29.4	9.8	30.0		
Sunderland	9.2	29.9	9.3	25.4		
Bessborough Bay	10.7	29.4	9.2	27.7		
Wellbore	12.1	27.7	9.3	27.8		
Chancellor	14.7	23.3	9.7	13.2		
Race Passage	10.8	18.8	9.7	29.8		
Cordero	10.5	28.5	11.4	30.3		
Average	10.4	27.3	9.4	26.8		

3.4 Fish Sample Composition

A total of 14285 fish were captured from all sites during beach seine sampling conducted in the Discovery Islands in 2021. Of those, 1766 individual fish (12.4 %) were retained as sample specimens and underwent analysis for sea lice infestation (Table 5). The total collected fish and the representative percentage of the total beach seine capture population for each species are presented in Table 5. Pink salmon and chum salmon were the most common species captured during sampling in 2021. Of the 8814 pink salmon captured, 848 individuals (9.6 %) were retained and underwent lab analysis. Of the 5282 chum salmon captured, 918 individuals (17.4 %) were retained and underwent lab analysis. None of the 124 coho salmon and none of the 65 chinook salmon captured were retained or analyzed for sea lice infestation. No threespine stickleback or Atlantic salmon were captured during 2021 sampling in the Discovery Islands.

A summary of the total number of fish captured and collected as specimens at each site over the collection period is provided in Table 9. A complete dataset showing fish capture and collection totals by site in 2021 can be found in Appendix II. At least one salmonid sample was captured at every site during both of the two sampling periods in 2021.

Table 5: The total of collected individuals of each fish species captured in the Discovery Islands, BC in April and May 2021, and the percentage of the total capture population that they represent.

Common Name	Capture Totals (% of total capture population)	Collection Totals	Collection %
chum salmon	5282 (37.0 %)	918	17.4
pink salmon	8814 (61.7 %)	848	12.4
coho salmon	124 (0.9 %)	0	0.0
chinook salmon	65 (0.5 %)	0	0.0
All species	14285	1766	12.4

3.4.1 Pre-Exposure Sample Composition

A total of 1515 fish were captured during beach seine sampling conducted in the Pre-Exposure sites in the Discovery Islands in 2021. Of those, 342 individual fish (22.6 %) were collected as sample specimens and underwent analysis for sea lice infestation (Table 6). The total collected fish from each species and the percentage that it represents of the total Pre-Exposure capture population are shown in Table 6. Of the 967 chum salmon captured, 203 individuals (21.0 %) were retained and underwent lab analysis. Of the 548 pink salmon captured, 139 individuals (25.4 %) were retained and underwent lab analysis.

Table 6: The total number of collected individuals of each fish species captured in the Pre-Exposure sites in the Discovery Islands, BC, in April and May 2021, and the percentage of the total Pre-Exposure capture population that they represent.

Common Name	Capture Totals (% of total pre-exposure capture population)	Collection Totals	Collection %
chum salmon	967(63.8 %)	203	21.0
pink salmon	548 (36.2 %)	139	25.4
All species	1515	342	22.6

3.4.2 Inactive Sub-area Sample Composition

A total of 8834 fish were captured during beach seine sampling conducted at the sites in the Inactive sub-area in the Discovery Islands in 2021. Of those, 815 individual fish (9.2%) were collected as sample specimens and underwent analysis for sea lice infestation (Table 7). The total collected fish from each species and the percentage that it represents of the total beach seine post exposure capture population is shown in Table 7. Of the 2823 chum salmon captured, 435 individuals (15.4%) were retained and underwent lab analysis. Of the 5985 pink salmon captured, 380 individuals (6.3%) were retained and underwent lab analysis. None of the 5 coho salmon captured or the 21 chinook salmon that were captured were retained or underwent lab analysis.

Table 7: The total of collected individuals of each fish species captured in the Inactive sub-area sites in the Discovery Islands BC, in April and May 2021, and the percentage of the total Inactive sub-area capture population that they represent.

Common Name	Capture Totals (% of total post-exposure capture population)	Collection Totals	Collection %	
chum salmon	2823 (32.0 %)	435	15.4	
pink salmon	5985 (67.7 %)	380	6.3	
coho salmon	5 (0.06%)	0	0	
chinook salmon	21 (0.2 %)	0	0	
All species	8834	815	9.2	

3.4.3 Post-Exposure Sample Composition

A total of 3936 fish were captured during beach seine sampling conducted at the Post-Exposure sites in the Discovery Islands in 2021. Of those, 609 individual fish (15.5%) were collected as sample specimens and underwent analysis for sea lice infestation (Table 8). The total collected fish from each species and the percentage that it represents of the total beach seine post exposure capture population is shown in Table 8. Of the 1492 chum salmon captured, 280 individuals (18.8%) were retained and underwent lab analysis. Of the 2281 pink salmon captured, 329 individuals (14.4%) were retained and underwent lab analysis. None of the 119 coho salmon or 44 chinook salmon that were captured were retained or underwent lab analysis.

Table 8: The total of collected individuals of each fish species captured in the Post-Exposure sites in the Discovery Islands BC, in April and May 2021, and the percentage of the total Post-Exposure capture population that they represent.

Common Name	Capture Totals (% of total post-exposure capture population)	Collection Totals	Collection %
chum salmon	1492 (37.9 %)	280	18.8
pink salmon	2281 (58.0 %)	329	14.4
coho salmon	119 (3.0 %)	0	0.0
chinook salmon	44 (1.1%)	0	0.0
All species	3936	609	15.5

Table 9: The number of captured fish (Capture Total) and the number of individual fish collected (Sample Total) from each of the 29 sample sites in the Discovery Islands, BC in April and May 2021, separated into Pre-Exposure, Inactive and Post-Exposure sub-area totals.

		Pi	nk	Ch	um	Co	ho	Chin	ook	Soc	keye		
Site Location (Sub-area)	Site Name	Capture Total	Sample Total	Capture Total	Sample Total								
	Francisco Point	395	56	414	64	0	0	0	0	0	0	809	120
	Marina Island	55	37	73	41	0	0	0	0	0	0	128	78
	Rebecca Spit	0	0	268	29	0	0	0	0	0	0	268	29
Pre-Exposure	Viner Point	8	8	6	6	0	0	0	0	0	0	14	14
	SE Hill Island	87	35	134	31	0	0	0	0	0	0	221	66
	Penn Island	2	2	3	3	0	0	0	0	0	0	5	5
	Deepwater Bay	1	1	69	29	0	0	0	0	0	0	70	30
Pre-Exposure Sites Subtotals		548	139	967	203	0	0	0	0	0	0	1515	342
Raza		0	0	66	45	1	0	0	0	0	0	67	45
	Raza North	0	0	112	60	1	0	0	0	0	0	113	60
	Rock Bay	83	41	5	5	0	0	1	0	0	0	89	46
	Bear Bay	2073	60	18	18	0	0	0	0	0	0	2091	78
	Knox Bay	66	36	38	28	0	0	0	0	0	0	104	64
	Bickley Bay	540	40	711	59	0	0	0	0	0	0	1251	99
Inactive	Fanny Bay	84	44	95	35	0	0	20	0	0	0	199	79
	Shoal Bay	2771	62	1408	58	0	0	0	0	0	0	4179	120
	Nodales	221	65	115	35	0	0	0	0	0	0	336	100
	Discovery	145	30	146	31	0	0	0	0	0	0	291	61
	Okisollo	2	2	49	31	0	0	0	0	0	0	51	33
	Owen Bay	0	0	60	30	3	0	0	0	0	0	63	30
Inactiv	re Sites Subtotals	5985	380	2823	435	5	0	21	0	0	0	8834	815
	Primary 1	63	38	7	7	0	0	3	0	0	0	73	45
	Beautiful Bay	345	64	75	63	0	0	3	0	0	0	423	127
	Primary 3	75	30	32	32	103	0	6	0	0	0	216	62
	Blenkinsop Bay	1	1	17	17	6	0	0	0	0	0	24	18
···········	Sunderland	4	4	0	0	0	0	0	0	0	0	4	4
ost-Exposure	Bessborough Bay	13	13	4	4	7	0	30	0	0	0	54	17
	Wellbore	819	49	831	61	0	0	0	0	0	0	1650	110
	Chancellor	46	36	271	61	0	0	0	0	0	0	317	97
	Race Passage	662	61	7	7	2	0	1	0	0	0	672	68
	Cordero	253	33	248	28	1	0	1	0	0	0	503	61
Post-Expo	sure Sites Subtotals	2281	329	1492	280	119	0	44	0	0	0	3936	609
Discov	ery Islands Totals	8814	848	5282	918	124	0	65	0	0	0	14285	1766

3.5 Pre-Exposure Fish Sample Size Statistics

Summary statistics for the Pre-Exposure sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 10).

3.5.1 Chum Salmon

The weight of 203 chum smolts collected during the two sample events at the Pre-Exposure sub-area sites in the Discovery Islands in 2021 ranged from 0.30 g to 13.26 g and averaged 1.34 g (SD = 0.1.80). The fork length of the chum smolts ranged from 32 mm to 105 mm and averaged 45 mm (SD = 12). Chum salmon weight and length data was summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 10).

3.5.2 Pink Salmon

The weight of 139 pink smolts collected during the two sample events at the Pre-Exposure sub-area sites in the Discovery Islands in 2021 ranged from 0.24 g to 20.44 g and averaged 1.41 g (SD = 2.31). The fork length of the pink smolts ranged from 31 mm to 115 mm and averaged 45 mm (SD = 15) (Table 10). Pink salmon weight and length data was summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 10).

Table 10: Average weights and lengths of the chum and pink salmon collected in the Pre-Exposure sub-area in the Discovery Islands in 2021, summarized by month.

Species	Average V	Veight (g)	Average Length (mm)			
Species	April	May	April	May		
Chum	0.69 (n=141)	2.81 (n=62)	39	58		
Pink	0.56 (n=98)	3.47 (n=41)	38	67		

3.6 Inactive Sub-area Fish Sample Size Statistics

Summary statistics for the Inactive sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 11).

3.6.1 Chum Salmon

The weight of 435 chum smolts collected during the two sample events at the Inactive sub-area sites in the Discovery Islands in 2021 ranged from 0.25 g to 6.39 g and averaged 0.92 g (SD = 0.74). The fork length of the chum smolts ranged from 31 mm to 84 mm and averaged 42 mm (SD = 9). Chum salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 10).

3.6.2 Pink Salmon

The weight of 380 pink smolts collected during the two sample events at the Inactive sub-area sites in the Discovery Islands in 2021 ranged from 0.19 g to 2.59 g and averaged 0.62 g (SD = 0.44). The fork length of the pink smolts ranged from 26 mm to 64 mm and averaged 38 mm (SD = 7). Pink salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 11).

Table 11: Average weights and lengths of the chum and pink salmon collected in the Inactive sub-area in the Discovery Islands in 2021, summarized by month.

Species	Average \	Neight (g)	Average Length (mm)			
Species	April	May	April	May		
Chum	0.61 (n=281)	1.49 (n=217)	38	49		
Pink	0.41 (n=225)	0.96 (n=155)	34	44		

3.7 Post-Exposure Sub-area Fish Sample Size Statistics

Summary statistics for the Post-Exposure sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 12).

3.7.1 Chum Salmon

The weight of 280 chum smolts collected during the two sample events at sites in the Post-Exposure sub-area in the Discovery Islands in 2021 ranged from 0.25 g to 7.16 g and averaged 1.84 g (SD = 1.43). The fork length of the chum smolts ranged from 31 mm to 92 mm and averaged 52 mm (SD = 14). Chum salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 12).

3.7.2 Pink Salmon

The weight of 329 pink smolts collected during the two sample events at the Post-Exposure sub-area sites in the Discovery Islands in 2021 ranged from 0.16 g to 4.19 g and averaged 0.82 g (SD = 0.75). The fork length of the pink smolts ranged from 27 mm to 76 mm and averaged 41 mm (SD = 11). Pink salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to May 2021 (Table 12).

Table 12: Average weights and lengths of the Post-Exposure chum and pink salmon collected in the Discovery Islands in 2021, summarized by month.

Species	Average \	Neight (g)	Average Length (mm)			
Species	April	May	April	May		
Chum	0.67 (n=114)	2.63 (n=166)	39	61		
Pink	0.37 (n=191)	1.45 (n=138)	34	51		

3.8 Pre-Exposure Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Pre-Exposure sub-area sample population collected in the Discovery Islands in 2021 are presented in Table 13 and lab analysis data is included in Appendix III. A total of 342 samples were collected at the seven Pre-Exposure sites in the Discovery Islands in 2021 and inspected for sea lice infestation. A total of 76 individuals in the sample population (42 chum and 34 pink salmon), were found to be infested with 98 sea lice (Table 13). This data included sea lice of either species (*L. salmonis and C. clemensi*) on the inspected juvenile salmon.

The sea lice prevalence in the 2021 Pre-Exposure sub-area sample population was 22.2 % and the abundance was 0.29. Sea lice counts of both lice species (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

The intensity of sea lice infestation, defined as the number of sea lice on a single infested salmon ranged from one louse found on 58 individuals to a maximum of four lice found on one individual. The average intensity was calculated by dividing the total number of sea lice by the number of infested fish of each species (Table 13).

Table 13: Results of analysis for sea lice infestation on Pre-Exposure sub-area salmonid smolts collected by beach seine in the Discovery Islands, BC in 2021.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	203	58	42	20.7	0.29	1.4
pink	139	40	34	24.4	0.29	1.2
Total	342	98	76	22.2	0.29	1.3

3.8.1 Pre-Exposure Sub-area Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Pre-Exposure chum salmon sample population are presented by site in Table 14. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined (Table 13 and 14). for the presentation of sea lice infestation, prevalence, intensity and abundance on the Pre-Exposure chum salmon sample population.

For the Pre-Exposure chum salmon sample population (n=203) there were more chum sampled, more infested individuals (n=31) and more sea lice (n=44) found on chum salmon collected in April (n=141) than in May (n=62). The prevalence, abundance and average intensity of sea lice infestation was also slightly higher for the fish captured in April 2021 (Table 14).

A total of 42 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=203) collected in the Pre-Exposure sub-area sites in 2021 was 20.7 %. Sea lice prevalence on chum salmon in 2021 was higher in April (22.0 %) than in May (17.7 %). The highest sea lice prevalence (50.0 %) was at SE Hill Island in May 2021. Sea lice prevalence calculated by site for the total Pre-Exposure sub-area chum sample population was highly variable ranging from 3.4 % at Deepwater Bay to a high of 50.0 % at SE Hill Island (Table 14).

A total of 58 sea lice were identified during laboratory analysis of retained chum salmon from Pre-Exposure sites. The abundance of sea lice on the Pre-Exposure chum salmon sample population (n=203) collected in the Discovery Islands in 2021 was 0.29. Sea lice abundance was calculated by week and by site and is presented in Table 14. During 2021 sampling, sea lice abundance on chum salmon was higher in April (0.31) compared to May (0.23). The highest sea lice abundance (0.50) was at SE Hill Island in May 2021. Sea lice abundance calculated by site for the total Pre-Exposure chum sample population was also highly variable ranging from 0.03 at Deepwater Bay to a high of 0.50 at SE Hill Island (Table 14).

The 58 identified sea lice were observed on 42 chum salmon during laboratory analysis of samples retained from Pre-Exposure sites. The average intensity of sea lice on the Pre-Exposure chum salmon sample population (n=203) collected in the Discovery Islands in 2021 was 1.4. Sea lice abundance was calculated by week and by site and is

presented in Table 14. During 2021 sampling, sea lice intensity on chum salmon was marginally higher in April (1.4) compared to May (1.3). The highest sea lice intensity (1.5) was at Marina Island and Rebecca Spit in April 2021. Sea lice intensity calculated by site for the total Pre-Exposure chum sample population ranged from 1.0 to 1.5 (Table 14).

3.8.2 Pre-Exposure Sub-area Infestation Rates on Pink Salmon

The results of the laboratory analysis for sea lice infestation for the Pre-Exposure subarea pink salmon sample population are presented by site in Table 13. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Pre-Exposure pink salmon sample population (Table 13 and 15). Of the 548 pink salmon captured, 98 were collected in April and 41 were collected in May 2021 sampling (Table 15).

A total of 34 pink salmon were found to be infested with at least one sea louse while one individual was found to be infested with three. The prevalence of sea lice on the pink salmon sample population (n=139) collected in the Pre-Exposure sub-area sites in 2021 was 24.4 %. The highest sea lice prevalence (62.5 %) was at SE Hill Island in May 2021. Sea lice prevalence calculated by site for the total Pre-Exposure pink sample population was variable ranging from 0.0 % at Penn Island and Deepwater Bay to a high of 62.5 % at SE Hill Island (Table 15).

A total of 40 sea lice were identified during laboratory analysis of retained Pre-Exposure sub-area pink salmon. The abundance of sea lice on the pink salmon sample population (n=139) collected in the Pre-Exposure sub-area sites in 2021 was 0.29. Sea lice abundance was calculated by week and by site and is presented in Table 15. The highest sea lice abundance (1.00) was at SE Hill Island in May 2021. Sea lice abundance calculated by site for the total Pre-Exposure pink sample population was also highly variable ranging from 0.00 at Penn Island and Deepwater Bay to a high of 1.00 at SE Hill Island (Table 15).

A total of 40 sea lice were observed on 34 pink salmon during laboratory analysis of retained pink salmon from the Pre-Exposure sub-area sites. The average intensity of sea lice on the Pre-Exposure pink salmon sample population (n=139) collected in 2021 was 1.2. Sea lice abundance was calculated by week and by site and is presented in Table 15. During 2021 sampling, sea lice intensity on pink salmon was slightly lower in April (1.1) compared to May (1.2). The highest sea lice intensity (1.6) was at SE Hill Island in May 2021. Sea lice intensity calculated by site for the total Pre-Exposure chum sample population ranged from 0.0 to 1.6 (Table 15).

Table 14: The number of sea lice found on chum salmon collected from the Pre-Exposure sub-area sample sites in the Discovery Islands in 2021, summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

							Sample	e Week							Total Pre	-Exposure Chu	m Sample
				April 19	-20			May 25-26							Population		
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Francisco Point	29	8	0.56	11	27.6	0.38	1.4	35	7	1.53	10	20.0	0.29	1.4	27.8	0.39	1.4
Marina Island	29	13	0.80	19	44.8	0.66	1.5	12	0	-	0	0.0	0.00	0.0	31.7	0.46	1.5
Rebecca Spit	29	2	0.37	3	6.9	0.10	1.5	0	-	-	-	-	-	-	6.9	0.10	1.5
Viner Point	25	7	0.94	10	28.0	0.40	1.4	6	0	-	0	0.0	0.00	0.0	22.6	0.32	1.4
SE Hill Island	0	-	-	-	-	-	-	6	3	7.45	3	50.0	0.50	1.0	50.0	0.50	1.0
Penn Island	0	-	-	-	-	-	-	3	1	12.60	1	33.3	0.33	1.0	33.3	0.33	1.0
Deepwater Bay	29	1	0.75	1	3.4	0.03	1.0	0	-	-	-	-	-	-	3.4	0.03	1.0
Total	141	31	0.75	44	22.0	0.31	1.4	62	11	4.52	14	17.7	0.23	1.3	20.7	0.29	1.4

Table 15: The number of sea lice found on pink salmon collected in the Pre-Exposure sub-area samples sites in 2021, summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

							Sample	e Week							Total Pro	e-Exposure Pin	k Sample
				April 19/	20			May 25/26							Population		
Site	# of Pinks Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Pinks Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Francisco Point	31	8	0.39	10	25.8	0.32	1.3	25	4	1.39	5	16.0	0.20	1.3	21.4	0.27	1.3
Marina Island	31	5	0.51	5	16.1	0.16	1.0	6	1	3.42	1	16.7	0.17	1.0	16.2	0.16	1.0
Rebecca Spit	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
Viner Point	35	11	0.63	11	31.4	0.31	1.0	0	-	-	-	-	-	-	31.4	0.31	1.0
SE Hill Island	0	-	-	-	-	-	-	8	5	9.50	8	62.5	1.00	1.6	62.5	1.00	1.6
Penn Island	0	-	-	-	-	-	-	2	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Deepwater Bay	1	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Total	98	24	0.52	26	24.5	0.27	1.1	41	10	5.65	14	24.3	0.34	1.4	22.4	0.29	1.2

3.9 Inactive Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Inactive subarea sample population collected in the Discovery Islands in 2021 are presented in Table 16. The data recorded for each fish in the sample population during lab analysis are included in Appendix III. A total of 815 samples were collected at the 12 Inactive sites in the Discovery Islands in 2021 and were inspected for sea lice infestation. A total of 94 individuals, consisting of 48 chum and 46 pink salmon were found to be infested with 101 sea lice in the Inactive sub-area sample population (Table 16). This data included sea lice of either species (*L. salmonis and C. clemensi*).

The sea lice prevalence in the Inactive sub-area sample population collected in 2021 was 11.5 % and the abundance was 0.14 (Table 16). Sea lice counts of both species observed (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

The intensity of sea lice infestation is defined as the number of sea lice on a single infested salmon. There were 81 samples infested with one louse, 10 with two lice, two with three lice and one individual infested with a maximum of four lice. The average intensity (1.1) was calculated by dividing the total number of sea lice by the number of infested fish of each species (Table 16).

Table 16:	Results of analysis for sea lice infestation on Inactive sub-area samples
	collected by beach seine in 2021.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	435	55	48	11.0	0.13	1.1
pink	380	56	46	12.1	0.15	1.2
Total	815	111	94	11.5	0.14	1.1

3.9.1 Inactive Sub-area Sea Lice Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Inactive sub-area chum salmon sample population are presented by site in Table 17. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Inactive sub-areachum salmon sample population (Table 16 and 17).

A total of 48 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=435) collected in the Inactive sub-area sites in 2021 was 11.0 %. The highest sea lice prevalence (37.5 %) was at Nodales in May 2021 (Table 16). Sea lice prevalence calculated by site for the total Inactive sub-are chum sample population was highly variable ranging from 0.0 % at Fanny Bay to a high of 34.3 % at Nodales (Table 17).

A total of 55 sea lice were identified during laboratory analysis of the retained Inactive sub-area chum salmon. The abundance of sea lice on the Inactive sub-area chum salmon sample population (n=435) collected Islands in 2021 was 0.13. Sea lice abundance was calculated by week and by site and is presented in Table 17. The

highest sea lice abundance (0.50) was at Nodales in May 2021. Sea lice abundance calculated by site for the total Inactive sub-area chum sample population was also highly variable ranging from 0.00 at Fanny Bay to a high of 0.48 at Nodales (Table 17).

A total of 55 sea lice were observed on 48 chum salmon during laboratory analysis of the retained chum salmon from Inactive sub-area sites. The average intensity of sea lice on the Inactive sub-area chum salmon sample population (n=435) collected in 2021 was 1.1. Sea lice intensity was calculated by week and by site and is presented in Table 17. During 2021 sampling, sea lice intensity on chum salmon was slightly higher in April (1.2) compared to May (1.1). The highest sea lice intensity (1.3) observed at two sites (Nodales in April and May and Shoal Bay in May) in 2021. Sea lice intensity calculated by site for the total Inactive sub-area chum sample population ranged from 1.0 to 1.3 (Table 17).

3.9.2 Inactive Sub-area Sea Lice Infestation Rates on Pink Salmon

The results of the laboratory analysis for sea lice infestation for the Inactive sub-area pink salmon sample population are presented by site in Table 16. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Inactive pink salmon sample population (Table 16 and 18).

A total of 46 pink salmon were found to be infested with at least one louse. The prevalence of sea lice on the pink salmon sample population (n=380) collected in the Inactive sub-area sites in 2021 was 12.1 %. The highest sea lice prevalence (37.5 %) was found at the Nodales site in May 2021. Sea lice prevalence calculated by site for the total Inactive sub-area pink sample population was highly variable ranging from 0.0 % at Fanny Bay to a high of 34.3 % at Nodales (Table 18).

A total of 56 sea lice were identified during laboratory analysis of retained Inactive subarea pink salmon. The abundance of sea lice on the Inactive sub-area pink salmon sample population (n=380) collected in 2021 was 0.15. Sea lice abundance on pink salmon is presented by week and by site in Table 18. The highest sea lice abundance (0.61) was found at Nodales in April 2021. Sea lice abundance calculated by site for the total Inactive sub-area pink sample population was variable, ranging from 0.00 at Fanny Bay to a high of 0.48 at Nodales (Table 18).

A total of 56 sea lice were observed on 46 pink salmon during laboratory analysis of samples retained from the Inactive sub-area sites. The average intensity of sea lice on the Inactive sub-area pink salmon sample population (n=380) collected in 2021 was 1.2. Sea lice abundance was calculated by week and by site and is presented in Table 18. During 2021 sampling, sea lice intensity on pink salmon was higher in April (1.3) compared to May (1.1). The highest sea lice intensity (1.7) was at Nodales in April 2021. Sea lice intensity calculated by site for the total Inactive sub-area pink salmon sample population ranged from 1.0 to 1.4 (Table 18).

Table 17: The number of sea lice found on chum salmon collected from the Inactive sub-area sites in the Discovery Islands in 2021, summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

							Sample	e Week							Total Post-E	Exposure Chu	m Sample
		April 19/20							May 25/26						Population		
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Raza	15	2	0.38	2	13.3	0.13	1.0	30	2	1.86	2	13.3	0.13	1.0	13.3	0.13	1.0
Raza North	30	2	0.40	2	6.7	0.07	1.0	30	3	1.19	3	10.0	0.10	1.0	8.3	0.08	1.0
Rock Bay	0	-	-	-	-	-	-	5	1	2.05	1	20.0	0.20	1.0	20.0	0.20	1.0
Bear Bay	0	-	-	-	-	-	-	18	3	2.79	3	16.7	0.17	1.0	16.7	0.17	1.0
Knox Bay	28	1	0.53	1	3.6	0.04	1.0	0	-	-	-	-	-	-			
Bickley Bay	29	1	0.62	1	3.5	0.04	1.0	30	2	2.77	2	13.3	0.13	1.0	5.1	0.05	1.0
Fanny Bay	30	0	-	0	0.0	0.00	0.0	5	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Shoal Bay	30	1	0.59	1	3.3	0.03	1.0	28	4	1.04	5	14.3	0.18	1.3	8.6	0.10	1.2
Nodales	27	9	0.83	12	33.3	0.44	1.3	8	3	0.71	4	37.5	0.50	1.3	34.3	0.48	1.3
Discovery	31	9	0.78	11	29.0	0.35	1.2	0	-	-	-	-	-	-	29.0	0.35	1.2
Okisollo	31	2	0.50	2	6.5	0.06	1.0	0	-	-	-	-	-	-	6.5	0.06	1.0
Owen Bay	30	3	1.24	3	10.0	0.10	1.0	0	-	-	-	-	-	-	10.0	0.10	1.0
Total	281	30	0.75	35	10.7	0.12	1.2	154	18	1.63	20	11.7	0.13	1.1	11.0	0.13	1.1

Table 18: The number of sea lice found on pink salmon collected from the Inactive sub-area sites in the Discovery Islands in 2021 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

	Sample Week											Total Post-Exposure Pink Sample					
	April 19/20								May 25/26						Population		
Site	# of Pink Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Pinks Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Raza	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
Raza North	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
Rock Bay	11	1	0.29	1	9.1	0.09	1.0	30	2	2.49	2	6.7	0.06	1.0	7.3	0.07	1.0
Bear Bay	30	1	0.52	1	3.3	0.03	1.0	30	1	1.04	1	3.3	0.03	1.0	3.3	0.03	1.0
Knox Bay	29	1	0.26	1	3.5	0.04	1.0	7	0	-	0	0.0	0.00	0.0	2.8	0.03	1.0
Bickley Bay	31	0	-	0	0.0	0.00	0.0	9	1	1.87	1	11.1	0.11	1.0	2.5	0.03	1.0
Fanny Bay	29	0	-	0	0.0	0.00	0.0	15	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Shoal Bay	30	0	-	0	0.0	0.00	0.0	32	6	0.61	7	18.8	0.22	1.2	9.7	0.11	1.2
Nodales	33	12	0.93	20	36.4	0.61	1.7	32	12	1.00	13	37.5	0.41	1.1	36.9	0.51	1.4
Discovery	30	8	0.71	8	26.7	0.27	1.0	0	-	-	-	-	-	-	26.7	0.27	1.0
Okisollo	2	1	0.28	1	50.0	0.50	1.0	0	-	-	-	-	-	-	50.0	0.50	1.0
Owen Bay	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
Total	225	24	0.76	32	10.7	0.14	1.3	155	22	1.00	24	14.2	0.15	1.1	12.1	0.15	1.2

3.10 Post-Exposure Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Post-Exposure sub-area sample population collected in 2021 are presented in Table 19. The data recorded for each fish in the sample population during lab analysis are included in Appendix III. A total of 609 samples were collected at the ten Post-Exposure sites in 2021 and were inspected for sea lice infestation. A total of 77 individuals consisting of 48 chum and 29 pink salmon were found to be infested with 98 sea lice in the Post-Exposure sample population (Table 19). This data included sea lice of either species (*L. salmonis and C. clemensi*).

The sea lice prevalence in the Post-Exposure sub-area sample population collected in in 2021 was 12.6 % and the abundance was 0.16 (Table 19). Sea lice counts of both species observed (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

The intensity of sea lice infestation is defined as the number of sea lice on a single infested salmon. There were 61 samples infested with one louse, two samples with three lice, 13 samples with two lice and one individual infested with a maximum of five lice. The average intensity (1.3) was calculated by dividing the total number of sea lice by the number of infested fish of each species (Table 19).

Table 19:	Results of analysis for sea lice infestation on Post-Exposure sub-area
	samples collected by beach seine in the Discovery Islands, BC in 2021.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	280	65	48	17.1	0.23	1.4
pink	329	33	29	8.8	0.10	1.1
Total	609	98	77	12.6	0.16	1.3

3.10.1 Post-Exposure Sub-area Sea Lice Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Post-Exposure chum salmon sample population are presented by site in Table 20. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Post-Exposure sub-area chum salmon sample population (Table 19 and 20). For the chum salmon sample population collected in 2021 (n=280), there were more infested individuals and more sea lice found on chum salmon collected in May than in April (Table 20).

A total of 48 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=280) collected in the Post-Exposure sub-area sites in 2021 was 17.1 %. The highest sea lice prevalence (56.7 %) was at Chancellor in May 2021 (Table 20). Sea lice prevalence calculated by site for the total Post-Exposure chum sample population was highly variable ranging from 0.0 % at two sites to a high of 39.3 % at Chancellor (Table 20).

A total of 65 sea lice were identified during laboratory analysis of the retained Post-Exposure sub-area chum salmon. The abundance of sea lice on the Post-Exposure

chum salmon sample population (n=280) collected in the Discovery Islands in 2021 was 0.23. Sea lice abundance was calculated by week and by site and is presented in Table 20. The highest sea lice abundance (0.87) was at Chancellor in May 2021. Sea lice abundance calculated by site for the total Post-Exposure chum sample population was also highly variable ranging from 0.00 at two sites to a high of 0.56 at Chancellor (Table 20).

A total of 65 sea lice were observed on 48 chum salmon during laboratory analysis of retained chum salmon from the Post-Exposure sub-area sites. The average intensity of sea lice on the Post-Exposure chum salmon sample population (n=280) collected in the Discovery Islands in 2021 was 1.4. Sea lice abundance was calculated by week and by site and is presented in Table 20. During 2021 sampling, sea lice intensity on chum salmon was the same in April and May (1.4). The highest sea lice intensity (1.5) was at Wellbore (April), Blenkinsop Bay (May) and Chancellor (May). Sea lice intensity calculated by site for the total Post-Exposure chum sample population ranged from 0.0 to 1.5 (Table 20).

3.10.2 Post-Exposure Sub-area Sea Lice Infestation Rates on Pink Salmon

The results of the laboratory analysis for sea lice infestation for the Post-Exposure subarea pink salmon sample population are presented by site in Table 19. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Post-Exposure pink salmon sample population (Table 19 and 21).

A total of 29 pink salmon were found to be infested with at least one louse. The prevalence of sea lice on the pink salmon sample population (n=329) collected in the Post-Exposure sub-area sites in 2021 was 8.8 %. The highest sea lice prevalence (57.1 %) was found at the Chancellor site in May 2021. Sea lice prevalence calculated by site for the total Post-Exposure pink sample population was highly variable ranging from 0.0 % at two sites to a high of 39.3 % at Chancellor (Table 21).

A total of 33 sea lice were identified during laboratory analysis of the retained Post-Exposure sub-area pink salmon. The abundance of sea lice on the Post-Exposure pink salmon sample population (n=329) collected in 2021 was 0.10. Sea lice abundance is presented by week and by site in Table 21. The highest sea lice abundance (1.00) was found at Chancellor in May 2021. Sea lice abundance calculated by site for the total Post-Exposure pink sample population was variable, ranging from 0.00 at two sites to a high of 0.42 at Chancellor (Table 21).

A total of 33 sea lice were observed on 29 pink salmon during laboratory analysis of retained pink salmon from Post-Exposure sub-area sites. The average intensity of sea lice on the Post-Exposure pink salmon sample population (n=329) collected in the Discovery Islands in 2021 was 1.1. Sea lice abundance was calculated by week and by site and is presented in Table 21. During 2021 sampling, sea lice intensity on pink salmon was marginally lower in April (1.1) compared to May (1.2). The highest sea lice intensity (1.8) was at Chancellor in May 2021. Sea lice intensity calculated by site for the total Post-Exposure pink sample population ranged from 0.0 to 1.4 (Table 21).

Table 20: The number of sea lice found on chum salmon collected from the Post-Exposure sub-area sites in the Discovery Islands in 2021 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

							Sample	e Week							Total Post-	Exposure Chur	m Sample
			Apri	l 19/20						May	25/26					Population	-
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Primary 1	3	0	-	0	0.0	0.00	0.0	4	1	6.78	1	25.0	0.25	1.0	14.2	0.14	1.0
Beautiful Bay	32	0	-	0	0.0	0.00	0.0	31	4	1.87	5	12.9	0.16	1.3	6.4	0.08	1.3
Primary 3	8	0	-	0	0.0	0.00	0.0	24	1	2.88	1	4.1	0.04	1.0	3.1	0.03	1.0
Blenkinsop Bay	0	-	-	-	-	-	-	17	2	3.78	3	11.8	0.18	1.5	11.8	0.18	1.5
Sunderland	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
Bessborough Bay	4	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Wellbore	30	2	0.55	3	6.7	0.10	1.5	31	6		7	19.4	0.23	1.2	13.1	0.16	1.3
Chancellor	31	6	0.88	8	19.4	0.26	1.3	30	17	1.77	26	56.7	0.87	1.5	39.3	0.56	1.4
Race Passage	5	0	-	0	0.0	0.00	0.0	2	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Cordero	0	-	-	-	-	-	-	28	9	2.29	11	32.1	0.39	1.2	32.1	0.39	1.2
Total	113	8	0.80	11	7.1	0.10	1.4	167	40	2.22	54	24.0	0.32	1.4	17.1	0.23	1.4

Table 21: The number of sea lice found on pink salmon collected from the Post-Exposure sub-area sites in the Discovery Islands in 2021 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

							Sample	e Week							Total Post-	Exposure Pinl	k Sample
			Apr	il 19/20						May	25/26					Population	-
Site	# of Pink Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Pinks Analyzed	# of Infested Pinks	Average Weight of Infested Pinks (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Primary 1	31	2	0.66	2	6.5	0.06	1.0	7	0	-	0	0.0	0.00	0.0	5.3	0.05	1.0
Beautiful Bay	32	1	0.47	1	3.1	0.3	1.0	32	5	0.60	5	15.3	0.16	1.0	9.4	0.09	1.0
Primary 3	30	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Blenkinsop Bay	0	-	-	-	-	-	-	1	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Sunderland	4	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Bessborough Bay	13	1	0.34	1	7.7	0.08	1.0	0	-	-	-	-	-	-	7.7	0.08	1.0
Wellbore	20	0	-	0	0.0	0.00	0.0	29	3	1.44	3	10.3	0.10	1.0	6.1	0.06	1.0
Chancellor	29	7	0.54	8	24.1	0.28	1.1	7	4	2.20	7	57.1	1.00	1.8	30.6	0.42	1.4
Race Passage	31	1	0.83	1	3.2	0.03	1.0	30	1	1.07	1	3.3	0.03	1.0	3.3	0.03	1.0
Cordero	1	0	-	0	0.0	0.00	0.0	32	4	2.23	4	12.5	0.13	1.0	12.1	0.12	1.0
Total	191	12	0.49	13	6.3	0.07	1.1	138	17	1.66	20	12.3	0.14	1.2	8.8	0.10	1.1

3.11 Pre-Exposure Sub-area Infestation by Sea Lice Species

For the Pre-Exposure sub-area sample population (n=342), a total of 21 *L. salmonis* sea lice of various life stages were identified on 32 individuals, and 77 *C. clemensi* sea lice were found on 65 individuals (Appendix III). Eight fish were found to be infested with both a *L. salmonis* and a *C. clemensi*.

3.11.1 Pre-Exposure Sub-area Infestation by Sea Lice Species on Chum Salmon

A breakdown of the species of sea lice (by life stage) identified on the 203 chum salmon collected at the Pre-Exposure sites in the Discovery Islands is presented in Table 22. A total of 11 *L. salmonis* sea lice of various life stages were identified on 11 juvenile chum salmon and 47 *C. clemensi* sea lice were found on 35 of the juvenile chum salmon analyzed in the lab (Appendix III). Four juvenile chum salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on chum salmon are also presented by site and by week in Table 24.

For the chum salmon sample population infested with *C. clemensi* sea lice (n=35) there were 25 samples infested with one louse, nine with two lice and one with four lice (Appendix III). For the chum salmon sample population infested with *L. salmonis* sea lice (n=11), all individuals were infested with one louse.

Table 22: The number of sea lice in each life stage by species identified on the Pre-Exposure chum salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	4	0
LEP C1	4	0
LEP C2	2	0
LEP PAM	0	1
LEP PAF	0	0
LEP AM	0	0
LEP AF	0	0
Total LEP	10	1
CAL Co	1	0
CAL C1	23	5
CAL C2	6	2
CAL C3	2	0
CAL C4	2	0
CAL PAM	0	0
CAL PAF	0	1
CAL AM	0	2
CAL AF	0	3
Total CAL	34	13

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.

3.11.2 Pre-Exposure Sub-area Infestation by Sea Lice Species on Pink Salmon

A breakdown of the species of sea lice (by life stage) identified on the 139 pink salmon collected at the Pre-Exposure sub-area sites in the Discovery Islands in 2021 is presented in Table 23. A total of 30 *C. clemensi* sea lice were found on 26 of the juvenile pink salmon analyzed in the lab (Appendix III). A total of ten *L. salmonis* sea lice were identified on ten juvenile pink salmon. There were two pink salmon infested with both species of sea lice. Sea lice identified on pink salmon are also presented by site and week in Table 25.

For the pink salmon sample population infested with *C. clemensi* sea lice (n=26) there were 22 individuals infested with one louse and four samples infested with two lice. For the pink salmon sample population infested with *L. salmonis* sea lice (n=10), all 10 individuals were infested with one louse.

Table 23: The number of sea lice in each life stage by species identified on the Pre-Exposure sub-area pink salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	2	0
LEP C1	3	1
LEP C2	0	0
LEP PAM	0	2
LEP PAF	0	2
LEP AM	0	0
LEP AF	0	0
Total LEP	5	5
CAL Co	1	0
CAL C1	10	1
CAL C2	7	0
CAL C3	1	0
CAL C4	2	0
CAL PAM	0	0
CAL PAF	0	0
CAL AM	0	7
CAL AF	0	1
Total CAL	21	9

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 24: The species of sea lice found on Pre-Exposure sub-area chum salmon collected in the Discovery Islands in 2021 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

				Sar	nple Week					TOTAL	
Site		April 19/20				May 25/26				TOTAL	
Site	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of
	Analyzed	Chum	LEP	CAL	Analyzed	Chum	LEP	CAL	Analyzed	Chum	Lice
Francisco Point	29	8	2	9	35	7	0	10	64	15	21
Marina Island	29	13	5	14	12	0	0	0	41	13	19
Rebecca Spit	29	2	0	3	0	-	-	-	29	2	3
Viner Point	25	7	2	8	6	0	0	0	31	7	10
SE Hill Island	0	-	-	-	6	3	1	2	6	3	3
Penn Island	0	-	-	-	3	1		1	3	1	1
Deepwater Bay	29	1	1	0	0	-	-	-	29	1	1
Total	141	31	10	34	62	11	1	13	203	42	58

Table 25: The species of sea lice found on Pre-Exposure pink salmon collected in the Discovery Islands in 2021 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

				Sam	ple Week					TOTAL	
Site		April 19/20				May 25/26				IOIAL	
Site	# of Pinks	# of Infested	# of	# of	# of Pinks	# of Infested	# of	# of	# of Pinks	# of Infested	# of
	Analyzed	Pinks	LEP	CAL	Analyzed	Pinks	LEP	CAL	Analyzed	Pinks	Lice
Francisco Point	31	8	1	9	25	4	3	2	56	12	15
Marina Island	31	5	2	3	6	1	0	1	37	6	6
Rebecca Spit	0	-	-	-	0	-	-	-	0	-	-
Viner Point	35	11	2	9	0	-	-	-	35	11	11
SE Hill Island	0	-	-	-	8	5	2	6	8	5	8
Penn Island	0	-	-	-	2	0	0	0	2	0	0
Deepwater Bay	1	0	0	0	0	-	-	-	1	0	0
Total	98	24	5	21	41	10	5	9	139	34	40

3.12 Inactive Sub-area Sea Lice Infestation by Sea Lice Species

Within the Inactive sub-area sample population (n=815), a total of 46 *L. salmonis* sea lice of various life stages were identified on 45 individuals and 65 *C. clemensi* sea lice were found on 57 of the samples analyzed in the lab (Appendix III). There were eight samples infested with both *L. salmonis* and *C. clemensi*.

3.12.1 Inactive Sub-area Infestation by Sea Lice Species on Chum Salmon

A breakdown of the species of sea lice (by life stage) identified on the 435 chum salmon collected in the Inactive sites in the Discovery Islands is presented in Table 26. A total of 24 *L. salmonis* sea lice of various life stages were identified on 24 juvenile chum salmon and 31 *C. clemensi* sea lice were found on 28 of the juvenile chum salmon analyzed in the lab (Appendix III). There were four juvenile chum salmon infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on chum salmon are also presented by site by week in Table 28.

For the chum salmon sample population infested with *L. salmonis* sea lice (n=24), all 24 samples were infested with one louse. For the chum salmon sample population infested with *C. clemensi* sea lice (n=31), 28 of the infested chum had one louse, and three had two lice.

Table 26: The number of sea lice in each life stage by species identified on the Inactive sub-area chum salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	10	0
LEP C1	8	1
LEP C2	0	2
LEP PAM	0	2
LEP PAF	0	1
LEP AM	0	0
LEP AF	0	0
Total LEP	18	6
CAL Co	7	2
CAL C1	8	9
CAL C2	2	0
CAL C3	0	2
CAL C4	0	0
CAL PAM	0	0
CAL PAF	0	0
CAL AM	0	0
CAL AF	0	1
Total CAL	17	14

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.

3.12.2 Inactive Sub-area Infestation by Sea Lice Species on Pink Salmon

A breakdownof the species of sea lice (by life stage) identified on the 380 pink salmon collected at the Inactive sub-area sites in the Discovery Islands is presented in Table 27. A total of 22 *L. salmonis* sea lice of various life stages were identified on 21 juvenile pink salmon and 34 *C. clemensi* sea lice were found on 29 of the juvenile pink salmon analyzed in the lab (Appendix III). A total of four juvenile pink salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on pink salmon are also presented by site and by week in Table 29.

For the pink salmon sample population infested with *L. salmonis* sea lice (n=21), 20 of the samples were infested with one louse and one sample had two lice. For the pink salmon sample population infested with *C. clemensi* sea lice (n=29) there were 24 samples infested with one louse and five samples were infested with two lice.

Table 27: The number of sea lice in each life stage by species identified on the Inactive sub-area pink salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	7	1
LEP C1	2	1
LEP C2	1	4
LEP PAM	2	0
LEP PAF	0	2
LEP AM	1	1
LEP AF	0	0
Total LEP	13	9
CAL Co	8	1
CAL C1	5	8
CAL C2	4	2
CAL C3	0	0
CAL C4	2	2
CAL PAM	0	1
CAL PAF	0	0
CAL AM	0	0
CAL AF	0	1
Total CAL	19	15

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 28: The species of sea lice found on Inactive sub-area chum salmon collected in the Discovery Islands in 2021 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

				Sar	nple Week					TOTAL	
Site		April 19/20				May 25/26				IOIAL	
Site	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of
	Analyzed	Chum	LEP	CAL	Analyzed	Chum	LEP	CAL	Analyzed	Chum	Lice
Raza	15	2	2	0	30	2	0	2	45	4	4
Raza North	30	2	2	0	30	3	1	2	60	5	5
Rock Bay	0	-	-	-	5	1	1	0	5	1	1
Bear Bay	0	-	-	-	18	3	2	1	18	3	3
Knox Bay	28	1	0	1	0	-	-	-	28	1	1
Bickley Bay	29	1	0	1	30	2	2	0	59	3	3
Fanny Bay	30	0	0	0	5	0	0	0	35	0	0
Shoal Bay	30	1	1	0	28	4	0	5	58	5	6
Nodales	27	9	6	6	8	3	0	4	35	12	16
Discovery	31	9	6	5	0	-	-	-	31	9	11
Okisollo	31	2	1	1	0	-	-	-	31	2	2
Owen Bay	30	3	0	3	0	-	-	-	30	3	3
Total	281	30	18	17	154	18	6	14	435	48	55

Table 29: The species of sea lice found on Inactive sub-area pink salmon collected in the Discovery Islands in 2021 summarized by site. LEP = *Lepeophtheirus salmonis* CAL = *Caligus clemensi*

				Sar	nple Week					TOTAL	
Site		April 19/20				May 25/26				IOIAL	
Sile	# of pink	# of Infested	# of	# of	# of pink	# of Infested	# of	# of	# of Pinks	# of Infested	# of
	Analyzed	Pinks	LEP	CAL	Analyzed	Pinks	LEP	CAL	Analyzed	pink	Lice
Raza	0	-	-	-	0	-	-	-	0	-	-
Raza North	0	-	-	-	0	-	-	-	0	-	-
Rock Bay	11	1	0	1	30	2	0	2	41	3	3
Bear Bay	30	1	1	0	30	1	1	0	60	2	2
Knox Bay	29	1	1	0	7	0	0	0	36	1	1
Bickley Bay	31	0	0	0	9	1	1	0	40	1	1
Fanny Bay	29	0	0	0	15	0	0	0	44	0	0
Shoal Bay	30	0	0	0	32	6	2	5	62	6	7
Nodales	33	12	8	12	32	12	5	8	65	24	33
Discovery	30	8	3	5	0	-	-	-	30	8	8
Okisollo	2	1	0	1	0	-	-	-	2	1	1
Owen Bay	0	-	-	-	0	-	-	-	0	-	-
Total	225	24	13	19	155	22	9	15	380	46	56

3.13 Post-Exposure Sub-area Sea Lice Infestation by Sea Lice Species

Within the 2021 Post-Exposure sub-area sample population, a total of 51 *L. salmonis* sea lice of various life stages were identified on 44 individuals and 47 *C. clemensi* sea lice were found on 42 of the samples analyzed in the lab (Appendix III). There were nine samples infested with both *L. salmonis* and *C. clemensi*.

3.13.1 Post-Exposure Infestation by Sea Lice Species on Chum Salmon

An analysis of the species of sea lice identified on the 280 chum salmon collected in the Post-Exposure sites in the Discovery Islands is presented in Table 30. A total of 39 *L. salmonis* sea lice of various life stages were identified on 32 juvenile chum salmon and 26 *C. clemensi* sea lice were found on 23 of the juvenile chum salmon analyzed in the lab (Appendix III). There were seven juvenile chum salmon infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on chum salmon are also presented by site and by week in Table 32.

For the chum salmon sample population infested with *L. salmonis* sea lice (n=32), 27 samples were infested with one louse, three with two lice, and two with three lice. For the chum salmon sample population infested with *C. clemensi* sea lice (n=23), 21 of the infested chum had one louse, one had two lice, and one had three lice.

Table 30: The number of sea lice in each life stage by species identified on the Post-Exposure sub-area chum salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	1	8
LEP C1	2	10
LEP C2	0	8
LEP PAM	0	6
LEP PAF	0	3
LEP AM	0	1
LEP AF	0	0
Total LEP	3	36
CAL Co	2	5
CAL C1	5	7
CAL C2	0	4
CAL C3	1	1
CAL C4	0	1
CAL PAM	0	0
CAL PAF	0	0
CAL AM	0	0
CAL AF	0	0
Total CAL	8	18

 $^{^{1}}$ 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.

3.13.2 Post Exposure Sub-area Infestation by Sea Lice Species on Pink Salmon

An analysis of the species of sea lice identified on the 329 pink salmon collected at the Post-Exposure sites in the Discovery Islands is presented in Table 31. A total of 12 *L. salmonis* sea lice of various life stages were identified on 12 juvenile pink salmon and 21 *C. clemensi* sea lice were found on 19 of the juvenile pink salmon analyzed in the lab (Appendix III). A total of two juvenile pink salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on pink salmon are also presented by site and by week in Table 33.

For the pink salmon sample population infested with *L. salmonis* sea lice (n=12), all 12 of the samples were infested with one louse. For the pink salmon sample population infested with *C. clemensi* sea lice (n=19) there were 17 samples infested with one louse and two samples were infested with two lice.

Table 31: The number of sea lice in each life stage by species identified on the Post-Exposure sub-area pink salmon sample population from the Discovery Islands in 2021. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19/20	May 25/26
LEP Co	2	1
LEP C1	1	3
LEP C2	0	2
LEP PAM	0	0
LEP PAF	0	2
LEP AM	0	0
LEP AF	0	1
Total LEP	3	9
CAL Co	2	0
CAL C1	6	8
CAL C2	1	2
CAL C3	1	1
CAL C4	0	0
CAL PAM	0	0
CAL PAF	0	0
CAL AM	0	0
CAL AF	0	0
Total CAL	10	11

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 32: The species of sea lice found on Post-Exposure sub-area chum salmon collected in the Discovery Islands in 2021 summarized by site. LEP = *Lepeophtheirus salmonis CAL* = *Caligus clemensi*

				Sar	nple Week					TOTAL	
Site		April 19/20				May 25/26				IOIAL	
Site	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of	# of	# of Chum	# of Infested	# of
	Analyzed	Chum	LEP	CAL	Analyzed	Chum	LEP	CAL	Analyzed	Chum	Lice
Primary 1	3	0	0	0	4	1	1	0	7	1	1
Beautiful Bay	32	0	0	0	31	4	4	1	63	4	5
Primary 3	8	0	0	0	24	1	0	1	32	1	1
Blenkinsop Bay	0	-	-	-	17	2	1	2	17	2	3
Sunderland	0	-	-	-	0	-	-	-	0	-	-
Bessborough Bay	4	0	0	0	0	-	-	-	4	0	0
Wellbore	30	2	2	1	31	6			61	8	3
Chancellor	31	6	1	7	30	17	17	9	61	23	34
Race Passage	5	0	0	0	2	0	0	0	7	0	0
Cordero	0	-	-	-	28	9	9	2	28	9	11
Total	113	8	3	8	167	40	32	15	280	48	58

Table 33: The species of sea lice found on Post-Exposure sub-area pink salmon collected in the Discovery Islands in 2021 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

				Sar	nple Week					TOTAL	
Site		April 19/20				May 25/26				IOIAL	
Site	# of pink	# of Infested	# of	# of	# of pink	# of Infested	# of	# of	# of pink	# of Infested	# of
	Analyzed	Pinks	LEP	CAL	Analyzed	Pinks	LEP	CAL	Analyzed	Pinks	Lice
Primary 1	31	2	1	1	7	0	0	0	38	2	2
Beautiful Bay	32	1	0	1	32	5	3	2	64	6	6
Primary 3	30	0	0	0	0	-	-	-	30	0	0
Blenkinsop Bay	0	-	-	-	1	0	0	0	1	0	0
Sunderland	4	0	0	0	0	-	-	-	4	0	0
Bessborough Bay	13	1	1	0	0	-	-	-	13	1	1
Wellbore	20	0	0	0	29	3	3	0	49	3	3
Chancellor	29	7	1	7	7	4	2	5	36	11	15
Race Passage	31	1	0	1	30	1	0	1	61	2	2
Cordero	1	0	0	0	32	4	1	3	33	4	4
Total	191	12	3	10	138	17	9	11	329	29	33

4.0 Conclusions

This report presents the data from the fifth year of industry supported beach seining and sea lice analysis for wild juvenile salmonid monitoring in the Discovery Islandsregion of BC by MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. This report is focused on the summary and presentation of data collected in 2021. In addition, several tables compiling results from 2017-2021 have been added to present the multi-year data.

4.1 Pre-Exposure, Inactive and Post-Exposure Sub-area Sites

The following summary tables have been prepared to allow for comparison of the Pre-Exposure, Inactive and Post-Exposure sub-areas data on sea lice infestation statistics for pink and chum salmon collected during both sample weeks in the Discovery Islands in 2021. Table 34 presents the infestation rates for the species as a combination of both *L. salmonis* and *C. clemensi* while Table 35 presents the infestation rates separated by sea lice species.

Table 34: A comparison of sea lice infestation rates on the chum and pink salmon sample populations collected at Pre-Exposure, Inactive and Post-Exposure sub-area sites in the Discovery Islands in 2021.

Species	Sample Location (Sub- area)	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
	Pre- Exposure	203	58	42	20.7	0.29	1.4
Chum	Inactive	435	55	48	11.0	0.13	1.1
	Post- Exposure	280	65	48	17.1	0.23	1.4
	Pre- Exposure	139	40	34	24.4	0.29	1.2
Pink	Inactive	380	56	46	12.1	0.15	1.2
	Post- Exposure	329	33	29	8.8	0.10	1.1

Table 35: A comparison of sea lice infestation rates by sea lice species on the chum and pink salmon sample populations collected at Pre-Exposure, Inactive and Post-Exposure sub-area sites in the Discovery Islands in 2021.

Fish	Sample	Ca	ligus clemensi		Lepeo	phtheirus salm	onis
Species	Sample Location	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Chum (n=203)	Pre- Exposure	17.2	0.23	1.3	5.4	0.05	1.0
Chum (n=435)	Inactive	6.4	0.07	1.1	5.5	0.06	1.0
Chum (n=280)	Post- Exposure	8.2	0.09	1.1	11.4	0.13	1.2
Pink (n=139)	Pre- Exposure	18.7	0.22	1.2	7.2	0.07	1.0
Pink (n=380)	Inactive	7.6	0.9	1.2	5.5	0.06	1.0
Pink (n=329)	Post- Exposure	5.8	0.6	1.1	3.6	0.04	1.0

The percentage of the Pre-Exposure, Inactive and Post-Exposure sub-areas chum salmon sample population with the number of sea lice per sample was graphed and is presented in Figure 3. As shown in the figure, 79.3 % of the Pre-Exposure chum salmon sample population, 89.0 % of the Inactive chum salmon population and 82.9 % of the Post-Exposure chum salmon sample population retained in 2021 were not infested with sea lice.

The percentage of the Pre-Exposure, Inactive and Post-Exposure sub-areas pink salmon sample population with the number of sea lice per sample was graphed and is presented in Figure 4. As shown in the figure, 82.7 % of the Pre-Exposure pink salmon sample population, 87.9 % of the Inactive pink salmon population and 91.2 % of the Post-Exposure pink salmon sample population retained in 2021 were not infested with sea lice.

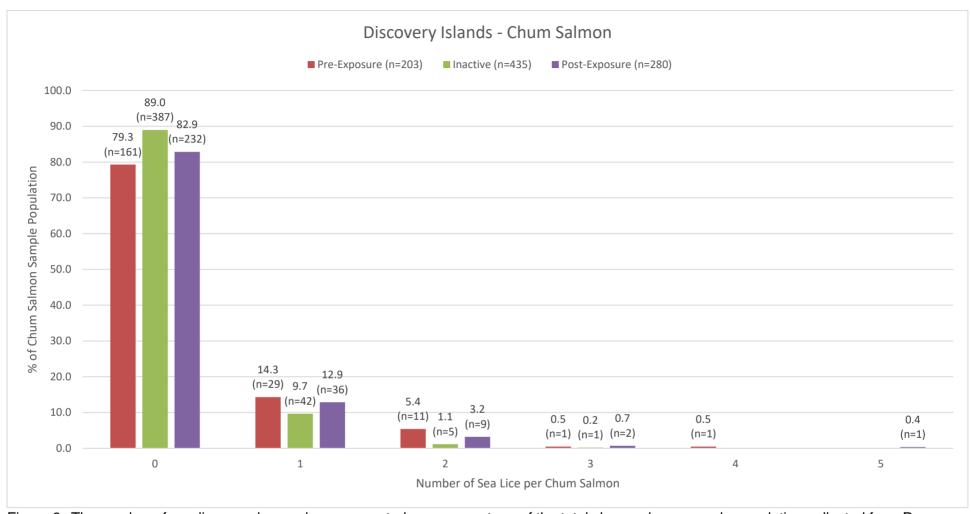


Figure 3: The number of sea lice per chum salmon presented as a percentage of the total chum salmon sample population collected from Pre-Exposure, Inactive and Post-Exposure sub-area sites in the Discovery Islands in 2021.

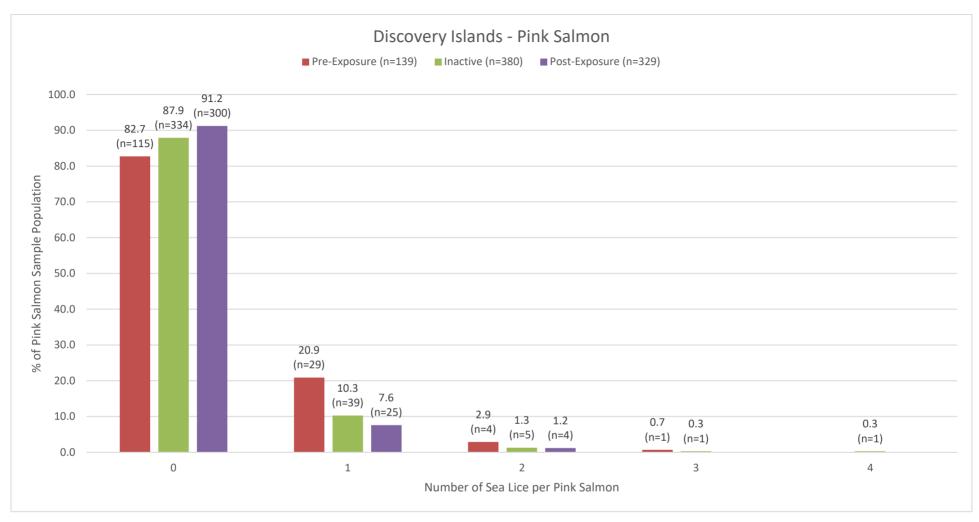


Figure 4: The number of sea lice per pink salmon presented as a percentage of the total pink salmon sample population collected from Pre-Exposure, Inactive and Post-Exposure sub-areas sites in the Discovery Islands in 2021.

4.2 Pre-Exposure, Inactive and Post Exposure Sub-areas Across Sample Years

A comparison of the prevalence, abundance and average intensity of sea lice species found on chum and pink salmon collected in the Discovery Islands between 2017 and 2021 is presented in the following summary tables. Data from 2017 to 2020 had previously reported for two sub-areas only (Pre-Exposure and Post-Exposure) and has been divided into the same three areas as the 2021 data presented in this report (Pre-Exposure, Inactive and Post-Exposure) to allow for the year to year comparison. The data from 2017 to 2020 represents the same beach seine sites and also includes data from two sampling periods (one in April and one in May), as there were no changes to the sampling program from 2017 to 2021. Between 2017 and 2020 varying numbers of aquaculture sites were active in the Inactive sub-area. The number of active farms in the Inactive subarea in any given year has not been presented in this report.

4.2.1 Chum Salmon Comparison 2017-2021

The prevalence, abundance and intensity of sea lice on juvenile chum salmon between 2017 and 2021 in the Pre-Exposure area, Inactive area and Post-Exposure area is shown in Table 36. This data included sea lice of either species (*L. salmonis and C. clemensi*) identified on the inspected juvenile salmon from those areas.

The prevalence of sea lice on chum salmon within the Pre-Exposure sample area has ranged between 18.6 % (2017) and 27.8 % (2019) with an average of 22.2 % (SD 3.8). The prevalence within the Pre-Exposure sub-area was always higher than the Inactive sub-area prevalence and the Post-Exposure sub-area prevalence in all years, except for in 2019 when the prevalence in the Inactive sub-area was 1.0 % greater (28.8 %).

The prevalence of sea lice on chum salmon within the Inactive sample area has ranged between 4.4 % (2018) and 28.8 % (2019) with an average of 14.5 % (SD 10.0). The 2021 prevalence (11.0 %) within the Inactive sub-area is the median value of the five years of data, as 2017 and 2018 (7.8 % and 4.4 %) results were less than 2021 and 2019 and 2020 (28.8 % and 20.6 %) were greater than 2021.

The prevalence of sea lice on chum salmon within the Post-Exposure sample area has ranged between 3.5 % (2018) and 17.1 % (2021) with an average of 8.6 % (SD 5.6). The prevalence within the Post-Exposure sub-area was always lower than the Inactive sub area prevalence and the Pre-Exposure sub-area prevalence in all years except for in 2021, when the Post-Exposure area was 6.1 % greater than the Inactive sub-area.

The abundance of sea lice on chum salmon within the Pre-Exposure sample area has ranged between 0.24 (2020) and 0.49 (2019) with an average of 0.35 (SD 0.11). The abundance within the Pre-Exposure sub-area has been higher than the Inactive sub-area abundance and the Post-Exposure sub-area abundance in all years except for in 2020 when the Inactive sub-area was 0.11 greater (difference of 0.35 %).

The abundance of sea lice on chum salmon within the Inactive sample area has ranged between 0.05 (2018) and 0.42 (2019) with an average of 0.21 (SD 0.17). The 2021 abundance (0.13) within the Inactive sub-area is the median value of the five years of data as abundance in 2017 and 2018 (0.09 and 0.05) was less than 2021, and abundance in 2019 and 2020 (0.42 and 0.35) was greater than 2021.

The abundance of sea lice on chum salmon within the Post-Exposure sample area has ranged between 0.03 (2018) and 0.23 (2021) with an average of 0.11 (SD 0.08). The

abundance within the Post-Exposure sub-area was lower than the Inactive sub-area abundance and the Pre-Exposure area abundance in all years, except for in 2021 when the Post-Exposure area was 0.10 greater than the Inactive sub-area.

The intensity of sea lice on chum salmon within the Pre-Exposure sample area has ranged between 1.20 (2018) and 2.38 (2017) with an average of 1.59 (SD 0.49). (2.38). The intensity within the Pre-Exposure sub-area has been higher than the Inactive sub-area intensity and the Post-Exposure sub-area intensity in all years except for in 2020 when the Inactive sub-area was 0.48 greater and in 2021 when the Post-Exposure area was 0.02 greater

The intensity of sea lice on chum salmon within the Inactive sample area has ranged between 1.06 (2018) and 1.71 (2020) with an average of 1.30 (SD 0.28). The intensity (1.10) of sea lice infection on fish captured within the Inactive sub-area is the median value of the five years of data as results in 2017 and 2018 (1.15 and 1.06) were less than 2021, and results in 2019 and 2020 (1.47 and 1.71) were greater than 2021.

The intensity of sea lice on chum salmon within the Post-Exposure sample area ranged between 1.00 (2017 and 2018) and 1.42 (2019) with an average of 1.20 (SD 0.20). The intensity within the Post-Exposure sub-area was lower than the results for the Inactive sub-area intensity and the Pre-Exposure sub-area intensity in all years except for in 2021, when the Inactive sub-area result was 0.30 less (1.10) and in 2021 when the Pre-Exposure area was 0.02 less (1.38).

Table 36: A summary of the prevalence, abundance, and intensity on juvenile chum salmon samples from the Pre-Exposure, Inactive and Post-Exposure sub-area sites in the Discovery Islands between 2017 and 2021.

			Dro-Evi	nosura Sul	h-Area luv	enile Chum Salmo	n							
		Sample	Year and		D-Alea Juv	enne Cham Sanno	<u></u>							
Parameter	2017 (n=215)	2018 (n=123)	2019 (n=126)	2020 (n=112)	2021 (n=203)	Min (year)	Max (year)	Average	SD					
Prevalence (%)	18.6	24.4	27.8	19.6	20.7	18.6 (2017)	27.8 (2019)	22.2	3.80					
Abundance	0.44	0.29	0.49	0.24	0.29	0.24 (2020)	0.49 (2019)	0.35	0.11					
Intensity	2.38	1.20	1.77	1.23	1.38	1.20 (2018)	2.38 (2017)	1.59	0.49					
Inactive Sub-Area Juvenile Chum Salmon														
		Sample	Year and	Size (n)										
Parameter	2017 (n=212)	2018 (n=362)	2019 (n=371)	2020 (n=315)	2021 (n=435)	Min (year)	Max (year)	Average	SD					
Prevalence (%)	7.8	4.4	28.8	20.6	11.0	4.4 (2018)	28.8 (2019)	14.5	10.0					
Abundance	0.09	0.05	0.42	0.35	0.13	0.05 (2018)	0.42 (2019)	0.21	0.17					
Intensity	1.15	1.06	1.47	1.71	1.10	1.06 (2018)	1.71 (2020)	1.30	0.28					
			Post-Ex	posure Su	b-Area Juv	enile Chum Salmo	on							
		Sample	Year and	Size (n)										
Parameter	2017 (n=212)	2018 (n=230)	2019 (n=120)	2020 (n=137)	2021 (n=113)	Min (year)	Max (year)	Average	SD					
Prevalence (%)	3.8	3.5	10.0	8.8	17.1	3.5 (2018)	17.1 (2021)	8.6	5.60					
Abundance	0.04	0.03	0.14	0.10	0.23	0.03 (2018)	0.23 (2021)	0.11	0.08					
Intensity	1.00	1.00	1.42	1.17	1.40	1.00 (2017/18)	1.42 (2019)	1.20	0.20					

4.2.2 Pink Salmon Comparison 2017-2021

The prevalence, abundance and intensity of sea lice on juvenile pink salmon between 2017 and 2021 in the Pre-Exposure sub-area, Inactive sub-area and Post-Exposure sub-area is shown in Table 37. This data included sea lice of either species (*L. salmonis and C. clemensi*) on the inspected juvenile salmon.

The prevalence of sea lice on pink salmon within the Pre-Exposure sample area ranged between 12.5 % (2019) and 30.1 % (2020) with an average of 22.8 % (SD 6.4). The prevalence within the Pre-Exposure sub-area has been higher than the Inactive sub-area prevalence and the Post-Exposure sub-area prevalence in all years.

The prevalence of sea lice on pink salmon within the Inactive sample area ranged between 5.8 % (2018) and 21.1 % (2020)with an average of 12.7 % (SD 5.5). The prevalence of sea lice in 2021 (12.1 %) within the Inactive sub-area is the median value of the five years of data as 2018 and 2019 (5.8 % and 10.9 %) had less sea lice prevalence than 2021, and 2017 and 2020 (13.7 % and 21.1 %) had greater sea lice prevalence than 2021.

The prevalence of sea lice on pink salmon within the Post-Exposure sample area ranged between 1.8 % (2017) and 13.7 % (2020) with an average of 7.9 % (SD 5.2). The prevalence within the Post-Exposure sub-area has been lower than the Inactive sub-area prevalence and the Pre-Exposure sub-area prevalence in all years except for in 2019 when the Post-Exposure area was 1.0 % greater than the prevalence in the Inactive sub-area.

The abundance of sea lice on pink salmon within the Pre-Exposure sample area ranged between 0.23 (2019) and 0.57 (2017) with an average of 0.35 (SD 0.13). The abundance within the Pre-Exposure area has been higher than the Inactive sub-area abundance and the Post-Exposure sub-area abundance in all years.

The abundance of sea lice on pink salmon within the Inactive sample area ranged between 0.06 (2018) and 0.34 (2020) with an average of 0.16 (SD 0.11). The abundance of sea lice in 2021 (0.15) within the Inactive sub-area is the median value of the five years of data, as 2018 and 2019 (0.06 and 0.12) showed less abundance than 2021, and 2017 and 2020 (0.15 and 0.34) were greater than or equal to the 2021 result.

The abundance of sea lice on pink salmon within the Post-Exposure sample area ranged between 0.02 (2017) and 0.17 (2020) with an average of 0.09 (SD 0.06). The abundance on juvenile pink salmon within the Post-Exposure sub-area has been lower than the Inactive sub-area abundance and the Pre-Exposure sub-area abundance in all years except for in 2019 when the Post-Exposure area was 0.02 greater than the calculated abundance in the Inactive sub-area.

The intensity of sea lice on pink salmon within the Pre-Exposure sample area ranged between 1.18 (2021) and 2.39 (2017) with an average of 1.57 (SD 0.52). From 2017 – 2019, the calculated intensity within the Pre-Exposure sub-area was higher than the Inactive sub-area intensity and the Post-Exposure sub-area intensity. In 2020 and 2021, the calculated intensity of sea lice on pink salmon was less in the Pre-Exposure sub-area than in the Inactive and Post-Exposure sub-areas, with less difference noted in 2021.

The intensity of sea lice on pink salmon within the Inactive sample area ranged between 1.09 (2017-2019) and 1.63 (2020) with an average of 1.22 (SD 0.23). The intensity of

sea lice infestation in 2021 (1.22) within the Inactive sub-area is equal to the mean value of the five years of data in this portion of the Discovery Islands.

The intensity of sea lice on pink salmon within the Post-Exposure sample area ranged between 1.00 (2017 and 2018) and 1.21 (2020) with an average of 1.11 (SD 0.10). The calculated intensity within the Post-Exposure sub-area has been lower than the Inactive sub-area intensity and the Pre-Exposure sub-area intensity in all years except for in 2019 when the Inactive sub-area was 0.10 less) and 2020 when the Pre-Exposure area was 0.02 less.

Table 37: A summary of the prevalence, abundance, and intensity on juvenile pink salmon samples from the Pre-Exposure, Inactive and Post-Exposure sites between 2017 and 2021.

	Pre-Exposure Sub-Area Juvenile Pink Salmon														
		Sample	Year and	Size (n)											
Parameter	2017 (n=97)	2018 (n=125)	2019 (n=40)	2020 (n=173)	2021 (n=139)	Min (year)	Max (year)	Average	SD						
Prevalence (%)	23.7	23.2	12.5	30.1	24.5	12.5 (2019)	30.1 (2020)	22.8	6.40						
Abundance	0.57	0.30	0.23	0.36	0.29	0.23 (2019)	0.57 (2017)	0.35	0.13						
Intensity	2.39	1.31	1.80	1.19	1.18	1.18 (2021)	2.39 (2017)	1.57	0.52						
Inactive Sub-Area Juvenile Pink Salmon															
		Sample	Year and	Size (n)											
Parameter	2017 (n=168)	2018 (n=191)	2019 (n=293)	2020 (n=266)	2021 (n=380)	Min (year)	Max (year)	Average	SD						
Prevalence (%)	13.7	5.8	10.9	21.1	12.1	5.8 (2018)	21.1 (2020)	12.7	5.5						
Abundance	0.15	0.06	0.12	0.34	0.15	0.06 (2018)	0.34 (2020)	0.20	0.1						
Intensity	1.09	1.09	1.09	1.63	1.22	1.09 (2017)	1.63 (2020)	1.20	0.2						
			Post-Expo	sure Sub-	Area Juve	nile Pink Salmon									
		Sample	Year and	Size (n)											
Parameter	2017 (n=109)	2018 (n=118)	2019 (n=177)	2020 (n=139)	2021 (n=329)	Min (year)	Max (year)	Average	SD						
Prevalence (%)	1.8	3.4	11.9	13.7	8.8	1.8 (2017)	13.7 (2020)	7.90	5.20						
Abundance	0.02	0.03	0.14	0.17	0.10	0.02 (2017)	0.17 (2020)	0.10	0.10						
Intensity	1.00	1.00	1.19	1.21	1.14	1.00 (2017/18)	1.21 (2020)	1.10	0.10						

5.0 References

- Hamre L.A., C Eichner, C.M.A. Caipang, S.T. Dalvin, J.E. Bron, F. Nilsen, G. Boxshall and R. Skern-Mauitzen. 2013. The Salmon Louse Lepeophtheirus salmonis (Copepoda: Caligidae) Life Cycle Has Only Two Chalimus Stages. PLoS ONE 8(9): e73539.
- 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 S. Johnson. 2015. Sea lice monitoring and non-chemical measures A: Biology of sea lice, Lepeophtheirus salmonis and Caligus spp., in western and eastern Canada. DFO Canadian Science Advisory Secretariat. Research Document 2014/019 Pacific Region. Pacific Biological Station, Fisheries and Oceans Canada.
- Jones S. and A. Nemec. 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.
- Mainstream Biological Consulting. 2019. Wild Juvenile Salmonid Monitoring Program Discovery Islands 2019. Unpublished report prepared for MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd.
- Pacific Aquaculture Regulations. Finfish Aquaculture Licence conditions under the Pacific Aquaculture Regulations. Section 7. Sea Lice Monitoring
- 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.
- Saksida, S., Constantine J., Karreman G.A. and Donald A. 2007a. Evaluation of sea lice abundance levels on farmed Atlantic salmon (*Salmo salar* L) located in the Discovery Islands of British Columbia from 2003 to 2005. Aquacult. Res. 38: 219-231.
- Saksida, S., Karreman G.A., Constantine J., and Donald A. 2007b. Differences in *Lepeophtheirus salmonis* abundance levels on Atlantic salmon farms in the Discovery Islands, British Columbia, Canada. J. Fish Dis. 30:357-366.
- 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.
- Tully O. 1992. Predicting infestation parameters and impacts of caligid copepods in wild and captured fish populations. Invert. Reprod. Develop. 22: 91-102.

Appendix I - Field Data

Date	Time	Site Name	Salinity (ppt)	Temperature (° C.)
			0.2m	0.2m
19-Apr-21	8:03:00	Primary 1	26.4	8.5
19-Apr-21	8:35:00	Beautiful Bay	29.6	9.0
19-Apr-21	9:02:00	Primary 3	29.9	8.5
19-Apr-21	9:40:00	Blenkinsop Bay	29.4	10.2
19-Apr-21	10:09:00	Sunderland	29.9	9.2
19-Apr-21	10:41:00	Bessborough Bay	29.4	10.7
19-Apr-21	11:10:00	Wellbore	27.7	12.1
19-Apr-21	11:42:00	Chancellor	23.3	14.7
19-Apr-21	12:31:00	Race Passage	18.8	10.8
19-Apr-21	7:15:00	Francisco Point	29.9	11.3
19-Apr-21	8:03:00	Marina Island	30.6	12.7
19-Apr-21	8:55:00	Rebecca Spit	30.0	11.8
19-Apr-21	9:31:00	Viner Point	30.1	12.1
19-Apr-21	10:10:00	SE Hill Island	29.8	12.2
19-Apr-21	10:31:00	Penn Island	29.7	12.0
19-Apr-21	11:12:00	Raza	28.7	12.2
19-Apr-21	11:45:00	Raza North	26.5	14.1
20-Apr-21	7:45:00	Rock Bay	28.4	8.5
20-Apr-21	8:34:00	Bear Bay	29.7	8.6
20-Apr-21	9:04:00	Knox Bay	29.1	9.0
20-Apr-21	10:15:00	Cordero	28.5	10.5
20-Apr-21	10:48:00	Bickley Bay	6.9	11.2
20-Apr-21	11:38:00	Fanny Bay	2.6	11.5
20-Apr-21	12:20:00	Shoal Bay	5.9	13.4
20-Apr-21 20-Apr-21	13:05:00	Nodales	25.3	14.8
	13:44:00		28.9	12.5
20-Apr-21		Discovery		
20-Apr-21	14:40:00	Owen Bay Okisollo	29.2	13.9
20-Apr-21	15:15:00		28.5	13.5
20-Apr-21	16:12:00	Deepwater Bay	27.9	13.9
25-May-21	8:23:00	Francisco Point	31.6	10.5
25-May-21	9:30:00	Marina Island	29.9	13.7
25-May-21	10:17:00	Rebecca Spit	29.3	15.0
25-May-21	10:46:00	Viner Point	28.8	13.7
25-May-21	11:22:00	SE Hill Island	29.8	15.1
25-May-21	11:57:00	Penn Island	29.2	14.6
25-May-21	12:43:00	Raza	22.7	15.9
25-May-21	13:13:00	Raza North	21.7	17.7
26-May-21	7:39:00	Rock Bay	31.7	9.8
26-May-21	8:27:00	Bear Bay	31.5	10.1
26-May-21	9:23:00	Knox Bay	31.2	10.6
26-May-21	10:01:00	Cordero	30.3	11.4
26-May-21	10:53:00	Bickley Bay	30.3	11.2
26-May-21	11:30:00	Shoal Bay	26.9	11.5
26-May-21	12:20:00	Fanny Bay	5.3	12.7
26-May-21	13:06:00	Nodales	28.7	12.8

Date	Time	Site Name	Salinity (ppt) 0.2m	Temperature (° C.) 0.2m
26-May-21	13:50:00	Discovery	29.4	12.5
26-May-21	14:37:00	Okisollo	29.0	13.3
26-May-21	15:07:00	Owen Bay	29.3	13.3
26-May-21	16:03:00	Deepwater Bay	29.9	13.0
26-May-21	6:39:00	Primary 1	24.5	8.5
26-May-21	6:57:00	Beautiful Bay	29.2	8.7
26-May-21	7:26:00	Primary 3	30.1	8.7
26-May-21	7:55:00	Blenkinsop Bay	30.0	9.8
26-May-21	8:25:00	Sunderland	25.4	9.3
26-May-21	8:44:00	Bessborough Bay	27.7	9.2
26-May-21	9:09:00	Wellbore	27.8	9.3
26-May-21	9:46:00	Chancellor	13.2	9.7
26-May-21	10:20:00	Race Passage	29.8	9.7

Appendix II – Capture and Collection Sample Totals

			Pink	Pink	Chum	Chum	Coho	Coho	Chinook	Chinook	Sookovo	Sockovo	TSB	TSB	
Date	Site Name	Weather Comments	Captured	Retained	Captured	Retained	Captured	Retained	Captured	Retained	Sockeye Captured	Sockeye Retained	Captured	Retained	Comments
19-Apr-21	Primary 1	20 Knots SE, Clear	56	31	3	3	0	0	3	0	0	0	0	0	Heavy Chop at Site
		Heavy Chop at site,					•••••		•						
19-Apr-21	Beautiful Bay	Clear	92	32	42	32	0	0	0	0	0	0	0	0	Heavy Chop
															Slight Chop on site in lee of point. 3
19-Apr-21	Primary 3	Slight Chop, Clear	75	30	8	8	0	0	5	0	0	0	0	0	sculpins, 2 sandlances
															No fish caught, no bycatch. Set off bluff ->
19-Apr-21	Blenkinsop Bay	Clear, Sun	0	0	0	0	0	0	0	0	0	0	0	0	high tide
19-Apr-21	Sunderland	Clear, Sun	4	4	0	0	0	0	0	0	0	0	1	1	Calm, 1 sculpin
															Net caught in prop. 1 flounder, Ghost
19-Apr-21	Bessborough Bay	Clear, Sun	13	13	4	4	0	0	0	0	0	0	0	0	Shrimp
19-Apr-21	Wellbore	Sun, Clear, Calm	20	20	30	30	0	0	0	0	0	0	0	0	
19-Apr-21	Chancellor	Calm, Clear	39	29	41	31	0	0	0	0	0	0	0	0	
19-Apr-21	Race Passage	Calm, Clear	631	31	5	5	1	0	1	0	0	0	0	0	Moved Site to Port Hkusam
19-Apr-21	Francisco Point	Calm, Sun	328	31	340	29	0	0	0	0	0	0	0	0	1 Juvenile Flounder
19-Apr-21	Marina Island	Calm, Sun	49	31	61	29	0	0	0	0	0	0	0	0	80 Sculpins, 1 sandlance, 10 juv flounders
19-Apr-21	Rebecca Spit	Calm, Sun	0	0	268	29	0	0	0	0	0	0	0	0	1 sculpin
19-Apr-21	Viner Point	Calm, Sun	87	35	128	25	0	0	0	0	0	0	0	0	7 sculpins, 3 tubesnouts, 1 pipefish
19-Apr-21	SE Hill Island	Calm, Sun	0	0	0	0	0	0	0	0	0	0	0	0	2 sculpins, 1 gunnel, 2 sandlances
19-Apr-21	Penn Island	Calm, Sun	0	0	0	0	0	0	0	0	0	0	0	0	2 sculpins, 1 gunnel
19-Apr-21	Raza	Calm, Sun	0	0	15	15	0	0	0	0	0	0	0	0	1 sculpin, 30 sandlance
19-Apr-21	Raza North	Calm, Sun	0	0	56	30	0	0	0	0	0	0	0	0	2 sandlances
20-Apr-21	Rock Bay	Windy 10-15km, Clear	11	11	0	0	0	0	0	0	0	0	0	0	Choppy at beach
20-Apr-21	Bear Bay	Windy, Clear	43	30	0	0	0	0	0	0	0	0	0	0	3 sculpins
20-Apr-21	Knox Bay	Low Winds, Clear	59	29	38	28	0	0	0	0	0	0	0	0	Lots of surge at the beach. Sculpins x15
20-Apr-21	Cordero	Windy, Clear	1	1	0	0	0	0	0	0	0	0	0	0	Lots of boulder hang ups
20-Apr-21	Bickley Bay	Calm, Clear	531	31	529	29	0	0	0	0	0	0	0	0	Set at creek mouth. 2 flounders, 1 pipefish
20-Apr-21	Fanny Bay	Calm, Clear	69	29	90	30	0	0	0	0	0	0	0	0	
20-Apr-21	Shoal Bay	Calm, Clear	2129	30	930	30	0	0	0	0	0	0	0	0	1 Tubesnout
20-Apr-21	Nodales	Calm, Clear	133	33	107	27	0	0	0	0	0	0	0	0	Gunnels, sculpins, pipefish
20-Apr-21	Discovery	Calm, Clear	145	30	146	31	0	0	0	0	0	0	0	0	sculpins, urchins, tubesnouts
20-Apr-21	Owen Bay	Calm, Clear	0	0	60	30	0	0	0	0	0	0	0	0	Sculpins, Flounder, CT
20 Apr 21	Okisollo	Colm Cloor	2	2	40	21	0	0	0	0	0	0	0	0	Flatfish, tubesnout, shiner perch, pipefish,
20-Apr-21	•	Clear Channy	2	2	49 69	31 29	0	0	0	0	0	0	0	0	sculpins
20-Apr-21	Deepwater Bay	Clear, Choppy	1	7. T	•••••		•	0	0		0		0	0	Sculpin, kelp greenling, pipefish, Perch
25-May-21	Francisco Point	Overcast, Calm	67	25	74	35	0	0	0	0	0	0	0	0	No Bycatch
															2 Red Rock Crabs, 3 juv ling, abundant juv flounder, sculpins, ~15 pipefish, ~10
25-May-21	Marina Island	Overcast, Calm	6	6	12	12	0	0	0	0	0	0	0	0	gunnels. 1 Gunnel for Aquarium
ZJ-IVIGY-ZI	iviarilla islallu	Overcast, Callii	U	U	14	17	U	U	U	U	U	U	U	U	1 Red Irish Lord for Aquarium. 1 Copper
															Rockfish, ~50 Shiner Perch, 1 Cutthroat, 1
25-May-21	Rebecca Spit	Sun/Cloud, Calm	0	0	0	0	0	0	0	0	0	0	0	0	Plainfin Midshipsman, 5 Gunnels
23 11.0y 21	nesceda spit	Jan, Cloud, Culli		<u> </u>		<u> </u>					<u> </u>			<u> </u>	5 Copper Rockfish, 4 Gunnels, Abundant
25-May-21	Viner Point	Overcast, Calm	0	0	6	6	0	0	0	0	0	0	0	0	shiner perch, ~ 20 kelp perch, 1 herring
25-May-21	SE Hill Island	Sun/Cloud, Calm	8	8	6	6	0	0	0	0	0	0	0	0	Abundant Sandlances, Large fish hard to ID
,	J	2, 0.0 da, 0 diiii											-		S Ca Ca Ca Ca. Ca. Ca. Ca.

Date	Site Name	Weather Comments	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	TSB Captured	TSB Retained	Comments
															Large samples, hard to ID. 4 kelp perch,
25-May-21	Penn Island	Sun/Cloud, Calm	2	2	3	3	0	0	0	0	0	0	0	0	abundant sandlances, 1 herring
25-May-21	Raza	Overcast, Calm	0	0	51	30	1	0	0	0	0	0	0	0	Tide, 13 shiner perch
25-May-21	Raza North	Overcast, Calm	0	0	56	30	1	0	0	0	0	0	0	0	No Bycatch
															1 Gunnel, 2 greenling, 1 striped perch for
															aquarium. ~15 Dungeness, 20 sanddabs,
26-May-21	Rock Bay	Overcast, Calm	72	30	5	5	0	0	1	0	0	0	0	0	~15 sculpins
															1 Tubesnout, 1 big gunnel for aquarium.
26-May-21	Bear Bay	Overcast, Calm	2030	30	18	18	0	0	0	0	0	0	0	0	~4000 juv greenling?
															Tide, 1 gunnel for aquarium. ~20 sculpins, 1
26-May-21	Knox Bay	Overcast, Calm	7	7	0	0	0	0	0	0	0	0	0	0	greenling
26-May-21	Cordero	Overcast, Calm	252	32	248	28	1	0	1	0	0	0	0	0	fish jumping
26-May-21	Bickley Bay	Overcast, Calm	9	9	182	30	0	0	0	0	0	0	0	0	1 red rock, 2 gunnels, ~10 sculpins
															7 tubesnouts, 20 shiner perch, 1 silver
															spotted sculpin for aquarium. Abundant
26-May-21	Shoal Bay	Rain, Calm	642	32	478	28	0	0	0	0	0	0	0	0	Shiner Perch
															Moved just around corner to avoid waves +
26-May-21	Fanny Bay	Rain, Small Waves	15	15	5	5	0	0	20	0	0	0	0	0	wind direction. 3 Gunnels
26-May-21	Nodales	Rain, Calm	88	32	8	8	0	0	0	0	0	0	0	0	No Bycatch
26-May-21	Discovery	Rain, Calm	0	0	0	0	0	0	0	0	0	0	0	0	3 gunnels, 3 sculpins
															2 Sculpins (1 Staghorn, 1 Great) for
26-May-21	Okisollo	Rain, Calm	0	0	0	0	0	0	0	0	0	0	0	0	aquarium
26-May-21	Owen Bay	Rain, Calm	0	0	0	0	3	0	0	0	0	0	0	0	~ 20 sculpins
26-May-21	Deepwater Bay	Rain, Calm	0	0	0	0	0	0	0	0	0	0	0	0	25 Pile Perch; 7 for aquarium
26-May-21	Primary 1	Overcast, Calm	7	7	4	4	0	0	0	0	0	0	0	0	Kelp greenling, sculpin, striped perch
26-May-21	Beautiful Bay	Overcast, Calm	253	32	33	31	0	0	3	0	0	0	0	0	12 sculpins
26-May-21	Primary 3	Overcast, Calm	0	0	24	24	103	0	1	0	0	0	0	0	Gunnels. Sculpins, Dolly
26-May-21	Blenkinsop Bay	Overcast, Calm	1	1	17	17	6	0	0	0	0	0	0	0	
26-May-21	Sunderland	Overcast, Calm	0	0	0	0	0	0	0	0	0	0	0	0	Tubesnouts, kelp greenling
26-May-21	Bessborough Bay	Overcast, Calm	0	0	0	0	7	0	30	0	0	0	0	0	35 flounders, 60 sculpins
															Abundant urchins, other salmonids released
26-May-21	Wellbore	Overcast, 5-10km Wind	799	29	801	31	0	0	0	0	0	0	0	0	due to wind/waves /murky water
26-May-21	Chancellor	Overcast, Light Wind	7	7	230	30	0	0	0	0	0	0	0	0	Gunnels, perch, sculpins, Abundant kelp
26-May-21	Race Passage	Overcast, Light Wind	31	30	2	2	1	0	0	0	0	0	0	0	

Appendix III – Sea Lice Analysis Data

Date of	Location	Fish	Length	Weight	LEP	Cal	Cal	Cal	Cal	Cal	CAL	CALP	CAL	CAL	CAL							
seine		Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	AF	AM	AF	Total
19-Apr-21	Bessborough Bay	Chum	37	0.44								0										0
19-Apr-21	Bessborough Bay	Chum	34	0.43								0										0
19-Apr-21	Bessborough Bay	Chum	33	0.34								0										0
19-Apr-21	Bessborough Bay	Chum	34	0.40								0										0
19-Apr-21	Viner Point	Chum	50	1.33								0										0
19-Apr-21	Viner Point	Chum	46	1.04								0										0
19-Apr-21	Viner Point	Chum	41	0.70								0										0
19-Apr-21	Viner Point	Chum	39	0.53								0										0
19-Apr-21	Viner Point	Chum	37	0.43								0		1								1
19-Apr-21	Viner Point	Chum	56	2.05								0		1								1
19-Apr-21	Viner Point	Chum	40	0.65								0										0
19-Apr-21	Viner Point	Chum	43	0.74								0		1								1
19-Apr-21	Viner Point	Chum	47	1.15				ļ				0						ļ				0
19-Apr-21	Viner Point	Chum	38	0.59								0		2		1						2
19-Apr-21	Viner Point	Chum	42	0.79				ļ				0						ļ				0
19-Apr-21	Viner Point	Chum	42	0.75				ļ				0						ļ				0
19-Apr-21	Viner Point	Chum	44	1.02								0	1		1							2
19-Apr-21	Viner Point	Chum	42	0.72								0										0
19-Apr-21	Viner Point	Chum	51	1.68								0										0
19-Apr-21	Viner Point	Chum	38	0.58	1							1										0
19-Apr-21	Viner Point	Chum	36	0.50								0										0
19-Apr-21	Viner Point	Chum	45	1.15		1						1		1								1
19-Apr-21	Viner Point	Chum	43	0.96								0										0
19-Apr-21	Viner Point	Chum	38	0.56								0										0
19-Apr-21	Viner Point	Chum	41	0.71								0										0
19-Apr-21	Viner Point	Chum	38	0.52								0										0
19-Apr-21	Viner Point	Chum	43	0.87								0										0
19-Apr-21	Viner Point	Chum	39	0.58								0										0
19-Apr-21	Viner Point	Chum	45	1.09								0										0
19-Apr-21	Raza Island	Chum	34	0.36								0										0
19-Apr-21	Raza Island	Chum	35	0.31								0										0
19-Apr-21	Raza Island	Chum	34	0.35								0										0
19-Apr-21	Raza Island	Chum	33	0.37								0										0
19-Apr-21	Raza Island	Chum	35	0.36								0										0
19-Apr-21	Raza Island	Chum	32	0.35								0										0
19-Apr-21	Raza Island	Chum	36	0.41								0										0
19-Apr-21	Raza Island	Chum	32	0.31	1			-				1				-		-				0
19-Apr-21	Raza Island	Chum	35	0.37								0										0
19-Apr-21	Raza Island	Chum	35	0.43								0										0
19-Apr-21	Raza Island	Chum	36	0.44								0				1						0
19-Apr-21	Raza Island	Chum	35	0.40								0										0
19-Apr-21	Raza Island	Chum	36	0.44	1							1				1						0
19-Apr-21	Raza Island	Chum	33	0.29								0										0
19-Apr-21	Raza Island	Chum	36	0.46				-				0				-		-	-			0
20-Apr-21	Deep Water	Chum	35	0.44				-				0						-	-			0
20-Apr-21	Deep Water	Chum	37	0.57				-				0				-		-	-			0
20-Apr-21	Deep Water	Chum	40	0.68								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Deep Water	Chum	49	1.33								0										0
20-Apr-21	Deep Water	Chum	51	1.44								0										0
20-Apr-21	Deep Water	Chum	53	1.82								0										0
20-Apr-21	Deep Water	Chum	42	0.75			1					1										0
20-Apr-21	Deep Water	Chum	45	1.07								0										0
20-Apr-21	Deep Water	Chum	42	0.69								0										0
20-Apr-21	Deep Water	Chum	45	1.18								0										0
20-Apr-21	Deep Water	Chum	52	1.56								0										0
20-Apr-21	Deep Water	Chum	37	0.59								0										0
20-Apr-21	Deep Water	Chum	32	0.30								0										0
20-Apr-21	Deep Water	Chum	40	0.71								0									<u> </u>	0
20-Apr-21	Deep Water	Chum	35	0.50								0										0
20-Apr-21	Deep Water	Chum	39	0.70								0										0
20-Apr-21	Deep Water	Chum	39	0.81								0										0
20-Apr-21 20-Apr-21	Deep Water Deep Water	Chum Chum	44 41	0.90 0.76				-				0									 	0
20-Apr-21 20-Apr-21	Deep Water	Chum	49	1.22								0										0
20-Apr-21	Deep Water	Chum	34	0.43								0										0
20-Apr-21	Deep Water	Chum	41	0.43								0										0
20-Apr-21	Deep Water	Chum	35	0.33								0										0
20-Apr-21	Deep Water	Chum	43	0.84								0										0
20-Apr-21	Deep Water	Chum	36	0.57								0										0
20-Apr-21	Deep Water	Chum	47	1.18								0										0
20-Apr-21	Deep Water	Chum	43	1.08								0										0
20-Apr-21	Deep Water	Chum	35	0.33								0										0
20-Apr-21	Deep Water	Chum	39	0.60								0										0
19-Apr-21	Marina Island	Chum	43	0.93								0										0
19-Apr-21	Marina Island	Chum	37	0.58								0		1								1
19-Apr-21	Marina Island	Chum	36	0.59								0										0
19-Apr-21	Marina Island	Chum	36	0.52								0										0
19-Apr-21	Marina Island	Chum	40	0.82								0		1	1							2
19-Apr-21	Marina Island	Chum	40	0.66								0		1								1
19-Apr-21	Marina Island	Chum	36	0.54								0										0
19-Apr-21	Marina Island	Chum	38	0.61								0										0
19-Apr-21	Marina Island	Chum	40	0.61								0										0
19-Apr-21	Marina Island	Chum	47	1.38			1					1		2								2
19-Apr-21	Marina Island	Chum	42	0.83			-					0		_								0
19-Apr-21	Marina Island	Chum	40	0.67		1						1										0
19-Apr-21	Marina Island	Chum	45	0.98		<u> </u>						0				1	1					2
19-Apr-21	Marina Island	Chum	39	0.80								0				<u> </u>						0
19-Apr-21	Marina Island	Chum	38	0.67	1							1										0
19-Apr-21	Marina Island	Chum	40	0.07	-							0									 	0
		+	40	0.73								0			1		1					2
19-Apr-21	Marina Island	Chum													1	4			-		<u> </u>	
19-Apr-21	Marina Island	Chum	40	0.77								0	-	_		1			1			1
19-Apr-21	Marina Island	Chum	42	0.82								0		1					-		<u> </u>	1
19-Apr-21	Marina Island	Chum	38	0.61								0		2								2

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Marina Island	Chum	38	0.64								0										0
19-Apr-21	Marina Island	Chum	42	0.83								0										0
19-Apr-21	Marina Island	Chum	36	0.57		1						1										0
19-Apr-21	Marina Island	Chum	37	0.63								0										0
19-Apr-21	Marina Island	Chum	42	0.91		1						1										0
19-Apr-21	Marina Island	Chum	41	0.73								0										0
19-Apr-21	Marina Island	Chum	37	0.51								0										0
19-Apr-21	Marina Island	Chum	44	1.07								0										0
19-Apr-21	Marina Island	Chum	39	0.80								0										0
19-Apr-21	Primary 3	Chum	37	0.42								0										0
19-Apr-21	Primary 3	Chum	35	0.36								0										0
19-Apr-21	Primary 3	Chum	34	0.37								0										0
19-Apr-21	Primary 3	Chum	35	0.38								0										0
19-Apr-21	Primary 3	Chum	41	0.71								0										0
19-Apr-21	Primary 3	Chum	36	0.40								0										0
19-Apr-21	Primary 3	Chum	38	0.47								0										0
19-Apr-21	Primary 3	Chum	36	0.41								0										0
20-Apr-21	Okisollo	Chum	37	0.51								0										0
20-Apr-21	Okisollo	Chum	35	0.37								0										0
20-Apr-21	Okisollo	Chum	37	0.64								0										0
20-Apr-21	Okisollo	Chum	35	0.39								0										0
20-Apr-21	Okisollo	Chum	36	0.40								0										0
20-Apr-21	Okisollo	Chum	39	0.40								0										0
20-Apr-21 20-Apr-21	Okisollo	Chum	37	0.61								0										0
20-Apr-21	Okisollo	Chum	43	0.82								0										0
20-Apr-21	Okisollo	Chum	34	0.38								0										0
20-Apr-21	Okisollo	Chum	36	0.44								0										0
20-Apr-21	Okisollo	Chum	36	0.40								0										0
20-Apr-21	Okisollo	Chum	36	0.42								0										0
20-Apr-21	Okisollo	Chum	37	0.45								0										0
20-Apr-21	Okisollo	Chum	36	0.48								0										0
20-Apr-21	Okisollo	Chum	36	0.44								0										0
20-Apr-21	Okisollo	Chum	36	0.50								0	1									1
20-Apr-21	Okisollo	Chum	35 36	0.46								0										0
20-Apr-21 20-Apr-21	Okisollo Okisollo	Chum Chum	40	0.51 0.55								0										0
20-Apr-21	Okisollo	Chum	36	0.33								0										0
20-Apr-21	Okisollo	Chum	36	0.44								0										0
20-Apr-21	Okisollo	Chum	33	0.39								0										0
20-Apr-21	Okisollo	Chum	34	0.39								0										0
20-Apr-21	Okisollo	Chum	39	0.66								0										0
20-Apr-21	Okisollo	Chum	35	0.33								0										0
20-Apr-21	Okisollo	Chum	36	0.50		1						1										0
20-Apr-21	Okisollo	Chum	34	0.36								0										0
20-Apr-21	Okisollo	Chum	32	0.39								0	4	4								0
19-Apr-21	Chancellor	Chum	38	0.65								0	1	1								2

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Chancellor	Chum	50	1.38								0										0
19-Apr-21	Chancellor	Chum	38	0.57								0										0
19-Apr-21	Chancellor	Chum	37	0.58								0										0
19-Apr-21	Chancellor	Chum	35	0.47								0										0
19-Apr-21	Chancellor	Chum	42	0.75								0		1								1
19-Apr-21	Chancellor	Chum	36	0.49								0										0
19-Apr-21	Chancellor	Chum	54	1.69								0										0
19-Apr-21	Chancellor	Chum	50	1.46								0										0
19-Apr-21	Chancellor	Chum	52	1.44								0										0
19-Apr-21	Chancellor	Chum	45	1.05								0										0
19-Apr-21	Chancellor	Chum	40	0.79								0										0
19-Apr-21	Chancellor	Chum	40	0.73								0										0
19-Apr-21	Chancellor	Chum	35	0.44								0										0
19-Apr-21	Chancellor	Chum	45	1.05								0		1								1
19-Apr-21	Chancellor	Chum	45	1.04								0										0
19-Apr-21	Chancellor	Chum	35	0.43								0										0
19-Apr-21	Chancellor	Chum	35	0.42								0										0
19-Apr-21	Chancellor	Chum	38	0.70								0										0
19-Apr-21	Chancellor	Chum	35	0.57								0	1									1
19-Apr-21	Chancellor	Chum	41	0.74								0										0
19-Apr-21	Chancellor	Chum	47	1.39								0										0
19-Apr-21	Chancellor	Chum	38	0.69								0										0
19-Apr-21	Chancellor	Chum	33	0.34								0										0
19-Apr-21	Chancellor	Chum	45	1.05		1						1		1								1
19-Apr-21	Chancellor	Chum	41	0.87								0										0
19-Apr-21	Chancellor	Chum	42	1.19								0				1						1
19-Apr-21	Chancellor	Chum	33	0.38								0										0
19-Apr-21	Chancellor	Chum	42	0.75								0										0
19-Apr-21	Chancellor	Chum	45	1.07								0										0
19-Apr-21	Chancellor	Chum	48	1.32								0										0
19-Apr-21	Primary 1	Chum	35	0.31								0										0
19-Apr-21	Primary 1	Chum	44	0.93								0										0
19-Apr-21	Primary 1	Chum	37	0.50								0										0
20-Apr-21	Owen Bay	Chum	41	0.68								0										0
20-Apr-21	Owen Bay	Chum	52	1.55								0										0
20-Apr-21	Owen Bay	Chum	39	0.63								0										0
20-Apr-21	Owen Bay	Chum	54	1.58								0										0
20-Apr-21	Owen Bay	Chum	51	1.38								0										0
20-Apr-21	Owen Bay	Chum	43	0.74								0										0
20-Apr-21	Owen Bay	Chum	51	1.58								0										0
20-Apr-21	Owen Bay	Chum	47	1.17								0										0
20-Apr-21	Owen Bay	Chum	40	0.68								0										0
20-Apr-21	Owen Bay	Chum	40	0.68								0										0
20-Apr-21	Owen Bay	Chum	43	0.97								0							1			0
20-Apr-21	Owen Bay	Chum	38	0.68								0										0
20-Apr-21	Owen Bay	Chum	41	0.70								0										0
20-Apr-21	Owen Bay	Chum	40	0.79								0										0
20-Apr-21	Owen Bay	Chum	46	1.03								0										0
20-Apr-21	Owen Bay	Chum	48	0.89								0							1			0
20-Apr-21	Owen Bay	Chum	40	0.76								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Owen Bay	Chum	52	1.50								0										0
20-Apr-21	Owen Bay	Chum	43	0.88								0										0
20-Apr-21	Owen Bay	Chum	50	2.01								0										0
20-Apr-21	Owen Bay	Chum	47	1.29								0	1									1
20-Apr-21	Owen Bay	Chum	56	2.10								0										0
20-Apr-21	Owen Bay	Chum	47	1.18								0	1									1
20-Apr-21	Owen Bay	Chum	57	1.83								0										0
20-Apr-21	Owen Bay	Chum	49	1.26								0			1							1
20-Apr-21	Owen Bay	Chum	48	1.31								0										0
20-Apr-21	Owen Bay	Chum	51	1.57								0										0
20-Apr-21	Owen Bay	Chum	60	2.23								0										0
20-Apr-21	Owen Bay	Chum	50	1.31								0										0
20-Apr-21	Owen Bay	Chum	52	1.70								0										0
19-Apr-21	Race Passage	Chum	37	0.61								0										0
19-Apr-21	Race Passage	Chum	38	0.55								0										0
19-Apr-21	Race Passage	Chum	37	0.53								0										0
19-Apr-21	Race Passage	Chum	34	0.37								0										0
19-Apr-21	Race Passage	Chum	36	0.47								0										0
19-Apr-21	Rebecca Spit	Chum	36	0.44								0										0
19-Apr-21	Rebecca Spit	Chum	35	0.41								0										0
19-Apr-21	Rebecca Spit	Chum	36	0.44								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.40								0										0
19-Apr-21	Rebecca Spit	Chum	37	0.40								0										0
19-Apr-21	Rebecca Spit	Chum	37	0.41								0										0
19-Apr-21	Rebecca Spit	Chum	38	0.45								0										0
19-Apr-21	Rebecca Spit	Chum	37	0.36								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.41								0										0
19-Apr-21	Rebecca Spit	Chum	35	0.35								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.38								0										0
19-Apr-21	Rebecca Spit	Chum	38	0.51								0		1								1
19-Apr-21	Rebecca Spit	Chum	38	0.44								0		•								0
19-Apr-21	Rebecca Spit	Chum	36	0.40								0										0
19-Apr-21	Rebecca Spit	Chum	35	0.38								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.39								0										0
19-Apr-21	Rebecca Spit	Chum	38	0.56								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.40								0										0
19-Apr-21	Rebecca Spit	Chum	39	0.56								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.48								0										0
19-Apr-21	Rebecca Spit	Chum	33	0.40								0										0
19-Apr-21	Rebecca Spit	Chum	38	0.48								0										0
19-Apr-21	Rebecca Spit	Chum	36	0.48								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.34								0										0
19-Apr-21	Rebecca Spit	Chum	35	0.41								0										0
19-Apr-21	Rebecca Spit	Chum	34	0.49								0										0
19-Apr-21	Rebecca Spit	Chum	35	0.45								0			2							2
19-Apr-21	Rebecca Spit	Chum	35	0.52								0										0
	·		35	0.49								0										0
19-Apr-21	Rebecca Spit	Chum		0.69								0										0
19-Apr-21	Raza North	Chum	34																			
19-Apr-21	Raza North	Chum	34	0.40								0										0
19-Apr-21	Raza North	Chum	35	0.46								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Raza North	Chum	32	0.40								0										0
19-Apr-21	Raza North	Chum	35	0.39								0										0
19-Apr-21	Raza North	Chum	31	0.33								0										0
19-Apr-21	Raza North	Chum	35	0.38	1							1										0
19-Apr-21	Raza North	Chum	35	0.50								0										0
19-Apr-21	Raza North	Chum	34	0.34								0										0
19-Apr-21	Raza North	Chum	33	0.38								0										0
19-Apr-21	Raza North	Chum	33	0.41								0										0
19-Apr-21	Raza North	Chum	37	0.49								0										0
19-Apr-21	Raza North	Chum	32	0.35								0										0
19-Apr-21	Raza North	Chum	35	0.40								0										0
19-Apr-21	Raza North	Chum	33	0.39								0										0
19-Apr-21	Raza North	Chum	33	0.36								0										0
19-Apr-21	Raza North	Chum	35	0.38			<u> </u>					0										0
19-Apr-21	Raza North	Chum	35	0.37								0										0
19-Apr-21	Raza North	Chum	32	0.33								0										0
19-Apr-21	Raza North	Chum	32	0.32								0										0
19-Apr-21	Raza North	Chum	33	0.35								0										0
19-Apr-21	Raza North	Chum	35	0.37								0										0
19-Apr-21	Raza North	Chum	33	0.37								0										0
19-Apr-21	Raza North	Chum	34	0.38								0										0
19-Apr-21	Raza North	Chum	33	0.34								0										0
19-Apr-21	Raza North	Chum	34	0.35								0										0
19-Apr-21	Raza North	Chum	32	0.35								0										0
19-Apr-21	Raza North	Chum	33	0.42		1						1										0
19-Apr-21	Raza North	Chum	33	0.35								0										0
19-Apr-21	Raza North	Chum	33	0.35								0										0
20-Apr-21	Discovery	Chum	49	1.17		1						1										0
20-Apr-21	Discovery	Chum	37	0.49								0										0
20-Apr-21	Discovery	Chum	38	0.53								0		1								1
20-Apr-21	Discovery	Chum	43	0.79	1							1										0
20-Apr-21	Discovery	Chum	40	0.70								0										0
20-Apr-21	Discovery	Chum	39	0.61								0										0
20-Apr-21	Discovery	Chum	42	0.76								0										0
20-Apr-21	Discovery	Chum	41	0.79								0										0
20-Apr-21	Discovery	Chum	40	0.80								0										0
20-Apr-21	Discovery	Chum	42	0.69								0										0
20-Apr-21	Discovery	Chum	36	0.49								0										0
20-Apr-21	Discovery	Chum	51	1.36								0										0
20-Apr-21	Discovery	Chum	40	0.61								0										0
20-Apr-21	Discovery	Chum	42	0.87		1						1		1	1							2
20-Apr-21	Discovery	Chum	34	0.30								0										0
20-Apr-21	Discovery	Chum	41	0.72								0		1								1
20-Apr-21	Discovery	Chum	41	0.73		1						1										0
20-Apr-21	Discovery	Chum	40	0.68								0										0
20-Apr-21	Discovery	Chum	42	0.80								0										0
20-Apr-21	Discovery	Chum	40	0.65								0										0
20-Apr-21	Discovery	Chum	37	0.50								0										0
20-Apr-21	Discovery	Chum	47	1.11								0										0
20-Apr-21	Discovery	Chum	43	0.85								0	1									1

20-Apr-21		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20-Apr-21		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20-Apr-21		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20-Apr-21		0 0 0 0 0 0 0 0 0 0 0 0 0
20-Apr-21		0 0 0 0 0 0 0 0 0 0 0 0
20-Apr-21		0 0 0 0 0 0 0 0 0 0 0
20-Apr-21 Discovery Chum 39 0.66 20-Apr-21 Fanny Bay Chum 35 0.42 0 20-Apr-21 Fanny Bay Chum 36 0.42 0 20-Apr-21 Fanny Bay Chum 32 0.37 0 20-Apr-21 Fanny Bay Chum 42 0.69 0 20-Apr-21 Fanny Bay Chum 32 0.36 0 0 20-Apr-21 Fanny Bay Chum 32 0.36 0 0 0 20-Apr-21 Fanny Bay Chum 36 0.41 0 0 0 0 20-Apr-21 Fanny Bay Chum 35 0.38 0		0 0 0 0 0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 35 0.42 0 0 0 0 20-Apr-21 Fanny Bay Chum 36 0.42 0		0 0 0 0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 36 0.42 0 0 0 0 20-Apr-21 Fanny Bay Chum 32 0.37 0		0 0 0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 32 0.37 0 0 0 0 20-Apr-21 Fanny Bay Chum 42 0.69 0 0 0 0 0 20-Apr-21 Fanny Bay Chum 32 0.36 0 <		0 0 0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 42 0.69 0 0 0 20-Apr-21 Fanny Bay Chum 32 0.36 0		0 0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 32 0.36 0 <td></td> <td>0 0 0 0 0 0 0</td>		0 0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 36 0.41 0 <td></td> <td>0 0 0 0 0 0</td>		0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 36 0.41 0 <td></td> <td>0 0 0 0 0 0</td>		0 0 0 0 0 0
20-Apr-21 Fanny Bay Chum 35 0.38 0 <td></td> <td>0 0 0 0 0</td>		0 0 0 0 0
20-Apr-21 Fanny Bay Chum 38 0.46 0 <td></td> <td>0 0 0 0 0</td>		0 0 0 0 0
20-Apr-21 Fanny Bay Chum 38 0.35 0 <td></td> <td>0 0 0 0</td>		0 0 0 0
20-Apr-21 Fanny Bay Chum 33 0.34 0 <td></td> <td>0 0 0 0</td>		0 0 0 0
20-Apr-21 Fanny Bay Chum 35 0.43 0 <td></td> <td>0 0</td>		0 0
20-Apr-21 Fanny Bay Chum 34 0.35 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 36 0.35 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 35 0.40 0 <td></td> <td></td>		
20-Apr-21 Fanny Bay Chum 37 0.46 0 0 0 20-Apr-21 Fanny Bay Chum 35 0.37 0		
20-Apr-21 Fanny Bay Chum 35 0.37 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 37 0.47 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 34 0.36 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 36 0.44 0 0 0 20-Apr-21 Fanny Bay Chum 35 0.42 0		0
20-Apr-21 Fanny Bay Chum 35 0.42 0 <td></td> <td>0</td>		0
20-Apr-21 Fanny Bay Chum 36 0.41 0		0
		0
ZU-MU-Z FAUDY DAY CUUU 41 U/4		0
20-Apr-21 Fanny Bay Chum 35 0.41 0		0
20-Apr-21 Fanny Bay Chum 35 0.44 0		0
20-Apr-21 Fanny Bay Chum 38 0.50 0		0
20-Apr-21 Fanny Bay Chum 36 0.42 0		0
20-Apr-21 Fanny Bay Chum 38 0.48 0		0
20-Apr-21 Fanny Bay Chum 36 0.38 0		0
20-Apr-21 Fanny Bay Chum 35 0.50 0		0
20-Apr-21 Fanny Bay Chum 34 0.36 0		0
19-Apr-21 Wellbore Chum 43 0.91		0
19-Apr-21 Wellbore Chum 39 0.76 0		0
19-Apr-21 Wellbore Chum 41 1.02 0		0
19-Apr-21 Wellbore Chum 36 0.55 0		0
19-Apr-21 Wellbore Chum 42 0.81 0		0
19-Apr-21 Wellbore Chum 35 0.47 0		0
19-Apr-21 Wellbore Chum 50 1.45 0		0
19-Apr-21 Wellbore Chum 49 1.15 0		0
		0
		0
19-Apr-21 Wellbore Chum 36 0.54 0 1 1 19-Apr-21 Wellbore Chum 39 0.64 0 0 1 0 1 0 1 0 0 1 0 </td <td></td> <td>1 0</td>		1 0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Wellbore	Chum	34	0.38								0										0
19-Apr-21	Wellbore	Chum	54	1.55								0										0
19-Apr-21	Wellbore	Chum	45	0.96								0										0
19-Apr-21	Wellbore	Chum	47	1.26								0										0
19-Apr-21	Wellbore	Chum	41	0.64								0										0
19-Apr-21	Wellbore	Chum	46	1.28								0										0
19-Apr-21	Wellbore	Chum	34	0.48								0										0
19-Apr-21	Wellbore	Chum	50	1.36								0										0
19-Apr-21	Wellbore	Chum	49	1.20								0										0
19-Apr-21	Wellbore	Chum	42	0.97								0										0
19-Apr-21	Wellbore	Chum	42	0.91								0										0
19-Apr-21	Wellbore	Chum	37	0.76								0										0
19-Apr-21	Wellbore	Chum	54	1.98								0										0
19-Apr-21	Wellbore	Chum	37	0.56	1	1						2										0
19-Apr-21	Wellbore	Chum	41	0.78								0										0
19-Apr-21	Wellbore	Chum	43	1.04								0										0
19-Apr-21	Wellbore	Chum	38	0.60								0										0
19-Apr-21	Wellbore	Chum	40	0.61								0										0
20-Apr-21	Bickley Bay	Chum	37	0.45								0										0
20-Apr-21	Bickley Bay	Chum	35	0.41								0										0
20-Apr-21	Bickley Bay	Chum	38	0.55								0										0
20-Apr-21	Bickley Bay	Chum	38	0.50								0										0
20-Apr-21	Bickley Bay	Chum	36	0.38								0										0
20-Apr-21	Bickley Bay	Chum	38	0.54								0										0
20-Apr-21	Bickley Bay	Chum	42	0.76								0										0
20-Apr-21	Bickley Bay	Chum	44	0.85								0										0
20-Apr-21	Bickley Bay	Chum	40	0.63								0										0
20-Apr-21	Bickley Bay	Chum	38	0.54								0										0
20-Apr-21	Bickley Bay	Chum	38	0.57								0										0
20-Apr-21	Bickley Bay	Chum	37	0.44								0										0
20-Apr-21	Bickley Bay	Chum	37	0.38								0										0
20-Apr-21	Bickley Bay	Chum	40	0.67								0										0
20-Apr-21	Bickley Bay	Chum	38	0.49								0										0
20-Apr-21	Bickley Bay	Chum	45	1.00								0										0
20-Apr-21	Bickley Bay	Chum	41	0.75								0										0
20-Apr-21	Bickley Bay	Chum	41	0.70								0										0
20-Apr-21	Bickley Bay	Chum	37	0.46								0										0
20-Apr-21	Bickley Bay	Chum	36	0.48								0										0
20-Apr-21	Bickley Bay	Chum	42	0.80								0										0
20-Apr-21	Bickley Bay	Chum	37	0.49								0				1						0
20-Apr-21	Bickley Bay	Chum	35	0.39								0				1						0
20-Apr-21	Bickley Bay	Chum	35	0.40								0										0
20-Apr-21	Bickley Bay	Chum	36	0.49								0										0
20-Apr-21	Bickley Bay	Chum	39	0.62								0		1								1
20-Apr-21	Bickley Bay	Chum	35	0.02								0		'								0
20-Apr-21	Bickley Bay	Chum	36	0.47								0										0
20-Apr-21	Bickley Bay	Chum	39	0.67								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.61								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.46								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.46				 				0								 		0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Beautiful Bay	Chum	33	0.29								0										0
19-Apr-21	Beautiful Bay	Chum	31	0.25								0										0
19-Apr-21	Beautiful Bay	Chum	33	0.33								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.44								0										0
19-Apr-21	Beautiful Bay	Chum	39	0.56								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.47								0										0
19-Apr-21	Beautiful Bay	Chum	42	0.66								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.34								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.43								0										0
19-Apr-21	Beautiful Bay	Chum	35	0.34								0										0
19-Apr-21	Beautiful Bay	Chum	35	0.48								0										0
19-Apr-21	Beautiful Bay	Chum	35	0.40								0										0
19-Apr-21	Beautiful Bay	Chum	33	0.27								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.49								0										0
19-Apr-21	Beautiful Bay	Chum	35	0.32								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.50								0										0
19-Apr-21	Beautiful Bay	Chum	34	0.38								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.48								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.43								0										0
19-Apr-21	Beautiful Bay	Chum	37	0.55								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.33								0										0
19-Apr-21	Beautiful Bay	Chum	34	0.35								0										0
19-Apr-21	Beautiful Bay	Chum	33	0.34								0										0
19-Apr-21	Beautiful Bay	Chum	38	0.51								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.33								0										0
19-Apr-21	Beautiful Bay	Chum	39	0.51								0										0
19-Apr-21	Beautiful Bay	Chum	35	0.39								0										0
19-Apr-21	Beautiful Bay	Chum	36	0.39								0										0
19-Apr-21	Beautiful Bay	Chum	32	0.41								0										0
19-Apr-21	Beautiful Bay	Chum	33	0.36								0										0
20-Apr-21	Nodales	Chum	37	0.45								0										0
20-Apr-21	Nodales	Chum	42	0.86	1							1	1									1
20-Apr-21	Nodales	Chum	38	0.64								0	<u> </u>	1								1
20-Apr-21	Nodales	Chum	35	0.42								0										0
20-Apr-21	Nodales	Chum	36	0.48	1							1										0
20-Apr-21	Nodales	Chum	50	1.57								0		1								1
20-Apr-21	Nodales	Chum	39	0.46								0										0
20-Apr-21	Nodales	Chum	44	0.40								0										0
20-Apr-21	Nodales	Chum	34	0.4								0										0
20-Apr-21	Nodales	Chum	35	0.53								0										0
20-Apr-21	Nodales	Chum	35	0.33								0										0
20-Apr-21	Nodales	Chum	41	0.76		1						1				-						0
20-Apr-21	Nodales	Chum	40	0.76		<u>'</u>						0										0
20-Apr-21	Nodales	Chum	39	0.65	1							1	1									1
20-Apr-21 20-Apr-21	Nodales	Chum	50	1.3	l I	1						1	1									1
20-Apr-21 20-Apr-21	Nodales	Chum	36	0.51								0		1								1
			35	0.51										ı								0
20-Apr-21	Nodales	Chum Chum		0.44								0				-						0
20-Apr-21	Nodales		40 47																			
20-Apr-21	Nodales	Chum		1.29								0										0
20-Apr-21	Nodales	Chum	44	0.95								0										

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Nodales	Chum	36	0.51								0										0
20-Apr-21	Nodales	Chum	37	0.53								0										0
20-Apr-21	Nodales	Chum	41	0.85		1						1										0
20-Apr-21	Nodales	Chum	36	0.55								0										0
20-Apr-21	Nodales	Chum	48	1.33								0										0
20-Apr-21	Nodales	Chum	36	0.52								0										0
20-Apr-21	Nodales	Chum	37	0.55								0										0
20-Apr-21	Knox Bay	Chum	37	0.62								0										0
20-Apr-21	Knox Bay	Chum	41	0.88								0										0
20-Apr-21	Knox Bay	Chum	37	0.50								0										0
20-Apr-21	Knox Bay	Chum	36	0.45								0										0
20-Apr-21	Knox Bay	Chum	36	0.53								0		1								1
20-Apr-21	Knox Bay	Chum	38	0.56								0										0
20-Apr-21	Knox Bay	Chum	35	0.36								0										0
20-Apr-21	Knox Bay	Chum	39	0.69								0										0
20-Apr-21	Knox Bay	Chum	36	0.45								0										0
20-Apr-21	Knox Bay	Chum	38	0.67								0										0
20-Apr-21	Knox Bay	Chum	35	0.38								0										0
20-Apr-21	Knox Bay	Chum	36	0.44								0										0
20-Apr-21	Knox Bay	Chum	40	0.73								0										0
20-Apr-21	Knox Bay	Chum	49	1.29								0										0
20-Apr-21	Knox Bay	Chum	37	0.44								0										0
20-Apr-21	Knox Bay	Chum	36	0.41								0										0
20-Apr-21	Knox Bay	Chum	36	0.41								0										0
20-Apr-21	Knox Bay	Chum	36	0.59								0										0
20-Apr-21	Knox Bay	Chum	36	0.56								0										0
20-Apr-21	Knox Bay	Chum	33	0.37								0										0
20-Apr-21	Knox Bay	Chum	35	0.40								0										0
20-Apr-21	Knox Bay	Chum	32	0.37								0										0
20-Apr-21	Knox Bay	Chum	35	0.39								0										0
20-Apr-21	Knox Bay	Chum	33	0.68								0										0
20-Apr-21	Knox Bay	Chum	31	0.25								0										0
20-Apr-21	Knox Bay	Chum	36	0.54								0										0
20-Apr-21	Knox Bay	Chum	38	0.61								0										0
20-Apr-21	Knox Bay	Chum	34	0.44								0										0
20-Apr-21	Knox Bay	Chum	35	0.51								0										0
20-Apr-21	Knox Bay	Chum	31	0.29								0										0
20-Apr-21	Knox Bay	Chum	35	0.23								0										0
20-Apr-21	Shoal Bay	Chum	40	0.51								0										0
20-Apr-21	Shoal Bay	Chum	37	0.45								0										0
20-Apr-21	Shoal Bay	Chum	35	0.43								0										0
20-Apr-21	Shoal Bay	Chum	38	0.50								0			-							0
20-Apr-21 20-Apr-21	Shoal Bay	Chum	37	0.50				-				0						1				0
20-Apr-21 20-Apr-21			35	0.41			-	-		-		0					-					0
	Shoal Bay	Chum	35	0.36								0										0
20-Apr-21	Shoal Bay	Chum						1														
20-Apr-21	Shoal Bay	Chum	50	1.25				1				0										0
20-Apr-21	Shoal Bay	Chum	43	0.79				1				0						1				0
20-Apr-21	Shoal Bay	Chum	37	0.37				-				0										0
20-Apr-21	Shoal Bay	Chum	37	0.54	4			-				0										0
20-Apr-21	Shoal Bay	Chum	40	0.59	1			1				1		1	1	1	1					0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Shoal Bay	Chum	36	0.45								0										0
20-Apr-21	Shoal Bay	Chum	35	0.33								0										0
20-Apr-21	Shoal Bay	Chum	37	0.44								0										0
20-Apr-21	Shoal Bay	Chum	52	1.46								0										0
20-Apr-21	Shoal Bay	Chum	40	0.62								0										0
20-Apr-21	Shoal Bay	Chum	44	0.80								0										0
20-Apr-21	Shoal Bay	Chum	36	0.40								0										0
20-Apr-21	Shoal Bay	Chum	33	0.33								0										0
20-Apr-21	Shoal Bay	Chum	37	0.46								0										0
20-Apr-21	Shoal Bay	Chum	35	0.37								0										0
20-Apr-21	Shoal Bay	Chum	39	0.51								0										0
20-Apr-21	Shoal Bay	Chum	35	0.36								0										0
20-Apr-21	Shoal Bay	Chum	36	0.43								0										0
20-Apr-21	Shoal Bay	Chum	36	0.44								0										0
20-Apr-21	Shoal Bay	Chum	45	0.91								0										0
20-Apr-21	Shoal Bay	Chum	36	0.48								0										0
20-Apr-21	Shoal Bay	Chum	38	0.47								0										0
20-Apr-21	Shoal Bay	Chum	38	0.54								0										0
19-Apr-21	Francisco Point	Chum	38	0.53								0										0
19-Apr-21	Francisco Point	Chum	35	0.40								0		2								2
19-Apr-21	Francisco Point	Chum	36	0.54								0			1							1
19-Apr-21	Francisco Point	Chum	37	0.60								0			-							0
19-Apr-21	Francisco Point	Chum	37	0.65								0										0
19-Apr-21	Francisco Point	Chum	37	0.54								0		1								1
19-Apr-21	Francisco Point	Chum	38	0.60								0		1								1
19-Apr-21	Francisco Point	Chum	38	0.64								0		•								0
19-Apr-21	Francisco Point	Chum	36	0.49								0										0
19-Apr-21	Francisco Point	Chum	33	0.46	1							1		1								1
19-Apr-21	Francisco Point	Chum	37	0.52								0		•								0
19-Apr-21	Francisco Point	Chum	39	0.61								0										0
19-Apr-21	Francisco Point	Chum	42	0.74								0										0
19-Apr-21	Francisco Point	Chum	35	0.49								0										0
19-Apr-21	Francisco Point	Chum	38	0.64								0										0
19-Apr-21	Francisco Point	Chum	35	0.50								0		1								1
19-Apr-21	Francisco Point	Chum	39	0.75	1							1		1								1
19-Apr-21	Francisco Point	Chum	39	0.69	•							0		<u> </u>								0
19-Apr-21	Francisco Point	Chum	36	0.58								0										0
19-Apr-21	Francisco Point	Chum	39	0.46								0										0
19-Apr-21	Francisco Point	Chum	38	0.56								0										0
19-Apr-21	Francisco Point	Chum	38	0.52								0										0
19-Apr-21	Francisco Point	Chum	39	0.65								0										0
19-Apr-21	Francisco Point	Chum	38	0.61								0										0
19-Apr-21	Francisco Point	Chum	35	0.51								0										0
19-Apr-21	Francisco Point	Chum	37	0.69								0										0
19-Apr-21	Francisco Point	Chum	38	0.65								0										0
19-Apr-21	Francisco Point	Chum	36	0.65								0										0
19-Apr-21	Francisco Point	Chum	40	0.49								0		1								1
19-Apr-21	Bessborough Bay	Pink	27	0.72								0		-								0
19-Apr-21	Bessborough Bay	Pink	30	0.19								0										0
19-MPI-Z I	Bessborough Bay	Pink	32	0.18			-					0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Bessborough Bay	Pink	31	0.27								0										0
19-Apr-21	Bessborough Bay	Pink	32	0.26								0										0
19-Apr-21	Bessborough Bay	Pink	30	0.25								0										0
19-Apr-21	Bessborough Bay	Pink	29	0.21								0										0
19-Apr-21	Bessborough Bay	Pink	31	0.24								0										0
19-Apr-21	Bessborough Bay	Pink	32	0.26								0										0
19-Apr-21	Bessborough Bay	Pink	34	0.34	1							1										0
19-Apr-21	Bessborough Bay	Pink	31	0.27								0										0
19-Apr-21	Bessborough Bay	Pink	32	0.28								0										0
19-Apr-21	Bessborough Bay	Pink	34	0.28								0										0
19-Apr-21	Viner Point	Pink	40	0.55								0										0
19-Apr-21	Viner Point	Pink	44	0.74								0										0
19-Apr-21	Viner Point	Pink	45	0.85								0										0
20-Apr-21	Rock Bay	Pink	31	0.27								0										0
20-Apr-21	Rock Bay	Pink	30	0.22								0										0
20-Apr-21	Rock Bay	Pink	32	0.25								0										0
20-Apr-21	Rock Bay	Pink	32	0.29								0										0
20-Apr-21	Rock Bay	Pink	32	0.26								0										0
20-Apr-21	Rock Bay	Pink	31	0.25								0										0
20-Apr-21	Rock Bay	Pink	33	0.29								0		1								1
20-Apr-21	Rock Bay	Pink	32	0.31								0										0
20-Apr-21	Rock Bay	Pink	31	0.23								0										0
20-Apr-21	Rock Bay	Pink	30	0.21								0										0
20-Apr-21	Rock Bay	Pink	32	0.22								0										0
19-Apr-21	Viner Point	Pink	46	0.90								0										0
19-Apr-21	Viner Point	Pink	36	0.43								0										0
19-Apr-21	Viner Point	Pink	49	1.17								0										0
19-Apr-21	Viner Point	Pink	42	0.69								0										0
19-Apr-21	Viner Point	Pink	35	0.44		1						1										0
19-Apr-21	Viner Point	Pink	36	0.44								0		1								1
19-Apr-21	Viner Point	Pink	37	0.55								0		1								1
19-Apr-21	Viner Point	Pink	45	0.92								0										0
19-Apr-21	Viner Point	Pink	37	0.51								0										0
19-Apr-21	Viner Point	Pink	37	0.51								0										0
19-Apr-21	Viner Point	Pink	45	0.82								0			1							1
19-Apr-21	Viner Point	Pink	34	0.40								0										0
19-Apr-21	Viner Point	Pink	44	0.82								0										0
19-Apr-21	Viner Point	Pink	37	0.46								0										0
19-Apr-21	Viner Point	Pink	42	0.71								0										0
19-Apr-21	Viner Point	Pink	49	1.31								0										0
19-Apr-21	Viner Point	Pink	43	0.75								0										0
19-Apr-21	Viner Point	Pink	45	0.86								0			1							1
19-Apr-21	Viner Point	Pink	36	0.45								0										0
19-Apr-21	Viner Point	Pink	56	1.66								0										0
19-Apr-21	Viner Point	Pink	43	0.70								0										0
19-Apr-21	Viner Point	Pink	44	0.81								0			1							1
19-Apr-21	Viner Point	Pink	37	0.47								0										0
19-Apr-21	Viner Point	Pink	45	0.93								0										0
19-Apr-21	Viner Point	Pink	42	0.68								0					1					1
19-Apr-21	Viner Point	Pink	36	0.47								0		1								1

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Viner Point	Pink	34	0.38								0										0
19-Apr-21	Viner Point	Pink	44	0.71								0										0
19-Apr-21	Viner Point	Pink	37	0.47								0			1							1
19-Apr-21	Viner Point	Pink	37	0.51								0			1							1
19-Apr-21	Viner Point	Pink	45	0.91		1						1										0
19-Apr-21	Viner Point	Pink	49	1.14								0										0
20-Apr-21	Deep Water	Pink	32	0.35								0										0
20-Apr-21	Bear Bay	Pink	33	0.29								0										0
20-Apr-21	Bear Bay	Pink	32	0.37								0										0
20-Apr-21	Bear Bay	Pink	30	0.28								0										0
20-Apr-21	Bear Bay	Pink	30	0.22								0										0
20-Apr-21	Bear Bay	Pink	32	0.31								0										0
20-Apr-21	Bear Bay	Pink	33	0.45								0										0
20-Apr-21	Bear Bay	Pink	30	0.26								0										0
20-Apr-21	Bear Bay	Pink	32	0.35								0										0
20-Apr-21	Bear Bay	Pink	32	0.33								0										0
20-Apr-21	Bear Bay	Pink	31	0.34								0										0
20-Apr-21	Bear Bay	Pink	31	0.26								0										0
20-Apr-21	Bear Bay	Pink	30	0.26								0										0
20-Apr-21	Bear Bay	Pink	30	0.24								0										0
20-Apr-21	Bear Bay	Pink	31	0.33								0										0
20-Apr-21	Bear Bay	Pink	33	0.42								0										0
20-Apr-21	Bear Bay	Pink	35	0.46								0										0
20-Apr-21	Bear Bay	Pink	35	0.50								0										0
20-Apr-21	Bear Bay	Pink	30	0.29								0										0
20-Apr-21	Bear Bay	Pink	30	0.29								0										0
20-Apr-21	Bear Bay	Pink	36	0.55								0										0
20-Apr-21	Bear Bay	Pink	33	0.36								0										0
20-Apr-21	Bear Bay	Pink	37	0.56								0										0
20-Apr-21	Bear Bay	Pink	31	0.29								0										0
20-Apr-21	Bear Bay	Pink	32	0.32								0										0
20-Apr-21	Bear Bay	Pink	31	0.33								0										0
20-Apr-21	Bear Bay	Pink	31	0.31								0										0
20-Apr-21	Bear Bay	Pink	37	0.58								0										0
20-Apr-21	Bear Bay	Pink	30	0.30								0										0
20-Apr-21	Bear Bay	Pink	35	0.52	1							1										0
20-Apr-21	Bear Bay	Pink	32	0.31								0										0
19-Apr-21	Marina Island	Pink	32	0.34								0		1								1
19-Apr-21	Marina Island	Pink	45	0.84								0										0
19-Apr-21	Marina Island	Pink	39	0.60								0										0
19-Apr-21	Marina Island	Pink	37	0.51								0										0
19-Apr-21	Marina Island	Pink	41	0.71								0										0
19-Apr-21	Marina Island	Pink	34	0.39								0										0
19-Apr-21	Marina Island	Pink	37	0.60								0										0
19-Apr-21	Marina Island	Pink	43	0.80								0										0
19-Apr-21	Marina Island	Pink	34	0.39	1							1										0
19-Apr-21	Marina Island	Pink	37	0.58								0				1						1
19-Apr-21	Marina Island	Pink	36	0.52		1						1				<u> </u>						0
19-Apr-21	Marina Island	Pink	31	0.33		-						0										0
19-Apr-21	Marina Island	Pink	42	0.81								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Marina Island	Pink	37	0.52								0										0
19-Apr-21	Marina Island	Pink	42	0.78								0										0
19-Apr-21	Marina Island	Pink	33	0.45								0										0
19-Apr-21	Marina Island	Pink	38	0.58								0										0
19-Apr-21	Marina Island	Pink	34	0.42								0										0
19-Apr-21	Marina Island	Pink	37	0.55								0										0
19-Apr-21	Marina Island	Pink	32	0.45								0										0
19-Apr-21	Marina Island	Pink	35	0.45								0										0
19-Apr-21	Marina Island	Pink	34	0.43								0										0
19-Apr-21	Marina Island	Pink	36	0.41								0										0
19-Apr-21	Marina Island	Pink	36	0.44								0										0
19-Apr-21	Marina Island	Pink	40	0.80								0										0
19-Apr-21	Marina Island	Pink	33	0.37								0										0
19-Apr-21	Marina Island	Pink	38	0.60								0										0
19-Apr-21	Marina Island	Pink	36	0.54								0										0
19-Apr-21	Marina Island	Pink	40	0.71								0					1					1
19-Apr-21	Marina Island	Pink	42	0.78								0										0
19-Apr-21	Marina Island	Pink	33	0.50								0										0
19-Apr-21	Primary 3	Pink	30	0.24								0										0
19-Apr-21	Primary 3	Pink	37	0.47								0										0
19-Apr-21	Primary 3	Pink	32	0.27								0										0
19-Apr-21	Primary 3	Pink	33	0.29								0										0
19-Apr-21	Primary 3	Pink	31	0.26								0										0
19-Apr-21	Primary 3	Pink	30	0.20								0										0
19-Apr-21	Primary 3	Pink	29	0.18								0										0
19-Apr-21	Primary 3	Pink	30	0.22								0										0
19-Apr-21	Primary 3	Pink	31	0.23								0										0
19-Apr-21	Primary 3	Pink	33	0.31								0										0
19-Apr-21	Primary 3	Pink	31	0.24								0										0
19-Apr-21	Primary 3	Pink	31	0.24								0										0
19-Apr-21	Primary 3	Pink	30	0.22								0										0
19-Apr-21	Primary 3	Pink	30	0.25								0										0
19-Apr-21	Primary 3	Pink	33	0.29								0										0
19-Apr-21	Primary 3	Pink	31	0.23								0										0
19-Apr-21	Primary 3	Pink	31	0.23								0										0
19-Apr-21	Primary 3	Pink	32	0.26								0										0
19-Apr-21	Primary 3	Pink	32	0.26								0										0
19-Apr-21	Primary 3	Pink	32	0.29								0										0
19-Apr-21	Primary 3	Pink	35	0.48								0										0
19-Apr-21	Primary 3	Pink	30	0.24								0										0
19-Apr-21	Primary 3	Pink	32	0.27								0										0
19-Apr-21	Primary 3	Pink	35	0.39								0										0
19-Apr-21	Primary 3	Pink	32	0.27								0										0
19-Apr-21	Primary 3	Pink	28	0.23								0										0
19-Apr-21	Primary 3	Pink	31	0.30								0										0
19-Apr-21	Primary 3	Pink	31	0.28								0										0
19-Apr-21	Primary 3	Pink	31	0.29								0										0
19-Apr-21	Primary 3	Pink	34	0.34								0										0
19-Apr-21	Primary 3	Pink	31	0.24								0										0
20-Apr-21	Okisollo	Pink	36	0.42								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Okisollo	Pink	33	0.28								0	1									1
19-Apr-21	Chancellor	Pink	38	0.57								0										0
19-Apr-21	Chancellor	Pink	40	0.72								0										0
19-Apr-21	Chancellor	Pink	35	0.40								0										0
19-Apr-21	Chancellor	Pink	33	0.42								0										0
19-Apr-21	Chancellor	Pink	32	0.34								0										0
19-Apr-21	Chancellor	Pink	35	0.50								0										0
19-Apr-21	Chancellor	Pink	44	1.02								0										0
19-Apr-21	Chancellor	Pink	34	0.57								0			1							1
19-Apr-21	Chancellor	Pink	33	0.34								0										0
19-Apr-21	Chancellor	Pink	30	0.30								0										0
19-Apr-21	Chancellor	Pink	29	0.29								0										0
19-Apr-21	Chancellor	Pink	30	0.30								0										0
19-Apr-21	Chancellor	Pink	29	0.26								0										0
19-Apr-21	Chancellor	Pink	42	0.83								0										0
19-Apr-21	Chancellor	Pink	35	0.38								0										0
19-Apr-21	Chancellor	Pink	35	0.54								0		1								1
19-Apr-21	Chancellor	Pink	35	0.42								0		1								1
19-Apr-21	Chancellor	Pink	32	0.32	1							1										0
19-Apr-21	Chancellor	Pink	37	0.59								0	1	1								2
19-Apr-21	Chancellor	Pink	34	0.41								0										0
19-Apr-21	Chancellor	Pink	30	0.29								0										0
19-Apr-21	Chancellor	Pink	33	0.39								0										0
19-Apr-21	Chancellor	Pink	45	0.98								0		1								1
19-Apr-21	Chancellor	Pink	38	0.60								0										0
19-Apr-21	Chancellor	Pink	32	0.37								0	1									1
19-Apr-21	Chancellor	Pink	36	0.45								0										0
19-Apr-21	Chancellor	Pink	36	0.42								0										0
19-Apr-21	Chancellor	Pink	48	1.36								0										0
19-Apr-21	Chancellor	Pink	49	1.18								0										0
19-Apr-21	Primary 1	Pink	44	0.64		1						1										0
19-Apr-21	Primary 1	Pink	43	0.74								0										0
19-Apr-21	Primary 1	Pink	34	0.33								0										0
19-Apr-21	Primary 1	Pink	32	0.26								0										0
19-Apr-21	Primary 1	Pink	32	0.23								0										0
19-Apr-21	Primary 1	Pink	36	0.42								0										0
19-Apr-21	Primary 1	Pink	32	0.26								0										0
19-Apr-21	Primary 1	Pink	37	0.51								0										0
19-Apr-21	Primary 1	Pink	38	0.50								0										0
19-Apr-21	Primary 1	Pink	37	0.45								0										0
19-Apr-21	Primary 1	Pink	42	0.64								0										0
19-Apr-21	Primary 1	Pink	40	0.57								0										0
19-Apr-21	Primary 1	Pink	36	0.46								0										0
19-Apr-21	Primary 1	Pink	42	0.76								0										0
19-Apr-21	Primary 1	Pink	34	0.22								0										0
19-Apr-21	Primary 1	Pink	42	0.60								0										0
19-Apr-21	Primary 1	Pink	38	0.53								0										0
19-Apr-21	Primary 1	Pink	40	0.69								0										0
19-Apr-21	Primary 1	Pink	39	0.68								0		1								1
19-Apr-21	Primary 1	Pink	42	0.66								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Primary 1	Pink	38	0.50								0										0
19-Apr-21	Primary 1	Pink	43	0.69								0										0
19-Apr-21	Primary 1	Pink	37	0.49								0										0
19-Apr-21	Primary 1	Pink	31	0.19								0										0
19-Apr-21	Primary 1	Pink	41	0.62								0										0
19-Apr-21	Primary 1	Pink	38	0.46								0										0
19-Apr-21	Primary 1	Pink	31	0.23								0										0
19-Apr-21	Primary 1	Pink	40	0.50								0										0
19-Apr-21	Primary 1	Pink	37	0.47								0										0
19-Apr-21	Primary 1	Pink	35	0.42								0										0
20-Apr-21	Cordero	Pink	55	1.31								0										0
19-Apr-21	Sunder land	Pink	31	0.23								0										0
19-Apr-21	Sunder land	Pink	32	0.24								0										0
19-Apr-21	Sunder land	Pink	32	0.23								0										0
19-Apr-21	Sunder land	Pink	32	0.22								0										0
19-Apr-21	Race Passage	Pink	27	0.18								0										0
19-Apr-21	Race Passage	Pink	33	0.35								0										0
19-Apr-21	Race Passage	Pink	29	0.20								0										0
19-Apr-21	Race Passage	Pink	31	0.24								0										0
19-Apr-21	Race Passage	Pink	31	0.24								0										0
19-Apr-21	Race Passage	Pink	27	0.17								0										0
19-Apr-21	Race Passage	Pink	30	0.20								0										0
19-Apr-21	Race Passage	Pink	32	0.28								0										0
19-Apr-21	Race Passage	Pink	35	0.51								0										0
19-Apr-21	Race Passage	Pink	31	0.22								0										0
19-Apr-21	Race Passage	Pink	31	0.22								0										0
19-Apr-21	Race Passage	Pink	32	0.26								0										0
19-Apr-21	Race Passage	Pink	31	0.32								0										0
19-Apr-21	Race Passage	Pink	30	0.24								0										0
19-Apr-21	Race Passage	Pink	36	0.45								0										0
19-Apr-21	Race Passage	Pink	32	0.29								0										0
19-Apr-21	Race Passage	Pink	31	0.22								0										0
19-Apr-21	Race Passage	Pink	31	0.23								0										0
19-Apr-21	Race Passage	Pink	33	0.31								0										0
19-Apr-21	Race Passage	Pink	32	0.21								0										0
19-Apr-21	Race Passage	Pink	31	0.23								0										0
19-Apr-21	Race Passage	Pink	31	0.25								0										0
19-Apr-21	Race Passage	Pink	32	0.26								0										0
19-Apr-21	Race Passage	Pink	32	0.24								0										0
19-Apr-21	Race Passage	Pink	31	0.24								0										0
19-Apr-21	Race Passage	Pink	30	0.19								0										0
19-Apr-21	Race Passage	Pink	30	0.16								0										0
19-Apr-21	Race Passage	Pink	32	0.16								0										0
19-Apr-21	Race Passage	Pink	40	0.65								0										0
19-Apr-21	Race Passage	Pink	29	0.03								0										0
19-Apr-21	Race Passage	Pink	44	0.17								0		1								1
20-Apr-21	Discovery	Pink	37	0.59	1							1		•								0
20-Apr-21	Discovery	Pink	32	0.39	<u>'</u>							0	1									1
20-Apr-21	Discovery	Pink	45	0.97								0	- '-									0
20-Apr-21	Discovery	Pink	51	1.31	1							1										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Discovery	Pink	34	0.38								0										0
20-Apr-21	Discovery	Pink	31	0.38								0										0
20-Apr-21	Discovery	Pink	49	1.07								0										0
20-Apr-21	Discovery	Pink	48	0.92								0										0
20-Apr-21	Discovery	Pink	34	0.42								0										0
20-Apr-21	Discovery	Pink	45	1.06								0										0
20-Apr-21	Discovery	Pink	32	0.32								0										0
20-Apr-21	Discovery	Pink	34	0.39								0		1								1
20-Apr-21	Discovery	Pink	47	1.05								0										0
20-Apr-21	Discovery	Pink	32	0.29								0										0
20-Apr-21	Discovery	Pink	45	0.92								0										0
20-Apr-21	Discovery	Pink	45	0.95								0										0
20-Apr-21	Discovery	Pink	33	0.45								0										0
20-Apr-21	Discovery	Pink	38	0.60								0										0
20-Apr-21	Discovery	Pink	35	0.62								0	1									1
20-Apr-21	Discovery	Pink	27	0.21								0										0
20-Apr-21	Discovery	Pink	38	0.73								0										0
20-Apr-21	Discovery	Pink	40	0.78								0										0
20-Apr-21	Discovery	Pink	45	0.92								0		1								1
20-Apr-21	Discovery	Pink	38	0.67								0										0
20-Apr-21	Discovery	Pink	32	0.30								0										0
20-Apr-21	Discovery	Pink	39	0.57			1					1										0
20-Apr-21	Discovery	Pink	40	0.69								0										0
20-Apr-21	Discovery	Pink	38	0.67								0										0
20-Apr-21	Discovery	Pink	43	0.99								0										0
20-Apr-21	Discovery	Pink	47	0.93								0	1									1
20-Apr-21	Fanny Bay	Pink	35	0.24								0										0
20-Apr-21	Fanny Bay	Pink	32	0.21								0										0
20-Apr-21	Fanny Bay	Pink	32	0.23								0										0
20-Apr-21	Fanny Bay	Pink	35	0.34								0										0
20-Apr-21	Fanny Bay	Pink	33	0.25								0										0
20-Apr-21	Fanny Bay	Pink	33	0.31								0										0
20-Apr-21	Fanny Bay	Pink	34	0.29								0										0
20-Apr-21	Fanny Bay	Pink	32	0.23								0										0
20-Apr-21	Fanny Bay	Pink	31	0.25								0										0
20-Apr-21	Fanny Bay	Pink	33	0.26								0										0
20-Apr-21	Fanny Bay	Pink	33	0.24								0										0
20-Apr-21	Fanny Bay	Pink	34	0.28								0										0
20-Apr-21	Fanny Bay	Pink	34	0.24								0										0
20-Apr-21	Fanny Bay	Pink	33	0.28								0										0
20-Apr-21	Fanny Bay	Pink	34	0.27								0										0
20-Apr-21	Fanny Bay	Pink	34	0.27								0										0
20-Apr-21	Fanny Bay	Pink	31	0.23								0										0
20-Apr-21	Fanny Bay	Pink	34	0.30								0										0
20-Apr-21	Fanny Bay	Pink	34	0.27								0										0
20-Apr-21	Fanny Bay	Pink	31	0.27								0										0
20-Apr-21	Fanny Bay	Pink	34	0.27								0										0
20-Apr-21	Fanny Bay	Pink	33	0.30								0										0
20-Apr-21	Fanny Bay	Pink	31	0.23								0										0
20-Apr-21	Fanny Bay	Pink	34	0.29								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Fanny Bay	Pink	33	0.27								0										0
20-Apr-21	Fanny Bay	Pink	33	0.26								0										0
20-Apr-21	Fanny Bay	Pink	34	0.28								0										0
20-Apr-21	Fanny Bay	Pink	36	0.32								0										0
20-Apr-21	Fanny Bay	Pink	32	0.26								0										0
19-Apr-21	Wellbore	Pink	32	0.28								0										0
19-Apr-21	Wellbore	Pink	40	0.63								0										0
19-Apr-21	Wellbore	Pink	35	0.35								0										0
19-Apr-21	Wellbore	Pink	33	0.27								0										0
19-Apr-21	Wellbore	Pink	35	0.37								0										0
19-Apr-21	Wellbore	Pink	36	0.37								0										0
19-Apr-21	Wellbore	Pink	33	0.35								0										0
19-Apr-21	Wellbore	Pink	35	0.37								0										0
19-Apr-21	Wellbore	Pink	34	0.23								0										0
19-Apr-21	Wellbore	Pink	31	0.24								0										0
19-Apr-21	Wellbore	Pink	37	0.46								0										0
19-Apr-21	Wellbore	Pink	40	0.62								0										0
19-Apr-21	Wellbore	Pink	33	0.29								0										0
19-Apr-21	Wellbore	Pink	37	0.46								0										0
19-Apr-21	Wellbore	Pink	34	0.35								0										0
19-Apr-21	Wellbore	Pink	35	0.45								0										0
19-Apr-21	Wellbore	Pink	32	0.21								0										0
19-Apr-21	Wellbore	Pink	34	0.29								0										0
19-Apr-21	Wellbore	Pink	34	0.25								0										0
19-Apr-21	Wellbore	Pink	31	0.29								0										0
20-Apr-21	Bickley Bay	Pink	33	0.23								0										0
20-Apr-21	Bickley Bay	Pink	34	0.31								0										0
20-Apr-21	Bickley Bay	Pink	34	0.32								0										0
20-Apr-21	Bickley Bay	Pink	35	0.32								0										0
20-Apr-21	Bickley Bay	Pink	33	0.32								0										0
20-Apr-21	Bickley Bay	Pink	34	0.34								0										0
20-Apr-21	Bickley Bay	Pink	26	0.42								0										0
20-Apr-21	Bickley Bay	Pink	34	0.30								0										0
20-Apr-21	Bickley Bay	Pink	34	0.35								0										0
20-Apr-21	Bickley Bay	Pink	34	0.20								0										0
20-Apr-21	Bickley Bay	Pink	33	0.30								0										0
20-Apr-21	Bickley Bay	Pink	34	0.29								0										0
20-Apr-21	Bickley Bay	Pink	31	0.29								0										0
20-Apr-21	Bickley Bay	Pink	33	0.20								0										0
20-Apr-21	Bickley Bay	Pink	34	0.32								0										0
20-Apr-21	Bickley Bay	Pink	33	0.32								0										0
20-Apr-21	Bickley Bay	Pink	34	0.27								0										0
20-Apr-21	Bickley Bay	Pink	34	0.27								0				1						0
			34	0.33					-			0				1						0
20-Apr-21	Bickley Bay	Pink Pink	34	0.32								0										0
20-Apr-21	Bickley Bay																					
20-Apr-21	Bickley Bay	Pink	37	0.46								0										0
20-Apr-21	Bickley Bay	Pink	34	0.28								0		1								0
20-Apr-21	Bickley Bay	Pink	35	0.35								0				-						0
20-Apr-21	Bickley Bay	Pink	33	0.28								0				-						0
20-Apr-21	Bickley Bay	Pink	34	0.29								0									1	0

20-Apr-21 Bickley Bay Pink 32 0.25 0 0 0 0 0 0 0 0 0	
20-Apr-21 Bickley Bay Pink 34 0.33 0.32 0 0 0 0 0 0 0 0 0	
20-Apr.21 Bickley Bay Pink 35 0.32 0 0 0 0 0 0 0 0 0	
20-Apr-21 Bickley Bay Pink 34 0.30 0 0 0 0 0 1	
20-Apr-21 Bickley Bay Pink 34 0.28 0 0 0 19-Apr-21 Beautiful Bay Pink 31 0.22 0 0 0 19-Apr-21 Beautiful Bay Pink 32 0.20 0 0 19-Apr-21 Beautiful Bay Pink 32 0.27 0 0 19-Apr-21 Beautiful Bay Pink 33 0.22 0 0 0 19-Apr-21 Beautiful Bay Pink 30 0.23 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 19-Apr-21 Beautiful Bay Pink 30 0.21 19-Apr-21 Beautiful Bay Pink 30 0.21 19-Apr-21 Beautiful Bay Pink 30 0.21 19-Apr-21 Beautiful Bay Pink 33 0.29 0 0 19-Apr-21 Beautiful Bay Pink 33 0.29 0 0 19-Apr-21 Beautiful Bay Pink 33 0.29 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 Beautiful Bay Pink 36 0.47 0 0 1 1 19-Apr-21 Beautiful Bay Pink 36 0.47 0 0 1 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 0 1 1 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 0 1 1 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 0 1 1 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 1 1 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 1 1 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 1 1 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 1 1 19-Apr-21 Beautiful Bay Pink 33 0.35 0 0 1 1 19-Apr-21 Beautiful Bay Pink 31 0.25 0 0 0 1 1 1 1 1 1 1	
19-Apr-21 Beautiful Bay Pink 31 0.22 0 0 0 0 1 1 1 1 1 1	
19-Apr-21 Beautiful Bay Pink 32 0.20 0 0 19-Apr-21 Beautiful Bay Pink 32 0.27 0 0 19-Apr-21 Beautiful Bay Pink 33 0.22 0 0 19-Apr-21 Beautiful Bay Pink 30 0.23 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 Beautiful Bay Pink 30 0.21 0 0 19-Apr-21 Beautiful Bay Pink 30 0.21 0 0 19-Apr-21 Beautiful Bay Pink 33 0.29 0 0 19-Apr-21 Beautiful Bay Pink 31 0.28 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 19-Apr-21 Beautiful Bay Pink 33 0.25 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 Beautiful Bay Pink 36 0.47 0 0 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 1 19-Apr-21 Beautiful Bay Pink 31 0.25 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 19-Apr-21 Beautiful Bay Pink 32 0.28 0 0 19-Apr-21 Beautiful Bay Pink 32 0.28 0 0 19-Apr-21 Beautiful Bay Pink 32 0.28 0 0 19-Apr-21 Beautiful Bay Pink 31 0.25 0 0 19-Apr-21 Beautiful Bay Pink 33 0.39 0 0 19-Apr-21 Beautiful Ba	
19-Apr-21 Beautiful Bay Pink 32 0.27	
19-Apr-21 Beautiful Bay Pink 33 0.22 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 30 0.23 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 30 0.21 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 33 0.29 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 31 0.28 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 0 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 0 0 19-Apr-21 Beautiful Bay Pink 36 0.47 0 0 1 1 1 1 1 1 1 1	
19-Apr-21 Beautiful Bay Pink 30 0.23 0 0 0 0 0 0 0 0 0	
19-Apr-21 Beautiful Bay Pink 31 0.24	
19-Apr-21 Beautiful Bay Pink 32 0.25	
19-Apr-21 Beautiful Bay Pink 30 0.21	
19-Apr-21 Beautiful Bay Pink 33 0.29	
19-Apr-21 Beautiful Bay Pink 33 0.29	
19-Apr-21 Beautiful Bay Pink 31 0.28 0 0 0 0 0 1 1 1 1 1	
19-Apr-21 Beautiful Bay Pink 33 0.27 0 0 19-Apr-21 19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 1 19-Apr-21 19-Apr-21 Beautiful Bay Pink 36 0.47 0 0 1 1 1 19-Apr-21 19-Apr-21 Beautiful Bay Pink 31 0.24 0	
19-Apr-21 Beautiful Bay Pink 32 0.25	
19-Apr-21 Beautiful Bay Pink 36 0.47 0 1 1 19-Apr-21 Beautiful Bay Pink 31 0.24 0	
19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 0 19-Apr-21 Beautiful Bay Pink 31 0.24 0	
19-Apr-21 Beautiful Bay Pink 31 0.24 0 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0	
19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 Beautiful Bay Pink 32 0.25 0	
19-Apr-21 Beautiful Bay Pink 32 0.25 0 0 19-Apr-21 0	
19-Apr-21 Beautiful Bay Pink 33 0.31 0 0 0 19-Apr-21 Beautiful Bay Pink 40 0.58 0	
19-Apr-21 Beautiful Bay Pink 40 0.58 0 0 19-Apr-21 Beautiful Bay Pink 32 0.28 0	
19-Apr-21 Beautiful Bay Pink 32 0.28 0 0 19-Apr-21 Beautiful Bay Pink 32 0.28 0	
19-Apr-21 Beautiful Bay Pink 32 0.28 0 0 19-Apr-21 19-Apr-21 Beautiful Bay Pink 31 0.25 0 0 0 0 19-Apr-21 19-Apr-21 Beautiful Bay Pink 33 0.39 0 0 0 0 0 19-Apr-21 19-Apr-21 Beautiful Bay Pink 30 0.22 0	
19-Apr-21 Beautiful Bay Pink 31 0.25 0 0 19-Apr-21 Beautiful Bay Pink 33 0.3 0	
19-Apr-21 Beautiful Bay Pink 33 0.3 0 0 19-Apr-21 0	
19-Apr-21 Beautiful Bay Pink 33 0.39 0 0 0 19-Apr-21 Beautiful Bay Pink 30 0.22 0	
19-Apr-21 Beautiful Bay Pink 30 0.22 0 0	
19-Apr-21 Beautiful Bay Pink 36 0.45	
19-Apr-21 Beautiful Bay Pink 32 0.29 0	
19-Apr-21 Beautiful Bay Pink 34 0.64 0	
19-Apr-21 Beautiful Bay Pink 30 0.25	
19-Apr-21 Beautiful Bay Pink 33 0.26 0	
19-Apr-21 Beautiful Bay Pink 34 0.3 0	
20-Apr-21 Nodales Pink 34 0.41 0	
20-Apr-21 Nodales Pink 48 1.13 1 1 1 1 1 1	
20-Apr-21 Nodales Pink 52 1.34 1 1 1 1 1 1 1	
20-Apr-21 Nodales Pink 53 1.45 0 1 1 1	
20-Apr-21 Nodales Pink 52 1.47 1 1 1 1 1	
20-Apr-21 Nodales Pink 52 1.49 0	
20-Apr-21 Nodales Pink 35 0.34 0	
20-Apr-21 Nodales Pink 39 0.45 0	
20-Apr-21 Nodales Pink 37 0.51 0	
20-Apr-21 Nodales Pink 37 0.31 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
20-Apr-21 Nodales Pink 34 0.30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
20-Apr-21 Nodales Pink 41 0.07 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Nodales	Pink	41	0.60								0										0
20-Apr-21	Nodales	Pink	33	0.32								0										0
20-Apr-21	Nodales	Pink	31	0.27								0										0
20-Apr-21	Nodales	Pink	31	0.23								0										0
20-Apr-21	Nodales	Pink	33	0.31								0										0
20-Apr-21	Nodales	Pink	48	1.07	1							1										0
20-Apr-21	Nodales	Pink	37	0.56	1							1										0
20-Apr-21	Nodales	Pink	31	0.26								0										0
20-Apr-21	Nodales	Pink	41	0.54								0										0
20-Apr-21	Nodales	Pink	32	0.34								0										0
20-Apr-21	Nodales	Pink	52	1.49				1		1		2		1			1					2
20-Apr-21	Nodales	Pink	32	0.34								0										0
20-Apr-21	Nodales	Pink	33	0.31								0	2									2
20-Apr-21	Nodales	Pink	32	0.30								0										0
20-Apr-21	Nodales	Pink	31	0.33								0										0
20-Apr-21	Nodales	Pink	36	0.53								0										0
20-Apr-21	Nodales	Pink	34	0.43								0										0
20-Apr-21	Nodales	Pink	45	0.96								0			1							1
20-Apr-21	Nodales	Pink	37	0.55								0			1							1
20-Apr-21	Nodales	Pink	41	0.75								0										0
20-Apr-21	Nodales	Pink	36	0.50	1							1										0
20-Apr-21	Knox Bay	Pink	30	0.28								0										0
20-Apr-21	Knox Bay	Pink	32	0.27								0										0
20-Apr-21	Knox Bay	Pink	34	0.27								0										0
20-Apr-21	Knox Bay	Pink	34	0.37								0										0
20-Apr-21	Knox Bay	Pink	32	0.30								0										0
20-Apr-21	Knox Bay	Pink	30	0.26								0										0
20-Apr-21	Knox Bay	Pink	34	0.35								0										0
20-Apr-21	Knox Bay	Pink	32	0.29								0										0
20-Apr-21	Knox Bay	Pink	32	0.22								0										0
20-Apr-21	Knox Bay	Pink	36	0.37								0										0
20-Apr-21	Knox Bay	Pink	33	0.28								0										0
20-Apr-21	Knox Bay	Pink	31	0.23								0										0
20-Apr-21	Knox Bay	Pink	33	0.43								0										0
20-Apr-21	Knox Bay	Pink	34	0.19								0										0
20-Apr-21	Knox Bay	Pink	34	0.36								0										0
20-Apr-21	Knox Bay	Pink	33	0.29								0										0
20-Apr-21	Knox Bay	Pink	34	0.25								0										0
20-Apr-21	Knox Bay	Pink	30	0.26								0										0
20-Apr-21	Knox Bay	Pink	30	0.21								0										0
20-Apr-21	Knox Bay	Pink	34	0.33								0										0
20-Apr-21	Knox Bay	Pink	31	0.24								0										0
20-Apr-21	Knox Bay	Pink	31	0.21								0										0
20-Apr-21	Knox Bay	Pink	32	0.33								0							1			0
20-Apr-21	Knox Bay	Pink	32	0.33								0										0
20-Apr-21	Knox Bay	Pink	31	0.26	1							1										0
20-Apr-21	Knox Bay	Pink	32	0.36	<u> </u>							0										0
20-Apr-21	Knox Bay	Pink	32	0.26								0							1			0
20-Apr-21	Knox Bay	Pink	34	0.43								0							1			0
20-Apr-21	Knox Bay	Pink	32	0.43								0										0

	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
20-Apr-21	Shoal Bay	Pink	34	0.36								0										0
20-Apr-21	Shoal Bay	Pink	34	0.33								0										0
20-Apr-21	Shoal Bay	Pink	35	0.33								0										0
20-Apr-21	Shoal Bay	Pink	34	0.25								0										0
20-Apr-21	Shoal Bay	Pink	35	0.34								0										0
20-Apr-21	Shoal Bay	Pink	35	0.33								0										0
20-Apr-21	Shoal Bay	Pink	35	0.32								0										0
20-Apr-21	Shoal Bay	Pink	34	0.33								0										0
20-Apr-21	Shoal Bay	Pink	33	0.31								0										0
20-Apr-21	Shoal Bay	Pink	35	0.37								0										0
20-Apr-21	Shoal Bay	Pink	34	0.38								0										0
20-Apr-21	Shoal Bay	Pink	32	0.27								0										0
20-Apr-21	Shoal Bay	Pink	36	0.37								0										0
20-Apr-21	Shoal Bay	Pink	33	0.30								0										0
20-Apr-21	Shoal Bay	Pink	35	0.34								0										0
20-Apr-21	Shoal Bay	Pink	39	0.59								0										0
20-Apr-21	Shoal Bay	Pink	33	0.30								0										0
20-Apr-21	Shoal Bay	Pink	33	0.29								0										0
20-Apr-21	Shoal Bay	Pink	35	0.37								0										0
20-Apr-21	Shoal Bay	Pink	35	0.35								0										0
20-Apr-21	Shoal Bay	Pink	32	0.27								0										0
20-Apr-21	Shoal Bay	Pink	33	0.34								0										0
20-Apr-21	Shoal Bay	Pink	33	0.26								0										0
20-Apr-21	Shoal Bay	Pink	33	0.26								0										0
20-Apr-21	Shoal Bay	Pink	33	0.36								0										0
20-Apr-21	Shoal Bay	Pink	33	0.33								0										0
20-Apr-21	Shoal Bay	Pink	34	0.29								0										0
20-Apr-21	Shoal Bay	Pink	35	0.34								0										0
20-Apr-21	Shoal Bay	Pink	35	0.38								0										0
20-Apr-21	Shoal Bay	Pink	36	0.41								0										0
19-Apr-21	Francisco Point	Pink	36	0.39								0										0
19-Apr-21	Francisco Point	Pink	33	0.36								0										0
19-Apr-21	Francisco Point	Pink	36	0.44								0			2							2
19-Apr-21	Francisco Point	Pink	33	0.28								0		1								1
19-Apr-21	Francisco Point	Pink	35	0.37								0										0
19-Apr-21	Francisco Point	Pink	36	0.38								0										0
19-Apr-21	Francisco Point	Pink	36	0.41								0										0
19-Apr-21	Francisco Point	Pink	32	0.31								0	1									1
19-Apr-21	Francisco Point	Pink	38	0.63								0										0
19-Apr-21	Francisco Point	Pink	37	0.46								0										0
19-Apr-21	Francisco Point	Pink	34	0.36				1				0										0
19-Apr-21	Francisco Point	Pink	35	0.39								0										0
19-Apr-21	Francisco Point	Pink	34	0.34								0										0
19-Apr-21	Francisco Point	Pink	35	0.36								0		1								1
19-Apr-21	Francisco Point	Pink	35	0.42								0		<u> </u>								0
19-Apr-21	Francisco Point	Pink	31	0.26								0										0
19-Apr-21	Francisco Point	Pink	37	0.49								0		2								2
19-Apr-21	Francisco Point	Pink	33	0.35								0		-								0
19-Apr-21	Francisco Point	Pink	32	0.28								0										0
19-Apr-21	Francisco Point	Pink	35	0.41				1				0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
19-Apr-21	Francisco Point	Pink	36	0.40		O1	O2	I AW	IAI	Alfi.	Ai	0		O1	O2	03	04	IAW	Ai	AIVI	AI .	0
19-Apr-21	Francisco Point	Pink	36	0.42								0										0
19-Apr-21	Francisco Point	Pink	37	0.56								0										0
19-Apr-21	Francisco Point	Pink	33	0.28								0										0
19-Apr-21	Francisco Point	Pink	33	0.24								0										0
19-Apr-21	Francisco Point	Pink	34	0.40								0		1								1
19-Apr-21	Francisco Point	Pink	37	0.49								0		1								1
19-Apr-21	Francisco Point	Pink	34	0.31	1							1										0
19-Apr-21	Francisco Point	Pink	34	0.35								0										0
19-Apr-21	Francisco Point	Pink	34	0.31								0										0
19-Apr-21	Francisco Point	Pink	36	0.49								0										0
26-May-21	Shoal Bay	Chum	39	0.68								0										0
26-May-21	Shoal Bay	Chum	43	0.87								0										0
26-May-21	Shoal Bay	Chum	45	1.20								0										0
26-May-21	Shoal Bay	Chum	44	0.88								0										0
26-May-21	Shoal Bay	Chum	42	0.87								0										0
26-May-21	Shoal Bay	Chum	39	0.65								0										0
26-May-21	Shoal Bay	Chum	39	0.73								0										0
26-May-21	Shoal Bay	Chum	37	0.71								0										0
26-May-21	Shoal Bay	Chum	42	0.91								0										0
26-May-21	Shoal Bay	Chum	44	0.89								0										0
26-May-21	Shoal Bay	Chum	44	0.92								0										0
26-May-21	Shoal Bay	Chum	55	2.13								0										0
26-May-21	Shoal Bay	Chum	45	1.03								0										0
26-May-21	Shoal Bay	Chum	50	1.39								0										0
26-May-21	Shoal Bay	Chum	53	1.75								0										0
26-May-21	Shoal Bay	Chum	42	0.84								0		1								1
26-May-21	Shoal Bay	Chum	45	1.05								0										0
26-May-21	Shoal Bay	Chum	43	1.30								0		2								2
26-May-21	Shoal Bay	Chum	47	1.04								0										0
26-May-21	Shoal Bay	Chum	45	0.99								0										0
26-May-21	Shoal Bay	Chum	36	0.44								0										0
26-May-21	Shoal Bay	Chum	37	0.58								0										0
26-May-21	Shoal Bay	Chum	41	0.89								0										0
26-May-21	Shoal Bay	Chum	46	0.97								0	1									1
26-May-21	Shoal Bay	Chum	47	1.06								0		1								1
26-May-21	Shoal Bay	Chum	38	0.65								0										0
26-May-21	Shoal Bay	Chum	51	1.50								0										0
26-May-21	Shoal Bay	Chum	47	1.10								0										0
26-May-21	Fanny Bay	Chum	48	1.16								0										0
26-May-21	Fanny Bay	Chum	35	0.42								0										0
26-May-21	Fanny Bay	Chum	47	1.00								0										0
26-May-21	Fanny Bay	Chum	51	1.45								0										0
26-May-21	Fanny Bay	Chum	54	1.67								0										0
26-May-21	Blenkinsop	Chum	73	4.13	1							1			1							1
26-May-21	Blenkinsop	Chum	64	2.80								0										0
26-May-21	Blenkinsop	Chum	70	3.92								0										0
26-May-21	Blenkinsop	Chum	60	2.32								0										0
26-May-21	Blenkinsop	Chum	77	5.64								0										0
26-May-21	Blenkinsop	Chum	68	3.43								0			1							1

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Blenkinsop	Chum	61	2.37								0										0
26-May-21	Blenkinsop	Chum	64	2.72								0										0
26-May-21	Blenkinsop	Chum	64	2.34								0										0
26-May-21	Blenkinsop	Chum	75	4.48								0										0
26-May-21	Blenkinsop	Chum	68	2.95								0										0
26-May-21	Blenkinsop	Chum	68	3.34								0										0
26-May-21	Blenkinsop	Chum	75	4.44								0										0
26-May-21	Blenkinsop	Chum	73	4.07								0										0
26-May-21	Blenkinsop	Chum	56	2.22								0										0
26-May-21	Blenkinsop	Chum	66	2.87								0										0
26-May-21	Blenkinsop	Chum	66	3.31								0										0
26-May-21	Cordero	Chum	56	1.95								0										0
26-May-21	Cordero	Chum	47	1.26								0										0
26-May-21	Cordero	Chum	60	2.98								0										0
26-May-21	Cordero	Chum	74	4.50								0										0
26-May-21	Cordero	Chum	57	2.18								0										0
26-May-21	Cordero	Chum	60	2.63								0										0
26-May-21	Cordero	Chum	53	1.85								0										0
26-May-21	Cordero	Chum	55	2.23								0										0
26-May-21	Cordero	Chum	56	2.08								0										0
26-May-21	Cordero	Chum	54	1.89		1	1	1				3										0
26-May-21	Cordero	Chum	57	2.26								0										0
26-May-21	Cordero	Chum	53	1.76								0										0
26-May-21	Cordero	Chum	62	2.72		1						1										0
26-May-21	Cordero	Chum	58	2.37		-						0										0
26-May-21	Cordero	Chum	46	1.22								0										0
26-May-21	Cordero	Chum	61	2.91		1						1										0
26-May-21	Cordero	Chum	49	1.32								0										0
26-May-21	Cordero	Chum	52	1.73								0										0
26-May-21	Cordero	Chum	62	2.87								0		1								1
26-May-21	Cordero	Chum	58	2.60								0										0
26-May-21	Cordero	Chum	59	2.80								0										0
26-May-21	Cordero	Chum	51	1.78								0										0
26-May-21	Cordero	Chum	50	1.33	1							1										0
26-May-21	Cordero	Chum	58	2.34								0		1								1
26-May-21	Cordero	Chum	59	2.39	1							1		<u> </u>								0
26-May-21	Cordero	Chum	56	1.81								0										0
26-May-21	Cordero	Chum	54	1.73			1					1										0
26-May-21	Cordero	Chum	57	2.44		1						1										0
26-May-21	Rock Bay	Chum	50	1.50		-						0										0
26-May-21	Rock Bay	Chum	52	1.64								0										0
26-May-21	Rock Bay	Chum	54	2.05		1						1										0
26-May-21	Rock Bay	Chum	50	1.63		'						0										0
26-May-21	Rock Bay	Chum	62	2.53								0										0
26-May-21	Bear Bay	Chum	67	3.11								0										0
26-May-21	Bear Bay	Chum	55	2.18								0									 	0
26-May-21	Bear Bay	Chum	57	1.83								0									\vdash	0
26-May-21	Bear Bay	Chum	48	1.03								0									 	0
26-May-21	Bear Bay	Chum	60	2.25								0		1							 	1
26-May-21	Bear Bay	Chum	56	2.23								0		<u>'</u>							 	0
∠u-iviay-∠ i	Dear Day	Cham	90	2.12			1	1	Ī	I	1	U	I	1	I	Ì	1	I	I	I	1	U

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Bear Bay	Chum	48	1.25								0										0
26-May-21	Bear Bay	Chum	57	1.94								0										0
26-May-21	Bear Bay	Chum	54	1.90								0										0
26-May-21	Bear Bay	Chum	39	0.60								0										0
26-May-21	Bear Bay	Chum	53	1.61								0										0
26-May-21	Bear Bay	Chum	49	1.51								0										0
26-May-21	Bear Bay	Chum	60	2.47								0										0
26-May-21	Bear Bay	Chum	55	1.91			1					1										0
26-May-21	Bear Bay	Chum	51	1.39								0										0
26-May-21	Bear Bay	Chum	50	1.34								0										0
26-May-21	Bear Bay	Chum	43	0.84								0										0
26-May-21	Bear Bay	Chum	72	4.22				1				1										0
25-May-21	Penn Island	Chum	95	10.66								0										0
25-May-21	Penn Island	Chum	101	12.60								0									1	1
25-May-21	Penn Island	Chum	39	0.55								0					1				<u>'</u>	0
25-May-21	Raza North	Chum	39	0.55								0				+						0
25-May-21	Raza North	Chum	49	1.36								0										0
25-May-21	Raza North	Chum	49	1.25								0										0
25-May-21	Raza North	Chum	49	1.23				1				1			-							0
			49					ı				'										
25-May-21	Raza North	Chum		0.93								0										0
25-May-21	Raza North	Chum	54	1.72								0			-							0
25-May-21	Raza North	Chum	45	0.96								0			-							0
25-May-21	Raza North	Chum	38	0.59								0										0
25-May-21	Raza North	Chum	46	1.14								0										0
25-May-21	Raza North	Chum	42	0.82								0										0
25-May-21	Raza North	Chum	38	0.55								0										0
25-May-21	Raza North	Chum	83	6.34								0										0
25-May-21	Raza North	Chum	43	0.83								0										0
25-May-21	Raza North	Chum	58	2.12								0										0
25-May-21	Raza North	Chum	37	0.54								0										0
25-May-21	Raza North	Chum	52	1.52								0				1						1
25-May-21	Raza North	Chum	37	0.52								0										0
25-May-21	Raza North	Chum	38	0.57								0										0
25-May-21	Raza North	Chum	37	0.57								0										0
25-May-21	Raza North	Chum	51	1.35								0										0
25-May-21	Raza North	Chum	44	0.81								0										0
25-May-21	Raza North	Chum	46	1.05								0										0
25-May-21	Raza North	Chum	39	0.61								0										0
25-May-21	Raza North	Chum	43	0.89								0				1						1
25-May-21	Raza North	Chum	44	0.91								0										0
25-May-21	Raza North	Chum	38	0.52								0										0
25-May-21	Raza North	Chum	42	0.93								0										0
25-May-21	Raza North	Chum	36	0.50								0										0
25-May-21	Raza North	Chum	44	0.93								0										0
25-May-21	Raza North	Chum	39	0.59								0										0
26-May-21	Primary 1	Chum	87	6.78			1					1										0
26-May-21	Primary 1	Chum	90	6.76								0										0
26-May-21	Primary 1	Chum	72	3.36								0										0
26-May-21	Primary 1	Chum	89	6.75								0				+						0
20-May-21	Race Passage	Chum	58	2.25								0										0
ZU-iviay-Z I	race i assaye	Ciluiti	50	2.20		1			<u> </u>	1		J		l						J	J	U

20 May 21 Raco Passago	Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21 Bickley Bay Chum 68 3.23 1 0 0 0 0 0 0 0 0 0		Page Pageage					Ci	CZ	LAM	FAI	AIVI	\ \tau_i		CU	Ci	C2	CS	C4	LVIAI	Ai	AIVI	Ai	
ZeMmy-21 Bickley Bay Chum 68 3.23																							
2eMay-21 Bickley Bay Chum 70 4.22 1 1 1 1		· ·																					
22M-My-21 Bickley Bay										1													
26-May-21 Bickley Bay Chum 48 1.32										'													
28-May-21 Bickley Bay		<u> </u>																					
2EMay-21 Bickley Bay		<u> </u>																					
25-May-21 Bickley Bay Chum 65 2.77 0 0 0 0 25-May-21 Bickley Bay Chum 57 1.76 0 0 0 0 0 0 0 0 0		<u> </u>																					
28May-21 Bickley Bay Chum 57 1.76 0 0 0 0 0 0 0 0 0		•	+																				
Deck Deck		· ·																					
28-May-21 Bickley Bay Chum 50 1.42		<u> </u>																					
28-May-21 Bickley Bay Chum 55 1.77																							
28-May-21 Bickley Bay		<u> </u>																					
28-May-21 Bickley Bay Chum 43 0.93 0 0 0 0 0 0 0 0 0		· ·																					
26-May-21		•	+																				
26-May-21		<u> </u>																					
26-May-21		· ·																					
26-May-21 Bickley Bay Chum 65 2.95		· ·																					
26-May-21 Bickley Bay Chum 47 1.28 0 0 0 0 0 0 0 0 0		· ·																					
26-May-21 Bickley Bay Chum 65 3.06		· ·																					
26-May-21 Bickley Bay Chum 49 1.32 1 1 1 1 1 1 1 1 1		· ·																					
26-May-21 Bickley Bay Chum 49 1.32 1 1 1 0 0 26-May-21 Bickley Bay Chum 62 2.63 0 <		· ·																					
26-May-21 Bickley Bay Chum 66 2.93 0 </td <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>		<u> </u>						1															
26-May-21 Bickley Bay Chum 62 2.63 0 0 0 0 26-May-21 Bickley Bay Chum 47 1.32 0 0 0 0 0 0 0 0 0 0 0 0 0 26-May-21 Bickley Bay Chum 62 2.52 0 0 0 0 0 0 26-May-21 Bickley Bay Chum 62 2.52 0 <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>'</td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td>		•						'					•										
26-May-21 Bickley Bay Chum 47 1.32 0 0 0 0 26-May-21 Bickley Bay Chum 64 1.64 0 0 0 0 0 26-May-21 Bickley Bay Chum 62 3.03 0 0 0 0 0 26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0 0 0 0 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0		· ·																					
26-May-21 Bickley Bay Chum 54 1.64 0 0 0 26-May-21 Bickley Bay Chum 62 2.52 0 0 0 0 26-May-21 Bickley Bay Chum 62 3.03 0 0 0 0 26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0 0 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 0 0 0 26-May-21 Primary 3 Chum 60 1.93 0 0 0 0 0 0 0 0 0 0 0		· ·																					
26-May-21 Bickley Bay Chum 62 2.52 0 0 0 26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0 0 0 0 26-May-21 Primary 3 Chum 80 4.68 0 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0		· ·																					
26-May-21 Bickley Bay Chum 62 3.03 0 0 0 26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0 0 0 0 0 0 0 0 26-May-21 Primary 3 Chum 80 4.68 0 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 26-May-21 Primary 3 Chum 90 0 0 0 0 0 0 26-May-21 Primary 3 Chum 76 4.09 0 0 0 0 0 0 26-May-21 Primary 3 Chum 60 1.93 0 0 0 0 26-May-21 Primary 3 Chum 75 4.50 0 0 0 0 0 26-May-21 Primary 3 Chum 75 4.50 <td></td> <td>· ·</td> <td></td>		· ·																					
26-May-21 Bickley Bay Chum 57 2.02 0 0 0 0 26-May-21 Bickley Bay Chum 53 1.64 0 <		· ·																					
26-May-21 Bickley Bay Chum 53 1.64 0 0 26-May-21 Primary 3 Chum 80 4.68 0 <td< td=""><td></td><td><u> </u></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		<u> </u>																					
26-May-21 Primary 3 Chum 80 4.68 0 0 0 26-May-21 Primary 3 Chum 70 3.04 0		•																					
26-May-21 Primary 3 Chum 70 3.04 0 0 0 0 26-May-21 Primary 3 Chum 92 7.16 0		<u> </u>		1																			
26-May-21 Primary 3 Chum 92 7.16 0 <td></td>																							
26-May-21 Primary 3 Chum 76 4.09 0 0 0 0 26-May-21 Primary 3 Chum 60 1.93 0																							
26-May-21 Primary 3 Chum 60 1.93 0 <td></td> <td>·</td> <td>+</td> <td></td>		·	+																				
26-May-21 Primary 3 Chum 75 4.50 0 <td></td>																							
26-May-21 Primary 3 Chum 81 5.12 0 <td></td>																							
26-May-21 Primary 3 Chum 64 2.38 0 <td></td> <td>·</td> <td></td>		·																					
26-May-21 Primary 3 Chum 83 5.29 0 <td></td> <td></td> <td>+</td> <td></td>			+																				
26-May-21 Primary 3 Chum 74 3.28 0 <td></td> <td></td> <td>+</td> <td></td>			+																				
26-May-21 Primary 3 Chum 75 4.57 0 <td></td> <td></td> <td>+</td> <td></td>			+																				
26-May-21 Primary 3 Chum 85 6.34 0 <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td>																			<u> </u>				
26-May-21 Primary 3 Chum 78 4.37 0 <td></td> <td>·</td> <td></td> <td>1</td> <td></td> <td></td> <td></td>		·																		1			
26-May-21 Primary 3 Chum 88 6.72 0 <td></td>																							
26-May-21 Primary 3 Chum 76 4.34 0 0 26-May-21 Primary 3 Chum 76 4.75 0 0 26-May-21 Primary 3 Chum 69 3.45 0 0		·																					
26-May-21 Primary 3 Chum 76 4.75 0 0 0 26-May-21 Primary 3 Chum 69 3.45 0 0 0 0		·																	<u> </u>				
26-May-21 Primary 3 Chum 69 3.45 0 0 0			+																				
		·																					
26-May-21	26-May-21	Primary 3	Chum	68	2.88								0					1					1
26-May-21 Primary 3 Chum 75 4.34 0 0		·																					

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Primary 3	Chum	78	4.78								0										0
26-May-21	Primary 3	Chum	72	3.89								0										0
26-May-21	Primary 3	Chum	70	3.84								0										0
26-May-21	Primary 3	Chum	73	4.17								0										0
26-May-21	Primary 3	Chum	85	6.04								0										0
25-May-21	Raza Island	Chum	52	1.46								0										0
25-May-21	Raza Island	Chum	61	3.10								0										0
25-May-21	Raza Island	Chum	46	1.35								0										0
25-May-21	Raza Island	Chum	59	2.43								0										0
25-May-21	Raza Island	Chum	45	1.00								0										0
25-May-21	Raza Island	Chum	39	0.71								0										0
25-May-21	Raza Island	Chum	48	1.24								0									1	1
25-May-21	Raza Island	Chum	40	0.77								0									-	0
25-May-21	Raza Island	Chum	44	1.00								0										0
25-May-21	Raza Island	Chum	52	1.57								0				+						0
25-May-21	Raza Island	Chum	42	0.97								0										0
25-May-21	Raza Island	Chum	55	2.11								0										0
25-May-21	Raza Island	Chum	51	1.51								0										0
25-May-21	Raza Island	Chum	51	1.67								0										0
25-May-21	Raza Island	Chum	54	1.96								0										0
25-May-21	Raza Island	Chum	46	1.10								0										0
25-May-21	Raza Island	Chum	56	2.17								0										0
25-May-21	Raza Island	Chum	53	1.77								0										0
25-May-21	Raza Island	Chum	58	2.10								0										0
25-May-21	Raza Island	Chum	58	1.80								0										0
25-May-21	Raza Island	Chum	55	1.78								0										0
25-May-21	Raza Island	Chum	57	2.10								0										0
25-May-21	Raza Island	Chum	55	1.99								0			-							0
	Raza Island	Chum	57	2.15								0										0
25-May-21			59	2.15								0		1								1
25-May-21	Raza Island	Chum Chum	44	0.75																		0
25-May-21	Raza Island											0										
25-May-21	Raza Island	Chum	42	0.79						-		0			-							0
25-May-21	Raza Island	Chum	55	1.75						-		0			-							0
25-May-21	Raza Island	Chum	49	1.27								0										0
25-May-21	Raza Island	Chum	44	0.84								0				4						0
26-May-21	Wellbore	Chum	62	2.24								0				1						1
26-May-21	Wellbore	Chum	45	1.04		1																0
26-May-21	Wellbore	Chum	53	1.47								0										0
26-May-21	Wellbore	Chum	64	2.75		1						1										0
26-May-21	Wellbore	Chum	56	2.00								0		_								0
26-May-21	Wellbore	Chum	59	1.91								0		1								1
26-May-21	Wellbore	Chum	42	0.94								0										0
26-May-21	Wellbore	Chum	59	2.40								0										0
26-May-21	Wellbore	Chum	54	1.64								0										0
26-May-21	Wellbore	Chum	51	1.26								0										0
26-May-21	Wellbore	Chum	60	2.12								0										0
26-May-21	Wellbore	Chum	62	2.60								0				1						0
26-May-21	Wellbore	Chum	52	1.57								0										0
26-May-21	Wellbore	Chum	46	1.09								0										0
26-May-21	Wellbore	Chum	64	2.82							1	0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Wellbore	Chum	50	1.37								0										0
26-May-21	Wellbore	Chum	55	1.79								0										0
26-May-21	Wellbore	Chum	69	3.48								0										0
26-May-21	Wellbore	Chum	52	1.27								0										0
26-May-21	Wellbore	Chum	47	1.09								0										0
26-May-21	Wellbore	Chum	70	4.00						1		1										0
26-May-21	Wellbore	Chum	66	3.13								0										0
26-May-21	Wellbore	Chum	49	1.78								0										0
26-May-21	Wellbore	Chum	52	1.94								0										0
26-May-21	Wellbore	Chum	58	2.80								0										0
26-May-21	Wellbore	Chum	74	5.04								0										0
26-May-21	Wellbore	Chum	64	3.31								0										0
26-May-21	Wellbore	Chum	64	2.82								0										0
26-May-21	Wellbore	Chum	65	2.66								0										0
26-May-21	Wellbore	Chum	54	2.00				1				1		1								1
26-May-21	Wellbore	Chum	71	4.34								0		<u> </u>								0
25-May-21	S. E. Hill Island	Chum	105	13.26								0								1		1
25-May-21	S. E. Hill Island	Chum	92	9.15								0								•		0
25-May-21	S. E. Hill Island	Chum	81	4.89								0										0
25-May-21	S. E. Hill Island	Chum	88	7.85				1				1										0
25-May-21	S. E. Hill Island	Chum	78	5.36				'				0								1		1
25-May-21	S. E. Hill Island	Chum	87	7.64								0								'		0
25-May-21	Viner Point	Chum	62	2.75								0										0
25-May-21	Viner Point	Chum	62	2.66								0										0
25-May-21	Viner Point	Chum	64	2.84								0										0
25-May-21	Viner Point	Chum	53	1.65								0										0
25-May-21	Viner Point	Chum	59	2.35								0										0
25-May-21	Viner Point	Chum	69	4.13								0			-							0
26-May-21	Chancellor	Chum	55	1.89					1			1										0
26-May-21	Chancellor	Chum	56	1.89	1				- 1			1										0
26-May-21	Chancellor	Chum	54	1.83	1							1	1		-							1
	Chancellor		1	1.53	· '							0	<u> </u>	1	-							•
26-May-21	Chancellor	Chum Chum	53 56	2.21			1					1		1								1
26-May-21							1					1	4									1
26-May-21	Chancellor	Chum	53	1.55			I						1									
26-May-21	Chancellor	Chum	59	2.25								0			1							0
26-May-21	Chancellor	Chum	53	1.72			1					0			1							1
26-May-21	Chancellor	Chum	51	1.37	1		i i					•										0
26-May-21	Chancellor	Chum	64	2.52	1							1			-							0
26-May-21	Chancellor	Chum	55	2.03								0										0
26-May-21	Chancellor	Chum	52	1.86								0										0
26-May-21	Chancellor	Chum	55	2.23					1			1				1						0
26-May-21	Chancellor	Chum	51	1.31								0		-		-						0
26-May-21	Chancellor	Chum	50	1.40								0				1						0
26-May-21	Chancellor	Chum	57	2.14					1			0	1									0
26-May-21	Chancellor	Chum	52	1.54								0										0
26-May-21	Chancellor	Chum	55	1.89								0										0
26-May-21	Chancellor	Chum	55	1.82		<u> </u>						0										0
26-May-21	Chancellor	Chum	53	1.80		1						1										0
26-May-21	Chancellor	Chum	54	1.80								0										0
26-May-21	Chancellor	Chum	55	1.88			1				1	1										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Chancellor	Chum	53	1.77			<u> </u>			7 1151	7 1.	0		<u> </u>			<u> </u>		7 11	7 (101	7	0
26-May-21	Chancellor	Chum	51	1.35		1						1										0
26-May-21	Chancellor	Chum	44	1.11	1			2				3										0
26-May-21	Chancellor	Chum	49	1.48	•							0			1							1
26-May-21	Chancellor	Chum	59	2.42								0										0
26-May-21	Chancellor	Chum	61	2.44					1			1										0
26-May-21	Chancellor	Chum	68	3.47					<u> </u>			0										0
26-May-21	Chancellor	Chum	44	1.23		1		1				2	3									3
25-May-21	Francisco Point	Chum	48	1.24		-		-				0										0
25-May-21	Francisco Point	Chum	43	1.00								0										0
25-May-21	Francisco Point	Chum	52	1.68								0										0
25-May-21	Francisco Point	Chum	45	1.05								0			1							1
25-May-21	Francisco Point	Chum	46	1.04								0										0
25-May-21	Francisco Point	Chum	46	1.11								0		1								1
25-May-21	Francisco Point	Chum	51	1.45								0		1								1
25-May-21	Francisco Point	Chum	53	1.53								0										0
25-May-21	Francisco Point	Chum	47	1.24								0										0
25-May-21	Francisco Point	Chum	50	1.40								0										0
25-May-21	Francisco Point	Chum	47	1.27								0										0
25-May-21	Francisco Point	Chum	48	1.23								0										0
25-May-21	Francisco Point	Chum	46	1.19								0										0
25-May-21	Francisco Point	Chum	48	1.18								0										0
25-May-21	Francisco Point	Chum	43	1.00								0										0
25-May-21	Francisco Point	Chum	57	2.29								0										0
25-May-21	Francisco Point	Chum	45	1.13								0										0
25-May-21	Francisco Point	Chum	51	1.87								0										0
25-May-21	Francisco Point	Chum	43	1.18								0										0
25-May-21	Francisco Point	Chum	51	1.57								0										0
25-May-21	Francisco Point	Chum	60	2.48								0		1								1
25-May-21	Francisco Point	Chum	52	1.80								0		'								0
25-May-21	Francisco Point	Chum	56	2.33								0		1								1
25-May-21	Francisco Point	Chum	48	1.29								0		'								0
25-May-21	Francisco Point	Chum	54	1.83								0										0
25-May-21	Francisco Point	Chum	49	1.47								0										0
25-May-21	Francisco Point	Chum	41	0.86								0			1							1
25-May-21	Francisco Point	Chum	49	1.40								0			'							0
25-May-21	Francisco Point	Chum	55	1.83								0										0
25-May-21	Francisco Point	Chum	63	3.05								0										0
25-May-21	Francisco Point	Chum	49	1.42								0		1					1		2	4
25-May-21	Francisco Point	Chum	49	1.53								0		1					'		2	0
	Francisco Point	Chum	50	1.50								0										0
25-May-21 25-May-21	Francisco Point	Chum	49	1.44								0							1			0
25-May-21	Francisco Point	Chum	62	3.18								0							1			0
25-May-21	Marina Island	Chum	60	2.94								0						-				0
		Chum	55	2.94								0						-				0
25-May-21	Marina Island																	-				
25-May-21	Marina Island	Chum	64	3.15								0							1			0
25-May-21	Marina Island	Chum	54	2.13								0							1			0
25-May-21	Marina Island	Chum	63	3.12								0							1			0
25-May-21	Marina Island	Chum	54	2.20								0						 				0
25-May-21	Marina Island	Chum	66	4.18								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
25-May-21	Marina Island	Chum	63	3.02								0										0
25-May-21	Marina Island	Chum	60	2.80								0										0
25-May-21	Marina Island	Chum	58	2.35								0										0
25-May-21	Marina Island	Chum	55	2.02								0										0
25-May-21	Marina Island	Chum	55	1.99								0										0
26-May-21	Nodales	Chum	45	0.88								0		2								2
26-May-21	Nodales	Chum	44	1.06								0										0
26-May-21	Nodales	Chum	50	1.25								0										0
26-May-21	Nodales	Chum	51	1.30								0										0
26-May-21	Nodales	Chum	36	0.54								0	1									1
26-May-21	Nodales	Chum	44	0.71								0		1								1
26-May-21	Nodales	Chum	45	1.09								0										0
26-May-21	Nodales	Chum	35	0.48								0										0
26-May-21	Beautiful Bay	Chum	56	1.97								0										0
26-May-21	Beautiful Bay	Chum	60	2.15								0										0
26-May-21	Beautiful Bay	Chum	45	0.89								0										0
26-May-21	Beautiful Bay	Chum	59	2.24								0										0
26-May-21	Beautiful Bay	Chum	58	2.09								0										0
26-May-21	Beautiful Bay	Chum	60	2.25								0										0
26-May-21	Beautiful Bay	Chum	62	2.23								0										0
26-May-21	Beautiful Bay	Chum	59	2.11								0										0
26-May-21	Beautiful Bay	Chum	56	1.89								0										0
26-May-21	Beautiful Bay	Chum	55	1.70								0										0
26-May-21	Beautiful Bay	Chum	60	2.37								0										0
26-May-21	Beautiful Bay	Chum	44	0.75								0										0
26-May-21	Beautiful Bay	Chum	66	2.97								0										0
26-May-21	Beautiful Bay	Chum	50	1.26	1	1						2										0
26-May-21	Beautiful Bay	Chum	37	0.50								0										0
26-May-21	Beautiful Bay	Chum	61	2.58								0		1								1
26-May-21	Beautiful Bay	Chum	61	2.30								0										0
26-May-21	Beautiful Bay	Chum	63	2.70								0										0
26-May-21	Beautiful Bay	Chum	62	2.56								0										0
26-May-21	Beautiful Bay	Chum	65	2.85			1					0										0
26-May-21	Beautiful Bay	Chum	57	1.72			1					0										0
26-May-21	Beautiful Bay	Chum	49	1.22			1					0										0
26-May-21	Beautiful Bay	Chum	48	1.08				1				1										0
26-May-21	Beautiful Bay	Chum	45	0.99				'				0										0
26-May-21	Beautiful Bay	Chum	40	0.52								0										0
26-May-21	Beautiful Bay	Chum	62	2.56			1					1										0
26-May-21	Beautiful Bay	Chum	63	2.46			'					0										0
26-May-21	Beautiful Bay	Chum	52	1.59								0										0
26-May-21		Chum	59	2.39			1					0			-							0
26-May-21	Beautiful Bay Beautiful Bay	Chum	64	2.39					 			0				1						0
	•		47	1.00						-		0				1						0
26-May-21	Shoal Bay	Pink	47	0.97								0										0
26-May-21	Shoal Bay	Pink																				
26-May-21	Shoal Bay	Pink	41	0.75								0										0
26-May-21	Shoal Bay	Pink	38	0.70					1			0										0
26-May-21	Shoal Bay	Pink	35	0.71								0				-						0
26-May-21	Shoal Bay	Pink	38	0.58								0				-						0
26-May-21	Shoal Bay	Pink	35	0.53							1	0									1	0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Shoal Bay	Pink	41	0.80								0										0
26-May-21	Shoal Bay	Pink	38	0.60								0										0
26-May-21	Shoal Bay	Pink	34	0.57								0			1							1
26-May-21	Shoal Bay	Pink	41	0.84								0										0
26-May-21	Shoal Bay	Pink	40	0.78								0		1								1
26-May-21	Shoal Bay	Pink	40	0.72								0										0
26-May-21	Shoal Bay	Pink	43	0.83								0										0
26-May-21	Shoal Bay	Pink	37	0.70								0		2								2
26-May-21	Shoal Bay	Pink	41	0.83								0										0
26-May-21	Shoal Bay	Pink	36	0.58								0										0
26-May-21	Shoal Bay	Pink	37	0.55			1					1										0
26-May-21	Shoal Bay	Pink	35	0.53								0										0
26-May-21	Shoal Bay	Pink	32	0.34								0										0
26-May-21	Shoal Bay	Pink	41	0.68								0										0
26-May-21	Shoal Bay	Pink	34	0.41								0										0
26-May-21	Shoal Bay	Pink	37	0.58								0		1								1
26-May-21	Shoal Bay	Pink	32	0.38								0		-								0
26-May-21	Shoal Bay	Pink	36	0.61								0										0
26-May-21	Shoal Bay	Pink	35	0.40								0										0
26-May-21	Shoal Bay	Pink	39	0.70								0										0
26-May-21	Shoal Bay	Pink	36	0.43								0										0
26-May-21	Shoal Bay	Pink	34	0.52								0										0
26-May-21	Shoal Bay	Pink	35	0.48					1			1										0
26-May-21	Shoal Bay	Pink	41	0.79					•			0										0
26-May-21	Shoal Bay	Pink	43	0.73								0										0
26-May-21	Fanny Bay	Pink	49	0.88								0										0
26-May-21	Fanny Bay	Pink	44	0.72								0										0
26-May-21	Fanny Bay	Pink	48	0.72								0										0
26-May-21	Fanny Bay	Pink	49	0.99								0										0
26-May-21	Fanny Bay	Pink	46	0.98								0										0
26-May-21	Fanny Bay	Pink	31	0.26								0										0
26-May-21	Fanny Bay	Pink	44	0.79								0										0
26-May-21	Fanny Bay	Pink	50	1.17								0										0
26-May-21	Fanny Bay	Pink	50	1.28								0										0
26-May-21	Fanny Bay	Pink	64	2.33								0										0
26-May-21	Fanny Bay	Pink	47	1.00								0										0
26-May-21	Fanny Bay	Pink	46	1.04								0										0
26-May-21	Fanny Bay	Pink	42	0.64								0										0
26-May-21	Fanny Bay	Pink	48	1.07								0										0
26-May-21	Fanny Bay	Pink	34	0.33		-						0										0
		Pink	74	3.85								0										0
26-May-21 26-May-21	Blenkinsop	Pink	42	0.72								0										0
	Knox Bay																					
26-May-21	Knox Bay Knox Bay	Pink	40 44	0.79								0										0
26-May-21		Pink		0.88																		
26-May-21	Knox Bay	Pink	39	0.78								0						1	-			0
26-May-21	Knox Bay	Pink	40	0.78								0						1	-			0
26-May-21	Knox Bay	Pink	36	0.44								0						1	1			0
26-May-21	Knox Bay	Pink	36	0.53								0		4				1	1			0
26-May-21	Cordero	Pink	49	1.41								0		1				1	1			1
26-May-21	Cordero	Pink	46	1.09								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Cordero	Pink	48	1.52								0										0
26-May-21	Cordero	Pink	69	2.83								0										0
26-May-21	Cordero	Pink	55	1.81								0										0
26-May-21	Cordero	Pink	56	2.00								0										0
26-May-21	Cordero	Pink	54	1.53								0										0
26-May-21	Cordero	Pink	54	1.87								0										0
26-May-21	Cordero	Pink	57	2.32								0										0
26-May-21	Cordero	Pink	51	1.26								0										0
26-May-21	Cordero	Pink	53	1.90								0										0
26-May-21	Cordero	Pink	52	1.43								0										0
26-May-21	Cordero	Pink	59	2.66								0		1								1
26-May-21	Cordero	Pink	68	3.90								0										0
26-May-21	Cordero	Pink	53	1.98								0										0
26-May-21	Cordero	Pink	55	2.16								0										0
26-May-21	Cordero	Pink	57	2.12								0		1								1
26-May-21	Cordero	Pink	50	1.38								0		•								0
26-May-21	Cordero	Pink	59	2.16								0										0
26-May-21	Cordero	Pink	60	2.72					1			1										0
26-May-21	Cordero	Pink	58	2.04					•			0										0
26-May-21	Cordero	Pink	50	1.37								0										0
26-May-21	Cordero	Pink	40	0.84								0										0
26-May-21	Cordero	Pink	53	2.05								0										0
26-May-21	Cordero	Pink	57	2.14								0										0
26-May-21	Cordero	Pink	60	2.37								0										0
26-May-21	Cordero	Pink	46	1.10								0										0
26-May-21	Cordero	Pink	60	2.84								0										0
26-May-21	Cordero	Pink	54	1.58								0										0
26-May-21	Cordero	Pink	51	1.89		-						0										0
		Pink	53	1.69		-						0										0
26-May-21 26-May-21	Cordero Cordero	Pink	59	2.37								0										0
		Pink	43	0.79																		0
26-May-21	Rock Bay											0										
26-May-21	Rock Bay	Pink	50	1.65								0										0
26-May-21	Rock Bay	Pink	48	1.29	-	-						0										0
26-May-21	Rock Bay	Pink	42	0.86								0										0
26-May-21	Rock Bay	Pink	47	1.02								0										0
26-May-21	Rock Bay	Pink	51	1.53								0										0
26-May-21	Rock Bay	Pink	55	1.80								0										0
26-May-21	Rock Bay	Pink	48	1.30								0										0
26-May-21	Rock Bay	Pink	52	1.67								0										0
26-May-21	Rock Bay	Pink	48	1.45								0										0
26-May-21	Rock Bay	Pink	54	1.58								0										0
26-May-21	Rock Bay	Pink	49	1.25								0										0
26-May-21	Rock Bay	Pink	62	2.22								0										0
26-May-21	Rock Bay	Pink	62	2.39								0	1									1
26-May-21	Rock Bay	Pink	48	1.26				-				0						ļ	ļ			0
26-May-21	Rock Bay	Pink	40	0.73								0										0
26-May-21	Rock Bay	Pink	44	1.10								0										0
26-May-21	Rock Bay	Pink	53	1.56								0										0
26-May-21	Rock Bay	Pink	50	1.25								0										0
26-May-21	Rock Bay	Pink	62	2.59	1	1					1	0	1					1			1	1

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Rock Bay	Pink	56	1.87								0										0
26-May-21	Rock Bay	Pink	44	0.99								0										0
26-May-21	Rock Bay	Pink	60	2.11								0										0
26-May-21	Rock Bay	Pink	60	2.27								0										0
26-May-21	Rock Bay	Pink	58	2.13								0										0
26-May-21	Rock Bay	Pink	44	0.75								0										0
26-May-21	Rock Bay	Pink	44	1.02								0										0
26-May-21	Rock Bay	Pink	44	1.01								0										0
26-May-21	Rock Bay	Pink	41	0.71								0										0
26-May-21	Rock Bay	Pink	46	1.21								0										0
26-May-21	Bear Bay	Pink	47	1.16								0										0
26-May-21	Bear Bay	Pink	49	1.23								0										0
26-May-21	Bear Bay	Pink	46	1.08								0										0
26-May-21	Bear Bay	Pink	40	0.73								0										0
26-May-21	Bear Bay	Pink	42	0.75								0										0
26-May-21	Bear Bay	Pink	41	0.66								0										0
26-May-21	Bear Bay	Pink	47	1.05								0										0
26-May-21	Bear Bay	Pink	45	0.87								0										0
26-May-21	Bear Bay	Pink	47	1.06								0										0
26-May-21	Bear Bay	Pink	56	1.91								0										0
26-May-21	Bear Bay	Pink	37	0.50								0										0
26-May-21	Bear Bay	Pink	45	0.93								0										0
26-May-21	Bear Bay	Pink	34	0.32								0										0
26-May-21	Bear Bay	Pink	49	1.26								0										0
26-May-21	Bear Bay	Pink	36	0.64								0										0
26-May-21	Bear Bay	Pink	47	1.03								0										0
26-May-21	Bear Bay	Pink	33	0.36								0										0
26-May-21	Bear Bay	Pink	44	0.92								0										0
26-May-21	Bear Bay	Pink	45	1.12								0										0
26-May-21	Bear Bay	Pink	40	0.69								0										0
26-May-21	Bear Bay	Pink	46	1.04					1			1										0
26-May-21	Bear Bay	Pink	45	0.86					-			0										0
26-May-21	Bear Bay	Pink	50	1.18								0										0
26-May-21	Bear Bay	Pink	46	0.90								0										0
26-May-21	Bear Bay	Pink	49	1.26								0										0
26-May-21	Bear Bay	Pink	40	0.73								0										0
26-May-21	Bear Bay	Pink	46	1.04								0										0
26-May-21	Bear Bay	Pink	51	1.28								0										0
26-May-21	Bear Bay	Pink	44	0.82								0										0
26-May-21	Bear Bay	Pink	47	1.04								0										0
25-May-21	Penn Island	Pink	83	5.78								0										0
25-May-21	Penn Island	Pink	80	5.74								0										0
26-May-21	Primary 1	Pink	59	1.71								0										0
26-May-21	Primary 1	Pink	49	1.01								0						 			\vdash	0
26-May-21	Primary 1	Pink	49	1.11								0									 	0
26-May-21	Primary 1	Pink	39	0.47								0						 			<u> </u>	0
26-May-21	Primary 1	Pink	48	1.06								0						 			<u> </u>	0
26-May-21	Primary 1	Pink	67	2.71				1				0						-	-		 	0
26-May-21	Primary 1	Pink	57	1.57				1				0						 	1		\vdash	0
		Pink	47					-				0						-	-		 	
26-May-21	Race Passage	PINK	4/	1.03						I		U]		1	1		l	1	0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Race Passage	Pink	44	0.90								0										0
26-May-21	Race Passage	Pink	46	0.87								0										0
26-May-21	Race Passage	Pink	44	0.96								0										0
26-May-21	Race Passage	Pink	50	1.07								0										0
26-May-21	Race Passage	Pink	50	1.11								0										0
26-May-21	Race Passage	Pink	45	0.70								0										0
26-May-21	Race Passage	Pink	43	1.05								0										0
26-May-21	Race Passage	Pink	53	1.64								0										0
26-May-21	Race Passage	Pink	47	1.07								0		1								1
26-May-21	Race Passage	Pink	52	1.22								0										0
26-May-21	Race Passage	Pink	48	1.12								0										0
26-May-21	Race Passage	Pink	45	1.07								0										0
26-May-21	Race Passage	Pink	49	1.11								0										0
26-May-21	Race Passage	Pink	42	0.74								0										0
26-May-21	Race Passage	Pink	48	0.96								0										0
26-May-21	Race Passage	Pink	48	0.99								0										0
26-May-21	Race Passage	Pink	55	1.47								0										0
26-May-21	Race Passage	Pink	48	1.06								0										0
26-May-21	Race Passage	Pink	48	0.99								0										0
26-May-21	Race Passage	Pink	49	1.27								0										0
26-May-21	Race Passage	Pink	50	1.10								0										0
26-May-21	Race Passage	Pink	50	1.42								0										0
26-May-21	Race Passage	Pink	51	1.48								0										0
26-May-21	Race Passage	Pink	51	1.13								0										0
26-May-21	Race Passage	Pink	50	1.14								0										0
26-May-21	Race Passage	Pink	48	1.20								0										0
26-May-21	Race Passage	Pink	47	1.16								0										0
26-May-21	Race Passage	Pink	52	1.16								0										0
26-May-21	Race Passage	Pink	47	1.15								0										0
26-May-21	Bickley Bay	Pink	53	1.45								0										0
26-May-21	Bickley Bay	Pink	42	0.83								0										0
26-May-21	Bickley Bay	Pink	62	2.31								0										0
26-May-21	Bickley Bay	Pink	51	1.63								0										0
26-May-21	Bickley Bay	Pink	48	1.17								0										0
26-May-21	Bickley Bay	Pink	56	1.87			1					1										0
26-May-21	Bickley Bay	Pink	42	0.91								0										0
26-May-21	Bickley Bay	Pink	45	0.99								0										0
26-May-21	Bickley Bay	Pink	36	0.42								0										0
26-May-21	Wellbore	Pink	48	1.16								0										0
26-May-21	Wellbore	Pink	44	0.76								0										0
26-May-21	Wellbore	Pink	52	1.17								0										0
26-May-21	Wellbore	Pink	38	0.68								0										0
26-May-21	Wellbore	Pink	53	1.39								0										0
26-May-21	Wellbore	Pink	56	1.52								0										0
26-May-21	Wellbore	Pink	45	1.03								0				+						0
26-May-21	Wellbore	Pink	60	2.08								0				+						0
26-May-21	Wellbore	Pink	40	0.51								0										0
26-May-21	Wellbore	Pink	52	1.47								0					1					0
26-May-21	Wellbore	Pink	48	1.22								0				+						0
26-May-21	Wellbore	Pink	62	1.91					1		1	1										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
26-May-21	Wellbore	Pink	56	1.88								0										0
26-May-21	Wellbore	Pink	67	2.58								0										0
26-May-21	Wellbore	Pink	57	1.87								0										0
26-May-21	Wellbore	Pink	48	1.12		1						1										0
26-May-21	Wellbore	Pink	59	1.99								0										0
26-May-21	Wellbore	Pink	62	2.15								0										0
26-May-21	Wellbore	Pink	45	0.92								0										0
26-May-21	Wellbore	Pink	46	0.93								0										0
26-May-21	Wellbore	Pink	51	1.51								0										0
26-May-21	Wellbore	Pink	37	0.50								0										0
26-May-21	Wellbore	Pink	49	1.30					1			1										0
26-May-21	Wellbore	Pink	50	1.15								0										0
26-May-21	Wellbore	Pink	54	1.57								0										0
26-May-21	Wellbore	Pink	58	1.83								0										0
26-May-21	Wellbore	Pink	52	1.41								0										0
26-May-21	Wellbore	Pink	46	1.14								0										0
26-May-21	Wellbore	Pink	58	2.57								0										0
25-May-21	S. E. Hill Island	Pink	85	7.79								0								1		1
25-May-21	S. E. Hill Island	Pink	115	20.44					1			1								'		0
25-May-21	S. E. Hill Island	Pink	83	5.90					- '			0									1	1
25-May-21	S. E. Hill Island	Pink	75	5.66								0										0
25-May-21	S. E. Hill Island	Pink	79	5.77				1				1								2		2
25-May-21	S. E. Hill Island	Pink	80	7.90				'				0										0
25-May-21	S. E. Hill Island	Pink	86	7.56								0										0
25-May-21	S. E. Hill Island	Pink	88	7.60								0								2		2
26-May-21	Chancellor	Pink	54	1.85	1							1		1								1
26-May-21	Chancellor	Pink	56	2.30	'		1					1		'		1						1
26-May-21	Chancellor	Pink	55	1.97			'					0				'						0
26-May-21	Chancellor	Pink	57	2.13								0										0
26-May-21	Chancellor	Pink	66	2.13								0		1	1							2
26-May-21	Chancellor	Pink	58	1.97								0		'	'							0
26-May-21	Chancellor	Pink	57	2.09								0			1							1
25-May-21	Francisco Point	Pink	70	3.37								0			ı							0
25-May-21	Francisco Point	Pink	50	1.15								0										0
	Francisco Point	Pink	53	1.71								0										0
25-May-21 25-May-21		Pink	49	1.71								0										0
	Francisco Point	Pink																				
25-May-21	Francisco Point	Pink	45 54	0.98								0										0
25-May-21	Francisco Point			1.51																		
25-May-21	Francisco Point	Pink	42	0.96		4						0		1								0
25-May-21	Francisco Point	Pink	43	0.88		1						1		1						4		1
25-May-21	Francisco Point	Pink	53	1.76								0								1		1
25-May-21	Francisco Point	Pink	52	1.42								0										0
25-May-21	Francisco Point	Pink	46	1.08								0										0
25-May-21	Francisco Point	Pink	46	1.06				1				0										0
25-May-21	Francisco Point	Pink	51	1.54					1			1										0
25-May-21	Francisco Point	Pink	50	1.39				1	1			1										0
25-May-21	Francisco Point	Pink	48	1.17				-				0										0
25-May-21	Francisco Point	Pink	54	1.66				-				0										0
25-May-21	Francisco Point	Pink	53	1.49								0										0
25-May-21	Francisco Point	Pink	48	1.04								0										0

Date of seine	Location	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CALP AF	CAL AM	CAL AF	CAL Total
25-May-21	Francisco Point	Pink	75	4.50								0										0
25-May-21	Francisco Point	Pink	51	1.64								0										0
25-May-21	Francisco Point	Pink	58	2.20								0										0
25-May-21	Francisco Point	Pink	61	2.52								0										0
25-May-21	Francisco Point	Pink	71	4.17								0										0
25-May-21	Francisco Point	Pink	54	1.75								0										0
25-May-21	Francisco Point	Pink	56	2.08								0										0
25-May-21	Marina Island	Pink	68	3.86								0										0
25-May-21	Marina Island	Pink	59	2.35								0										0
25-May-21	Marina Island	Pink	60	2.35								0										0
25-May-21	Marina Island	Pink	70	3.53								0										0
25-May-21	Marina Island	Pink	67	3.42								0								1		1
25-May-21	Marina Island	Pink	60	2.55								0										0
26-May-21	Nodales	Pink	35	0.56			1					1										0
26-May-21	Nodales	Pink	38	0.67								0										0
26-May-21	Nodales	Pink	39	0.58								0										0
26-May-21	Nodales	Pink	44	0.82								0										0
26-May-21	Nodales	Pink	40	0.78								0										0
26-May-21	Nodales	Pink	41	0.80								0										0
26-May-21	Nodales	Pink	34	0.36								0										0
26-May-21	Nodales	Pink	39	0.60			1					1										0
26-May-21	Nodales	Pink	44	0.90								0						1				1
26-May-21	Nodales	Pink	47	1.06		1						1										0
26-May-21	Nodales	Pink	48	0.76								0										0
26-May-21	Nodales	Pink	39	0.64								0										0
26-May-21	Nodales	Pink	35	0.42								0										0
26-May-21	Nodales	Pink	45	0.87								0										0
26-May-21	Nodales	Pink	35	0.41								0										0
26-May-21	Nodales	Pink	42	0.96								0										0
26-May-21	Nodales	Pink	37	0.50								0										0
26-May-21	Nodales	Pink	42	0.76	1							1					1					1
26-May-21	Nodales	Pink	47	1.00						1		1					-					0
26-May-21	Nodales	Pink	36	0.49						<u> </u>		0			1							1
26-May-21	Nodales	Pink	40	0.84								0		1	-							1
26-May-21	Nodales	Pink	46	1.06								0										0
26-May-21	Nodales	Pink	46	1.03								0		1								1
26-May-21	Nodales	Pink	35	0.59								0										0
26-May-21	Nodales	Pink	40	0.68								0										0
26-May-21	Nodales	Pink	45	0.89								0										0
26-May-21	Nodales	Pink	45	0.82								0		1								1
26-May-21	Nodales	Pink	47	1.06								0										0
26-May-21	Nodales	Pink	52	1.55								0		1								1
26-May-21	Nodales	Pink	41	0.75								0		 			1					1
26-May-21	Nodales	Pink	43	0.86								0										0
26-May-21	Nodales	Pink	36	0.55								0										0
26-May-21	Beautiful Bay	Pink	32	0.31		1						1										0
26-May-21	Beautiful Bay	Pink	64	2.59		'		<u> </u>				0						1				0
26-May-21	Beautiful Bay	Pink	42	0.70			1					1										0
26-May-21	Beautiful Bay	Pink	38	0.70			'					0										0
26-May-21	Beautiful Bay	Pink	42	0.69								0										0

Date of		Fish	Length	Weight	LEP	Cal	Cal	Cal	Cal	Cal	CAL	CALP	CAL	CAL	CAL							
seine	Location	Species	(mm)	(g)	Co	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	AF	AM	AF	Total
26-May-21	Beautiful Bay	Pink	48	1.05								0										0
26-May-21	Beautiful Bay	Pink	48	1.00								0										0
26-May-21	Beautiful Bay	Pink	48	1.10								0										0
26-May-21	Beautiful Bay	Pink	48	0.95								0										0
26-May-21	Beautiful Bay	Pink	53	1.78								0										0
26-May-21	Beautiful Bay	Pink	40	0.59								0										0
26-May-21	Beautiful Bay	Pink	33	0.32		1						1										0
26-May-21	Beautiful Bay	Pink	37	0.51								0										0
26-May-21	Beautiful Bay	Pink	34	0.34								0									1	0
26-May-21	Beautiful Bay	Pink	40	0.59								0									1	0
26-May-21	Beautiful Bay	Pink	35	0.42								0										0
26-May-21	Beautiful Bay	Pink	35	0.33								0									1	0
26-May-21	Beautiful Bay	Pink	48	1.03								0		1								1
26-May-21	Beautiful Bay	Pink	39	0.65								0										0
26-May-21	Beautiful Bay	Pink	34	0.40								0										0
26-May-21	Beautiful Bay	Pink	70	2.97								0										0
26-May-21	Beautiful Bay	Pink	76	4.13								0										0
26-May-21	Beautiful Bay	Pink	35	0.36								0										0
26-May-21	Beautiful Bay	Pink	43	0.79								0									1	0
26-May-21	Beautiful Bay	Pink	76	4.19								0										0
26-May-21	Beautiful Bay	Pink	34	0.43								0									1	0
26-May-21	Beautiful Bay	Pink	40	0.62								0		1								1
26-May-21	Beautiful Bay	Pink	58	1.78								0										0
26-May-21	Beautiful Bay	Pink	46	1.05								0										0
26-May-21	Beautiful Bay	Pink	32	0.42								0										0
26-May-21	Beautiful Bay	Pink	57	1.79								0										0
26-May-21	Beautiful Bay	Pink	37	0.50								0										0