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CCGS W.E. RICKER GULF OF ALASKA SALMON SURVEY, FEBRUARY 27 TO MARCH 17, 2002

by

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ABSTRACT

Welch, D. W., J. F. T. Morris, M. E. Thiess, M. Trudel, A. R. Ladouceur, M. C. Jacobs, T. B. Zubkowski, P. M. Winchell, and H. R. MacLean. 2004. *CCGS W.E. Ricker* Gulf of Alaska salmon survey, February 27 to March 17, 2002. Can. Data Rep. Fish. Aquat. Sci. 1143: 56 p.

The Highseas Salmon program of Fisheries and Oceans Canada conducted a survey of Pacific salmon in the Gulf of Alaska during February 27 to March 17, 2002. The objectives of the surveys were to (1) evaluate the distribution and ecology of juvenile Pacific salmon (*Oncorhynchus spp.*) during their first year in the ocean, (2) describe the ambient oceanographic conditions, and (3) quantify the biomass of zooplankton, an important prey for Pacific salmon at sea. Fish, oceanographic, and zooplankton sampling was conducted at stations spanning the area from Juan du Fuca in southern British Columbia (48.4^{o} N) to Frederick Sound in Southeast Alaska (57.2^{o} N).

A total of 434 Pacific salmon were caught on the survey. Of these, 146 were juvenile coho salmon (*O. kisutch*) in their first winter in the ocean and 270 were chinook salmon (*O. tshawytscha*) under 350 mm in fork length.

Juvenile coho were caught in Juan du Fuca Strait, and both near shore and up the inlets off the west coast of Vancouver Island. No juvenile coho were caught north of Vancouver Island.

Juvenile chinook under 350 mm in fork length were also caught in Juan du Fuca Strait, and both on the shelf and up the inlets off the west coast of Vancouver Island. However, in contrast to juvenile coho, they were also caught further north in Southeast Alaska.

RESUME

Welch, D. W., J. F. T. Morris, M. E. Thiess, M. Trudel, A. R. Ladouceur, M. C. Jacobs, T. B. Zubkowski, P. M. Winchell, and H. R. MacLean. 2004. *CCGS W.E. Ricker* Gulf of Alaska salmon survey, February 27 to March 17, 2002. Can. Data Rep. Fish. Aquat. Sci. 1143: 56 p.

Le programme canadien des Saumons en Haute Mer de Pêches de Océans Canada a réalisé une étude sur les saumons du Pacifique dans le Golfe de l'Alaska du 27 février et le 17 mars 2002. Les objectifs de cette étude était de (1) évaluer la distribution et l'écologie des saumons du Pacifique (*Oncorhynchus* spp.) juvéniles durant leur première année en mer, (2) décrire les conditions océanographiques ambiantes, et (3) quantifier la biomasse de zooplancton, une proie importante des saumons du Pacifique dans l'océan. Nous avons mesuré les conditions océanographiques et échantillonné le zooplancton et les poissons à des stations situées entre détroit de Juan de Fuca dans le sud de la Colombie-Britannique (48.4^{o} N) et le détroit de Frédéric dans le Sud-Est de l'Alaska (58.3°N).

Un total de 434 saumons du Pacifique ont été capturés durant cette étude. De ce nombre, 146 étaient des saumons cohos (*O. kisutch*) juvéniles durant leur première année en mer et 270 étaient des saumons quinnats (*O. tshawytscha*) ayant une longueur à la fourche inférieure à 350mm.

Les saumons cohos juvéniles ont été capturés dans le détroit de Juan de Fuca, et près du rivage et dans les fjords de la côte ouest de l'Île de Vancouver. Aucun saumon coho juvénile n'a été capturé au nord de l'Île de Vancouver.

Les saumons Chinooks ayant une longueur à la fourche inférieure à 350mm ont également été capturés dans le détroit de Juan de Fuca, et sur le plateau continental et les fjords de la côte ouest de l'Île de Vancouver. Toutefois, contrairement aux saumons cohos juvéniles, ils ont aussi été capturés plus au nord dans le Sud-Est de l'Alaska.

INTRODUCTION

The Highseas Program of Fisheries and Oceans Canada has conducted annual Pacific salmon surveys in the Gulf of Alaska since 1995 [1-18]. The main objectives of these surveys were to collect information on (1) the distribution and ecology of Pacific salmon (*Oncorhynchus spp.*) during their ocean phase, (2) the ambient oceanographic conditions, and (3) the distribution and biomass of zooplankton.

This report documents the data collected for the survey completed during February 27 to March 17, 2002. The survey design comprised fish, oceanographic and zooplankton sampling along transects spanning the area from the west coast of Vancouver Island to Southeast Alaska.

MATERIALS AND METHODS

General Survey Information

Figures 1, 2, and 3 show the fishing, oceanographic and zooplankton stations, respectively, completed by the *CCGS W.E. Ricker* during the February 27 to March 17, 2002 survey. A total of 91 fishing stations, 87 oceanographic stations, and 84 zooplankton stations were completed.

The survey conducted scientific operations off the west coast of Vancouver Island, in Johnstone Strait, in Queen Charlotte Sound, in Hecate Strait, in Dixon Entrance, along the inside channels in Southeast Alaska, and on the shelf off Southeast Alaska. Three cross-shelf transects were completed: one off Estevan Point on the west coast of Vancouver Island, a second starting from a position within the Sea Otter Group in Queen Charlotte Sound and running through Triangle Island to the offshore; and a third off Baranof Island in Southeast Alaska.

Fishing Gear and Fishing Operations

The survey was conducted on the *CCGS W.E. Ricker*, a stern trawler 58 m in length which is powered by a 2,500 H.P. model AH 40 Akasaka diesel engine.

The *CCGS W.E. Ricker* towed a mid-water trawl, originally manufactured by Cantrawl Nets Ltd., Richmond, BC, and later modified to a model 240 trawl by the fishing crew. The trawl has a heavy-duty front end of hexagonal web made from 3/8 in. (9.5 mm) and 5/16 in. (7.9 mm) Tenex rope, and a tapered body made-up of 64 in. (163 cm), 32 in. (81.3 cm), 16 in. (40.6 cm), 8 in. (20.3 cm) and 4 in. (10.2 cm) polypropylene sections, an intermediate section of 3 in. (7.6 cm) polypropylene, and a codend of 1.5 in. (3.8 cm) knotted nylon lined with 0.25 in. mesh (64 mm). The trawl has three 40 m bridles of 5/8 in. (1.6 cm) wire rope per side that are attached with a single hook-up to

5 m Jet doors. Typically, 100-150 m of 1.25 in. (3.2 cm) warp was paid out to tow the trawl at the surface.

The *CCGS W.E. Ricker* was able to tow the trawl at the surface at 5 knots (2.6 m s^{-1}) in good sea conditions, and this typically achieved a mouth opening of approximately 28 m wide by 16 m deep as measured acoustically by a Scanmar trawl eye mounted on the headrope. In rough weather, the trawl was towed at 15 m depths.

Oceanographic Sampling

At oceanographic stations, the scientific crew (1) conducted CTD (conductivity-temperature-depth) casts, (2) collected surface seawater samples with a Niskin bottle for nitrate, phosphate, silicate, and salinity, and (3) filtered surface seawater on GF/F glass fibre filter disks for chlorophyll *a.*

Nitrate, phosphate, and silicate samples were collected in acid-washed glass test tubes, and the glass fiber disks were folded and placed in polypropylene scintillation vials. All these samples were stored frozen.

CTD casts were conducted to 250 m or within 5 m of the bottom with a Seabird SBE 911+ probe. Several calibration samples from selected CTD casts were collected over the course of the survey with Niskin bottles at depths where the salinities were stable.

Zooplankton Sampling

Vertical bongo tows to approximately 150 m or within 10 m of the bottom were conducted with two 57 cm diameter, 253 μm Nitex nets. One of the nets was equipped with a flowmeter.

Zooplankton collected from the net with the flowmeter were preserved in 10% formalin and sent to the zooplankton laboratory at the Institute of Ocean Sciences, Fisheries and Oceans Canada (Sidney, BC) for species classification and enumeration. Zooplankton taken from the net without flowmeter 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 weighed wet, dried at 60°C for 48 hours, re-weighed, and stored in plastic bags for future stable isotope, bomb calorimetry, and proximate analyses.

RESULTS

Salmon Catch Data

Table 1 reports information on trawl tows and a summary of Pacific salmon catches for this survey. Tow information includes: station ID, transect name, sampling region, date and time, start latitude (°N) and longitude (°W), heading (°T; degrees true), and bottom depth (m). Station ID numbers consisted of the Pacific Biological Station

cruise designation (“HS200205” for, where HS stands for High Seas), followed by a tow number (e.g., “HS200205-JF01” for a tow #1 in Juan du Fuca, British Columbia. The station ID number serves as the primary key in the High Seas salmon database that links fishing tow information with the oceanographic and zooplankton tables.

For each tow, catch totals are provided for all chinook salmon (*O. tshawytscha*) (“CK”) that includes all ages and size classes, and separately for juveniles and adults of chum salmon (*O. keta*) (“CM”), coho salmon (*O. kisutch*) (“CO”), pink salmon (*O. gorbuscha*) (“PK”), and sockeye salmon (*O. nerka*) (”SE”). In this report, “juveniles” are defined as fish in their first winter in the ocean (age X.1+), while “adults” include all older age groups (age X.2+ or older). Age separation was determined based on examination of size distributions (fork length) which showed non-overlapping size modes for chum, coho, pink, and sockeye salmon. Chinook salmon were not divided into juveniles and adults based on size since there is considerable overlap among size modes that represent the multiple age groups.

The abbreviations for the regions in Tables 1, 3, and 4, and the CWT recovery regions in Table 5 are:

ISEA	Inside channels of Southeast Alaska
SEA	Southeast Alaska
DE	Dixon Entrance
IBC	Inside channels of the central coast of British Columbia
HS	Hecate Strait
QCSD	Queen Charlotte Sound
JS	Johnstone Strait
VI	west coast Vancouver Island
IVI	inlets on the west coast of Vancouver Island
JF	Juan du Fuca

Biological Data

Table 2 reports the detailed biological data collected from each Pacific salmon caught during the survey. Individual salmon were assigned a fish number which consisted of the cruise identifier (e.g., “HS200205”), followed hierarchically by tow number, species code, and sample number. For example, “HS200205-DE01-124-001” refers to tow number DE01 or tow #1 in Dixon Entrance, species code “124” for chinook salmon, and the sample number “001” (within tow and species). We used the following codes from Fisheries and Oceans’ Salmon Stock Assessment database: 108, pink salmon; 112, chum salmon; 115, coho salmon; 118, sockeye salmon; and 124, chinook salmon.

Biological data collected for each salmon includes (when available): species common name, fork length (mm), whole body weight (g wet), sex, stomach content weight (g wet), % water (based on the ratio of dry to wet whole body weight), coded wire

tag number (CWT; if present), pit tag number (if present), and observed fin clip (if present).

Catch Distributions

Juvenile coho, were caught in Juan du Fuca Strait, off the west coast of Vancouver Island, and in Johnstone Strait (Figure 9). Juvenile coho catch rates were within the range of 10 to 100 fish per tow in Juan du Fuca Strait, and within the range of 1-10 fish per tow around Vancouver Island. No juvenile coho were caught north of Vancouver Island.

Juvenile chinook from 100 to199 mm in fork length were caught within the range of 1-10 fish per tow off the west coast of Vancouver Island (Figure 11).

Juvenile chinook from 200 to 299 mm in fork length catches were highest off the west coast of Vancouver and in Sumner Strait, where they were caught within the range of 10 to 100 fish per tow (Figure 12). Juvenile chinook were caught occasionally within the range of 1-10 fish per tow in Juan du Fuca Strait, Johnstone Strait, and Dixon Entrance.

Chinook 300 mm and greater in fork length were caught occasionally within the range of 1-100 fish per tow over the survey range (Figures 13,14,15, and 16).

Juvenile pink, chum, and sockeye, defined in this report as age (X.1) salmon in their first winter at sea, were caught occasionally within the range of 1-10 fish per tow over the survey range (Figures 4, 5, and 7).

No adult chum or sockeye, defined in this report as salmon age X.2 or more, were caught (Figures 6 and 8).

Size Comparisons of Juvenile Salmon Among Regions

Figure 18 shows the length frequencies for coho and chinook species of salmon caught on the cruise.

Juvenile coho (age X.1) averaged 318 mm in fork length, and ranged from 237 to 411 mm off the west coast of Vancouver Island. There was no significant size difference among the four following regions around Vancouver Island: Juan du Fuca, Johnstone Strait, the shelf on the west coast of Vancouver Island, and up inside the inlets on the west coast of Vancouver Island ($F = 0.99$, $p = 0.4$). No north to south size comparison is available, since no juvenile coho were caught further north than Vancouver Island.

Juvenile chinook under 400 mm representing a mixed age group population averaged 252 mm in fork length and ranged from 182 to 357 mm over the range of the survey. Due to the considerable overlap among size modes that represent multiple age

groups, it was not possible to make a regional comparison of sizes of juvenile chinook for specific ocean age classes.

CWT Recoveries

Table 5 reports the details on the coded wire tag (CWT) salmon caught during the survey. Reported information includes: the coded wire tag number, the assigned fish number, species common name, the date and region of recovery, the fork length (mm) at capture, the release area, the name of the agency and hatchery that released the tagged fish, the brood year, and dates of first and second hatchery releases.

The abbreviations for release agencies in Table 5 are:

CDFO	Canadian Department of Fisheries and Oceans
COOP	Washington Department of Fisheries - Cooperative
LUMMI	Lummi Tribe (WA)
ODFW	Oregon Department of Fisheries and Oceans
WDFW	Washington Department of Fish and Wlidlife

The abbreviations for release areas in Table 5 are:

LOCR	lower Columbia R, Washington
MPS	mid-Puget Sound, Washington
NOOK	Nooksack R – Saamish R, Washington
NASK	Nass R – Skeena R, BC
WCVI	west coast Vancouver Island, BC

On this survey, 7 CWT chinook were recovered. Of these, 6 were recovered off the west coast of Vancouver Island. All six were age 0.1, ocean-type chinook. Of these six, 5 had been released from west coast Vancouver Island hatcheries in the spring of 2001; and 1 had been released from a hatchery within the basin of the lower Columbia River in the fall of 2001. The six age 0.1 chinook averaged 242 mm in fork length, and ranged from 215 to 262 mm.

One CWT chinook was recovered inside Southeast Alaska. This age 1.1, stream-type chinook had been released within the Nass – Skeena river region in northern British Columbia in the spring of 2001. It was 334 mm in fork length.

Nine CWT coho were recovered in Juan du Fuca and off the west coast of southern Vancouver Island. All 9 were age 1.1. Of these nine, 5 had been released from hatcheries in Puget Sound, 3 from hatcheries on the Nooksack - Saamish river system in Washington State, and 1 from a hatchery on the Cowlitz river in the Colunbia River basin in the spring of 2001.

Oceanographic Data

Table 3 reports the physical oceanographic data collected during the survey, including the station ID number, transect, region, the date and time in UTC, the latitude (^{o}N) and longitude (^{o}W), sea surface temperature (SST; ^{o}C), and salinity (SSS; ppt) taken from the CTD files, sea surface salinities (ppt) determined from the sample bottles that were used to calibrate the CTD probe, nitrate, silicate and phosphate concentrations (μmol L^{-1}), and chlorophyll *a* (μg L^{-1}).

The CTD files are available through the website of the Canadian Department of Fisheries and Oceans, Ocean Science and Productivity division (OSAP) at:

http://www-sci.pac.dfo-mpo.gc.ca/osap/data/default_e.htm

Zooplankton Data

Table 4 reports the zooplankton data by station collected by the Bongo tows, including the station ID number, transect, region, latitude (^{o}N) and longitude (^{o}W), bottom depth (m), the date and time, target depth (m), tow duration, wire angle (degrees), and volume of ocean water sampled in cubic meters that is calculated from the flow meter readings. Also shown are the dry weights (g) of zooplankton which were standardised to 1,000 cubic meters sampled for the 8.0, 1.7, 1.0, and 0.25 mm size factions as well as for the total sample.

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Table 1. Tow positions and catch summaries of Pacific salmon for the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date	Time	Latitude (ºN)	Longitude (ºW)	Heading (ºT)	SOG (kts)	Bottom Depth (m)	CK all	CM Juv	CM ad.	CO Juv	CO Ad.	PK Juv	PK Ad.	SE Juv	SE Ad.
HS200205JF01	JORDAN RIVER	JF	27-Feb-02	07:16	48.402	124.138	293	5.13	108	4	3	0	29	0	0	0	0	0
HS200205JF02	PORT SAN JUAN	JF	27-Feb-02	09:50	48.508	124.468	289	5.55	114	3	1	0	67	0	0	0	0	0
HS200205VI01	CARMANAH	VI	27-Feb-02	12:08	48.579	124.806	296	5.12	68	4	0	0	20	0	0	0	0	0
HS200205VI02	PACHENA	VI	27-Feb-02	14:25	48.640	125.057	278	4.48	72	8	0	0	16	0	0	0	0	0
HS200205EP12	ESTEVAN PT	VI	28-Feb-02	08:03	48.455	128.206	340	4.61	2566	0	0	0	0	0	0	0	0	0
HS200205EP11	ESTEVAN PT	VI	28-Feb-02	11:16	48.600	127.952	3	3.38	2594	0	0	0	0	0	0	0	0	0
HS200205EP10	ESTEVAN PT	VI	28-Feb-02	14:17	48.730	127.699	7	3.87	2544	0	0	0	0	0	0	0	0	0
HS200205EP09	ESTEVAN PT	VI	28-Feb-02	16:55	48.871	127.433	345	3.72	2212	0	0	0	0	0	0	0	0	0
HS200205EP08	ESTEVAN PT	VI	01-Mar-02	07:11	49.003	127.170	355	3.38	1965	2	0	0	0	0	0	0	0	0
HS200205EP07	ESTEVAN PT	VI	01-Mar-02	09:23	49.095	126.994	351	3.93	639	0	0	0	0	0	0	0	0	0
HS200205EP06	ESTEVAN PT	VI	01-Mar-02	11:24	49.139	126.866	312	4.32	181	13	0	0	0	0	0	0	0	0
HS200205EP05	ESTEVAN PT	VI	01-Mar-02	13:36	49.177	126.808	322	4.24	140	0	0	0	0	0	0	0	0	0
HS200205EP04	ESTEVAN PT	VI	01-Mar-02	15:14	49.261	126.809	120	4.8	129	0	0	0	0	0	0	0	0	0
HS200205EP03	ESTEVAN PT	VI	01-Mar-02	17:01	49.305	126.721	136	4.37	110	1	0	0	0	0	0	0	0	0
HS200205EP02	ESTEVAN PT	VI	01-Mar-02	18:20	49.338	126.660	120	4.76	75	3	0	0	0	0	0	0	0	0
HS200205EP01	ESTEVAN PT	VI	01-Mar-02	19:13	49.337	126.566	112	4.21	53	14	0	0	0	0	0	0	0	0
HS200205IVI01	NOOTKA SD	IVI	02-Mar-02	07:10	49.651	126.478	209	5.48	264	0	0	0	0	0	0	0	0	0
HS200205IVI02	NOOTKA SD	IVI	02-Mar-02	09:00	49.601	126.591	344	5.07	117	0	0	0	5	0	0	0	0	0
HS200205IVI03	NOOTKA SD	IVI	02-Mar-02	10:33	49.690	126.544	58	4.86	152	0	0	0	0	0	0	0	0	0
HS200205IVI04	ESPERANZA INLET	IVI	02-Mar-02	14:13	49.887	126.810	233	5.15	248	21	0	0	0	0	0	0	0	0
HS200205IVI05	ESPERANZA INLET	IVI	02-Mar-02	15:38	49.859	126.873	261	5.31	226	1	0	0	2	0	0	0	0	0
HS200205IVI06	ESPERANZA INLET	IVI	02-Mar-02	17:40	49.857	126.922	245	5.32	248	0	0	0	0	0	0	0	0	0
HS200205VI03	ESPERANZA	VI	02-Mar-02	18:53	49.774	127.082	245	5.39	49	74	1	0	0	0	0	0	2	0
HS200205IVI07	QUATSINO SD	IVI	03-Mar-02	07:10	50.510	127.698	247	4.98	113	33	0	0	3	0	0	0	0	0
HS200205IVI08	QUATSINO SD	IVI	03-Mar-02	08:33	50.493	127.775	228	5.34	187	5	0	0	1	0	0	0	0	0
HS200205IVI09	QUATSINO SD	IVI	03-Mar-02	09:46	50.471	127.887	263	5.39	167	12	0	0	0	0	0	0	0	0
HS200205VI04	OFF QUATSINO SD	VI	03-Mar-02	11:23	50.418	127.993	228	4.71	144	0	0	0	0	0	0	0	0	0
HS200205VI05	VAN IS N - TOPKNOT	VI	03-Mar-02	13:46	50.463	128.229	305	4.84	102	3	0	0	0	0	0	0	0	0
HS200205VI06	VAN IS N - BUSHY RK	VI	03-Mar-02	15:35	50.570	128.330	322	4.56	67	2	0	0	0	0	0	0	0	0
HS200205VI07	VAN IS N - C RUSSEL	VI	03-Mar-02	17:14	50.687	128.433	333	4.78	64	0	0	0	0	0	0	0	0	0
HS200205VI08	VAN IS N - COX IS	VI	03-Mar-02	18:58	50.721	128.522	265	5.72	90	0	0	0	0	0	0	0	0	0
HS200205T07	TRIANGLE IS	VI	05-Mar-02	07:10	50.817	129.190	276	5.03	90	0	0	0	0	0	0	0	0	0
HS200205T08	TRIANGLE IS	VI	05-Mar-02	09:39	50.747	129.407	247	5.19	1140	0	0	0	0	0	0	0	0	0
HS200205T09	TRIANGLE IS	VI	05-Mar-02	12:10	50.615	129.560	273	5.34	1961	0	0	0	0	0	0	0	0	0
HS200205T10	TRIANGLE IS	VI	05-Mar-02	14:35	50.545	129.789	270	5.49	2165	3	0	0	0	0	0	0	0	0
HS200205T11	TRIANGLE IS	VI	05-Mar-02	16:44	50.466	129.926	265	5.22	2459	0	0	0	0	0	0	0	0	0
HS200205T12	TRIANGLE IS	VI	05-Mar-02	18:40	50.403	130.084	251	5.03	1700	0	0	0	0	0	0	0	0	0
HS200205T06	TRIANGLE IS	QCSD	06-Mar-02	07:38	50.909	129.035	35	4.1	61	0	0	0	0	0	0	0	0	0

Table 1. Tow positions and catch summaries of Pacific salmon for the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date	Time	Latitude (ºN)	Longitude (ºW)	Heading (ºT)	SOG (kts)	Bottom Depth (m)	CK all	CM Juv	CM ad.	CO Juv	CO Ad.	PK Juv	PK Ad.	SE Juv	SE Ad.
HS200205T05	TRIANGLE IS	QCSD	06-Mar-02	09:24	50.989	128.953	76	4.05	73	0	0	0	0	0	0	0	0	0
HS200205T04	TRIANGLE IS	QCSD	06-Mar-02	11:27	51.074	128.820	83	3.78	59	0	0	0	0	0	0	0	0	0
HS200205T03	TRIANGLE IS	QCSD	06-Mar-02	13:12	51.132	128.671	76	4.36	110	0	0	0	0	0	0	0	0	0
HS200205T02	TRIANGLE IS	QCSD	06-Mar-02	14:58	51.187	128.518	54	4.58	194	0	0	0	0	0	0	0	0	0
HS200205T01	TRIANGLE IS	QCSD	06-Mar-02	16:32	51.226	128.429	45	4.77	174	0	0	0	0	0	0	0	0	0
HS200205QCS01	CALVERT IS	QCSD	06-Mar-02	18:52	51.383	128.250	12	4.11	127	0	0	0	0	0	0	0	0	0
HS200205HS01	McGINNIS IS	HS	07-Mar-02	07:09	52.304	128.852	235	4.96	92	0	0	0	0	0	0	0	0	0
HS200205H01	HECATE ST	HS	07-Mar-02	08:04	52.266	128.956	242	5.6	125	0	0	0	0	0	0	0	0	0
HS200205H02	HECATE ST	HS	07-Mar-02	10:40	52.248	129.384	288	4.25	161	0	0	0	0	0	0	0	0	0
HS200205H03	HECATE ST	HS	07-Mar-02	12:55	52.290	129.633	297	4.62	207	0	0	0	0	0	0	0	0	0
HS200205H04	HECATE ST	HS	07-Mar-02	15:34	52.359	129.884	291	5.2	196	0	0	0	0	0	0	0	0	0
HS200205H05	HECATE ST	HS	07-Mar-02	17:35	52.417	130.138	293	4.92	300	0	0	0	0	0	0	0	0	0
HS200205HS02	LASKEEK BK	HS	08-Mar-02	15:04	52.720	131.044	50	4.88	40	0	0	0	0	0	0	0	0	0
HS200205HS03	LASKEEK BK	HS	08-Mar-02	17:04	52.848	130.877	25	4.88	43	0	0	0	0	0	0	0	0	0
HS200205HS04	LASKEEK BK	HS	08-Mar-02	18:50	52.994	130.772	349	5.26	88	0	0	0	0	0	0	0	0	0
HS200205DE01	McINTYRE BAY	DE	09-Mar-02	07:09	54.214	131.690	222	4.98	57	3	0	0	0	0	0	0	0	0
HS200205DE02	McINTYRE BAY	DE	09-Mar-02	08:52	54.141	131.873	265	5.06	42	0	0	0	0	0	0	0	0	0
HS200205DE03	McINTYRE BAY	DE	09-Mar-02	10:43	54.154	132.095	258	5.68	41	0	0	0	0	0	0	0	0	0
HS200205DE04	DIXON E	DE	09-Mar-02	12:15	54.137	132.344	261	5.2	67	0	0	0	0	0	0	0	0	0
HS200205ISEA01	CLARENCE ST	ISEA	10-Mar-02	07:10	55.268	131.914	344	5.2	388	5	0	0	0	0	0	0	0	0
HS200205ISEA02	CLARENCE ST	ISEA	10-Mar-02	09:16	55.414	131.976	345	5.19	476	0	0	0	0	0	0	0	0	0
HS200205ISEA03	CLARENCE ST	ISEA	10-Mar-02	11:35	55.526	132.049	295	4.56	118	0	0	0	0	0	0	0	0	0
HS200205ISEA04	CLARENCE ST	ISEA	10-Mar-02	13:40	55.625	132.215	351	4.56	162	0	0	0	0	0	0	0	0	0
HS200205ISEA05	CLARENCE ST	ISEA	10-Mar-02	15:50	55.735	132.352	327	4.05	572	0	0	0	0	0	0	0	0	0
HS200205ISEA06	CLARENCE ST	ISEA	10-Mar-02	17:43	55.839	132.503	316	6.1	245	0	1	0	0	0	0	0	0	0
HS200205ISEA07	CLARENCE ST	ISEA	10-Mar-02	18:52	55.928	132.617	310	4.87	383	0	0	0	0	0	0	0	0	0
HS200205ISEA08	SUMNER ST	ISEA	11-Mar-02	07:07	56.371	133.140	237	4.61	42	1	0	0	0	0	0	0	0	0
HS200205ISEA09	SUMNER ST	ISEA	11-Mar-02	09:10	56.348	133.351	264	4.95	136	13	0	0	0	0	0	0	0	0
HS200205ISEA10	SUMNER ST	ISEA	11-Mar-02	11:16	56.371	133.621	308	4.04	142	2	0	0	0	0	0	0	0	0
HS200205ISEA11	SUMNER ST	ISEA	11-Mar-02	13:39	56.315	133.684	184	4.93	314	3	0	0	0	0	0	0	0	0
HS200205ISEA12	SUMNER ST	ISEA	11-Mar-02	15:43	56.140	133.707	184	5.18	152	0	0	0	0	0	0	0	0	0
HS200205ISEA13	SUMNER ST	ISEA	11-Mar-02	17:29	56.014	133.833	239	3.96	334	3	0	0	0	0	0	0	0	0
HS200205ISEA14	SUMNER ST	ISEA	11-Mar-02	18:26	55.984	133.927	225	4.29	162	39	0	0	0	0	0	0	0	0
HS200205ISEA15	FREDERICK SD	ISEA	12-Mar-02	07:09	56.938	134.540	14	4.79	120	1	0	0	0	0	0	0	0	0
HS200205ISEA16	FREDERICK SD	ISEA	12-Mar-02	09:10	57.076	134.347	30	5.12	124	0	0	0	0	0	0	0	0	0
HS200205ISEA17	FREDERICK SD	ISEA	12-Mar-02	11:04	57.190	134.159	54	4.28	150	0	0	0	0	0	0	0	0	0
HS200205ISEA18	CHATHAM ST	ISEA	12-Mar-02	17:38	56.435	134.498	164	4.3	702	0	0	0	0	0	0	0	0	0
HS200205ISEA19	CHATHAM ST	ISEA	12-Mar-02	19:15	56.341	134.390	184	3.73	463	0	0	0	0	0	0	0	0	0

Table 1. Tow positions and catch summaries of Pacific salmon for the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date	Time	Latitude (ºN)	Longitude (ºW)	Heading (ºT)	SOG (kts)	Bottom Depth (m)	CK all	CM Juv	CM ad.	CO Juv	CO Ad.	PK Juv	PK Ad.	SE Juv	SE Ad.
HS200205B01	BARANOF IS	SEA	13-Mar-02	07:06	56.255	134.884	336	5.39	147	0	0	0	0	0	0	0	0	0
HS200205B02	BARANOF IS	SEA	13-Mar-02	08:29	56.290	134.946	236	4.27	142	0	0	0	0	0	0	0	0	0
HS200205B03	BARANOF IS	SEA	13-Mar-02	10:03	56.245	135.055	0	8.05	142	0	0	0	0	0	0	0	0	0
HS200205B04	BARANOF IS	SEA	13-Mar-02	11:41	56.214	135.162	233	3.53	189	0	0	0	0	0	0	0	0	0
HS200205B05	BARANOF IS	SEA	13-Mar-02	13:25	56.155	135.283	232	4.04	306	0	0	0	0	0	0	0	0	0
HS200205B06	BARANOF IS	SEA	13-Mar-02	15:13	56.088	135.434	232	4.17	344	0	0	0	0	0	0	0	0	0
HS200205B07	BARANOF IS	SEA	13-Mar-02	16:34	56.060	135.512	218	4.03	470	0	0	0	0	0	0	0	0	0
HS200205B08	BARANOF IS	SEA	13-Mar-02	18:03	56.013	135.611	226	4.21	919	0	0	0	0	0	0	0	0	0
HS200205B09	BARANOF IS	SEA	13-Mar-02	19:30	55.969	135.711	226	4.88	1342	0	0	0	0	0	0	0	0	0
HS200205IBC01	WRIGHT SD	IBC	15-Mar-02	08:14	53.344	129.263	122	4.75	514	0	0	0	0	0	0	0	0	0
HS200205JS01	JOHNSTONE ST	JS	17-Mar-02	07:03	50.545	126.706	123	3.09	422	0	0	0	0	0	1	0	0	0
HS200205JS02	JOHNSTONE ST	JS	17-Mar-02	09:12	50.509	126.550	95	3.01	426	1	0	0	0	0	0	0	0	0
HS200205JS03	JOHNSTONE ST	JS	17-Mar-02	11:13	50.503	126.329	96	3.38	284	0	0	0	1	0	0	0	0	0
HS200205JS04	JOHNSTONE ST	JS	17-Mar-02	13:03	50.477	126.133	95	3.67	297	1	0	0	0	0	0	0	0	0
HS200205JS05	JOHNSTONE ST	JS	17-Mar-02	14:45	50.418	125.982	115	5.79	184	1	0	0	2	0	0	0	0	0
									Totals	279	6	0	146	0	1	0	2	0
															Overall total			434

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-DE01-124-001	CHINOOK	275	262	M	0.94			
HS200205-DE01-124-002	CHINOOK	297	315	M	2.61			
HS200205-DE01-124-003	CHINOOK	800	6870	M				
HS200205-EP01-124-001	CHINOOK	230	143	F	1.71			
HS200205-EP01-124-002	CHINOOK	240	162	M	7.71			
HS200205-EP01-124-003	CHINOOK	242	195	F	3.55			
HS200205-EP01-124-004	CHINOOK	228	139	M	2.09			
HS200205-EP01-124-005	CHINOOK	236	151	F	3.79			
HS200205-EP01-124-006	CHINOOK	217	130	M	5.2			
HS200205-EP01-124-007	CHINOOK	215	127	F	2.49			
HS200205-EP01-124-008	CHINOOK	194	88	M	0.67			
HS200205-EP01-124-009	CHINOOK	254	196	M	6.79			
HS200205-EP01-124-010	CHINOOK	212	112	F	1.55			
HS200205-EP01-124-011	CHINOOK	219	135	M	5.8			
HS200205-EP01-124-012	CHINOOK	250	189	M	3.62	0.1	T184701	AD
HS200205-EP01-124-013	CHINOOK	210	111	M	2.66			
HS200205-EP01-124-014	CHINOOK	252	190	F	7.07			
HS200205-EP02-124-001	CHINOOK	284	290	F	13.28			
HS200205-EP02-124-002	CHINOOK	273	274	F	6.66			
HS200205-EP02-124-003	CHINOOK	253	194	F	3.15			
HS200205-EP03-124-001	CHINOOK	268	228	M	8.38			
HS200205-EP06-124-001	CHINOOK	299	348	F	11.11			
HS200205-EP06-124-002	CHINOOK	322	459	F	22.48			
HS200205-EP06-124-003	CHINOOK	314	419	M	12.7			
HS200205-EP06-124-004	CHINOOK	315	403	M	13.09			
HS200205-EP06-124-005	CHINOOK	310	392	M	14.64			
HS200205-EP06-124-006	CHINOOK	336	504	F	18.46			
HS200205-EP06-124-007	CHINOOK	292	337	F	7.85			
HS200205-EP06-124-008	CHINOOK	485	1372	F	37.4			
HS200205-EP06-124-009	CHINOOK	283	321	F	9.32			
HS200205-EP06-124-010	CHINOOK	330	472	F	15.53			
HS200205-EP06-124-011	CHINOOK	291	322	F	12.3			
HS200205-EP06-124-012	CHINOOK	274	266	F	11.64			
HS200205-EP06-124-013	CHINOOK	775	5940	F				
HS200205-EP08-124-001	CHINOOK	301	320	F	0.67			
HS200205-EP08-124-002	CHINOOK	306	358	F	0.92			
HS200205-ISEA01-124-001	CHINOOK	300	325	F	0.78			
HS200205-ISEA01-124-002	CHINOOK	318	390	F	1.45			
HS200205-ISEA01-124-003	CHINOOK	334	455	F	0.47	1.1	T184562	AD

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-ISEA01-124-004	CHINOOK	343	476	M	1.52			
HS200205-ISEA01-124-005	CHINOOK	314	384	F	1.01			
HS200205-ISEA08-124-001	CHINOOK	330	470	F	2.9			
HS200205-ISEA09-124-001	CHINOOK	264	220	M	1.19			
HS200205-ISEA09-124-002	CHINOOK	255	207	F	4.29			
HS200205-ISEA09-124-003	CHINOOK	264	245	M	2.74			
HS200205-ISEA09-124-004	CHINOOK	270	244	M	0.57			
HS200205-ISEA09-124-005	CHINOOK	295	340	M	0.48			
HS200205-ISEA09-124-006	CHINOOK	280	267	M	0.95			
HS200205-ISEA09-124-007	CHINOOK	280	268	M	3.73			
HS200205-ISEA09-124-008	CHINOOK	262	210	F	1.15			
HS200205-ISEA09-124-009	CHINOOK	275	242	M	0.48			
HS200205-ISEA09-124-010	CHINOOK	288	280	F	0.19			
HS200205-ISEA09-124-011	CHINOOK	295	313	F	1.16			
HS200205-ISEA09-124-012	CHINOOK	284	276	F	0.48			
HS200205-ISEA09-124-013	CHINOOK	288	278	F	3.69			
HS200205-ISEA10-124-001	CHINOOK	291	316	M	0.58			
HS200205-ISEA10-124-002	CHINOOK	475	1208	F	8.34			AD
HS200205-ISEA11-124-001	CHINOOK	262	222	M	4.51			
HS200205-ISEA11-124-002	CHINOOK	255	203	M	4.24			
HS200205-ISEA11-124-003	CHINOOK	660	3462	M				
HS200205-ISEA13-124-001	CHINOOK	296	314	M	9.45			
HS200205-ISEA13-124-002	CHINOOK	308	349	M	0.84			
HS200205-ISEA13-124-003	CHINOOK	280	263	F	4.67			
HS200205-ISEA14-124-001	CHINOOK	282	293	F	12.53			
HS200205-ISEA14-124-002	CHINOOK	308	380	M	10.73			
HS200205-ISEA14-124-003	CHINOOK	318	386	M	3.67			
HS200205-ISEA14-124-004	CHINOOK	272	252	F	11.13			
HS200205-ISEA14-124-005	CHINOOK	312	379	F	2.08			
HS200205-ISEA14-124-006	CHINOOK	290	303	F	14.27			
HS200205-ISEA14-124-007	CHINOOK	284	300	F	2.98			
HS200205-ISEA14-124-008	CHINOOK	281	310	F	7.82			
HS200205-ISEA14-124-009	CHINOOK	314	375	F	3.36			
HS200205-ISEA14-124-010	CHINOOK	321	441	F	10.17			
HS200205-ISEA14-124-011	CHINOOK	300	338	M	1.75			
HS200205-ISEA14-124-012	CHINOOK	278	260	F	2.94			
HS200205-ISEA14-124-013	CHINOOK	283	301	M	2.42			
HS200205-ISEA14-124-014	CHINOOK	294	323	F	2.58			
HS200205-ISEA14-124-015	CHINOOK	304	373	M	9.25			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-ISEA14-124-016	CHINOOK	278	273	M	3.93			AD
HS200205-ISEA14-124-017	CHINOOK	301	337	M	3.38			
HS200205-ISEA14-124-018	CHINOOK	281	279	F	3.87			
HS200205-ISEA14-124-019	CHINOOK	279	268	F	2.58			
HS200205-ISEA14-124-020	CHINOOK	300	359	F	9.47			
HS200205-ISEA14-124-021	CHINOOK	323	396	F	3.86			
HS200205-ISEA14-124-022	CHINOOK	285	284	M	3.27			
HS200205-ISEA14-124-023	CHINOOK	309	338	M	6.44			
HS200205-ISEA14-124-024	CHINOOK	315	405	F	3.32			
HS200205-ISEA14-124-025	CHINOOK	293	329	M	4.58			
HS200205-ISEA14-124-026	CHINOOK	281	286	M	2.72			
HS200205-ISEA14-124-027	CHINOOK	285	298	M	8.22			
HS200205-ISEA14-124-028	CHINOOK	250	202	M	5.72			
HS200205-ISEA14-124-029	CHINOOK	277	286	M	8.57			
HS200205-ISEA14-124-030	CHINOOK	295	328	F	2.16			
HS200205-ISEA14-124-031	CHINOOK	284	265					
HS200205-ISEA14-124-032	CHINOOK	253	219					
HS200205-ISEA14-124-033	CHINOOK	259	235					
HS200205-ISEA14-124-034	CHINOOK	280	284					
HS200205-ISEA14-124-035	CHINOOK	259	212					
HS200205-ISEA14-124-036	CHINOOK	281	301					
HS200205-ISEA14-124-037	CHINOOK	270	260					
HS200205-ISEA14-124-038	CHINOOK	270	253					
HS200205-ISEA14-124-039	CHINOOK	258	230					
HS200205-ISEA15-124-001	CHINOOK	282	281	F	0.24			
HS200205-IVI04-124-001	CHINOOK	218	130	F	2.1			
HS200205-IVI04-124-002	CHINOOK	241	155	F	1.59			
HS200205-IVI04-124-003	CHINOOK	213	123	F	3.45			
HS200205-IVI04-124-004	CHINOOK	243	159	F	2.55			
HS200205-IVI04-124-005	CHINOOK	225	125	F	2.15	0.1	T184340	AD
HS200205-IVI04-124-006	CHINOOK	217	117	F	2.59			
HS200205-IVI04-124-007	CHINOOK	207	101	F	1.28			
HS200205-IVI04-124-008	CHINOOK	213	120	F	1.58			
HS200205-IVI04-124-009	CHINOOK	213	119	M	0.97			
HS200205-IVI04-124-010	CHINOOK	214	109	M	1.21			
HS200205-IVI04-124-011	CHINOOK	286	253	M	1.8			
HS200205-IVI04-124-012	CHINOOK	262	211	M	0.97			
HS200205-IVI04-124-013	CHINOOK	225	127	M	2.42			
HS200205-IVI04-124-014	CHINOOK	213	107	M	1.86			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-IVI04-124-015	CHINOOK	243	173	F	2.1			
HS200205-IVI04-124-016	CHINOOK	232	137	F	2.42			
HS200205-IVI04-124-017	CHINOOK	228	139	F	2.45			
HS200205-IVI04-124-018	CHINOOK	235	164	F	3.8			
HS200205-IVI04-124-019	CHINOOK	236	157	M	2.19			
HS200205-IVI04-124-020	CHINOOK	221	125	F	2.4			
HS200205-IVI04-124-021	CHINOOK	200	102	M	1.64			
HS200205-IVI05-124-001	CHINOOK	225	132	F	2.07			
HS200205-IVI07-124-001	CHINOOK	223	125	M	0.08			
HS200205-IVI07-124-002	CHINOOK	255	196	M	0.52			
HS200205-IVI07-124-003	CHINOOK	239	152	M	0.26			
HS200205-IVI07-124-004	CHINOOK	250	192	F	1.03			
HS200205-IVI07-124-005	CHINOOK	244	177	F	0.56			
HS200205-IVI07-124-006	CHINOOK	228	128	M	0.2			
HS200205-IVI07-124-007	CHINOOK	229	132	F	0.29			
HS200205-IVI07-124-008	CHINOOK	240	161	M	0.36			
HS200205-IVI07-124-009	CHINOOK	248	180	F	0.42			
HS200205-IVI07-124-010	CHINOOK	255	209	M	0.27			
HS200205-IVI07-124-011	CHINOOK	227	140	M	1.58			
HS200205-IVI07-124-012	CHINOOK	233	148	M	0.44			
HS200205-IVI07-124-013	CHINOOK	248	181	F	0.15			
HS200205-IVI07-124-014	CHINOOK	216	123	M	0.38			
HS200205-IVI07-124-015	CHINOOK	230	134	M	0.43			
HS200205-IVI07-124-016	CHINOOK	234	150	F	0.44			
HS200205-IVI07-124-017	CHINOOK	251	188	M	0.51			
HS200205-IVI07-124-018	CHINOOK	241	158	M	3			
HS200205-IVI07-124-019	CHINOOK	243	168	F	0.32			
HS200205-IVI07-124-020	CHINOOK	225	132	M	0.77			
HS200205-IVI07-124-021	CHINOOK	231	142	F	0.46			
HS200205-IVI07-124-022	CHINOOK	278	253	F	0.44			
HS200205-IVI07-124-023	CHINOOK	216	116	F	0.21			
HS200205-IVI07-124-024	CHINOOK	214	114	F	0.28			
HS200205-IVI07-124-025	CHINOOK	244	170	M	0.57			
HS200205-IVI07-124-026	CHINOOK	226	140	F	0.78			
HS200205-IVI07-124-027	CHINOOK	222	129	M	0.61			
HS200205-IVI07-124-028	CHINOOK	236	151	M	0.72			
HS200205-IVI07-124-029	CHINOOK	216	114	M	0.33			
HS200205-IVI07-124-030	CHINOOK	225	131	M	0.58			
HS200205-IVI07-124-031	CHINOOK	240	158					

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-IVI07-124-032	CHINOOK	230	130					
HS200205-IVI07-124-033	CHINOOK	221	134					
HS200205-IVI08-124-001	CHINOOK	227	128	F	0.37			
HS200205-IVI08-124-002	CHINOOK	240	163	F	0.67			
HS200205-IVI08-124-003	CHINOOK	235	151	F	0.58			
HS200205-IVI08-124-004	CHINOOK	219	123	F	0.34			
HS200205-IVI08-124-005	CHINOOK	223	129	F	0.59			
HS200205-IVI09-124-001	CHINOOK	217	120	M	0.37			
HS200205-IVI09-124-002	CHINOOK	215	110	M	0.37			
HS200205-IVI09-124-003	CHINOOK	236	147	M	0.28			
HS200205-IVI09-124-004	CHINOOK	246	167	F	0.28			AD
HS200205-IVI09-124-005	CHINOOK	226	127	F	0.38			
HS200205-IVI09-124-006	CHINOOK	208	93	M	0.47			
HS200205-IVI09-124-007	CHINOOK	248	173	M	0.1			
HS200205-IVI09-124-008	CHINOOK	231	144	F	0.68			
HS200205-IVI09-124-009	CHINOOK	245	175	F	0.56			
HS200205-IVI09-124-010	CHINOOK	227	142	F	0.49			
HS200205-IVI09-124-011	CHINOOK	227	129	F	0.26			
HS200205-IVI09-124-012	CHINOOK	450						
HS200205-JF01-124-001	CHINOOK	240	162	M	0.11			
HS200205-JF01-124-002	CHINOOK	226	127	M	0.23			
HS200205-JF01-124-003	CHINOOK	255	197	F	0			
HS200205-JF01-124-004	CHINOOK	215	115	M	0.25			
HS200205-JF02-124-001	CHINOOK	182	68	F	0.27			
HS200205-JF02-124-002	CHINOOK	233	153	M	0.23			
HS200205-JF02-124-003	CHINOOK	260	180	M	0.58			
HS200205-JS02-124-001	CHINOOK	224	118	F	0.84			
HS200205-JS04-124-001	CHINOOK	357	562	M	0.85			
HS200205-JS05-124-001	CHINOOK	256	195	F	6.83			
HS200205-T10-124-001	CHINOOK	315	411	F	1.13			
HS200205-T10-124-002	CHINOOK	291	299	F	0.61			
HS200205-T10-124-003	CHINOOK	601	2969	M				
HS200205-VI01-124-001	CHINOOK	205	110					
HS200205-VI01-124-002	CHINOOK	220	123					
HS200205-VI01-124-003	CHINOOK	214	104					
HS200205-VI01-124-004	CHINOOK	608	2898	F				
HS200205-VI02-124-001	CHINOOK	220	117	F	0.56			AD
HS200205-VI02-124-002	CHINOOK	226	145	M	4.19			
HS200205-VI02-124-003	CHINOOK	297	316	F	15.06			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-VI02-124-004	CHINOOK	191	84	F	0.47			
HS200205-VI02-124-005	CHINOOK	221	127	F	0.72			
HS200205-VI02-124-006	CHINOOK	236	152	F	0.21			AD
HS200205-VI02-124-007	CHINOOK	215	119	M	2.34			
HS200205-VI02-124-008	CHINOOK	228	134	F	0.53			AD
HS200205-VI03-124-001	CHINOOK	258	220	F	9.62			
HS200205-VI03-124-002	CHINOOK	289	343	M	1.99			
HS200205-VI03-124-003	CHINOOK	230	161	F	6.43			
HS200205-VI03-124-004	CHINOOK	215	124	M	3.64			
HS200205-VI03-124-005	CHINOOK	232	162	F	4.22			
HS200205-VI03-124-006	CHINOOK	258	208	M	4.17			
HS200205-VI03-124-007	CHINOOK	242	185	F	1.91			
HS200205-VI03-124-008	CHINOOK	197	104	F	2.5			
HS200205-VI03-124-009	CHINOOK	215	114	M	4.78	0.1	T093249	AD
HS200205-VI03-124-010	CHINOOK	305	330	F	4.28		T930198?	AD
HS200205-VI03-124-011	CHINOOK	229	147	M	4.31			
HS200205-VI03-124-012	CHINOOK	294	310	F	10.21			
HS200205-VI03-124-013	CHINOOK	242	176	M	4.51			
HS200205-VI03-124-014	CHINOOK	262	222	F	5.52	0.1	T184340	AD
HS200205-VI03-124-015	CHINOOK	303	361	F	1.11			
HS200205-VI03-124-016	CHINOOK	271	228	F	0.33			
HS200205-VI03-124-017	CHINOOK	214	118	M	4.77			
HS200205-VI03-124-018	CHINOOK	215	121	M	3.85			
HS200205-VI03-124-019	CHINOOK	336	455	M	14.28			
HS200205-VI03-124-020	CHINOOK	228	139	M	1.33			
HS200205-VI03-124-021	CHINOOK	267	238	F	5.08			
HS200205-VI03-124-022	CHINOOK	240	171	F	4.43			
HS200205-VI03-124-023	CHINOOK	262	231	F	0.53	0.1	T184556	AD
HS200205-VI03-124-024	CHINOOK	238	170	M	3.47	0.1	T184360	AD
HS200205-VI03-124-025	CHINOOK	231	156	F	2.18		T??1248	AD
HS200205-VI03-124-026	CHINOOK	269	233	F	2.23			
HS200205-VI03-124-027	CHINOOK	236	131	M	4.3			
HS200205-VI03-124-028	CHINOOK	238	150	M	3			
HS200205-VI03-124-029	CHINOOK	225	140	F	1.37			
HS200205-VI03-124-030	CHINOOK	226	144	M	1.33			
HS200205-VI03-124-031	CHINOOK	247	185					
HS200205-VI03-124-032	CHINOOK	267	243					
HS200205-VI03-124-033	CHINOOK	283	275					
HS200205-VI03-124-034	CHINOOK	208	119					

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-VI03-124-035	CHINOOK	242	193					
HS200205-VI03-124-036	CHINOOK	222	137					
HS200205-VI03-124-037	CHINOOK	222	131					
HS200205-VI03-124-038	CHINOOK	229	148					
HS200205-VI03-124-039	CHINOOK	251	207					
HS200205-VI03-124-040	CHINOOK	222	146					
HS200205-VI03-124-041	CHINOOK	227	145					
HS200205-VI03-124-042	CHINOOK	227	139					
HS200205-VI03-124-043	CHINOOK	265	221					
HS200205-VI03-124-044	CHINOOK	212	122					
HS200205-VI03-124-045	CHINOOK	245	194					
HS200205-VI03-124-046	CHINOOK	255	217					
HS200205-VI03-124-047	CHINOOK	245	213					
HS200205-VI03-124-048	CHINOOK	205	105					
HS200205-VI03-124-049	CHINOOK	248	195					
HS200205-VI03-124-050	CHINOOK	210	127					
HS200205-VI03-124-051	CHINOOK	244	192					
HS200205-VI03-124-052	CHINOOK	227	166					
HS200205-VI03-124-053	CHINOOK	239	166					
HS200205-VI03-124-054	CHINOOK	223	148					
HS200205-VI03-124-055	CHINOOK	211	120					
HS200205-VI03-124-056	CHINOOK	225	111					
HS200205-VI03-124-057	CHINOOK	197	92					
HS200205-VI03-124-058	CHINOOK	237	159					
HS200205-VI03-124-059	CHINOOK	217	120					
HS200205-VI03-124-060	CHINOOK	199	94					
HS200205-VI03-124-061	CHINOOK	206	124					
HS200205-VI03-124-062	CHINOOK	203	104					
HS200205-VI03-124-063	CHINOOK	203	101					
HS200205-VI03-124-064	CHINOOK	198	88					
HS200205-VI03-124-065	CHINOOK	283	308					
HS200205-VI03-124-066	CHINOOK	259	183					
HS200205-VI03-124-067	CHINOOK	242	149					
HS200205-VI03-124-068	CHINOOK	215	133					
HS200205-VI03-124-069	CHINOOK	219	141					
HS200205-VI03-124-070	CHINOOK	200	104					
HS200205-VI03-124-071	CHINOOK	204	115					
HS200205-VI03-124-072	CHINOOK	332	496					AD
HS200205-VI03-124-073	CHINOOK	401	754					AD

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-VI03-124-074	CHINOOK	289	353					
HS200205-VI05-124-001	CHINOOK	226	142	M	0.85			
HS200205-VI05-124-002	CHINOOK	259	208	F	6.74			
HS200205-VI05-124-003	CHINOOK	232	155	M	6.16			
HS200205-VI06-124-001	CHINOOK	230	146	M	0.57			
HS200205-VI06-124-002	CHINOOK	231	160	M	3.7			
HS200205-ISEA06-112-001	CHUM	227	111	F	1.51			
HS200205-JF01-112-001	CHUM	250	155	M	1.43			
HS200205-JF01-112-002	CHUM	250	156	F	1.88			
HS200205-JF01-112-003	CHUM	226	115	F	0.63			
HS200205-JF02-112-001	CHUM	239	140	M	1.21			
HS200205-VI03-112-001	CHUM	239	145					
HS200205-IVI02-115-001	COHO	345	436	F	1.28			
HS200205-IVI02-115-002	COHO	282	260	F	0.36			
HS200205-IVI02-115-003	COHO	286	276	M	0			
HS200205-IVI02-115-004	COHO	308	296	F	0.87			
HS200205-IVI02-115-005	COHO	303	322	F	4.11			
HS200205-IVI05-115-001	COHO	289	295					
HS200205-IVI05-115-002	COHO	290	299					
HS200205-IVI07-115-001	COHO	330	416					
HS200205-IVI07-115-002	COHO	328	388					
HS200205-IVI07-115-003	COHO	346	462					
HS200205-IVI08-115-001	COHO	278	237					
HS200205-JF01-115-001	COHO	320	329	F	2.04	1.1	T210177	AD
HS200205-JF01-115-002	COHO	296	295	M	1.07			AD
HS200205-JF01-115-003	COHO	320	356	M	1.19			AD
HS200205-JF01-115-004	COHO	411	704	M	22.5			
HS200205-JF01-115-005	COHO	332	385	M	1.39			AD
HS200205-JF01-115-006	COHO	334	395	M	1.87			
HS200205-JF01-115-007	COHO	346	420	F	1.58			AD
HS200205-JF01-115-008	COHO	293	261	F	1.31			
HS200205-JF01-115-009	COHO	322	386	F	1.45			
HS200205-JF01-115-010	COHO	312	348	F	1.07			
HS200205-JF01-115-011	COHO	305	305	M	1.63			AD
HS200205-JF01-115-012	COHO	261	199	F	0.73			
HS200205-JF01-115-013	COHO	341	400	M	0.72			AD
HS200205-JF01-115-014	COHO	408	766	F	0.44			
HS200205-JF01-115-015	COHO	296	272	F	0.47			
HS200205-JF01-115-016	COHO	313	316	F	1.15			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-JF01-115-017	COHO	307	317	F	0.49			
HS200205-JF01-115-018	COHO	308	308	F	0.46			
HS200205-JF01-115-019	COHO	311	333	F	0.93			
HS200205-JF01-115-020	COHO	348	407	M	0.85			AD
HS200205-JF01-115-021	COHO	334	394	F	2.35			AD
HS200205-JF01-115-022	COHO	315	351	M	0.82			AD
HS200205-JF01-115-023	COHO	279	230	M	1.85			AD
HS200205-JF01-115-024	COHO	335	403	F	0.25			AD
HS200205-JF01-115-025	COHO	305	305	F	0.91			
HS200205-JF01-115-026	COHO	301	274	F	0			AD
HS200205-JF01-115-027	COHO	314	319	F	1.79			
HS200205-JF01-115-028	COHO	303	301	M	0			AD
HS200205-JF01-115-029	COHO	308	314	F	0.45			
HS200205-JF02-115-001	COHO	326	362	F	3.65		LOST	AD
HS200205-JF02-115-002	COHO	340	365	M	0.64	1.1	T210196	AD
HS200205-JF02-115-003	COHO	293	289	F	0.96	1.1	T631358	
HS200205-JF02-115-004	COHO	302	292	F	3.51	1.1	T210177	AD
HS200205-JF02-115-005	COHO	311	318	F	7.66	1.1	T631357	
HS200205-JF02-115-006	COHO	375	549	M	3	1.1	T630365	AD
HS200205-JF02-115-007	COHO	317	318	M	0.55	1.1	T210175	AD
HS200205-JF02-115-008	COHO	318	329	M	1.57	1.1	T210196	AD
HS200205-JF02-115-009	COHO	320	339	M	0.59			
HS200205-JF02-115-010	COHO	350	447	F	0.19			
HS200205-JF02-115-011	COHO	368	573	F	0.72			
HS200205-JF02-115-012	COHO	303	291	F	1.02			AD
HS200205-JF02-115-013	COHO	311	319	F	0.65			
HS200205-JF02-115-014	COHO	318	335	M	0.79			
HS200205-JF02-115-015	COHO	332	388	M	2.2			
HS200205-JF02-115-016	COHO	338	445	F	0			AD
HS200205-JF02-115-017	COHO	288	259	M	1.98			
HS200205-JF02-115-018	COHO	346	475	F	6.02			AD
HS200205-JF02-115-019	COHO	354	439	M	2.94			AD
HS200205-JF02-115-020	COHO	318	329	F	3.53			
HS200205-JF02-115-021	COHO	309	326	F	0.63			
HS200205-JF02-115-022	COHO	352	497	F	5.96			AD
HS200205-JF02-115-023	COHO	303	313	M	3.5			AD
HS200205-JF02-115-024	COHO	350	492	M	10.28			AD
HS200205-JF02-115-025	COHO	286	240	F	0.88			
HS200205-JF02-115-026	COHO	331	360	M	2			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-JF02-115-027	COHO	315	322	M	1.2			
HS200205-JF02-115-028	COHO	342	456	M	7.45			
HS200205-JF02-115-029	COHO	350	464	F	2.8			AD
HS200205-JF02-115-030	COHO	350	443	M	2.06			
HS200205-JF02-115-031	COHO	355	464					
HS200205-JF02-115-032	COHO	337	416					
HS200205-JF02-115-033	COHO	334	413					
HS200205-JF02-115-034	COHO	336	434					
HS200205-JF02-115-035	COHO	344	458					
HS200205-JF02-115-036	COHO	327	371					
HS200205-JF02-115-037	COHO	353	458					
HS200205-JF02-115-038	COHO	332	392					
HS200205-JF02-115-039	COHO	352	469					
HS200205-JF02-115-040	COHO	348	485					
HS200205-JF02-115-041	COHO	330	370					
HS200205-JF02-115-042	COHO	313	295					
HS200205-JF02-115-043	COHO	310	306					
HS200205-JF02-115-044	COHO	321	361					
HS200205-JF02-115-045	COHO	337	395					
HS200205-JF02-115-046	COHO	330	375					
HS200205-JF02-115-047	COHO	307	319					
HS200205-JF02-115-048	COHO	295	297					
HS200205-JF02-115-049	COHO	332	386					
HS200205-JF02-115-050	COHO	314	310					
HS200205-JF02-115-051	COHO	304	297					
HS200205-JF02-115-052	COHO	294	267					
HS200205-JF02-115-053	COHO	324	373					
HS200205-JF02-115-054	COHO	306	314					
HS200205-JF02-115-055	COHO	270	216					
HS200205-JF02-115-056	COHO	297	277					
HS200205-JF02-115-057	COHO	291	252					
HS200205-JF02-115-058	COHO	299	278					
HS200205-JF02-115-059	COHO	304	308					
HS200205-JF02-115-060	COHO	305	330					
HS200205-JF02-115-061	COHO	310	316					
HS200205-JF02-115-062	COHO	294	262					
HS200205-JF02-115-063	COHO	304	280					
HS200205-JF02-115-064	COHO	276	226					
HS200205-JF02-115-065	COHO	237	144					

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-JF02-115-066	COHO	301	299					
HS200205-JF02-115-067	COHO	322	391					
HS200205-JS03-115-001	COHO	278	240	F	9.81			AD
HS200205-JS05-115-001	COHO	314	352	F	14.8			
HS200205-JS05-115-002	COHO	323	375	F	10.79			AD
HS200205-VI01-115-001	COHO	324	365	M	16.15			
HS200205-VI01-115-002	COHO	307	294	F	1.07			
HS200205-VI01-115-003	COHO	293	264	M	7.58			
HS200205-VI01-115-004	COHO	326	342	M	1			
HS200205-VI01-115-005	COHO	322	356	M	0.5			AD
HS200205-VI01-115-006	COHO	332	465	F	43.04			AD
HS200205-VI01-115-007	COHO	332	352	M	1.14			
HS200205-VI01-115-008	COHO	319	387	F	5.58			AD
HS200205-VI01-115-009	COHO	311	331	M	12.68			AD
HS200205-VI01-115-010	COHO	331	422	F	19.17			AD
HS200205-VI01-115-011	COHO	340	428	F	3.4			AD
HS200205-VI01-115-012	COHO	324	364	F	1.68			AD
HS200205-VI01-115-013	COHO	382	615	F	1.68			
HS200205-VI01-115-014	COHO	330	398	M	11.93			
HS200205-VI01-115-015	COHO	385	582	M	2.45			AD
HS200205-VI01-115-016	COHO	338	404	F	2.54			AD
HS200205-VI01-115-017	COHO	311	320	F	1.45			
HS200205-VI01-115-018	COHO	282	261	F	3.62			
HS200205-VI01-115-019	COHO	316	337	M	1.41			
HS200205-VI01-115-020	COHO	340	399	M	10.61			
HS200205-VI02-115-001	COHO	289		M	8.28	1.1	T630296	AD
HS200205-VI02-115-002	COHO	318	332	F	10.94			AD
HS200205-VI02-115-003	COHO	348	476	F	2.06			AD
HS200205-VI02-115-004	COHO	325	376	F	10.94			AD
HS200205-VI02-115-005	COHO	340	461	F	11.07			
HS200205-VI02-115-006	COHO	323	333	M	4.59			AD
HS200205-VI02-115-007	COHO	316	352	F	1.85			AD
HS200205-VI02-115-008	COHO	280	236	M	2.32			AD
HS200205-VI02-115-009	COHO	264	185	M	1.04			
HS200205-VI02-115-010	COHO	298	287	F	3.37			AD
HS200205-VI02-115-011	COHO	330	351	F	4.53			
HS200205-VI02-115-012	COHO	258	196	M	3.15			
HS200205-VI02-115-013	COHO	291	258	F	0.93			AD
HS200205-VI02-115-014	COHO	286	242	M	0.48			

Table 2. Biological data collected for each salmon caught on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Fish Number	Species	Fork Length	Whole Body Weight (g wet)	Sex	Stomach Content Weight (g wet)	**CWT age**	CWT	Fin Clip
HS200205-VI02-115-015	COHO	312	324	M	6.14			
HS200205-VI02-115-016	COHO	318	372	M	16.22			AD
HS200205-JS01-108-001	PINK	274	210					
HS200205-VI03-118-001	SOCKEYE	225	132					
HS200205-VI03-118-002	SOCKEYE	222	115					

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205JF02	PORT SAN JUAN	JF	27-Feb-02	18:36	48.524	124.547	120					1.83	1.21
HS200205VI01	CARMANAH	VI	27-Feb-02	21:03	48.597	124.873	60	7.7	30.01	15.6	27.9	1.45	1.61
HS200205VI02	PACHENA	VI	27-Feb-02	23:14	48.641	125.130	73	7.88	29.57	13.3	24	1.29	1.62
HS200205EP12	ESTEVAN PT	VI	28-Feb-02	16:43	48.489	128.210	2566	7.72	32.34	8.1	11.4	1.06	0.33
HS200205EP11	ESTEVAN PT	VI	28-Feb-02	19:53	48.621	127.949	2594	7.8	32.35	8	11.4	1.06	0.35
HS200205EP10	ESTEVAN PT	VI	28-Feb-02	22:50	48.754	127.687	2544	7.85	32.33	8.1	11.4	1.1	0.55
HS200205EP09	ESTEVAN PT	VI	01-Mar-02	02:30	48.897	127.456	2212	8.08	31.98	8.6	15.9	1.07	1.5
HS200205EP08	ESTEVAN PT	VI	01-Mar-02	15:48	49.032	127.167	1730	7.79	30.74	11.4	21	1.17	3.67
HS200205EP07	ESTEVAN PT	VI	01-Mar-02	18:10	49.132	126.983	490	7.75	30.53	15.9	29.2	1.49	1.35
HS200205EP06	ESTEVAN PT	VI	01-Mar-02	20:13	49.162	126.919	197	7.9	30.7	15.2	28.4	1.48	1.26
HS200205EP05	ESTEVAN PT	VI	01-Mar-02	22:20	49.208	126.852	147	7.9	30.59				
HS200205EP04	ESTEVAN PT	VI	02-Mar-02	00:01	49.235	126.746	122	7.85	30.26	16.6	31.4	1.54	1.97
HS200205EP01	ESTEVAN PT	VI	02-Mar-02	03:58	49.321	126.505	47	7.86	29.91	13.6	26.9	1.4	2.03
HS200205EP02	ESTEVAN PT	VI	02-Mar-02	04:39	49.317	126.603	81	7.7	29.88	14.9	29.7	1.34	2.18
HS200205EP03	ESTEVAN PT	VI	02-Mar-02	05:25	49.280	126.678	100	7.72	29.99	15.3	30.3	1.37	1.28

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205IVI01	NOOTKA SD	IVI	02-Mar-02	15:56	49.603	126.522	264	8.04	29.1	15.4	29.8	1.51	0.63
HS200205IVI02	NOOTKA SD	IVI	02-Mar-02	17:47	49.651	126.611	110	6.15	25.08	15.8	32	1.59	0.8
HS200205IVI03	NOOTKA SD	IVI	02-Mar-02	19:18	49.718	126.481	194	6.84	20.56	17.4	32.1	1.72	0.5
HS200205IVI05	ESPERANZA INLET	IVI	03-Mar-02	00:28	49.848	126.960	161	8.14	29.01	14.7	28.4	1.44	0.95
HS200205VI03	ESPERANZA	VI	03-Mar-02	03:41	49.747	127.157	76	8.01	30.46	14.5	27.4	1.41	1.57
HS200205IVI07	QUATSINO SD	IVI	03-Mar-02	15:56	50.497	127.751	114	8.16	29.44	13.7	28	1.44	0.32
HS200205IVI08	QUATSINO SD	IVI	03-Mar-02	17:07	50.476	127.822	128	8.12	29.51	13.7	27.4	1.52	0.22
HS200205IVI09	QUATSINO SD	IVI	03-Mar-02	18:31	50.463	127.955	222	8.24	29.93	13.3	24.7	1.41	0.18
HS200205VI04	OFF QUATSINO SD	VI	03-Mar-02	20:13	50.388	128.046	132	7.71	30.81	11.8	21.4	1.29	0.63
HS200205VI05	VAN IS N - TOPKNOT	VI	03-Mar-02	22:37	50.487	128.291	87	7.89	31.43	10.5	18.5	1.34	0.46
HS200205VI06	VAN IS N - BUSHY RK	VI	04-Mar-02	00:23	50.608	128.377	74	7.86	31.21	11.1	21	1.21	0.81
HS200205VI07	VAN IS N - C RUSSEL	VI	04-Mar-02	02:27	50.731	128.353	85	7.77	31.77	13.1	21.6	1.38	0.33
HS200205VI08	VAN IS N - COX IS	VI	04-Mar-02	03:49	50.713	128.623	120	7.74	31.73	12.4	20.6	1.3	0.32
HS200205T07	TRIANGLE IS	VI	05-Mar-02	16:19	50.821	129.219	90	7.44	31.64	11.5	20.2	1.26	0.68
HS200205T08	TRIANGLE IS	VI	05-Mar-02	18:40	50.702	129.483	1955	7.53	31.65	10.9	19.1	1.2	0.61

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205T09	TRIANGLE IS	VI	05-Mar-02	20:51	50.621	129.654	2024	7.48	31.66	10	18.3	1.14	0.87
HS200205T10	TRIANGLE IS	VI	05-Mar-02	23:14	50.542	129.822	2189	7.59	31.78	8.5	16.4	1.06	1.25
HS200205T11	TRIANGLE IS	VI	06-Mar-02	01:18	50.462	129.994	2331	7.16	31.5	8.3	15	1.06	1.47
HS200205T12	TRIANGLE IS	VI	06-Mar-02	03:44	50.382	130.162	2030			7.6	12.3	1.04	1.38
HS200205T06	TRIANGLE IS	QCSD	06-Mar-02	16:26	50.933	129.001	59	7.15	31.48	12	22.4	1.27	0.83
HS200205T05	TRIANGLE IS	QCSD	06-Mar-02	18:23	51.000	128.869	60	7.19	31.32	14.2	26.2	1.44	0.78
HS200205T04	TRIANGLE IS	QCSD	06-Mar-02	20:22	51.076	128.735	60	7.34	31.02	13.2	24.1	1.36	0.66
HS200205T03	TRIANGLE IS	QCSD	06-Mar-02	21:59	51.144	128.602	139	6.99	31.21	14.9	27.9	1.48	0.57
HS200205T02	TRIANGLE IS	QCSD	06-Mar-02	23:47	51.210	128.467	190	7.22	31.32	14	25.9	1.39	0.82
HS200205T01	TRIANGLE IS	QCSD	07-Mar-02	01:30	51.276	128.333	75	7.32	30.93	13.4	23.4	1.35	0.51
HS200205QCS01	CALVERT IS	QCSD	07-Mar-02	04:05	51.448	128.238	120	6.61	31.2	15.4	29	1.51	0.59
HS200205H01	HECATE ST	HS	07-Mar-02	17:23	52.206	129.176	160	6.82	31.81	11.8	20.5	1.26	0.55
HS200205H02	HECATE ST	HS	07-Mar-02	19:35	52.257	129.442	184	6.49	31.47	14.8	26.2	1.47	0.47
HS200205H03	HECATE ST	HS	07-Mar-02	22:18	52.317	129.693	210	6.72	31.73	13.2	23	1.36	0.33
HS200205H04	HECATE ST	HS	08-Mar-02	00:22	52.372	129.961	202	6.83	31.75	12.7	22.3	1.32	0.65

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205H05	HECATE ST	HS	08-Mar-02	02:28	52.428	130.219	324	6.98	31.51	10.1	18.7	1.12	0.79
HS200205HS02	LASKEEK BK	HS	08-Mar-02	23:49	52.751	130.985	37	6.49	32.06	12.2	19.9	1.32	1.82
HS200205HS03	LASKEEK BK	HS	09-Mar-02	01:51	52.894	130.846	35	6.52	31.98	13.1	22.4	1.38	1.18
HS200205HS04	LASKEEK BK	HS	09-Mar-02	03:39	53.047	130.785	103	6.76	31.97	14	23.5	1.43	0.59
HS200205DE01	McINTYRE BAY	DE	09-Mar-02	16:01	54.183	131.739	43	4.82	31.82	18.6	33.8	1.65	0.74
HS200205DE02	McINTYRE BAY	DE	09-Mar-02	17:52	54.135	131.955	42	5.14	31.8	18.5	32.7	1.69	0.52
HS200205DE03	McINTYRE BAY	DE	09-Mar-02	19:32	54.138	132.194	43	5.05	31.45	18	32.8	1.7	0.45
HS200205DE04	DIXON E	DE	09-Mar-02	21:09	54.129	132.436	53	5.93	32.03	18.4	32.7	1.71	0.23
HS200205ISEA01	CLARENCE ST	ISEA	10-Mar-02	16:05	55.321	131.942	401	4.9	30.74	18.7	35.7	1.68	0.49
HS200205ISEA02	CLARENCE ST	ISEA	10-Mar-02	18:25	55.476	132.032	474	4.32	30.45	18.3	36.2	1.68	0.67
HS200205ISEA03	CLARENCE ST	ISEA	10-Mar-02	20:26	55.545	132.121	317	4.48	30.47	18	35.2	1.69	0.6
HS200205ISEA04	CLARENCE ST	ISEA	10-Mar-02	22:42	55.652	132.288	618	4.54	30.59	18.8	36.9	1.74	0.51
HS200205ISEA05	CLARENCE ST	ISEA	11-Mar-02	00:45	55.779	132.405	579	4.73	30.65	19.3	37	1.75	0.43
HS200205ISEA07	CLARENCE ST	ISEA	11-Mar-02	03:42	55.968	132.658	407	4.66	30.59	17.8	35.1	1.76	0.48
HS200205ISEA08	SUMNER ST	ISEA	11-Mar-02	16:05	56.364	133.162	54	5.38	30.94	20.6		1.92	0.21

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205ISEA09	SUMNER ST	ISEA	11-Mar-02	18:03	56.359	133.436	326	5.59	31.51	21.4	38.9	1.92	0.15
HS200205ISEA10	SUMNER ST	ISEA	11-Mar-02	20:19	56.413	133.691	275	5.09	31.3	21.5	39.6	1.94	0.22
HS200205ISEA11	SUMNER ST	ISEA	11-Mar-02	22:32	56.270	133.687	110	5.53	31.72	20.5	36.8	1.86	0.29
HS200205ISEA12	SUMNER ST	ISEA	12-Mar-02	00:28	56.091	133.716	110	5.41	31.7	20.3	36.4	1.84	0.26
HS200205ISEA14	SUMNER ST	ISEA	12-Mar-02	03:17	55.955	133.987	204	5.51	31.59	20.5	36.9	1.78	0.17
HS200205ISEA15	FREDERICK SD	ISEA	12-Mar-02	16:03	56.987	134.485	138	3.8	31.39	27.7	52.6	2.32	0.34
HS200205ISEA16	FREDERICK SD	ISEA	12-Mar-02	18:00	57.121	134.298	141	3.68	31.34	27.8	53.1	2.33	0.4
HS200205ISEA17	FREDERICK SD	ISEA	12-Mar-02	19:39	57.208	134.108	76	3.72	31.3	27.8	54	2.25	0.34
HS200205ISEA18	CHATHAM ST	ISEA	13-Mar-02	02:26	56.387	134.468	723	5.26	31.79	19	33.3	1.73	0.38
HS200205ISEA19	CHATHAM ST	ISEA	13-Mar-02	04:29	56.307	134.391	455	5.32	31.7	19.9	35.1	1.82	0.32
HS200205B01	BARANOF IS	SEA	13-Mar-02	15:58	56.300	134.909	87	4.82	31.42	22.2	40.3	2.01	0.26
HS200205B02	BARANOF IS	SEA	13-Mar-02	17:22	56.253	135.025	148	4.93	31.81	22.6	40.6	1.96	0.36
HS200205B03	BARANOF IS	SEA	13-Mar-02	19:00	56.209	135.133	177	5.23	31.93	19.9	35.7	1.81	0.37
HS200205B04	BARANOF IS	SEA	13-Mar-02	20:39	56.162	135.245	294	5.72	32.18	15.4	25.6	1.44	0.55
HS200205B05	BARANOF IS	SEA	13-Mar-02	22:16	56.116	135.354	310	5.83	32.24	15.1	25	1.47	0.55

Table 3. Physical oceanographic data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Date UTC	Time UTC	Latitude (ºN)	Longitude (ºW)	Bottom Depth (m)	SST (ºC)	SSS (ppt)	NO3 umoles/L	Si umoles/	PO4 umoles/L	Chl A ug/L
HS200205B06	BARANOF IS	SEA	13-Mar-02	23:48	56.073	135.475	393	5.53	32.45	14	21.4	1.43	0.6
HS200205B07	BARANOF IS	SEA	14-Mar-02	01:15	56.027	135.577	840	5.33	32.5	14.2	20.3	1.38	0.69
HS200205B08	BARANOF IS	SEA	14-Mar-02	02:44	55.982	135.690	1233	5.39	32.44	13.8	20.4	1.47	0.74
HS200205B09	BARANOF IS	SEA	14-Mar-02	04:35	55.898	135.884	2588	5.42	32.43	13.8	20.9	1.4	0.78
HS200205B10	BARANOF IS	SEA	14-Mar-02	06:32	55.820	136.088	2647	5.39	32.44	13.6	19.3	1.34	0.8
HS200205IBC01	WRIGHT SD	IBC	15-Mar-02	17:18	53.315	129.164	499	6.21	30.91	18.2	33.5	1.68	0.8
HS200205CPE01	PINE IS	QCST	17-Mar-02	08:23	50.998	127.833	153			19.7	36.3	1.86	
HS200205JS01	JOHNSTONE ST	JS	17-Mar-02	15:53	50.528	126.667	465	7.21	30.61	23.7	46.2	2.19	0.32
HS200205JS02	JOHNSTONE ST	JS	17-Mar-02	17:57	50.508	126.508	392	7.2	30.54	23.9	47.3	2.2	0.34
HS200205JS03	JOHNSTONE ST	JS	17-Mar-02	20:01	50.500	126.275	218	7.29	30.51	24.4	47.6	2.21	0.24
HS200205JS04	JOHNSTONE ST	JS	17-Mar-02	21:50	50.476	126.074	231	7.39	30.52	24.9	48.3	2.21	0.19
HS200205JS05	JOHNSTONE ST	JS	17-Mar-02	23:33	50.391	125.881	207	7.44	30.22	25.6	50.1	2.3	0.2

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205IBC01	WRIGHT SD	IBC	53.315	129.168	15-Mar-02	09:36	150	00:11		61	2.97	2.47	11.38	1.98	18.8
HS200205ISEA10	SUMNER ST	ISEA	56.413	133.692	11-Mar-02	12:39	150	00:08		60	0	0.5	3.52	0.67	4.69
HS200205EP12	ESTEVAN PT	VI	48.490	128.228	28-Feb-02	09:28	150	00:10		66	0.76	0.15	0.91	2.57	4.39
HS200205H01	HECATE ST	HS	52.205	129.175	07-Mar-02	09:36	150	00:10		43	0	3.02	2.55	4.18	9.75
HS200205H02	HECATE ST	HS	52.262	129.440	07-Mar-02	11:54	150	00:11		39	0	1.01	3.3	2.03	6.34
HS200205H03	HECATE ST	HS	52.318	129.693	07-Mar-02	14:34	150	00:09		16	0	1.87	4.36	2.49	8.71
HS200205H04	HECATE ST	HS	52.377	129.962	07-Mar-02	16:38	150	00:09		39	0	0.77	2.82	3.08	6.67
HS200205H05	HECATE ST	HS	52.433	130.220	07-Mar-02	18:54	150	00:15		102	0	2.45	1.96	1.57	5.97
HS200205HS02	LASKEEK BK	HS	52.750	130.983	08-Mar-02	16:02	30	00:02		7	6.89	0	11.03	16.54	34.45
HS200205EP10	ESTEVAN PT	VI	48.755	127.690	28-Feb-02	15:08	150	00:09		68	0	1.31	1.9	2.19	5.4
HS200205HS04	LASKEEK BK	HS	53.047	130.786	08-Mar-02	19:51	95	00:05		23	0.44	0.44	0.88	3.98	5.74

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205EP09	ESTEVAN PT	VI	48.898	127.447	28-Feb-02	18:04	150	00:14		83	0	2.4	1.32	1.68	5.4
HS200205ISEA01	CLARENCE ST	ISEA	55.319	131.944	10-Mar-02	08:23	150	00:10		59	0	3.05	3.56	1.19	7.79
HS200205ISEA02	CLARENCE ST	ISEA	55.481	132.036	10-Mar-02	10:57	150	00:11		45	0	7.83	13.87	0.89	22.6
HS200205ISEA03	CLARENCE ST	ISEA	55.544	132.119	10-Mar-02	12:47	150	00:08		44	0	1.14	13.85	3.18	18.16
HS200205ISEA04	CLARENCE ST	ISEA	55.650	132.284	10-Mar-02	14:59	150	00:09		37	0	10	22.16	5.4	37.56
HS200205ISEA05	CLARENCE ST	ISEA	55.780	132.407	10-Mar-02	17:04	150	00:08		54	0.37	10.6	22.88	3.35	37.2
HS200205ISEA07	CLARENCE ST	ISEA	55.967	132.657	10-Mar-02	20:04	150	00:08		39	0	20.42	25.78	3.83	50.02
HS200205ISEA08	SUMNER ST	ISEA	56.366	133.159	11-Mar-02	08:17	60	00:04		61	0	0.99	4.3	2.15	7.44
HS200205B01	BARANOF IS	SEA	56.301	134.911	13-Mar-02	08:10	30	00:03		12	0	0	0	3.24	3.24
HS200205HS03	LASKEEK BK	HS	52.895	130.846	08-Mar-02	18:00	25	00:03		18	3.99	1.14	4.56	8.54	18.22
HS200205DE02	McINTYRE BAY	DE	54.135	131.957	09-Mar-02	10:03	30	00:06		57	0	0.18	1.05	1.4	2.63

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205B02	BARANOF IS	SEA	56.254	135.023	13-Mar-02	09:36	135	00:10		63	0	0.79	0.16	0.32	1.27
HS200205B03	BARANOF IS	SEA	56.213	135.131	13-Mar-02	11:17	150	00:11		109	0	0.92	1.93	1.47	4.31
HS200205B04	BARANOF IS	SEA	56.164	135.243	13-Mar-02	12:58	150	00:11		85	0	1.53	2.82	2.82	7.16
HS200205B05	BARANOF IS	SEA	56.129	135.354	13-Mar-02	14:35	150	00:11		65	0	0.46	2	1.54	4
HS200205B06	BARANOF IS	SEA	56.072	135.478	13-Mar-02	16:06	150	00:12		71	20.55	1.83	1.41	1.55	25.34
HS200205B07	BARANOF IS	SEA	56.027	135.578	13-Mar-02	17:32	150	00:14		101	5.66	2.09	1.79	1.39	10.93
HS200205B08	BARANOF IS	SEA	55.981	135.692	13-Mar-02	19:03	150	00:12		73	0.96	4.37	2.6	2.73	10.66
HS200205B09	BARANOF IS	SEA	55.897	135.889	13-Mar-02	20:54	150	00:12		69	5.36	6.38	1.59	2.32	15.65
HS200205EP11	ESTEVAN PT	VI	48.623	127.951	28-Feb-02	12:30	150	00:11		58	0	1.54	0.68	1.2	3.42
HS200205DE01	McINTYRE BAY	DE	54.183	131.741	09-Mar-02	08:11	32	00:03		22	0.46	0	1.84	4.14	6.44
HS200205ISEA11	SUMNER ST	ISEA	56.271	133.688	11-Mar-02	14:45	130	00:06		30	0	0.99	1.98	2.97	5.94

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205EP01	ESTEVAN PT	VI	49.321	126.508	01-Mar-02	20:09	30	00:04		14	0	5.65	4.95	16.26	26.86
HS200205EP02	ESTEVAN PT	VI	49.318	126.603	01-Mar-02	20:47	70	00:08		26	0	7.55	3.02	20.77	31.34
HS200205EP03	ESTEVAN PT	VI	49.279	126.677	01-Mar-02	21:35	100	00:08		48	0	6.41	2.48	9.1	17.99
HS200205EP04	ESTEVAN PT	VI	49.238	126.748	01-Mar-02	16:16	110	00:06		41	0	0.98	2.71	5.91	9.6
HS200205EP05	ESTEVAN PT	VI	49.208	126.854	01-Mar-02	14:28	130	00:09		70	0	0.86	2.15	3.45	6.46
HS200205EP06	ESTEVAN PT	VI	49.165	126.927	01-Mar-02	12:45	150	00:08		69	0	0.43	2.32	4.78	7.54
HS200205EP07	ESTEVAN PT	VI	49.132	126.988	01-Mar-02	10:30	150	00:10		72	0.41	1.24	2.35	4.97	8.97
HS200205EP08	ESTEVAN PT	VI	49.012	127.174	01-Mar-02	08:04	150	00:10		92	0	1.3	2.27	3.79	7.36
HS200205B10	BARANOF IS	SEA	55.822	136.077	13-Mar-02	22:03	150	00:12		67	3.29	7.63	3.74	3.29	17.96
HS200205T11	TRIANGLE IS	VI	50.462	129.993	05-Mar-02	17:46	150	00:12		30	0.34	4.72	9.1	6.4	20.55
HS200205ISEA09	SUMNER ST	ISEA	56.359	133.432	11-Mar-02	10:23	150	00:12		115	0	1.57	4.26	1.39	7.22

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205T02	TRIANGLE IS	QCSD	51.209	128.461	06-Mar-02		150			104	0	0.19	0.29	1.06	1.54
HS200205T03	TRIANGLE IS	QCSD	51.145	128.603	06-Mar-02	14:23	127			37	0	0.53	0.27	2.94	3.74
HS200205T04	TRIANGLE IS	QCSD	51.070	128.735	06-Mar-02	12:34	48	00:05		14	0	2.18	5.8	2.9	10.88
HS200205T05	TRIANGLE IS	QCSD	51.000	128.868	06-Mar-02	10:35	50	00:05		29	0	0.7	3.84	1.74	6.28
HS200205T06	TRIANGLE IS	QCSD	50.932	129.001	06-Mar-02	08:38	49	00:07		20	0	0.5	3.01	3.51	7.03
HS200205T07	TRIANGLE IS	VI	50.818	129.235	05-Mar-02	08:35	90	00:07		158	0	0.13	0.32	1.07	1.52
HS200205T08	TRIANGLE IS	VI	50.702	129.483	05-Mar-02	11:11	150	00:11		64	0	0.47	1.09	1.88	3.44
HS200205QCS01	CALVERT IS	QCSD	51.448	128.238	06-Mar-02	20:20	110	00:15		29	0	0.68	3.41	4.43	8.52
HS200205T10	TRIANGLE IS	VI	50.547	129.828	05-Mar-02	15:54	150			66	0.15	1.82	1.06	0.76	3.79
HS200205JS05	JOHNSTONE ST	JS	50.390	125.874	17-Mar-02	15:49	135	00:07		79	0	0.63	0.63	2.27	3.54
HS200205T12	TRIANGLE IS	VI	50.381	130.158	05-Mar-02	19:20	150			58	1.38	3.28	0	2.42	7.08

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205VI01	CARMANAH	VI	48.596	124.874	27-Feb-02	13:20	50	00:05		17	0	2.41	3.62	21.11	27.14
HS200205VI02	PACHENA	VI	48.639	125.133	27-Feb-02	15:27	70	00:05		21	0	2.41	8.19	31.32	41.92
HS200205VI03	ESPERANZA	VI	49.749	127.161	02-Mar-02	19:51	65	00:05		28	0	5.45	2.18	7.63	15.25
HS200205VI04	OFF QUATSINO SD	VI	50.389	128.044	03-Mar-02	12:24	130	00:07		33	0	0	0.31	2.44	2.75
HS200205VI05	VAN IS N - TOPKNOT	VI	50.486	128.289	03-Mar-02	14:45	75	00:06		17	0	0.58	5.24	16.32	22.14
HS200205VI06	VAN IS N - BUSHY RK	VI	50.608	128.379	03-Mar-02	16:32	65	00:05		21	0	3.82	0	0.96	4.78
HS200205VI07	VAN IS N - C RUSSEL	VI	50.729	128.489	03-Mar-02	18:34	75	00:07		24	0	0	0.42	5.47	5.89
HS200205T09	TRIANGLE IS	VI	50.622	129.662	05-Mar-02	13:25	150	00:15		88	0	0.34	0.34	0.68	1.36
HS200205IVI07	QUATSINO SD	IVI	50.497	127.749	03-Mar-02	08:08	105	00:05		62	0	3.68	0.96	1.12	5.76
HS200205ISEA12	SUMNER ST	ISEA	56.092	133.715	11-Mar-02	16:42	105	00:06		30	0	1.33	1.99	1.66	4.98
HS200205ISEA15	FREDERICK SD	ISEA	56.990	134.484	12-Mar-02	08:19	125	00:08		32	0	3.75	2.5	1.56	7.81

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205ISEA16	FREDERICK SD	ISEA	57.119	134.294	12-Mar-02	10:14	135	00:08		40	1.48	0.99	0	1.24	3.71
HS200205ISEA17	FREDERICK SD	ISEA	57.209	134.103	12-Mar-02	11:51	70	00:05		19	0	0.54	0	1.08	1.62
HS200205ISEA19	CHATHAM ST	ISEA	56.305	134.392	12-Mar-02	20:06	150	00:10		41	0	3.69	1.97	3.2	8.86
HS200205IVI01	NOOTKA SD	IVI	49.603	126.521	02-Mar-02	08:22	140	00:09		38	0	18.76	23.71	20.58	63.05
HS200205IVI02	NOOTKA SD	IVI	49.652	126.611	02-Mar-02	09:57	140	00:08		35	0	14.9	18.91	30.37	64.18
HS200205IVI03	NOOTKA SD	IVI	49.718	126.480	02-Mar-02	11:31	150	00:07		39	0	4.92	4.14	8.02	17.08
HS200205T01	TRIANGLE IS	QCSD	51.275	128.332	06-Mar-02	17:40	65	00:08		39	0	0	1.78	5.1	6.88
HS200205IVI05	ESPERANZA INLET	IVI	49.848	126.960	02-Mar-02	16:39	150	00:10		45	0	10.48	21.85	11.15	43.49
HS200205VI08	VAN IS N - COX IS	VI	50.711	128.625	03-Mar-02	20:01	110	00:05		27	0	0	0.36	4.73	5.1
HS200205IVI08	QUATSINO SD	IVI	50.476	127.823	03-Mar-02	09:17	120	00:07		32	0	0.93	2.18	2.18	5.29
HS200205IVI09	QUATSINO SD	IVI	50.463	127.956	03-Mar-02	10:45	150	00:06		33	0	0.6	0.6	2.41	3.62

Table 4. Zooplankton data from bongo tows collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

Station ID	Station Name	Region	Latitude (ºN)	Longitude (ºW)	Date	Time	Target Depth (m)	Tow Duration	Wire Angle (º)	Volume Seived (cu m)	Plankton Weights by Size Faction (g dry / 1000 cu m)				
											8.0mm	1.7mm	1.0mm	0.25mm	Total
HS200205JF01	JORDAN RIVER	JF	48.429	124.220	27-Feb-02	08:24	80	00:05		28	0	2.53	9.02	9.02	20.56
HS200205JF02	PORT SAN JUAN	JF	48.520	124.550	27-Feb-02	10:50	100	00:07		30	0	4.02	12.06	9.71	25.79
HS200205JS01	JOHNSTONE ST	JS	50.513	126.581	17-Mar-02	08:11	150	00:09		41	0	2.71	2.95	5.17	10.83
HS200205JS02	JOHNSTONE ST	JS	50.500	126.542	17-Mar-02	10:15	150	00:09		39	0	5.68	3.1	11.37	20.15
HS200205JS03	JOHNSTONE ST	JS	50.499	126.274	17-Mar-02	12:17	150	00:08		33	0	5.51	3.67	2.45	11.62
HS200205JS04	JOHNSTONE ST	JS	50.482	126.078	17-Mar-02	14:06	150	00:07		32	0	1.25	1.57	4.7	7.52
HS200205IVI04	ESPERANZA INLET	IVI	49.858	126.878	02-Mar-02	15:08	150	00:08		75	0	7.78	19.18	6.71	33.67

Table 5. Coded Wire Tag (CWT) data collected on the CCGS W.E. RICKER survey to the Gulf of Alaska, 27/02/2002 - 17/03/2002.

CWT	Fish Number	Species	Recovery Date	Recovery Region	Recovery Fork Length (mm)	Release Area	Release Agency	Hatchery	Brood Year	Date of First Release	Date of Last Release	Age
T093249	HS200205-VI03-124-009	CHINOOK	02-Mar-02	VI	215	LOCR	ODFW	SOUTH SANTIAM H	2000	29-Oct-01	05-Nov-01	0.1
T184340	HS200205-VI03-124-014	CHINOOK	02-Mar-02	VI	262	WCVI	CDFO	H-CONUMA R	2000	12-May-01	22-May-01	0.1
T184340	HS200205-IVI04-124-005	CHINOOK	02-Mar-02	IVI	225	WCVI	CDFO	H-CONUMA R	2000	12-May-01	22-May-01	0.1
T184360	HS200205-VI03-124-024	CHINOOK	02-Mar-02	VI	238	WCVI	CDFO	NITINAT R H	2000	06-Jun-01	06-Jun-01	0.1
T184556	HS200205-VI03-124-023	CHINOOK	02-Mar-02	VI	262	WCVI	CDFO	H-NITINAT R	2000	18-May-01	18-May-01	0.1
T184562	HS200205-ISEA01-124-003	CHINOOK	10-Mar-02	ISEA	334	NASK	CDFO	H-TERRACE	1999	25-Apr-01	27-Apr-01	1.1
T184701	HS200205-EP01-124-012	CHINOOK	01-Mar-02	VI	250	WCVI	CDFO	H-CLAYOQUOT	2000	25-May-01	25-May-01	0.1
T210175	HS200205-JF02-115-007	COHO	27-Feb-02	JF	317	NOOK	LUMM	SKOOKUM CR H	1999	23-May-01	01-Jun-01	1.1
T210177	HS200205-JF02-115-004	COHO	27-Feb-02	JF	302	NOOK	LUMM	LUMMI SEA PONDS	1999	23-May-01	23-May-01	1.1
T210177	HS200205-JF01-115-001	COHO	27-Feb-02	JF	320	NOOK	LUMM	LUMMI SEA PONDS	1999	23-May-01	23-May-01	1.1
T210196	HS200205-JF02-115-008	COHO	27-Feb-02	JF	318	MPS	COOP	ELLIOTT BY TRIBAL NP	1999	10-Jun-01	10-Jun-01	1.1
T210196	HS200205-JF02-115-002	COHO	27-Feb-02	JF	340	MPS	COOP	ELLIOTT BY TRIBAL NP	1999	10-Jun-01	10-Jun-01	1.1
T630296	HS200205-VI02-115-001	COHO	27-Feb-02	VI	289	MPS	WDFW	VOIGHTS CR H	1999	15-Apr-01	30-Apr-01	1.1
T630365	HS200205-JF02-115-006	COHO	27-Feb-02	JF	375	LOCR	WDFW	COWLITZ SALMON H	1999	30-Apr-01	30-Apr-01	1.1
T631357	HS200205-JF02-115-005	COHO	27-Feb-02	JF	311	MPS	WDFW	SOOS CREEK H	1999	09-Apr-01	18-Apr-01	1.1
T631358	HS200205-JF02-115-003	COHO	27-Feb-02	JF	293	MPS	WDFW	SOOS CREEK H	1999	09-Apr-01	18-Apr-01	1.1

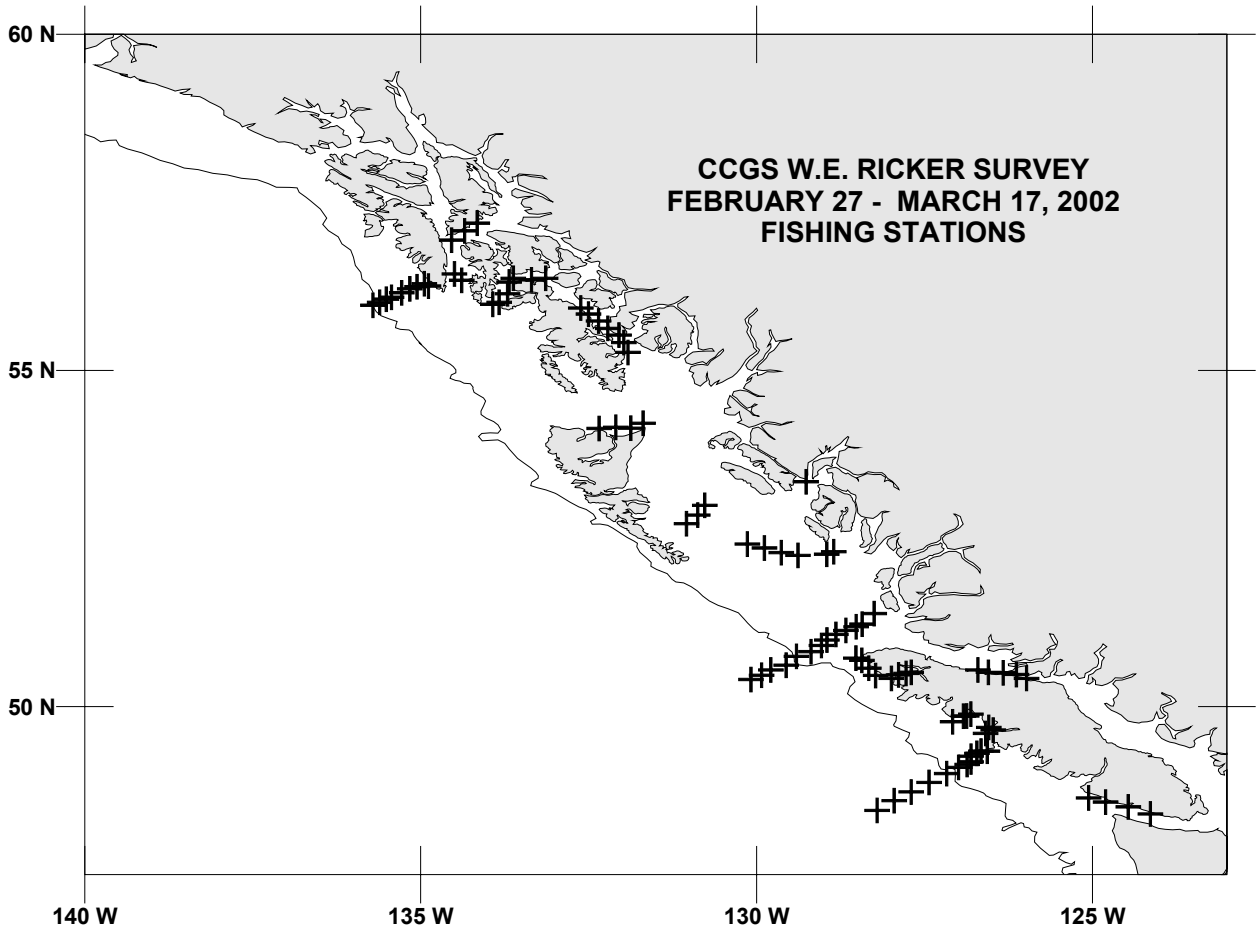

Figure 1. Fishing stations on the CCGS W.E. Ricker survey to the Gulf of Alaska from February 27 – March 17, 2002.

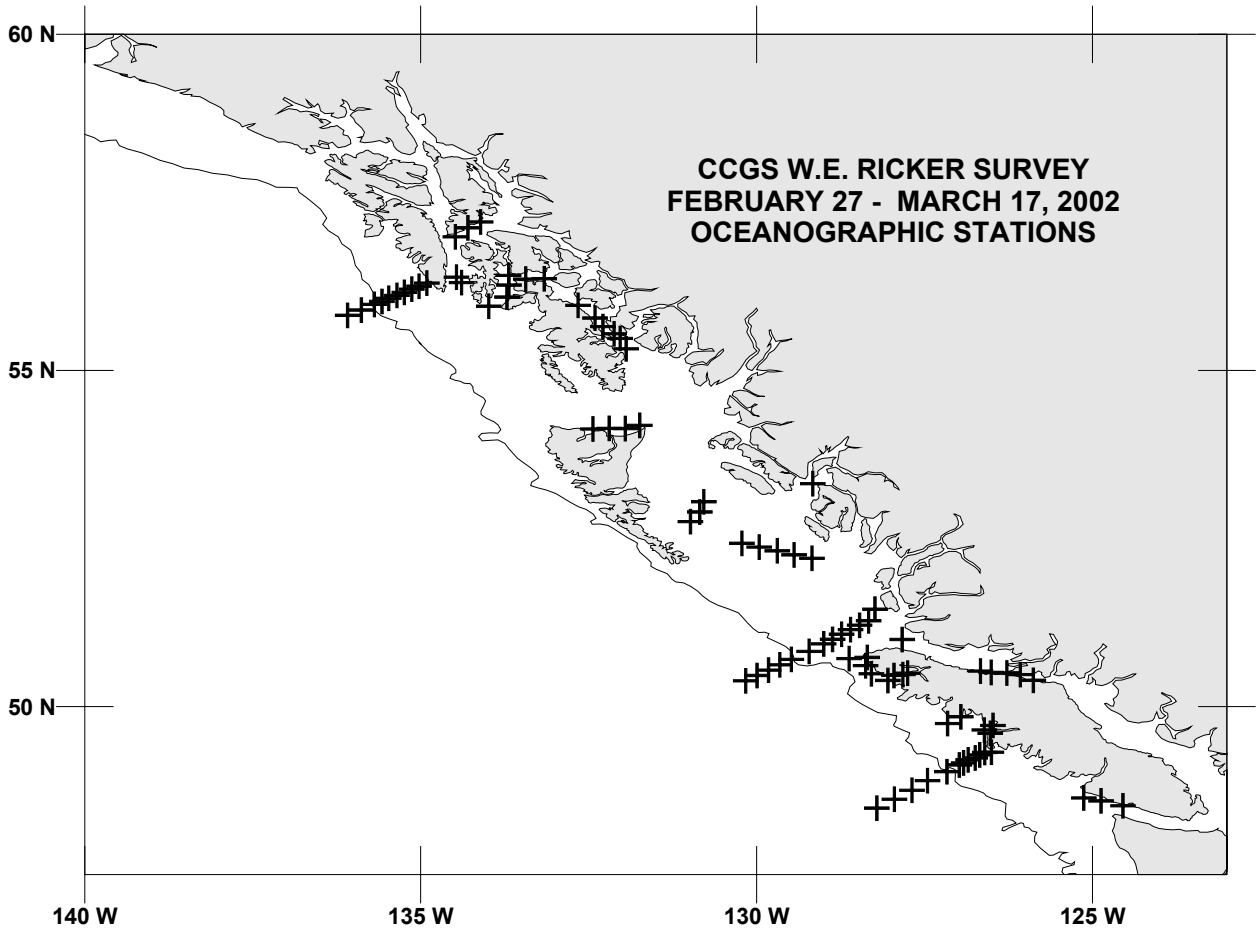

Figure 2. Oceanographic stations on the CCGS W.E. Ricker survey to the Gulf of Alaska from February 27 - March 17, 2002.

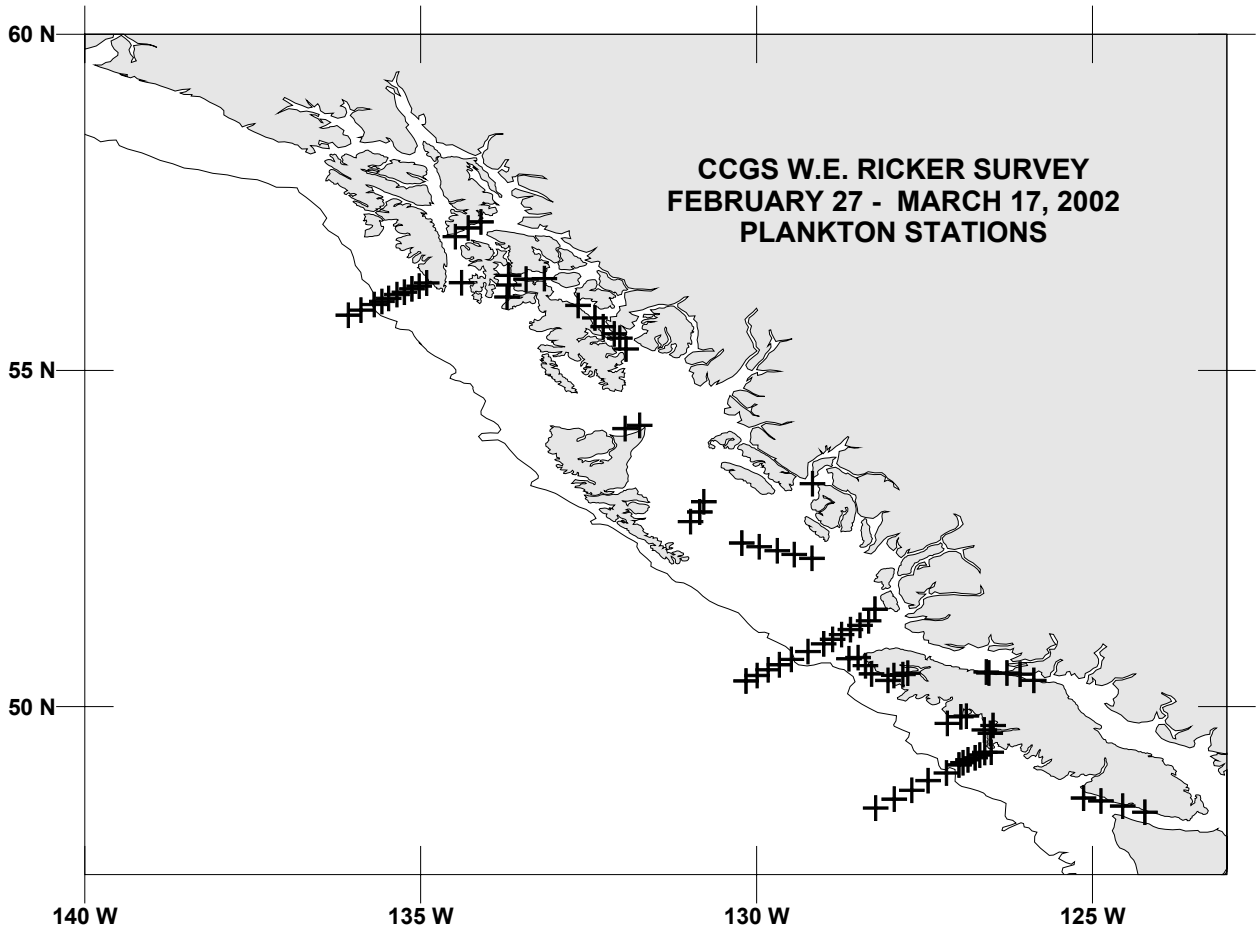

Figure 3. Plankton stations on the CCGS W.E. Ricker survey to the Gulf of Alaska from February 27 – March 17, 2002.

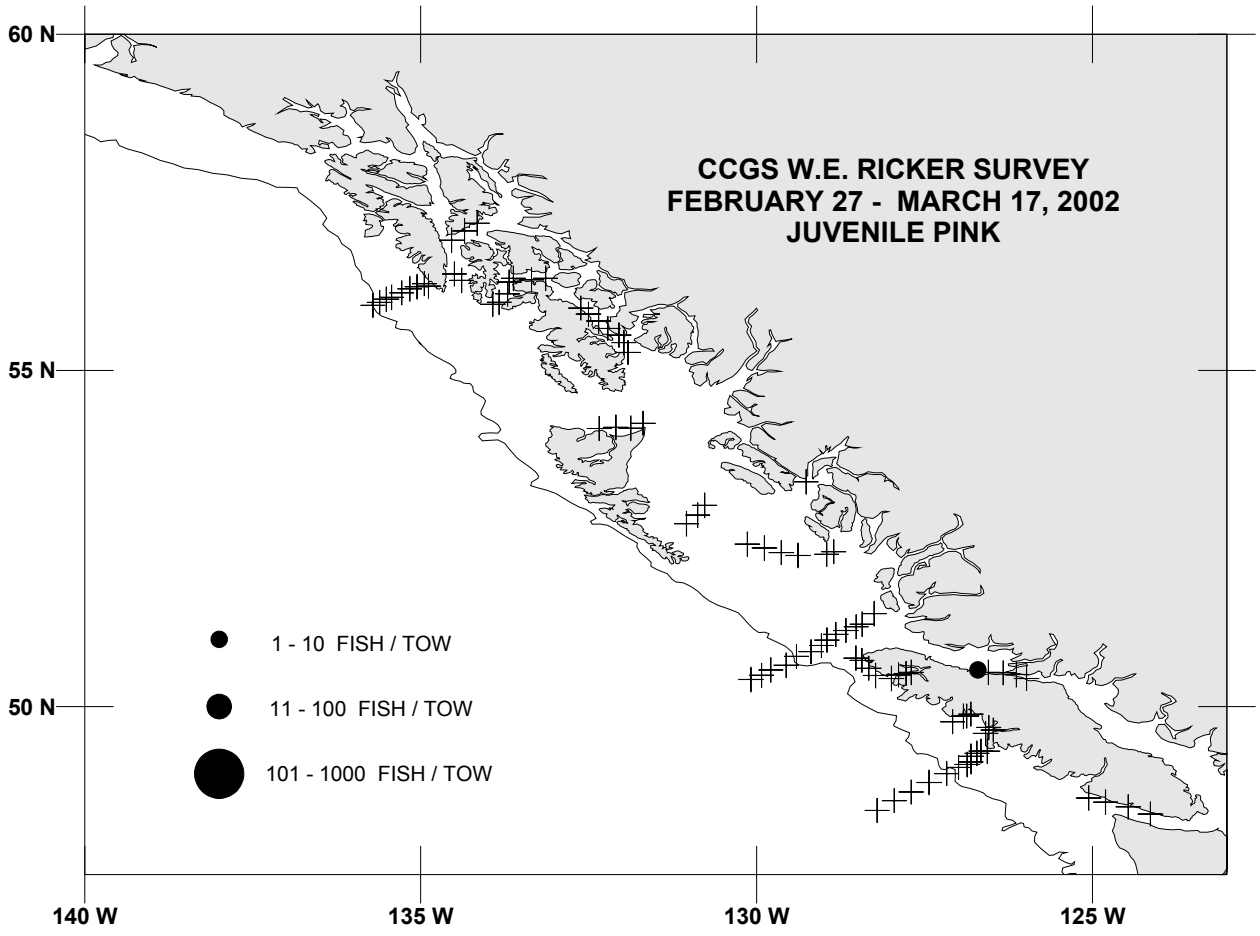

Figure 4. Distribution of juvenile (age 0.1) pink salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

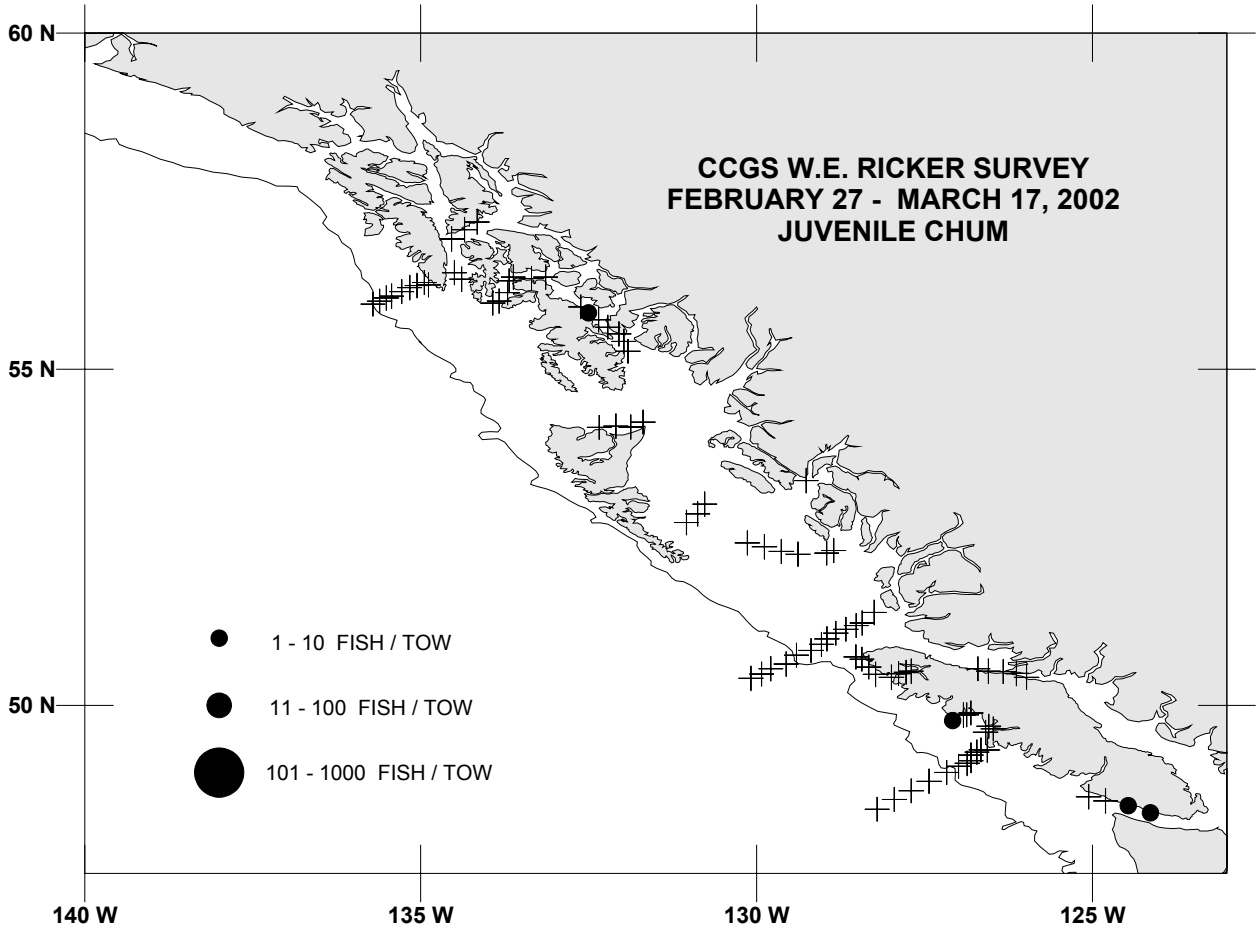

Figure 5. Distribution of juvenile (age 0.1) chum salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

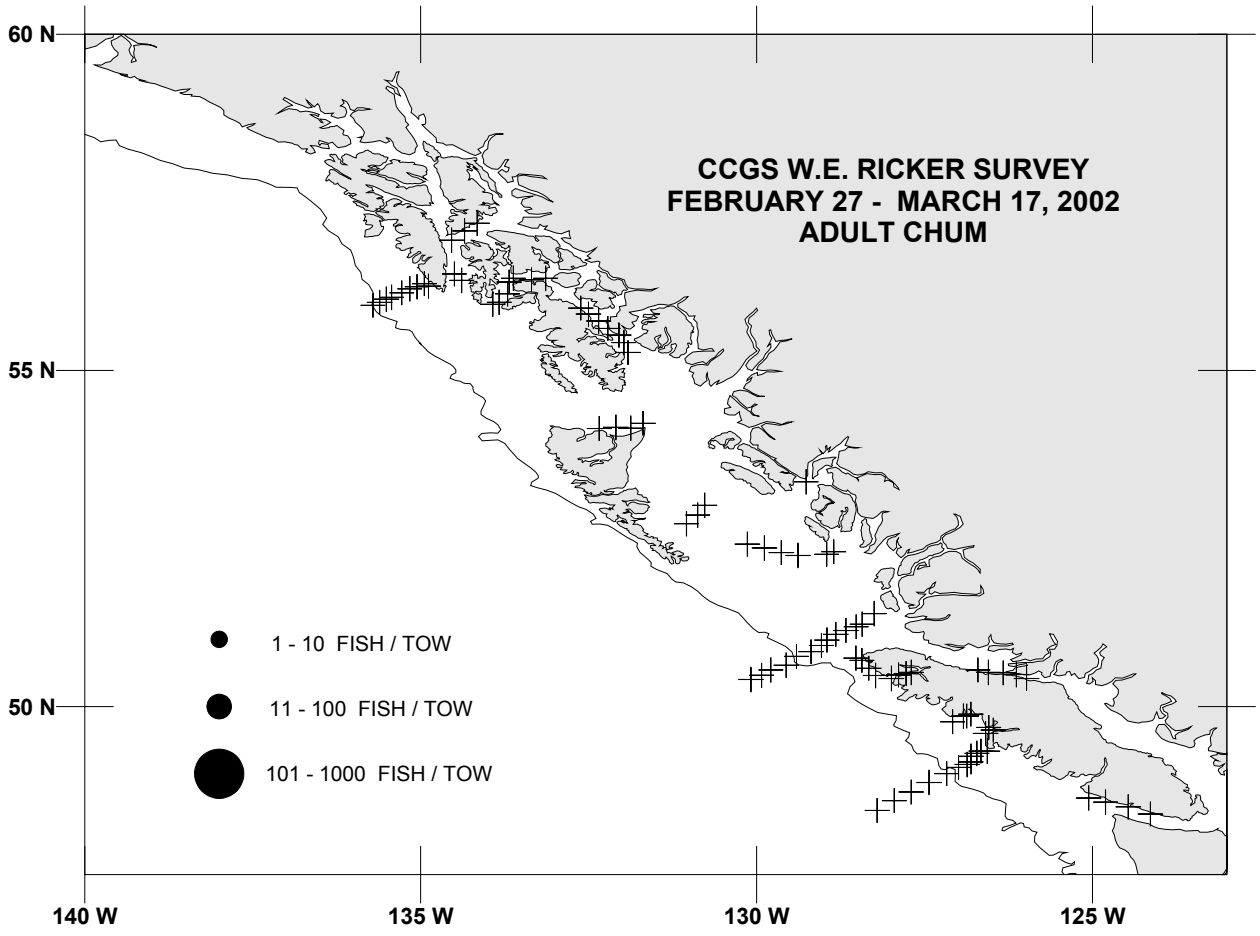

Figure 6. Distribution of adult (age 0.2 and over) chum salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

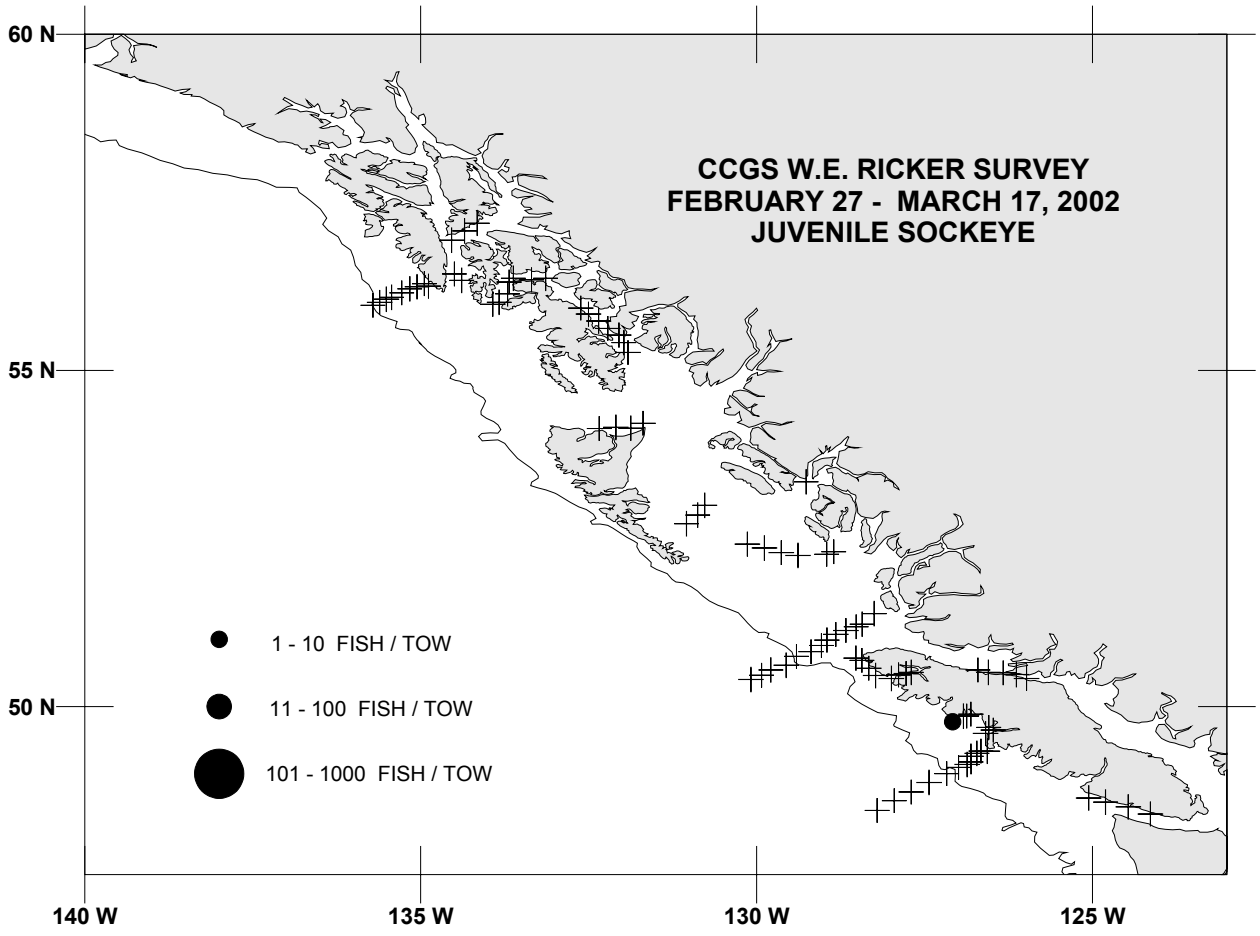

Figure 7. Distribution of juvenile (age X.1) sockeye salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

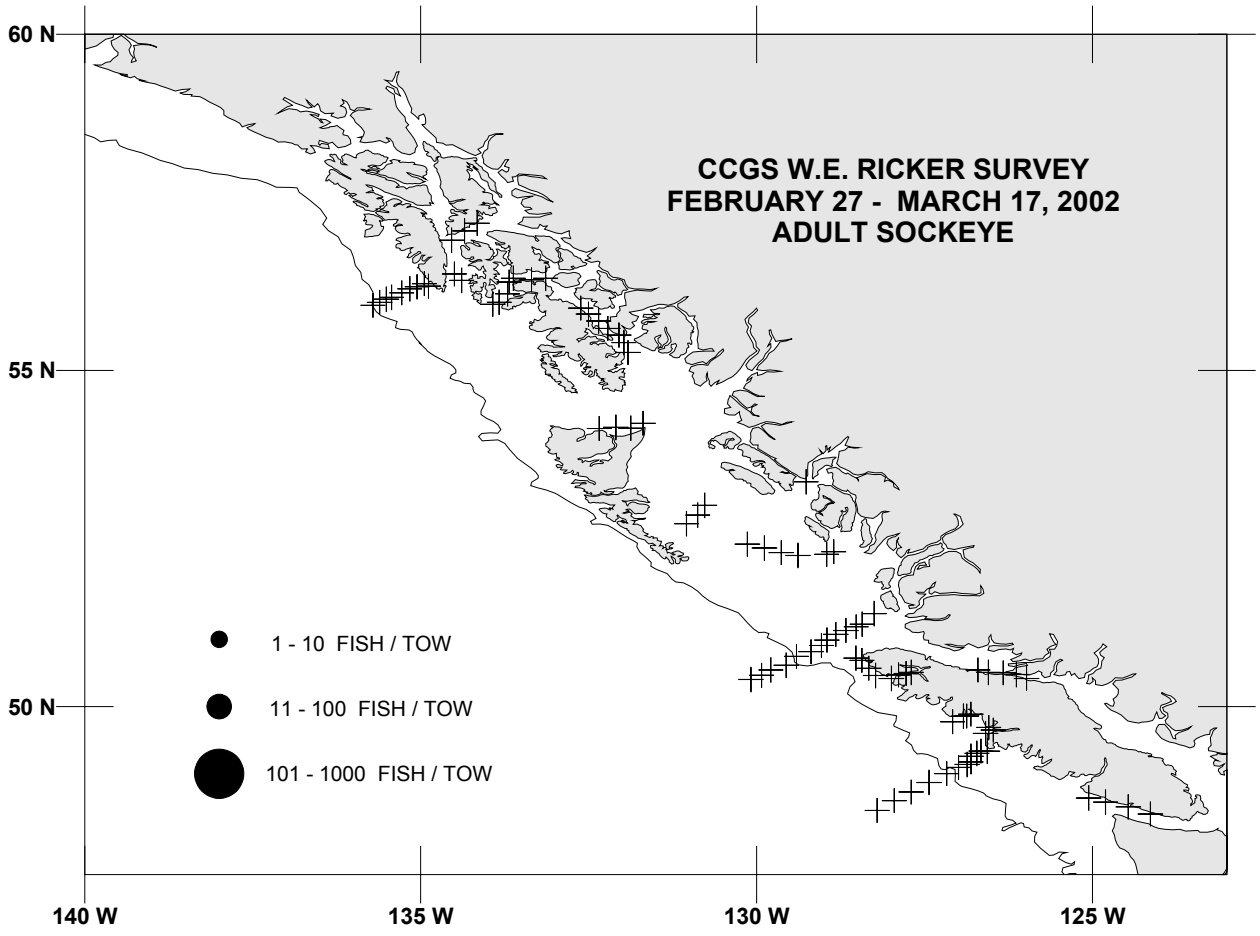

Figure 8. Distribution of adult (age X.2 and over) sockeye salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

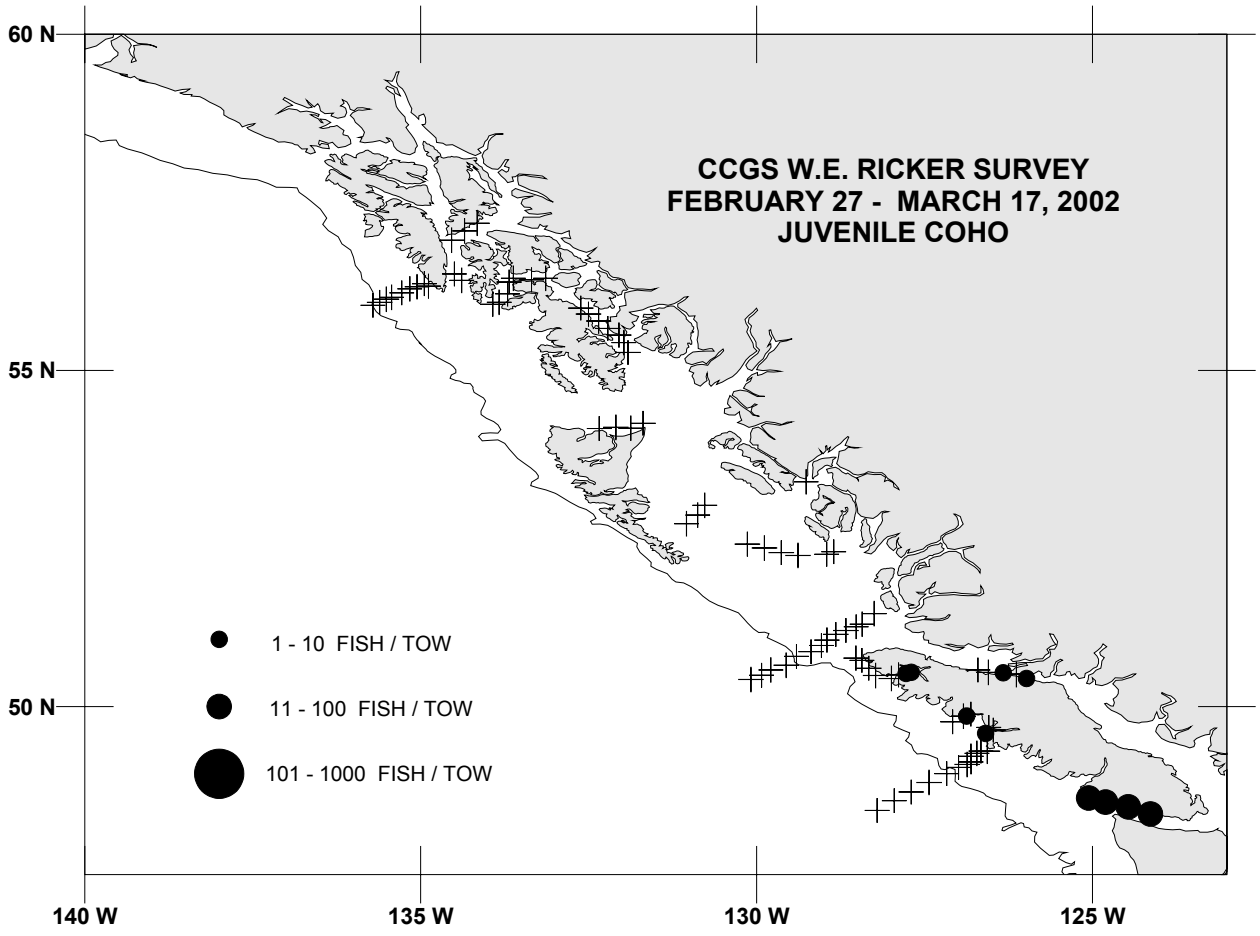

Figure 9. Distribution of juvenile (age X.1) coho salmon catches. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

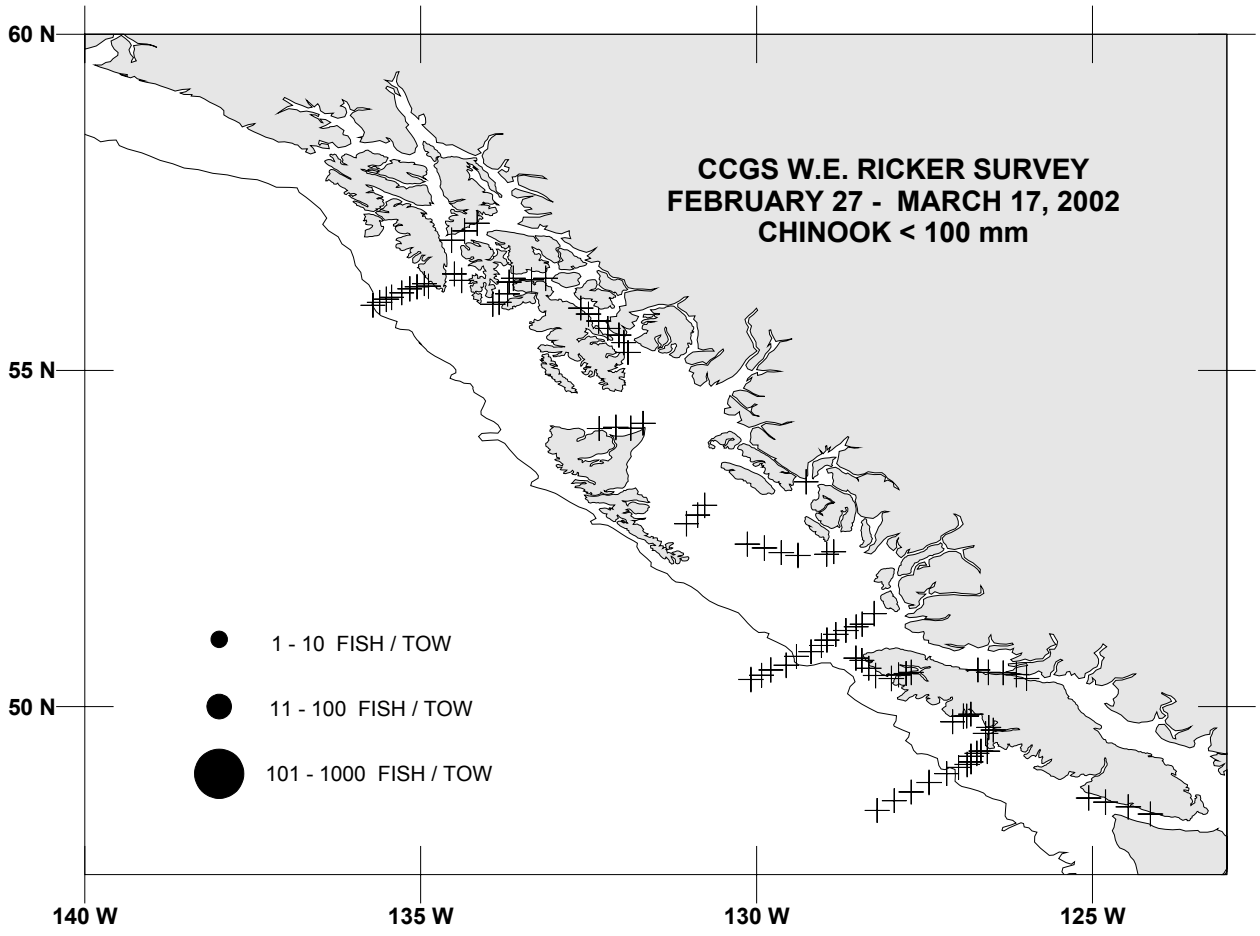

Figure 10. Distribution of catches of chinook salmon less than 100 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

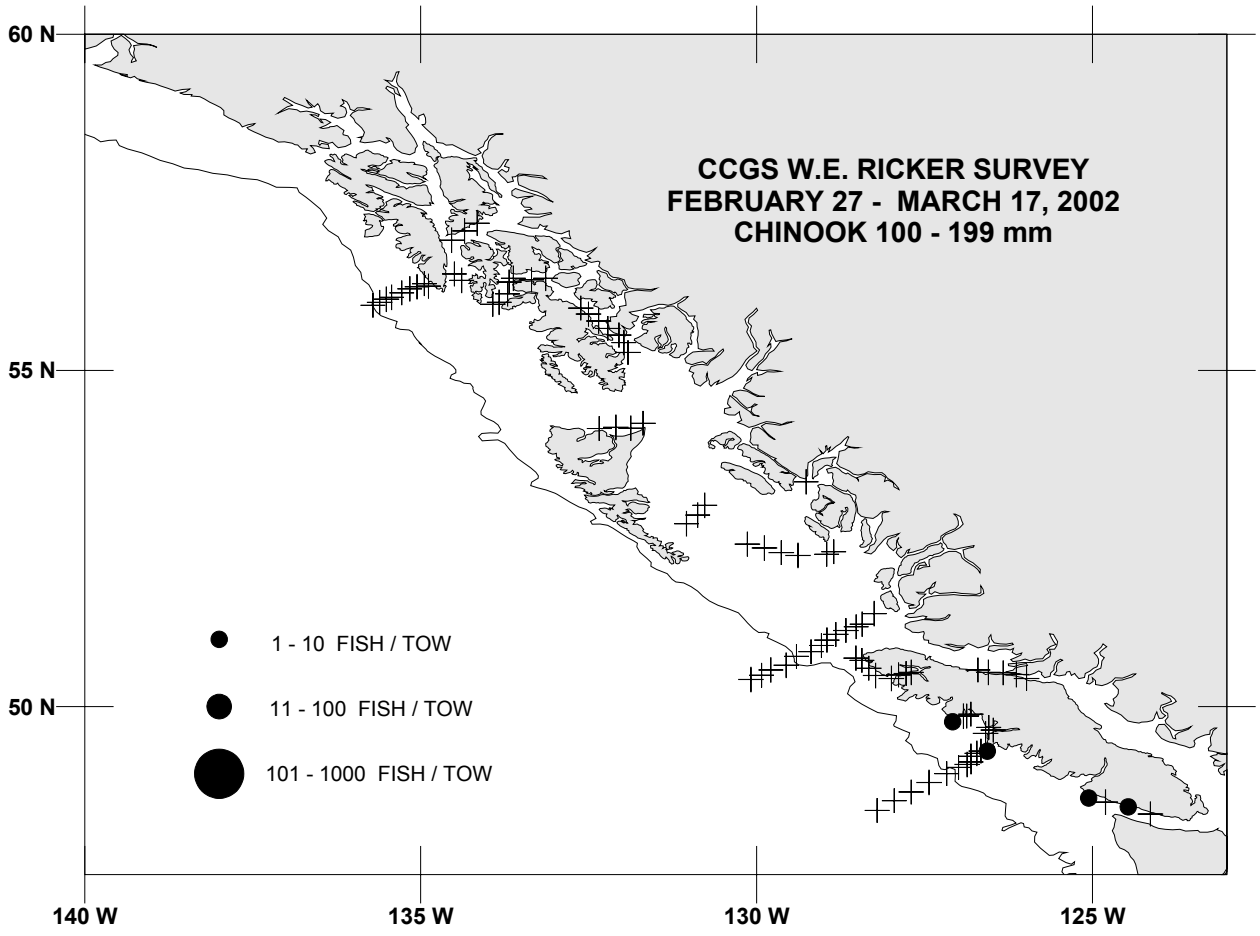

Figure 11. Distribution of catches of chinook salmon from 100 to199 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

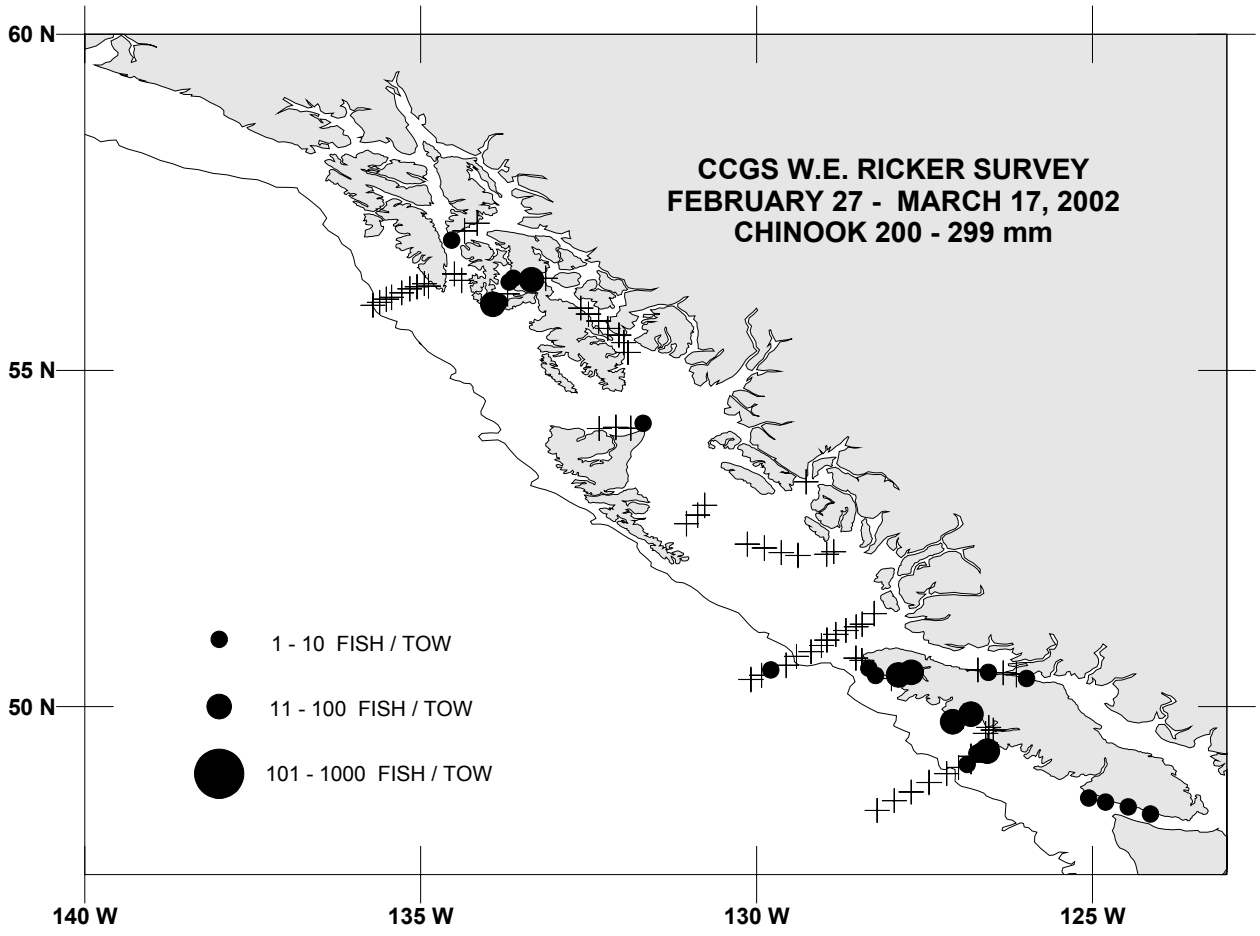

Figure 12. Distribution of catches of chinook salmon from 200 to 299 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

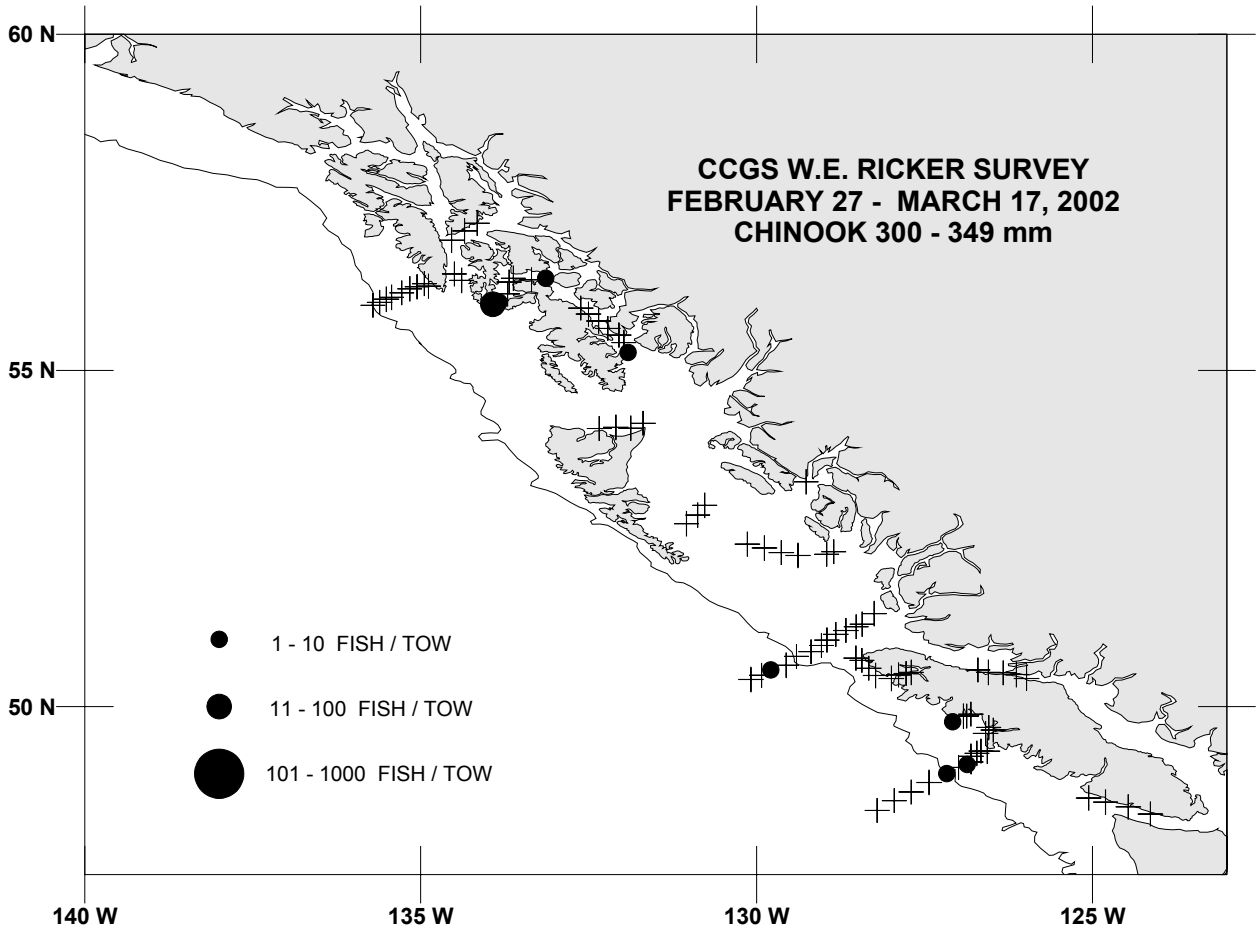

Figure 13. Distribution of catches of chinook salmon from 300 to 349 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

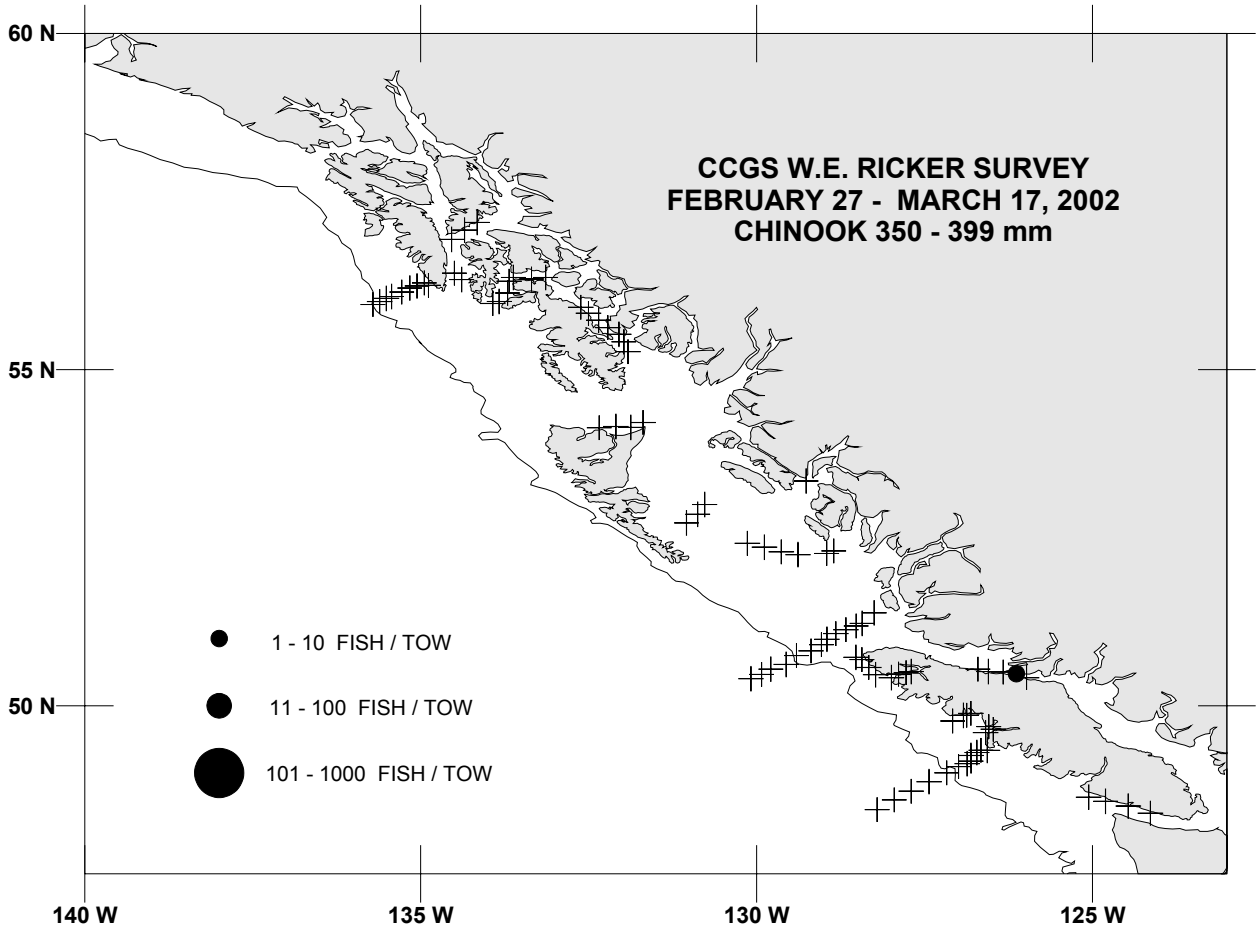

Figure 14. Distribution of catches of chinook salmon from 350 to 399 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

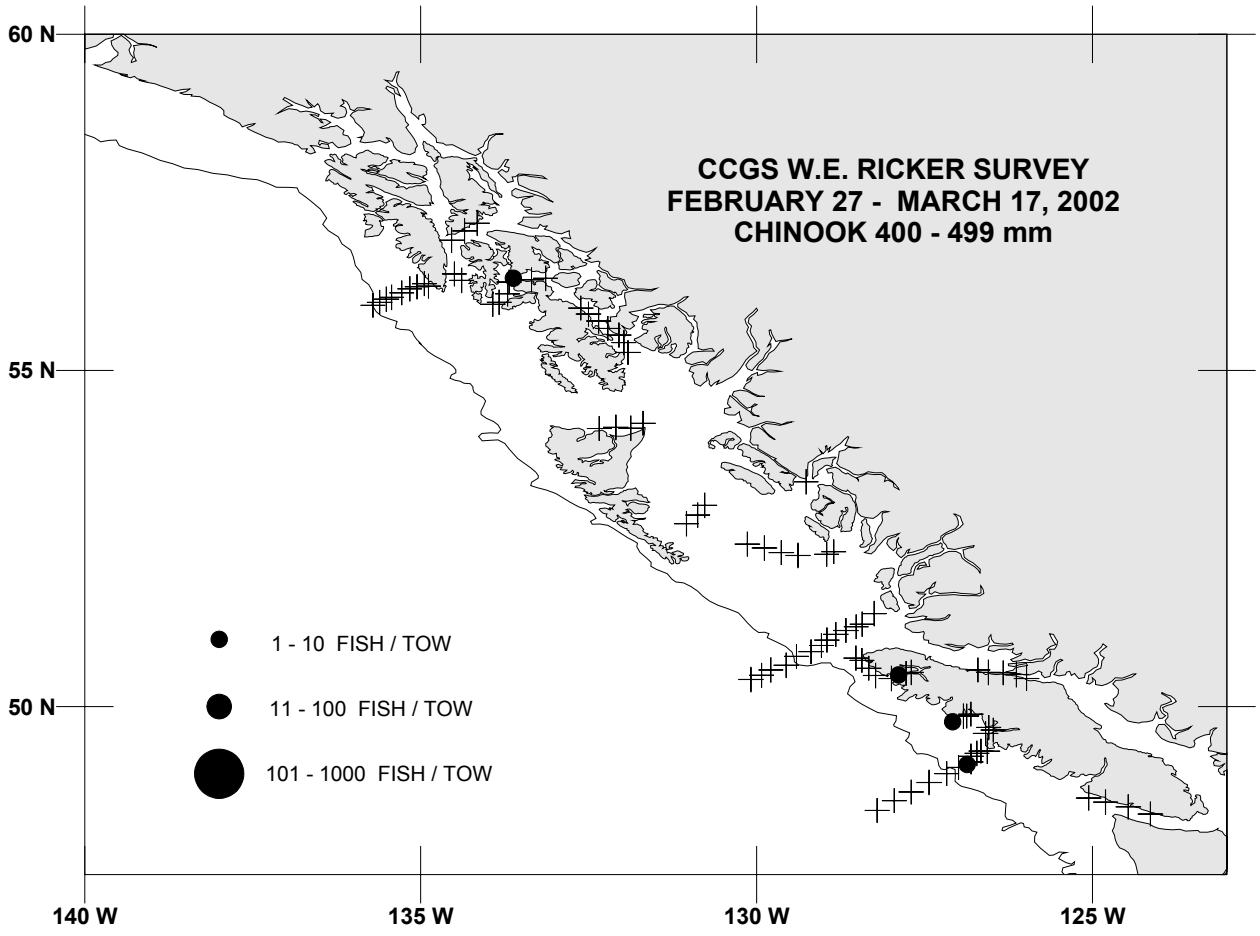

Figure 15. Distribution of catches of chinook salmon from 400 to 499 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

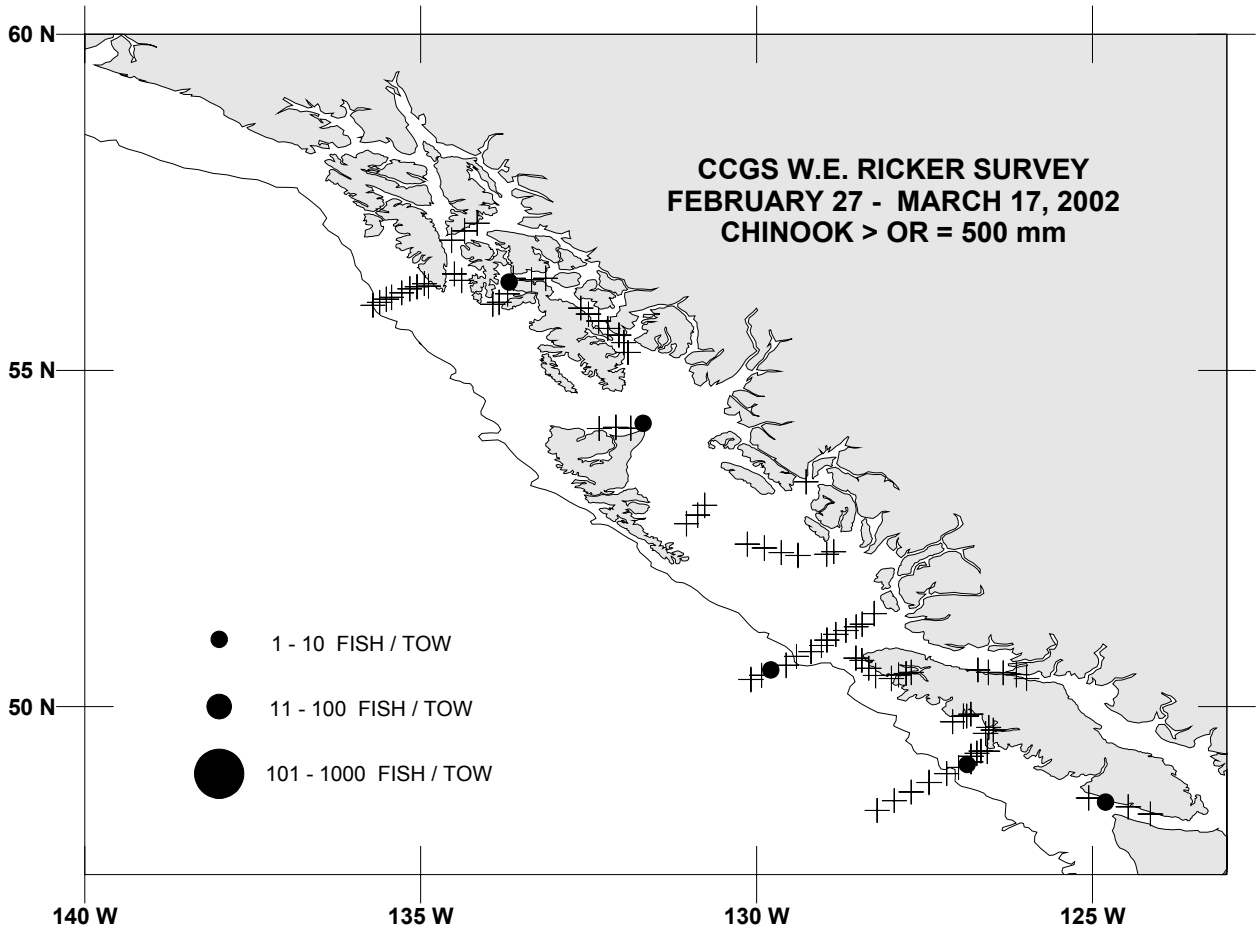

Figure 16. Distribution of catches of chinook salmon equal to or greater than 500 mm. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

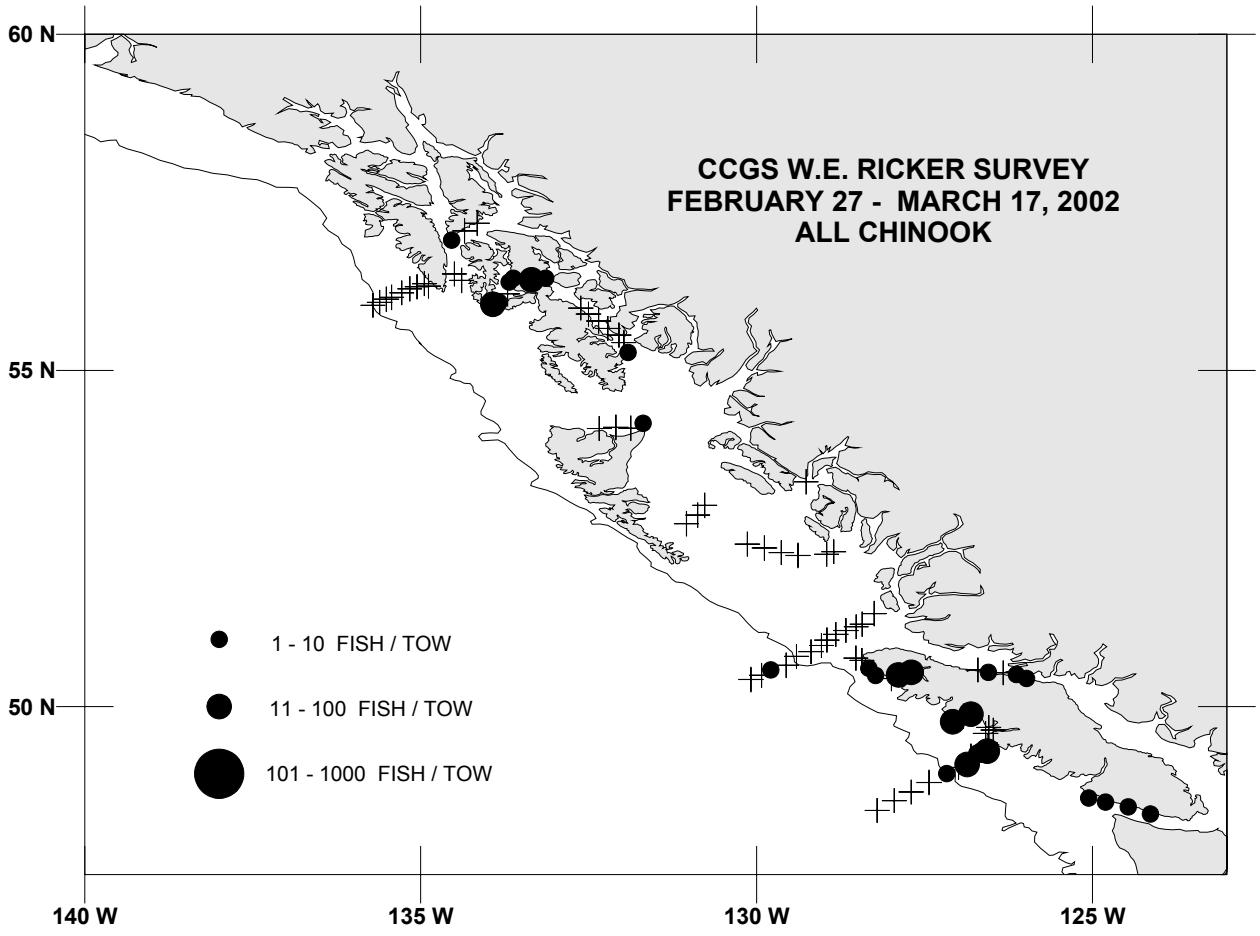

Figure 17. Distribution of catches of chinook salmon from all size classes. Symbol size (●) is proportional to catch per tow; zero catches are shown by a (+).

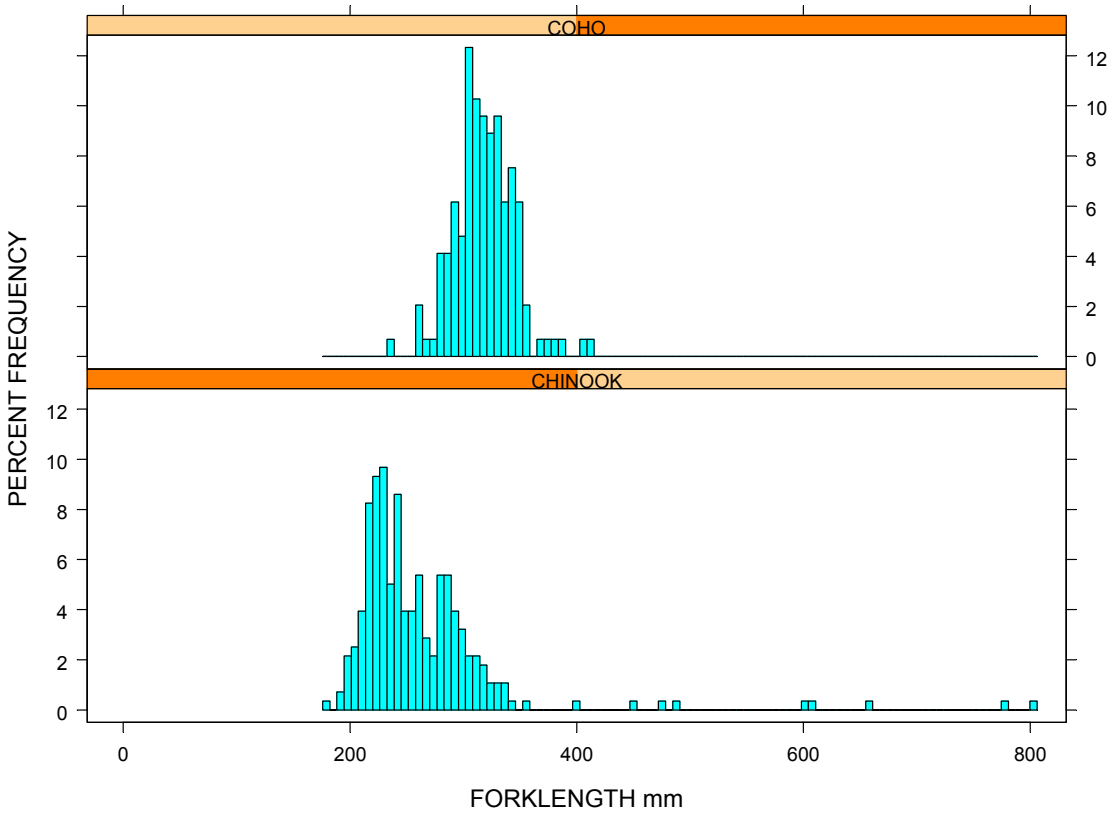

Figure 18. Size distribution (fork length; mm) of Pacific salmon caught on the CCGS W.E. Ricker survey to the Gulf of Alaska from February 27 - March 17, 2002.