Ecosystem-Based Juvenile Pacific Salmon (*Oncorhynchus* spp.) Trawl Survey off North and West Coast of Vancouver Island, British Columbia, September 30 - October 15, 2025

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ECOSYSTEM-BASED JUVENILE PACIFIC SALMON (*ONCORHYNCHUS* SPP.) TRAWL SURVEY OFF NORTH AND WEST COAST VANCOUVER ISLAND, BRITISH COLUMBIA, SEPTEMBER 30 - OCTOBER 15, 2025

by

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CONTENTS

ABSTRACT

King, J.R., Jung, Y., Tabata, A.M. and Flynn, K.L. 2026. Ecosystem-Based Juvenile Pacific Salmon (*Oncorhynchus* spp.) Trawl Survey off North and West Coast Vancouver Island, British Columbia, September 30 - October 15, 2025. Can. Data Rep. Fish. Aquat. Sci. 1482: vi + 57 p.

Fisheries and Oceans Canada conducted an ecosystem-based trawl survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*. This study targeted juvenile Pacific Salmon (*Oncorhynchus* spp.) off the north and west coast of Vancouver Island. In 77 tows, there were 40 taxonomic groups sampled in 1,567 kg of catch, with 34% juvenile Pacific Salmon caught by weight (538.19 kg). Water Jellyfish (*Aequorea* spp.), adult Chum Salmon (*O. keta*), and juvenile Chum Salmon were the most abundant catch by weight. There were 2,949 individual lengths and 2,540 individual weights recorded, including all 5 Pacific Salmon (*Oncorhynchus* spp.) species. Juvenile salmon species caught, in decreasing catch weight, were: Chum Salmon, Coho Salmon, Pink Salmon, Chinook Salmon and Sockeye Salmon, with catch distribution varied based on species. Common prey species for juvenile salmon included amphipods, euphausiids, crabs and fishes. Biological samples for genetic stock composition, otoliths, energy density, gills, and coded wire tags are at the Pacific Biological Station, Fisheries and Oceans Canada (Nanaimo, BC). Associated information on the physical oceanography (39 stations) and zooplankton composition (38 stations) was collected and will be analysed at the Institute of Ocean Sciences, Fisheries and Oceans Canada (Sidney, BC).

RÉSUMÉ

King, J.R., Jung, Y., Tabata, A.M. and Flynn, K.L. 2026. Ecosystem-Based Juvenile Pacific Salmon (*Oncorhynchus* spp.) Trawl Survey off North and West Coast Vancouver Island, British Columbia, September 30 - October 15, 2025. Can. Data Rep. Fish. Aquat. Sci. 1482: vi + 57 p.

Pêches et Océans Canada a mené une étude écosystémique au chalutage pélagique du septembre 30 au octobre 15, 2025 sur le CCGS *Sir John Franklin*. Cette étude ciblait les saumons du Pacifique juvéniles (*Oncorhynchus* spp.) de la région du nord et ouest de l'isle de Vancouver. En 77 traits, il y avait 40 groupes taxonomiques échantillonnées dans 1,567 kg de prises, avec 34% de juvénile saumon du Pacifique capturé en poids (538.19 kg). Aequorea (*Aequorea* spp.), les saumon kéta adultes (*O. keta*), et les saumon kéta juvéniles étaient les espèces les plus abondantes en poids. On a enregistré 2,949 longueurs individuelles et 2,540 poids individuels, dont les 5 espèces de saumon du Pacifique. Les espèces de saumon juvénile capturées par ordre décroissant d'abondance par comptage étaient les seuivantes: saumon kéta, saumon coho, saumon rose, saumon quinnat et saumon rouge, avec la répartition des prises variait selon les espèces. Les espèces de proies communes aux saumons juvéniles comprenaient des amphipodes, des euphausiacés, des crabes et des poissons. Les échantillons biologiques pour la composition des stocks génétique, les otolithes, la densité énergétique, les branchies et les micromarques magnétisées codées se trouvent à la Station biologique du Pacifique de Pêches et Océans Canada (Nanaimo, Colombie-Britannique). Des informations associées sur l'océanographie physique (39 stations) et la composition du zooplancton (38 stations) ont été collectées et seront analysées à l'Institut des sciences de la mer, Pêches et Océans Canada (Sidney, C.-B.).

1 INTRODUCTION

Fisheries and Oceans Canada conducted an ecosystem-based midwater trawl survey, targeting juvenile Chum Salmon (*Oncorhynchus keta*), Chinook Salmon (*O. tshawytscha*), Coho Salmon (*O. kisutch*), Pink Salmon (*O. gorbuscha*) and Sockeye Salmon (*O. nerka*) from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*. The main objectives of this survey were:

1. to determine the abundance, condition, distribution, and genetic stock composition of juvenile Pacific Salmon present off the north and west coast of Vancouver Island in the fall,
2. the associated physical oceanography, and
3. the distribution and biomass of prey species, including zooplankton.

This survey supports research into linkages between oceanographic conditions, fish abundance and community composition, Pacific Salmon ocean ecology and forecasting adult returns. This data report documents the biological, oceanographic, and zooplankton data and samples collected during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025.

2 METHODS

2.1 SURVEY LOCATIONS

Fishing, oceanographic, and zooplankton sampling occurred off the north and west coast of Vancouver Island, including Queen Charlotte Strait, Queen Charlotte Sound, and west coast Vancouver Island (Figure 1 and 2) aboard the CCGS *Sir John Franklin*.

2.2 FISHING OPERATIONS

The vessel deployed a coastal LFS 7742 trawl net (Appendix 9, manufactured by LFS Trawl (LFS Net Systems, Bellingham, USA). This two-bridle midwater net has a codend liner (12.7 mm stretched) to retain smaller species. The LFS 7742 trawl net was designed to have a net opening of 30 m wide by 15 m high, or an area of 450 m^2 (Figure 11). The net was towed at 4 to 5 knots (7.4 - 9.3 km/hr) for a target duration of 20 minutes. The start time and location of the tow was recorded when the doors were locked, and the end time and location when the retrieval of the doors was initiated. The target headrope depths were 0 m (surface) and 15 m (depth). Two A-6 floats 86.4 cm x 118.1 cm (34” x 46.5”) were attached to the headrope for surface tows.

The trawl net was fished with Thyborøn Type 15 VF, 4.5 m^2 midwater doors (approximately 798 kg each). Two chain clumps were attached to the footrope with approximately 204 kg (450 lbs) per chain clump. Vessel speed, direction, bottom depth and weather conditions were recorded for each tow (Appendix 10). The vessel was equipped with a SCANMAR Trawl System

and wireless SS4 Catch Sensor that provided real time door spread, headline depth and net opening values (SCANMAR, Åsgårdstrand, Norway). RBR duet (RBR Ltd., Ottawa, ON, Canada) temperature and depth sensors were attached to the headrope and footrope to record depth and temperature every 30 seconds to allow for determination of the vertical net depth and opening and temperature at capture depth over time.

2.3 CATCH PROCESSING

At the end of each trawl tow, all retrieved specimens were sorted to the lowest taxonomic group possible. Large catches were randomly subsampled prior to sorting. The total catch (or the subsample) of each species or taxonomic group, was weighed using Marel Model M2200 dual range motion-compensating electronic scales and when practical, the number of individuals was recorded. For catches of a species or taxonomic group which totaled less than 0.01 kg, “trace” weight was recorded. Pacific Salmon were divided into juveniles and adults based on their fork lengths to account for different migratory behavior, with Coho Salmon considered juveniles < 400 mm and all other Pacific Salmon species considered juveniles < 350 mm. Jellyfish species catch weights include both whole and incomplete pieces, while counts are only inclusive of specimens with intact bells.

2.4 BIOLOGICAL SAMPLES

For each species, a pre-determined, target number of randomly selected specimens per tow were sampled for length and weight (Marel Model M2200 dual range motion-compensating electronic scales), with up to 10 of those randomly selected specimens also used for stomach content analyses. If the catch count was less than the target number, all specimens in that tow were sampled. Stomachs were analysed at sea following an established protocol (King, Boldt, and King 2018), and from these samples up to five whole bodies were collected for energy density. Pacific Salmon had additional sampling and collections, which included: fin clips for genetic stock identification (GSI), otoliths, adipose fin status (i.e. clipped vs. non-clipped), presence and retention of coded wire tags (CWTs) and gill tissues for for infectious agents and fitness.

2.5 OCEANOGRAPHY

A Sea-Bird SBE-911plus CTD (conductivity-temperature-depth) equipped with transmissometer, fluorometer, pH, salinity and dissolved oxygen sensors was used for oceanographic profiles (Sea-bird Electronics Bellevue Washington, USA). A Niskin bottle at 5 m from the surface was used to collect water for nutrient and chlorophyll (chl *a*) analysis. Seawater samples for nitrate, phosphate, and silicate were placed in acid-washed glass test tubes and frozen. Seawater for chl *a* estimation was filtered with a 25 mm GF/F glass fibre filter disks. Filter disks were then placed in polypropylene scintillation vials and frozen. Both the nutrient and chl *a* samples were frozen and maintained at -20℃. Nutrient and chl *a* samples were returned for analyses at the Institute of Ocean Sciences, Fisheries and Oceans Canada (Sidney, BC).

2.6 ZOOPLANKTON

Vertical tows to sample zooplankton were conducted to approximately 250 m or within 10 m of the bottom with two 60 cm diameter, 253 micrometer mesh nets mounted in a bongo-drum style frame, one of which was equipped with a flow meter. Zooplankton collected from the flow meter side net were sorted into four size fractions by successively sieving through 8.0, 1.7, 1.0, and 0.25 mm screens. Each size fraction was individually frozen for future stable isotope, energy density, or proximate analyses. Zooplankton collected from the net without the flowmeter were preserved in 10% buffered formalin and sent to the zooplankton laboratory at the Institute of Ocean Sciences, Fisheries and Oceans Canada (Sidney, BC) for species classification and enumeration.

3 RESULTS

3.1 FISHING OPERATIONS

This survey conducted 77 trawl net tows off the north and west coast of Vancouver Island with 77 trawls completed successfully (Figure 1 and Appendix 11). There were 0 unusable tows.

The survey encountered a number of days of high winds and sea state in the survey area, however the vessel and science crew were able to adjust tow locations and timing as needed and were able to still obtain full coverage of the survey region.

Tow speed averaged 8.1 km/hr (4.4 knots), and varied between 5.8 to 10 km/hr (3.1 - 5.4 knots) speed over ground, depending on the wind, tide, and current. Warp length ranged from 44 m to 240 m (Appendix 11).

Net mensuration data from the SCANMAR trawl sensors and RBR data loggers was collected for mouth opening height, gear depth and doorspread. The doorspread was used to calculate the horizontal net opening width. The difference between the headrope and footrope depth from the RBR duet data loggers was used to calculate the average mouth opening of each tow. Tows with missing mensuration data used tow depth-specific averages when required (i.e., an average height and width of 18 m and 44 m for surface tows and 10 m and 49 m for 15 m target depth tows; Table 6).

3.2 OCEANOGRAPHY

CTD casts and water samples were completed at 39 sites (Figure 2) with cast depths ranging from 41 m to 696 m (Appendix 12). Two casts over 250 m were completed to allow complete calibration of the instrumentation and analyses. Oceanographic data from the CTD casts and nutrient analysis of the water samples will be archived online within the Water Properties Data Inventory under cruise number 2025-027.

3.3 ZOOPLANKTON

Vertical bongo tows were conducted at 38 stations (Figure 2) to depths ranging from 41 m to 208 m (Appendix 12). Formalin-preserved zooplankton samples will be enumerated at the Institute of Ocean Sciences, Fisheries and Oceans Canada (Sidney, BC). Data will be archived in the zooplankton database. Fractionated zooplankton samples are frozen at the Pacific Biological Station, Fisheries and Oceans Canada (Nanaimo, BC).

3.4 CATCH COMPOSITION

Total catch for the survey from usable tows was 1,567 kg, with 538.19 kg (34%) juvenile Pacific Salmon. Detailed catch composition for each tow is included in Appendix 13. For each species captured during the survey, the number of tows in which the species was present, total catch weight and count, maximum tow catch weight, and mean tow catch weight in usable tows is presented in Table 1. The three most abundant species caught by weight were Water Jellyfish (388.87 kg), in 86% of the tows, adult Chum Salmon (212.47 kg) in 16% of the tows, and juvenile Chum Salmon (212 kg in 43% of the tows (Table 1). Juvenile Pacific Salmon species caught, in order of abundance by weight, were: Chum Salmon, Coho Salmon, Pink Salmon, Chinook Salmon and Sockeye Salmon. The survey targeted juvenile Pacific Salmon so the catches of adult Pacific Salmon should be interpreted with care.

The location and catch per unit effort (CPUE, tonnes/km^3) of juvenile salmon is shown in Figure 3. The majority of juvenile Chinook Salmon were caught along the west coast of Vancouver Island, in the inlets and sounds. Juvenile Coho Salmon were caught in Queen Charlotte Strait and Queen Charlotte Sound and on the shelf and sounds of the west coast of Vancouver Island. Juvenile Chum Salmon were also found in Queen Charlotte Strait and Queen Charlotte Sound, and along the shelf of the west coast of Vancouver Island below Brooks Pennisula. Juvenile Pink Salmon were only caught in Queen Charlotte Strait and Queen Charlotte Sound. Juvenile Sockeye Salmon were the least abundant salmon species found only at two locations, south of Estevan Point and in Clayoquot sound. The location and catch per unit effort (CPUE, tonnes/km^3) of other, non-salmonid, frequently caught species is shown in Figure 4.

3.5 BIOLOGICAL SAMPLES

Samples were collected for DNA stock composition (1,025), otoliths (640), energy density (347), coded wire tags (32), and gill samples for infectious agents (163). These biological samples were returned to the Pacific Biological Station, Fisheries and Oceans Canada (Nanaimo, BC).

3.6 LENGTH AND WEIGHT

Lengths and weights of 24 species were recorded (Table 2). Within juvenile Pacific salmon, Coho Salmon had the largest mean length (284 mm) and weight (297 g), whereas Pink Salmon had

the smallest mean length (152 mm) and weight (37 g). Length frequencies and length-weight relationships are presented for Pacific Salmon species in Figures 5 to 9. Double log transformed length-weight regression coefficients were similar in Chinook Salmon, and Chum Salmon, while Coho Salmon, and Pink Salmon had slightly smaller coefficients. The regression coefficient for Sockeye Salmon was much smaller, but the sample size was low (n=27). A larger coefficient typically represents better condition, whereas a smaller coefficient typically represents worse condition. Length frequencies for other species with at least 50 individuals measured is shown in Figure 10.

3.7 STOMACH CONTENTS

Stomachs of 661 individual fish, from 10 species, were analysed at sea (Table 3). Juvenile Pacific Salmon species had between 0 and 8% empty stomachs, with juvenile Coho Salmon having the highest percentage and juvenile Sockeye Salmon having the lowest percentage (Table 3). The frequency of observation and average volume of identified prey is shown in Table 4. Amphipods and crabs were the most frequently observed prey for juvenile Chinook Salmon, while Cods, Hakes, and Grenadiers had the highest average volume. For juvenile Chum Salmon, the most common stomach contents were unidentified remains, while shrimp and amphipods had the highest average volume when present. Since gelatinous prey are digested quickly, it is likely that the unidentified remains in the juvenile Chum Salmon may be ctenophores and jellyfish. Juvenile Coho Salmon stomach contained amphipods and crabs most frequently compared to other prey, and the most voluminous prey was Opalescent Inshore Squid (Table 4). The most common and most voluminous prey for juvenile Pink Salmon was amphipods. Finally, for juvenile Sockeye Salmon amphipods were the most common and most voluminous prey item.

4 DISCUSSION

The data generated by this ecosystem-based juvenile Pacific Salmon trawl survey in 2025 covers physical and biological oceanographic conditions, fish abundance and composition of the pelagic community, along with comprehensive sampling and stomach content analyses of all caught species. This data provides valuable information on distribution, abundance, condition, and genetic stock composition for juvenile Pacific Salmon off the north and west coast of Vancouver Island and extends a long-term trawl survey time series from southern British Columbia of juvenile Pacific Salmon and other important pelagic fish species. The physical oceanographic water profiles and zooplankton samples associated with the survey catches provide valuable additions to the understanding of the pelagic ecosystem. As it becomes available, the data from laboratory analysis (i.e. GSI, energy density, isotopic analysis, zooplankton composition) will be integrated into the survey data. This data supplements historic juvenile Pacific Salmon surveys, and will be reported in Fisheries and Oceans Canada State of the Pacific Ocean, and is being incorporated into longer term and broader scope research projects.

5 ACKNOWLEDGEMENTS

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6 REFERENCES

King, J., J. L. Boldt, and S. King. 2018. "Proceedings of the Pacific Region Workshop on Stomach Content Analyses, February 27 - March 1 2018, Nanaimo, British Columbia." *Can. Tech. Rep. Fish. Aquat. Sci.*, no. 3274: v + 55 p.

7 TABLES

Table 1. All captured species (or taxonomic group), ordered by total catch weight (in kilograms), showing number of tows in which the species occurred, total catch count, (Count), total catch weight (Weight), maximum catch weight (Max), and mean catch weight (Mean) per tow for usable tows during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025. Jellyfish species catch weights include both whole and incomplete pieces, while counts are only inclusive of specimens with intact bells. Blank weights indicate specimens which could not be weighed accurately (either released alive or too small).

Common Name	Scientific Name	Tows	Count	Weight	Max	Mean
Water Jellyfish	*Aequorea*	66		388.87	36.64	6
Chum Salmon (Adults)	*Oncorhynchus keta*	12	67	212.47	90.00	18
Chum Salmon (Juveniles)	*Oncorhynchus keta*	33	1,901	212.00	94.77	6
Lions Mane	*Cyanea capillata*	31	24	153.29	29.68	5
Coho Salmon (Juveniles)	*Oncorhynchus kisutch*	30	492	151.13	36.66	5
Pink Salmon (Juveniles)	*Oncorhynchus gorbuscha*	9	3,016	119.02	70.66	13
Moon Jellyfish	*Aurelia labiata*	49	113	97.23	27.12	2
Opalescent Inshore Squid	*Doryteuthis opalescens*	29	21,716	82.05	72.95	6
Chinook Salmon (Juveniles)	*Oncorhynchus tshawytscha*	25	625	54.16	9.03	2
Pacific Sea Nettle	*Chrysaora fuscescens*	20	60	40.36	14.92	2
Fried Egg Jellyfish	*Phacellophora camtschatica*	30	16	29.22	3.82	1
Coho Salmon (Adults)	*Oncorhynchus kisutch*	5	5	9.12	3.89	2
Ocean Sunfish	*Mola mola*	4	4	8.05	3.00	3
Steelhead Trout	*Oncorhynchus mykiss*	1	1	2.99	2.99	3
Sockeye Salmon (Juveniles)	*Oncorhynchus nerka*	2	27	1.88	1.76	1
Northern Sea Nettle	*Chrysaora melanaster*	3	3	1.08	0.84	0
Pacific Saury	*Cololabis saira*	1	13	1.02	1.02	1
Common Murre	*Uria aalge*	1	1	0.83	0.83	1
Chinook Salmon (Adults)	*Oncorhynchus tshawytscha*	1	1	0.54	0.54	1
Pile Perch	*Rhacochilus vacca*	1	1	0.38	0.38	0
Comb Jellyfish	*Ctenophora*	14	23	0.37	0.16	0
Medusafish	*Icichthys lockingtoni*	4	5	0.28	0.17	0
Pacific Herring	*Clupea pallasii*	6	10	0.23	0.12	0
Jellyfish	*Medusozoa*	2		0.17	0.10	0
Wolf Eel	*Anarrhichthys ocellatus*	2	2	0.13	0.11	0
Polyorchis	*Polyorchis*	4	13	0.10	0.05	0
Mitrocomella Polydiademata	*Mitrocomella polydiademata*	2	12	0.07	0.07	0
Cods/Hakes/Grenadiers	*Gadiformes*	2	2	0.04	0.02	0
Pacific Pompano	*Peprilus simillimus*	1	2	0.02	0.02	0
Silverspotted Sculpin	*Blepsias cirrhosus*	1	1	0.02	0.02	0
Pacific Tomcod	*Microgadus proximus*	1	1	0.01	0.01	0
Flatfishes	*Pleuronectiformes*	15	46			
Larval Fish	*Larval Fish*	12	23			
Bay Pipefish	*Syngnathus leptorhynchus*	2	2			
Jack Mackerel	*Trachurus symmetricus*	1	1			
Pelagic Goose Barnacle	*Lepas anatifera*	1	3			
Rex Sole	*Glyptocephalus zachirus*	1	1			
Salmon Shark	*Lamna ditropis*	1	1			

Table 2. Lengths and weights for each species (arranged descending by the number of length measurements for each by species) sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025. Tows = number of tows. Type = Type of length measurement (FL = Fork Length, TL = Total Length, SL = Standard Length, ML = Mantle Length, BD = Bell Diameter). Lengths = number of length measurements. Weights = number of weight measurements.

		Length (mm)					**Weight (g)**			
Common Name	Tows	Type	Lengths	Min	Max	Mean	Weights	Min	Max	Mean
Chum Salmon (Juveniles)	33	FL	692	21	275	212	686	28	251	113
Chinook Salmon (Juveniles)	25	FL	605	109	248	186	605	16	206	84
Pink Salmon (Juveniles)	9	FL	456	117	239	152	451	14	142	37
Opalescent Inshore Squid	16	ML	383	20	66	41	383	1	11	3
Coho Salmon (Juveniles)	30	FL	293	22	345	284	293	99	544	297
Water Jellyfish	18	BD	165	44	238	95				
Moon Jellyfish	39	BD	94	80	546	216				
Pacific Sea Nettle	16	BD	74	81	290	187				
Chum Salmon (Adults)	12	FL	53	519	773	667	53	1596	5730	3731
Lions Mane	22	BD	48	67	637	374				
Sockeye Salmon (Juveniles)	2	FL	26	169	195	180	26	55	91	71
Pacific Saury	1	FL	13	223	295	259	13	50	112	76
Fried Egg Jellyfish	5	BD	12	45	438	181				
Pacific Herring	6	SL	9	67	183	101	9	4	83	21
Coho Salmon (Adults)	5	FL	5	361	686	486	5	598	3874	1822
Medusafish	3	TL	4	153	223	186	4	33	99	70
Ocean Sunfish	4	TL	4	344	405	368	3	2340	3000	2683
Northern Sea Nettle	3	BD	3	116	213	149				
Wolf Eel	2	TL	2	350	574	462	2	27	113	70
Chinook Salmon (Adults)	1	FL	1	398	398	398	1	530	530	530

		Length (mm)					Weight (g)			
Common Name	Tows	Type	Lengths	Min	Max	Mean	Weights	Min	Max	Mean
Cods/Hakes/Grenadiers	1	FL	1	110	110	110	1	7	7	7
Jack Mackerel	1	FL	1	89	89	89	1	7	7	7
Pacific Tomcod	1	FL	1	113	113	113	1	11	11	11
Pile Perch	1	FL	1	247	247	247	1	347	347	347
Salmon Shark	1	TL	1	2100	2100	2100				
Silverspotted Sculpin	1	TL	1	108	108	108	1	14	14	14
Steelhead Trout	1	FL	1	685	685	685	1	2958	2958	2958

Table 3. Number of tows with stomach samples (Tows), number of stomachs examined (Stomachs), number of empty stomachs (empty), and percentage of empty stomachs for each species (Percent Empty), arranged descending by number of stomachs, during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025.

Species	Tows	Stomachs	Empty	Percent Empty
Chum Salmon (Juveniles)	33	194	3	2
Coho Salmon (Juveniles)	30	147	12	8
Chinook Salmon (Juveniles)	25	175	4	2
Chum Salmon (Adults)	12	38	9	24
Pink Salmon (Juveniles)	9	72	2	3
Coho Salmon (Adults)	5	5	1	20
Medusafish	3	4	1	25
Pacific Herring	2	2	1	50
Sockeye Salmon (Juveniles)	2	11	0	0
Chinook Salmon (Adults)	1	1	1	100
Steelhead Trout	1	1	0	0
Pacific Tomcod	1	1	1	100
Pacific Saury	1	10	1	10

Table 4. Prey items (Prey) identified in the stomach contents of predator species (Species) sampled (alphabetical by Species) during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025. Frequency of occurrence (FO) is the proportion of non-empty stomachs containing that prey item and volume is the mean volume in cm^3.

Species	Prey	FO	Volume
Chinook Salmon (Juveniles)	Crabs	0.68	0.51
Chinook Salmon (Juveniles)	Amphipods	0.60	0.37
Chinook Salmon (Juveniles)	Unidentified Fishes	0.19	0.66
Chinook Salmon (Juveniles)	Shrimp	0.17	1.18
Chinook Salmon (Juveniles)	Euphausiids	0.16	0.23
Chinook Salmon (Juveniles)	Insects	0.13	0.22
Chinook Salmon (Juveniles)	Unidentified Remains	0.11	0.10
Chinook Salmon (Juveniles)	Squid	0.06	0.63
Chinook Salmon (Juveniles)	Pteropods	0.03	0.03
Chinook Salmon (Juveniles)	Pacific Herring	0.02	3.07
Chinook Salmon (Juveniles)	Flatfishes	0.02	0.37
Chinook Salmon (Juveniles)	Copepods	0.02	0.07
Chinook Salmon (Juveniles)	Cods/Hakes/Grenadiers	0.01	6.00
Chinook Salmon (Juveniles)	Polychaete Worms	0.01	0.06
Chinook Salmon (Juveniles)	Gastropods	0.01	0.01
Chinook Salmon (Juveniles)	Cephalopods	0.01	0.01
Chinook Salmon (Juveniles)	Barnacles	0.01	0.01
Chinook Salmon (Juveniles)	Misc. Non-Marine	0.01	0.01
Chinook Salmon (Juveniles)	Squat Lobster	0.01	0.01
Chum Salmon (Adults)	Unidentified Remains	0.97	6.99
Chum Salmon (Adults)	Comb Jellyfish	0.59	0.86
Chum Salmon (Adults)	Jellyfish	0.14	6.65
Chum Salmon (Adults)	Opalescent Inshore Squid	0.03	9.50
Chum Salmon (Adults)	Water Jellyfish	0.03	2.10
Chum Salmon (Adults)	Squid	0.03	2.10
Chum Salmon (Juveniles)	Unidentified Remains	0.71	0.56
Chum Salmon (Juveniles)	Amphipods	0.35	1.49
Chum Salmon (Juveniles)	Arrow Worms	0.15	0.60
Chum Salmon (Juveniles)	Crabs	0.13	0.67
Chum Salmon (Juveniles)	Comb Jellyfish	0.10	0.18
Chum Salmon (Juveniles)	Copepods	0.08	0.73
Chum Salmon (Juveniles)	Shrimp	0.04	2.10
Chum Salmon (Juveniles)	Euphausiids	0.04	0.75
Chum Salmon (Juveniles)	Larvaceans (Pelagic Tunicates)	0.03	0.80
Chum Salmon (Juveniles)	Jellyfish	0.02	0.01
Chum Salmon (Juveniles)	Polychaete Worms	0.01	0.01
Chum Salmon (Juveniles)	Pteropods	0.01	0.01
Chum Salmon (Juveniles)	Unidentified Fishes	0.01	0.01
Coho Salmon (Adults)	Unidentified Fishes	0.50	3.35
Coho Salmon (Adults)	Euphausiids	0.25	2.40
Coho Salmon (Adults)	Unidentified Remains	0.25	0.50

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Species	Prey	FO	Volume
Coho Salmon (Adults)	Comb Jellyfish	0.25	0.30
Coho Salmon (Juveniles)	Amphipods	0.50	0.85
Coho Salmon (Juveniles)	Crabs	0.49	0.89
Coho Salmon (Juveniles)	Euphausiids	0.30	4.37
Coho Salmon (Juveniles)	Unidentified Fishes	0.28	2.52
Coho Salmon (Juveniles)	Shrimp	0.10	1.86
Coho Salmon (Juveniles)	Pacific Herring	0.08	9.44
Coho Salmon (Juveniles)	Unidentified Remains	0.07	0.42
Coho Salmon (Juveniles)	Pteropods	0.05	0.01
Coho Salmon (Juveniles)	Squid	0.02	1.00
Coho Salmon (Juveniles)	Copepods	0.02	0.01
Coho Salmon (Juveniles)	Opalescent Inshore Squid	0.01	3.50
Coho Salmon (Juveniles)	Smelts	0.01	2.70
Coho Salmon (Juveniles)	Misc. Non-Marine	0.01	1.00
Coho Salmon (Juveniles)	Cephalopods	0.01	0.60
Coho Salmon (Juveniles)	Threespine Stickleback	0.01	0.50
Coho Salmon (Juveniles)	Arrow Worms	0.01	0.10
Coho Salmon (Juveniles)	Jellyfish	0.01	0.01
Coho Salmon (Juveniles)	Comb Jellyfish	0.01	0.01
Coho Salmon (Juveniles)	Isopods	0.01	0.01
Medusafish	Unidentified Remains	1.00	0.54
Medusafish	Amphipods	0.67	0.01
Medusafish	Comb Jellyfish	0.33	0.20
Pacific Herring	Crabs	1.00	0.30
Pacific Saury	Unidentified Remains	1.00	0.46
Pink Salmon (Juveniles)	Amphipods	0.66	0.58
Pink Salmon (Juveniles)	Copepods	0.44	0.16
Pink Salmon (Juveniles)	Arrow Worms	0.39	0.27
Pink Salmon (Juveniles)	Pteropods	0.31	0.02
Pink Salmon (Juveniles)	Crabs	0.20	0.02
Pink Salmon (Juveniles)	Unidentified Remains	0.16	0.08
Pink Salmon (Juveniles)	Euphausiids	0.09	0.01
Pink Salmon (Juveniles)	Unidentified Fishes	0.03	0.06
Pink Salmon (Juveniles)	Shrimp	0.01	0.01
Sockeye Salmon (Juveniles)	Amphipods	0.91	1.48
Sockeye Salmon (Juveniles)	Arrow Worms	0.73	0.06
Sockeye Salmon (Juveniles)	Euphausiids	0.45	0.01
Sockeye Salmon (Juveniles)	Unidentified Remains	0.09	0.10
Sockeye Salmon (Juveniles)	Unidentified Fishes	0.09	0.01
Sockeye Salmon (Juveniles)	Crabs	0.09	0.01
Steelhead Trout	Unidentified Remains	1.00	3.00

8 FIGURES

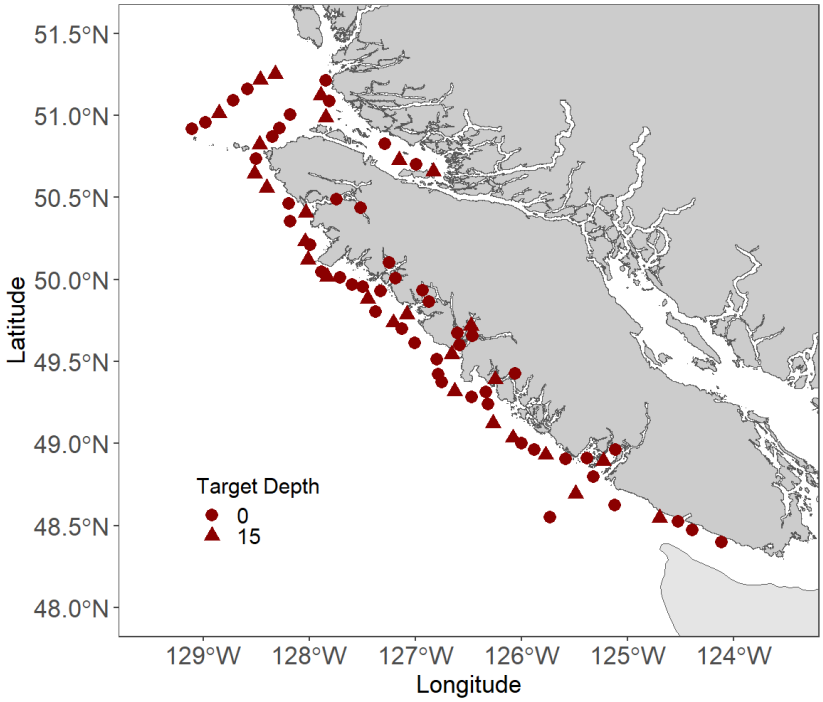

Figure 1. Location of survey midwater trawl fishing events during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*. Target depth is indicated by symbol; circle indicationg a target headrope depth of 0 m, triangle indicating a 15 m target headrope depth.

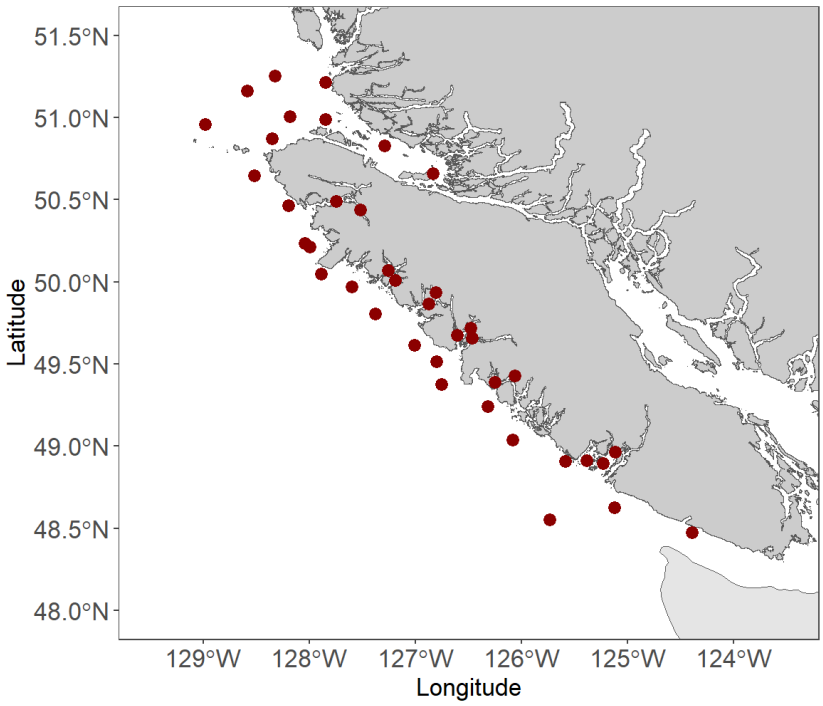

Figure 2. Location of survey oceanography events (CTD and plankton Bongos) during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*.

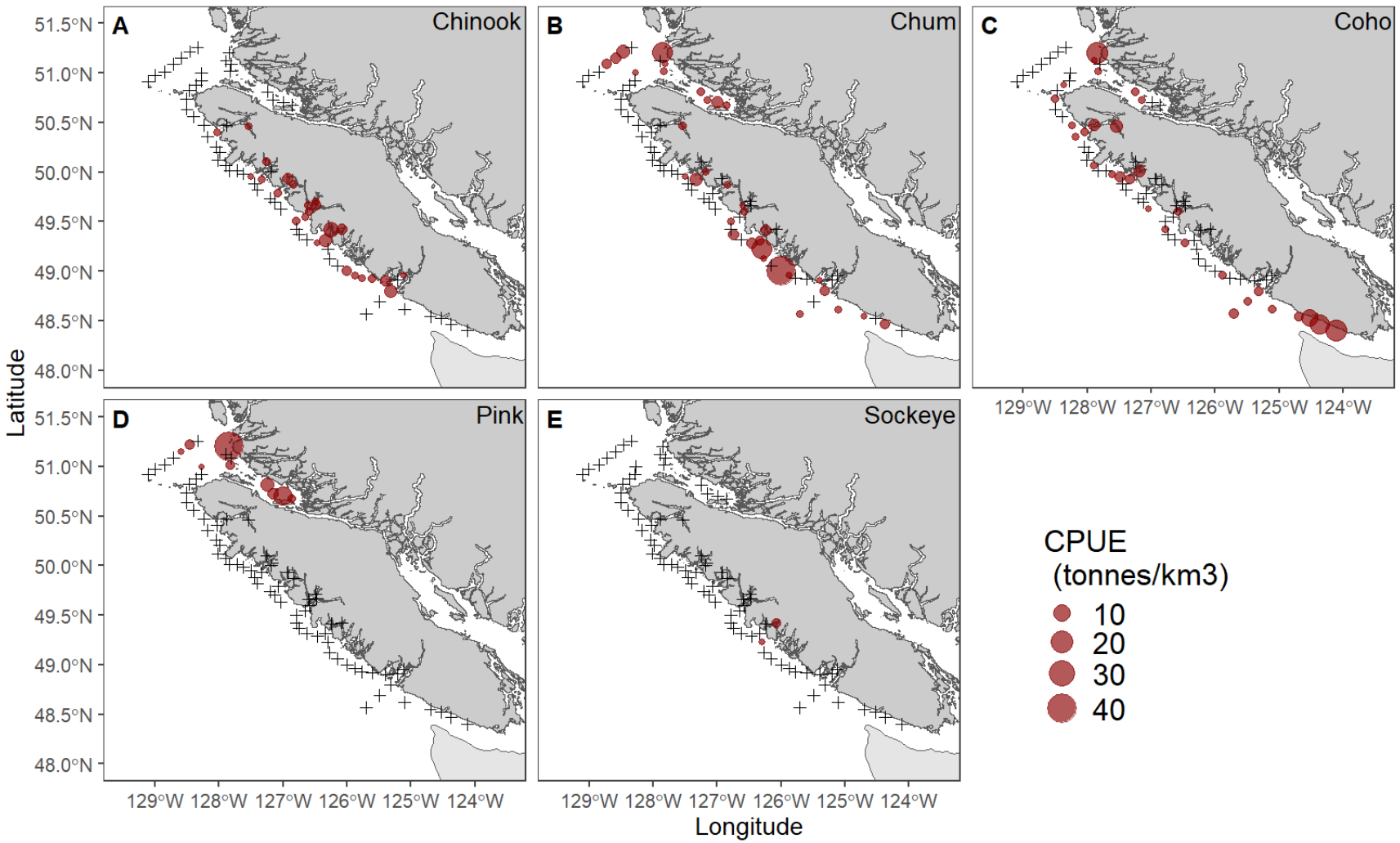

Figure 3. Juvenile Pacific Salmon (*Oncorhynchus spp.*) catch per unit effort (CPUE; tonnes/km^3) for each tow. **A.** Chinook Salmon (*Oncorhynchus tshawytscha*), **B.** Chum Salmon (*Oncorhynchus keta*), **C.** Coho Salmon (*Oncorhynchus kisutch*), **D.** Pink Salmon (*Oncorhynchus gorbusha*) and **E.** Sockeye Salmon (*Oncorhynchus nerka*). Circles are proportional to catch abundance, and zero catches are shown with a cross (+).

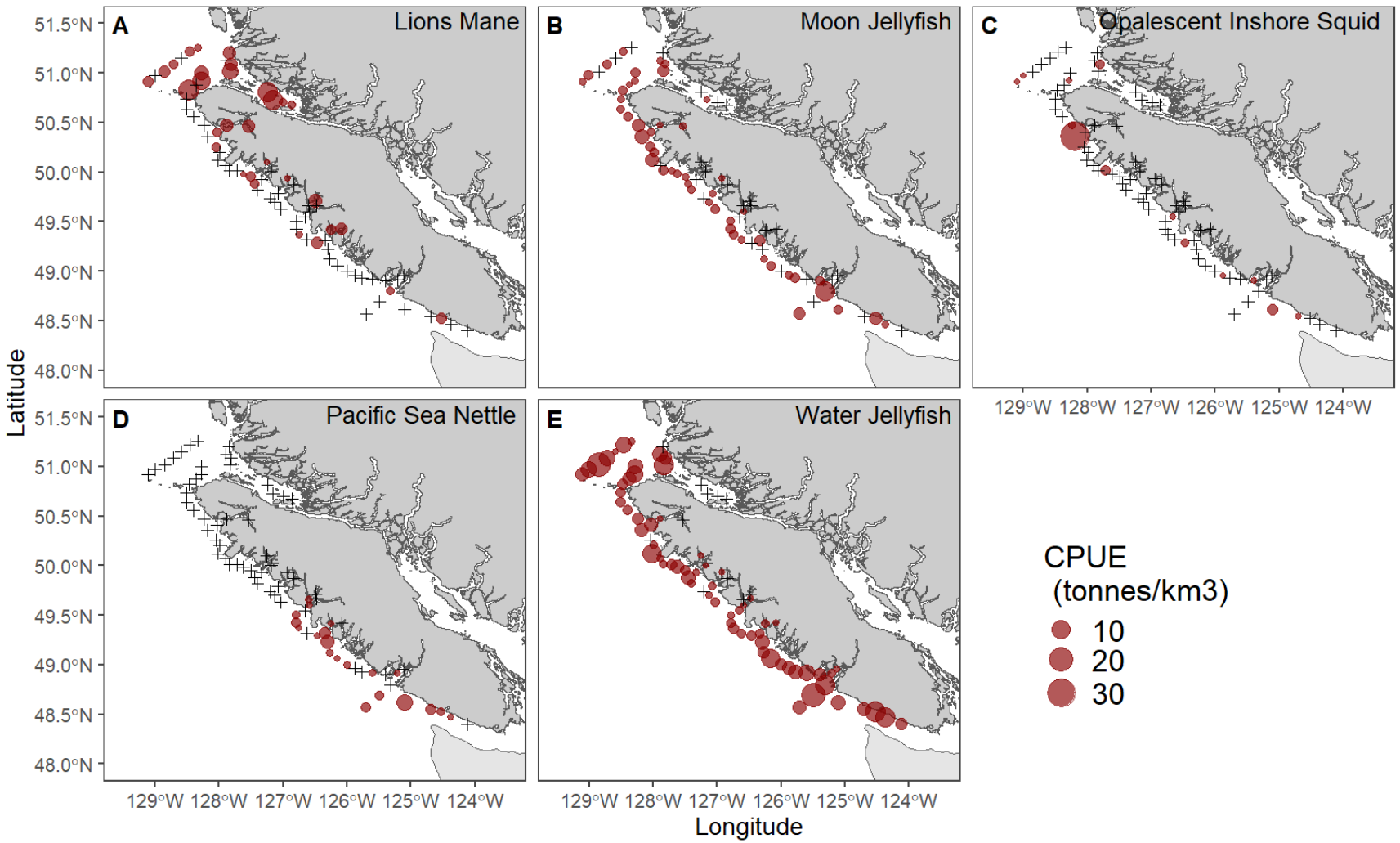

Figure 4. Catch per unit effort (CPUE; tonnes/km^3) for commonly caught species by tow. Circles are proportional to catch abundance, and zero catches are shown with a cross (+). **A.** Lions Mane (*Cyanea capillata*), **B.** Moon Jellyfish (*Aurelia labiata*), **C.** Opalescent Inshore Squid (*Doryteuthis opalescens*), **D.** Pacific Sea Nettle (*Chrysaora fuscescens*), **E.** Water Jellyfish (*Aequorea*).

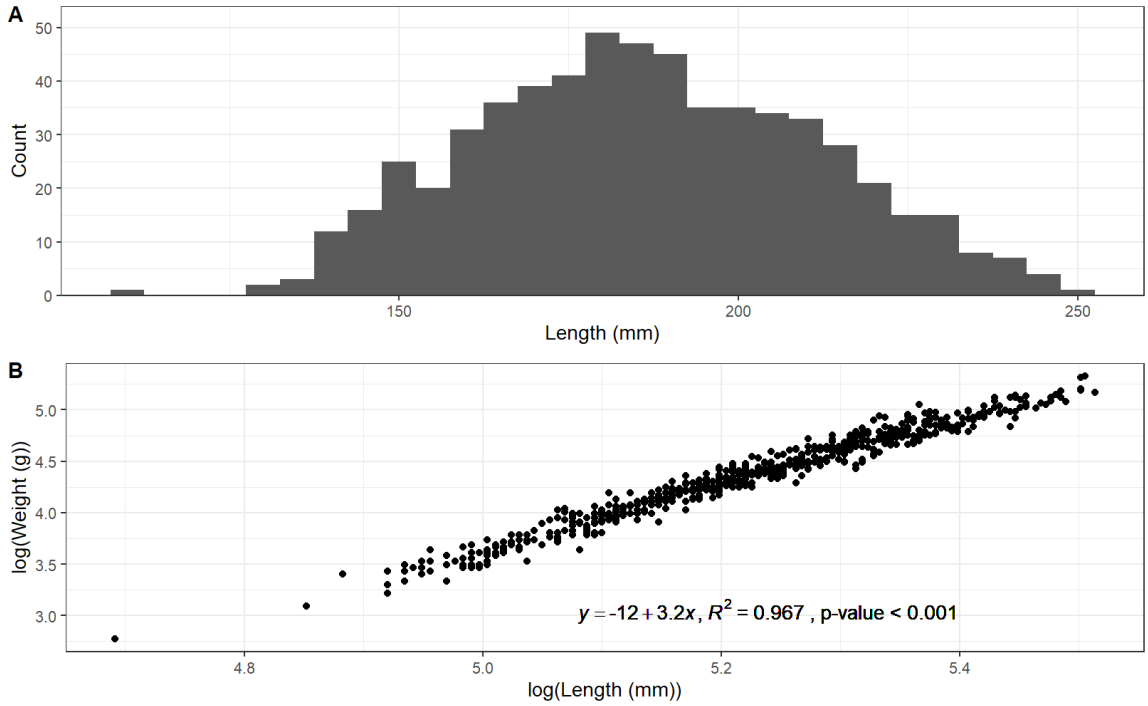

Figure 5. **A.** Chinook Salmon (*Oncorhynchus tshawytscha*) length frequency plot as sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025 **B.** Double log-transformed length-weight regression with outliers removed, using a Bonferroni outlier test.

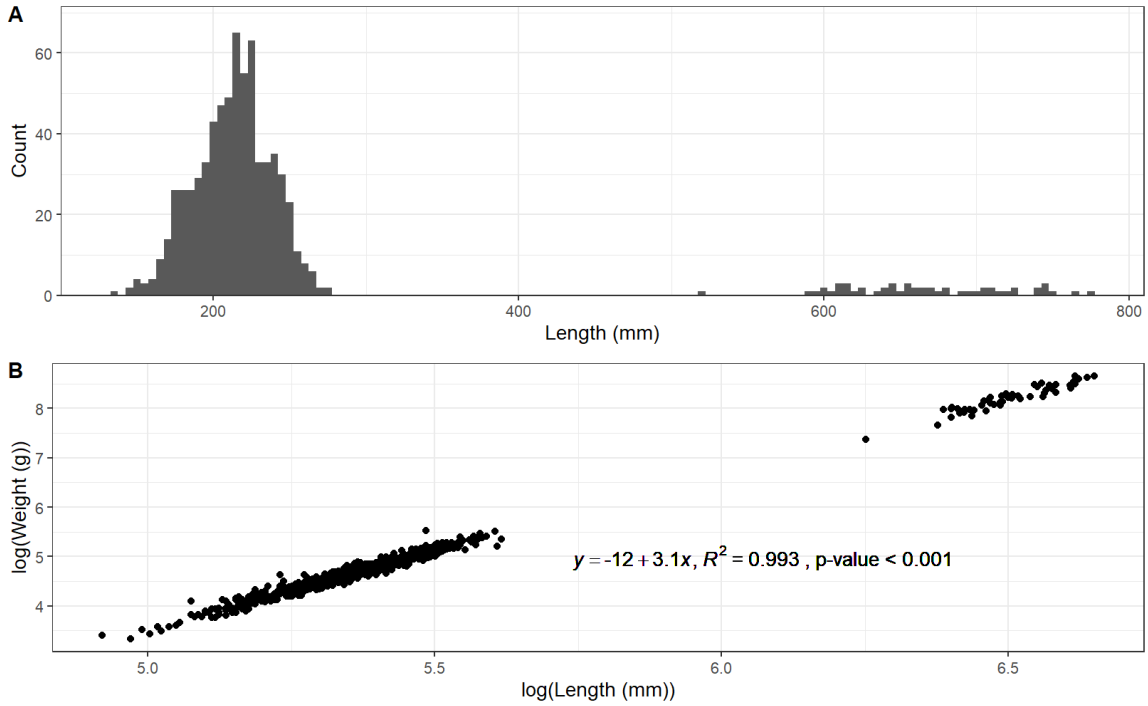

Figure 6. **A.** Chum Salmon (*Oncorhynchus keta*) length frequency plot as sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025 **B.** Double log-transformed length-weight regression with outliers removed, using a Bonferroni outlier test.

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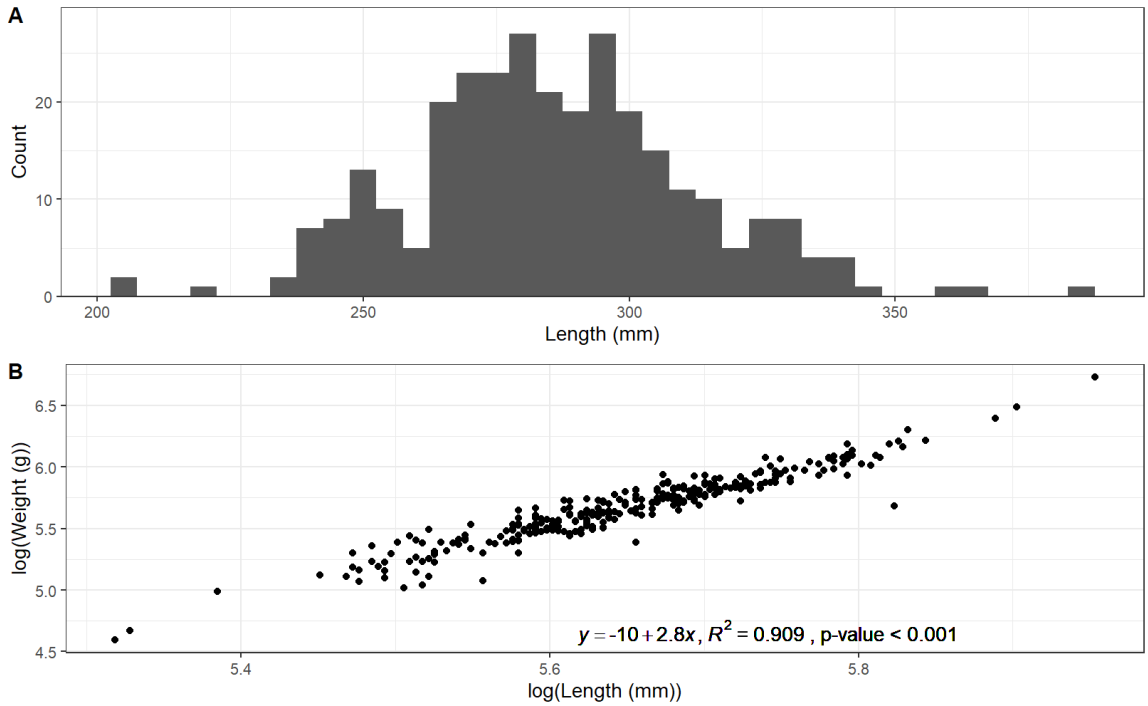

Figure 7. **A.** Coho Salmon (*Oncorhynchus kisutch*) length frequency plot as sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025 **B.** Double log-transformed length-weight regression with outliers removed, using a Bonferroni outlier test.

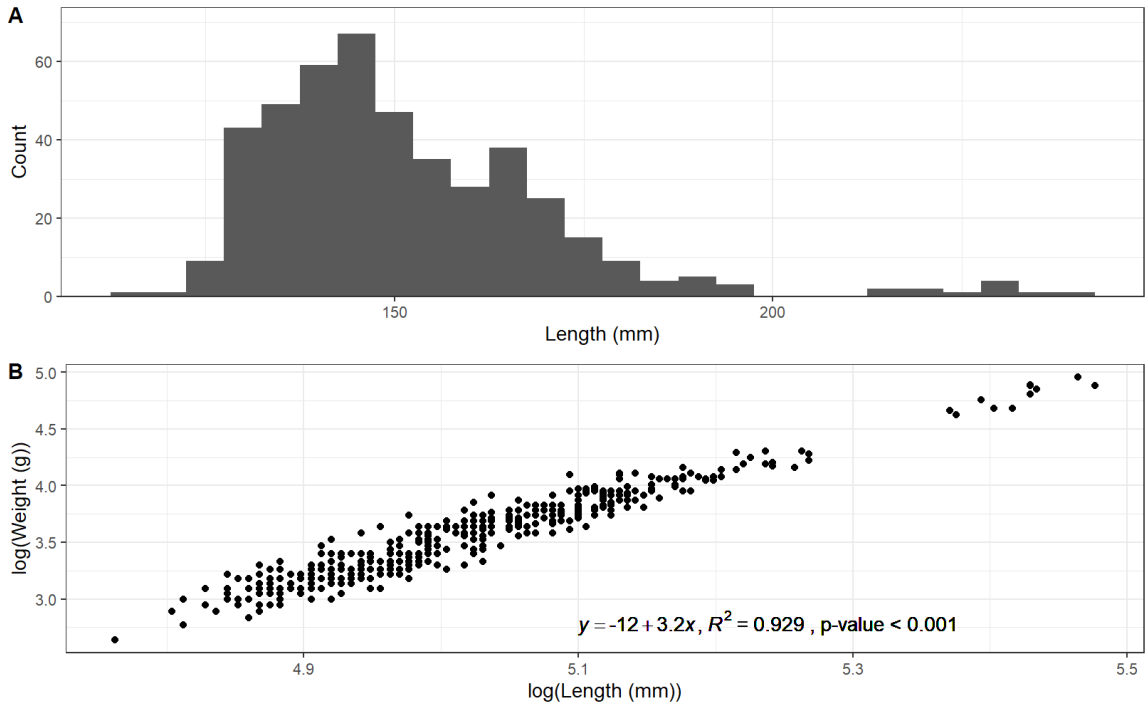

Figure 8. **A.** Pink Salmon (*Oncorhynchus gorbusha*) length frequency plot as sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025 **B.** Double log-transformed length-weight regression with outliers removed, using a Bonferroni outlier test.

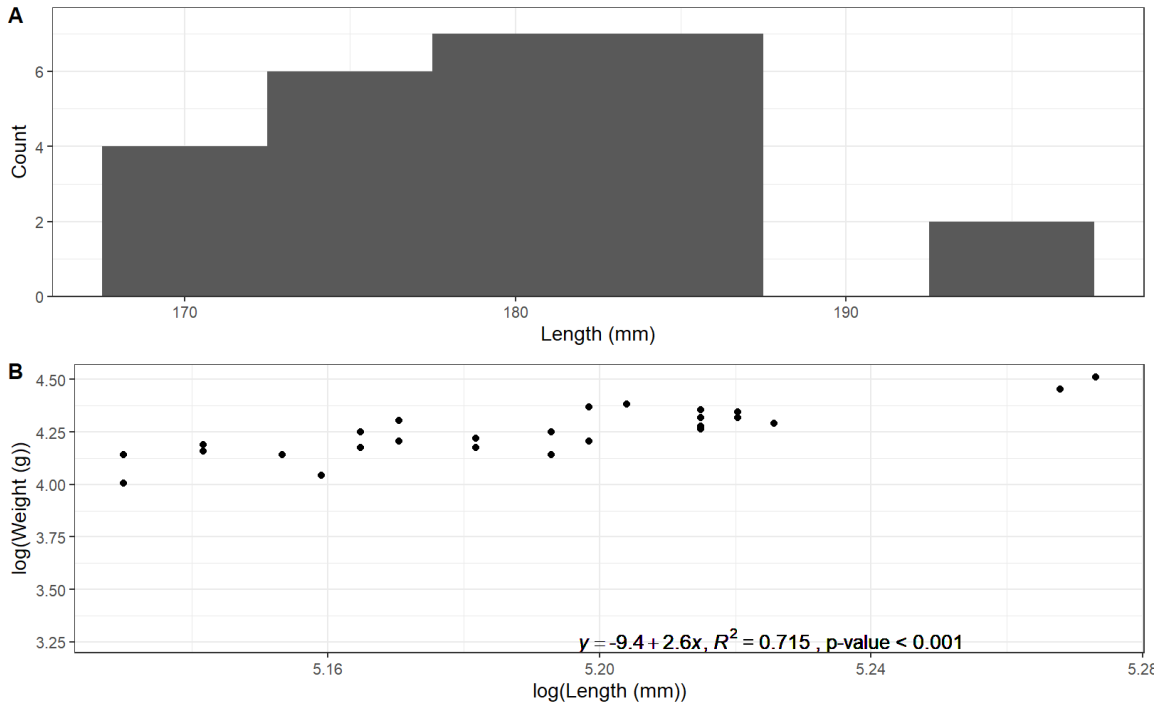

Figure 9. **A.** Sockeye Salmon (*Oncorhynchus nerka*) length frequency plot as sampled during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025 **B.** Double log-transformed length-weight regression with outliers removed, using a Bonferroni outlier test.

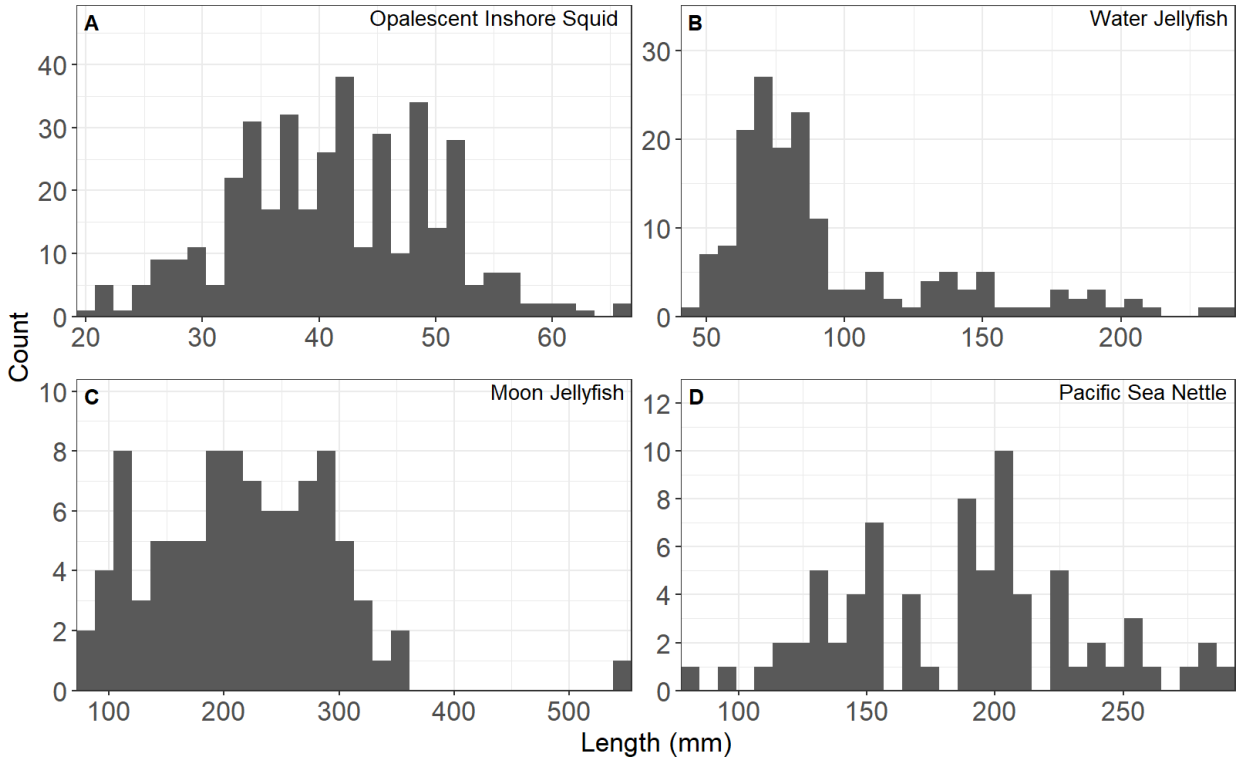

Figure 10. Length (mm) frequency plots for common species sampled (n>50 samples) during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025. **A.** Opalescent Inshore Squid (*Doryteuthis opalescens*), length = Mantle Length, **B.** Water Jellyfish (*Aequorea*), length = Bell Diameter, **C.** Moon Jellyfish (*Aurelia labiata*), length = Bell Diameter, **D.** Pacific Sea Nettle (*Chrysaora fuscescens*), length = Bell Diameter.

9 NET SPECIFICATIONS

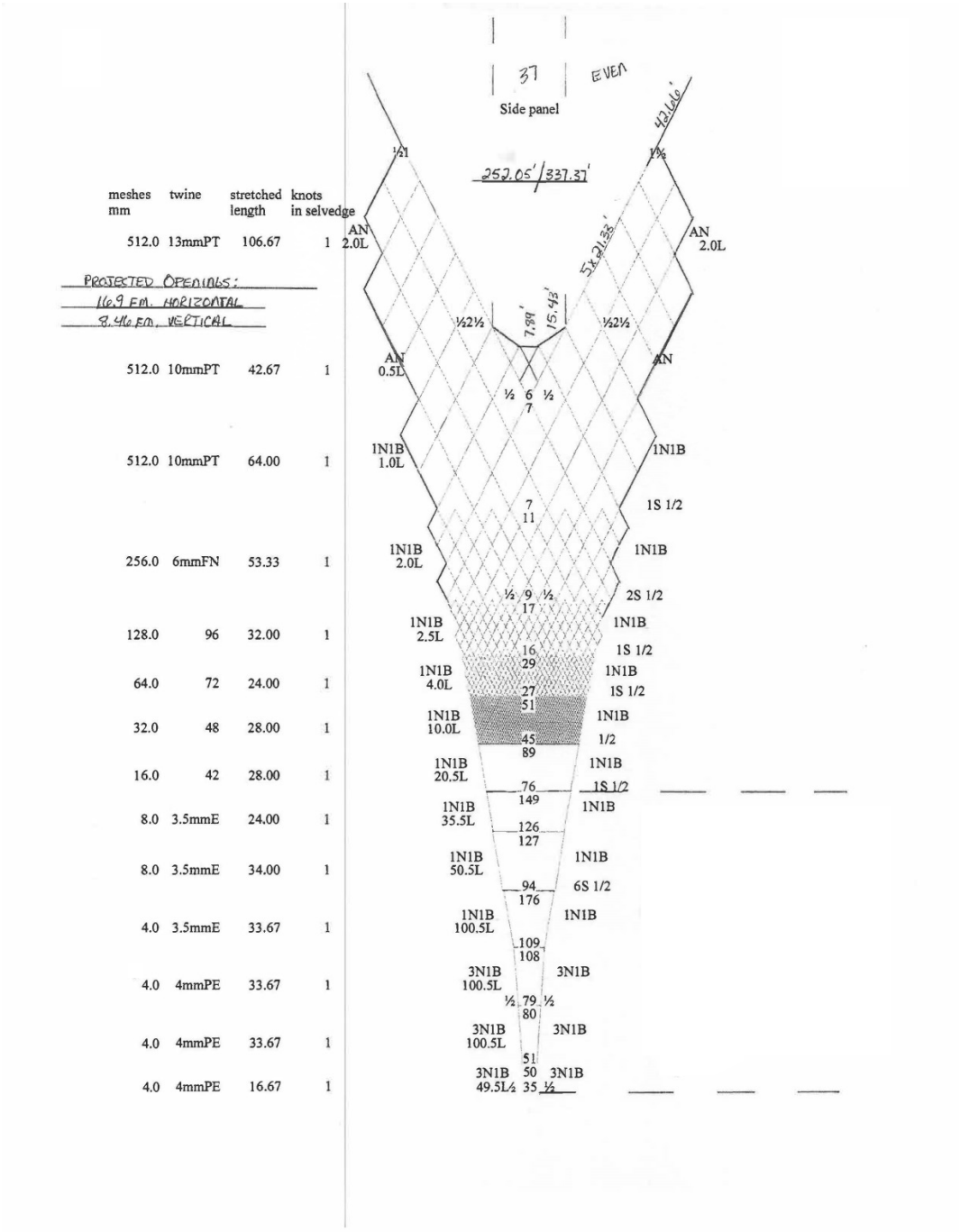

Figure 11. Net specifications (side view) for the LFS 7742 trawl net used during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*.

10 THE BEAUFORT SCALE

Table 5. The Beaufort Scale used to describe weather conditions.

Force	Description	Wind Speed (knots)	Sea State
0	Calm	<1	Sea like mirror
1	Light Air	1-3	Ripples; no foam crests
2	Light Breeze	4-6	Small wavelets
3	Gentle Breeze	7-10	Crests breaking
4	Moderate Breeze	11-16	Whitecaps
5	Fresh Breeze	17-21	Moderate waves - spray
6	Strong Breeze	22-27	Large waves
7	Moderate Gale	28-33	Sea heaps up
8	Fresh Gale	34-40	Moderately high waves
9	Strong Gale	41-47	High waves; spray
10	Whole Gale	48-55	Overhanging crests; sea white
11	Storm	56-63	Exceptionally high waves
12	Hurricane	64-118	Sea white

11 TRAWL BRIDGE LOG DATA

Table 6. Bridge log information for trawl tows during the ecosystem-based juvenile Pacific Salmon survey aboard the CCGS *Sir John Franklin*, September 30 to October 15, 2025.

Station Name	QCST01	QCST02	QCST03	QCST04	QCST07	QCSD03
Tow	1	2	3	4	5	6
Event Number	3	4	5	6	11	12
Date (Pacific)	2025-10-01	2025-10-01	2025-10-01	2025-10-01	2025-10-02	2025-10-02
Start Time (Pacific)	10:45	13:50	14:56	16:06	08:15	09:57
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	21	20	20	20	20
Start Latitude	50° 40’ 27" N	50° 41’ 59" N	50° 43’ 38" N	50° 48’ 44" N	51° 01’ 14" N	51° 05’ 16" N
Start Longitude	126° 51’ 34" W	126° 59’ 29" W	127° 09’ 17" W	127° 14’ 50" W	127° 49’ 54" W	127° 48’ 41" W
End Latitude	50° 41’ 24" N	50° 42’ 27" N	50° 44’ 01" N	50° 49’ 25" N	51° 02’ 31" N	51° 05’ 51" N
End Longitude	126° 53’ 25" W	127° 01’ 51" W	127° 11’ 37" W	127° 17’ 10" W	127° 50’ 03" W	127° 50’ 26" W
Direction of Tow (deg)	307	286	283	293	355	297
Vessel Speed (km/h)	8.4	8.7	8.5	9.0	7.2	6.9
Distance Towed (km)	2.81	2.92	2.84	3.02	2.39	2.31
Net Opening Width (m)	47	45	48	44	48	42
Net Opening Height (m)	9	19	10	20	10	17
Warp Length (m)	240	200	240	200	240	200
Target Headrope Depth (m)	15	0	15	0	15	0
Median Headrope Depth (m)	16	4	17	6	17	4
Start Bottom Depth (m)	187	188	203	152	142	102
End Bottom Depth (m)	195	165	193	134	139	108
Usable	Y	Y	Y	Y	Y	Y

Station Name	QCSD01	QCSD02	QCSD04	QCSD05	TI01	TI02
Tow	7	8	9	10	11	12
Event Number	13	16	19	20	23	24
Date (Pacific)	2025-10-02	2025-10-02	2025-10-02	2025-10-02	2025-10-03	2025-10-03
Start Time (Pacific)	10:49	12:36	15:45	17:31	07:33	08:40
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	21	20
Start Latitude	51° 07’ 15" N	51° 12’ 03" N	50° 59’ 51" N	50° 55’ 25" N	51° 15’ 30" N	51° 13’ 02" N
Start Longitude	127° 53’ 22" W	127° 50’ 54" W	128° 16’ 30" W	128° 16’ 57" W	128° 20’ 17" W	128° 27’ 42" W
End Latitude	51° 07’ 53" N	51° 10’ 54" N	50° 59’ 43" N	50° 56’ 56" N	51° 16’ 18" N	51° 11’ 52" N
End Longitude	127° 55’ 17" W	127° 51’ 17" W	128° 18’ 45" W	128° 16’ 22" W	128° 22’ 20" W	128° 28’ 31" W
Direction of Tow (deg)	297	191	264	013	302	203
Vessel Speed (km/h)	7.5	6.6	7.9	8.7	8.3	7.1
Distance Towed (km)	2.53	2.21	2.63	2.90	2.81	2.35
Net Opening Width (m)	48	44	44	43	50	49
Net Opening Height (m)	10	18	19	18	10	10
Warp Length (m)	240	200	200	200	240	240
Target Headrope Depth (m)	15	0	0	0	15	15
Median Headrope Depth (m)	15	4	4	4	16	16
Start Bottom Depth (m)	122	106	68	48	84	193
End Bottom Depth (m)	117	105	65	79	97	198
Usable	Y	Y	Y	Y	Y	Y

Station Name	TI03	TI04	TI05	TI06	TI07	QCSD06
Tow	13	14	15	16	17	18
Event Number	27	28	29	30	33	36
Date (Pacific)	2025-10-03	2025-10-03	2025-10-03	2025-10-03	2025-10-03	2025-10-04
Start Time (Pacific)	10:27	12:02	13:21	14:42	16:16	07:26
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	20	20
Start Latitude	51° 09’ 01" N	51° 05’ 21" N	51° 00’ 48" N	50° 58’ 26" N	50° 54’ 58" N	50° 52’ 38" N
Start Longitude	128° 35’ 20" W	128° 43’ 04" W	128° 51’ 08" W	129° 00’ 14" W	129° 06’ 15" W	128° 21’ 52" W
End Latitude	51° 07’ 56" N	51° 03’ 59" N	51° 01’ 56" N	50° 57’ 17" N	50° 54’ 16" N	50° 53’ 22" N
End Longitude	128° 36’ 22" W	128° 44’ 21" W	128° 52’ 12" W	128° 58’ 41" W	129° 08’ 38" W	128° 23’ 41" W
Direction of Tow (deg)	211	211	329	139	245	302
Vessel Speed (km/h)	7.0	8.8	7.3	8.4	9.3	7.6
Distance Towed (km)	2.33	2.93	2.44	2.80	3.10	2.53
Net Opening Width (m)	44	44	50	43	44	42
Net Opening Height (m)	20	19	10	19	18	19
Warp Length (m)	200	200	240	200	200	200
Target Headrope Depth (m)	0	0	15	0	0	0
Median Headrope Depth (m)	4	4	16	4	4	4
Start Bottom Depth (m)	154	66	66	81	74	49
End Bottom Depth (m)	137	66	67	72	71	62
Usable	Y	Y	Y	Y	Y	Y

Station Name	VI01	VI02	VI03	VI04	VI05	QS03
Tow	19	20	21	22	23	24
Event Number	37	38	41	42	43	46
Date (Pacific)	2025-10-04	2025-10-04	2025-10-04	2025-10-04	2025-10-04	2025-10-05
Start Time (Pacific)	08:40	09:51	12:13	13:16	14:31	08:05
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	20	20
Start Latitude	50° 49’ 21" N	50° 44’ 13" N	50° 38’ 09" N	50° 33’ 26" N	50° 28’ 22" N	50° 27’ 47" N
Start Longitude	128° 28’ 19" W	128° 30’ 18" W	128° 30’ 14" W	128° 23’ 56" W	128° 14’ 15" W	127° 32’ 28" W
End Latitude	50° 48’ 24" N	50° 42’ 56" N	50° 37’ 04" N	50° 32’ 12" N	50° 27’ 40" N	50° 26’ 33" N
End Longitude	128° 29’ 00" W	128° 29’ 13" W	128° 28’ 54" W	128° 22’ 44" W	128° 12’ 00" W	127° 31’ 12" W
Direction of Tow (deg)	204	152	141	148	115	146
Vessel Speed (km/h)	5.8	8.1	7.5	8.0	8.8	8.3
Distance Towed (km)	1.94	2.72	2.53	2.68	2.96	2.74
Net Opening Width (m)	45	43	48	46	43	44
Net Opening Height (m)	10	18	10	10	18	17
Warp Length (m)	240	200	240	240	200	200
Target Headrope Depth (m)	15	0	15	15	0	0
Median Headrope Depth (m)	15	4	16	15	4	4
Start Bottom Depth (m)	69	88	131	145	84	189
End Bottom Depth (m)	78	92	130	147	89	193
Usable	Y	Y	Y	Y	Y	Y

Station Name	QS02	QS01	BB01	BB02	BB03	BB04
Tow	25	26	27	28	29	30
Event Number	51	52	53	54	59	60
Date (Pacific)	2025-10-05	2025-10-05	2025-10-05	2025-10-05	2025-10-06	2025-10-06
Start Time (Pacific)	12:21	13:31	14:47	16:07	07:46	08:49
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	21	11
Start Latitude	50° 28’ 21" N	50° 24’ 21" N	50° 21’ 16" N	50° 15’ 22" N	50° 12’ 10" N	50° 07’ 18" N
Start Longitude	127° 53’ 20" W	128° 01’ 55" W	128° 10’ 59" W	128° 02’ 48" W	127° 59’ 25" W	128° 00’ 54" W
End Latitude	50° 28’ 19" N	50° 23’ 55" N	50° 19’ 44" N	50° 13’ 58" N	50° 10’ 40" N	50° 06’ 38" N
End Longitude	127° 55’ 45" W	128° 04’ 11" W	128° 09’ 45" W	128° 02’ 18" W	127° 58’ 59" W	128° 00’ 38" W
Direction of Tow (deg)	268	253	152	166	169	165
Vessel Speed (km/h)	8.6	8.4	9.5	8.0	8.0	6.8
Distance Towed (km)	2.87	2.79	3.19	2.66	2.82	1.28
Net Opening Width (m)	45	48	42	49	41	47
Net Opening Height (m)	18	10	17	10	18	10
Warp Length (m)	44	240	200	240	200	240
Target Headrope Depth (m)	0	15	0	15	0	15
Median Headrope Depth (m)	4	16	4	16	5	17
Start Bottom Depth (m)	113	88	155	84	79	150
End Bottom Depth (m)	197	80	156	84	83	154
Usable	Y	Y	Y	Y	Y	Y

Station Name	BP01	VI06	VI07	VI08	VI09	KI01
Tow	31	32	33	34	35	36
Event Number	61	64	65	66	69	70
Date (Pacific)	2025-10-06	2025-10-06	2025-10-06	2025-10-06	2025-10-06	2025-10-07
Start Time (Pacific)	09:50	12:14	13:48	14:40	16:05	09:35
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	21	20	20	20
Start Latitude	50° 04’ 16" N	50° 00’ 54" N	50° 00’ 47" N	49° 59’ 01" N	49° 57’ 12" N	50° 06’ 11" N
Start Longitude	127° 53’ 48" W	127° 50’ 06" W	127° 42’ 45" W	127° 37’ 16" W	127° 29’ 45" W	127° 15’ 03" W
End Latitude	50° 03’ 24" N	49° 59’ 48" N	49° 59’ 41" N	49° 58’ 04" N	49° 57’ 30" N	50° 04’ 42" N
End Longitude	127° 52’ 11" W	127° 49’ 04" W	127° 41’ 37" W	127° 35’ 42" W	127° 27’ 36" W	127° 15’ 17" W
Direction of Tow (deg)	129	148	145	133	076	184
Vessel Speed (km/h)	7.5	7.1	7.4	7.7	7.8	8.3
Distance Towed (km)	2.51	2.38	2.46	2.57	2.62	2.77
Net Opening Width (m)	44	49	43	44	44	46
Net Opening Height (m)	17	10	17	18	17	16
Warp Length (m)	200	240	200	200	200	200
Target Headrope Depth (m)	0	15	0	0	0	0
Median Headrope Depth (m)	4	15	4	4	4	3
Start Bottom Depth (m)	82	551	98	76	59	125
End Bottom Depth (m)	87	580	103	81	57	216
Usable	Y	Y	Y	Y	Y	Y

Station Name	KS02	KS03	KS04	VI10	EI02	EI03
Tow	37	38	39	40	41	42
Event Number	75	76	77	78	83	86
Date (Pacific)	2025-10-07	2025-10-07	2025-10-07	2025-10-07	2025-10-08	2025-10-08
Start Time (Pacific)	12:06	13:37	14:58	15:53	08:14	10:58
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	10	20	20	20	20	20
Start Latitude	50° 00’ 18" N	49° 55’ 44" N	49° 52’ 58" N	49° 49’ 19" N	49° 52’ 22" N	49° 55’ 55" N
Start Longitude	127° 11’ 06" W	127° 19’ 50" W	127° 27’ 02" W	127° 23’ 58" W	126° 50’ 12" W	126° 55’ 48" W
End Latitude	49° 59’ 59" N	49° 54’ 48" N	49° 51’ 37" N	49° 48’ 21" N	49° 51’ 48" N	49° 54’ 25" N
End Longitude	127° 12’ 08" W	127° 18’ 03" W	127° 26’ 54" W	127° 22’ 39" W	126° 52’ 24" W	126° 55’ 46" W
Direction of Tow (deg)	243	127	175	137	247	177
Vessel Speed (km/h)	8.1	8.2	7.6	7.2	8.5	8.4
Distance Towed (km)	1.36	2.75	2.51	2.40	2.84	2.79
Net Opening Width (m)	45	44	47	43	46	47
Net Opening Height (m)	17	19	10	20	17	16
Warp Length (m)	200	200	240	200	200	200
Target Headrope Depth (m)	0	0	15	0	0	0
Median Headrope Depth (m)	4	4	16	4	3	4
Start Bottom Depth (m)	162	67	74	86	236	203
End Bottom Depth (m)	165	59	77	85	214	284
Usable	Y	Y	Y	Y	Y	Y

Station Name	EI04	EI05	VI11	VI12	NS02	NS01
Tow	43	44	45	46	47	48
Event Number	87	88	89	90	95	98
Date (Pacific)	2025-10-08	2025-10-08	2025-10-08	2025-10-08	2025-10-09	2025-10-09
Start Time (Pacific)	12:46	14:26	15:27	16:23	08:28	10:04
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	11	20	20	20
Start Latitude	49° 47’ 17" N	49° 44’ 13" N	49° 41’ 58" N	49° 37’ 44" N	49° 39’ 51" N	49° 42’ 37" N
Start Longitude	127° 04’ 42" W	127° 12’ 24" W	127° 07’ 50" W	127° 02’ 13" W	126° 28’ 26" W	126° 29’ 31" W
End Latitude	49° 46’ 25" N	49° 43’ 14" N	49° 41’ 28" N	49° 36’ 39" N	49° 40’ 58" N	49° 41’ 42" N
End Longitude	127° 02’ 54" W	127° 10’ 46" W	127° 06’ 54" W	127° 00’ 34" W	126° 30’ 01" W	126° 31’ 15" W
Direction of Tow (deg)	125	132	128	134	316	229
Vessel Speed (km/h)	8.1	8.1	7.9	8.5	8.6	8.1
Distance Towed (km)	2.70	2.69	1.44	2.83	2.82	2.70
Net Opening Width (m)	51	47	45	45	45	48
Net Opening Height (m)	10	10	20	19	15	10
Warp Length (m)	240	240	200	200	200	240
Target Headrope Depth (m)	15	15	0	0	0	15
Median Headrope Depth (m)	17	15	4	4	4	
Start Bottom Depth (m)	51	89	104	98	161	194
End Bottom Depth (m)	50	107	103	94	121	233
Usable	Y	Y	Y	Y	Y	Y

Station Name	NS03	NS04	NS05	NS06	VI13	VI14
Tow	49	50	51	52	53	54
Event Number	101	102	103	106	107	110
Date (Pacific)	2025-10-09	2025-10-09	2025-10-09	2025-10-09	2025-10-09	2025-10-10
Start Time (Pacific)	11:50	12:49	13:53	15:24	16:28	08:03
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	20	21
Start Latitude	49° 39’ 37" N	49° 35’ 55" N	49° 32’ 37" N	49° 30’ 19" N	49° 25’ 21" N	49° 22’ 06" N
Start Longitude	126° 36’ 10" W	126° 35’ 00" W	126° 39’ 21" W	126° 47’ 21" W	126° 47’ 14" W	126° 44’ 46" W
End Latitude	49° 38’ 09" N	49° 34’ 56" N	49° 31’ 32" N	49° 29’ 12" N	49° 24’ 07" N	49° 21’ 21" N
End Longitude	126° 36’ 12" W	126° 36’ 41" W	126° 40’ 53" W	126° 46’ 03" W	126° 46’ 07" W	126° 43’ 25" W
Direction of Tow (deg)	179	227	221	141	148	129
Vessel Speed (km/h)	8.2	8.2	8.2	7.8	8.0	6.5
Distance Towed (km)	2.74	2.72	2.73	2.59	2.67	2.16
Net Opening Width (m)	45	46	49	44	45	44
Net Opening Height (m)	18	18	10	18	18	19
Warp Length (m)	200	200	240	200	200	200
Target Headrope Depth (m)	0	0	15	0	0	0
Median Headrope Depth (m)						4
Start Bottom Depth (m)	160	106	64	60	82	93
End Bottom Depth (m)	165	108	53	57	86	94
Usable	Y	Y	Y	Y	Y	Y

Station Name	EP01	EP02	CS06	CS03	CS04	CS07
Tow	55	56	57	58	59	60
Event Number	111	112	113	116	117	122
Date (Pacific)	2025-10-10	2025-10-10	2025-10-10	2025-10-10	2025-10-10	2025-10-12
Start Time (Pacific)	09:09	10:26	12:04	14:51	16:15	07:32
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	20	20
Start Latitude	49° 19’ 04" N	49° 17’ 07" N	49° 18’ 52" N	49° 25’ 29" N	49° 24’ 50" N	49° 13’ 34" N
Start Longitude	126° 37’ 43" W	126° 28’ 02" W	126° 20’ 12" W	126° 04’ 49" W	126° 14’ 38" W	126° 17’ 57" W
End Latitude	49° 18’ 16" N	49° 16’ 18" N	49° 17’ 34" N	49° 25’ 13" N	49° 23’ 26" N	49° 12’ 22" N
End Longitude	126° 36’ 09" W	126° 26’ 22" W	126° 20’ 07" W	126° 07’ 00" W	126° 14’ 51" W	126° 16’ 42" W
Direction of Tow (deg)	126	125	176	257	183	144
Vessel Speed (km/h)	7.2	7.5	7.2	8.1	7.8	8.0
Distance Towed (km)	2.41	2.52	2.40	2.69	2.61	2.69
Net Opening Width (m)	50	42	44	45	50	46
Net Opening Height (m)	10	20	21	17	10	18
Warp Length (m)	240	200	200	200	240	200
Target Headrope Depth (m)	15	0	0	0	15	0
Median Headrope Depth (m)	17	7	4	4	15	4
Start Bottom Depth (m)	95	65	44	157	70	46
End Bottom Depth (m)	95	64	48	157	69	57
Usable	Y	Y	Y	Y	Y	Y

Station Name	CS08	CS09	CS10	VI15	VI16	VI17
Tow	61	62	63	64	65	66
Event Number	123	124	127	128	129	130
Date (Pacific)	2025-10-12	2025-10-12	2025-10-12	2025-10-12	2025-10-12	2025-10-12
Start Time (Pacific)	08:58	10:05	12:08	13:15	14:09	15:26
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	21	20	21	20	20
Start Latitude	49° 07’ 19" N	49° 03’ 31" N	49° 00’ 03" N	48° 57’ 39" N	48° 55’ 49" N	48° 55’ 17" N
Start Longitude	126° 16’ 12" W	126° 09’ 17" W	126° 00’ 08" W	125° 52’ 48" W	125° 46’ 19" W	125° 36’ 17" W
End Latitude	49° 06’ 37" N	49° 02’ 43" N	48° 58’ 58" N	48° 56’ 31" N	48° 54’ 54" N	48° 54’ 23" N
End Longitude	126° 14’ 10" W	126° 07’ 08" W	125° 58’ 05" W	125° 50’ 52" W	125° 44’ 36" W	125° 34’ 46" W
Direction of Tow (deg)	116	117	126	130	127	129
Vessel Speed (km/h)	8.4	9.0	9.5	9.4	8.1	7.7
Distance Towed (km)	2.80	3.01	3.19	3.17	2.70	2.47
Net Opening Width (m)	48	49	44	45	50	44
Net Opening Height (m)	10	10	17	17	10	11
Warp Length (m)	240	240	200	200	240	200
Target Headrope Depth (m)	15	15	0	0	15	0
Median Headrope Depth (m)	15	17	4	4	17	6
Start Bottom Depth (m)	73	66	46	49	96	101
End Bottom Depth (m)	71	63	49	49	108	101
Usable	Y	Y	Y	Y	Y	Y

Station Name	IVI07	BS01	BS02	BS03	BS04	BS05
Tow	67	68	69	70	71	72
Event Number	135	137	138	141	142	143
Date (Pacific)	2025-10-13	2025-10-13	2025-10-13	2025-10-13	2025-10-13	2025-10-13
Start Time (Pacific)	08:04	11:08	12:05	13:45	15:09	16:35
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	20	20	20
Start Latitude	48° 54’ 08" N	48° 57’ 20" N	48° 54’ 46" N	48° 47’ 55" N	48° 41’ 38" N	48° 33’ 59" N
Start Longitude	125° 23’ 42" W	125° 07’ 16" W	125° 12’ 29" W	125° 19’ 18" W	125° 29’ 24" W	125° 42’ 18" W
End Latitude	48° 53’ 01" N	48° 56’ 11" N	48° 53’ 36" N	48° 46’ 50" N	48° 40’ 45" N	48° 33’ 01" N
End Longitude	125° 25’ 08" W	125° 08’ 40" W	125° 13’ 41" W	125° 20’ 46" W	125° 31’ 18" W	125° 44’ 10" W
Direction of Tow (deg)	218	216	211	219	232	230
Vessel Speed (km/h)	8.1	8.2	7.9	8.0	8.6	8.7
Distance Towed (km)	2.71	2.73	2.64	2.68	2.86	2.92
Net Opening Width (m)	45	46	51	45	49	46
Net Opening Height (m)	17	18	10	18	10	19
Warp Length (m)	200	200	240	200	240	200
Target Headrope Depth (m)	0	0	15	0	15	0
Median Headrope Depth (m)	4	4	16	4	16	5
Start Bottom Depth (m)	58	93	100	87	158	75
End Bottom Depth (m)	66	98	97	93	161	85
Usable	Y	Y	Y	Y	Y	Y

Station Name	VI18	JF01	JF02	JF03	JF05
Tow	73	74	75	76	77
Event Number	148	149	150	153	154
Date (Pacific)	2025-10-14	2025-10-14	2025-10-14	2025-10-14	2025-10-14
Start Time (Pacific)	07:23	09:26	10:30	12:16	13:34
Net	LFS 7742	LFS 7742	LFS 7742	LFS 7742	LFS 7742
Duration (min)	20	20	20	10	20
Start Latitude	48° 37’ 05" N	48° 32’ 50" N	48° 31’ 31" N	48° 28’ 02" N	48° 23’ 59" N
Start Longitude	125° 06’ 17" W	124° 41’ 53" W	124° 31’ 36" W	124° 22’ 18" W	124° 06’ 59" W
End Latitude	48° 36’ 21" N	48° 32’ 03" N	48° 30’ 46" N	48° 27’ 39" N	48° 23’ 16" N
End Longitude	125° 04’ 18" W	124° 39’ 26" W	124° 29’ 08" W	124° 21’ 20" W	124° 05’ 06" W
Direction of Tow (deg)	116	113	111	117	116
Vessel Speed (km/h)	8.4	10.0	10.0	8.4	8.0
Distance Towed (km)	2.80	3.33	3.34	1.40	2.69
Net Opening Width (m)	45	49	47	48	47
Net Opening Height (m)	20	10	18	14	17
Warp Length (m)	200	240	200	200	200
Target Headrope Depth (m)	0	15	0	0	0
Median Headrope Depth (m)	4	18	4	8	4
Start Bottom Depth (m)	97	125	102	128	106
End Bottom Depth (m)	92	152	114	127	116
Usable	Y	Y	Y	Y	Y

12 CTD CASTS AND ZOOPLANKTON TOWS

Table 19. CTD casts and vertical bongo tow times and depths during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*.

				CTD			BONGO		
Date	Station	Latitude	Longitude	Start Time (PDT)	Bottom Depth (m)	Gear Depth (m)	Start Time (PDT)	Bottom Depth (m)	Gear Depth (m)
2025-10-01	QCST01	50° 39' 06" N	126° 49' 14" W	10:17	168	158	10:38	156	148
2025-10-01	QCST04	50° 50' 11" N	127° 18' 27" W	17:36	136	125	17:53	135	125
2025-10-02	QCST07	50° 58' 18" N	127° 50' 58" W	07:44	110	100	07:59	107	97
2025-10-02	QCSD02	51° 12' 55" N	127° 50' 41" W	12:15	106	99	12:30	105	95
2025-10-02	QCSD04	51° 00' 37" N	128° 08' 10" W	14:52	134	129	15:08	134	129
2025-10-03	TI01	51° 14' 48" N	128° 18' 37" W	07:06	75	70	07:17	75	65
2025-10-03	TI03	51° 09' 46" N	128° 34' 44" W	10:02	167	157	10:19	168	158
2025-10-03	TI06	50° 56' 45" N	128° 57' 59" W	15:36	68	64	15:46	68	63
2025-10-04	QCSD06	50° 52' 06" N	128° 20' 34" W	07:03	46	41	07:15	46	41
2025-10-04	VI03	50° 38' 57" N	128° 31' 18" W	11:09	132	122	11:24	132	122
2025-10-04	VI05	50° 27' 16" N	128° 10' 33" W	15:24	69	64	15:34	67	60
2025-10-05	QS03	50° 25' 27" N	127° 30' 21" W	09:12	161	156	09:33	162	156
2025-10-05	QS02	50° 29' 44" N	127° 40' 33" W	10:40	106	100	10:54	106	100
2025-10-05	BB02	50° 13' 07" N	128° 02' 07" W	16:58	86	81	17:09	86	81
2025-10-06	BB03	50° 13' 06" N	127° 59' 47" W	07:22	49	43	07:31	48	43
2025-10-06	BP01	50° 01' 06" N	127° 53' 27" W	11:10	676	696	10:41	94	85
2025-10-06	VI08	49° 57' 36" N	127° 34' 51" W	15:31	76	71	15:42	76	71
2025-10-07	KS01	50° 03' 57" N	127° 15' 18" W	10:34	133	141	10:50	139	125
2025-10-07	KS02	50° 00' 21" N	127° 11' 19" W	11:37	151	146	11:55	150	140
2025-10-07	VI10	49° 47' 46" N	127° 22' 05" W	16:47	81	71	16:59	81	71
2025-10-08	EI01	49° 55' 57" N	126° 48' 15" W	07:24	219	213	07:43	218	208
2025-10-08	EI02	49° 51' 32" N	126° 53' 29" W	09:37	213	208	09:58	215	205
2025-10-08	VI12	49° 36' 14" N	126° 59' 44" W	17:18	92	82	17:27	91	82
2025-10-09	NS02	49° 39' 12" N	126° 27' 28" W	07:28	188	183	07:45	188	177
2025-10-09	NS01	49° 43' 23" N	126° 28' 24" W	09:39	208	203	09:57	211	200

				CTD			BONGO		
Date	Station	Latitude	Longitude	Start Time (PDT)	Bottom Depth (m)	Gear Depth (m)	Start Time (PDT)	Bottom Depth (m)	Gear Depth (m)
2025-10-09	NS03	49° 40’ 39" N	126° 36’ 13" W	11:17	128	122	11:33	128	120
2025-10-09	NS06	49° 31’ 03" N	126° 48’ 22" W	15:03	63	58	15:13	63	58
2025-10-10	VI14	49° 22’ 36" N	126° 45’ 33" W	07:43	94	84	07:54	94	84
2025-10-10	CS03	49° 25’ 35" N	126° 03’ 24" W	14:27	121	118	14:39	120	115
2025-10-10	CS04	49° 22’ 40" N	126° 14’ 50" W	17:02	62	57	17:09	62	55
2025-10-12	CS07	49° 14’ 50" N	126° 19’ 13" W	07:10	52	45	07:20	52	41
2025-10-12	CS09	49° 01’ 25" N	126° 02’ 40" W	11:14	55	44	11:27	55	44
2025-10-12	VI17	48° 54’ 01" N	125° 34’ 17" W	16:15	102	92	16:27	101	92
2025-10-13	IVI07	48° 54’ 58" N	125° 22’ 40" W	07:44	57	52	07:53	56	52
2025-10-13	BS01	48° 58’ 08" N	125° 06’ 25" W	10:40	91	87			
2025-10-13	BS02	48° 52’ 58" N	125° 14’ 10" W	12:54	94	92	13:05	94	89
2025-10-13	BS05	48° 32’ 34" N	125° 45’ 00" W	17:28	89	79	17:38	89	79
2025-10-14	VI18	48° 37’ 35" N	125° 07’ 36" W	07:03	97	87	07:14	97	87
2025-10-14	JF03	48° 28’ 46" N	124° 24’ 05" W	11:53	127	118	12:04	128	118

13 CATCH DATA

Table 21. Weight (kg) and counts of species (or taxa) per station during the ecosystem-based juvenile Pacific Salmon survey from September 30 to October 15, 2025 on the CCGS *Sir John Franklin*. Jellyfish weights include all identified pieces but only counted if bells were intact. Euphausiacea were not counted. Counts with blank weights indicate catches too big or small to be weighed accurately.

Station Name	QCST01		QCST02		QCST03		QCST04		QCST07	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)										
Chum Salmon (Adults)										
Chum Salmon (Juveniles)	0.27	6	7.00	112	0.18	3	1.62	27	0.16	2
Coho Salmon (Adults)			0.84	1						
Coho Salmon (Juveniles)					0.21	1	1.03	4	0.16	1
Pink Salmon (Juveniles)	0.46	19	31.27	869	3.00	109	10.96	379	1.20	24
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish						1				
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish	0.43	1							0.63	
Jack Mackerel										
Jellyfish										
Larval Fish										
Lions Mane	0.34		0.91		16.35	2	29.68		8.09	
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish					0.02	1			2.25	2
Northern Sea Nettle										
Ocean Sunfish									2.34	1
Opalescent Inshore Squid										1
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin	0.02	1								
Water Jellyfish									12.97	
Wolf Eel										
TOTAL	**1.52**	**27**	**40.02**	**982**	**19.76**	**117**	**43.29**	**410**	**27.80**	**31**

Station Name	QCSD03		QCSD01		QCSD02		QCSD04		QCSD05	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)										
Chum Salmon (Adults)										
Chum Salmon (Juveniles)	0.10	1			27.60	372	0.13	1		
Coho Salmon (Adults)										
Coho Salmon (Juveniles)			0.15	1	31.81	97				
Pink Salmon (Juveniles)					70.66	1,603	0.04	1		
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish			2.35							
Jack Mackerel										
Jellyfish										
Larval Fish		1								
Lions Mane	4.72				4.94		9.20		20.95	
Medusafish									0.17	2
Mitrocomella Polydiademata										
Moon Jellyfish	0.66	2	0.24	1			2.35	6	0.37	1
Northern Sea Nettle									0.08	1
Ocean Sunfish										
Opalescent Inshore Squid	1.27	423							0.03	19
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	4.14		6.14				12.65		16.94	
Wolf Eel										
TOTAL	**10.89**	**427**	**8.88**	**2**	**135.01**	**2,072**	**24.37**	**8**	**38.54**	**23**

Station Name	TI01		TI02		TI03		TI04		TI05	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)										
Chum Salmon (Adults)										
Chum Salmon (Juveniles)			5.07	43	4.33	35	3.49	27		
Coho Salmon (Adults)										
Coho Salmon (Juveniles)										
Pink Salmon (Juveniles)			1.29	11	0.14	1				
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish										
Jack Mackerel										
Jellyfish										
Larval Fish		1								
Lions Mane	0.15		1.08	1			1.46	2	2.32	1
Medusafish			0.08	1						
Mitrocomella Polydiademata										
Moon Jellyfish			0.49	1			1.72	5		
Northern Sea Nettle									0.16	1
Ocean Sunfish										
Opalescent Inshore Squid								6		1
Pacific Herring										
Pacific Pompano										
Pacific Saury					1.02	13				
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark						1				
Silverspotted Sculpin										
Water Jellyfish	0.22		7.79		0.03		14.31		25.12	
Wolf Eel										
TOTAL	**0.37**	**1**	**15.80**	**57**	**5.52**	**50**	**20.98**	**40**	**27.60**	**3**

Station Name	TI06		TI07		QCSD06		VI01		VI02	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)										
Chum Salmon (Adults)										
Chum Salmon (Juveniles)										
Coho Salmon (Adults)										
Coho Salmon (Juveniles)					0.24	1			0.73	2
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers			0.02	1						
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish										
Jack Mackerel						1				
Jellyfish										
Larval Fish		2								
Lions Mane			3.46				11.12			
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish	2.85	8	0.52	1	0.15	1	0.73	2	0.39	1
Northern Sea Nettle										
Ocean Sunfish		1								
Opalescent Inshore Squid	0.01	4	0.02	19				1		
Pacific Herring			0.01	2				1		
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	14.76		8.58		7.82		1.31		2.29	
Wolf Eel										
TOTAL	**17.62**	**15**	**12.61**	**23**	**8.21**	**3**	**13.16**	**4**	**3.41**	**3**

Station Name	VI03		VI04		VI05		QS03		QS02	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)							0.70	12		
Chum Salmon (Adults)					15.41	5				
Chum Salmon (Juveniles)							1.21	24		
Coho Salmon (Adults)							0.66	1		
Coho Salmon (Juveniles)					0.36	1	7.43	27	6.93	26
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish	0.05		0.47				1.52		0.30	
Jack Mackerel										
Jellyfish			0.10							
Larval Fish										
Lions Mane							5.63	1	6.74	3
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish	0.44	2	0.81	1	6.61	16	0.47	2	0.11	2
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid					0.51	155				4
Pacific Herring										1
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	1.49		1.37		5.77				0.09	
Wolf Eel										
TOTAL	**1.98**	**2**	**2.75**	**1**	**28.66**	**177**	**17.62**	**67**	**14.17**	**36**

Station Name	QS01		BB01		BB02		BB03		BB04	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.17	1								
Chum Salmon (Adults)			17.19	5	33.43	9				
Chum Salmon (Juveniles)										
Coho Salmon (Adults)										
Coho Salmon (Juveniles)	0.52	2	0.33	1						
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish	0.05	2								
Jack Mackerel										
Jellyfish										
Larval Fish										
Lions Mane	1.10	2			1.04					
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish	0.43	1	9.15	8	1.31	1	1.57	4	2.13	3
Northern Sea Nettle										
Ocean Sunfish							3.00	1		
Opalescent Inshore Squid			72.95	19,406						
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	4.63		7.90				0.84		5.63	
Wolf Eel			0.02	1						
TOTAL	**6.90**	**8**	**107.54**	**19,421**	**35.78**	**10**	**5.41**	**5**	**7.76**	**3**

Station Name	BP01		VI06		VI07		VI08		VI09	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)									0.16	1
Chum Salmon (Adults)							4.81	1		
Chum Salmon (Juveniles)									0.14	1
Coho Salmon (Adults)									3.11	1
Coho Salmon (Juveniles)	0.36	1					0.39	1	4.20	13
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish			0.02							
Common Murre	0.83	1								
Flatfishes										
Fried Egg Jellyfish										
Jack Mackerel										
Jellyfish										
Larval Fish										
Lions Mane							0.02	1	2.57	1
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish			1.42	1	0.24	1	0.70		0.48	1
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid		6			1.85	488		1		
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	0.21		0.41		2.57		7.82		2.06	
Wolf Eel										
TOTAL	**1.40**	**8**	**1.85**	**1**	**4.66**	**489**	**13.74**	**4**	**12.72**	**18**

Station Name	KI01		KS02		KS03		KS04		VI10	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.80	10			0.48	3				
Chum Salmon (Adults)					15.32	3	8.21	2	2.53	1
Chum Salmon (Juveniles)			0.14	1	8.41	48				
Coho Salmon (Adults)										
Coho Salmon (Juveniles)			2.46	11	2.75	10				
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish										
Common Murre										
Flatfishes										
Fried Egg Jellyfish	0.86	2	0.02		0.10		3.63	1		
Jack Mackerel										
Jellyfish										
Larval Fish		1								
Lions Mane	0.01						0.66			
Medusafish							0.03	1		1
Mitrocomella Polydiademata										
Moon Jellyfish							0.18	1	0.72	1
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid										
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	0.06		0.01		0.56		5.31		0.88	
Wolf Eel										
TOTAL	**1.73**	**13**	**2.63**	**12**	**27.62**	**64**	**18.02**	**5**	**4.13**	**3**

Station Name	EI02		EI03		EI04		EI05		VI11	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.95	12	4.75	65	0.54	4				
Chum Salmon (Adults)	90.00	35								
Chum Salmon (Juveniles)	0.35	3								
Coho Salmon (Adults)										
Coho Salmon (Juveniles)										
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish						3				2
Common Murre										
Flatfishes										
Fried Egg Jellyfish			0.25				3.82		0.68	1
Jack Mackerel										
Jellyfish										
Larval Fish						1				
Lions Mane			0.12	1						
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish			0.04	1	0.31				0.26	
Northern Sea Nettle										
Ocean Sunfish							2.71	1		
Opalescent Inshore Squid				1						
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle										
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish			0.16		0.50				0.13	
Wolf Eel										
TOTAL	**91.30**	**50**	**5.32**	**68**	**1.35**	**8**	**6.53**	**1**	**1.07**	**3**

Station Name	VI12		NS02		NS01		NS03		NS04	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)			2.24	49	0.44	12	1.05	25	1.25	18
Chum Salmon (Adults)										
Chum Salmon (Juveniles)							0.11	2	0.32	3
Coho Salmon (Adults)										
Coho Salmon (Juveniles)	0.26	1							1.02	4
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers					0.02	1				
Comb Jellyfish										
Common Murre										
Flatfishes										1
Fried Egg Jellyfish	0.24		1.02		2.16		2.90		1.22	4
Jack Mackerel										
Jellyfish										
Larval Fish								2		6
Lions Mane					4.32					
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish	1.36	2							0.12	1
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid		3								
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle							0.26	1	0.14	1
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	1.62		0.11						0.10	
Wolf Eel										
TOTAL	**3.48**	**6**	**3.37**	**49**	**6.94**	**13**	**4.32**	**30**	**4.17**	**38**

Station Name	NS05		NS06		VI13		VI14		EP01	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.36	6	1.07	8						
Chum Salmon (Adults)										
Chum Salmon (Juveniles)			0.30	3			4.15	36		
Coho Salmon (Adults)										
Coho Salmon (Juveniles)					0.48	1				
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout									2.99	1
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish		5					0.02			
Common Murre										
Flatfishes						1		3		
Fried Egg Jellyfish					1.58	2			0.11	
Jack Mackerel										
Jellyfish										
Larval Fish		1								
Lions Mane							0.37	1		
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish			0.68	1	2.01	3	1.48	2	0.14	
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid	0.02	2		2				1		
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle			0.70	1	2.35	5	0.08	1		
Pacific Tomcod	0.01	1								
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	0.43		0.53		1.28		2.42		0.84	
Wolf Eel										
TOTAL	**0.82**	**15**	**3.28**	**15**	**7.70**	**12**	**8.52**	**44**	**4.08**	**1**

Station Name	EP02		CS06		CS03		CS04		CS07	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.08	1	8.65	73	4.08	61	9.03	77		
Chum Salmon (Adults)									4.64	1
Chum Salmon (Juveniles)	4.33	39	1.62	18			2.98	24	36.81	285
Coho Salmon (Adults)					3.89	1				
Coho Salmon (Juveniles)	1.00	3								
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)					1.76	25			0.12	2
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish	0.01		0.10							
Common Murre										
Flatfishes		2		4				1		
Fried Egg Jellyfish	0.21									
Jack Mackerel										
Jellyfish										
Larval Fish		3				2		1		
Lions Mane	4.63	1			3.86		1.18			
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish			3.02	4						
Northern Sea Nettle	0.84	1								
Ocean Sunfish										
Opalescent Inshore Squid	0.90	239								
Pacific Herring									0.12	2
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle	0.09		4.46				0.09	1	9.19	22
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis	0.01	2	0.04	8						
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	2.02		1.41		0.15		0.37		9.95	
Wolf Eel										
TOTAL	**14.12**	**291**	**19.30**	**107**	**13.74**	**89**	**13.65**	**104**	**60.83**	**312**

Station Name	CS08		CS09		CS10		VI15		VI16	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)					3.44	23	0.43	3	0.21	2
Chum Salmon (Adults)										
Chum Salmon (Juveniles)	0.08	1			94.77	726	0.13	1		
Coho Salmon (Adults)										
Coho Salmon (Juveniles)							0.97	4		
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish		6						2		
Common Murre										
Flatfishes								10		1
Fried Egg Jellyfish							0.05	1	2.09	
Jack Mackerel										
Jellyfish										
Larval Fish										
Lions Mane										
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish	0.20		0.91				0.66		1.38	2
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid						51	0.01	25		7
Pacific Herring										
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle	0.32	3	0.10	1	0.28	5				
Pacific Tomcod										
Pelagic Goose Barnacle		3								
Pile Perch										
Polyorchis		1								
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	3.13		14.55		4.47		8.62		6.31	
Wolf Eel										
TOTAL	**3.73**	**14**	**15.56**	**1**	**102.96**	**805**	**10.87**	**46**	**9.99**	**12**

Station Name	VI17		IVI07		BS01		BS02		BS03	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)										
Chinook Salmon (Juveniles)	0.56	8	4.89	65	0.17	3			7.66	83
Chum Salmon (Adults)							3.19	1		
Chum Salmon (Juveniles)			0.07	1					3.69	40
Coho Salmon (Adults)										
Coho Salmon (Juveniles)									1.88	6
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										1
Cods/Hakes/Grenadiers										
Comb Jellyfish		5	0.16							
Common Murre										
Flatfishes		3		2		6		6		
Fried Egg Jellyfish	0.09				0.44		0.13	1		
Jack Mackerel										
Jellyfish			0.07							
Larval Fish								2		
Lions Mane									0.96	5
Medusafish										
Mitrocomella Polydiademata										
Moon Jellyfish			1.85	2					27.12	
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid		8	0.09	34		12		7		
Pacific Herring			0.08	1						
Pacific Pompano										
Pacific Saury										
Pacific Sea Nettle	0.20						0.06	1		
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch									0.38	1
Polyorchis			0.05	2						
Rex Sole										
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	7.84		5.40		0.07		0.52		27.02	
Wolf Eel					0.11	1				
TOTAL	**8.69**	**24**	**12.66**	**107**	**0.79**	**22**	**3.90**	**18**	**68.71**	**136**

Station Name	BS04		BS05		VI18		JF01		JF02	
Common Name	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count
Chinook Salmon (Adults)					0.54	1				
Chinook Salmon (Juveniles)										
Chum Salmon (Adults)	14.16	3			3.58	1				
Chum Salmon (Juveniles)			0.45	3	0.62	5	0.13	1		
Coho Salmon (Adults)										
Coho Salmon (Juveniles)	0.74	2	4.06	10	0.88	4	1.64	6	28.02	87
Pink Salmon (Juveniles)										
Sockeye Salmon (Juveniles)										
Steelhead Trout										
Bay Pipefish										
Cods/Hakes/Grenadiers										
Comb Jellyfish			0.06							
Common Murre										
Flatfishes				1		4				
Fried Egg Jellyfish	1.70	1								
Jack Mackerel										
Jellyfish										
Larval Fish										
Lions Mane									5.31	2
Medusafish										
Mitrocomella Polydiademata					0.07	11		1		
Moon Jellyfish			6.20	9	1.71				8.11	6
Northern Sea Nettle										
Ocean Sunfish										
Opalescent Inshore Squid					4.31	772	0.08	18		
Pacific Herring					0.02	3				
Pacific Pompano							0.02	2		
Pacific Saury										
Pacific Sea Nettle	0.95	4	2.72		14.92		2.58	8	0.83	6
Pacific Tomcod										
Pelagic Goose Barnacle										
Pile Perch										
Polyorchis										
Rex Sole				1						
Salmon Shark										
Silverspotted Sculpin										
Water Jellyfish	28.64		9.57		10.77		5.82		36.64	
Wolf Eel										
TOTAL	**46.19**	**10**	**23.06**	**24**	**37.42**	**801**	**10.27**	**36**	**78.91**	**101**

Station Name	JF03		JF05	
Common Name	Weight	Count	Weight	Count
Chinook Salmon (Adults)				
Chinook Salmon (Juveniles)				
Chum Salmon (Adults)				
Chum Salmon (Juveniles)	1.24	7		
Coho Salmon (Adults)	0.62	1		
Coho Salmon (Juveniles)	13.46	44	36.66	120
Pink Salmon (Juveniles)				
Sockeye Salmon (Juveniles)				
Steelhead Trout				
Bay Pipefish				
Cods/Hakes/Grenadiers				
Comb Jellyfish				
Common Murre				
Flatfishes		1		
Fried Egg Jellyfish			0.12	
Jack Mackerel				
Jellyfish				
Larval Fish				
Lions Mane				
Medusafish				
Mitrocomella Polydiademata				
Moon Jellyfish	0.16	3		
Northern Sea Nettle				
Ocean Sunfish				
Opalescent Inshore Squid				
Pacific Herring				
Pacific Pompano				
Pacific Saury				
Pacific Sea Nettle	0.04			
Pacific Tomcod				
Pelagic Goose Barnacle				
Pile Perch				
Polyorchis				
Rex Sole				
Salmon Shark				
Silverspotted Sculpin				
Water Jellyfish	10.76		4.04	
Wolf Eel				
TOTAL	**26.28**	**56**	**40.82**	**120**