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STATE OF ALASKA
Bill Sheffield, Governor

AGE, SEX, AND SIZE OF CHUM SALMON (*Oncorhynchus keta* Walbaum) FROM CATCHES AND ESCAPEMENTS IN SOUTHEASTERN ALASKA, 1982

Compiled by:
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October 1983

ALASKA DEPARTMENT OF FISH AND GAME
P.O. Box 3-2000, Juneau, Alaska 99802

Don W. Collinsworth
Commissioner

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Division of Commercial Fisheries
Juneau, Alaska

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ABSTRACT

A 1982 total chum salmon commercial harvest of 1,352,266 fish was realized in Southeastern Alaska, excluding the inside waters of the Yakutat Management Area. Sport and subsistence catches of 1,857 and 3,848 chum salmon respectively were also recorded. The majority of commercially caught chum salmon were harvested by purse seine (64.3%) and gill net (35.1%) with incidental catches by troll and fish trap (< 1.0%). District 104 recorded the largest commercial catch of chum salmon (354,285), followed by District 115 (306,467), District 101 (241,487), and District 102 (170,626). The median week of purse seine chum salmon catches was 22-28 August, and that of gillnet catches was 12-17 September.

Four-year-old chum salmon predominated in both purse seine and gillnet catches. From 52.6% to 87.0% of the commercial catch by district was estimated to be 4-year-old fish. However, 3-year-old and 5-year-old fish contributed substantially to commercial catches in several districts. The age composition of chum salmon harvested by purse seine in northern Southeastern districts was characterized by a larger proportion of 5-year-old chum salmon than in the southern districts. Gill net catches exhibited proportionately more older (and larger) fish than purse seine catches. Seasonal changes in age and sex composition were apparently random. The average length of male chum salmon was consistently greater than that of female chum salmon from the same age class, district, and gear.

Estimated age and sex composition of escapement in 13 surveyed drainages was variable. Excursion River contained a large percentage of 6-year-old chum salmon (18.3%). Humpback Creek, Nakwasina River, Kadashan River, Montana Creek, and Snettisham Hatchery returns all had relatively large numbers of 5-year-old chum salmon. Female chum salmon generally outnumbered male chum salmon. No consistent pattern in the character of the migratory time densities was observed, although the mean day of the male migration always preceded the mean day of the female for all drainages where separate counts were conducted.

KEY WORDS: catch allocation, migration timing, age composition, chum salmon, Southeastern Alaska, *Oncorhynchus keta*, gill net selectivity, fishery synopsis.

INTRODUCTION

The Southeastern Region (Region I), excluding the Yakutat Management Area, is defined as both Federal and Alaskan waters between Cape Fairweather on the north and Dixon Entrance on the south. The region is divided into five management areas (Ketchikan, Petersburg, Sitka, Juneau, and Haines) and 19 statistical districts (inside districts 101 to 116 and outside districts 152, 154, and 157) (Figure 1). Statistical districts are subdivided into geographical units which more accurately reflect discrete assemblages of salmon stocks. Statistical subareas are designated either numerically or alphabetically. This report also includes troll catch data from offshore statistical districts 181 and 189 (offshore waters from Cape Fairweather to Cape Suckling).

All five species of salmon are harvested commercially; almost exclusively by purse seine, gillnet, hand troll, and power troll gear. The gill net fishery is restricted to districts 101, 106, 108, 111, and 115. Purse seine harvest is permitted in districts 101 to 105, 107, and 109 through 114. Commercial troll fishing is allowed in all districts. In 1982, purse seine catches accounted for 22,673,240 salmon of all species in the Southeastern Region, or 82.6% of the total commercial catch. Drift gill nets accounted for 2,111,351 (7.6% of the total catch) and hand and power troll gear harvested 2,125,533 (7.7% of the total catch).

Historically, of the 5 species of salmon taken commercially, chum salmon are second in numerical importance. Annual Southeastern commercial catches have averaged over 1.4 million chum salmon from 1970 to 1982. Prior to the mid-1950's, Southeastern chum salmon catches constituted over half of the total Alaskan chum salmon catch. Small harvests from the mid-1950's to present have reduced the importance of Southeastern chum salmon in relation to other Alaskan regional chum salmon commercial catches. In 1982, Southeastern chum catches made up 11% of the total Alaskan chum salmon catch. A 13-year average of 65% of the total annual chum salmon commercial catch is harvested by purse seine, 34% by drift gill nets, and less than 1% by hand and power trollers. Floating fish traps, employed on the Annette Island Fishery Reserve, catch a small number of fish each year (an average of 1,600 chum salmon).

Subsistence and sport catches of chum salmon in the Southeastern Region have historically been a very small percentage of total chum salmon catch (sport and subsistence catches combined average less than 1% of the total commercial catch of chum salmon). Subsistence catches from 1970 to 1982 averaged 4,451 chum salmon caught each year. Annual total estimated chum salmon sport catches have averaged 2,627 fish from 1978 to 1981.

A total of 915 surveys were conducted in Southeastern Alaska drainages in order to gauge the magnitude of the 1982 chum salmon escapement. These relative escapement indices were based on foot and aerial stream surveys and weir counts. It should be noted that stream surveys result in peak counts, or a series of counts which are not a total enumeration of chum salmon abundance. However, stream surveys can be regarded as an index of relative abundance for the surveyed locality and have a potential use in interannual or interdrainage comparisons of escapement. Weir activities result in exact escapement counts for a defined drainage and provide migratory timing information on salmon which pass the weir site.

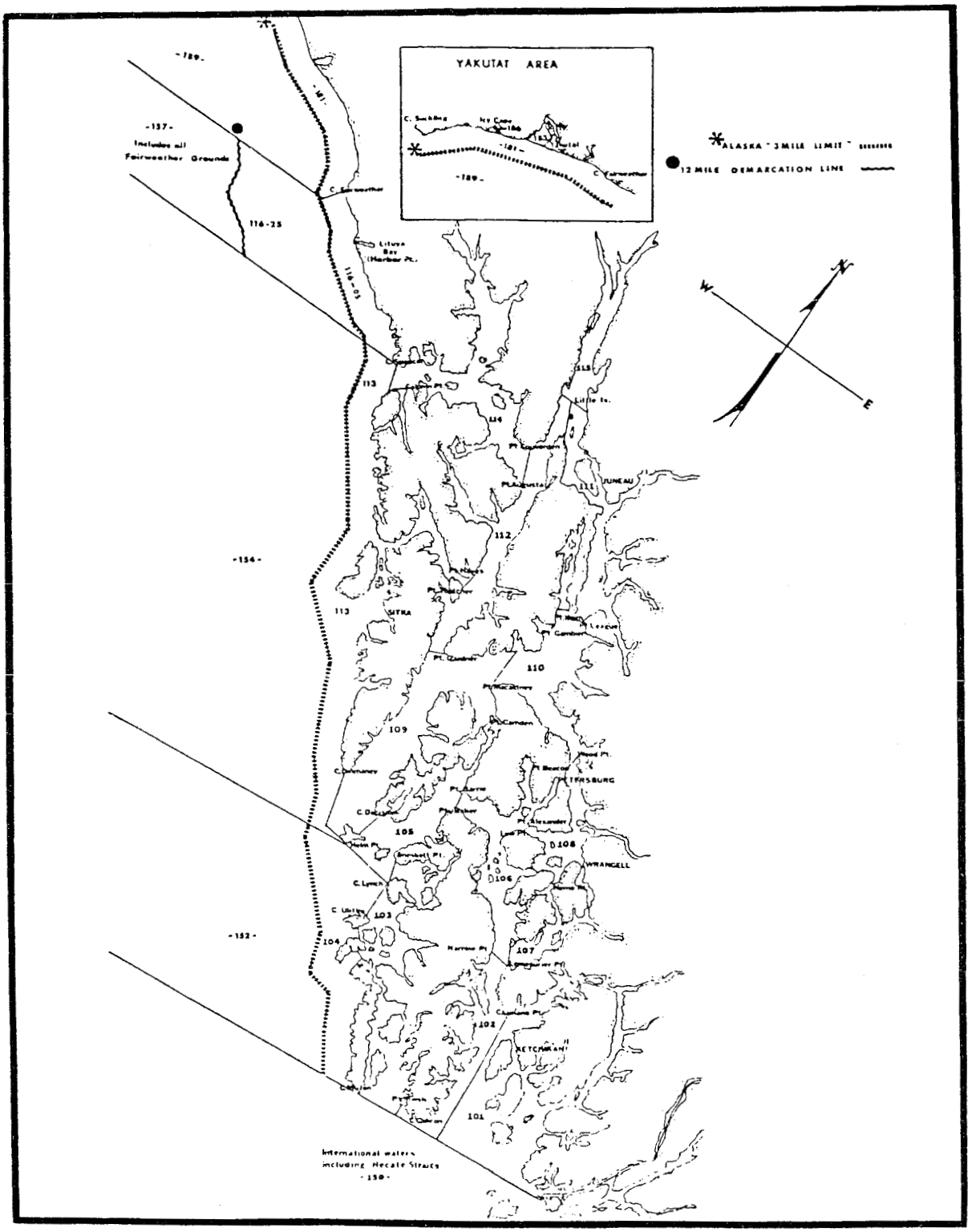

Figure 1. Map of Southeastern Alaska showing the statistical fishing districts.

This report is a synopsis of the 1982 chum salmon season in Southeastern Alaska. It presents total commercial chum salmon catch by district, gear, and statistical week. Size, age, and sex of samples of commercial catch are extrapolated to the total commercial catch of chum salmon resulting in estimates of total district commercial catch by age and sex. Escapement indices are tabulated and escapement samples are used to estimate the sex and age composition of specified drainages. The migratory timing characteristics of 10 populations of chum salmon passing weirs is described. Data are presented in summarized form in the body of this report; more detailed tables are given in the appendix.

METHODS

The 1982 commercial chum salmon catch was sampled in order to adequately and representatively describe the age and sex composition of the harvest by gear type and district. Troll, subsistence, and sport-caught chum salmon were not sampled since they make up only a small percentage of the total chum salmon catch. Escapement samples were obtained at several hatcheries and weirs and from foot surveys. Both catch and escapement samples of chum salmon were sampled for age, sex, and total length (mid-eye to fork of tail, recorded to the nearest millimeter). Scales were taken from the left side of the chum salmon approximately two rows above the lateral line and on the diagonal row downward from the posterior insertion of the dorsal fin. Scales were placed on gum cards and impressions were subsequently made in cellulose acetate cards. Ages are reported in European notation[1]. Sex was assigned by external morphological characteristics (appearance of snout and belly).

Whenever sample sizes permitted, the data were stratified over time into sampling periods. A sampling period is designated as a group of statistical weeks whose total number of samples with valid age determinations equals or exceeds 454. This is the minimum number of samples needed to attain a significance level of 0.05 (also referred to as 95% confidence level) and a level of accuracy of plus or minus 5% for the age composition of a population with three age classes. In some cases the total number of readable scales was less than 454. Age compositions are presented for these groups but the level of accuracy is less than that desired. The annual age distribution of the total commercial catch by district and gear was calculated by weighting the sample age distribution recorded each statistical week by the total commercial catch reported during the same statistical week. Weighting of the sample age and sex distribution by weekly catches results in a more accurate, less biased estimate of the total commercial catch age and sex distribution than weighting methods, which use sampling periods. Mean length was calculated for each district and each gear type by age and sex of the sampled chum salmon. Ninety-five percent confidence limits are also presented for mean length.

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[1] The first digit in the 2-digit age notation is the number of freshwater annuli. The second digit is the number of saltwater annuli. The total age of the fish is the sum of the 2 digits plus one.

The mean and variance of the migratory time density of chum salmon observed passing through weirs was calculated by standard statistical methods. Data summaries were performed on a Vector Graphics microcomputer.

Alaskan commercial catch data used in this report was compiled by the Division of Commercial Fisheries, Alaska Department of Fish and Game, and was based on individual fish tickets as of 2 May 1983. Because of the volume of tickets and frequency of both data entry and recording errors, later summaries may differ slightly from those used in this report as more errors are detected and corrected. Sport catch information was obtained from Mills (1983). Subsistence catch information was tabulted from subsistence use permits returned to the Alaska Department of Fish and Game (Valentine, Bergmann, DeJong, Imamura; personal communications). All subsistence permits were not returned, however, so that subsistence catch totals listed in this report underestimate the total subsistence harvest from the Region.

RESULTS

Commercial purse seine catches by statistical week and district are presented in Table 1. The purse seine fleet targets primarily on pink salmon. Therefore, management bases its decisions of which areas and dates to open to purse seine gear on the run strength of various pink salmon stocks. In 1982, purse seine fisheries to specifically harvest fall chum salmon were limited to a 39-hour open fishing period in Port Camden (District 105) and a 15-day opening in Cholmondeley Sound (District 102).

Purse seine catches of chum salmon tended to increase in late August openings due to an increasing abundance of fall chum salmon. The median week of purse seine chum salmon catch was 22-28 August, and the largest weekly catch occurred the following week (29 August - 4 September). District 104 accounted for over 40% of the total commercial purse seine catch, followed by District 102 (20%) and District 101 (15%).

Age distribution by gear, sampling period, district, age, and sex are presented in Appendix Tables 1 to 50. No consistent trends in age or sex through sampling periods were found. Associated statistics of mean length by gear and statistical area and allocation of total commercial catch to sex and age classes are also presented in the same appendix tables. Although intraannual variations in sex, age, or length were apparently random, interannual comparisons of similar data may result in the discovery of trends beneficial to an understanding of the Southeastern chum salmon fishery.

Four-year-old (03) chum salmon were the dominant age group in the purse seine catch (Table 2). From 54% (District 113) to 91% (Cholmondeley Sound, District 102) of the commercial catch was represented by this age class. In general, 3-year-old (02) chum salmon were second in numerical abundance in the more southern statistical areas (in Districts 101 to 107, 3-year-old fish account for 7% to 34% of the commercial purse seine chum salmon catch). Five-year-old fish only account for 2% to 12% of the chum salmon catch from the southern areas. In contrast, the purse seine catch of chum salmon in the more northern districts (109 to 114) was characterized by a relatively larger percentage of 5-year-old (04)

Table 1. Commercial purse seine catch of chum salmon in Southeastern Alaska by district and statistical week, 1982.

	District													
Date	101	102	103	104	105	107	109	110	111	112	113	114	115	Total
Before June 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June 27-July 3	0	0	0	235	0	0	0	0	0	0	0	0	0	235
July 4-10	3501	0	0	7618	0	0	0	0	0	0	0	0	0	11119
July 11-17	9025	1026	0	39488	0	0	0	0	0	13436	0	0	0	62975
July 18-24	7212	1728	0	16125	0	0	0	0	0	17560	4593	0	0	47218
July 25-31	1191	1340	0	3300	0	0	0	0	0	8253	0	0	0	14084
August 1-7	4230	5022	0	14496	0	0	5932	5569	1539	10635	80	0	0	47503
August 8-14	10513	14525	161	50580	0	0	12023	3230	125	6384	3252	0	0	100793
August 15-21	12129	16986	9347	71552	0	482	3316	993	18	11657	2887	0	0	129367
August 22-28	19359	21333	4770	70003	0	0	1931	332	0	13588	3558	2001	0	136875
Aug. 29-Sept. 4	43041	10990	14335	68406	4257	0	2939	0	0	9077	998	2003	0	156046
Sept. 5-11	17381	2850	19989	9962	0	0	15874	0	0	18	0	0	0	66074
Sept. 12-18	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Sept. 19-25	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Sept. 26-Oct. 2	36	55850	0	2034	0	0	0	0	0	0	0	0	0	57920
Oct. 3-9	0	36040	0	0	0	0	0	0	0	0	0	0	106	36146
Oct. 10-16	0	2852	0	0	0	0	0	0	0	0	0	0	0	2852
Total	127631	170542	48602	353810[1]	4257	482	42015	10124	1682	90608	15368	4004	106	869404[2]

[1] Includes 11 chum salmon caught in District 104 during an unrecorded statistical week.

[2] Includes 173 chum salmon caught during statistical week 15 August - 29 August in unrecorded Southeastern Alaska districts.

Table 2. Summary of age composition of the commercial purse seine catch of chum salmon in Southeastern Alaska by sex and district, 1982.

Sex/ Age	101	102 (Cholmondeley)	102	104/ 152	105	107	109	110/ 111	112	113	114
	District										
Male	45.9	55.8	47.7	44.6	45.8	76.4	47.4	53.6	43.8	56.2	40.5
01	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
02	4.8	5.0	3.9	7.4	20.3	8.3	5.0	8.2	4.3	13.3	1.3
03	37.2	49.6	41.1	31.5	22.4	65.3	32.9	35.4	29.3	32.4	36.5
04	3.7	1.1	2.5	5.6	3.1	2.8	9.0	9.7	9.7	9.5	2.7
05	0.1	0.0	0.0	0.2	0.0	0.0	0.5	0.3	0.5	1.0	0.0
Female	54.1	44.2	52.3	55.4	54.2	23.6	52.6	46.4	56.2	43.8	59.5
01	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	
02	5.4	2.3	3.3	7.9	13.6	1.4	3.2	5.5	5.4	6.7	4.0
03	43.8	41.1	45.8	42.5	31.5	19.4	37.2	32.3	37.4	33.3	43.2
04	3.9	0.8	3.1	5.1	8.7	2.8	11.9	8.1	12.4	3.8	10.8
05	1.0	0.0	0.1	0.0	0.4	0.0	0.4	0.2	0.9	0.0	1.3
Both Sexes											
01	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0
02	10.20	7.2	15.3	14.1	33.9	9.7	8.2	13.7	9.8	20.0	5.4
03	81.0	90.8	87.0	73.9	53.9	84.7	69.9	67.8	66.7	65.7	79.7
04	7.6	1.9	5.6	10.6	11.9	5.6	20.9	17.8	22.1	13.3	13.5
05	1.1	0.0	0.1	0.2	0.4	0.0	0.9	0.5	1.4	1.0	1.3

fish. From 13% to 22% of the chum salmon caught by purse seine gear in these districts were 5-year-old fish. Six-year-old (05) chum salmon were numerically a minor constituent of the commercial purse catch from all districts (from less than 0.1% to 1.4%).

Cursory inspection of average lengths of the purse seine catch of chum salmon by district, age, and sex (Table 3) disclosed no obvious differences in average length between districts. The average length of male chum salmon was consistently greater than the average female length for the same age and district. The average length of a given age class of chum salmon was greater than the average length of younger chum salmon of the same sex and district. However, the large variability in individual lengths precludes assignment of a given chum salmon of known length and unknown sex and age to an age and sex category.

Gill net fisheries are generally directed toward sockeye salmon stocks early in the season and chum and coho salmon stocks during the fall season. Chum salmon comprised 21% of the total drift gillnet catch in 1982. Table 4 summarizes the 1982 drift gill net catch of chum salmon by district and statistical week. The median date of the total Southeastern Alaska chum salmon catch was the week of 12-18 September, and a peak catch of 67,808 chum occurred during the week of 26 September to 2 October. District 115 gillnetters harvested the largest number of chum salmon (64% of the total Southeastern gillnet catch) followed by District 101 gillnetters (23%). Approximately 35% of the total Southeastern chum salmon catch in 1982 was taken by drift gillnet gear.

The chum salmon commercial gill net catch was dominated by 4-year-old fish (Table 5). From 53% to 80% of the chum salmon catch was assigned to the 03 age class. Five-year-old fish appear to be relatively more abundant in the gill net catches than southern Southeastern purse seine catches and similar to northern Southeastern purse seine catches (compare Table 5 and Table 2). Three-year-old fish were third in numerical importance, and 6-year-old chum salmon comprise less than 1% of the catch.

Average lengths display interdistrict variability similar to that of purse seine catches (Table 6). As was observed for purse seine catches of chum salmon, males were, on the average, larger than females of the same district and age class, and older fish were larger than younger chum salmon of the same district and sex. The ranges of interdistrict means by age and sex were similar to those observed for purse seine catches (compare Table 3 and Table 6).

Because troll catches of chum salmon are a very small percentage of the total chum salmon commercial catch, troll catches were not sampled. In 1982, a total of 7,804 chum salmon were caught by hand and power troll gear (Table 7 and 8) which was 0.6% of the total commercial catch. District 113 recorded the highest number of troll chum salmon, followed by Districts 115 and 101.

The total 1982 Southeastern commercial catch of chum salmon, excluding the Yakutat Area, was 1,352,266 fish (Tables 9 and 10). District 104 recorded the largest total catch (26%) followed by District 115 (23%). The outside districts 154, 157, 152, and 116 reported the fewest number of chum salmon in the commercial catch. The largest weekly catch occurred the week of 29 August to 4 September when 196,994 chum salmon were taken commercially. A secondary peak, due to the Cholmondeley Sound (District 102) and Lynn Canal (District 115) fall chum migrations,

Table 3. Summary of average length (± 95% confidence limit) composition of the commercial purse seine catch of chum salmon in Southeastern Alaska by sex and district, 1982.

Sex/ Age	District 101	102 (Cholmondely)	102	104/ 152	105	107	109
Male							
02	622.0 (11.4)	626.8 (22.2)	604.7 (16.9)	604.9 (10.3)	599.5 (7.5)	622.2 (82.0)	589.2 (8.6)
03	643.7 (5.5)	647.1 (5.5)	644.5 (5.4)	640.2 (4.4)	657.6 (10.3)	638.0 (15.9)	637.6 (3.5)
04	692.1 (20.8)	661.7 (82.6)	676.5 (12.9)	669.5 (9.5)	689.4 (29.0)	675.9 (22.7)	670.6 (6.3)
05	654.0 (---)	------	------	------	------	------	688.6 (23.3)
Female							
01	------	------	------	------	------	------	461.4 (50.3)
02	615.7 (9.3)	616.0 (14.9)	599.6 (9.4)	588.7 (8.3)	593.9 (8.6)	559.3 (65.8)	583.2 (8.2)
03	642.5 (3.8)	644.2 (5.6)	634.5 (3.3)	630.9 (3.4)	643.5 (22.9)	615.9 (20.9)	623.2 (3.8)
04	671.0 (13.2)	652.5 (476.6)	667.5 (9.7)	646.7 (7.4)	667.1 (17.4)	678.2 (18.3)	658.4 (5.3)
05	726.3 (117.8)	------	698.3 (61.2)	------	------	------	649.3 (33.2)

-Continued-

Table 3. Summary of average length (± 95% confidence limit) composition of the commercial purse seine catch of chum salmon in Southeastern Alaska by sex and district, 1982 (continued).

Sex/ Age	District 110/ 111	112	113	114
Male				
02	602.1 (11.1)	594.3 (8.1)	582.3 (9.0)	———
03	637.9 (5.3)	648.9 (2.8)	638.4 (6.5)	649.3 (16.2)
04	671.9 (8.9)	677.4 (5.4)	687.0 (8.9)	726.0 (12.8)
05	660.0 (228.8)	669.1 (25.1)	———	———
Female				
02	595.2 (10.3)	590.1 (28.6)	584.8 (9.6)	575.0 (101.6)
03	618.3 (4.4)	629.5 (2.2)	634.9 (5.4)	645.5 (10.9)
04	657.1 (9.9)	655.7 (4.0)	655.3 (8.7)	668.4 (29.6)
05	669.0 (58.7)	674.1 (12.1)	———	———

Table 4. Commercial gill net catch of chum salmon in Southeastern Alaska by district and statistical week, 1982.

Stat Week	District 101	103	106	108	111	115	Total
Before June 6	0	0	0	0	0	0	0
June 6 -12	0	0	0	0	0	0	0
June 13-19	268	0	157	8	10	260	703
June 20-26	3616	0	721	112	259	941	5649
June 27-July 3	4330	0	897	40	736	1412	7415
July 4-10	5422	0	805	67	2700	670	9664
July 11-17	8828	0	1682	0	2528	670	13708
July 18-24	15264	0	6050	0	2824	481	24619
July 25-31	8187	0	2935	0	2919	903	14944
August 1-7	11921	0	0	0	1728	1714	15363
August 8-14	6959	0	0	124	1026	3379	11488
August 15-21	7314	0	622	94	3247	4704	15981
August 22-28	10540	0	2261	112	3301	14169	30383
Aug. 29-Sept. 4	14382	76	1802	102	5046	18159	39567
Sept. 5-11	13367	0	441	53	5396	25037	44294
Sept. 12-18	1362	0	472	32	5589	47595	55050
Sept. 19-25	161	0	0	0	0	54445	54606
Sept. 26-Oct. 2	0	0	0	0	0	67808	67808
Oct. 3-9	0	0	0	0	0	27837	27837
Oct. 10-16	0	0	0	0	0	30035	30035
Oct. 17-23	0	0	0	0	0	4849	4849
Oct. 24-30	0	0	0	0	0	59	59
Total	111948[1]	76	18845	744	37310[2]	305127	474050

[1] Includes 27 chum salmon caught during an unrecorded statistical week in District 101.

[2] Includes 1 chum salmon caught in District 111 during an unrecorded statistical week.

Table 5. Summary of age composition of the commercial gill net catch of chum salmon in Southeastern Alaska by sex and district, 1982.

Sex/ Age	District 101	106	108	111	115
Male	40.9	47.6	63.8	43.0	50.9
02	12.7	1.6	6.2	2.3	3.9
03	26.0	37.2	43.9	23.4	41.0
04	2.1	8.3	13.6	17.1	5.9
05	0.1	0.4	0.0	0.2	0.1
Female	59.1	51.5	36.2	57.0	49.1
02	18.5	1.8	3.8	1.4	2.3
03	37.3	39.3	21.4	29.2	48.9
04	3.1	10.2	11.0	26.1	7.7
05	0.1	0.2	0.0	0.3	0.1
Both Sexes					
02	31.2	3.5	10.0	3.7	6.1
03	63.4	76.5	65.4	52.6	79.9
04	5.2	18.5	24.6	43.2	13.6
05	0.2	0.7	0.0	0.5	0.3

Table 6. Summary of average length (± 95% confidence limit) composition of the commercial gill net catch of chum salmon in Southeastern Alaska by sex and district, 1982.

Sex/ Age	District 101	106	108	111	115
Male					
02	629.3 (7.3)	600.3 (13.4)	622.2 (82.1)	600.1 (19.8)	635.0 (7.7)
03	663.1 (5.0)	652.0 (3.3)	638.0 (15.9)	660.2 (2.6)	668.9 (1.9)
04	679.7 (15.8)	680.7 (9.0)	675.9 (22.7)	690.7 (3.6)	684.2 (3.7)
05	751.2 (184.0)	696.1 (53.1)	————	670.0 (31.3)	686.4 (41.0)
Female					
02	617.1 (3.7)	594.0 (11.4)	559.3 (65.8)	606.7 (11.2)	623.1 (7.3)
03	642.8 (2.8)	632.1 (2.8)	615.9 (20.9)	640.4 (2.4)	653.6 (1.6)
04	663.6 (10.4)	662.5 (9.2)	678.2 (18.3)	666.5 (2.1)	664.9 (3.9)
05	694.5 (80.9)	667.2 (15.7)	————	669.2 (25.9)	658.0 (18.6)

Table 7. Commercial troll catch of chum salmon in southern Southeastern Alaska by district and statistical week, 1982.

Stat Week	District 101	102	103	104	105	106	107	109	110	152	Total
Before May 23	0	0	0	0	0	0	0	0	0	0	0
May 23- 29	0	0	1	0	0	0	0	0	0	0	1
May 30-June 5	0	0	0	0	0	0	0	0	0	0	0
June 6 -12	0	0	0	3	0	2	0	1	0	0	6
June 13-19	0	0	0	0	0	0	1	0	1	1	3
June 20-26	2	3	1	1	0	0	1	2	3	0	13
June 27-July 3	3	2	1	9	0	3	0	7	2	0	27
July 4-10	1	4	2	14	1	0	2	23	6	1	54
July 11-17	11	4	4	26	3	0	2	22	8	18	98
July 18-24	8	10	10	24	5	2	0	51	12	6	128
July 25-31	70	17	20	32	14	6	1	26	7	11	204
August 1-7	21	0	0	0	0	0	0	0	0	0	21
August 8-14	23	8	9	350	5	8	0	55	2	9	469
August 15-21	68	9	13	8	3	3	0	60	4	3	171
August 22-28	40	15	57	3	5	5	0	24	0	1	150
Aug. 29-Sept. 4	29	7	0	3	3	6	0	3	0	0	51
Sept. 5-11	13	4	0	0	0	0	1	8	1	0	27
Sept. 12-18	276	0	0	0	0	0	0	1	0	0	277
Sept. 19-25	459	0	0	2	0	3	0	0	0	0	464
Sept. 26-Oct. 2	0	0	0	0	0	0	0	0	0	0	0
Oct. 3-9	0	0	0	0	0	0	0	0	0	0	0
Oct. 10-16	0	0	0	0	0	0	0	0	0	0	0
Oct. 17-23	0	1	0	0	0	0	0	0	0	0	1
Total	1024	84	118	475	39	38	8	283	46	50	2165

Table 8. Commercial troll catch of chum salmon in northern Southeastern Alaska by district and statistical week, 1982.

Stat Week	District 111	112	113	114	115	116	154	157	181	189	Total
Before May 23	0	0	0	0	0	0	0	0			0
May 23- 29	0	0	2	6	0	0	0	0	0	0	8
May 30-June 5	0	1	13	12	0	0	0	0	0	0	26
June 6 -12	0	2	2	26	0	3	0	0	0	0	33
June 13-19	0	2	8	12	0	0	1	0	0	0	23
June 20-26	2	17	81	212	1	27	3	1	4	0	349
June 27-July 3	2	20	75	133	2	2	1	0	0	0	235
July 4-10	0	21	94	171	0	0	2	0	0	0	288
July 11-17	0	22	836	40	1	49	16	0	0	0	964
July 18-24	1	22	868	40	2	23	40	2	0	0	998
July 25-31	0	10	643	56	0	20	9	0	1	1	740
August 1-7	0	0	0	0	0	0	0	6	0	0	6
August 8-14	0	10	141	39	0	8	1	0	0	0	199
August 15-21	0	13	229	24	0	31	5	0	8	1	311
August 22-28	0	3	146	17	0	24	8	2	2	0	202
Aug. 29-Sept. 4	0	6	39	5	0	4	2	0	1	2	59
Sept. 5-11	0	1	29	7	0	7	1	0	8	0	53
Sept. 12-18	0	4	3	19	0	2	2	0	0	0	30
Sept. 19-25	0	1	0	8	10	0	0	0	0	0	19
Sept. 26-Oct. 2	0	0	0	0	0	0	0	0	0	0	0
Oct. 3-9	0	0	0	0	285	0	0	0	0	0	285
Oct. 10-16	0	0	0	0	830	0	0	0	0	0	830
Oct. 17-23	0	0	0	0	2	0	0	0	0	0	2
Total	5	155	3209	827	1133	200	91	11	24	8	5671

Table 9. Total commercial catch of chum salmon in southern Southeastern Alaska by district and statistical week, 1982.

Stat Week	District 101	102	103	104	105	106	107	108	109	110	152	Total
Before June 6	0	0	0	0	0	0	0	0	0	0	0	0
June 6 -12	0	0	0	3	0	2	0	0	1	0	0	17
June 13-19	268	0	0	0	0	157	1	8	0	1	1	436
June 20-26	3630 [1]	3	1	1	0	721	1	112	2	3	0	4474
June 27-July 3	4362	2	1	244	0	900	0	40	7	2	0	5558
July 4-10	9062	4	2	7632	1	805	2	67	23	6	1	17605
July 11-17	18019	1030	4	39514	3	1682	2	0	22	8	18	60302
July 18-24	22531	1738	10	16149	5	6052	0	0	51	12	6	46554
July 25-31	9523	1357	20	3332	14	2941	1	0	26	7	11	17232
August 1-7	16232	5022	0	14496	0	0	0	0	5932	5569	0	47251
August 8-14	17546 [2]	14533	170	50930	5	8	0	124	12078	3232	9	98635
August 15-21	19546	16995	9360	71560	3	625	482	94	3376	997	3	123041
August 22-28	30003	21348	4827	70006	5	2266	0	112	2955	332	1	130855
Aug. 29-Sept. 4	57584	10997	14411	68409	4260	1808	0	102	2942	0	0	160513
Sept. 5-11	30874	2854	19989	9962	0	441	1	53	15882	1	0	80057
Sept. 12-18	1643	0	0	0	0	472	0	32	1	0	0	2148
Sept. 19-25	628	0	0	2	0	3	0	0	0	0	0	633
Sept. 26-Oct. 2	36	55850	0	2034	0	0	0	0	0	0	0	57920
Oct. 3-9	36040	0	0	0	0	0	0	0	0	0	0	36040
Oct. 10-16	0	2852	0	0	0	0	0	0	0	0	0	2852
Oct. 17-23	0	1	0	0	0	0	0	0	0	0	0	1
Total	241487	170626	48796	354285 [3]	4296	18883	490	744	42298	10170	50	892125

[1] Includes 12 chum salmon caught with unidentified gear.

[2] Includes 1 chum salmon caught with unidentified gear.

[3] Includes 11 chum salmon caught in District 104 during an unrecorded statistical week.

Table 10. Total commercial catch of chum salmon in northern Southeastern Alaska by district and statistical week, 1982.

Stat Week	District 111	112	113	114	115	116	154	157	181	189	Total
Before May 23	0	0	0	0	0	0	0	0	0	0	0
May 23- 29	0	0	2	6	0	0	0	0	0	0	8
May 30-June 5	0	1	13	12	0	0	0	0	0	1	27
June 6 -12	1	2	2	26	0	3	0	0	0	2	36
June 13-19	10	2	8	12	260	0	1	0	0	0	293
June 20-26	261	17	81	212	942	27	3	1	4	3	1551
June 27-July 3	738	20	75	133	1414	2	1	0	0	0	2383
July 4-10	2700	42 [1]	94	198 [3]	670	0	2	0	0	0	3706
July 11-17	2528	13582 [2]	836	40	671	49	16	0	0	0	17722
July 18-24	2825	17582	5461	40	483	23	40	2	0	0	26456
July 25-31	2919	8262	643	56	903	20	9	0	1	1	12814
August 1-7	3267	10635	80	0	1714	0	0	6	0	0	15702
August 8-14	1151	6394	3393	39	3379	8	1	0	0	0	14365
August 15-21	3265	11670	3116	24	4704	31	5	0	8	1	22824
August 22-28	3301	13591	3704	2019	14169	24	8	2	2	0	36820
Aug. 29-Sept. 4	5046	9083	1037	2008	18159	4	2	0	1	2	35342
Sept. 5-11	5396	19	29	7	25037	7	1	0	8	0	30504
Sept. 12-18	5589	4	3	19	47595	2	2	0	0	0	53214
Sept. 19-25	0	1	0	8	54445	0	0	0	0	0	54464
Sept. 26-Oct. 2	0	0	0	0	67808	0	0	0	0	0	67808
Oct. 3-9	0	0	0	0	28329	0	0	0	0	0	28329
Oct. 10-16	0	0	0	0	30865	0	0	0	0	0	30865
Oct. 17-23	0	0	0	0	4851	0	0	0	0	0	4851
Oct. 24-30	0	0	0	0	59	0	0	0	0	0	59
Total	38997 [4]	90907	18577	4859	306467	200	91	11	24	8	460141

[1] Includes 21 chum salmon caught by unidentified gear.

[2] Includes 124 chum salmon caught by unidentified gear.

[3] Inclueds 27 chum salmon caught by unidentified gear.

[4] Includes 1 chum salmon caught in District 111 during an unrecorded statistical week.

occurred 4 weeks later (26 September to 2 October with a total chum salmon catch of 125,731 fish).

Because the subsistence and sport catch of chum salmon are only a small percentage of the commercial catch, length, sex, and scale samples were not obtained. An estimated total of 1,857 chum salmon was taken by sport fishermen (Table 11). The largest sport catch total was reported from the Juneau area. The reported subsistence catch totaled 3,848 chum salmon (Table 12). District 113 and 114 each accounted for 26% of the total chum subsistence catch.

Peak escapement counts for streams in the Southeastern Region may be useful for interannual or interdrainage comparisons. Stream counts in which counts of 25 or greater were observed are presented in Table 13. Scale, sex, and length data were obtained for 13 streams and age distribution (without assigning sex) for Neka River (see Tables 51 to 80 in the appendix and summaries in Tables 14 and 15). Because of the large number of samples collected throughout the chum salmon migration at Hidden Falls Hatchery, samples were divided into 6 sampling periods (Appendix Table 76). With the exception of Neka River, Snettisham Hatchery, and Hidden Falls Hatchery, all other sample sizes were less than the 454 mininum necessary for a ± 5% confidence interval assigned to the percent of total escapement allotted to each age class. However, mean values are presented for comparative purposes.

Several differences in age composition of the escapement were noted. Excursion River had a significantly higher percentage of 6-year-old chum salmon (18.3% of the total sample) than other sampled streams (an average of 1.6% of the total sample). As in the commercial catch, the majority of chum salmon sampled in escapement surveys were 4-year-old fish. However, several drainages had high proportions of 5-year-old chum (51.9% for Humpback Creek, 46.4% for Snettisham Hatchery, 41.7% for Nakwasina River, 40.5% for Kadashan River, and 32.0% for Montana Creek; compare commercial catch percentages of from 1.9% to 21.6% for purse seine and 5.8% to 43.2% for gill net 5-year-old chum salmon). The male/female ratio differed notably from the approximate 50/50 male/female ratio observed in the chum salmon commercial catch. With the exception of Excursion River and Snettisham Hatchery, females outnumbered males sampled, and were significantly greater in numbers in escapement samples from Nakwasina River (24/76) and Herman Creek (34/66). Length data of chum salmon were consistent with those of commercial catch samples.

Basic statistics concerning the migratory time distribution are presented in Table 16. Means range from 19 July to 3 October. The range of variances is large, from 17.43 days^2 to 183.13 days^2. No relationship between means and variances was detected. In Montana Creek and Sawmill Creek daily counts of male and female chum salmon were recorded. In both cases the mean day of the male chum salmon migration preceded the corresponding mean day of female chum salmon. No consistent pattern in the shape or character of the migratory time distribution was noted. Daily and cumulative counts for the 11 weir systems observed are presented in Appendix Tables 81-90.

Table 11. Southeastern Alaska sport catch, 1982[1].

Area	Saltwater	Freshwater	Total
Ketchikan	230	0	230
Prince of Wales Island	42	52	94
Petersburg-Wrangell	210	42	252
Juneau	577	31	608
Glacier Bay	0	0	0
Sitka	594	10	304
Haines-Skagway	10	59	69
Total	1663	194	1857

[1] Source: Mills, J.J. 1983. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game. Federal Aid and Fish Restoration. Annual Report of Progress, 1982-1983. Project F-9-15, Vol. 22 (SW-I-A).

Table 12. Southeastern Alaska reported chum salmon subsistence catch, 1982[1].

Area	Stream number	Number harvested
Carroll River/ George Inlet	101-45-078	8
Gravina E. Side	101-47-060	2
Traitors River	101-90-029	10
District 1 total		20
Cholmondeley Sound	102-40-069	20
Maybeso Creek	102-60-084	9
Karta River	102-60-087	15
Kasaan	102-60-099	10
District 2 total		54
Nutkwa Inlet	103-21-008	20
Hetta/Eek	103-25-047	50
Klawock	103-60-047	141
Nossuk Bay	103-80-040	86
District 3 total		297
Petersburg/ Wrangell	106/ 108	753
District 6/8 total		753
Youngs Bay Area	111	56
Limestone Inlet	111	25
Several systems	111	56
District 11 total		137
Chaik	112	370
Several systems	112	116
District 12 total		486
Nakwasina	113-43	843
Starigavan Bay	113-41	8
Katlian Bay	113-44	42
Sandy Cove	113-41	25
Aleutkina Bay	113-41	43
Deep Bay	113-64	50
District 13 total		1011
Excursion	114	526
Port Frederich	114	150
Several systems	114	329
District 14 total		1005
Several unassigned districts		85
Total reported subsistence catch		3848

[1] Source: Valentine, Bergmann, DeJong, and Imamura; personal communication, 1983.

Table 13. Peak escapement by individual stream for Southeastern Alaskan chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey.

Stream Number	Stream Name	Count	Method	Distance	Date
101-11-033	Nakat Inlet Head	800	A	L	8/22
101-11-037	Nakat Creek	6000	F	L	9/10 [1]
101-11-039	Sockeye Creek Nakat	40	F	.8	9/17
101-11-079	Fillmore Creek	44	F	2.0	8/26
101-11-101	Hidden Inlet	550	A	1.0	7/20
101-15-019	Tombstone River	550	A	L	8/10
101-15-085	Fish Creek-Hyder	5795	F	L	9/14
101-23-027	Very Inlet	307	F	.5	9/24
101-27-019	Dall Head Creek	609	F	L	9/12
101-29-006	Vallenar Creek	322	F	4.5	9/29
101-30-030	Keta River	3003	A	L	7/20
101-30-060	Marten River	300	A	L	7/20
101-41-067	Nadzaheen Creek	125	F	L	9/27
101-45-024	White River	266	F	4.5	8/26
101-45-078	Carroll Creek	11000	F	L	8/17 [1]
101-55-009	Cabin Creek	30	F	L	9/3
101-55-020	Wilson River	503	A	L	7/20
101-55-040	Blossom River	307	B	L	9/04
101-60-009	Nooya Creek	135	F	L	9/14
101-60-015	Rudyerd Creek	1599	F	2.0	9/15
101-60-030	Big Goat Creek	58	F	4.0	8/13
101-71-008	Humpy Creek	42	F	0.3	8/15
101-71-014	King Creek	2242	F	3.0	8/15
101-71-025	Walker Cove	259	F	L	9/16
101-71-026	Walker Cove	189	F	0.8	9/16
101-71-028	Walker Creek	1748	F	1.5	9/16
101-71-063	Portage Creek	86	F	L	9/15
101-75-005	Herman Creek	380	F	3.5	8/18
101-75-015	Eulachon River	200	A	1.0	7/11
101-75-050	Klahini River	65	F	1.5	8/17
101-75-300	Cripple Creek (Unuk R.)	31	F	L	8/4

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

101-80-050	Spacious Bay	28	F	1.5	8/19
101-80-060	Sea Lion Cove	28	F	L	8/19
101-80-068	Wolverine Creek	75	W	L	9/9
101-80-084	Short Creek	98	F	L	9/17
101-90-029	Traitors Cove Creek	6376	F	1.0	8/21
101-90-039	Marguerite Creek	97	F	L	9/19
101-90-050	Naha River	163	F	6.0	9/29
101-90-060	Wolf Creek	145	F	0.3	9/25
101-90-092	Stewart Creek	52	F	2.0	8/20
102-30-015	Johnson Cove	1509	A	L	9/8
102-30-017	Johnson Cove Creek	2477	F	0.3	9/23
102-30-028	Perkins Creek	514	F	1.3	9/11
102-30-035	Moira S Arm SE	168	F	L	9/12
102-30-037	Moira S Arm S	62	F	0.2	9/23
102-30-040	Moira S Arm SW	51	F	0.1	9/23
102-30-042	Moira S Arm W	486	F	0.5	9/23
102-30-049	Frederick Cove	763	F	1.3	9/23
102-30-051	Frederick Creek	503	F	1.5	9/12
102-30-065	Kugel Creek	4100	F	0.4	9/23
102-30-067	Kegan Cove	391	W	L	9/20
102-40-007	Lancaster Cove	2300	A	L	9/17
102-40-043	Disappearance Creek	30000	W	L	10/20
102-40-045	Cholmondeley Sound	152	F	0.5	9/10
102-40-052	Cannery Creek	72	F	0.2	9/24
102-40-060	Logoon Creek	6633	F	L	10/17
102-40-087	Sunny Creek	233	F	L	9/10
102-60-016	Omar Creek	30	A	T	8/18
102-60-024	Old Tom Creek	1495	F	3.0	9/9
102-60-037	Rock Creek	311	F	1.0	9/9
102-60-068	Kena Creek	69	F	1.0	9/25
102-60-072	Twelvemile Creek	150	A	2.0	8/11
102-60-082	Harris River	600	A	1.0	8/8
102-60-084	Maybeso Creek	289	F	3.0	9/8
102-60-087	Karta Creek	41429	W	L	9/27

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

103-11-017	Hunter Bay	69	F	2.0	9/21
103-11-025	Hessa Inlet	73	F	L	9/22
103-11-035	Little Datzkoo Head	150	A	T	8/18
103-15-023	Klakas Right Head	276	F	1.8	9/13
103-25-005	Saltery Creek	184	F	1.5	9/17
103-25-015	Deer Creek	1363	F	0.8	9/17
103-25-030	Hetta Portage Creek	76	F	1.0	9/17
103-25-047	Hetta Lake Creek	1041	W	L	9/01
103-40-003	Soda Bay	43	F	1.2	9/19
103-40-009	Shilikof Creek	475	F	0.5	9/19
103-40-030	Flat Creek	120	A	0.8	9/19
103-40-035	Natzuhini Bay NE	303	F	1.0	8/12
103-40-039	Natzuhini Bay E	149	F	0.3	9/19
103-40-041	Hydaburg River	71	A	1.0	9/17
103-40-067	Coco Harbor	200	F	L	9/12
103-50-021	Port Estrella Head	665	F	0.7	9/5
103-50-022	Port Estrella Head R	520	F	0.4	9/5
103-50-029	Waterfall Creek S	105	F	0.7	9/5
103-50-032	Waterfall Creek E	38	F	2.0	9/5
103-50-044	Port Refugio Arm R	150	F	L	9/5
103-50-047	Port Refugio Arm S	8003	A	0.5	9/12
103-50-049	Port Refugio Arm H	332	F	L	9/28
103-50-079	Real Marina S	1200	A	T	9/12
103-50-083	Real Marina N	1500	A	T	9/12
103-60-009	Shinaku Inlet	216	F	0.5	9/10
103-60-013	Shinaku Creek	500	A	T	8/17
103-60-029	Steelhead Creek	30	F	1.5	9/9
103-60-031	Blackbear Creek	45	F	1.5	8/14
103-60-043	Airport Creek	25	F	0.2	9/9
103-60-047	Klawock River	9006	F	L	9/21
103-60-057	St. Nicholas N	582	F	0.1	9/7
103-60-059	Port St. Nicholas	412	F	0.7	9/7
103-60-065	Doyle Creek	493	F	0.5	9/7
103-60-071	Trocadero Bay NW	189	F	0.5	9/7
103-60-073	Trocadero Bay N	171	F	0.1	9/7
103-60-079	Trocadero Bay S	198	F	0.2	9/7
103-60-087	Deep Bay	176	F	1.0	9/8
103-60-092	Port Caldera	94	F	L	9/26
103-60-093	Caldera W	82	F	L	9/26

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

103-70-011	11 Mile Creek	108	F	3.0	9/24
103-70-015	Cruz Cove	2007	F	1.0	9/10
103-80-024	Warm Chuck NW	100	F	0.8	9/21
103-80-026	Warm Chuck L	95	F	0.7	9/21
103-80-031	Chuck Lake Creek	53	W	L	11/13
103-80-035	Nossuk Bay	65	F	1.8	9/21
103-80-046	Salt Lake Bay R	281	F	L	9/21
103-80-050	Salt Lake Bay S	215	F	L	9/22
103-80-056	St. Phillips Isl.	33	F	L	9/22
103-90-004	Sarheen Cove	73	F	0.5	9/13
103-90-006	El Capitan E	51	F	1.0	9/13
103-90-025	Yakut Creek	310	F	2.0	9/20
103-90-030	Staney Creek	816	F	2.5	8/15
103-90-035	Tuxekan Passage	65	F	1.8	9/21
103-90-042	Sarheen Creek	500	A	2.0	8/17
103-90-069	Tokeen Bay Head	370	F	1.0	9/19
103-90-072	Tokeen Capm Creek	578	F	L	9/19
104-20-020	Sakie Bay	25	F	0.5	9/18
104-30-040	Diver Bay	270	F	0.5	9/18
105-10-016	Linda Sue Slough	49	F	0.2	9/23
105-10-019	Kathleen Creek	366	F	L	9/23
105-10-021	Joan Creek	1492	F	L	9/23
105-10-024	Bear Harbor Creek	604	F	L	9/23
105-10-028	Kell Sough Creek	25	F	0.1	9/23
105-10-032	Kell Bay Creek	159	F	0.2	9/23
105-20-007	P Beauclerc NW	29	F	L	9/24
105-20-008	Cannery Creek	327	F	L	9/24
105-20-010	Gail Creek	88	F	L	9/24
105-20-012	P LBeauclerc S	1537	F	L	9/24
105-32-001	Lovelace Creek	32	F	0.5	9/28
105-42-005	Calder Creek	1799	F	L	9/25
105-42-009	El Capitan Creek	390	A	1.5	8/18

-Continued-

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106-10-030	Eagle Creek	72	F	L	9/23
106-21-004	Falls Creek	800	A	T	8/19
106-21-005	Trout Creek	1593	F	1.0	8/29
106-22-006	Flat Creek	130	F	1.0	8/27
106-22-008	Mosman Creek	418	F	1.5	8/27
106-22-010	Mosman Inlet	50	F	L	9/13
106-22-016	Navy Creek	292	F	L	8/29
106-30-010	Porcupine Creek	25	F	L	9/9
106-30-072	Mabel Creek	30	A	0.2	8/19
106-44-031	Crystal Creek	282	W	L	10/22
107-10-030	Black Bear Creek	27	F	2.5	9/14
107-10-070	Kukays Creek	32	F	0.8	8/27
107-10-072	Etolin Island	1500	A	M	8/13
107-20-020	Canoe Pass	78	F	L	8/26
107-20-023	Fisherman Chuck	40	A	0.5	8/16
107-20-030	Menefee Creek	149	F	1.5	8/26
107-30-090	Dog Salmon Creek	27	F	0.3	9/14
107-40-022	Berg Creek	30	A	L	7/20
107-40-025	Oerns Creek	280	A	L	7/20
107-40-049	Harding River	5300	A	L	7/26
107-40-055	Eagle River	85	F	3.0	8/31
108-40-010	North Arm Creek	840	F	1.3	8/11
108-40-020	Andrews Creek	53	W	L	8/21
108-40-050	Ohmer Creek	44	F	L	8/23
108-40-13A	W of Hot Springs	120	F	2.0	8/16

-Continued-

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109-10-006	Sashin Creek	25	W	L	10/31
109-30-003	Eliza Creek	40	A	0.5	8/1
109-30-016	Tyee Head E	700	A	T	8/2
109-30-017	Tyee Head W	250	A	0.3	8/29
109-30-025	Little Pybus Bay Cr.	9404	A	L	9/27
109-43-006	Port Camden S	3900	A	L	9/27
109-43-008	Port Camden W	1550	A	0.3	9/20
109-44-037	Saginaw Bay S	350	A	M	8/8
109-44-039	Saginaw Creek	650	A	1.5	8/18
109-45-013	Salt Chuck-Security	12000	A	L	9/27
109-45-015	Security Bay S	210	A	0.1	8/15
109-45-017	Lookout Pt. Creek	520	A	T	9/27
109-52-005	Wanigan Creek	380	A	0.1	9/13
109-52-006	Rowan Bay	250	A	M	8/8
109-52-007	Rowan Creek	50	A	2.0	8/18
109-52-035	Katlaku Creek	130	A	L	9/13
109-62-010	Elena Bay NW Side	80	F	L	9/22
109-62-011	Elena Bay NW Head	68	F	L	9/22
109-62-012	Elena Bay Head	921	F	L	9/21
109-62-013	Alecks Creek	25	A	L	8/18
109-62-014	Sample Creek	1620	A	L	9/08
109-62-017	W of Long Island	68	F	L	9/22
109-62-018	Goose Trap Creek	65	F	L	9/21
109-62-020	Petrof Bay SE	220	F	L	9/21
109-62-022	Petrof Bay S	105	F	0.3	8/29
109-62-024	Petrof Bay W	150	A	M	9/21
109-62-026	Petrof Bay SW	358	F	L	8/15
109-62-028	William Creek	250	A	M	9/13
109-62-029	Wolf Creek	200	A	0.3	9/21
109-62-030	Thetis Bay	31	F	T	9/21
109-62-036	Neal Creek	400	A	L	9/13

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

110-13-004	Dry Bay Creek	568	F	L	8/10
110-14-008	Dale Creek	1730	A	0.2	7/27
110-22-002	Old Mans Creek	267	F	L	8/17
110-22-004	Amber Creek	131	F	L	8/17
110-22-006	Pybus Bay Head	104	F	L	8/16
110-22-009	Beautiful Creek	450	A	L	8/11
110-22-012	Donkey Creek	1600	A	L	7/29
110-22-014	Cannery Cove	227	F	0.6	7/29
110-23-008	Johnson Creek	64	F	L	8/15
110-23-010	Bowman Creek	223	F	1.7	8/15
110-23-019	Snug Cove	616	F	L	8/15
110-23-040	Snug Cove E	30	A	T	8/9
110-31-004	Roberts Isl. Creek	101	F	L	8/11
110-32-009	Chuck River	207	F	L	8/13
110-32-012	1st SW Narrows	26	F	L	8/13
110-33-008	Nancy Creek	600	F	L	8/20
110-33-013	Lauras Creek	2000	A	1.0	7/27
110-34-006	Glen Creek	50	A	L	8/9
110-34-008	Sanborn Creek	1206	A	2.0	7/27
110-34-014	Negro Creek	231	F	0.4	8/11

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

111-11-020	Bear Creek	150	A	L	8/5
111-12-005	Pleasant Bay Creek	200	A	2.0	8/13
111-13-010	Mole River	300	A	3.5	8/13
111-14-034	Buck Lake Creek	100	A	0.5	8/13
111-15-020	Windfall Creek	320	A	L	8/5
111-15-024	Windfall Harbor	300	A	L	8/8
111-15-030	Pack Creek	950	A	L	7/28
111-16-040	Swan Cove Creek	350	A	L	8/8
111-17-010	King Salmon River	500	A	L	8/5
111-31-005	Taku Lake Creek	588	F	2.0	7/20
111-32-032	Taku River	1100	H	L	10/22
111-32-056	Fish Creek	25	H	L	10/22
111-33-010	Prospect Creek	500	H	L	8/13
111-35-005	Whiting River	120	A	L	9/9
111-35-006	Cresent Lake	350	A	L	9/9
111-35-020	Sweetheart Creek	500	A	L	8/13
111-40-015	Salmon Creek	45	F	L	8/2
111-40-028	Sheep Creek	36	F	L	8/2
111-40-065	Middle Point	75	A	L	8/15
111-40-070	Hilda LCreek	200	A	L	8/15
111-40-090	Cowee Creek	35	F	L	8/17
111-41-005	Admiralty Creek	450	A	L	8/4
111-50-042	Auke Creek	251	W	L	11/30
111-50-052	Montana LCreek	1533	W	L	8/21
111-50-069	Fish Creek	1219	F	2.0	8/2
111-90-005	Limestone Inlet	750	B	0.2	8/4

-Continued-

Table 13. Peak escapement by individual stream for Southeastern Alaska chum salmon systems, 1982. Survey code is: (F) foot, (H) helicopter, (A) aerial, (B) boat, (W) weir. L designates entire length of stream surveyed (numbers are distances in miles), M a survey at the mouth of a stream, and T a tidal survey (continued).

112-12-005	White Rock Creek	50	A	0.1	7/19
112-15-054	Opp Point Retreat	150	A	0.2	8/05
112-15-062	Robinson Creek	503	A	L	8/19
112-19-010	Wilson River	200	A	L	8/05
112-21-004	Glacial River	1000	A	L	8/09
112-21-005	Clear River	5000	A	L	8/09
112-21-006	Ralphs Creek	3000	A	L	8/01
112-42-008	Indian River	202	F	1.0	8/06
112-42-008	Corner Bay Creek	28	F	2.2	8/16
112-42-025	Kadashan Creek	14150	W	L	8/22
112-42-032	Rudy Creek	35	F	1.0	8/24
112-43-002	Crab Bay S	200	A	L	8/07
112-43-012	Crab Bay Head	45	F	1.0	8/07
112-46-009	Seal Bay Head	2803	A	L	7/16
112-47-010	Long Bay Head	5000	A	L	8/07
112-48-015	Big Goose Creek	3000	A	L	8/07
112-48-023	West Bay Head Creek	1000	A	L	8/07
112-48-035	Tenakee Inlet Head	300	A	L	8/17
112-50-020	Kennel Creek	140	A	L	8/3
112-50-030	Freshwater Creek	200	A	L	7/21
112-61-010	Point Howard Creek	50	A	L	7/21
112-61-012	Howard Bay E	300	A	L	8/25
112-65-012	Jimmy Green Creek	50	F	L	8/6
112-65-015	Hawk Inlet Head	550	F	L	8/9
112-65-022	Zinc Creek	100	F	L	8/9
112-65-024	Greens Creek	900	F	L	8/9
112-65-028	Piledriver Cove Creek	500	A	L	8/5
112-67-080	Favorite Creek	28	A	L	8/12
112-72-011	Weir Creek	450	A	L	7/28
112-72-012	Hood bay N	25	A	L	7/21
112-73-024	Weir Creek S	500	A	1.0	8/1
112-80-028	Chaik Bay Creek	1850	A	L	9/17
112-90-014	Whitewater Creek	300	A	M	8/3

-Continued-

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113-22-015	Whale Bay	3900	A	L	8/9
113-32-005	Crawfish NE	1933	F	L	8/19
113-41-032	Salmon Lake Stream	4500	A	L	9/3
113-41-040	Sandy Cove	1500	F	L	8/26
113-41-043	Redoubt Lake	50	W	L	8/22
113-43-002	Nakwasina River	6000	A	L	8/31
113-53-003	Saook Bay	400	A	0.5	7/17
113-54-007	Rodman Creek	300	A	0.5	7/26
113-57-001	Fick Cove	2000	A	L	8/1
113-57-005	Patterson Bay W	300	A	0.5	7/25
113-57-009	Hoonah Sound S	500	A	L	8/15
113-58-004	Hoonah Sound N	1500	A	L	8/1
113-59-004	Sitkoh Lake Creek	54	W	L	9/4
113-62-009	Kalinin Cove	1200	A	L	9/3
113-66-006	St. John Baptist	100	A	M	8/11
113-72-001	Chichagoff Creek	500	A	M	8/17
113-72-003	Lake Anna Head	500	A	M	8/4
113-72-005	Sister Lake SE	3000	A	M	8/17
113-73-003	Lake Stream Ford	68	W	L	11/17
113-73-004	South Ford Arm	300	A	M	7/27
113-73-010	Slocum Arm	500	A	L	7/27
113-73-012	Khaz Creek	1000	A	M	7/19
113-81-010	Black Bay N	400	A	L	8/17
113-81-011	Black River	500	A	0.5	7/27
113-96-002	Saltery River	400	A	M	7/27
114-23-070	Mud Bay River	500	A	1.0	8/6
114-25-005	Windy Creek	100	A	L	8/16
114-25-010	Homeshore Creek	415	F	2.0	8/8
114-25-012	E. Homeshore Creek	30	A	L	8/19
114-27-030	Spasski Creek	800	A	T	7/27
114-31-009	Gartina Creek	1000	A	L	8/9
114-31-013	Game Creek	2500	A	L	7/27
114-32-004	Seagull Creek	203	A	T	8/6
114-32-006	Bear Creek	553	A	0.5	8/6
114-33-023	Neka River	17321	W	L	8/11
114-33-025	Chum Creek	300	A	L	8/3
114-34-010	Humpback Creek	2300	A	1.0	7/27
114-40-035	Trail River	370	A	L	8/17
114-50-010	Anchor Bite Creek	350	A	0.5	8/9
114-80-020	Excursion River	2750	H	L	10/25

-Continued-

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115-10-042	St. James Bay	400	A	T	7/27
115-10-080	Endicott River	30	A	L	9/22
115-20-010	Berners River	50	A	L	9/9
115-20-030	Antler-Gilkey River	310	A	L	11/1
115-20-052	Sawmill Creek	4580	A	L	8/9
115-20-062	Cowee Creek	69	F	L	10/21
115-32-025	Chilkat River	98000	A	L	10/19
115-32-030	Takhin River	500	A	L	9/29
115-32-046	Klehini River	15600	A	L	9/29
115-32-047	Mink Creek	77	F	L	10/15
115-32-048	Herman Creek	1200	F	2.0	10/20
115-32-049	Bear Creek	414	F	L	10/15
115-32-056	Muncaster Creek	94	F	L	11/17
115-32-057	31 Mile Creek	1155	F	L	10/22
115-32-059	25 Mile Creek	800	F	0.5	10/22
115-32-081	18 Mile Slough	401	F	L	10/22
115-33-020	Chilkoot Lake Outlet	507	W	L	9/14

[1] Data obtained from Southern Southeast Regional Aquaculture Association.

Table 14. Summary of age composition by sex of escapement of chum salmon in Southeastern Alaska by surveyed stream, 1982.

Sex/ Age	Beaver Creek Hatchery	Crystal Creek	Montana Creek	Salmon Lake Creek	Kadashan River	Hidden Falls Hatchery	Nakwasina River
					Stream		
Male	49.2	48.3	47.8	50.0	48.6	51.4	24.2
02	5.8	0.0	6.9	5.3	10.7	21.2	3.3
03	35.2	46.0	24.4	35.5	19.1	25.9	12.7
04	6.7	2.3	15.9	9.2	17.1	1.6	8.2
05	1.5	0.0	0.6	0.0	1.7	0.0	0.0
Female	50.8	51.7	52.2	50.0	51.4	51.2	75.8
02	5.5	2.3	6.3	2.6	3.5	13.8	2.7
03	32.4	48.3	28.9	46.1	23.6	34.5	39.6
04	8.9	1.0	16.1	1.3	23.4	2.8	33.5
05	4.0	0.0	0.9	0.0	0.9	0.0	0.0
Both Sexes							
02	11.3	2.3	13.2	7.9	14.2	35.0	6.0
03	67.6	94.3	53.3	81.6	42.7	60.4	52.3
04	15.6	3.4	32.0	10.5	40.5	4.5	41.7
05	5.5	0.0	1.5	0.0	2.6	0.0	---

-Continued-

Table 14. Summary of age composition by sex of escapement of chum salmon in Southeastern Alaska by surveyed stream, 1982 (continued).

Sex/ Age	Herman Creek	Chilkat River	Salmon Creek	Snettisham Hatchery	Klehini River	Humpback Creek	Excursion River
	Stream						
Male	33.8	44.7	38.8	61.9	48.9	40.4	52.9
02	1.2	2.1	2.1	1.2	1.1	1.9	4.0
03	28.5	34.8	28.0	32.8	43.5	15.4	28.1
04	4.1	7.8	8.7	27.8	4.3	19.3	12.8
05	0.0	0.0	0.0	0.0	0.0	3.8	8.0
Female	66.2	55.3	61.2	38.1	51.1	59.6	47.1
02	1.0	2.1	0.0	0.4	1.1	0.0	2.9
03	57.4	40.1	47.2	13.5	41.0	21.2	22.3
04	7.3	13.1	14.0	24.1	9.0	32.6	11.7
05	0.5	0.0	0.0	0.1	0.0	5.8	10.2
Both Sexes							
02	2.2	4.2	2.1	1.2	2.2	1.9	6.9
03	85.9	74.9	75.2	46.4	84.5	36.6	50.4
04	11.4	20.9	22.7	51.9	13.3	51.9	24.4
05	0.5	0.0	0.0	0.1	0.0	9.6	18.3

Table 15. Summary of average length (± 95% confidence limit) composition by sex of escapement of chum salmon in Southeastern Alaska by surveyed stream, 1982.

Sex/	Stream						
	Beaver Creek Hatchery	Crystal Creek	Montana Creek	Salmon Lake Creek	Kadashan River	Hidden Falls Hatchery	Nakwasina River
Male							
02	578.1 (13.7)	———	596.7 (13.1)	633.7 (25.0)	578.2 (11.3)	591.4 (7.0)	618.3 (20.4)
03	635.4 (6.5)	623.0 (12.4)	635.6 (7.8)	675.2 (17.0)	627.8 (9.6)	639.2 (6.2)	682.6 (14.5)
04	665.4 (17.0)	605.0 (21.5)	670.4 (10.9)	682.1 (21.7)	664.0 (11.6)	667.5 (21.2)	684.2 (19.0)
05	668.8 (31.3)	———	723.5 (83.8)	———	679.5 (28.5)	———	———
Female							
02	605.6 (14.5)	574.0 (124.7)	598.9 (14.4)	642.5 (225.7)	591.5 (21.3)	601.3 (5.6)	644.0 (13.7)
03	639.9 (6.6)	606.0 (8.1)	608.0 (4.9)	651.3 (12.1)	615.8 (6.3)	627.3 (3.9)	665.6 (6.2)
04	669.1 (8.8)	570.0 (——)	636.6 (7.7)	670.0 (——)	643.7 (5.4)	649.3 (12.1)	679.7 (3.9)
05	681.3 (4.2)	———	647.0 (33.7)	———	640.7 (3.8)	685.0 (——)	———

-Continued-

Table 15. Summary of average length (± 95% confidence limit) composition by sex of escapement of chum salmon in Southeastern Alaska by surveyed stream, 1982 (continued).

Sex/ Age	Herman Creek	Chilkat River	Snettisham Hatchery	Salmon Creek	Klehini River	Humpback Creek	Excursion River
				Stream			
Male							
02	628.8 (37.9)	613.9 (34.0)	616.2 (60.2)	596.6 (48.0)	618.7 (63.8)	550.0 (---)	620.2 (26.0)
03	661.9 (5.0)	660.5 (4.8)	651.4 (7.8)	655.7 (8.7)	660.2 (4.2)	682.4 (28.8)	676.8 (7.1)
04	679.5 (19.9)	685.8 (9.3)	698.0 (9.5)	687.8 (11.8)	677.9 (11.7)	664.8 (29.8)	677.9 (42.2)
05	----------	----------	----------	----------	----------	662.5 (225.7)	687.2 (15.6)
Female							
02	586.7 (24.2)	605.6 (12.7)	----------	----------	598.7 (39.5)	----------	608.2 (35.2)
03	639.6 (4.1)	648.6 (4.8)	641.6 (7.7)	633.2 (5.5)	641.0 (4.5)	610.0 (14.9)	641.2 (7.9)
04	645.3 (12.7)	676.9 (9.3)	670.4 (6.6)	651.0 (9.3)	670.5 (9.3)	631.9 (21.5)	661.7 (14.2)
05	664.0 (4.3)	----------	700.0 (---)	----------	----------	613.7 (26.7)	664.0 (11.6)

Table 16. Description of the migratory time distributions of selected Southeastern chum salmon migrations, 1982.

Weir	Mean	Variance	Day of 25 % Passage	Median	Day of 75 % Passage	Comments
Auk Cr.	August 21	35.86 $days^2$	August 16	August 21	August 23	Bimodal, Smaller Peak at August 15, Major peak August 21.
Beaver Cr.	Sept. 25	23.42 $days^2$	Sept. 20	Sept. 25	Oct. 3	Sporatic migration, 3 to 4 days between peaks.
Chilkoot	Sept. 4	22.17 $days^2$	Sept. 2	Sept. 3	Sept. 12	Consistent migration, large peak Sept. 3. Later part may be truncated.
Disappearance	Oct. 3	83.95 $days^2$	Sept. 27	Oct. 4	Oct. 10	Somewhat consistent through Sept. 29. Large peak at Sept. 30 followed by smaller Oct. 4 - 5 and Oct. 9 - 13 peaks. Both late early parts possibly truncated.
Neka R.	Sept. 1	183.13 $days^2$	Aug. 20	Sept. 13	Sept. 14	Left skewed. Consistent counts until last 2 days when over one-half of total chum salmon passed. Later part truncated.
Kadashan R.	July 19	74.13 $days^2$	July 14	July 18	Aug. 3	Sporadic, with bimodal character. Peaks on July 14 - 18 and late July - Early August.
Klawock	Aug. 16	170.49 $days^2$	Aug. 7	Aug. 12	Aug. 4	Five days of catch account for 68 % of total count. Sporadic.
Montana Cr.	July 22	83.16 $days^2$	July 15	July 22	July 27	Mean day of males is July 20. Mean day of females is July 23. Consistent counts with large counts from July 21 to July 28.
Salmon Cr.	July 29	17.43 $days^2$	July 27	July 27	July 29	Over one-half counted on first day, truncated first part.
Salmill Cr.	July 26	34.21 $days^2$	July 21	July 25	Aug. 1	Mean day of males is July 25. Mean day of females is July 27. Consistent counts.

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APPENDICES

Appendix Table 1. District 101 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 7/4 - 9/11						
Period Sample Size 789						
Male	Count	7,438	38,646	4,366	162	50,612
	Percent	5.83	30.29	3.42	.13	39.67
Female	Count	10,349	59,991	6,145	485	76,970
	Percent	8.11	47.02	4.82	.38	60.33
Sexes Combined	Count	17,787	98,637	10,511	647	127,582
	Percent	13.94	77.31	8.24	.51	100.00

Appendix Table 2. District 101 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	622.00	643.66	692.15	654.00
Std Error	5.64	2.82	10.14	0.00
Samp Size	46	239	27	1
Upper bounds of Confid. Int.	633.39	649.18	713.04	------
Lower bounds of Confid. Int.	610.61	638.14	671.25	------
Females				
Av Length	615.69	642.49	671.05	726.33
Std Error	4.66	1.95	6.50	27.39
Samp Size	64	371	38	3
Upper bounds of Confid. Int.	625.00	646.32	684.25	844.10
Lower bounds of Confid. Int.	606.37	638.66	657.86	608.56

Appendix Table 3. District 101 commercial purse seine catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	46	238	27	1	0	312
Percent	0.00	4.82	37.19	3.72	0.13	0.00	45.86
Number	0	6156	47462	4749	165	0	58532
Female							
Sample Number	0	64	371	38	3	0	476
Percent	0.00	5.43	43.84	3.91	0.96	0.00	54.14
Number	0	6926	55950	4992	1232	0	69099
Sexes Combined							
Sample Number	0	110	609	65	4	0	788
Percent	0.00	10.25	81.02	7.63	1.09	0.00	100.00
Number	0	13082	103412	9741	1347	0	127631

Appendix Table 4. District 101 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 7/4 - 7/17						
Period Sample Size 497						
Male	Count	1,233	4,158	401	57	5,849
	Percent	8.65	29.18	2.81	.40	41.05
Female	Count	1,577	6,337	487	0	8,401
	Percent	11.07	44.47	3.42	0.00	58.95
Sexes Combined	Count	2,810	10,495	888	57	14,250
	Percent	19.72	73.65	6.23	.40	100.00
Sample Period 2 7/18- 7/31						
Period Sample Size 563						
Male	Count	4,040	5,207	583	42	9,872
	Percent	17.23	22.20	2.49	.18	42.10
Female	Count	5,873	6,831	875	0	13,579
	Percent	25.04	29.13	3.73	0.00	57.90
Sexes Combined	Count	9,913	12,038	1,458	42	23,451
	Percent	42.27	51.33	6.22	.18	100.00
Sample Period 3 8/1 - 8/21						
Period Sample Size 488						
Male	Count	3,328	5,046	590	54	9,018
	Percent	12.71	19.26	2.25	.21	34.43
Female	Count	6,387	9,608	1,020	161	17,176
	Percent	24.38	36.68	3.89	.61	65.57
Sexes Combined	Count	9,715	14,654	1,610	215	26,194
	Percent	37.09	55.94	6.15	.82	100.00

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Appendix Table 4. District 101 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group				
		02	03	04	05	
Sample Period 4 8/22- 9/18						
Period Sample Size 548						
Male	Count	3,328	13,531	796	0	17,655
	Percent	8.39	34.13	2.01	0.00	44.53
Female	Count	3,907	16,715	1,302	72	21,996
	Percent	9.85	42.16	3.28	.18	55.47
Sexes Combined	Count	7,235	30,246	2,098	72	39,651
	Percent	18.25	76.28	5.29	.18	100.00

Appendix Table 5. District 101 commercial gill net catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	629.32	663.06	679.66	751.25
Std Error	3.71	2.52	7.88	57.86
Samp Size	249	552	50	4
Upper bounds of Confid. Int.	636.60	668.00	695.50	935.23
Lower bounds of Confid. Int.	622.05	658.11	663.82	567.27
Females				
Av Length	617.11	642.80	663.60	694.50
Std Error	1.93	1.41	5.24	25.43
Samp Size	369	795	75	4
Upper bounds of Confid. Int.	620.89	645.56	674.02	775.37
Lower bounds of Confid. Int.	613.34	640.03	653.18	613.63

Appendix Table 6. District 101 commercial gill net catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	249	552	50	4	0	855
Percent	0.00	12.71	26.03	2.07	0.11	0.00	40.92
Number	0	14226	29143	2317	128	0	45813
Female							
Sample Number	0	369	795	75	4	0	1243
Percent	0.00	18.49	37.34	3.11	0.13	0.00	59.08
Number	0	20703	41806	3483	143	0	66135
Sexes Combined							
Sample Number	0	618	1347	125	8	0	2098
Percent	0.00	31.20	63.38	5.18	0.24	0.00	100.00
Number	0	34929	70949	5800	271	0	111948

Appendix Table 7. District 102-40 (Cholmondeley Sound) commercial purse seine of chum salmon; age and sex composition, 1982.

		Age Group 02	03	04	Total
Sample Period 1 9/26-10/09					
Period Sample Size		260[1]			
Male	Count	3,587	35,597	828	40,012
	Percent	5.00	49.62	1.15	55.77
Female	Count	1,656	29,525	552	31,733
	Percent	2.31	41.15	.77	44.23
Sexes Combined	Count	5,243	65,122	1,380	71,745
	Percent	7.31	90.77	1.92	100.00

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 8. District 102-40 (Cholmondeley Sound) commercial purse seine catch of chum salmon; length (mm) by age and sex, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length	626.77	647.12	661.67
Std Error	10.19	2.83	19.22
Samp Size	13	129	3
Upper bounds of Confid. Int.	648.98	652.68	744.31
Lower bounds of Confid. Int.	604.56	641.57	579.02
Females			
Av Length	616.00	644.15	652.50
Std Error	5.80	2.87	37.50
Samp Size	6	107	2
Upper bounds of Confid. Int.	630.91	649.78	1129.13
Lower bounds of Confid. Int.	601.09	638.52	175.87

Appendix Table 9. District 102-40 (Cholmondeley Sound) total commercial purse seine catch of chum salmon; age and sex composition, 1982.

	Age Group			
	02	03	04	Total
Male				
Sample Number	13	129	3	145
Percent	5.00	49.61	1.15	55.77
Number	3,751	37,219	866	41,836
Female				
Sample Number	6	107	2	115
Percent	2.31	41.15	0.77	44.23
Number	1,731	30,873	577	33,181
Sexes Combined				
Sample Number	19	236	5	260
Percent	7.31	90.76	1.92	100.00
Number	5,482	68,092	1,443	75,017

Appendix Table 10. District 102 (not including Cholmondeley Sound) commercial purse seine catch of chum salmon; age and sex composition, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 7/18- 8/28						
Period Sample Size	873					
Male	Count	1,773	14,934	3,478	0	20,185
	Percent	2.98	25.09	5.84	0.00	33.91
Female	Count	3,819	30,277	5,046	205	39,347
	Percent	6.42	50.86	8.48	.34	66.09
Sexes Combined	Count	5,592	45,211	8,524	205	59,532
	Percent	9.39	75.94	14.32	.34	100.00

Appendix Table 11. District 102 (not including Cholmondeley Sound) commercial purse seine catch of chum salmon; length (mm) by age and sex, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	604.69	644.53	676.49	
Std Error	8.23	2.76	6.43	
Samp Size	26	219	51	
Upper bounds of Confid. Int.	621.64	649.95	689.41	
Lower bounds of Confid. Int.	587.74	639.12	663.56	
Females				
Av Length	599.64	634.53	667.46	698.33
Std Error	4.73	1.68	4.86	14.24
Samp Size	56	444	74	3
Upper bounds of Confid. Int.	609.10	637.84	677.75	759.57
Lower bounds of Confid. Int.	590.19	631.23	657.75	637.10

Appendix Table 12. District 102 (not including Cholmondeley Sound) total commercial purse seine catch of chum salmon; age and sex composition, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	1	13	129	3	0	0	146
Percent	0.29	4.24	51.88	0.87	0.00	0.00	57.29
Number	276	4021	49153	827	0	0	54276
Female							
Sample Number	0	6	107	2	0	0	115
Percent	0.00	1.74	40.39	0.58	0.00	0.00	42.71
Number	0	1653	38262	551	0	0	40466
Sexes Combined							
Sample Number	1	19	236	5	0	0	261
Percent	0.29	5.99	92.27	1.45	0.00	0.00	100.00
Number	276	5665	87415	1378	0	0	94742

Appendix Table 13. District 102 total commercial purse seine catch of chum salmon; length (mm) by age and sex, 1982. Confidence limits are 95%.

	AGE GROUP			
	02	03	04	05
Males				
Av Length	612.05	645.49	675.67	
Std Error	6.59	2.03	6.15	
Samp Size	39	348	54	
Upper bounds of Confid. Int.	625.37	649.47	668.03	
Lower bounds of Confid. Int.	598.73	641.52	663.30	
Females				
Av Length	601.23	636.40	667.07	698.33
Std Error	4.34	1.48	4.79	14.24
Samp Size	62	551	76	3
Upper bounds of Confid. Int.	609.91	639.29	676.59	759.57
Lower bounds of Confid. Int.	592.54	633.51	657.54	637.10

Appendix Table 14. District 102 total commercial purse seine catch of chum salmon; age and sex composition, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	1	39	348	54	0	0	442
Percent	0.18	3.88	41.14	2.48	0.00	0.00	47.68
Number	301	6620	70168	4232	0	0	81321
Female							
Sample Number	0	62	551	76	3	0	692
Percent	0.00	3.30	45.82	3.12	0.08	0.00	52.32
Number	0	5622	78150	5318	130	0	89221
Sexes Combined							
Sample Number	1	101	899	130	3	0	1134
Percent	0.18	7.18	86.97	5.60	0.08	0.00	100.00
Number	301	12242	148318	9550	130	0	170542

Appendix Table 15. District 104 and 152 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 7/11- 7/31						
Period Sample Size 612						
Male	Count	2,503	15,209	3,562	0	21,274
	Percent	4.25	25.82	6.05	0.00	36.11
Female	Count	5,006	27,820	4,813	0	37,639
	Percent	8.50	47.22	8.17	0.00	63.89
Sexes Combined	Count	7,509	43,029	8,375	0	58,913
	Percent	12.75	73.04	14.22	0.00	100.00
Sample Period 2 8/ 1- 9/ 4						
Period Sample Size 486						
Male	Count	20,939	95,640	20,939	566	138,084
	Percent	7.61	34.77	7.61	.21	50.21
Female	Count	18,675	103,564	14,714	0	136,953
	Percent	6.79	37.65	5.35	0.00	49.79
Sexes Combined	Count	39,614	199,204	35,653	566	275,037
	Percent	14.40	72.43	12.96	.21	100.00

Appendix Table 16. District 104 and 152 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length	604.87	640.25	669.47
Std Error	5.15	2.27	4.73
Samp Size	63	327	74
Upper bounds of Confid. Int.	615.17	644.70	678.93
Lower bounds of Confid. Int.	594.57	635.80	660.02
Females			
Av Length	588.75	630.92	646.66
Std Error	4.19	1.72	3.71
Samp Size	85	472	76
Upper bounds of Confid. Int.	597.10	634.30	639.27
Lower bounds of Confid. Int.	580.41	627.55	654.04

Appendix Table 17. District 104 and 152 commercial purse seine catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	63	327	74	1	0	465
Percent	0.00	7.41	31.46	5.56	0.15	0.00	44.58
Number	0	26208	111321	19686	530	0	157745
Female							
Sample Number	0	85	472	76	0	0	633
Percent	0.00	7.87	42.47	5.07	0.00	0.00	55.42
Number	0	27859	150269	17936	0	0	196065
Sexes Combined							
Sample Number	0	148	799	150	1	0	1098
Percent	0.00	15.28	73.94	10.63	0.15	0.00	100.00
Number	0	54067	261590	37622	530	0	353810

Appendix Table 18. District 105 commercial purse seine catch of chum salmon; age and sex composition by period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 8/29- 9/ 4						
Period Sample Size		285[1]				
Male	Count	866	957	134	0	1,957
	Percent	20.34	22.48	3.15	0.00	45.97
Female	Count	583	1,329	373	15	2,300
	Percent	13.70	31.22	8.76	.35	54.03
Sexes Combined	Count	1,449	2,286	507	15	4,257
	Percent	34.04	53.70	11.91	.35	100.00

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 19. District 105 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	599.53	657.56	689.44	
Std Error	3.78	5.16	12.57	
Samp Size	58	64	9	
Upper bounds of Confid. Int.	607.10	667.89	718.49	
Lower bounds of Confid. Int.	591.97	647.24	660.40	
Females				
Av Length	593.95	643.51	667.08	660.00
Std Error	4.25	3.44	8.45	0.00
Samp Size	39	89	25	1
Upper bounds of Confid. Int.	602.54	652.11	684.48	———
Lower bounds of Confid. Int.	585.36	620.60	649.67	———

Appendix Table 20. District 105 commercial purse seine catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	58	64	9	0	0	131
Percent	0.00	20.28	22.38	3.15	0.00	0.00	45.80
Number	0	863	953	134	0	0	1950
Female							
Sample Number	0	39	90	25	1	0	155
Percent	0.00	13.64	31.47	8.74	0.35	0.00	54.20
Number	0	581	1340	372	15	0	2307
Sexes Combined							
Sample Number	0	97	154	34	1	0	286
Percent	0.00	33.92	53.85	11.89	0.35	0.00	100.00
Number	0	1444	2293	506	15	0	4257

Appendix Table 21. District 106 commercial gill net catch of chum salmon; age and sex composition by period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 6/20- 7/17						
Period Sample Size 632						
Male	Count	58	1,495	429	32	2,014
	Percent	1.41	36.42	10.45	.78	49.06
Female	Count	45	1,397	630	19	2,091
	Percent	1.10	34.03	15.35	.46	50.94
Sexes Combined	Count	103	2,892	1,059	51	4,105
	Percent	2.51	70.45	25.80	1.24	100.00
Sample Period 2 7/18- 8/21						
Period Sample Size 455						
Male	Count	169	3,526	507	63	4,265
	Percent	1.76	36.70	5.28	.66	44.39
Female	Count	169	4,329	823	21	5,342
	Percent	1.76	45.06	8.57	.22	55.61
Sexes Combined	Count	338	7,855	1,330	84	9,607
	Percent	3.52	81.76	13.84	.87	100.00

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Appendix Table 21. District 106 commercial gill net catch of chum salmon; age and sex composition by period, 1982 (continued).

		Age Group				
		02	03	04	05	Total
Sample Period 3 8/22- 9/18						
Period Sample Size 581						
Male	Count	120	1,927	471	0	2,518
	Percent	2.41	38.73	9.47	0.00	50.60
Female	Count	171	1,858	420	9	2,458
	Percent	3.44	37.34	8.44	.18	49.40
Sexes Combined	Count	291	3,785	891	9	4,976
	Percent	5.85	76.07	17.91	.18	100.00

Appendix Table 22. District 106 commercial gill net catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	600.35	652.02	680.66	696.12
Std Error	6.55	1.70	4.58	22.51
Samp Size	31	622	145	8
Upper bounds of Confid. Int.	613.71	655.35	689.64	749.26
Lower bounds of Confid. Int.	587.00	648.69	671.69	642.99
Females				
Av Length	593.97	632.07	662.51	667.20
Std Error	5.62	1.43	4.67	5.65
Samp Size	35	637	186	5
Upper bounds of Confid. Int.	605.38	634.87	671.67	682.91
Lower bounds of Confid. Int.	582.56	629.28	653.35	651.49

Appendix Table 23. District 106 commercial gill net catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	33	711	172	8	0	924
Percent	0.00	1.65	37.22	8.31	0.44	0.00	47.62
Number	0	311	7014	1566	83	0	8974
Female							
Sample Number	0	37	679	187	5	0	908
Percent	0.00	1.85	39.28	10.18	0.23	0.00	51.54
Number	0	349	7402	1919	44	0	9714
Sexes Combined							
Sample Number	0	70	1390	359	13	0	1832
Percent	0.00	3.50	76.50	18.49	0.67	0.00	100.00
Number	0	660	14416	3485	127	0	18845

Appendix Table 24. District 107 commercial purse seine catch of chum salmon; age and sex composition of total catch, 1982.

		Age Group			
		02	03	04	Total
Sample Period 1 8/15- 8/21					
Period Sample Size		72[1]			
Male	Count	40	315	13	368
	Percent	8.30	65.35	2.70	76.35
Female	Count	7	94	13	114
	Percent	1.45	19.50	2.70	23.65
Sexes Combined	Count	47	409	26	482
	Percent	9.75	84.85	5.39	100.00

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 25. District 107 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length	624.67	645.02	628.50
Std Error	19.88	6.16	10.50
Samp Size	6	47	2
Upper bounds of Confid. Int.	675.76	657.47	761.04
Lower bounds of Confid. Int.	573.57	632.57	495.04
Females			
Av Length	675.00	638.57	646.50
Std Error	0.00	11.24	38.50
Samp Size	1	14	2
Upper bounds of Confid. Int.	———	662.84	1135.84
Lower bounds of Confid. Int.	———	614.30	157.16

Appendix Table 26. District 107 commercial purse seine catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	6	47	2	0	0	55
Percent	0.00	8.33	65.28	2.78	0.00	0.00	76.39
Number	0	40	315	13	0	0	368
Female							
Sample Number	0	1	14	2	0	0	17
Percent	0.00	1.39	19.44	2.78	0.00	0.00	23.61
Number	0	7	94	13	0	0	114
Sexes Combined							
Sample Number	0	7	61	4	0	0	72
Percent	0.00	9.72	84.72	5.56	0.00	0.00	100.00
Number	0	47	409	26	0	0	482

Appendix Table 27. District 108 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group 02	03	04	Total
Sample Period 1 6/27- 8/15					
Period Sample Size		72[1]			
Male	Count	13	106	32	151
	Percent	5.63	45.89	13.85	65.37
Female	Count	10	54	16	80
	Percent	4.33	23.38	6.93	34.63
Sexes Combined	Count	23	160	48	231
	Percent	9.96	69.26	20.78	100.00

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 28. District 108 commercial gill net catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length	622.25	637.97	675.90
Std Error	25.81	7.79	10.05
Samp Size	4	33	10
Upper bounds of Confid. Int.	704.32	653.86	698.62
Lower bounds of Confid. Int.	540.18	622.07	653.18
Females			
Av Length	559.33	615.94	678.20
Std Error	15.30	9.87	6.58
Samp Size	3	17	5
Upper bounds of Confid. Int.	625.13	636.86	696.50
Lower bounds of Confid. Int.	493.54	595.02	659.90

Appendix Table 29. District 108 commercial gill net catch of chum salmon; age and sex composition of total catch, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	4	33	8	0	0	45
Percent	0.00	6.22	43.94	13.62	0.00	0.00	63.78
Number	0	46	327	101	0	0	475
Female							
Sample Number	0	3	17	5	0	0	25
Percent	0.00	3.78	21.42	11.02	0.00	0.00	36.22
Number	0	28	159	82	0	0	269
Sexes Combined							
Sample Number	0	7	50	13	0	0	70
Percent	0.00	10.00	65.37	24.63	0.00	0.00	100.00
Number	0	74	486	183	0	0	744

Appendix Table 30. District 109 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group 02	03	04	05	Total
Sample Period 1 8/ 1- 8/21						
Period Sample Size 649						
Male	Count	1,049	5,374	2,491	197	9,111
	Percent	4.93	25.26	11.71	.93	42.83
Female	Count	1,180	8,456	2,360	164	12,160
	Percent	5.55	39.75	11.09	.77	57.17
Sexes Combined	Count	2,229	13,830	4,851	361	21,271
	Percent	10.48	65.02	22.81	1.70	100.00
Sample Period 2 8/22- 9/11						
Period Sample Size 741						
Male	Count	1,176	8,062	1,876	224	11,338
	Percent	5.67	38.86	9.04	1.08	54.66
Female	Count	700	6,326	2,352	28	9,406
	Percent	3.37	30.50	11.34	.13	45.34
Sexes Combined	Count	1,876	14,388	4,228	252	20,744
	Percent	9.04	69.36	20.38	1.21	100.00

Appendix Table 31. District 109 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group				
	01	02	03	04	05
Males					
Av Length		589.23	637.60	670.57	688.57
Std Error		4.34	1.78	3.19	10.76
Samp Size		74	452	143	14
Upper bounds of Confid. Int.		597.56	641.08	676.83	711.82
Lower bounds of Confid. Int.		580.56	634.11	664.31	665.32
Females					
Av Length	461.40	583.20	623.21	658.40	649.33
Std Error	18.10	4.10	1.93	2.68	12.92
Samp Size	5	61	485	156	6
Upper bounds of Confid. Int.	511.72	591.39	627.00	663.66	682.53
Lower bounds of Confid. Int.	411.08	575.00	619.43	653.15	616.14

Appendix Table 32. District 109 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	148	904	286	28	0	1366
Percent	0.00	4.97	32.89	8.97	0.54	0.00	47.37
Number	0	2088	13818	3771	226	0	19903
Female							
Sample Number	10	122	970	312	12	0	1426
Percent	0.15	3.22	37.02	11.88	0.35	0.00	52.63
Number	65	1354	15554	4992	146	0	22112
Sexes Combined							
Sample Number	10	270	1874	598	40	0	2792
Percent	0.15	8.19	69.91	20.86	0.89	0.00	100.00
Number	65	3442	29372	8763	372	0	42015

Appendix Table 33. District 110 and 111 commercial purse seine catch of chum salmon; age and sex composition by period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 8/ 1- 8/28						
Period Sample Size 660						
Male	Count	948	3,971	1,198	36	6,153
	Percent	8.03	33.64	10.15	.30	52.12
Female	Count	733	3,811	1,055	54	5,653
	Percent	6.21	32.28	8.94	.46	47.88
Sexes Combined	Count	1,681	7,782	2,253	90	11,806
	Percent	14.24	65.92	19.08	.76	100.00

Appendix Table 34. District 110 and 111 commercial purse seine of chum salmon; length (mm) by age and sex, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	602.09	637.91	671.88	660.00
Std Error	5.54	2.71	4.45	18.00
Samp Size	53	222	67	2
Upper bounds of Confid. Int.	613.22	643.21	680.78	888.78
Lower bounds of Confid. Int.	590.97	632.61	662.98	431.22
Females				
Av Length	595.17	618.31	657.07	669.00
Std Error	5.12	2.33	4.93	13.65
Samp Size	41	213	59	3
Upper bounds of Confid. Int.	605.51	622.86	666.92	727.70
Lower bounds of Confid. Int.	584.83	613.86	647.22	610.30

Appendix Table 35. District 110 and 111 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	53	222	67	2	0	344
Percent	0.00	8.25	35.45	9.65	0.29	0.00	53.65
Number	0	974	4186	1140	35	0	6334
Female							
Sample Number	2	41	213	59	3	0	318
Percent	0.21	5.47	32.31	8.13	0.23	0.00	46.35
Number	24	645	3815	960	27	0	5472
Sexes Combined							
Sample Number	2	94	435	126	5	0	662
Percent	0.21	13.72	67.77	17.78	0.52	0.00	100.00
Number	24	1629	8001	3100	62	0	11806

Appendix Table 36. District 111 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group 02	03	04	05	Total
Sample Period 1 6/20- 7/10						
Period Sample Size 777						
Male	Count	14	604	1,289	5	1,912
	Percent	.38	16.35	34.88	.14	51.75
Female	Count	10	518	1,255	0	1,783
	Percent	.27	14.02	33.96	0.00	48.25
Sexes Combined	Count	24	1,122	2,544	5	3,695
	Percent	.65	30.37	68.85	.14	100.00
Sample Period 2 7/11- 7/24						
Period Sample Size 644						
Male	Count	91	1,164	939	8	2,202
	Percent	1.70	21.75	17.54	.15	41.14
Female	Count	42	1,371	1,737	0	3,150
	Percent	.78	25.62	32.46	0.00	58.86
Sexes Combined	Count	133	2,535	2,676	8	5,352
	Percent	2.49	47.37	50.00	.15	100.00
Sample Period 3 7/25- 8/ 7						
Period Sample Size 451[1]						
Male	Count	247	1,123	701	41	2,112
	Percent	5.32	24.17	15.09	.88	45.45
Female	Count	227	1,556	742	10	2,535
	Percent	4.88	33.48	15.97	.22	54.55
Sexes Combined	Count	474	2,679	1,443	51	4,647
	Percent	10.20	57.65	31.05	1.10	100.00

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Appendix Table 36. District 111 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group 02	03	04	05	Total
Sample Period 4 8/ 8- 8/21						
Period Sample Size 551						
Male	Count	93	1,248	512	16	1,869
	Percent	2.18	29.21	11.98	.37	43.74
Female	Count	78	1,302	993	31	2,404
	Percent	1.83	30.47	23.24	.73	56.26
Sexes Combined	Count	171	2,550	1,505	47	4,273
	Percent	4.00	59.68	35.22	1.10	100.00
Sample Period 5 8/22- 9/ 4						
Period Sample Size 546						
Male	Count	61	2,141	1,299	15	3,516
	Percent	.73	25.65	15.56	.18	42.12
Female	Count	61	2,599	2,125	46	4,831
	Percent	.73	31.14	25.46	.55	57.88
Sexes Combined	Count	122	4,740	3,424	61	8,347
	Percent	1.46	56.79	41.02	.73	100.00

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Appendix Table 36. District 111 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group 02	03	04	05	Total
Sample Period 6 9/ 5- 9/18						
Period Sample Size 489						
Male	Count	337	2,426	1,707	0	4,470
	Percent	3.07	22.08	15.54	0.00	40.69
Female	Count	112	3,550	2,808	45	6,515
	Percent	1.02	32.32	25.56	.41	59.31
Sexes Combined	Count	449	5,976	4,515	45	10,985
	Percent	4.09	54.40	41.10	.41	100.00

[1] Sample size sufficient for ± 6% confidence limits.

Appendix Table 37. District 111 commercial gill net catch of chum salmon, length (mm) by age and sex, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	600.07	660.17	690.69	670.00
Std Error	9.87	1.33	1.82	13.54
Samp Size	70	785	680	9
Upper bounds of Confid. Int.	619.81	662.78	694.27	701.28
Lower bounds of Confid. Int.	580.33	657.56	687.12	638.72
Females				
Av Length	606.71	640.42	666.46	669.20
Std Error	5.55	1.25	1.05	11.48
Samp Size	48	922	937	10
Upper bounds of Confid. Int.	617.93	642.87	668.52	695.14
Lower bounds of Confid. Int.	595.49	637.97	664.40	643.26

Appendix Table 38. District 111 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	70	785	680	9	0	1544
Percent	0.00	2.31	23.41	17.06	0.23	0.00	43.02
Number	0	862	8736	6367	87	0	16052
Female							
Sample Number	0	48	922	937	10	0	1917
Percent	0.00	1.39	29.16	26.10	0.32	0.00	56.98
Number	0	520	10880	9739	120	0	21258
Sexes Combined							
Sample Number	0	118	1707	1617	19	0	3461
Percent	0.00	3.70	52.58	43.17	0.55	0.00	100.00
Number	0	1382	19616	16106	207	0	37310

Appendix Table 39. District 112 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

		Age Group 02	03	04	05	Total
Sample Period 1 7/11- 7/17						
Period Sample Size 485						
Male	Count	277	3,822	2,743	139	6,981
	Percent	2.06	28.45	20.42	1.03	51.96
Female	Count	277	3,796	2,216	166	6,455
	Percent	2.06	28.25	16.49	1.24	48.04
Sexes Combined	Count	554	7,618	4,959	305	13,436
	Percent	4.12	56.70	36.91	2.27	100.00
Sample Period 2 7/18- 7/31						
Period Sample Size 645						
Male	Count	1,801	7,003	1,761	160	10,725
	Percent	6.98	27.13	6.82	.62	41.55
Female	Count	2,161	9,966	2,841	120	15,088
	Percent	8.37	38.61	11.01	.46	58.45
Sexes Combined	Count	3,962	16,969	4,602	280	25,813
	Percent	15.35	65.74	17.83	1.08	100.00
Sample Period 3 8/ 1- 8/14						
Period Sample Size 624						
Male	Count	955	4,881	1,473	55	7,364
	Percent	5.61	28.68	8.66	.32	43.27
Female	Count	1,036	6,055	2,455	109	9,655
	Percent	6.09	35.58	14.43	.64	56.73
Sexes Combined	Count	1,991	10,936	3,928	164	17,019
	Percent	11.70	64.26	23.08	.96	100.00

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Appendix Table 39. District 112 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group				
		02	03	04	05	Total
Sample Period 4 8/15- 8/28						
Period Sample Size 494						
Male	Count	625	10,770	2,640	69	14,104
	Percent	1.82	31.38	7.69	.20	41.09
Female	Count	1,529	14,798	3,474	417	20,218
	Percent	4.45	43.12	10.12	1.21	58.91
Sexes Combined	Count	2,154	25,568	6,114	486	34,322
	Percent	6.28	74.49	17.81	1.42	100.00

Appendix Table 40. District 112 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	594.34	648.94	677.38	669.08
Std Error	4.14	1.44	2.78	11.45
Samp Size	99	648	235	12
Upper bounds of Confid. Int.	602.54	651.77	682.82	694.27
Lower bounds of Confid. Int.	586.16	646.11	671.93	643.89
Females				
Av Length	590.07	629.47	655.72	674.05
Std Error	11.45	1.13	2.04	5.77
Samp Size	12	821	291	19
Upper bounds of Confid. Int.	694.27	631.69	659.72	686.16
Lower bounds of Confid. Int.	643.89	627.26	651.72	661.94

Appendix Table 41. District 112 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	1	99	648	235	12	0	995
Percent	0.03	4.33	29.33	9.65	0.51	0.00	43.85
Number	28	3925	26572	8744	465	0	39734
Female							
Sample Number	1	125	821	291	19	0	1257
Percent	0.03	5.43	37.37	12.45	0.86	0.00	56.15
Number	32	4925	33861	11279	777	0	50874
Sexes Combined							
Sample Number	2	224	1469	526	31	0	2252
Percent	0.07	9.77	66.70	22.10	1.37	0.00	100.00
Number	60	8850	60433	20023	1242	0	90608

Appendix Table 42. District 113 commercial purse seine catch of chum salmon; age and sex composition, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 8/22- 8/28						
Period Sample Size	593					
Male	Count	564	930	366	6	1,866
	Percent	15.85	26.14	10.29	.17	52.45
Female	Count	318	984	390	0	1,692
	Percent	8.94	27.66	10.96	0.00	47.55
Sexes Combined	Count	882	1,914	756	6	3,558
	Percent	24.79	53.79	21.25	.17	100.00

Appendix Table 43. District 113 commercial purse seine catch of chum salmon; length (mm) by age and sex, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length	582.32	638.43	687.00
Std Error	4.53	3.26	4.42
Samp Size	94	160	61
Upper bounds of Confid. Int.	591.33	644.82	695.85
Lower bounds of Confid. Int.	573.31	632.05	678.15
Females			
Av Length	584.77	634.94	655.26
Std Error	4.78	2.78	4.37
Samp Size	53	171	66
Upper bounds of Confid. Int.	594.39	640.38	664.00
Lower bounds of Confid. Int.	575.16	629.49	646.52

Appendix Table 44. District 113 total commercial purse seine catch of chum salmon; age and sex composition, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	14	34	10	1	0	59
Percent	0.00	13.33	32.38	9.52	0.95	0.00	56.19
Number	0	2049	4976	1464	146	0	8635
Female							
Sample Number	0	7	35	4	0	0	46
Percent	0.00	6.67	33.33	3.81	0.00	0.00	43.81
Number	0	1025	5123	585	0	0	6733
Sexes Combined							
Sample Number	0	21	69	14	1	0	105
Percent	0.00	20.00	65.71	13.33	0.95	0.00	100.00
Number	0	3074	10099	2049	146	0	15368

Appendix Table 45. District 114 commercial purse seine catch of chum salmon, age and sex composition by sampling period, 1982.

		Age Group				
		02	03	04	05	Total
Sample Period 1 8/29- 9/ 4						
Period Sample Size		74[1]				
Male	Count	27	731	54	0	812
	Percent	1.35	36.50	2.70	0.00	40.54
Female	Count	81	866	217	27	1,191
	Percent	4.04	43.24	10.83	1.35	59.46
Sexes Combined	Count	108	1,597	271	27	2,003
	Percent	5.39	79.73	13.53	1.35	100.00

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 46. District 114 commercial purse seine catch of chum salmon; length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group		
	02	03	04
Males			
Av Length		649.30	726.00
Std Error		7.86	1.00
Samp Size		27	2
Upper bounds of Confid. Int.		665.49	738.71
Lower bounds of Confid. Int.		633.11	713.29
Females			
Av Length	575.00	645.25	668.37
Std Error	23.63	5.35	12.56
Samp Size	3	32	8
Upper bounds of Confid. Int.	676.61	656.17	698.01
Lower bounds of Confid. Int.	473.39	634.33	638.74

Appendix Table 47. District 114 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	1	27	2	0	0	30
Percent	0.00	1.35	36.49	2.70	0.00	0.00	40.54
Number	0	54	1461	108	0	0	1623
Female							
Sample Number	0	3	32	8	1	0	44
Percent	0.00	4.05	43.24	10.81	1.35	0.00	59.46
Number	0	162	1731	433	54	0	2381
Sexes Combined							
Sample Number	0	4	59	10	1	0	74
Percent	0.00	5.41	79.73	13.51	1.35	0.00	100.00
Number	0	216	3192	541	54	0	4004

Appendix Table 48. District 115 commercial purse seine catch of chum salmon, age and sex composition by sampling period, 1982.

		Age Group 02	03	04	05	Total
Sample Period 1 6/13- 7/ 3						
Period Sample Size 535						
Male	Count	24	552	620	10	1,206
	Percent	.92	21.13	23.73	.38	46.15
Female	Count	15	601	771	20	1,407
	Percent	.57	23.00	29.51	.77	53.85
Sexes Combined	Count	39	1,153	1,391	30	2,613
	Percent	1.49	44.13	53.23	1.15	100.00
Sample Period 2 7/ 4- 7/17						
Period Sample Size 491						
Male	Count	14	349	248	11	622
	Percent	1.04	26.04	18.51	.82	46.42
Female	Count	11	409	287	11	718
	Percent	.82	30.52	21.42	.82	53.58
Sexes Combined	Count	25	758	535	22	1,340
	Percent	1.87	56.57	39.93	1.64	100.00
Sample Period 3 7/18- 8/ 7						
Period Sample Size 621						
Male	Count	55	749	289	10	1,103
	Percent	1.78	24.18	9.33	.32	35.60
Female	Count	65	1,286	624	20	1,995
	Percent	2.10	41.51	20.14	.65	64.40
Sexes Combined	Count	120	2,035	913	30	3,098
	Percent	3.87	65.69	29.47	.97	100.00

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Appendix Table 48. District 115 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group 02	03	04	05	Total
Sample Period 4 8/ 8- 8/21						
Period Sample Size 699						
Male	Count	69	3,065	786	0	3,920
	Percent	.85	37.92	9.72	0.00	48.50
Female	Count	208	2,983	960	12	4,163
	Percent	2.57	36.90	11.88	.15	51.50
Sexes Combined	Count	277	6,048	1,746	12	8,083
	Percent	3.43	74.82	21.60	.15	100.00
Sample Period 5 8/22- 8/28						
Period Sample Size 527						
Male	Count	484	5,297	1,156	0	6,937
	Percent	3.42	37.38	8.16	0.00	48.96
Female	Count	403	5,834	995	0	7,232
	Percent	2.84	41.17	7.02	0.00	51.04
Sexes Combined	Count	887	11,131	2,151	0	14,169
	Percent	6.26	78.56	15.18	0.00	100.00
Sample Period 6 8/29- 9/11						
Period Sample Size 614						
Male	Count	915	15,829	3,025	0	19,769
	Percent	2.12	36.64	7.00	0.00	45.77
Female	Count	844	19,910	2,673	0	23,427
	Percent	1.95	46.09	6.19	0.00	54.23
Sexes Combined	Count	1,759	35,739	5,698	0	43,196
	Percent	4.07	82.74	13.19	0.00	100.00

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Appendix Table 48. District 115 commercial purse seine catch of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group 02	03	04	05	Total
Sample Period 7 9/12- 9/25						
Period Sample Size 737						
Male	Count	6,923	41,260	1,938	138	50,259
	Percent	6.78	40.44	1.90	.14	49.25
Female	Count	3,600	43,889	4,292	0	51,781
	Percent	3.53	43.01	4.21	0.00	50.75
Sexes Combined	Count	10,523	85,149	6,230	138	102,040
	Percent	10.31	83.45	6.11	.14	100.00
Sample Period 8 9/26-10/ 9						
Period Sample Size 549						
Male	Count	4,704	35,715	871	174	41,464
	Percent	4.92	37.34	.91	.18	43.35
Female	Count	2,439	50,000	1,742	0	54,181
	Percent	2.55	52.28	1.82	0.00	56.65
Sexes Combined	Count	7,143	85,715	2,613	174	95,645
	Percent	7.47	89.62	2.73	.18	100.00

Appendix Table 49. District 115 commercial gill net catch of chum salmon, length (mm) by sex and age, 1982. Confidence limits are 95%.

	Age Group			
	02	03	04	05
Males				
Av Length	635.03	668.89	684.16	686.44
Std Error	3.85	1.00	1.91	17.76
Samp Size	125	1451	402	9
Upper bounds of Confid. Int.	642.58	670.86	687.89	727.46
Lower bounds of Confid. Int.	627.48	666.93	680.42	645.43
Females				
Av Length	623.06	653.63	664.94	658.00
Std Error	3.67	0.79	1.93	8.00
Samp Size	99	1802	544	12
Upper bounds of Confid. Int.	630.33	655.19	668.72	675.60
Lower bounds of Confid. Int.	615.79	652.08	661.16	640.40

Appendix Table 50. District 115 commercial gill net catch of chum salmon; age and sex composition by sampling period, 1982.

	Age Group						
	01	02	03	04	05	06	Total
Male							
Sample Number	0	163	2078	464	10	0	2715
Percent	0.00	3.87	40.99	5.92	0.15	0.00	50.93
Number	0	18582	196901	28431	733	0	244647
Female							
Sample Number	0	103	1880	587	13	0	2583
Percent	0.00	2.26	38.95	7.71	0.14	0.00	49.07
Number	0	10876	187091	37047	694	0	235708
Sexes Combined							
Sample Number	0	266	3958	1051	23	0	5298
Percent	0.00	6.13	79.94	13.63	0.30	0.00	100.00
Number	0	29458	383992	65478	1427	0	480355

Appendix Table 51. Beaver Creek hatchery escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	5.80	35.20	6.70	1.50	49.20
Samp Size	19	115	22	5	161
Females					
Percent	5.50	32.40	8.90	4.00	50.80
Samp Size	18	106	29	13	166
Sexes Combined					
Percent	11.30	67.60	15.60	5.50	100.00
Samp Size	37	221	51	18	327 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 52. Beaver Creek hatchery escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	578.11	635.45	665.45	668.80
Std Error	6.56	3.31	8.23	12.18
Samp Size	19	115	22	5
Upper bounds of Confid. Int.	591.87	641.94	682.57	702.66
Lower bounds of Confid. Int.	564.34	628.96	648.34	634.94
Females				
Av Length	605.61	639.87	669.10	681.31
Std Error	6.88	3.36	4.31	6.94
Samp Size	18	106	29	13
Upper bounds of Confid. Int.	620.13	646.46	677.93	696.43
Lower bounds of Confid. Int.	591.09	633.28	660.27	666.19

Appendix Table 53. Crystal Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group			
	02	03	04	Total
Males				
Percent		46.00	2.30	48.30
Samp Size		40	2	42
Females				
Percent	2.30	48.30	1.10	51.70
Samp Size	2	42	1	45
Sexes Combined				
Percent	2.30	94.30	3.40	100.00
Samp Size	2	82	3	87 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 54. Crystal Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group		
	02	03	04
Males			
Av Length		623.03	605.00
Std Error		6.13	5.00
Samp Size		40	2
Upper bounds of Confid. Int.		635.40	668.55
Lower bounds of Confid. Int.		610.65	541.45
Females			
Av Length	574.00	606.02	570.00
Std Error	29.00	4.01	———
Samp Size	2	42	1
Upper bounds of Confid. Int.	942.59	614.92	———
Lower bounds of Confid. Int.	205.41	597.92	———

Appendix Table 55. Salmon Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group			
	02	03	04	Total
Males				
Percent	2.10	28.00	8.70	38.80
Samp Size	5	68	21	94
Females				
Percent	0.00	47.20	14.00	61.20
Samp Size	0	114	34	148
Sexes Combined				
Percent	2.10	75.20	22.70	100.00
Samp Size	5	182	55	242[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 56. Salmon Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group		
	02	03	04
Males			
Av Length	596.60	655.75	687.81
Std Error	18.68	4.35	5.66
Samp Size	5	68	21
Upper bounds of Confid. Int.	648.53	664.44	699.65
Lower bounds of Confid. Int.	544.67	647.06	675.97
Females			
Av Length		633.23	651.03
Std Error		2.81	4.57
Samp Size		114	34
Upper bounds of Confid. Int.		638.74	660.34
Lower bounds of Confid. Int.		627.72	641.72

Appendix Table 57. Klehini River escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group			
	02	03	04	Total
Males				
Percent	1.10	43.50	4.30	48.90
Samp Size	4	160	16	180
Females				
Percent	1.10	41.00	9.00	51.10
Samp Size	4	151	33	188
Sexes Combined				
Percent	2.20	84.50	13.30	100.00
Samp Size	8	311	49	368[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 58. Klehini River escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group		
	02	03	04
Males			
Av Length	618.75	660.21	677.94
Std Error	22.96	2.13	5.51
Samp Size	4	160	16
Upper bounds of Confid. Int.	691.77	664.38	689.68
Lower bounds of Confid. Int.	545.73	656.04	666.20
Females			
Av Length	598.75	640.97	670.55
Std Error	14.22	2.31	4.57
Samp Size	4	151	33
Upper bounds of Confid. Int.	643.97	645.50	679.87
Lower bounds of Confid. Int	553.53	636.45	661.22

Appendix Table 59. Herman Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	1.20	28.50	4.10	0.00	33.80
Samp Size	5	117	17	0	139
Females					
Percent	1.00	57.40	7.30	.50	66.20
Samp Size	4	236	30	2	272
Sexes Combined					
Percent	2.20	85.90	11.40	.50	100.00
Samp Size	9	353	47	2	411[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 60. Herman Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	628.80	661.86	679.47	
Std Error	14.76	2.57	9.42	
Samp Size	5	117	17	
Upper bounds of Confid. Int.	669.84	666.90	699.45	
Lower bounds of Confid. Int.	587.76	656.83	659.49	
Females				
Av Length	586.75	639.65	645.30	664.00
Std Error	8.69	2.08	6.23	4.50
Samp Size	4	236	30	2
Upper bounds of Confid. Int.	614.39	643.72	658.01	668.50
Lower bounds of Confid. Int.	559.11	635.58	632.59	659.50

Appendix Table 61. Chilkat River escapement of chum salmon age and sex composition of escapement samples, 1982.

	Age Group			
	02	03	04	Total
Males				
Percent	2.10	34.80	7.80	44.70
Samp Size	8	130	29	167
Females				
Percent	2.10	40.10	13.10	55.30
Samp Size	8	150	49	207
Sexes Combined				
Percent	4.20	74.90	20.90	100.00
Samp Size	16	280	78	374 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 62. Chilkat River escapement of chum salmon average length (mm) by age and sex composition, 1982.

	Age Group		
	02	03	04
Males			
Av Length	613.87	660.53	685.76
Std Error	14.70	2.47	4.58
Samp Size	8	130	29
Upper bounds of Confid. Int.	648.58	665.38	695.14
Lower bounds of Confid. Int.	579.17	655.68	676.38
Females			
Av Length	605.62	648.65	676.90
Std Error	5.49	2.44	4.65
Samp Size	8	150	49
Upper bounds of Confid. Int.	618.58	653.44	686.24
Lower bounds of Confid. Int.	592.67	643.86	667.56

Appendix Table 63. Humpback Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	1.90	15.40	19.30	3.80	40.40
Samp Size	1	8	10	2	21
Females					
Percent	0.00	21.20	32.60	5.80	59.60
Samp Size	0	11	17	3	31
Sexes Combined					
Percent	1.90	36.60	51.90	9.60	100.00
Samp Size	1	19	27	5	52[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 64. Humpback Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	550.00	682.37	664.80	622.50
Std Error	0.00	12.48	13.35	52.50
Samp Size	1	8	10	2
Upper bounds of Confid. Int.	———	711.84	694.97	1289.77
Lower bounds of Confid. Int.	———	652.91	634.63	0.00
Females				
Av Length		610.00	631.94	613.67
Std Error		6.77	10.18	8.41
Samp Size		11	17	3
Upper bounds of Confid. Int.		625.09	653.52	649.84
Lower bounds of Confid. Int.		594.91	610.37	577.49

Appendix Table 65. Neka River escapement of chum salmon, age composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Sexes Combined					
Percent	2.10	27.00	64.30	6.60	100.00
Samp Size	12	151	360	37	560

Appendix Table 66. Excursion River escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	4.01	28.10	12.77	8.03	52.91
Samp Size	11	77	35	22	145
Females					
Percent	2.90	22.30	11.70	10.20	47.09
Samp Size	8	61	32	28	129
Sexes Combined					
Percent	6.90	50.40	24.40	18.30	100.00
Samp Size	19	138	67	50	274[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 67. Excursion River escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	620.18	676.82	677.91	687.23
Std Error	11.84	3.55	20.79	7.50
Samp Size	11	77	35	22
Upper bounds of Confid. Int.	646.59	683.88	720.13	702.83
Lower bounds of Confid. Int.	593.78	669.76	635.70	671.62
Females				
Av Length	608.12	641.20	661.72	664.04
Std Error	15.25	3.95	6.97	5.64
Samp Size	8	61	32	28
Upper bounds of Confid. Int.	644.12	649.09	675.93	675.61
Lower bounds of Confid. Int.	572.13	633.30	647.51	652.46

Appendix Table 68. Montana Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	6.90	24.40	15.90	.60	47.80
Samp Size	24	85	55	2	166
Females					
Percent	6.30	28.90	16.10	.90	52.20
Samp Size	22	100	56	3	181
Sexes Combined					
Percent	13.20	53.30	32.00	1.50	100.00
Samp Size	46	185	111	5	347 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 69. Montana Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	596.71	635.60	670.35	723.50
Std Error	6.37	3.91	5.43	19.50
Samp Size	24	85	55	2
Upper bounds of Confid. Int.	609.89	643.38	681.21	971.34
Lower bounds of Confid. Int.	583.52	627.82	659.49	475.66
Females				
Av Length	598.95	607.96	636.61	647.00
Std Error	6.94	2.50	3.84	10.60
Samp Size	22	100	56	3
Upper bounds of Confid. Int.	613.40	612.90	644.29	692.57
Lower bounds of Confid. Int.	584.51	603.02	628.93	601.43

Appendix Table 70. Kadashan River escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	10.70	19.10	17.10	1.70	48.60
Samp Size	37	66	59	6	168
Females					
Percent	3.50	23.60	23.40	.90	51.40
Samp Size	12	82	81	3	178
Sexes Combined					
Percent	14.20	42.70	40.50	2.60	100.00
Samp Size	49	148	140	9	346[1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 71. Kadashan River escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	578.24	627.85	664.02	679.50
Std Error	5.56	4.81	5.81	11.63
Samp Size	37	66	59	6
Upper bounds of Confid. Int.	589.54	637.47	675.64	709.38
Lower bounds of Confid. Int.	566.95	618.22	652.39	649.62
Females				
Av Length	591.50	615.83	643.68	640.67
Std Error	9.76	3.19	2.70	1.20
Samp Size	12	82	81	3
Upper bounds of Confid. Int.	612.97	622.18	649.04	645.79
Lower bounds of Confid. Int.	570.03	609.47	638.31	635.54

Appendix Table 72. Nakwasina River escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group			
	03	04	05	Total
Males				
Percent	3.30	12.70	8.20	24.20
Samp Size	6	23	15	44
Females				
Percent	2.70	39.60	33.50	75.80
Samp Size	5	72	61	138
Sexes Combined				
Percent	6.00	52.30	41.70	100.00
Samp Size	11	95	76	182 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 73. Nakwasina River escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group		
	03	04	05
Males			
Av Length	618.33	682.61	684.20
Std Error	8.33	6.99	8.93
Samp Size	6	23	15
Upper bounds of Confid. Int.	639.75	697.07	703.31
Lower bounds of Confid. Int.	596.92	668.15	665.09
Females			
Av Length	644.00	665.61	679.67
Std Error	5.34	3.08	3.93
Samp Size	5	72	61
Upper bounds of Confid. Int.	658.84	671.77	687.53
Lower bounds of Confid. Int.	629.16	659.45	671.82

Appendix Table 74. Salmon Lake Creek escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group			
	03	04	05	Total
Males				
Percent	5.30	35.50	9.20	50.00
Samp Size	4	27	7	38
Females				
Percent	2.60	46.10	1.30	50.00
Samp Size	2	35	1	38
Sexes Combined				
Percent	7.90	81.60	10.50	100.00
Samp Size	6	62	8	76 [1]

[1] Sample size insufficient for ± 5% confidence limits.

Appendix Table 75. Salmon Lake Creek escapement of chum salmon, average length (mm) by age and sex composition, 1982.

	Age Group		
	03	04	05
Males			
Av Length	633.75	675.22	682.14
Std Error	8.98	8.28	15.15
Samp Size	4	27	7
Upper bounds of Confid. Int.	658.71	692.19	703.85
Lower bounds of Confid. Int.	608.79	658.25	660.43
Females			
Av Length	642.50	651.29	670.00
Std Error	52.50	5.96	0.00
Samp Size	2	35	1
Upper bounds of Confid. Int.	868.25	663.39	——
Lower bounds of Confid. Int.	416.75	639.19	——

Appendix Table 76. Hidden Falls hatchery escapement of chum salmon; age and sex composition by sampling period, 1982.

		Age Group 02	03	04	05	Total
Sample Period 1 7/21- 7/28						
Period Sample Size	554					
Male	Percent	5.10	38.20	3.80	0.00	47.10
Female	Percent	.90	46.00	6.00	0.00	52.90
Sexes Combined	Percent	6.00	84.20	9.80	0.00	100.00
Sample Period 2 7/29- 7/31						
Period Sample Size	519					
Male	Percent	8.30	36.10	1.50	0.00	45.90
Female	Percent	1.30	49.10	3.70	0.00	54.10
Sexes Combined	Percent	9.60	85.20	5.20	0.00	100.00
Sample Period 3 8/ 1- 8/ 7						
Period Sample Size	587					
Male	Percent	16.00	31.20	3.60	0.00	50.80
Female	Percent	4.60	39.80	4.80	0.00	49.20
Sexes Combined	Percent	20.60	71.00	8.40	0.00	100.00
Sample Period 4 8/ 8- 8/14						
Period Sample Size	582					
Male	Percent	23.40	26.80	.50	0.00	50.70
Female	Percent	13.60	34.20	1.50	0.00	49.30
Sexes Combined	Percent	37.00	61.00	2.00	0.00	100.00

-Continued-

Appendix Table 76. Hidden Falls hatchery escapement of chum salmon; age and sex composition by sampling period, 1982 (continued).

		Age Group 02	03	04	05	Total
Sample Period 5 8/15- 8/21						
Period Sample Size 609						
Male	Percent	30.80	15.80	.50	0.00	47.10
Female	Percent	27.60	24.80	.50	0.00	52.90
Sexes Combined	Percent	58.40	40.60	1.00	0.00	100.00
Sample Period 6 8/22- 9/14						
Period Sample Size 543						
Male	Percent	43.80	7.60	0.00	0.00	51.40
Female	Percent	34.90	12.90	.60	.20	48.60
Sexes Combined	Percent	78.70	20.50	.60	.20	100.00

Appendix Table 77. Hidden Falls hatchery escapement of chum salmon; age and sex composition of total escapement, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	21.23	25.95	1.65	0.00	48.83
Samp Size	727	875	56	0	1,658
Females					
Percent	13.82	34.47	2.85	.03	51.17
Samp Size	476	1,164	95	1	1,736
Sexes Combined					
Percent	35.05	60.42	4.50	.03	100.00
Samp Size	1,203	2,039	151	1	3,394

Appendix Table 78. Hidden Falls hatchery escapement of chum salmon; average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	591.38	639.16	677.51	
Std Error	1.51	3.10	10.50	
Samp Size	727	875	56	
Upper bounds of Confid. Int.	594.33	641.43	690.19	
Lower bounds of Confid. Int.	588.42	636.18	665.91	
Females				
Av Length	601.34	627.04	649.36	685.00
Std Error	1.31	0.85	2.88	0.00
Samp Size	476	1,166	95	1
Upper bounds of Confid. Int.	603.90	628.70	655.06	———
Lower bounds of Confid. Int.	598.79	625.37	643.67	———

Appendix Table 79. Snettisham hatchery escapement of chum salmon, age and sex composition of escapement samples, 1982.

	Age Group				
	02	03	04	05	Total
Males					
Percent	1.22	32.84	27.84		61.90
Samp Size	10	269	228		507
Females					
Percent	0.37	13.55	24.05	0.12	38.10
Samp Size	3	111	197	1	312
Sexes Combined					
Percent	1.59	46.40	51.89	0.12	100.00
Samp Size	13	380	425	1	819

Appendix Table 80. Snettisham hatchery escapement of chum salmon; average length (mm) by age and sex composition, 1982.

	Age Group			
	02	03	04	05
Males				
Av Length	616.25	651.35	698.03	
Std Error	18.99	3.92	4.75	
Samp Size	4	75	71	
Upper bounds of Confid. Int.	676.67	659.15	707.51	
Lower bounds of Confid. Int.	555.83	643.55	688.55	
Females				
Av Length		641.62	670.43	700.00
Std Error		3.81	3.33	0.00
Samp Size		47	82	1
Upper bounds of Confid. Int.		649.28	677.05	———
Lower bounds of Confid. Int.		633.95	663.80	———

Appendix Table 81. Daily and cumulative chum salmon weir counts from Auke Creek weir, 1982.

Date		Daily count	Cumulative count
August	11	2	2
August	12	1	3
August	13	2	5
August	14	14	19
August	15	37	56
August	16	26	82
August	17	3	85
August	18	4	89
August	19	4	93
August	20	16	109
August	21	43	152
August	22	10	162
August	23	27	189
August	24	14	203
August	25	9	212
August	26	11	223
August	27	0	223
August	28	7	230
August	29	0	230
August	30	0	230
August	31	6	236
September	1	0	236
September	2	7	243
September	3	0	243
September	4	0	243
September	5	2	245
September	6	0	245
September	7	1	246
September	8	1	247
September	9	0	247
September	10	0	247
September	11	1	248
September	12	1	249
September	13	1	250
September	14	0	250
September	15	0	250
September	16	1	251
End of chum counts			

Appendix Table 82. Daily and cumulative chum salmon weir counts from Beaver Creek weir, 1982.

Date		Daily count	Cumulative count
September	3	1	1
September	4	0	1
September	5	1	2
September	6	0	2
September	7	12	14
September	8	15	29
September	9	0	29
September	10	105	134
September	11	143	277
September	12	86	363
September	13	4	367
September	14	0	367
September	15	0	367
September	16	5	372
September	17	88	460
September	18	0	460
September	19	0	460
September	20	345	805
September	21	68	873
September	22	96	969
September	23	24	993
September	24	77	1070
September	25	133	1203
September	26	0	1203
September	27	135	1338
September	28	26	1364
September	29	1	1365
September	30	195	1560
October	1	175	1735
October	2	0	1735
October	3	77	1812
October	4	151	1963
October	5	167	2130
October	6	0	2130
October	7	172	2302

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Appendix Table 82. Daily and cumulative chum salmon weir counts from Beaver Creek weir, 1982 (continued).

Date		Daily count	Cumulative count
October	8	47	2349
October	9	0	2349
October	10	0	2349
October	11	17	2366
October	12	0	2366
October	13	0	2366
October	14	8	2374
October	15	6	2380
October	16	0	2380
October	17	0	2380
October	18	0	2380
October	19	0	2380
October	20	2	2382
October	21	0	2382
October	22	1	2383
October	23	0	2383
October	24	4	2387
End of chum counts			

Appendix Table 83. Daily and cumulative chum salmon weir counts from Chilkoot weir, 1982.

Date		Daily count	Cumulative count
August	22	2	2
August	23	0	2
August	24	2	4
August	25	12	16
August	26	10	26
August	27	22	48
August	28	11	59
August	29	9	68
August	30	10	78
August	31	12	90
September	1	13	103
September	2	79	182
September	3	116	298
September	4	28	326
September	5	33	359
September	6	26	385
September	7	13	398
September	8	8	406
September	9	19	425
September	10	18	443
September	11	23	466
September	12	32	498
September	13	9	507
		Weir closed for season	

Appendix Table 84. Daily and cumulative chum salmon weir counts from Disappearance weir, 1982.

Date		Daily count	Cumulative count
September	13	1010	1010
September	14	2	1012
September	15	200	1212
September	16	117	1329
September	17	1018	2347
September	18	130	2477
September	19	118	2595
September	20	121	2716
September	21	564	3280
September	22	62	3342
September	23	655	3997
September	24	150	4147
September	25	2762	6909
September	26	402	7311
September	27	850	8161
September	28	306	8467
September	29	533	9000
September	30	4000	13000
October	1	0	13000
October	2	0	13000
October	3	0	13000
October	4	2085	15085
October	5	4915	20000
October	6	14	20014
October	7	8	20022
October	8	0	20022
October	9	1356	21378
October	10	1373	22751
October	11	2249	25000
October	12	599	25599
October	13	1337	26936
October	14	604	27540
October	15	460	28000
October	16	0	28000
October	17	0	28000
October	18	0	28000
October	19	0	28000
October	20	406	28406
October	21	1594	30000
End of chum counts			

Appendix Table 85. Daily and cumulative chum salmon weir counts from Neka River weir, 1982.

Date		Daily count	Cumulative count
August	2	1	1
August	3	0	1
August	4	26	27
August	5	203	230
August	6	449	679
August	7	139	818
August	8	11	829
August	9	571	1400
August	10	340	1740
August	11	363	2103
August	12	828	2931
August	13	234	3165
August	14	233	3398
August	15	48	3446
August	16	130	3576
August	17	340	3916
August	18	766	4682
August	19	638	5320
August	20	852	6172
August	21	455	6627
August	22	703	7330
August	23	145	7475
August	24	705	8180
August	25	207	8387
August	26	139	8526
August	27	677	9203
August	28	602	9805
August	29	232	10037
August	30	403	10440
August	31	237	10677

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Appendix Table 85. Daily and cumulative chum salmon weir counts from Neka River weir, 1982 (continued).

Date		Daily count	Cumulative count
September	1	1	10678
September	2	51	10729
September	3	346	11075
September	4	60	11135
September	5	5	11140
September	6	93	11233
September	7	7	11240
September	8	181	11421
September	9	49	11470
September	10	0	11470
September	11	350	11820
September	12	0	11820
September	13	5500	17320
September	14	5972	23292
End of chum counts			

Appendix Table 86. Daily and cumulative chum salmon weir counts from Kadashan River weir, 1982.

Date		East Fork	West Fork	Total	Cumulative
July	12	350	196	546	546
July	13	302	123	425	971
July	14	3198	1222	4420	5391
July	15	308	138	446	5837
July	16	0	41	41	5878
July	17	51	436	487	6365
July	18	328	873	1201	7566
July	19	126	219	345	7911
July	20	0	207	207	8118
July	21	0	0	0	8118
July	22	2	268	270	8388
July	23	0	0	0	8388
July	24	1	34	35	8423
July	25	0	248	248	8671
July	26	2	135	137	8808
July	27	0	51	51	8859

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Appendix Table 86. Daily and cumulative chum salmon weir counts from Kadashan River weir, 1982 (continued).

Date		East Fork	West Fork	Total	Cumulative
July	28	30	9	39	8898
July	29	142	385	527	9425
July	30	1	0	1	9426
July	31	42	402	444	9870
August	1	7	11	18	9888
August	2	11	190	201	10089
August	3	178	593	771	10860
August	4	577	314	8	11751
August	5	3	1	4	11755
August	6	25	78	10	11858
August	7	213	377	5	12448
August	8	269	144	4	12861
August	9	315	150	4	13326
August	10	5	3	8	13334
August	11	40	15	55	13389
August	12	72	136	2	13597
August	13	1	1	2	13599
August	14	0	1	1	13600
August	15	127	38	165	13765
August	16	30	9	39	13804
August	17	55	93	148	13952
August	18	84	55	139	14091
August	19	0	0	0	14091
August	20	3	8	11	14102
August	21	9	20	29	14131
August	22	19	0	19	14150
August	23	0	0	0	14150
End of chum counts					

Appendix Table 87. Daily and cumulative chum salmon weir counts from Klawock weir, 1982.

Date		Daily count	Cumulative count
June	28	1	1
June	29	0	1
June	30	0	1
July	1	0	1
July	2	0	1
July	3	0	1
July	4	0	1
July	5	0	1
July	6	0	1
July	7	0	1
July	8	0	1
July	9	0	1
July	10	0	1
July	11	0	1
July	12	0	1
July	13	0	1
July	14	0	1
July	15	0	1
July	16	0	1
July	17	0	1
July	18	0	1
July	19	0	1
July	20	0	1
July	21	0	1
July	22	0	1
July	23	0	1
July	24	0	1
July	25	0	1
July	26	0	1
July	27	1	2
July	28	0	2
July	29	2	4
July	30	3	7
July	31	0	7
August	1	15	22
August	2	2	24
August	3	1	25
August	4	0	25
August	5	15	40

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Appendix Table 87. Daily and cumulative chum salmon weir counts from Klawock weir, 1982 (continued).

Date		Daily count	Cumulative count
August	6	1	41
August	7	4	45
August	8	0	45
August	9	2	47
August	10	0	47
August	11	6	53
August	12	51	104
August	13	2	106
August	14	0	106
August	15	2	108
August	16	4	112
August	17	0	112
August	18	6	118
August	19	10	128
August	20	4	132
August	21	0	132
August	22	0	132
August	23	0	132
August	24	0	132
August	25	0	132
August	26	0	132
August	27	0	132
August	28	0	132
August	29	0	132
August	30	0	132
August	31	0	132
September	1	0	132
September	2	3	135
September	3	0	135
September	4	27	162
September	5	0	162
September	6	2	164
September	7	15	179
September	8	0	179
September	9	0	179
September	10	0	179
September	11	2	181
End of chum counts			

Appendix Table 88. Daily and cumulative chum salmon weir counts from Montana Creek weir, 1982.

Date	Female	Male	Total	Cumulative
July 4	2	3	5	5
July 5	3	11	14	19
July 6	20	23	43	62
July 7	20	28	48	110
July 8	24	52	76	186
July 9	28	47	75	261
July 10	48	63	111	372
July 11	29	47	76	448
July 12	48	80	128	576
July 13	62	65	127	703
July 14	9	40	49	752
July 15	38	32	70	822
July 16	58	51	109	931
July 17	101	87	188	1119
July 18	23	65	88	1207
July 19	16	60	76	1283
July 20	6	52	58	1341
July 21	92	99	191	1532
July 22	109	92	201	1733
July 23	101	98	199	1932
July 24	80	55	135	2067
July 25	65	46	111	2178
July 26	73	54	127	2305
July 27	60	56	116	2421
July 28	80	75	155	2576
July 29	18	17	35	2611
July 30	48	36	84	2695
July 31	10	15	25	2720
August 1	24	17	41	2761
August 2	10	10	20	2781
August 3	34	13	47	2828
August 4	0	0	0	2828
August 5	19	12	31	2859
August 6	16	7	23	2882

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Appendix Table 88. Daily and cumulative chum salmon weir counts from Montana Creek weir, 1982 (continued).

Date	Female	Male	Total	Cumulative
August 7	5	40	96	2978
August 8	18	12	30	3008
August 9	49	8	57	3065
August 10	15	8	23	3088
August 11	2	2	4	3092
August 12	2	5	7	3099
August 13	2	4	6	3105
August 14	10	2	12	3117
August 15	10	1	11	3128
August 16	1	0	1	3129
August 17	9	0	9	3138
August 18	1	1	2	3140
August 19	3	1	4	3144
August 20	2	0	2	3146
August 21	2	0	2	3148
End of chum counts				

Appendix Table 89. Daily and cumulative chum salmon weir counts from Salmon Creek weir, 1982.

Date		Daily count	Cumulative count
July	27	38	38
July	28	0	38
July	29	1	39
July	30	5	44
July	31	2	46
August	1	2	48
August	2	2	50
August	3	0	50
August	4	1	51
August	5	0	51
August	6	0	51
August	7	0	51
August	8	1	52
August	9	1	53
August	10	0	53
August	11	3	56
August	12	0	56
End of chum counts			

Appendix Table 90. Daily and cumulative chum salmon weir counts from Sawmill Creek weir, 1982.

Date	Female	Male	Total	Cumulative
July 17	32	42	74	74
July 18	32	150	182	256
July 19	0	0	0	256
July 20	49	121	170	426
July 21	19	40	59	485
July 22	60	138	198	683
July 23	27	37	64	747
July 24	48	78	126	873
July 25	29	71	100	973
July 26	36	57	93	1066
July 27	28	78	106	1172
July 28	11	58	69	1241
July 29	8	22	30	1271
July 30	11	28	39	1310
July 31	11	18	29	1339
August 1	83	170	253	1592
August 2	13	14	27	1619
August 3	63	36	99	1718
August 4	23	19	42	1760
August 5	0	0	0	1760
August 6	25	16	41	1801
August 7	8	15	23	1824
August 8	9	9	18	1842
Stream walk count prior to weir installation			242	total 2084
End of chum counts				

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