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CONTRIBUTION, EXPLOITATION, AND MIGRATORY TIMING OF CHILKAT AND CHILKOOT RIVER RUNS OF SOCKEYE SALMON (*Oncorhynchus nerka* Walbaum) IN THE LYNN CANAL DRIFT GILLNET FISHERY OF 1983

By:
Scott A. McPherson
and
Scott L. Marshall

March 1986

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

Don W. Collinsworth
Commissioner

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Alaska Department of Fish and Game
Division of Commercial Fisheries
Stock Biology Group
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ABSTRACT

Visual interpretation of circuli patterns on scales collected from sockeye salmon *(Oncorhynchus nerka* Walbaum*)* from spawning escapements and commercial catches in the Lynn Canal (District 115), gillnet fishery of Southeastern Alaska, provided the basis for estimating the catch which originated from stocks of Chilkoot and Chilkat River drainages. The total return of sockeye salmon to Lynn Canal in 1983 was 583,861 fish, of which 369,311 (63.3%) were harvested and 214,550 escaped to spawn. The Chilkat River run contributed 262,049 fish of which 127,842 (48.8%) were harvested and 134,207 escaped to spawn. Chilkoot River contributed 321,812 fish of which 241,469 (75.0%) were harvested and 80,343 escaped to spawn.

KEY WORDS: Scale pattern analysis, stock allocation, Chilkoot River, Chilkat River, Lynn Canal, sockeye salmon, total return, escapement, catch apportionment.

INTRODUCTION

The Lynn Canal (District 115) drift gillnet fishery operates in those waters of Southeastern Alaska north of Little Island (Figure 1). While all five species of Pacific salmon *(Oncorhynchus* sp.*)* are harvested, the fleet targets on sockeye salmon *(O. nerka)* from June through late August. From 1970 through 1982 this fishery harvested between 18,388 and 273,528 sockeye salmon. The average annual harvest for this period is 122,786 fish. Sockeye salmon harvested in Lynn Canal originate from the Chilkoot and Chilkat River drainages. Previous studies (Bergander 1974, Marshall et al. 1982, McPherson et al. 1983) have shown that both stocks are present simultaneously in the fishery and that scale pattern analysis provides a method for estimating the contribution of each run to the catches.

The purpose of this report is threefold. First, we document the accuracy and precision of determining the stock of origin of sockeye salmon harvested in the fishery by visual inspection of freshwater growth zones. This is a departure from previous methods (Bergander 1974, Marshall et al. 1982, McPherson et al. 1983) which relied on a dichotomous key or digitized measurements of growth zones interpreted with a discriminant function. Second, by combining escapement by stock and age with run-specific harvest data we document basic population statistics for future use in evaluation of escapement goals and development of forecasts. Third, we provide estimates of migratory timing and exploitation rates for each run.

METHODS

Numbers of Fish

The number of fish caught in District 115 was obtained from the State of Alaska's records of individual sales between fishermen and processors. Catch statistics we used were current as of 18 June 1984. Catches are reported by fishing period and assigned to a statistical week[1].

Escapements into Chilkoot Lake and Chilkat Lake were counted through weirs (Figure 1). The Chilkoot weir was located approximately 0.8 kilometers upstream of the mouth of Chilkoot River and was operated from 4 June through 13 November. Chilkat Lake weir was located at the outlet of Chilkat Lake, approximately 35 kilometers upstream from the mouth of Chilkat River and was operated from 22 June through 12 November.

Age Composition

Scales were obtained from the left side of the fish approximately two rows above the lateral line and on the diagonal row downward from the posterior insertion of the dorsal fin (Clutter and Whitesel 1956) and mounted on gummed cards. Subsequently, impressions were made in cellulose acetate and viewed using a microfiche reader at 70 power. Ages were determined and recorded in

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[1] A statistical week is a division of time used to report catch figures in Alaska. A statistical week begins at 12:01 AM on Sunday and ends the following Saturday at midnight. Weeks are numbered sequentially from the beginning of the calendar year.

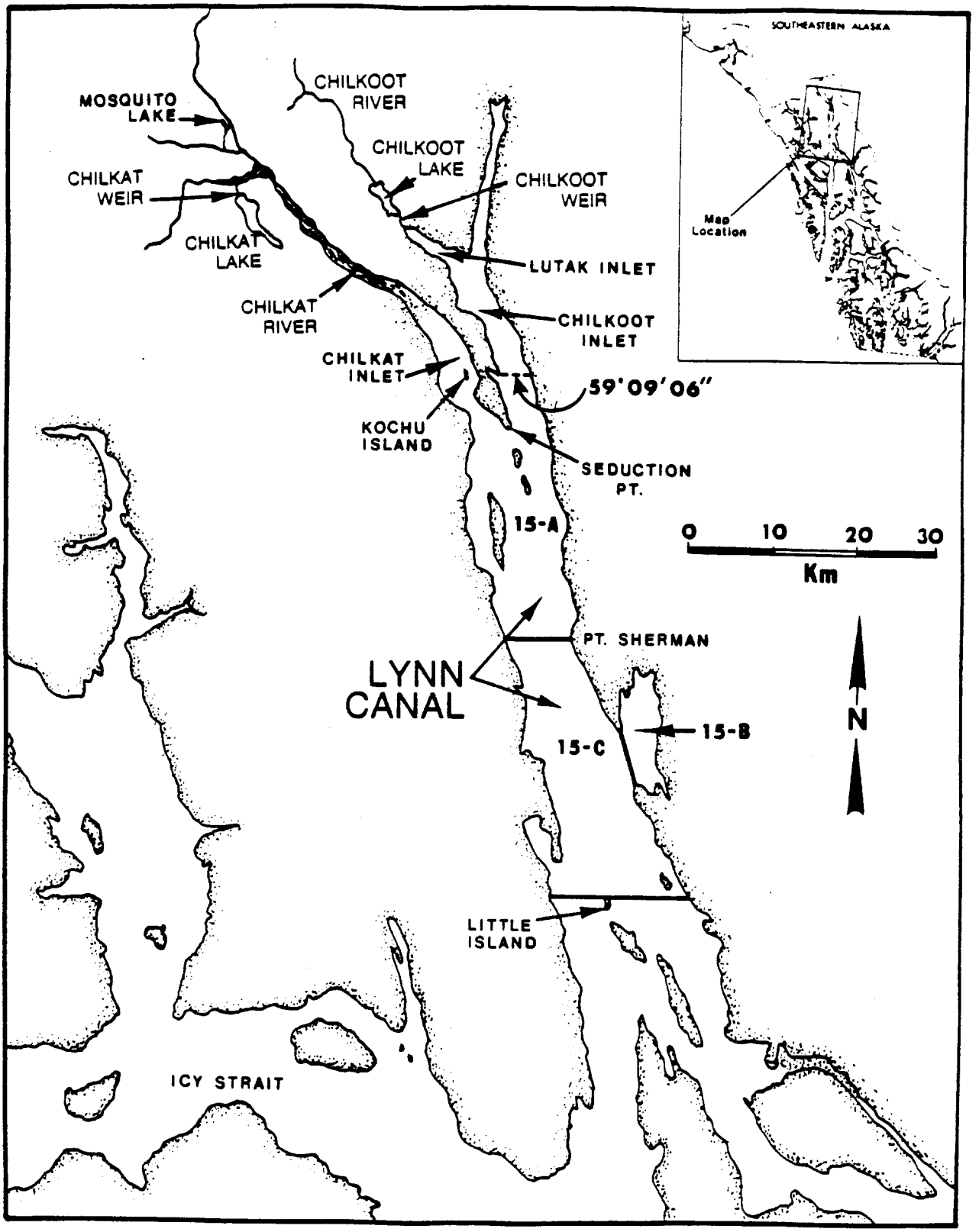

Figure 1. Map of Lynn Canal showing the fishing district and sections (e.g., 15-C).

European[2] notation.

Catches of sockeye salmon after 22 September were small and not sampled; we assigned the same age composition to catches made after this date as observed during the period 11 to 22 September. We sampled at all major processing facilities to which Lynn Canal fish were delivered to assure representativeness. Dipnetting provided fish for sampling at Chilkoot weir while beach seining was used at the Chilkat Lake weir site. Estimates of the total number of sockeye salmon of each age class were made by applying period age composition data to the number of fish during those time periods and summing the estimates across time periods.

Blind Test

Previous studies indicate that sufficient differences exist in freshwater scale patterns of Chilkat and Chilkoot stocks to identify the origin by visual inspection of low magnification. To determine the accuracy of visual examination, we used a blind test procedure. Scales collected from fish in the escapements to each lake were randomly selected and remounted. The test included a maximum of 80 scales from each age class.

One of us (McPherson) inspected each pattern as projected by a microfiche reader at 70x. An origin was assigned to each specimen and subsequently compared to the true origin to estimate accuracy. While size of the freshwater growth zone was the principal scale characteristic used to distinguish between runs, others taken into consideration were: (1) the size of the freshwater annuli; (2) the number of circuli in the freshwater annuli; (3) size of the focal plate; and (4) completeness of the freshwater circuli.

Mixed Stock Analysis

The proportion of fish originating from the Chilkoot and Chilkat Rivers was made by classifying scales obtained during each fishing period. Point estimates were corrected for misclassification error rates using the procedure of Cook and Lord (1978). Stock composition estimates were expanded to the catch; variances and 90% confidence intervals were estimated around each estimate using the procedures of Pella and Robertson (1979).

Fish aged 0.2, 0.3, and 0.4 were not present in samples collected at the weir sites at either Chilkoot or Chilkat Lake. Because fish of these age classes were found in the mainstem Chilkat River (McGregor et al. 1984), we assigned them to the Chilkat run. Fish aged 1.- and 2.- were also present in the Chilkat mainstem escapement samples and the scale patterns of these fish showed a small freshwater growth zone, similar to those observed at Chilkoot Lake. We rarely found scales with this intermediate pattern in catch samples, when we did, they were assigned to the Chilkat run.

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[2] European formula: Numerals preceding the decimal refer to the number of freshwater annuli. Numerals following the decimal are the number of marine annuli. Total age is the sum of these two numbers plus 1.

Length

Length measurements (mid-eye to fork of tail) were taken from each fish sampled. Average lengths were calculated for each age and sex by run.

RESULTS

Blind Test

Results of the blind test to determine the accuracy of visual inspection to classify fish of the Chilkoot and Chilkat systems are summarized in Table 1. All samples included from Chilkat Lake were correctly classified, and 99.3% of the samples included from Chilkoot Lake were correctly classified. All fish with two freshwater annuli were correctly classified, while 99.4% of the fish with one freshwater annulus were correctly classified.

We were not surprised to learn that visual inspection of scale patterns was sufficient to distinguish between fish of Chilkoot and Chilkat River origin. McPherson et al. (1983) showed large and consistent differences in the number of circuli for fish aged 1.3 between Chilkoot (mean of 6.0, s.d. of 1.6) and Chilkat (mean 13.1, s.d. 2.2) Rivers for samples collected from 1976 through 1982. Similarly, the size of the freshwater zone was smaller for Chilkoot River fish (mean 54.6 s.d. 13.4) than Chilkat River fish (mean 149.0 s.d. 24.0). That such large differences are easy to distinguish with the naked eye is obvious by comparing photographs (Figures 2 and 3) for fish of each principal age class, by run.

Harvest

The harvest of sockeye salmon in Lynn Canal occurred over a 17-week period (Figure 4). Management strategies to selectively harvest or protect stocks of sockeye, coho *(O. kisutch)*, pink *(O. gorbuscha)*, or chum *(O. keta)* salmon resulted in considerable variation in the time and areas open to fishing each week. (See Appendix Table 1).

Fish aged 1.3 dominated the catch (55.3%) followed by fish aged 2.3 (33.5%), aged 2.2 (7.1%), aged 1.2 (2.7%); fish of all other age classes accounted for 1.4% (see Appendix Table 2). Temporal trends in age composition of the catch were evident (Figure 5a). The relative abundance of fish aged 1.3 decreased while those aged 2.3 increased. During the last half of the season, fish aged 2.2 also increased in relative abundance.

The harvest of 369,311 sockeye salmon was comprised of 241,469 Chilkoot River fish (Appendix Table 3) and 127,842 Chilkat River fish. Fish of both runs were caught in each fishing period during the 17-week season (Figure 6).

The harvest of Chilkoot River fish was mostly fish aged 1.3 (72.2%) and 2.3 (24.3%) (Appendix Table 4). No temporal trend in the age composition of the Chilkoot River catch was evident (see Figure 5c). The mean date of the harvest of Chilkoot fish was 7 August. The mean dates of harvest for fish aged 1.2, 1.3, and 2.3 were 4 August, 7 August, and 7 August, respectively.

Table 1. Accuracy of visual classification by inspection of scale patterns for sockeye salmon of the Chilkoot and Chilkat Lakes, 1983.

	Brood Year and Age Class							
	1980	1979		1978		1977		
System	1.1	1.2	2.1	1.3	2.2	1.4	2.3	Weighted Avg.
Chilkoot								
Sample Size	2	39	1	44	13	3	44	146
Correctly Classified	1	39	1	44	13	3	44	145
Percent	50.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3
Chilkat								
Sample Size	5	39	4	36	9	1	36	130
Correctly Classified	5	39	4	36	9	1	36	130
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total								
Sample Size	7	78	5	80	22	4	80	276
Correctly Classified	6	78	5	80	22	4	80	275
Percent	85.7	100.0	100.0	100.0	100.0	100.0	100.0	99.6

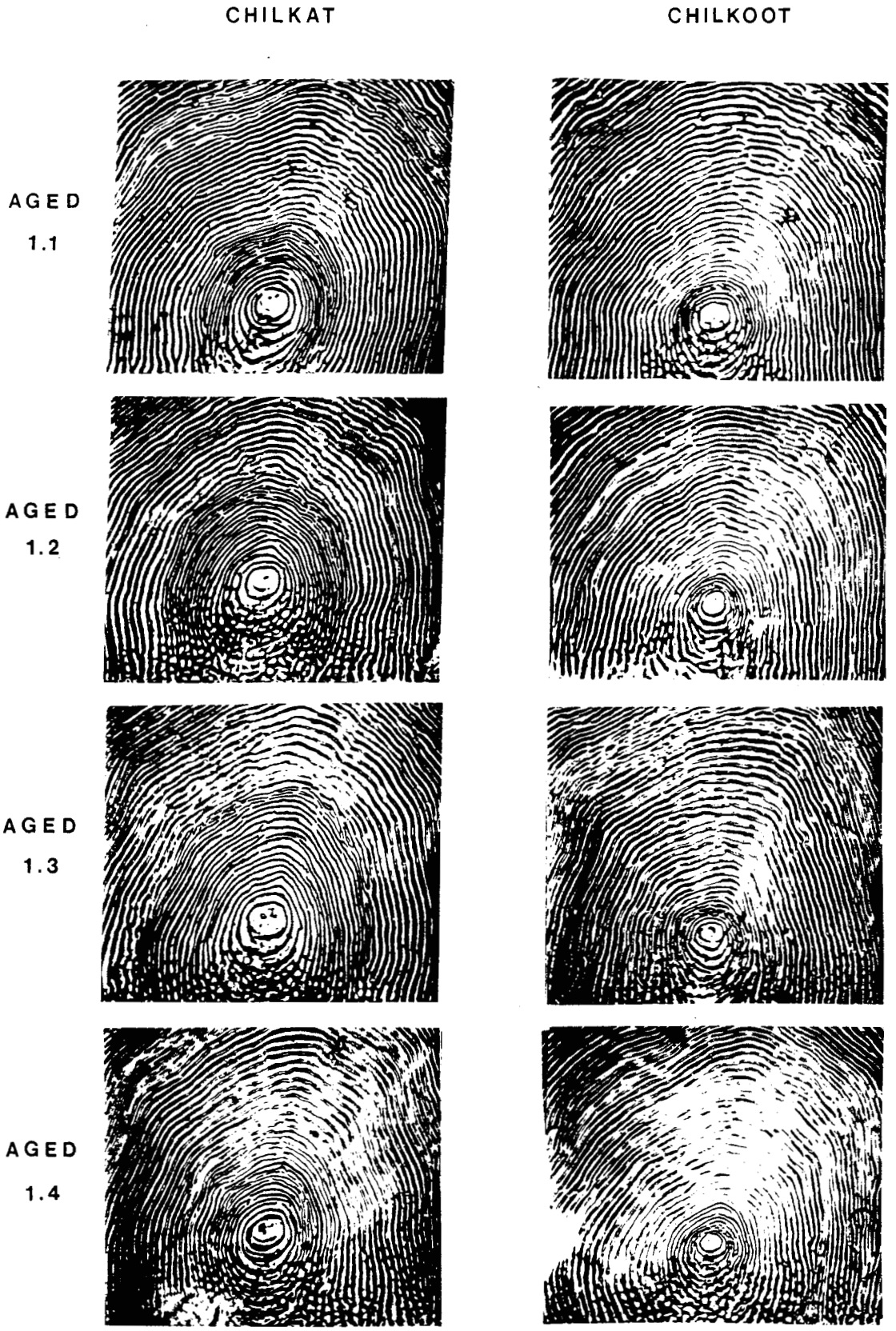

Figure 2. Photographs of typical scale patterns of sockeye salmon aged 1.- from Chilkoot and Chilkat escapements, 1983.

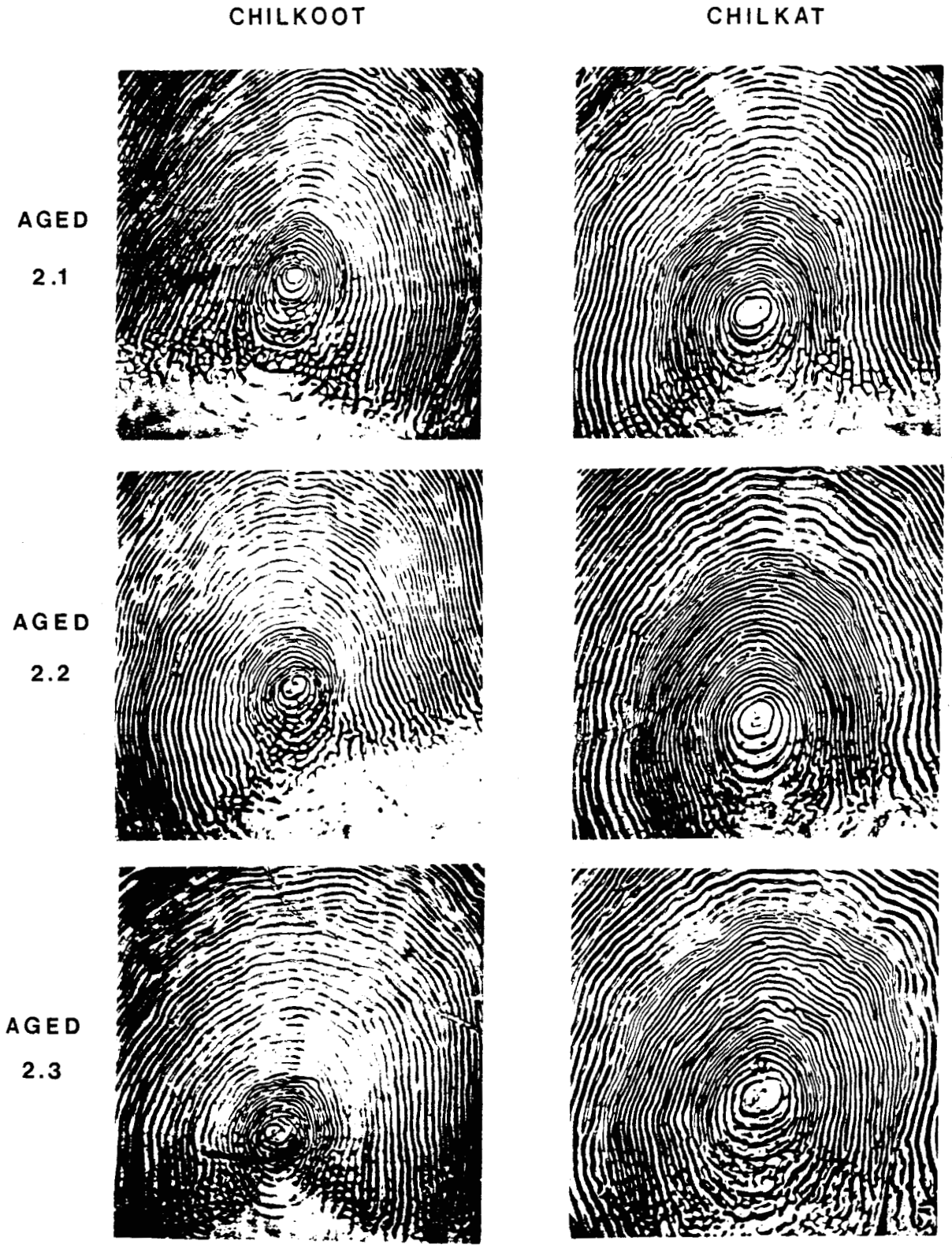

Figure 3. Photographs of typical scale patterns of sockeye salmon aged 2.- from Chilkoot and Chilkat escapements, 1983.

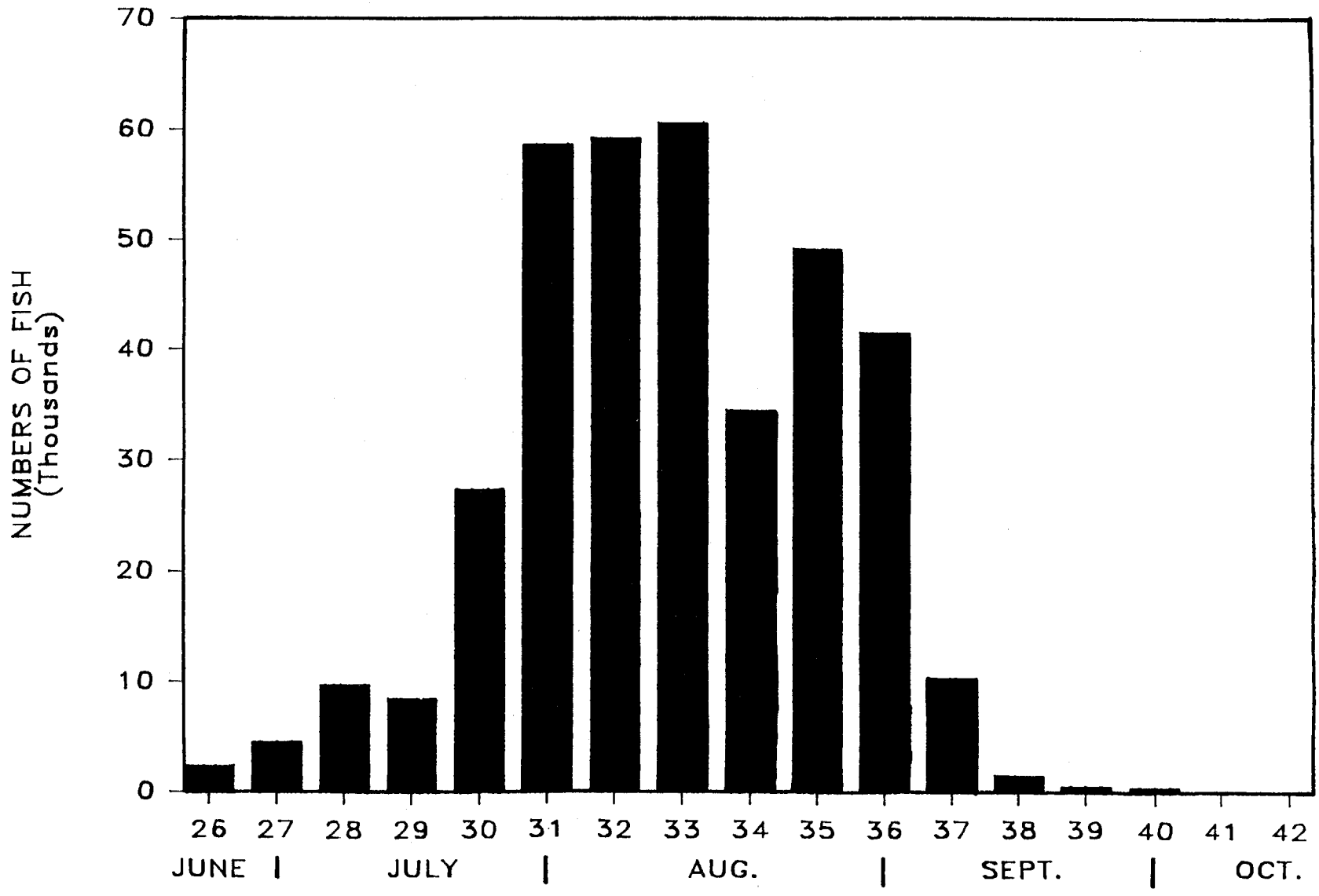

Figure 4. Numbers of sockeye salmon harvested in Lynn Canal by week, 1983.

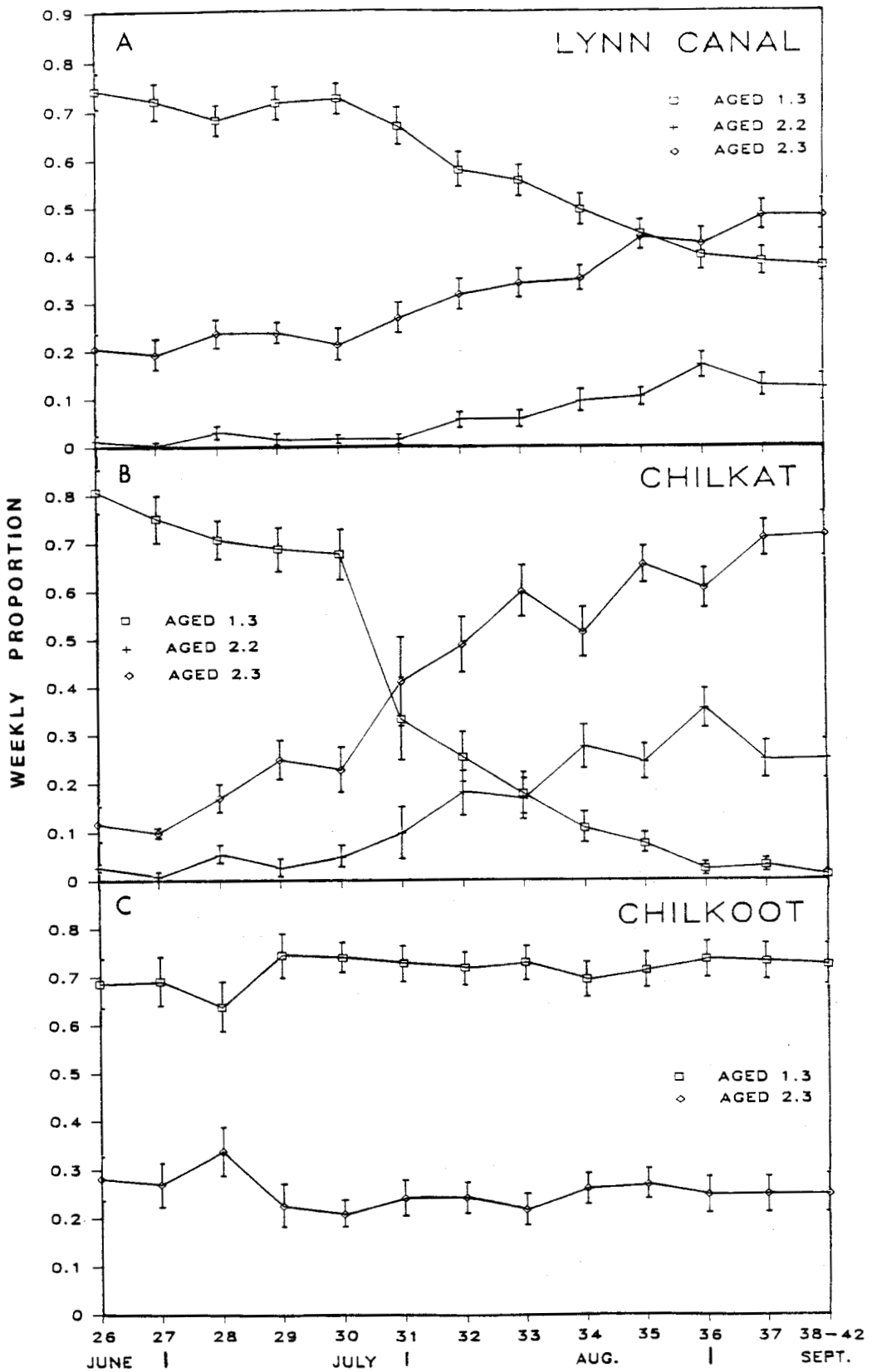

Figure 5. The weekly proportion and 95% confidence intervals of catch samples composed of the principal age classes by stock and in total, Lynn Canal, 1983.

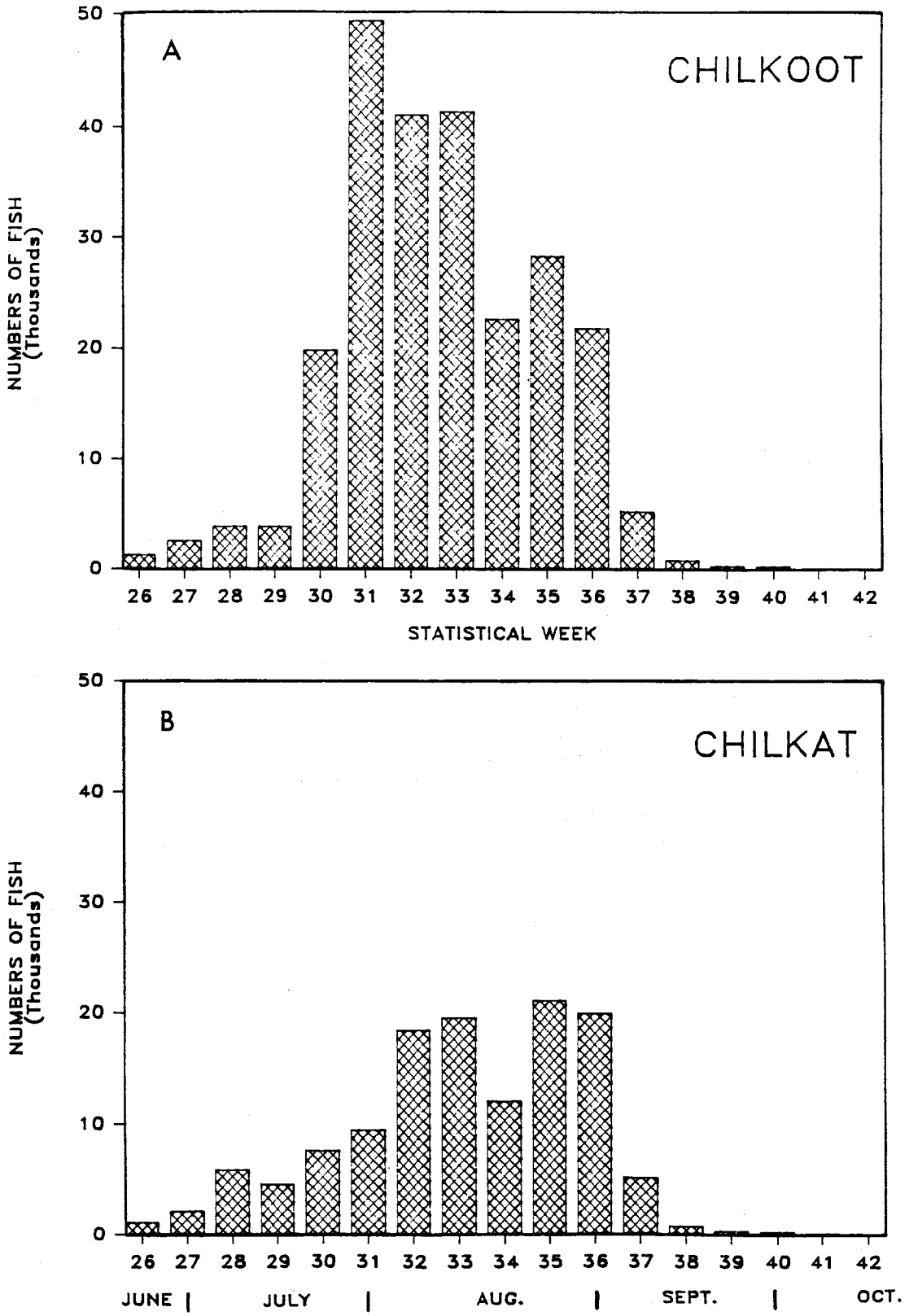

Figure 6. The catch of Chilkoot and Chilkat River sockeye salmon in the Lynn Canal drift gillnet fishery, by statistical week, 1983.

The catch of Chilkat River fish was dominated by fish aged 2.3 (50.8%) followed by fish aged 1.3 (23.3%), 2.2 (19.9%), 0.3 (3.0%), and 1.2 (2.3%) (Appendix Table 5). Fish of other age classes accounted for less than 1% of the catch. Early in the run, (Figure 5b) age 1.3 fish predominated and accounted for 67.7% to 80.6% of the harvest. The percent of fish aged 1.3 dropped sharply to 33.3% of the catch during week 31 and continued to decrease steadily to 1.1% of harvest in the last sampling period, week 38. The relative abundance of fish aged 2.3 and 2.2 increased as the season progressed. The mean date of harvest for the Chilkat fish was 10 August. Fish aged 1.3 arrived earliest (24 July) followed by fish aged 1.2 (10 August), 2.3 (16 August), and 2.2 (19 August).

Escapement

The estimated escapement of sockeye salmon into Chilkat Lake was 134,207 fish. The weir was operated from 22 June through 13 November (see Appendix Table 6). The escapement was strongly bimodal; models were seen in mid-June and mid-September (Figure 7a). During the period 22 August through 28 August, high runoff in the Tsirku River reversed flow at the outlet of Chilkat Lake. Presumably this flow reversal disoriented migratory fish and accounted for the substantial reduction in escapement counts.

The estimated escapement into Chilkoot Lake was 80,343 fish. The weir was operated from 4 June through 13 November (see Appendix Table 7). Peak periods of escapement occurred in late June and late July (Figure 7b).

In the Chilkat River escapement, fish aged 2.2 (32.6%), 1.3 (32.2%), and 2.3 (28.2%) were approximately equally abundant. Seven other age classes contributed to the remaining 7% of the fish in the escapement (see Appendix Table 8). Weekly estimates of age composition (note small sample sizes for some periods) (Figure 8a) show that fish aged 1.3 decreased in relative abundance through the season while those aged 2.2 and 2.3 increased.

In the Chilkoot River escapement, fish aged 1.3 (60.6%) dominated samples while fish aged 2.3 (25.2%) and 1.2 (12.1%) were common (Appendix Table 9). Three other age classes (1.1, 1.2, and 2.2) accounted for the remaining 2.1%. In contrast to catch samples, trends through time in the age composition of the escapement (Figure 8b) were evident; note particularly the mid-season peak abundance of fish aged 1.2.

Limited samples collected from the mainstem Chilkat River on 13 October indicate a majority (82.6%) of three ocean-age fish. Fish aged 1.3 were most abundant (41.3%) followed closely by fish aged 0.3 (40.0%) (McGregor et al. 1984). Fish aged 1.2 comprised 14.0% of the samples while fish of other age classes accounted for less than 5% of the total.

Exploitation Rates

The total return of Chilkoot River sockeye salmon origin was 321,812 fish of which 241,469 were caught and 80,343 escaped to spawn (Table 2). The exploitation rate for this run was 0.75. The total return of sockeye salmon of Chilkat River origin was 262,049 of which 127,842 were harvested and 134,207 escaped to spawn. The exploitation rate for this run was 0.49.

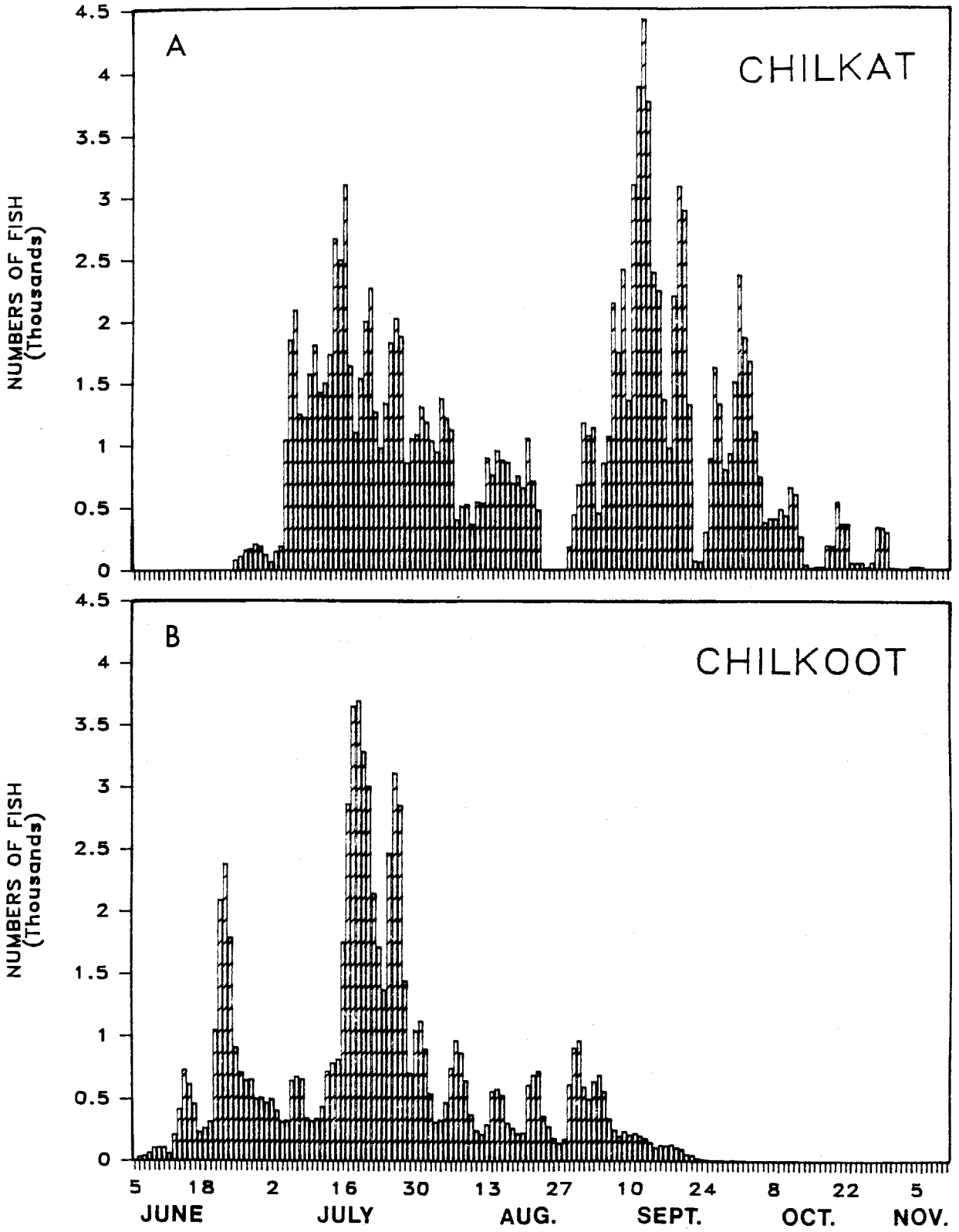

Figure 7. Escapement of sockeye salmon into Chilkat and Chilkoot Lakes by moving 3 - day average, 1983.

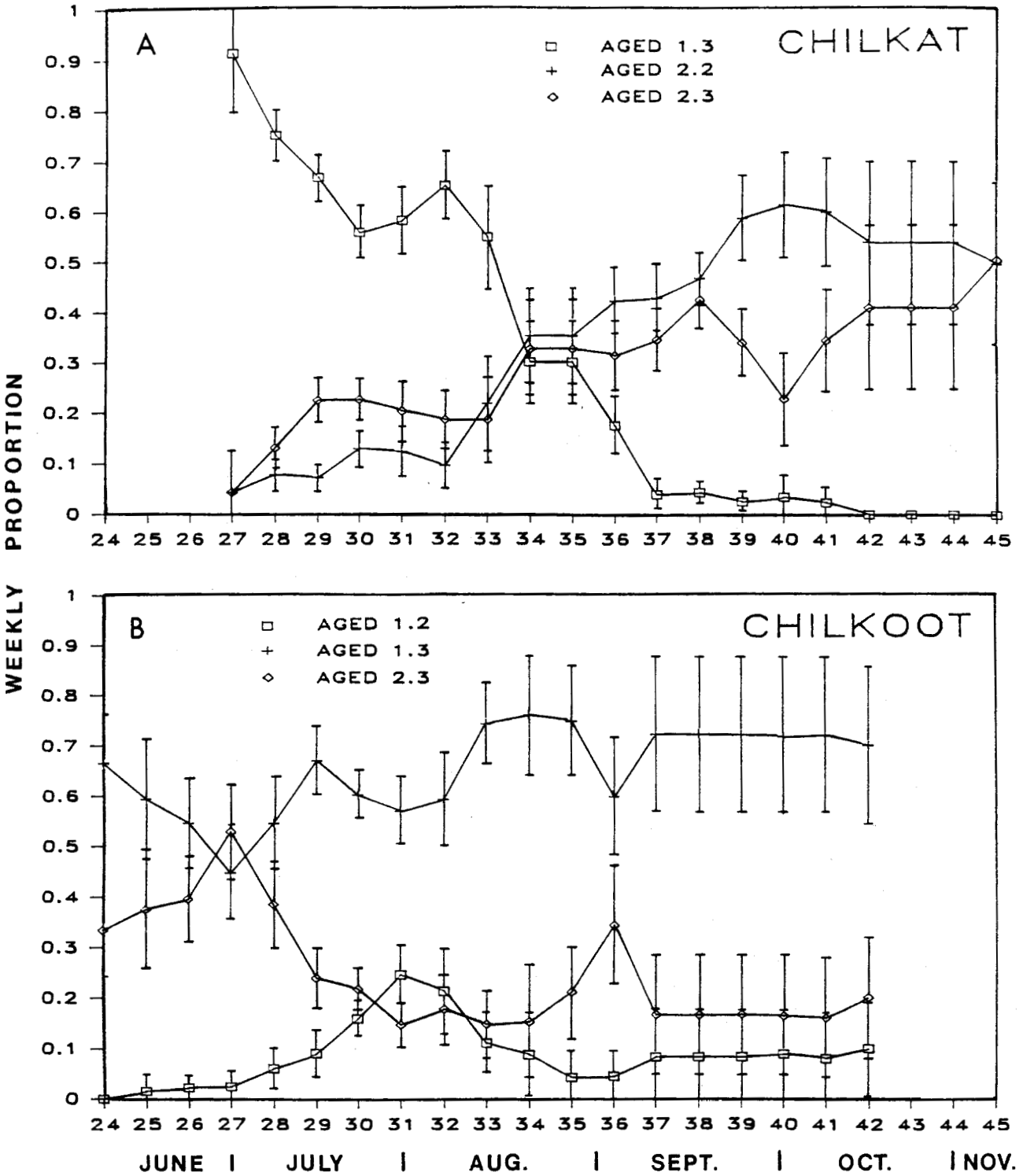

Figure 8. The weekly proportion and 95% confidence intervals of escapement samples composed of the principal age classes in Chilkoot and Chilkat Lakes, 1983.

Table 2. Catch, escapement, total return, and exploitation rates of sockeye salmon to Lynn Canal (District 115) by age class and system, 1983.

		Brood Year and Age Class													
		1980		1979			1978			1977			1976		
System		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
Chilkoot															
Catch	N				7120			174335	710	739	58519		46		241469
	%				2.9			72.2	0.3	0.3	24.3		0.0+		100.0
Escapement	N		89		9746	45		48726	1271	241	20225		0		80343
	%		0.1		12.1	0.1		60.6	1.6	0.3	25.2				100.0
Total Run	N		89		16866	45		223061	1981	980	78744		46		321812
	%		0.0+		5.2	0.0+		69.3	0.6	0.3	24.5		0.0+		100.0
Exploitation Rate			0.00		0.42	0.00		0.78	0.36	0.75	0.74		1.00		0.75
Chilkat															
Catch [1]	N	74	93	3859	2990		22	29753	25466	72	65195	197		122	127842
	%	0.1	0.1	3.0	2.3		0.0+	23.3	19.9	0.1	50.8	0.2		0.1	100.0
Escapement	N		874		3730	4478		43258	43715	23	37810	238	23	58	134207
	%		0.7		2.8	3.3		32.2	32.6	0.0+	28.2	0.2	0.0+	0.0+	100.0
Total Run	N	74	967	3859	6720	4478	22	73011	69181	95	103004	435	23	180	262,049
	%	0.0+	0.4	1.5	2.6	1.7	0.0+	27.9	26.4	0.0+	39.3	0.2	0.0+	0.1	100.0
Exploitation Rate			0.10		0.44	0.00		0.41	0.37	0.75	0.63	0.45	0.00	0.68	0.49

[1] Includes sockeye salmon from the Chilkat River mainstem.

Exploitation rates tended to increase with ocean-age regardless of stock (Table 2). One ocean-age fish were virtually unexploited; slightly more than one-third of the fish aged 2.2 were caught (0.36 and 0.37) while 0.42 to 0.44 of the fish aged 1.2 were harvested. Exploitation rates were similar for fish aged 1.3 (0.78) and 2.3 (0.74) for the Chilkoot run. Difference in timing may account for the lower exploitation rates for Chilkat fish aged 1.3 (0.41) than those aged 2.3 (0.63). Fish aged 1.4 were rare in both runs; exploitation rates were the same (.0.75) among runs.

Size at Age by Sex and Stock

Chilkat Lake sockeye were larger at age (by sex) than Chilkoot Lake fish (Table 3). In catch samples, the difference for fish aged 2.2 ranged from 42 mm for males to 30 mm for females while for fish aged 1.3 the difference was 13 mm among males and 11 mm among females. In the escapements, differences were larger between runs for fish aged 2.2 (males 84 mm; females 66 mm) and for fish age 1.3 (males 23 mm; females 24 mm).

Larger Chilkoot Lake fish aged 1.2, 1.3, and 2.3 were seen in the catches than in the escapements (Table 3). The difference in mean lengths between the catch and escapement of three ocean-age fish was less than 20 mm by sex and age class. However, among two ocean-age fish the difference was far greater and ranged from 50 mm for females aged 2.2 to 69 mm for females aged 1.2.

Larger Chilkat River fish were also harvested than escaped with the exception of fish aged 1.3, which were approximately equal. Two ocean-age fish exhibited larger differences than three ocean-age fish with fish aged 1.2 diverging the most (37 mm among males and 22 mm among females). Among three-ocean fish those 0.3 showed the major difference (16 mm for males and 19 mm for females).

DISCUSSION

The significant difference ($p < 0.001$) in migratory timing by age class (Appendix Table 10; Figure 9) within the Chilkat Lake run suggests that an objective division of the Chilkat Lake sockeye population into two components is possible. The presence of discrete timing for age classes within the Chilkat Lake run has implications to management of the fishery and setting of escapement goals. If two demes exist, separate strategies for escapement goals need to be evaluated.

Electrophoretic studies conducted in 1983 detected no significant genetic difference between the early and late segments of the run (Jack Helle, National Marine Fisheries Service, personal communication). We recommend that fish be tagged at the weir with recovery on the spawning grounds to determine if differences exist in the time and location of spawning by freshwater age.

Table 3. Mean length, standard error, and 95% confidence intervals by sex and age class of sockeye salmon from Lynn Canal catches and escapements, 1983.

			Brood Year and Age Class												
			1980		1979			1978			1977			1976	
System	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.2	2.4	3.3
Chilkat River Mainstem Escapement	M	x	430	330	576	440			587	435		565			
		S.E.	10.0		3.4	6.8			5.7						
		95% C.I.	127		7	14			12						
		N	2	1	23	19			20	1		1			
	F	x	505		552	508			560			530			
		S.E.			4.0	2.5			3.3						
		95% C.I.			8	32			7						
		N	1		37	2			42			1			
Chilkat Lake Escapement	M	x		330		494	355		604	545		608	565	630	601
		S.E.		1.9		6.0	2.8		1.6	1.9		1.9	8.9		
		95% C.I.		4		12	6		3	4		3	38		
		N		24		50	78		547	409		401	3	1	1
	F	x				522	349		589	539	615	594	556		
		S.E.				4.7	6.5		1.1	1.2		1.3			
		95% C.I.				10	84		2	3		2			
		N				37	2		549	384	1	373	1		
Chilkat River Catch	M	x		346	593	531		645	603	567	636	617	574		643
		S.E.			2.6	7.2			1.1	1.5	18.0	0.8	7.8		15.2
		95% C.I.			5	15			2	2	217	2	19		65
		N		1	57	33		2	625	413	2	1,039	7		3
	F	x			571	544			588	553	585	600	532		605
		S.E.			3.2	4.1			0.9	1.4	15.0	0.8	9.2		
		95% C.I.			7	8			2	2	191	1	29		
		N			62	44			757	351	2	994	4		1
Chilkoot Lake Escapement	M	x		410		456	420		581	461	600	580			
		S.E.				2.9			1.0	15.6	30.0	1.7			
		95% C.I.				6			2	38	381	3			
		N		1		132	1		525	7	2	190			
	F	x		345		455			565	473	590	560			
		S.E.				3.8			0.8	7.4	50.0	1.4			
		95% C.I.				7			2	16	635	3			
		N		1		82			559	17	2	272			
Chilkoot Lake Catch	M	x				507			590	525	599	587		650	
		S.E.				4.2			0.5	14.3	6.9	0.8			
		95% C.I.				13			1	31	15	2			
		N				111			2,130	14	19	776		1	
	F	x				524			577	523	587	576		585	
		S.E.				5.9			0.4	25.3	13.0	0.8		15.0	
		95% C.I.				12			1	70	36	2		189	
		N				46			2,304	5	5	764		2	

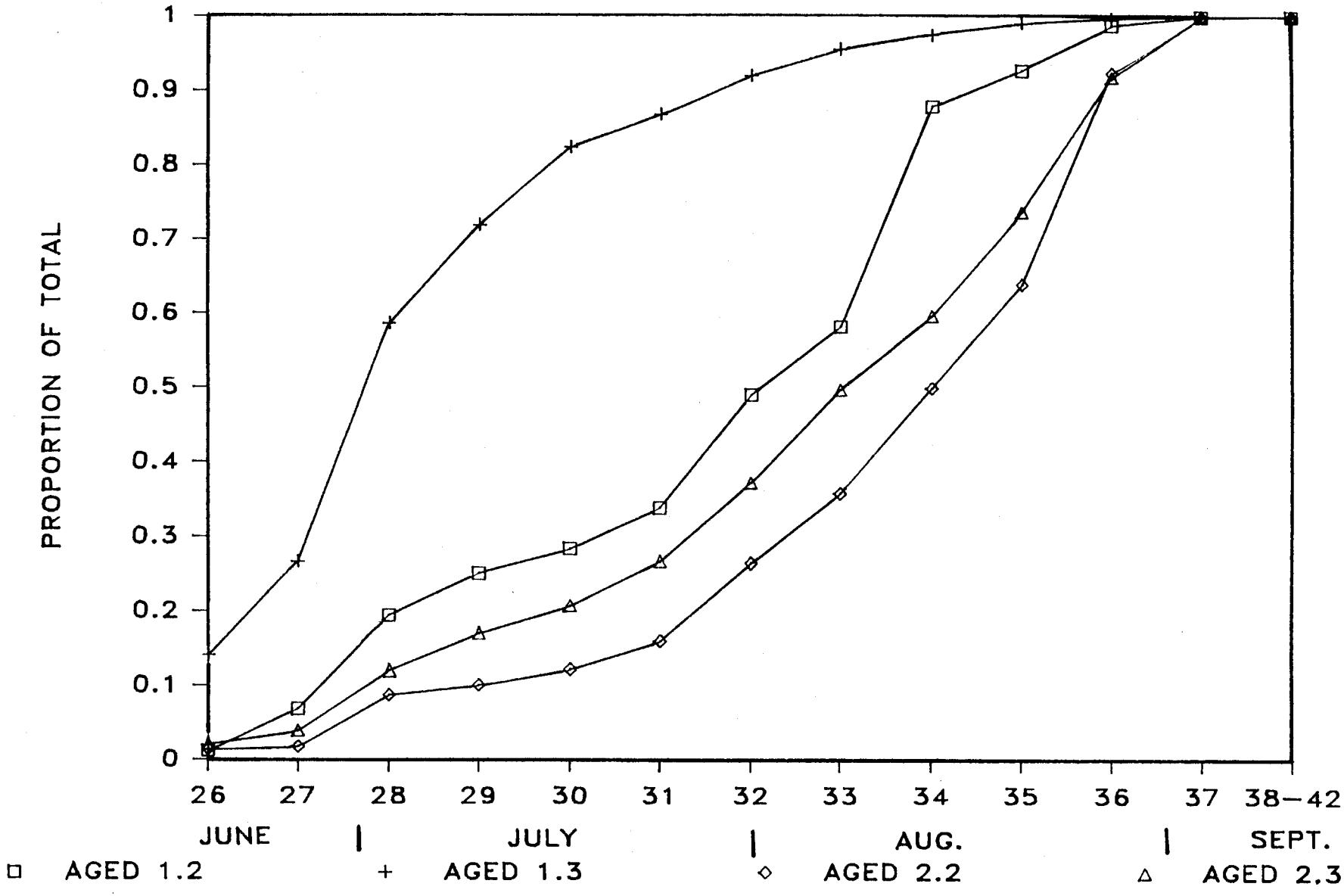

Figure 9. Cumulative proportion curves for the Chilkat catch by age, 1983.

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APPENDICES

Appendix Table 1. Harvest of sockeye salmon in Lynn Canal (District 115) by period, 1983.

Section	Statistical Week	Dates Fished	Hours (H)	Boats (B)	Catch	CPUE Fish/Boatday
15-A[1]	26	6/19 - 6/22	72	19	2448	42.9
15-A[1]	27	6/26 - 6/28	48	55	4697	42.7
15-A[1]	28	7/03 - 7/05	48	57	9779	85.8
15-A[1]	29	7/10 - 7/12	48	104	8401	40.4
15-A & C[2]	30	7/17 - 7/20	72	144	27420	63.5
15-AB & C[3]	31	7/24 - 7/28	96[4]	153	58678	95.9
15-A & C[5]	32	7/31 - 8/04	96	196	59176	75.5
15-A & C	33	8/07 - 8/11	96	214	60560	70.7
15-A & C	34	8/14 - 8/17	72	191	34507	60.2
15-A & C	35	8/21 - 8/26	120[6,7]	180	49182	54.6
15-A & C	36	8/28 - 8/31	72	204	41509	67.8
15-A & C	37	9/04 - 9/06	48	205	10338	25.2
15-A & C	38	9/11 - 9/13	48	221	1519	3.4
15-A & C[8]	39	9/18 - 9/20	48	204	575	1.4
15-A & C[8]	40	9/25 - 9/28	72	194	485	0.8
15-A & C[9]	41	10/2 - 10/4	48	159	35	0.1
15-A & C[9]	42	10/9 -10/10	24	57	2	0.0

1 Section 15-A open south of the latitude of Seduction Point.

2 Section 15-A open only south of 59 09'06" N. latitude.
Section 15-C open only within two nautical miles of the western shore of Lynn Canal to harvest sockeye and pink salmon.

3 Section 15-A open only south of Katzehin River flats buoy.
Section 15-B open.
Section 15-C open only within two nautical miles of the western shore of Lynn Canal to harvest sockeye and pink salmon.

4 Last 48 hours, noon 7/26-noon 7/28, Section 15-A open completely.
Section 15-B and 15-C same as above.

5 Section 15-A open.
Section 15-B closed.
Section 15-C open only within 2 nautical miles of the western shore of Lynn Canal to harvest sockeye and pink salmon.

6 Section 15-A extension 24 hours through noon 8/25.

7 Section 15-A extension 24 hours through noon Friday 8/26 open north of Latitude of Seduction Point and Lutak Inlet.

8 Section 15-A open.
Section 15-C open only south of the latitude of Pt. Bridget.

9 Section 15-A open except that Chilkat Lake was closed north of the latitude of the northern most tip of Kochu Island.

Appendix Table 2. Numbers by age of sockeye salmon harvested in the Lynn Canal drift gillnet fishery, by period, 1983.

			Brood Year and Age Class												
			1980		1979		1978			1977			1976		
Stat Week	Inclusive Dates	Sample Size	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
26	6/19-6/25	546			49	9		1819	31	36	504				2448
27	6/26-7/02	531			246	124	9	3377	18	18	905				4697
28	7/03-7/09	727			282	175	13	6644	322	26	2317				9779
29	7/10-7/16	639			105	158		5997	144		1997				8401
30	7/17-7/23	1004			268	961		19809	486	55	5841				27420
31	7/24-7/30	612		93	1204	1634		38962	926	97	15763				58678
32	7/31-8/06	787			740	2105		33977	3481	76	18797				59176
33	8/07-8/13	812	74		589	2168		33476	3540	150	20563				60560
34	8/14-8/20	930			256	1662		16940	3332	261	12056				34507
35	8/21-8/27	1244			78	553		21708	5173	40	21355	117	40	118	49182
36	8/28-9/03	984			42	465		16435	7074	42	17409	42			41509
37	9/04-9/10	1026				71		3961	1323	10	4953	20			10338
38-42	9/11-10/15	734				25		982	326		1254	18	7	4	2616
Total	Number	10575	74	93	3859	10110	22	204087	26176	811	123714	197	47	122	369311
	Percent		0.02	0.03	1.04	2.74	0.01	55.26	7.09	0.22	33.50	0.05	0.01	0.03	

Appendix Table 3. Estimated contribution of Chilkat and Chilkoot River sockeye salmon to the drift gillnet catch in Lynn Canal, by statistical week, 1983.

		Chilkoot		Chilkat	
Statistical Week	Inclusive Dates	Proportion	Number of Fish	Proportion	Number of Fish
26	6/19-6/25	0.537 ± 0.036	1,315	0.463 ± 0.036	1,133
27	6/26-7/02	0.548 ± 0.036	2,574	0.452 ± 0.036	2,123
28	7/03-7/09	0.397 ± 0.030	3,882	0.603 ± 0.030	5,897
29	7/10-7/16	0.457 ± 0.033	3,839	0.543 ± 0.033	4,562
30	7/17-7/23	0.721 ± 0.025	19,770	0.279 ± 0.025	7,650
31	7/24-7/30	0.839 ± 0.027	49,231	0.161 ± 0.027	9,447
32	7/31-8/06	0.690 ± 0.029	40,832	0.310 ± 0.029	18,344
33	8/07-8/13	0.679 ± 0.028	41,120	0.321 ± 0.028	19,440
34	8/14-8/20	0.653 ± 0.027	22,533	0.347 ± 0.027	11,974
35	8/21-8/27	0.573 ± 0.024	28,181	0.427 ± 0.024	21,001
36	8/28-9/03	0.522 ± 0.027	21,668	0.478 ± 0.026	19,841
37	9/04-9/10	0.502 ± 0.026	5,190	0.498 ± 0.026	5,148
38-42	9/11-10/15	0.510 ± 0.031	1,334	0.490 ± 0.031	1,282
Total	6/19-10/15		241,469		127,842

Appendix Table 4. Age composition of Chilkoot River fish harvested in 1983, by week and sex.

Stat Week	Inclusive Dates	Sex	N		Brood Year and Age Class 1979 1.2	1978 1.3	1978 2.2	1977 1.4	1977 2.3	1976 2.4	Total
26	6/19-6/25	M	142	%		32.7		2.4	13.7		48.8
				SE		4.0		1.3	2.9		2.9
				N		429		31	181		641
		F	149	%	0.3	36.1		0.3	14.5		51.2
				SE	0.4	3.9		0.4	2.9		2.9
				N	5	474		5	190		674
		C	291	%	0.3	68.8		2.7	28.2		100.0
				SE	0.3	2.7		1.0	2.6		
				N	5	903		36	371		1315
27	6/26-7/02	M	108	%	2.1	25.6		0.3	9.4		37.4
				SE	1.4	4.2		0.5	2.8		2.9
				N	53	659		9	241		962
		F	181	%	1.4	43.6			17.6		62.6
				SE	0.9	3.7			2.8		2.9
				N	36	1122			454		1612
		C	289	%	3.5	69.2		0.3	27.0		100.0
				SE	1.1	2.7		0.3	2.6		
				N	89	1781		9	695		2574
28	7/03-7/09	M	136	%	1.4	27.5			18.5		47.4
				SE	1.0	3.8			3.3		3.0
				N	54	1069			717		1840
		F	151	%	1.0	36.3			15.3		52.6
				SE	0.8	3.9			2.9		3.0
				N	41	1406			595		2042
		C	287	%	2.4	63.8			33.8		100.0
				SE	0.9	2.8			2.8		
				N	95	2475			1312		3882
29	7/10-7/16	M	124	%	2.1	28.3	0.7		11.7		42.8
				SE	1.3	4.1	0.8		2.9		2.9
				N	80	1086	26		450		1642
		F	166	%	0.3	46.2			10.7		57.2
				SE	0.4	3.9			2.4		2.9
				N	13	1774			410		2197
		C	290	%	2.4	74.5	0.7		22.4		100.0
				SE	0.9	2.6	0.5		2.5		
				N	93	2860	26		860		3839
30	7/17-7/23	M	360	%	3.6	36.2	0.6	0.3	9.4		50.1
				SE	1.0	2.5	0.4	0.3	1.5		1.9
				N	715	7149	110	55	1870		9899
		F	359	%	0.8	37.8			11.3		49.9
				SE	0.5	2.6			1.7		1.9
				N	165	7479			2227		9871
		C	719	%	4.4	74.0	0.6	0.3	20.7		100.0
				SE	0.8	1.6	0.3	0.2	1.5		
				N	880	14628	110	55	4097		19770
31	7/24-7/30	M	280	%	2.1	41.4		0.2	11.2		54.9
				SE	0.9	2.9		0.3	1.9		2.2
				N	1062	20368		97	5502		27029
		F	230	%	0.8	31.4			12.9		45.1
				SE	0.6	3.1			2.2		2.2
				N	386	15445			6371		22202
		C	510	%	2.9	72.8		0.2	24.1		100.0
				SE	0.7	2.0		0.2	1.9		
				N	1448	35813		97	11873		49231
32	7/31-8/06	M	269	%	1.8	36.2	0.2		11.7		49.9
				SE	0.8	2.9	0.3		2.0		2.2
				N	757	14772	76		4773		20378
		F	270	%	1.7	35.6	0.2	0.2	12.4		50.1
				SE	0.8	2.9	0.3	0.3	2.0		2.2
				N	682	14545	76	76	5075		20454
		C	539	%	3.5	71.8	0.4	0.2	24.1		100.0
				SE	0.8	1.9	0.3	0.2	1.8		
				N	1439	29317	152	76	9848		40832

-Continued-

Appendix Table 4. Age composition of Chilkoot River fish harvested in 1983, by week and sex (continued).

Stat Week	Inclusive Dates	Sex	N		Brood Year and Age Class 1979 1.2	1978 1.3	1978 2.2	1977 1.4	1977 2.3	1976 2.4	Total
33	8/07-8/13	M	245	%	2.9	30.7	0.5	0.4	10.2		44.7
				SE	1.1	3.0	0.5	0.4	1.9		2.1
				N	1201	12606	225	150	4202		18384
		F	303	%	1.3	42.3	0.2		11.5		55.3
				SE	0.7	2.8	0.3		1.8		2.1
				N	525	17409	75		4727		22736
		C	548	%	4.2	73.0	0.7	0.4	21.7		100.0
				SE	0.9	1.9	0.4	0.3	1.8		
				N	1726	30015	300	150	8929		41120
34	8/14-8/20	M	307	%	2.8	33.6		0.7	13.8		50.9
				SE	0.9	2.7		0.5	2.0		2.0
				N	635	7586		149	3102		11472
		F	296	%	0.3	35.9	0.2	0.3	12.4		49.1
				SE	0.3	2.8	0.3	0.3	1.9		2.0
				N	75	8072	37	75	2802		11061
		C	603	%	3.1	69.5	0.2	1.0	26.2		100.0
				SE	0.7	1.9	0.2	0.4	1.8		
				N	710	15658	37	224	5904		22533
35	8/21-8/27	M	315	%	0.7	30.7		0.1	12.9	0.1	44.5
				SE	0.5	2.6		0.2	1.9	0.2	1.9
				N	199	8637		40	3622	40	12538
		F	393	%	0.4	40.9	0.1		14.1		55.5
				SE	0.3	2.5	0.2		1.8		1.9
				N	119	11503	40		3981		15643
		C	708	%	1.1	71.6	0.1	0.1	27.0	0.1	100.0
				SE	0.4	1.7	0.1	0.1	1.7	0.1	
				N	318	20140	40	40	7603	40	28181
36	8/28-9/03	M	229	%	0.6	31.8			12.5		44.9
				SE	0.5	3.1			2.2		2.2
				N	128	6883			2719		9730
		F	281	%	0.6	41.9		0.2	12.4		55.1
				SE	0.5	2.9		0.3	2.0		2.2
				N	127	9092		42	2677		11938
		C	510	%	1.2	73.7		0.2	24.9		100.0
				SE	0.5	2.0		0.2	1.9		
				N	255	15975		42	5396		21668
37	9/04-9/10	M	279	%	0.6	38.6	0.6	0.2	14.5		54.5
				SE	0.5	2.9	0.5	0.3	2.1		2.2
				N	30	2007	31	10	750		2828
		F	233	%	0.2	34.6	0.2		10.5		45.5
				SE	0.3	3.1	0.3		2.0		2.2
				N	11	1794	10		547		2362
		C	512	%	0.8	73.2	0.8	0.2	25.0		100.0
				SE	0.4	2.0	0.4	0.2	1.9		
				N	41	3801	41	10	1297		5190
38-42	9/11-10/15	M	257	%	1.1	50.0	0.3		17.7		69.1
				SE	0.7	3.1	0.3		2.4		2.4
				N	14	667	4		237		922
		F	115	%	0.5	22.6			7.3	0.5	30.9
				SE	0.7	3.9			2.4	0.7	2.4
				N	7	301			97	7	412
		C	372	%	1.6	72.6	0.3		25.0	0.5	100.0
				SE	0.7	2.3	0.3		2.2	0.4	
				N	21	968	4		334	7	1334
Combined Periods (Percentages are weighted by period catches)											
Total		M	2130	%	2.0	34.8	0.2	0.2	11.8	<0.0	49.0
				SE	0.3	1.1	0.1	0.1	0.7	<0.0	0.8
				N	4928	83918	472	541	28366	40	118265
		F	2304	%	0.9	37.4	0.1	0.1	12.5	<0.0	51.0
				SE	0.2	1.1	0.1	0.1	0.7	<0.0	0.8
				N	2192	90416	238	198	30153	7	123204
		C	4434	%	2.9	72.2	0.3	0.3	24.3	<0.0	100.0
				SE	0.3	0.7	0.1	0.1	0.7	<0.0	
				N	7120	174334	710	739	58519	47	241469
Mean date of catch					8/4	8/7	8/7	8/7	8/7	8/28	8/7

Appendix Table 5. Age composition of Chilkat River fish harvested in 1983, by week and sex.

	Brood Year and Age Class											
	1980		1979		1978			1977			1976	
	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	3.3	Total
Stat Week 26 (June 19 - 25)												
Male												
Sample Number			5			82	1		12			100
Percent			2.0			32.1	0.4		4.7			39.2
Standard Error			1.4			4.7	0.6		2.1			3.1
Number			22			365	4		53			444
Female												
Sample Number			6	1		124	6		18			155
Percent			2.4	0.4		48.5	2.4		7.1			60.8
Standard Error			1.2	0.5		4.0	1.2		2.1			3.1
Number			27	4		551	27		80			689
Sexes Combined												
Sample Number			11	1		206	7		30			255
Percent			4.4	0.4		80.6	2.8		11.8			100.0
Standard Error			1.3	0.4		2.5	1.0		2.0			
Number			49	4		916	31		133			1133
Stat Week 27 (June 26 - July 2)												
Male												
Sample Number			10	1	1	64			4			80
Percent			4.1	0.4	0.4	26.5			1.7			33.1
Standard Error			2.2	0.7	0.7	5.0			1.5			3.0
Number			88	9	9	561			35			702
Female												
Sample Number			18	3		118	2	1	20			162
Percent			7.4	1.2		48.8	0.8	0.4	8.3			66.9
Standard Error			2.1	0.9		3.9	0.7	0.5	2.2			3.0
Number			158	26		1035	18	9	175			1421
Sexes Combined												
Sample Number			28	4	1	182	2	1	24			242
Percent			11.5	1.6	0.4	75.3	0.8	0.4	10.0			100.0
Standard Error			2.1	0.8	0.4	2.8	0.6	0.4	1.9			
Number			246	35	9	1596	18	9	210			2123
Stat Week 28 (July 3 - 9)												
Male												
Sample Number			9	3	1	152	13	1	32			211
Percent			2.0	0.7	0.2	34.6	3.0	0.2	7.3			48.0
Standard Error			1.0	0.6	0.3	3.3	1.2	0.3	1.8			2.4
Number			121	40	13	2038	174	13	429			2828
Female												
Sample Number			12	3		159	11	1	43			229
Percent			2.7	0.7		36.1	2.5	0.2	9.8			52.0
Standard Error			1.1	0.6		3.2	1.0	0.3	2.0			2.4
Number			161	40		2131	148	13	576			3069
Sexes Combined												
Sample Number			21	6	1	311	24	2	75			440
Percent			4.7	1.4	0.2	70.7	5.5	0.4	17.1			100.0
Standard Error			0.6	0.6	0.2	2.2	1.1	0.3	1.8			
Number			281	80	13	4169	322	27	1005			5897
Stat Week 29 (July 10 - 16)												
Male												
Sample Number			2	4		101	4		33			144
Percent			0.6	1.1		29.0	1.1		9.5			41.3
Standard Error			0.6	0.9		3.8	0.9		2.5			2.6
Number			27	52		1320	52		431			1882
Female												
Sample Number			6	1		139	5		54			205
Percent			1.7	0.3		39.8	1.4		15.5			58.7
Standard Error			0.9	0.4		3.4	0.8		2.5			2.6
Number			78	13		1817	66		706			2680
Sexes Combined												
Sample Number			8	5		240	9		87			349
Percent			2.3	1.4		68.8	2.5		25.0			100.0
Standard Error			0.8	0.6		2.5	0.9		2.3			
Number			105	65		3137	118		1137			4562
Stat Week 30 (July 17 - 23)												
Male												
Sample Number			5	3		100	8		30			146
Percent			1.7	1.1		35.1	2.8		10.5			51.2
Standard Error			1.1	0.9		4.0	1.4		2.5			3.0
Number			134	81		2684	215		805			3919
Female												
Sample Number			5			93	6		35			139
Percent			1.8			32.6	2.1		12.3			48.8
Standard Error			1.1			4.0	1.2		2.8			3.0
Number			134			2497	161		939			3731
Sexes Combined												
Sample Number			10	3		193	14		65			285
Percent			3.5	1.1		67.7	4.9		22.8			100.0
Standard Error			1.1	0.6		2.8	1.3		2.5			
Number			268	81		5181	376		1744			7650

-Continued-

Appendix Table 5. Age composition of Chilkat River fish harvested in 1983, by week and sex (continued).

	Brood Year and Age Class											
	1980		1979		1978			1977			1976	
	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	3.3	Total
Stat Week 31 (July 24 - 30)												
Male												
Sample Number		1	8	1		19	6		22			57
Percent		1.0	7.8	1.0		18.6	5.9		21.6			55.9
Standard Error		1.3	3.6	1.3		5.2	3.1		5.5			4.9
Number		93	741	93		1760	556		2037			5279
Female												
Sample Number			5	1		15	4		20			45
Percent			4.9	1.0		14.7	3.9		19.6			44.1
Standard Error			3.3	1.5		5.3	2.9		6.0			4.9
Number			463	93		1389	370		1853			4168
Sexes Combined												
Sample Number		1	13	2		34	10		42			102
Percent		1.0	12.7	2.0		33.3	9.8		41.2			100.0
Standard Error		1.0	3.3	1.4		4.7	3.0		4.9			
Number		93	1204	185		3149	926		3890			9447
Stat Week 32 (July 31 - August 6)												
Male												
Sample Number			6	4		30	20		48			108
Percent			2.4	1.6		12.1	8.1		19.3			43.5
Standard Error			1.5	1.2		3.2	2.6		3.8			3.2
Number			444	296		2219	1480		3550			7989
Female												
Sample Number			4	5		33	25		73			140
Percent			1.6	2.0		13.3	10.1		29.5			56.5
Standard Error			1.1	1.2		2.9	2.6		3.9			3.2
Number			296	370		2441	1849		5399			10355
Sexes Combined												
Sample Number			10	9		63	45		121			248
Percent			4.0	3.6		25.4	18.2		48.8			100.0
Standard Error			1.2	1.2		2.8	2.4		3.2			
Number			740	666		4660	3329		8949			18344
Stat Week 33 (August 7 - 13)												
Male												
Sample Number			5	5		27	25		77			139
Percent			1.9	1.9		10.2	9.5		29.2			52.7
Standard Error			1.2	1.2		2.6	2.5		3.9			3.1
Number			368	368		1988	1841		5670			10235
Female												
Sample Number	1		3	1		20	19		81			125
Percent	0.4		1.1	0.4		7.6	7.2		30.6			47.3
Standard Error	0.6		0.9	0.6		2.4	2.3		4.1			3.1
Number	74		221	74		1473	1399		5964			9205
Sexes Combined												
Sample Number	1		8	6		47	44		158			264
Percent	0.4		3.0	2.3		17.8	16.7		59.8			100.0
Standard Error	0.4		1.1	0.9		2.4	2.3		3.0			
Number	74		589	442		3461	3240		11635			19440
Stat Week 34 (August 14 - 20)												
Male												
Sample Number			7	4		16	46	1	81			155
Percent			2.1	1.2		4.9	14.1	0.3	24.8			47.4
Standard Error			1.2	0.9		1.7	2.8	0.4	3.5			2.8
Number			256	146		586	1684	37	2967			5676
Female												
Sample Number				22		19	44		87			172
Percent				6.7		5.8	13.5		26.6			52.6
Standard Error				1.9		1.8	2.6		3.4			2.8
Number				806		696	1611		3185			6298
Sexes Combined												
Sample Number			7	26		35	90	1	168			327
Percent			2.1	7.9		10.7	27.6	0.3	51.4			100.0
Standard Error			0.8	1.5		1.7	2.5	0.3	2.8			
Number			256	952		1282	3295	37	6152			11974
Stat Week 35 (August 21 - 27)												
Male												
Sample Number				4		14	70		157	1	2	248
Percent				0.7		2.6	13.1		29.3	0.2	0.4	46.3
Standard Error				0.5		1.0	2.1		2.9	0.3	0.4	2.2
Number				157		549	2743		6151	39	78	9717
Female												
Sample Number			2	2		26	61		194	2	1	288
Percent			0.4	0.4		4.9	11.3		36.1	0.4	0.2	53.7
Standard Error			0.4	0.4		1.3	1.9		2.8	0.4	0.3	2.2
Number			78	78		1019	2390		7601	78	40	11284
Sexes Combined												
Sample Number			2	6		40	131		351	3	3	536
Percent			0.4	1.1		7.5	24.4		65.4	0.6	0.6	100.0
Standard Error			0.3	0.5		1.1	1.9		2.1	0.3	0.3	
Number			78	235		1567	5133		13753	117	118	21001

-Continued-

Appendix Table 5. Age composition of Chilkat River fish harvested in 1983, by week and sex (continued).

	Brood Year and Age Class											
	1980		1979		1978			1977			1976	
	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	3.3	Total
Stat Week 36 (August 28 - Sept. 3)												
Male												
Sample Number				3		7	87		141	1		239
Percent				0.6		1.5	18.4		29.7	0.2		50.4
Standard Error				0.5		0.8	2.5		3.0	0.3		2.3
Number				126		293	3642		5901	42		10004
Female												
Sample Number			1	2		4	82		146			235
Percent			0.2	0.4		0.8	17.3		30.9			49.6
Standard Error			0.3	0.4		0.6	2.5		3.0			2.3
Number			42	84		167	3432		6112			9837
Sexes Combined												
Sample Number			1	5		11	169		287	1		474
Percent			0.2	1.0		2.3	35.7		60.6	0.2		100.0
Standard Error			0.2	0.5		0.7	2.2		2.2	0.2		
Number			42	210		460	7074		12013	42		19841
Stat Week 37 (Sept. 4 - 10)												
Male												
Sample Number						10	80		227	1		318
Percent						1.9	15.6		44.2	0.2		61.9
Standard Error						0.8	2.0		2.8	0.3		2.1
Number						100	801		2274	10		3185
Female												
Sample Number				3		6	48		138	1		196
Percent				0.6		1.2	9.3		26.8	0.2		38.1
Standard Error				0.6		0.8	2.1		3.2	0.3		2.1
Number				30		60	481		1382	10		1963
Sexes Combined												
Sample Number				3		16	128		365	2		514
Percent				0.6		3.1	24.9		71.0	0.4		100.0
Standard Error				0.3		0.8	1.9		2.0	0.3		
Number				30		160	1282		3656	20		5148
Stat Weeks 38 - 42 (Sept. 11 - Oct. 15)												
Male												
Sample Number				1		3	53		175	4	1	237
Percent				0.3		0.8	14.6		48.4	1.1	0.3	65.5
Standard Error				0.4		0.6	2.3		3.3	0.7	0.4	2.5
Number				4		10	187		620	14	4	839
Female												
Sample Number						1	38		85	1		125
Percent						0.3	10.5		23.4	0.3		34.5
Standard Error						0.5	2.8		3.8	0.5		2.5
Number						4	135		300	4		443
Sexes Combined												
Sample Number				1		4	91		260	5	1	362
Percent				0.3		1.1	25.1		71.8	1.4	0.3	100.0
Standard Error				0.3		0.5	2.3		2.4	0.6	0.3	
Number				4		14	322		920	18	4	1282
Combined Periods (Percentages are weighted by period catches)												
Male												
Sample Number		1	57	33	2	625	413	2	1039	7	3	2182
Percent		0.1	1.7	1.1	<0.1	11.3	10.5	<0.1	24.1	0.1	0.1	49.0
Standard Error		0.1	0.4	0.4		0.8	0.8	0.1	1.2	0.1	0.1	1.0
Number		93	2201	1371	22	14473	13379	50	30923	105	82	62699
Female												
Sample Number	1		62	44		757	351	2	994	4	1	2216
Percent	0.1		1.3	1.3		12.0	9.5	<0.1	26.7	0.1	<0.1	51.0
Standard Error	0.1		0.3	0.3		0.8	0.8		1.2	0.1		1.0
Number	74		1658	1618		15280	12080	22	34272	92	40	65143
Sexes Combined												
Sample Number	1	1	119	77	2	1382	764	4	2033	11	4	4398
Percent	0.1	0.1	3.0	2.3	<0.1	23.3	19.9	0.1	50.8	0.2	0.1	100.0
Standard Error	0.1	0.1	0.4	0.3		0.7	0.8		0.9	0.1	0.1	
Number	74	93	3858	2989	22	29752	25466	73	65197	197	122	127842
Mean catch date	8/10	7/26	7/26	8/10	7/3	7/24	8/19	7/22	8/16	9/3	8/24	8/10

Appendix Table 6. Chilkat Lake weir counts of sockeye salmon and associated statistics, 1983[1].

Date		Daily Count	Cumulative Count	Daily Percent of Total	Cumulative Percent
JUNE	22	12	12	0.01	0.01
JUNE	23	26	38	0.02	0.03
JUNE	24	226	264	0.17	0.20
JUNE	25	104	368	0.08	0.27
JUNE	26	189	557	0.14	0.42
JUNE	27	230	787	0.17	0.59
JUNE	28	211	998	0.16	0.74
JUNE	29	145	1143	0.11	0.85
JUNE	30	25	1168	0.02	0.87
JULY	1	44	1212	0.03	0.90
JULY	2	404	1616	0.30	1.20
JULY	3	134	1750	0.10	1.30
JULY	4	2606	4356	1.94	3.25
JULY	5	2818	7174	2.10	5.35
JULY	6	866	8040	0.65	5.99
JULY	7	68	8108	0.05	6.04
JULY	8	2747	10855	2.05	8.09
JULY	9	1905	12760	1.42	9.51
JULY	10	777	13537	0.58	10.09
JULY	11	1599	15136	1.19	11.28
JULY	12	2126	17262	1.58	12.86
JULY	13	1474	18736	1.10	13.96
JULY	14	4401	23137	3.28	17.24
JULY	15	1609	24746	1.20	18.44
JULY	16	3298	28044	2.46	20.90
JULY	17	10	28054	0.01	20.90
JULY	18	0	28054	0.00	20.90
JULY	19	4591	32645	3.42	24.32
JULY	20	1408	34053	1.05	25.37
JULY	21	806	34859	0.60	25.97
JULY	22	1588	36447	1.18	27.16
JULY	23	532	36979	0.40	27.55
JULY	24	1879	38858	1.40	28.95
JULY	25	3062	41920	2.28	31.24
JULY	26	1127	43047	0.84	32.08
JULY	27	1436	44483	1.07	33.15
JULY	28	0	44483	0.00	33.15
JULY	29	1714	46197	1.28	34.42
JULY	30	1532	47729	1.14	35.56
JULY	31	664	48393	0.49	36.06
AUG.	1	1356	49749	1.01	37.07
AUG.	2	1081	50830	0.81	37.87
AUG.	3[2]	398	51228	0.30	38.17
AUG.	4	2640	53868	1.97	40.14
AUG.	5	612	54480	0.46	40.59
AUG.	6	114	54594	0.08	40.68
AUG.	7	476	55070	0.35	41.03
AUG.	8	933	56003	0.70	41.73
AUG.	9	152	56155	0.11	41.84
AUG.	10	9	56164	0.01	41.85
AUG.	11	1459	57623	1.09	42.94
AUG.	12	133	57756	0.10	43.04
AUG.	13	1092	58848	0.81	43.85
AUG.	14	1044	59892	0.78	44.63
AUG.	15	721	60613	0.54	45.16
AUG.	16	866	61479	0.65	45.81
AUG.	17	994	62473	0.74	46.55
AUG.	18	221	62694	0.16	46.71
AUG.	19	1047	63741	0.78	47.49
AUG.	20	696	64437	0.52	48.01
AUG.	21	1417	65854	1.06	49.07
AUG.	22	16	65870	0.01	49.08
AUG.	23	0	65870	0.00	49.08
AUG.	24	0	65870	0.00	49.08
AUG.	25	0	65870	0.00	49.08
AUG.	26	0	65870	0.00	49.08
AUG.	27	0	65870	0.00	49.08
AUG.	28	0	65870	0.00	49.08
AUG.	29	578	66448	0.43	49.51
AUG.	30	767	67215	0.57	50.08
AUG.	31	705	67920	0.53	50.61
SEPT.	1	2069	69989	1.54	52.15

-Continued-

Appendix Table 6. Chilkat Lake weir counts of sockeye salmon and associated statistics, 1983[1] (continued).

Date		Daily Count	Cumulative Count	Daily Percent of Total	Cumulative Percent
SEPT.	2	466	70455	0.35	52.50
SEPT.	3	890	71345	0.66	53.16
SEPT.	4	7	71352	0.01	53.17
SEPT.	5	1685	73037	1.26	54.42
SEPT.	6	1522	74559	1.13	55.56
SEPT.	7	3243	77802	2.42	57.97
SEPT.	8	475	78277	0.35	58.33
SEPT.	9	3541	81818	2.64	60.96
SEPT.	10	53	81871	0.04	61.00
SEPT.	11	5719	87590	4.26	65.26
SEPT.	12	5871	93461	4.37	69.64
SEPT.	13	1636	95097	1.22	70.86
SEPT.	14	3781	98878	2.82	73.68
SEPT.	15	1754	100632	1.31	74.98
SEPT.	16	1185	101817	0.88	75.87
SEPT.	17	1151	102968	0.86	76.72
SEPT.	18	594	103562	0.44	77.17
SEPT.	19	4872	108434	3.63	80.80
SEPT.	20	3785	112219	2.82	83.62
SEPT.	21	12	112231	0.01	83.63
SEPT.	22	175	112406	0.13	83.76
SEPT.	23	17	112423	0.01	83.77
SEPT.	24	0	112423	0.00	83.77
SEPT.	25	891	113314	0.66	84.43
SEPT.	26	1785	115099	1.33	85.76
SEPT.	27	2195	117294	1.64	87.40
SEPT.	28	0	117294	0.00	87.40
SEPT.	29[2]	210	117504	0.16	87.55
SEPT.	30	2589	120093	1.93	89.48
OCT.	1	1728	121821	1.29	90.77
OCT.	2	2780	124601	2.07	92.84
OCT.	3	1083	125684	0.81	93.65
OCT.	4	1152	126836	0.86	94.51
OCT.	5	1079	127915	0.80	95.31
OCT.	6	0	127915	0.00	95.31
OCT.	7	44	127959	0.03	95.34
OCT.	8	1167	129126	0.87	96.21
OCT.	9	1	129127	0.00	96.21
OCT.	10	273	129400	0.20	96.42
OCT.	11	1014	130414	0.76	97.17
OCT.	12	685	131099	0.51	97.68
OCT.	13	95	131194	0.07	97.75
OCT.	14	0	131194	0.00	97.75
OCT.	15	0	131194	0.00	97.75
OCT.	16	25	131219	0.02	97.77
OCT.	17	32	131251	0.02	97.80
OCT.	18	0	131251	0.00	97.80
OCT.	19	555	131806	0.41	98.21
OCT.	20	0	131806	0.00	98.21
OCT.	21	1085	132891	0.81	99.02
OCT.	22	0	132891	0.00	99.02
OCT.	23	0	132891	0.00	99.02
OCT.	24	152	133043	0.11	99.13
OCT.	25	9	133052	0.01	99.14
OCT.	26	0	133052	0.00	99.14
OCT.	27	41	133093	0.03	99.17
OCT.	28	134	133227	0.10	99.27
OCT.	29	857	134084	0.64	99.91
OCT.	30	0	134084	0.00	99.91
OCT.	31	29	134113	0.02	99.93
NOV.	1	4	134117	0.00	99.93
NOV.	2	0	134117	0.00	99.93
NOV.	3	0	134117	0.00	99.93
NOV.	4	10	134127	0.01	99.94
NOV.	5	60	134187	0.04	99.99
NOV.	6	1	134188	0.00	99.99
NOV.	7	1	134189	0.00	99.99
NOV.	8	0	134189	0.00	99.99
NOV.	9	2	134191	0.00	99.99
NOV.	10	0	134191	0.00	99.99
NOV.	11	0	134191	0.00	99.99
NOV.	12	15	134206	0.01	100.00
NOV.	13	1	134207	0.00	100.00

[1] McGregor, et al. 1984.

[2] Sockeye salmon taken for biological samples are included in counts for the following days: August 3 - 100 sockeye, September 29 - 105 sockeye.

Appendix Table 7. Chilkoot Lake weir counts of sockeye salmon and associated statistics, 1983[1].

Date		Daily COount	Cumulative Count	Daily Percent Of Total	Cumulative Percent
JUNE	4	0	0	0.00	0.00
JUNE	5	0	0	0.00	0.00
JUNE	6	5	5	0.01	0.01
JUNE	7	93	98	0.12	0.12
JUNE	8	39	137	0.05	0.17
JUNE	9	85	222	0.11	0.28
JUNE	10	220	442	0.27	0.55
JUNE	11	25	467	0.03	0.58
JUNE	12	100	567	0.12	0.71
JUNE	13	68	635	0.08	0.79
JUNE	14	488	1123	0.61	1.40
JUNE	15	716	1839	0.89	2.29
JUNE	16	1006	2845	1.25	3.54
JUNE	17	126	2971	0.16	3.70
JUNE	18	260	3231	0.32	4.02
JUNE	19	320	3551	0.40	4.42
JUNE	20	219	3770	0.27	4.69
JUNE	21	427	4197	0.53	5.22
JUNE	22	2526	6723	3.14	8.37
JUNE	23	3325	10048	4.14	12.51
JUNE	24	1295	11343	1.61	14.12
JUNE	25	748	12091	0.93	15.05
JUNE	26	684	12775	0.85	15.90
JUNE	27	703	13478	0.87	16.78
JUNE	28	561	14039	0.70	17.47
JUNE	29	700	14739	0.87	18.35
JUNE	30	256	14995	0.32	18.66
JULY	1	583	15578	0.73	19.39
JULY	2	575	16153	0.72	20.11
JULY	3	341	16494	0.42	20.53
JULY	4	316	16810	0.39	20.92
JULY	5	304	17114	0.38	21.30
JULY	6	366	17480	0.46	21.76
JULY	7	1264	18744	1.57	23.33
JULY	8	405	19149	0.50	23.83
JULY	9	308	19457	0.38	24.22
JULY	10	326	19783	0.41	24.62
JULY	11	348	20131	0.43	25.06
JULY	12	355	20486	0.44	25.50
JULY	13	618	21104	0.77	26.27
JULY	14	1208	22312	1.50	27.77
JULY	15	531	22843	0.66	28.43
JULY	16	704	23547	0.88	29.31
JULY	17	4047	27594	5.04	34.35
JULY	18	3838	31432	4.78	39.12
JULY	19	3057	34489	3.80	42.93
JULY	20	4183	38672	5.21	48.13
JULY	21	2613	41285	3.25	51.39
JULY	22	2222	43507	2.77	54.15
JULY	23	1588	45095	1.98	56.13
JULY	24	1322	46417	1.65	57.77
JULY	25	1194	47611	1.49	59.26
JULY	26	4887	52498	6.08	65.34
JULY	27	3250	55748	4.05	69.39
JULY	28[2]	421	56169	0.52	69.91
JULY	29	652	56821	0.81	70.72
JULY	30	1021	57842	1.27	71.99
JULY	31	1448	59290	1.80	73.80
AUG.	1	884	60174	1.10	74.90
AUG.	2	343	60517	0.43	75.32
AUG.	3	406	60923	0.51	75.83
AUG.	4	207	61130	0.26	76.09
AUG.	5	387	61517	0.48	76.57
AUG.	6	832	62349	1.04	77.60
AUG.	7	1026	63375	1.28	78.88
AUG.	8	1030	64405	1.28	80.16
AUG.	9	531	64936	0.66	80.82
AUG.	10	369	65305	0.46	81.28
AUG.	11	230	65535	0.29	81.57

-Continued-

Appendix Table 7. Chilkoot Lake weir counts of sockeye salmon and associated statistics, 1983[1] (continued).

Date		Daily Count	Cumulative Count	Daily Percent of Total	Cumulative Percent
AUG.	12	148	65683	0.18	81.75
AUG.	13	280	65963	0.35	82.10
AUG.	14	458	66421	0.57	82.67
AUG.	15	963	67384	1.20	83.87
AUG.	16	320	67704	0.40	84.27
AUG.	17	310	68014	0.39	84.65
AUG.	18	289	68303	0.36	85.01
AUG.	19	195	68498	0.24	85.26
AUG.	20	185	68683	0.23	85.49
AUG.	21	307	68990	0.38	85.87
AUG.	22	1348	70338	1.68	87.55
AUG.	23	412	70750	0.51	88.06
AUG.	24	399	71149	0.50	88.56
AUG.	25	273	71422	0.34	88.90
AUG.	26	159	71581	0.20	89.09
AUG.	27	118	71699	0.15	89.24
AUG.	28	156	71855	0.19	89.44
AUG.	29	268	72123	0.33	89.77
AUG.	30	1428	73551	1.78	91.55
AUG.	31	1011	74562	1.26	92.80
SEPT.	1	453	75015	0.56	93.37
SEPT.	2	324	75339	0.40	93.77
SEPT.	3	726	76065	0.90	94.68
SEPT.	4	858	76923	1.07	95.74
SEPT.	5	484	77407	0.60	96.35
SEPT.	6	345	77752	0.43	96.78
SEPT.	7	194	77946	0.24	97.02
SEPT.	8	216	78162	0.27	97.29
SEPT.	9	193	78355	0.24	97.53
SEPT.	10	314	78669	0.39	97.92
SEPT.	11	122	78791	0.15	98.07
SEPT.	12	241	79032	0.30	98.37
SEPT.	13	253	79285	0.31	98.68
SEPT.	14	57	79342	0.07	98.75
SEPT.	15	140	79482	0.17	98.93
SEPT.	16	130	79612	0.16	99.09
SEPT.	17	127	79739	0.16	99.25
SEPT.	18	130	79869	0.16	99.41
SEPT.	19	156	80025	0.19	99.60
SEPT.	20	57	80082	0.07	99.68
SEPT.	21	82	80164	0.10	99.78
SEPT.	22	34	80198	0.04	99.82
SEPT.	23	36	80234	0.04	99.86
SEPT.	24	7	80241	0.01	99.87
SEPT.	25	12	80253	0.01	99.89
SEPT.	26	13	80266	0.02	99.90
SEPT.	27	8	80274	0.01	99.91
SEPT.	28	7	80281	0.01	99.92
SEPT.	29	13	80294	0.02	99.94
SEPT.	30	6	80300	0.01	99.95
OCT.	1	8	80308	0.01	99.96
OCT.	2	8	80316	0.01	99.97
OCT.	3	3	80319	0.00	99.97
OCT.	4	4	80323	0.00	99.98
OCT.	5	5	80328	0.01	99.98
OCT.	6	3	80331	0.00	99.99
OCT.	7	0	80331	0.00	99.99
OCT.	8	2	80333	0.00	99.99
OCT.	9	1	80334	0.00	99.99
OCT.	10	0	80334	0.00	99.99
OCT.	11	1	80335	0.00	99.99
OCT.	12	4	80339	0.00	100.00
OCT.	13[3]	4	80343	0.00	100.00

[1] McGregor, et al. 1984.

[2] A total of 97 sockeye salmon taken for biological samples are included in the count for July 28.

[3] Weir was operational until November 13, but the last sockeye salmon was counted through October 13.

Appendix Table 8. Age composition of the Chilkat Lake escapement, by sample period and sex, 1983.

	Brood Year and Age Class										
	1980	1979		1978			1977		1976		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
Stat Week 27 (26 June - 2 July)											
Male											
Sample Number				10							10
Percent				43.5							43.5
Std. Error				10.6							10.6
Number				703							703
Female											
Sample Number				11	1		1				13
Percent				47.9	4.3		4.3				56.5
Std. Error				10.6	4.3		4.3				10.6
Number				773	70		70				913
Sexes Combined											
Sample Number				21	1		1				23
Percent				91.4	4.3		4.3				100
Std. Error				6	4.3		4.3				
Number				1476	70		70				1616
Stat Week 28 (3 - 9 July)											
Male											
Sample Number	4	7		112	13		17				153
Percent	1.3	2.3		36.6	4.2		5.6				50
Std. Error	0.7	0.9		2.8	1.2		1.3				2.9
Number	146	255		4079	473		619				5572
Female											
Sample Number		1		118	11		23				153
Percent		0.3		38.6	3.6		7.5				50
Std. Error		0.3		2.8	1.1		1.5				2.9
Number		36		4297	401		838				5572
Sexes Combined											
Sample Number	4	8		230	24		40				306
Percent	1.3	2.6		75.2	7.8		13.1				100
Std. Error	0.7	0.9		2.5	1.5		1.9				
Number	146	291		8376	874		1457				11144
Stat Week 29 (10 - 16 July)											
Male											
Sample Number	2	4	1	112	16		40				175
Percent	0.5	1.1	0.3	29.9	4.3		10.7				46.8
Std. Error	0.4	0.5	0.3	2.4	1.0		1.6				2.6
Number	82	163	41	4577	654		1635				7152
Female											
Sample Number		6		138	11		44				199
Percent		1.6		36.9	2.9		11.8				53.2
Std. Error		0.7		2.5	0.9		1.7				2.6
Number		245		5640	449		1798				8132
Sexes Combined											
Sample Number	2	10	1	250	27		84				374
Percent	0.5	2.7	0.3	66.8	7.2		22.5				100
Std. Error	0.4	0.8	0.3	2.4	1.3		2.2				
Number	82	409	41	10216	1103		3433				15284
Stat Week 30 (17 - 23 July)											
Male											
Sample Number	12	9	4	108	23		35		1		192
Percent	3.1	2.3	1.0	28.1	6.0		9.1		0.3		49.9
Std. Error	0.9	0.8	0.5	2.3	1.2		1.5		0.3		2.6
Number	278	209	93	2507	534		812		23		4456
Female											
Sample Number		5	1	107	27	1	52				193
Percent		1.3	0.3	27.7	7.0	0.3	13.5				50.1
Std. Error		0.6	0.3	2.3	1.3	0.3	1.7				2.6
Number		116	23	2484	626	23	1207				4479
Sexes Combined											
Sample Number	12	14	5	215	50	1	87		1		385
Percent	3.1	3.6	1.3	55.8	13.0	0.3	22.6		0.3		100
Std. Error	0.9	1.0	0.6	2.5	1.7	0.3	2.1		0.3		
Number	278	325	116	4991	1160	23	2019		23		8935
Stat Week 31 (24 - 30 July)											
Male											
Sample Number	3	7	3	56	11		17				97
Percent	1.6	3.7	1.6	30.0	5.9		9.1				51.9
Std. Error	0.9	1.4	0.9	3.4	1.7		2.1				3.7
Number	172	402	172	3221	632		977				5576
Female											
Sample Number		4		53	12		21				90
Percent		2.2		28.3	6.4		11.2				48.1
Std. Error		1.1		3.3	1.8		2.3				3.7
Number		230		3047	690		1207				5174
Sexes Combined											
Sample Number	3	11	3	109	23		38				187
Percent	1.6	5.9	1.6	58.3	12.3		20.3				100
Std. Error	0.9	1.7	0.9	3.6	2.4		3				
Number	172	632	172	6268	1322		2184				10750
Stat Week 32 (31 July - 6 August)											
Male											
Sample Number	1	6		68	10		20				105
Percent	0.5	3.2		36.4	5.3		10.7				56.1
Std. Error	0.5	1.3		3.5	1.6		2.3				3.6
Number	37	220		2497	367		734				3855
Female											
Sample Number		5		54	8		15				82
Percent		2.7		28.9	4.3		8.0				43.9
Std. Error		1.2		3.3	1.5		2.0				3.6
Number		184		1981	294		551				3010
Sexes Combined											
Sample Number	1	11		122	18		35				187
Percent	0.5	5.9		65.2	9.6		18.7				100
Std. Error	0.5	1.7		3.5	2.2		2.9				
Number	37	404		4478	661		1285				6865

-Continued-

Appendix Table 8. Age composition of the Chilkat Lake escapement, by sample period and sex, 1983 (continued).

	Brood Year and Age Class										
	1980	1979		1978			1977		1976		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
Stat Week 33 (7 - 13 August)											
Male											
Sample Number		3		24	10		7				44
Percent		3.3		26.4	11		7.7				48.4
Std. Error		1.9		4.6	3.3		2.8				5.3
Number		140		1122	468		327				2057
Female											
Sample Number		1		26	10		10				47
Percent		1.1		28.5	11		11				51.6
Std. Error		1.1		4.8	3.3		3.3				5.3
Number		47		1215	467		468				2197
Sexes Combined											
Sample Number		4		50	20		17				91
Percent		4.4		54.9	22.0		18.7				100
Std. Error		2.2		5.2	4.4		4.1				
Number		187		2337	935		795				4254
Stat Weeks 34 and 35 (14 - 27 August)											
Male											
Sample Number		1	1	20	22		21				65
Percent		0.9	0.9	17.7	19.5		18.5				57.5
Std. Error		0.9	0.9	3.6	3.7		3.7				4.7
Number		63	63	1243	1367		1303				4039
Female											
Sample Number				14	18		16				48
Percent				12.4	15.9		14.2				42.5
Std. Error				3.1	3.5		3.3				4.7
Number				870	1119		994				2983
Sexes Combined											
Sample Number		1	1	34	40		37				113
Percent		0.9	0.9	30.1	35.4		32.7				100
Std. Error		0.9	0.9	4.3	4.5		4.4				
Number		63	63	2113	2486		2297				7022
Stat Week 36 (28 August - 3 September)											
Male											
Sample Number		7	4	19	42		31				103
Percent		4.2	2.4	11.4	25.3		18.7				62.0
Std. Error		1.6	1.2	2.5	3.4		3.0				3.8
Number		231	132	627	1385		1022				3397
Female											
Sample Number		4		10	28		21				63
Percent		2.4		6.0	16.9		12.7				38.0
Std. Error		1.2		1.9	2.9		2.6				3.8
Number		132		329	924		693				2078
Sexes Combined											
Sample Number		11	4	29	70		52				166
Percent		6.6	2.4	17.5	42.2		31.3				100
Std. Error		1.9	1.2	3	3.8		3.6				
Number		363	132	956	2309		1715				5475
Stat Week 37 (4 - 10 September)											
Male											
Sample Number	1	1	34	5	53		38				132
Percent	0.5	0.5	16.7	2.5	26.1		18.7				65.0
Std. Error	0.5	0.5	2.6	1.1	3.1		2.7				3.4
Number	52	52	1763	259	2748		1970				6844
Female											
Sample Number		2		3	34		32				71
Percent		1.0		1.5	16.7		15.8				35.0
Std. Error		0.7		0.8	2.6		2.6				3.4
Number		104		156	1762		1660				3682
Sexes Combined											
Sample Number	1	3	34	8	87		70				203
Percent	0.5	1.5	16.7	3.9	42.9		34.5				100
Std. Error	0.5	0.8	2.6	1.4	3.5		3.3				
Number	52	156	1763	415	4510		3630				10526
Stat Week 38 (11 - 17 September)											
Male											
Sample Number		2	19	9	97		114	2			243
Percent		0.5	4.3	2.0	22.0		25.9	0.5			55.2
Std. Error		0.3	1.0	0.7	2.0		2.1	0.3			2.4
Number		96	911	432	4651		5465	96			11651
Female											
Sample Number		4	1	10	109		73				197
Percent		0.9	0.2	2.3	24.8		16.6				44.8
Std. Error		0.5	0.2	0.7	2.1		1.8				2.4
Number		192	48	479	5226		3501				9446
Sexes Combined											
Sample Number		6	20	19	206		187	2			440
Percent		1.4	4.5	4.3	46.8		42.5	0.5			100
Std. Error		0.6	1.0	1.0	2.4		2.4	0.3			
Number		288	959	911	9877		8966	96			21097
Stat Week 39 (18 - 24 September)											
Male											
Sample Number		1	1	3	48		27	1		1	82
Percent		0.6	0.6	1.9	29.6		16.7	0.6		0.6	50.5
Std. Error		0.6	0.6	1.1	3.6		2.9	0.6		0.6	3.9
Number		59	58	175	2802		1576	58		58	4786
Female											
Sample Number		4		1	47		28				80
Percent		2.5		0.6	29.0		17.3				49.4
Std. Error		1.2		0.6	3.6		3.0				3.9
Number		233		58	2744		1634				4669
Sexes Combined											
Sample Number		5	1	4	95		55	1		1	162
Percent		3.1	0.6	2.5	58.6		34.0	0.6		0.6	100
Std. Error		1.4	0.6	1.2	3.9		3.7	0.6		0.6	
Number		292	58	233	5546		3210	58		58	9455

-Continued-

Appendix Table 8. Age composition of the Chilkat Lake escapement, by sample period and sex, 1983 (continued).

	Brood Year and Age Class										
	1980	1979		1978			1977		1976		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
Stat Week 40 (25 September - 1 October)											
Male											
Sample Number	1	1	9	1	28		13				53
Percent	1.1	1.1	10.2	1.1	31.9		14.8				60.2
Std. Error	1.1	1.1	3.2	1.1	5		3.8				5.2
Number	107	107	961	107	2990		1388				5660
Female											
Sample Number				2	26		7				35
Percent				2.3	29.5		8.0				39.8
Std. Error				1.6	4.9		2.9				5.2
Number				213	2777		748				3738
Sexes Combined											
Sample Number	1	1	9	3	54		20				88
Percent	1.1	1.1	10.2	3.4	61.4		22.8				100
Std. Error	1.1	1.1	3.2	1.9	5.2		4.5				
Number	107	107	961	320	5767		2136				9398
Stat Week 41 (2 - 8 October)											
Male											
Sample Number			1		23		9				33
Percent			1.1		26.4		10.4				37.9
Std. Error			1.1		4.8		3.3				5.2
Number			84		1931		756				2771
Female											
Sample Number		1		2	29		21	1			54
Percent		1.1		2.3	33.5		24.1	1.1			62.1
Std. Error		1.1		1.6	5.1		4.6	1.1			5.2
Number		84		168	2435		1763	84			4534
Sexes Combined											
Sample Number		1	1	2	52		30	1			87
Percent		1.1	1.1	2.3	59.9		34.5	1.1			100
Std. Error		1.1	1.1	1.6	5.3		5.1	1.1			
Number		84	84	168	4366		2519	84			7305
Stat Weeks 41 - 44 (9 - 29 October)											
Male											
Sample Number		1	1		11		9				22
Percent		2.6	2.6		28.1		23.1				56.4
Std. Error		2.6	2.6		7.3		6.8				8.0
Number		129	129		1397		1142				2797
Female											
Sample Number					10		7				17
Percent					25.7		17.9				43.6
Std. Error					7.1		6.2				8.0
Number					1271		890				2161
Sexes Combined											
Sample Number		1	1		21		16				39
Percent		2.6	2.6		53.8		41.0				100
Std. Error		2.6	2.6		8.1		8.0				
Number		129	129		2668		2032				4958
Stat Week 45 (30 October - 5 November)											
Male											
Sample Number					2		3				5
Percent					20.0		30.0				50.0
Std. Error					13.3		15.3				16.7
Number					25		37				62
Female											
Sample Number					3		2				5
Percent					30.0		20.0				50.0
Std. Error					15.3		13.3				16.7
Number					36		25				61
Sexes Combined											
Sample Number					5		5				10
Percent					50.0		50.0				100
Std. Error					16.7		16.7				
Number					61		62				123
Combined Periods (Percentages are weigted by period escapements)											
Male											
Sample Number	24	50	78	547	409		401	3	1	1	1514
Percent	0.7	1.6	3.3	16.1	16.7		14.7	0.1	<0.1	<0.1	53.2
Std. Error	0.1	0.2	0.4	0.6	0.8		0.7	0.1	<0.1	<0.1	1.0
Number	874	2126	4407	21549	22424		19763	154	23	58	71378
Female											
Sample Number		37	2	549	384	1	373	1			1347
Percent		1.2	0.1	16.2	15.9	<0.1	13.4	0.1			46.8
Std. Error		0.2	<0.1	0.6	0.8	<0.1	0.7	0.1			1.0
Number		1603	71	21710	21291	23	18047	84			62830
Sexes Combined											
Sample Number	24	87	80	1096	793	1	774	4	1	1	2861
Percent	0.7	2.8	3.3	32.2	32.6	<0.1	28.2	0.2	<0.1	<0.1	100
Std. Error	0.1	0.3	0.4	0.7	0.9	<0.1	0.9	0.1	<0.1	<0.1	
Number	874	3730	4478	43258	43715	23	37810	238	23	58	134207

Appendix Table 9. Age composition of the Chilkoot Lake escapement, by sample period and sex, 1983.

	Brood Year and Age Class							
	1980	1979		1978		1977		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	Total
Stat Week 24 (5 - 11 June)								
Male								
Sample Number				2			1	3
Percent				33.3			16.7	50
Std. Error				21.1			16.7	22.4
Number				155			78	233
Female								
Sample Number				2			1	3
Percent				33.3			16.7	50
Std. Error				21.1			16.7	22.4
Number				156			78	234
Sexes Combined								
Sample Number				4			2	6
Percent				66.7			33.3	100.0
Std. Error				21.1			21.1	
Number				311			156	467
Stat Week 25 (12 - 18 June)								
Male								
Sample Number		1		18		1	6	26
Percent		1.6		28.0		1.6	9.4	40.6
Std. Error		1.6		5.7		1.6	3.7	6.2
Number		43		777		43	260	1123
Female								
Sample Number				20			18	38
Percent				31.3			28.1	59.4
Std. Error				5.8			5.7	6.2
Number				864			777	1641
Sexes Combined								
Sample Number		1		38		1	24	64
Percent		1.6		59.3		1.6	37.5	100.0
Std. Error		1.6		6.2		1.6	6.1	
Number		43		1641		43	1037	2764
Stat Week 26 (19 - 25 June)								
Male								
Sample Number		2		33		1	17	53
Percent		1.5		24.7		0.7	12.7	39.6
Std. Error		1.1		3.7		0.7	2.9	4.2
Number		132		2182		66	1124	3504
Female								
Sample Number		1		40	2	2	36	81
Percent		0.7		29.8	1.5	1.5	26.9	60.4
Std. Error		0.7		4	1.1	1.1	3.8	4.2
Number		66		2646	132	132	2380	5356
Sexes Combined								
Sample Number		3		73	2	3	53	134
Percent		2.2		54.5	1.5	2.2	39.6	100.0
Std. Error		1.3		4.3	1.1	1.3	4.2	
Number		198		4828	132	198	3504	8860
Stat Week 27 (26 June - 2 July)								
Male								
Sample Number		3		27			33	63
Percent		2.4		22.0			26.8	51.2
Std. Error		1.4		3.7			4.0	4.5
Number		99		892			1090	2081
Female								
Sample Number				28			32	60
Percent				22.8			26	48.8
Std. Error				3.8			4.0	4.5
Number				924			1057	1981
Sexes Combined								
Sample Number		3		55			65	123
Percent		2.4		44.8			52.8	100.0
Std. Error		1.4		4.5			4.5	
Number		99		1816			2147	4062
Stat Week 28 (3 - 9 July)								
Male								
Sample Number		4		37	1		27	69
Percent		3.1		28.4	0.8		20.8	53.1
Std. Error		1.5		4.0	0.8		3.6	4.4
Number		102		941	25		686	1754
Female								
Sample Number		4		34			23	61
Percent		3.1		26.1			17.7	46.9
Std. Error		1.5		3.9			3.4	4.4
Number		101		864			585	1550
Sexes Combined								
Sample Number		8		71	1		50	130
Percent		6.2		54.5	0.8		38.5	100.0
Std. Error		2.1		4.4	0.8		4.3	
Number		203		1805	25		1271	3304

-Continued-

Appendix Table 9. Age composition of the Chilkoot Lake escapement, by sample period and sex, 1983 (continued).

	Brood Year and Age Class							
	1980	1979		1978		1977		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	Total
Stat Week 29 (10 - 16 July)								
Male								
Sample Number		7		59			19	85
Percent		4.0		33.5			10.8	48.3
Std. Error		1.5		3.6			2.3	3.8
Number		163		1370			442	1975
Female								
Sample Number		9		59			23	91
Percent		5.1		33.5			13.1	51.7
Std. Error		1.7		3.6			2.5	3.8
Number		209		1372			534	2115
Sexes Combined								
Sample Number		16		118			42	176
Percent		9.1		67.0			23.9	100.0
Std. Error		2.2		3.6			3.2	
Number		372		2742			976	4090
Stat Week 30 (17 - 23 July)								
Male								
Sample Number	1	32	1	126	2		33	195
Percent	0.2	6.6	0.2	26.0	0.5		6.8	40.3
Std. Error	0.2	1.1	0.2	2.0	0.3		1.1	2.2
Number	44	1425	45	5609	89		1470	8682
Female								
Sample Number	1	45		165	6		72	289
Percent	0.2	9.3		34.1	1.2		14.9	59.7
Std. Error	0.2	1.3		2.2	0.5		1.6	2.2
Number	45	2003		7346	267		3205	12866
Sexes Combined								
Sample Number	2	77	1	291	8		105	484
Percent	0.4	15.9	0.2	60.1	1.7		21.7	100.0
Std. Error	0.3	1.7	0.2	2.2	0.6		1.9	
Number	89	3428	45	12955	356		4675	21548
Stat Week 31 (24 - 30 July)								
Male								
Sample Number		40		65	3		10	118
Percent		17.2		28	1.3		4.4	50.9
Std. Error		2.5		3.0	0.7		1.3	3.3
Number		2198		3572	164		549	6483
Female								
Sample Number		17		67	6		24	114
Percent		7.3		28.9	2.6		10.3	49.1
Std. Error		1.7		3.0	1.0		2.0	3.3
Number		934		3681	330		1319	6264
Sexes Combined								
Sample Number		57		132	9		34	232
Percent		24.5		56.9	3.9		14.7	100.0
Std. Error		2.8		3.3	1.3		2.3	
Number		3132		7253	494		1868	12747
Stat Week 32 (31 July - 6 August)								
Male								
Sample Number		20		33			7	60
Percent		17.7		29.2			6.2	53.1
Std. Error		3.6		4.3			2.3	4.7
Number		798		1316			279	2393
Female								
Sample Number		4		34	2		13	53
Percent		3.5		30.1	1.8		11.5	46.9
Std. Error		1.7		4.3	1.2		3.0	4.7
Number		159		1356	80		519	2114
Sexes Combined								
Sample Number		24		67	2		20	113
Percent		21.2		59.3	1.8		17.7	100.0
Std. Error		3.9		4.6	1.2		3.6	
Number		957		2672	80		798	4507
Stat Week 33 (7 - 13 August)								
Male								
Sample Number		11		40			9	60
Percent		10.1		36.6			8.3	55
Std. Error		2.9		4.6			2.6	4.8
Number		365		1326			298	1989
Female								
Sample Number		1		41			7	49
Percent		0.9		37.7			6.4	45
Std. Error		0.9		4.7			2.4	4.8
Number		33		1360			232	1625
Sexes Combined								
Sample Number		12		81			16	109
Percent		11.0		74.3			14.7	100.0
Std. Error		3.0		4.2			3.4	
Number		398		2686			530	3614

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Appendix Table 9. Age composition of the Chilkoot Lake escapement, by sample period and sex, 1983 (continued).

	Brood Year and Age Class							
	1980	1979		1978		1977		
	1.1	1.2	2.1	1.3	2.2	1.4	2.3	Total
Stat Week 34 (14 - 20 August)								
Male								
Sample Number		4		25			6	35
Percent		8.7		54.4			13.0	76.1
Std. Error		4.2		7.4			5.0	6.4
Number		237		1478			355	2070
Female								
Sample Number				10			1	11
Percent				21.7			2.2	23.9
Std. Error				6.1			2.2	6.4
Number				591			59	650
Sexes Combined								
Sample Number		4		35			7	46
Percent		8.7		76.1			15.2	100.0
Std. Error		4.2		6.4			5.4	
Number		237		2069			414	2720
Stat Week 35 (21 - 27 August)								
Male								
Sample Number		3		32			9	44
Percent		4.2		45.1			12.7	62.0
Std. Error		2.4		5.9			4	5.8
Number		127		1360			382	1869
Female								
Sample Number				21			6	27
Percent				29.6			8.4	38.0
Std. Error				5.5			3.3	5.8
Number				892			255	1147
Sexes Combined								
Sample Number		3		53			15	71
Percent		4.2		74.7			21.1	100.0
Std. Error		2.4		5.2			4.9	
Number		127		2252			637	3016
Stat Week 36 (28 August - 3 September)								
Male								
Sample Number		2		18	1		11	32
Percent		3.0		26.9	1.5		16.4	47.8
Std. Error		2.1		5.5	1.5		4.6	6.1
Number		130		1173	65		717	2085
Female								
Sample Number		1		22			12	35
Percent		1.5		32.8			17.9	52.2
Std. Error		1.5		5.8			4.7	6.1
Number		65		1434			782	2281
Sexes Combined								
Sample Number		3		40	1		23	67
Percent		4.5		59.7	1.5		34.3	100.0
Std. Error		2.5		6.0	1.5		5.8	
Number		195		2607	65		1499	4366
Stat Weeks 37 - 42 (4 September - 13 October)								
Male								
Sample Number		3		10			2	15
Percent		8.3		27.8			5.6	41.7
Std. Error		4.7		7.6			3.9	8.3
Number		357		1188			238	1783
Female								
Sample Number				16	1		4	21
Percent				44.4	2.8		11.1	58.3
Std. Error				8.4	2.8		5.3	8.3
Number				1901	119		475	2495
Sexes Combined								
Sample Number		3		26	1		6	36
Percent		8.3		72.2	2.8		16.7	100.0
Std. Error		4.7		7.6	2.8		6.3	
Number		357		3089	119		713	4278
Combined Periods (Percentages are weighted by period escapements)								
Male								
Sample Number	1	132	1	525	7	2	190	858
Percent	0.1	7.7	0.1	29.1	0.4	0.1	9.9	47.3
Std. Error	0.1	0.7	0.1	1.1	0.2	0.1	0.7	1.2
Number	44	6176	45	23339	343	109	7968	38024
Sample Number	1	82		559	17	2	272	933
Percent	0.1	4.4		31.6	1.2	0.2	15.3	52.7
Std. Error	0.1	0.5		1.2	0.3	0.1	0.9	1.2
Number	45	3570		25387	928	132	12257	42319
Sexes Combined								
Sample Number	2	214	1	1084	24	4	462	1791
Percent	0.1	12.1	0.1	60.6	1.6	0.3	25.2	100.0
Std. Error	0.1	0.8	0.1	1.2	0.3	0.2	1.1	
Number	89	9746	45	48726	1271	241	20225	80343

Appendix Table 10. Cumulative weekly proportions of Chilkat catches of sockeye salmon, by age and statistical week, 1983.

Stat Week	Inclusive Dates	Age Class 0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	3.3	Total
26	6/19-6/25	0.000	0.000	0.013	0.001	0.000	0.031	0.001	0.000	0.002	0.000	0.000	0.009
27	6/26-7/2	0.000	0.000	0.076	0.013	0.409	0.084	0.002	0.125	0.005	0.000	0.000	0.025
28	7/3-7/9	0.000	0.000	0.150	0.040	1.000	0.225	0.015	0.486	0.021	0.000	0.000	0.072
29	7/10-7/16	0.000	0.000	0.177	0.062	1.000	0.330	0.019	0.486	0.038	0.000	0.000	0.107
30	7/17-7/23	0.000	0.000	0.246	0.089	1.000	0.504	0.034	0.486	0.065	0.000	0.000	0.167
31	7/24-7/30	0.000	1.000	0.558	0.151	1.000	0.610	0.070	0.486	0.125	0.000	0.000	0.241
32	7/31-8/6	0.000	1.000	0.750	0.374	1.000	0.767	0.201	0.486	0.262	0.000	0.000	0.385
33	8/7-8/13	1.000	1.000	0.903	0.521	1.000	0.883	0.328	0.486	0.440	0.000	0.000	0.537
34	8/14-8/20	1.000	1.000	0.969	0.840	1.000	0.926	0.458	1.000	0.535	0.000	0.000	0.630
35	8/21-8/27	1.000	1.000	0.989	0.918	1.000	0.979	0.659	1.000	0.746	0.594	0.967	0.795
36	8/28-9/3	1.000	1.000	1.000	0.989	1.000	0.994	0.937	1.000	0.930	0.807	0.967	0.950
37	9/4-9/10	1.000	1.000	1.000	0.999	1.000	1.000	0.987	1.000	0.986	0.909	0.967	0.990
38-42	9/11-10/13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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