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Bill Sheffield, Governor

ABUNDANCE, AGE, SEX, AND SIZE DATA FOR UPPER COOK INLET SOCKEYE, CHINOOK, COHO, CHUM, AND PINK SALMON, 1983

By:
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October 1985

ALASKA DEPARTMENT OF FISH AND GAME
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Don W. Collinsworth
Commissioner

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Alaka Department of Fish and Game
Division of Commercial Fisheries
Anchorage, Alaska

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ABSTRACT

Abundance, age, sex, and size data are summarized for returns of sockeye *(Oncorhynchus nerka)*, chinook *(O. tshawytscha)*, coho *(O. kisutch)*, chum *(O. keta)*, and pink salmon *(O. gorbuscha)* to the Upper Cook Inlet area in 1983. Abundance information include estimates of commercial, sport, subsistence, and personal use harvests and estimates of escapements. The age and sex compositions of commercial catches were estimated with stratified, systematic sampling programs. The majority of sport, subsistence, and personal use fisheries were sampled for age and sex data and the information was summarized over the entire season. Most escapements of sockeye salmon were systematically sampled for age, sex, and size data; but few samples were taken from escapements of the other species. In 1983, the total number of salmon harvested in Upper Cook Inlet was 7,034,212 fish. The majority (96%) of fish were caught by commercial fisheries. Of the salmon harvested, sockeye salmon represented the largest (74%) portion, followed by chum (16%), coho (8%), chinook (1%), and pink salmon (1%). Based on available escapement estimates, the largest sockeye salmon escapement occurred in the Kenai River and the greatest numbers of chinook, coho, chum, and pink salmon returned to the Susitna River. Most of the sockeye salmon harvested were age 1.3 fish. Age 1.3 sockeye salmon were also numerous in the escapement into the Kenai River (79%); while age 1.2 sockeye salmon predominated in the returns to the Susitna River (56%), the Kasilof River (50%), and Fish Creek (88%). The majority of chinook salmon caught were age 1.4 fish. Younger chinook salmon (age 1.2 and age 1.3) were generally more common in sport harvests from rivers in northern Cook Inlet than from rivers along the Kenai Peninsula. A high percentage of all coho salmon sampled were age 2.1 fish, and the majority of chum salmon sampled were fish aged 0.3 or 0.4.

KEY WORDS: Upper Cook Inlet, sockeye salmon *(O. nerka)*, chinook salmon *(O. tschawytscha)*, coho salmon *(O. kisutch)*, chum salmon *(O. keta)*, pink salmon *(O. gorbuscha)*, age composition, size composition, sex composition, abundance, harvest.

FOREWORD

This publication is the first in a series of annual catch and escapement reports for the inshore return of salmon to the Upper Cook Inlet area. The objective of this report series is to present the Alaska Department of Fish and Game's (ADF&G) most current estimates of abundance, utilization, and age, sex, and size composition of salmon returns. Estimation of these parameters is a prerequisite to studying the population dynamics of Upper Cook Inlet salmon. Optimum management of the resource requires quantitative estimates of stock-specific production. No attempt was made in this report to determine the origins of fish caught in mixed stock fisheries or to estimate total returns. Stock identification and total return studies are currently in progress and will be reported in future publications. The purpose of this report is to present catch and escapement data in a format that will facilitate future investigations of individual species and stock production.

INTRODUCTION

The Upper Cook Inlet management area (Figure 1) includes all waters north of Anchor Point and supports populations of all five species of Pacific salmon *(Oncorhynchus* sp. Walbaum*)*. These species contribute to commercial, sport, subsistence, and personal use fisheries throughout the area. Rivers which produce major runs of salmon include: the Susitna River, Kenai River, Kasilof River, Crescent River, Fish Creek, Big River, and the McArthur/Chakachatna Rivers. Numerous other rivers support salmon populations which are smaller in magnitude, but contribute significantly to the various fisheries.

The Alaska Department of Fish and Game (ADF&G) conducts a variety of programs that supply information used to manage the fisheries[1]. These programs include: (1) compiling catch statistics by fishery; (2) sampling salmon catches for age, sex, and size data; (3) counting and/or indexing the major spawning escapements; (4) sampling escapements for age, sex, and size data. Data generated from these programs form the basis for the analysis of salmon production in Upper Cook Inlet and subsequently, the development of harvest strategies to optimize long term yield and meet allocative priorities.

Basic fishery statistics for Upper Cook Inlet salmon are collected by several divisions within ADF&G and are reported in a wide variety of documents. Estimates of commercial salmon catches and the rationale behind management decisions are documented by the Division of Commercial Fisheries in Annual Management Reports. Escapement studies conducted by the Division of Commercial Fisheries are documented annually in the ADF&G Technical Data Report series. Catch and age, sex, and size information for subsistence and personal use gillnet fisheries are reported by the Division of Commercial Fisheries in the Upper Cook Inlet Data report series (unpublished). Sockeye salmon *(O. nerka)* catch and escapement data; age, sex, and size data; and estimates of returns by stock are reported annually by the Division of Commercial Fisheries in the ADF&G Technical Data Report series. A summary of all historic age, size, and sex data for salmon was compiled by the Division of Commercial Fisheries and is available in an Upper Cook Inlet data report. Estimates of statewide sport harvests are made annually by the Division of Sport Fish and are published in Federal Aid in Fish Restoration and Anadromous Fish Studies performance reports. The Division of Sport Fish also documents their investigations (estimates of sport catches and spawning escapements, and age and size data) of selected chinook *(O. tschawytscha)* and coho *(O. kisutch)* salmon fisheries in Federal Aid reports.

In recent years, escapement data for all salmon species in the Susitna River have been published by the ADF&G Susitna Hydroelectric project in reports to the Alaska Power Authority.

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[1] Some fishery monitoring and research in Upper Cook Inlet are done by private resource agencies. These agencies are cited in the report.

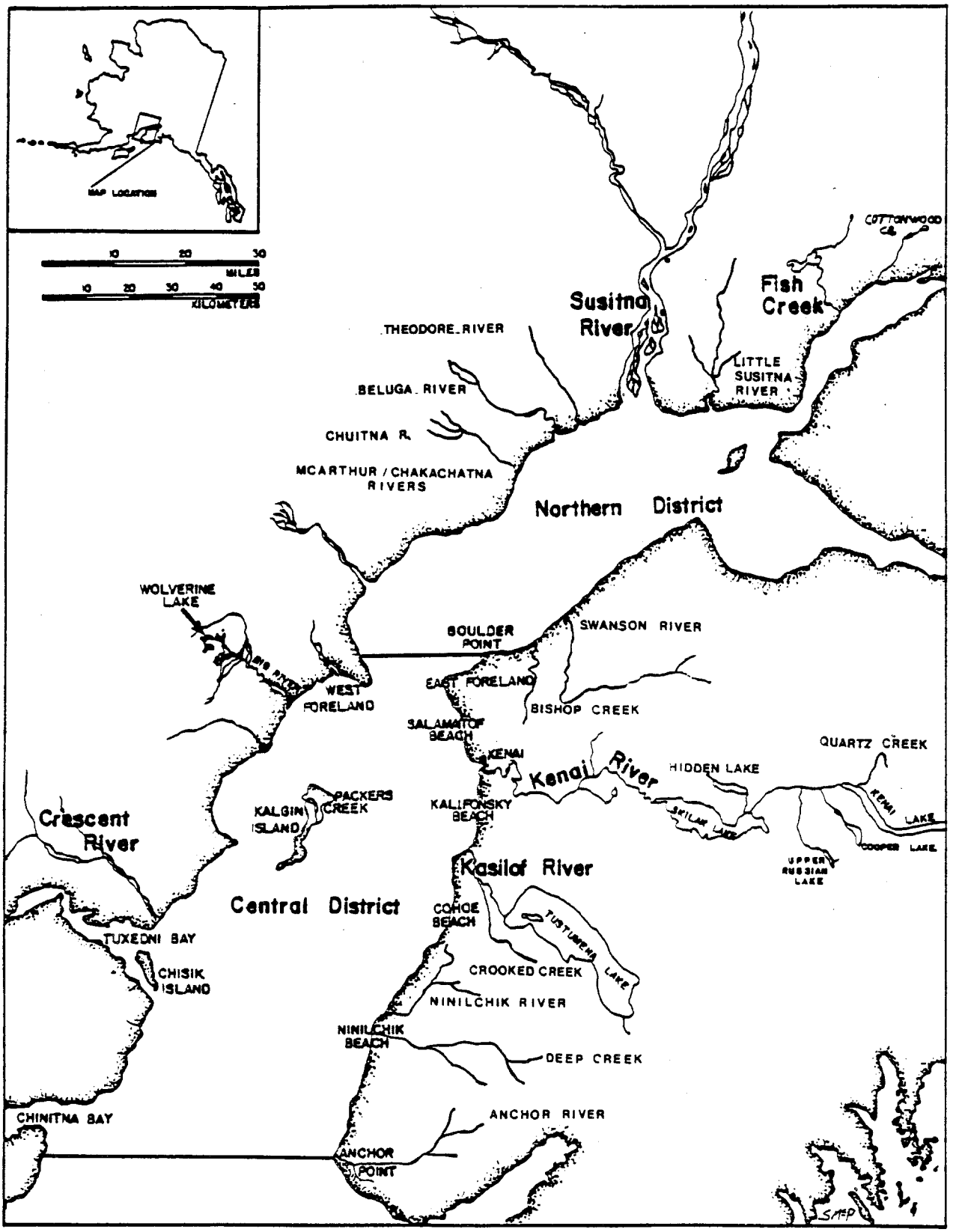

Figure 1. Upper Cook Inlet area showing fishing districts, rivers, and major features.

Population statistics for enhanced salmon stocks are reported by the Division of Fisheries Rehabilitation, Enhancement, and Development (FRED) in a series of annual reports. Several salmon runs returning to Upper Cook Inlet in 1983 were augmented through artificial rearing of fry. Enhanced runs include: chinook salmon returning to Crooked Creek (Waite 1984), sockeye salmon returning to Kasilof River (Flagg et al. 1985), and sockeye and coho salmon returning to Fish Creek (Chlupach 1984a, 1984b).

The objectives of this report are to coalesce and present basic population statistics for the 1983 returns of sockeye, chinook, coho, chum *(O. keta)*, and pink *(O. gorbuscha)* salmon to Upper Cook Inlet. Estimates of harvests (commercial, sport, subsistence, and personal use) and escapements are reported together with all available age, sex, and size information. The report is structured such that abundance estimates (catch and escapement) are summarized for all species and fisheries. Following the abundance summaries are summaries by species for the age, sex, and size information. Detailed catch, effort, escapement, and age-sex-size data are presented in the Appendices.

METHODS

Description of Fisheries

For regulation of commercial fisheries, the area is divided into two fishing districts, the Northern and Central (Figure 1). There are a drift net fishery and five set net fisheries in the Central District: Central District west-side, Kalgin Island, Salamatof Beach, Kalifonsky Beach, and Cohoe/Ninilchik Beach. There are two set net fisheries within the Northern District: the Northern District east-side and the Northern District west-side. Sockeye salmon are the most valuable fish to the commercial fisheries, followed by chum salmon, pink salmon (even-years), coho salmon, pink salmon (odd-years), and chinook salmon. The commercial harvest of salmon averaged 3,005,610 fish from 1954 through 1982 (Ruesch 1984). The number of permits issued for the Upper Cook Inlet area has averaged 557 drift net and 738 set net permits annually since 1976 (Ruesch 1984).

Regulations adopted by the Board of Fisheries in 1981 provided for one subsistence fishery in the Upper Cook Inlet area, which occurs in the Tyonek area (Figure 2). Effort in the Tyonek subsistence fishery is directed primarily at chinook salmon. The maximum allowable chinook salmon harvest was established at 4,200 fish. From 1980 through 1982 subsistence harvests have averaged 1,834 chinook salmon, 268 sockeye salmon, and 58 coho salmon (Browning 1984a).

In 1981 the Alaska Board of Fisheries adopted a Cook Inlet personal use dip net fishery management plan. Since that time dip net fisheries have been allowed in the Kasilof and Kenai Rivers. Salmon dip net fisheries are opened by emergency order when the Alaska Department of Fish and Game determines specific escapement goals have been met. In 1981, approximately 5,400 angler days were spent dipnetting on the Kasilof River and 10,300 sockeye salmon were caught, while in 1982 only 1,800 sockeye salmon were harvested in 2,600 angler days (Logan et al. 1984). In addition to personal use dip net fisheries, the

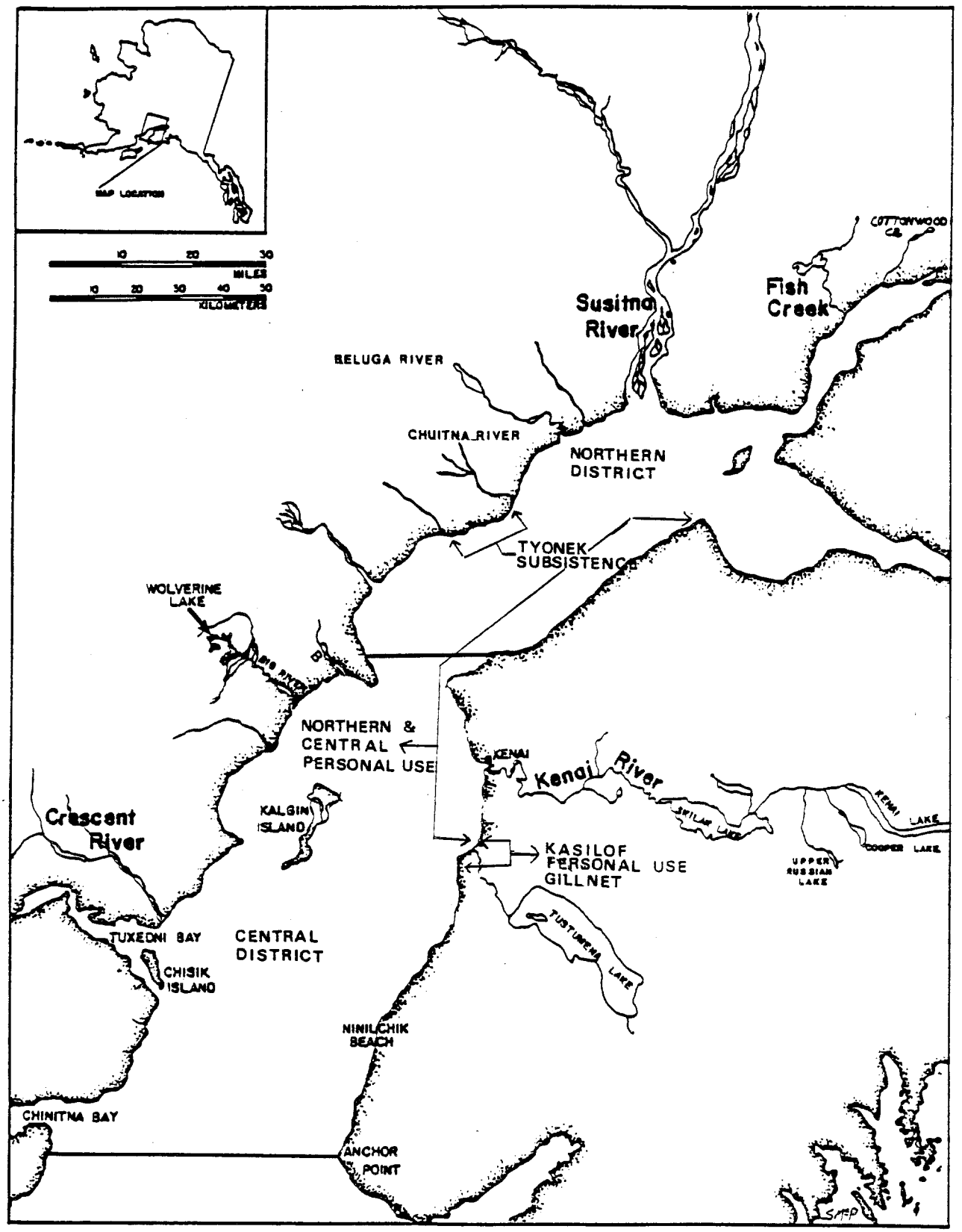

Figure 2. Subsistence and personal use fisheries in Upper Cook Inlet.

Alaska Board of Fisheries created personal use gill net fisheries in Upper Cook Inlet. Two personal use gill net fisheries exist in the area: the Kasilof River sockeye salmon gillnet fishery, and the Central and Northern Districts coho salmon gillnet fishery (Figure 2). The Kasilof River gillnet fishery is opened by regulation on 21 June and closed by emergency order when a quota of 5,000-10,000 sockeye salmon are harvested. In 1982, 649 permits were issued for the Kasilof River gillnet fishery and the harvest consisted of 7,543 sockeye salmon, 372 chinook salmon, and 24 coho salmon (Ruesch 1984). The Central and Northern District coho fishery was not permitted until 1983.

The Upper Cook Inlet area supports the largest recreational fisheries in the state. In 1982, 55% (887,861 angler days) of all the sport fishing effort in the state occurred in the Cook Inlet area[1] (Mills 1983). Most of the sport fishing effort occurs on the Kenai and Susitna Rivers. Other rivers which receive substantial effort from sport fishermen include the Little Susitna, Kasilof, Ninilchik, and Anchor Rivers and Deep Creek (Figure 3). Sport harvests in the Cook Inlet area averaged 257,545 salmon[2] annually from 1977 through 1982. The average number of fish by species harvested annually from 1977 through 1982 equaled: 86,372 sockeye salmon, 76,293 coho salmon, 62,066 pink salmon, 24,999 chinook salmon, and 7,816 chum salmon.

Abundance Data

Commercial catch statistics are compiled by the ADF&G Division of Commercial Fisheries from sales receipts (fish tickets). Catch figures presented in this report were taken from fish ticket computer summaries dated 31 August 1984 and are considered final.

Catches:

Catches reported for the Tyonek subsistence fishery and the Kasilof River personal use gillnet fishery represent estimates derived from returned permit forms (Browning 1984a, 1984b). Catches from the Central and Northern Districts personal use coho fishery were estimated from aerial surveys of effort expanded by average catch per net reported by participants via telephone (Browning 1985). The numbers of fish kept for personal use by commercial fishermen are unknown because documentation is not required.

Sport harvests and personal use dip net harvests are results from an annual mail survey conducted by the Division of Sport Fish (ADF&G) and documented by Mills (1984).

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[1] Cook Inlet area refers to all waters draining into Cook Inlet and all drainages along the Kenai Peninsula from Cape Puget. The Cook Inlet area includes Knik Arms drainages, Anchorage drainages, East Susitna drainages, West Susitna - West Cook Inlet drainages, and Kenai Peninsula drainages as described in Mills (1983).

[2] Salmon catch statistics refer to sea-run salmon only.

Escapements:

Escapements are monitored with various methods and by several divisions within ADF&G and private agencies.

The Division of Commercial Fisheries (ADF&G) uses side-scanning sonar to enumerate the returns of sockeye salmon to the Susitna, Kenai, Kasilof, and Crescent Rivers (King and Tarbox 1984). Sonar counts are apportioned to species by fishwheel catch data. In addition to sonar operations, they conduct aerial surveys of key tributaries to the Susitna River and of systems along the west-side of Cook Inlet and ground surveys of spawning streams along Tustumena Lake.

The Division of Sport Fish (ADF&G) monitors primarily chinook salmon escapements by conducting aerial or ground surveys. These data are considered indices of relative abundance and do not represent total counts. Hepler and Bentz (1984) report results from aerial and ground surveys for Susitna River tributaries, the Little Susitna River, and other northern Cook Inlet systems. Aerial surveys were also used by Hammarstrom and Larson (1984) to estimate the escapement of chinook salmon into the Ninilchik, and Anchor Rivers, and Deep Creek. The magnitude of the late run of chinook salmon into the Kenai River was estimated with a mark-recapture program documented by Hammarstrom and Larson (1984). Escapement of coho salmon into the Little Susitna River was estimated with aerial and foot surveys (Bentz 1984). Sockeye salmon escapement into Russian River is counted through a weir by personnel from the Division of Sport Fish (Nelson 1984).

Personnel from the Division of Fisheries Rehabilitation, Enhancement, and Development (FRED-ADF&G) operate weirs to monitor sockeye salmon escapements at Fish Creek (Chlupach 1984a), and Hidden and Quartz Creeks (Litchfield and Hauser, personal communication) tributaries of the Kenai River. The number of chinook salmon returning to Crooked Creek, tributary of the Kasilof River, was counted through a weir operated by FRED (Waite, personal communication).

The Susitna Hydroelectric (Su-Hydro) project of ADF&G monitors the returns of all salmon species to the Susitna River. The program estimates escapement into different segments of the river. Escapement into the Yentna River (river mile 28, tributary mile 4) is counted with side-scanning sonar and counts are apportioned to species with fishwheel catch data. Estimates of escapements past Sunshine Station (river mile 80), Talkeetna Station (river mile 103), and Curry Station (river mile 120) are made with mark-recapture programs. Escapement estimates for these sites were taken from Barrett et al. (1984).

The Cook Inlet Aquaculture Association (CIAA) counted through weirs sockeye salmon escapement into Packers Creek (Marcusson 1984a) and Wolverine Creek, a tributary of Big River (Marcusson 1984b). Personnel from CIAA also flew aerial surveys and counted salmon escapement into various west-side systems and northern Cook Inlet systems.

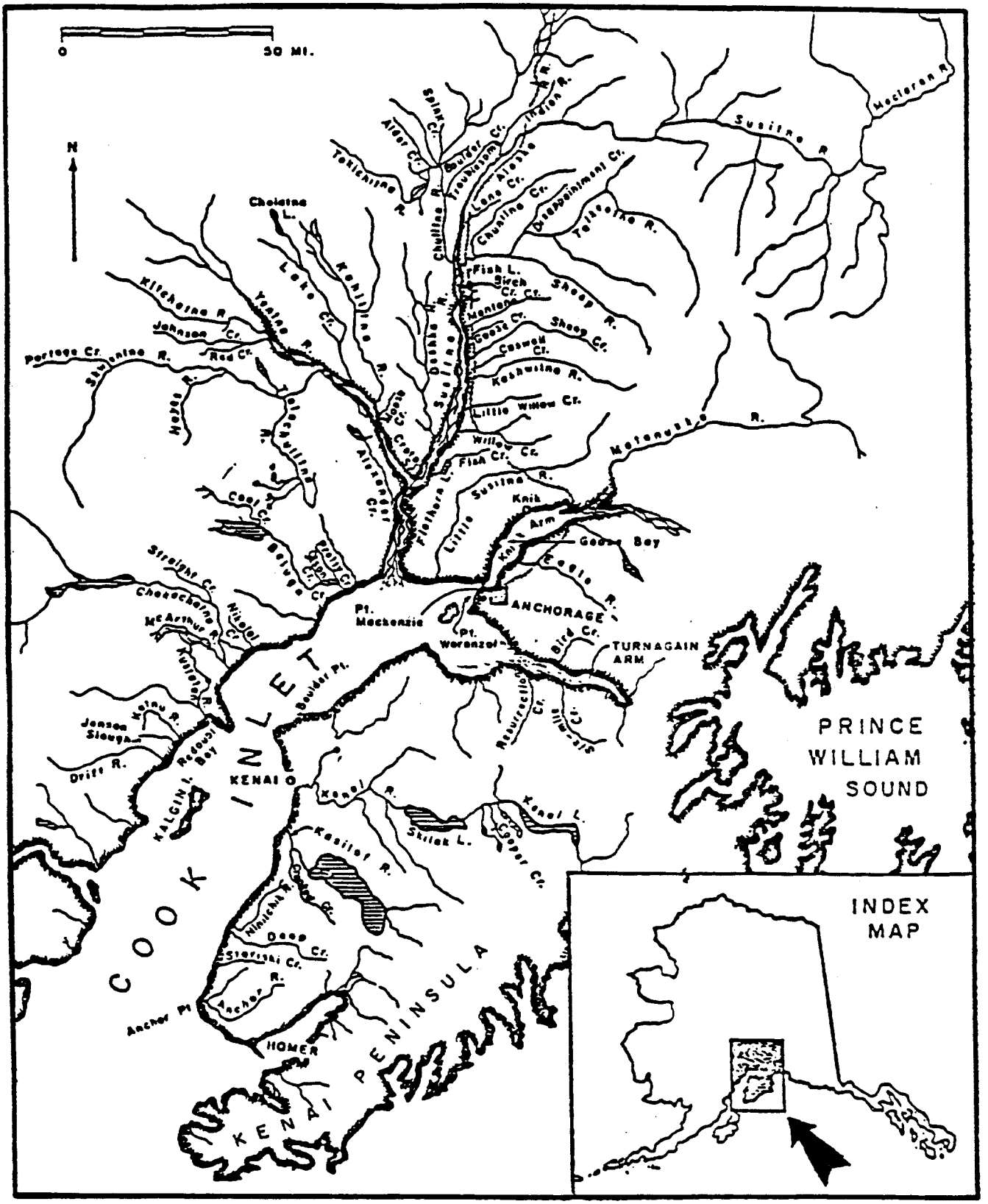

Figure 3. Cook Inlet area showing rivers which support sport fisheries.

Age, Sex, and Size Data

Sockeye, chinook, coho, and chum salmon were sampled for scales, sex, and length measurements.

Measurements:

Scales were taken from the left side of the fish, two rows above the lateral line on the diagonal row downward from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin (INPFC 1963). Scales were mounted on gum cards and impressions made in cellulose acetate (Clutter and Whitesel 1956). Otoliths were collected from carcasses of spawned-out sockeye salmon from the McArthur and Chakachatna Rivers. Only sex and lengths were measured from pink salmon. Scales were not taken because pink salmon are generally two-year-old fish.

Ages were determined from examination of scales or otoliths. Ages were recorded in European notation[1]. Sex was determined from morphometric characteristics or examination of gonads. Fish were measured in millimeters from the middle of the eye to the fork of tail.

Commercial Catch Samples:

All age, sex, and size data for commercial catches presented in this report were collected and computed by the author. The age and sex composition of the season's catch for each species and fishery were estimated with stratified systematic sampling programs according to Cochran (1977). Sampling was designed so that sufficient numbers of fish were sampled to simultaneously estimate the true proportion of each major age group in the catch within ±5 percentage points 90% of the time. The number of time and spatial strata selected for sampling differed among fisheries and species. In general, the numbers of time strata were determined according to the rapidity of change in age composition as estimated from previous years data. For those species and fisheries where good estimates of age composition were not available from past years, three or four strata were used to expose moderate time trends. Spatial strata were based on the knowledge of differences in stock contributions and catch trends demonstrated in previous years. Fisheries contributing large percentages to a catch of a species were sampled with greatest intensity.

Sockeye salmon were sampled from each of the eight major fisheries: Central District drift, Northern District east-side set, Northern District west-side set, Kalgin Island set, Central District west-side set, Salamatof Beach set, Kalifonsky Beach set, and Cohoe/Ninilchik Beach set. Spatial strata for sampling chinook salmon were similar to those for sockeye salmon, except the Northern District east-side set net fishery was not sampled. Coho salmon were sampled from four fisheries: Central District drift, Northern District west-side set, Central District west-side set, and the Central District east-

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[1] European formula: Numerals preceding the decimal refer to the numbers of freshwater annuli, numerals following the decimal are the numbers of marine annuli. Total age from brood year is the sum of these two numbers plus one.

side set (Salamatof, Kalifonsky, Cohoe/Ninilchik Beaches pooled). Chum salmon were sampled only from the Central District drift net fishery. Pink salmon were sampled from the Central District drift net and the Central District east-side set net fisheries.

Subsistence and Personal Use Samples:

Browning (1984a, 1984b) summarized age, sex, and size information collected from chinook salmon harvested by the Tyonek subsistence fishery and sockeye salmon caught in the Kasilof River personal use fishery. The author compiled the age and sex data for sockeye salmon harvested by the subsistence fishery at Tyonek. Age compositions for these fisheries were not stratified through time.

Sport Catch Samples:

The majority of age and size information collected from sport fisheries were taken from chinook salmon catches. Chinook salmon harvested from the Susitna River, Little Susitna River, and Chuitna River were sampled from scales and lengths and the information presented in this report was provided by Hepler (personal communication). Sport harvests of chinook salmon made in the Kenai, Anchor, and Ninilchik Rivers and Deep Creek (marine and freshwater) were sampled for age and size characteristics and the data are summarized by Hammarstrom and Larson (1984). Other sport harvests sampled were coho salmon catches from the Little Susitna River (Bentz 1984) and from the Anchor River (Wallis and Hammarstrom 1984). Age composition estimates for sport harvests were not stratified through time.

Escapement Samples:

Salmon escapements were sampled for age and size data. The majority of data available are from sockeye salmon runs, although runs of chinook, coho, chum, and pink salmon were sampled to a lesser degree. The escapement age compositions presented in this report were taken from other sources, except for information for sockeye salmon from the McArthur/Chakachatna Rivers which were collected and summarized by the author. Sources for age and size compositions for the various systems and species are basically the same as those for the corresponding abundance estimates which are outlined in the previous section.

King and Tarbox (1984) document the age and size composition for sockeye, coho, chum, and pink salmon escapements at Susitna Station and for sockeye salmon only at Kenai, Kasilof, and Crescent Rivers. Fish were captured with fishwheels located near the sonar sites. Age compositions for sockeye salmon from these systems were stratified through time, while the information for the other species was presented as a season total.

Barrett et al. (1984) report the age and size compositions for sockeye, coho, chum, and pink salmon passing by several sites (Yentna, Sunshine, Talkeetna, and Curry) along the Susitna River. Fish were captured with fishwheels at each of these sites. Age information was not stratified through time. Scale and length measurements were also taken from chinook salmon at these sites

(Barrett et al. 1984); however potential problems with the aging of these samples were discovered. Because questions about the aging were not resolved prior to publication of this report, these data are not presented.

Estimates of the age and size composition of sockeye and chinook salmon returns to Quartz Creek (tributary of the Kenai River) were provided by Litchfield (personal communication). Data for sockeye salmon returning to the Russian River (Kenai River tributary) were summarized by Nelson (personal communication). Chlupach (personal communication) provided estimates of age compositions for sockeye and coho salmon returns to Fish Creek. Fish returning to these systems were captured and sampled at weirs and the age information was compiled for a single time stratum.

Marcusson (1984a, 1984b) documents age information for sockeye salmon escapement into Packers Creek and sockeye and coho salmon into Big River. Fish were captured at a weir on Packers Creek and by fishwheels on the mainstem of the Big River and at a weir on Wolverine Creek (tributary to Big River). Estimates of age composition for sockeye salmon returns to Big Lake were made for the early and late segments of the run. Age information for sockeye salmon escapement to Packers Creek and coho salmon into Big River were compiled for the entire run.

The age composition of the late run of chinook salmon returning to the Kenai River was estimated by Hammarstrom (personal communication). Fish were captured with gillnets which measured 5-1/4 in (13.34 cm), 7 in (17.79 cm), and 8 in (20.33 cm) in mesh size. Estimates of age composition were not stratified through time.

Waite (personal communication) summarized age and size data for chinook and coho salmon returning to Crooked Creek. Estimates of age composition were made for the entire run.

RESULTS AND DISCUSSION

Abundance Data All Species

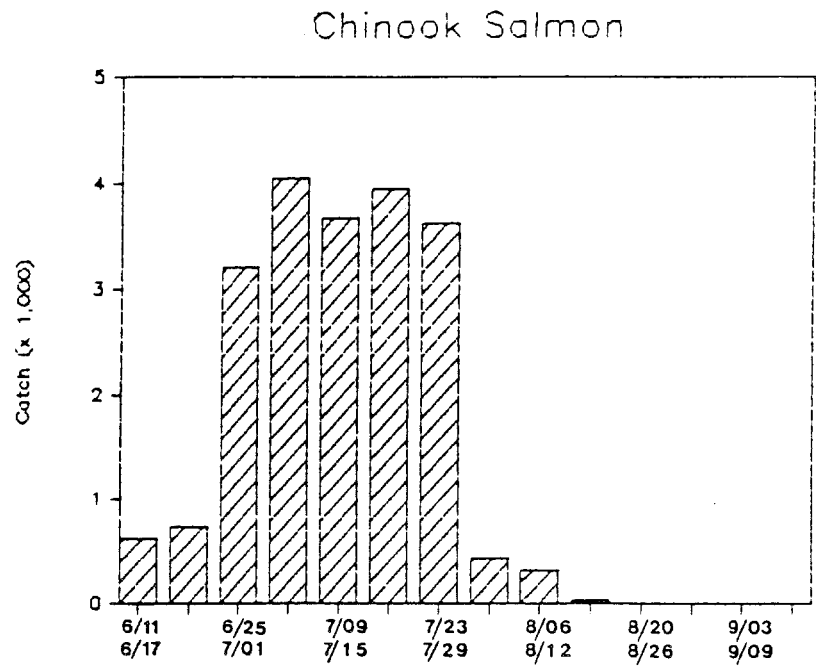
In 1983, commercial fisheries in Upper Cook Inlet harvested approximately 6.8 million salmon (Table 1). Sockeye and chum salmon accounted for most of the commercial harvest (75% and 17%, respectively). The Central District drift net fishery harvested the largest number of fish (4,621,365), followed by set nets along Cohoe/Ninilchik Beach (607,427), Salamatof Beach (510,605), and Kalifonsky Beach (464,714). Levels of chinook salmon catches were similar from 25 June through 29 July (Figure 4). Harvests of sockeye, coho, chum, and pink salmon all peaked during the week of 16 July - 22 July (Figure 4). The majority of sockeye salmon were harvested in a short period of time, with 42% of the season's catch occurring over a seven-day period (16 July - 22 July). Detailed commercial catch and effort statistics are reported in Appendix A.

Subsistence and personal use fisheries harvested 31,572 salmon in 1983 (Table 2). Sockeye and chinook salmon were the most important species to the

Table 1. Estimated numbers of salmon by species harvested by commercial fisheries in Upper Cook Inlet in 1983[1].

Fishery	Chinook	Sockeye	Coho	Chum	Pink	Total
Northern District East-side Set Net	92	67,204	11,778	2,765	855	82,694
Northern District West-side Set Net	841	117,015	42,089	26,556	20,749	207,250
Central District Drift Net	1,124	3,222,007	326,962	1,044,644	26,628	4,621,365
Central District West-side Set Net	2,015	71,998	53,696	29,682	1,886	159,277
Kalgin Island Set Net	1,519	62,546	44,131	8,447	1,899	118,542
Salamatof Beach Set Net	2,249	488,788	13,838	2,290	3,440	510,605
Kalifonsky Beach Set Net	3,646	452,560	7,589	182	737	464,714
Cohoe/Ninilchik Beach Set Net	9,148	567,615	16,239	292	14,133	607,427
Total	20,634	5,049,733	516,322	1,114,858	70,327	6,771,874

[1] Source: Alaska Department of Fish and Game, Division of Commercial Fisheries, fish ticket summaries taken from files on the University of Alaska Honeywell computer.



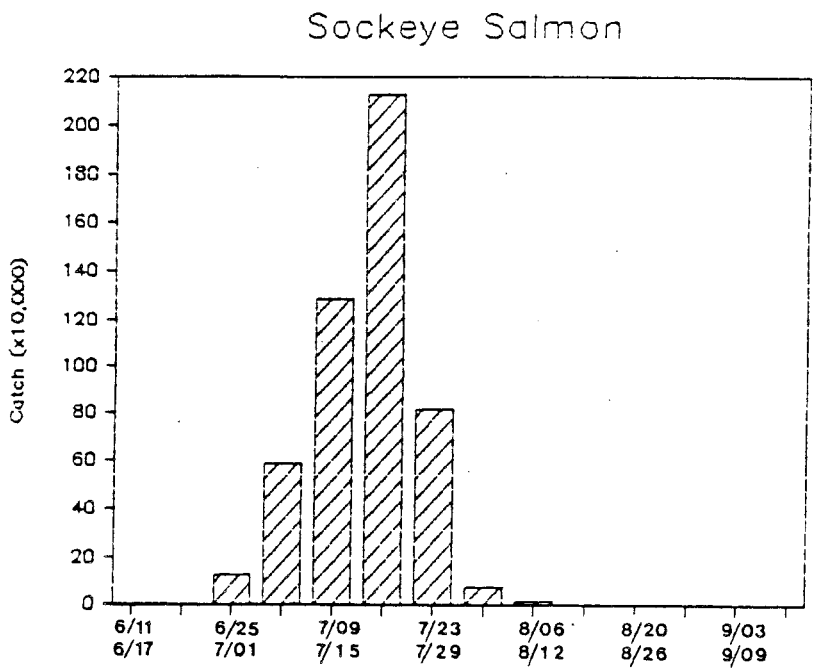


Figure 4. Weekly catches of chinook, sockeye, coho, chum, and pink salmon by commercial fisheries in Upper Cook Inlet in 1983.

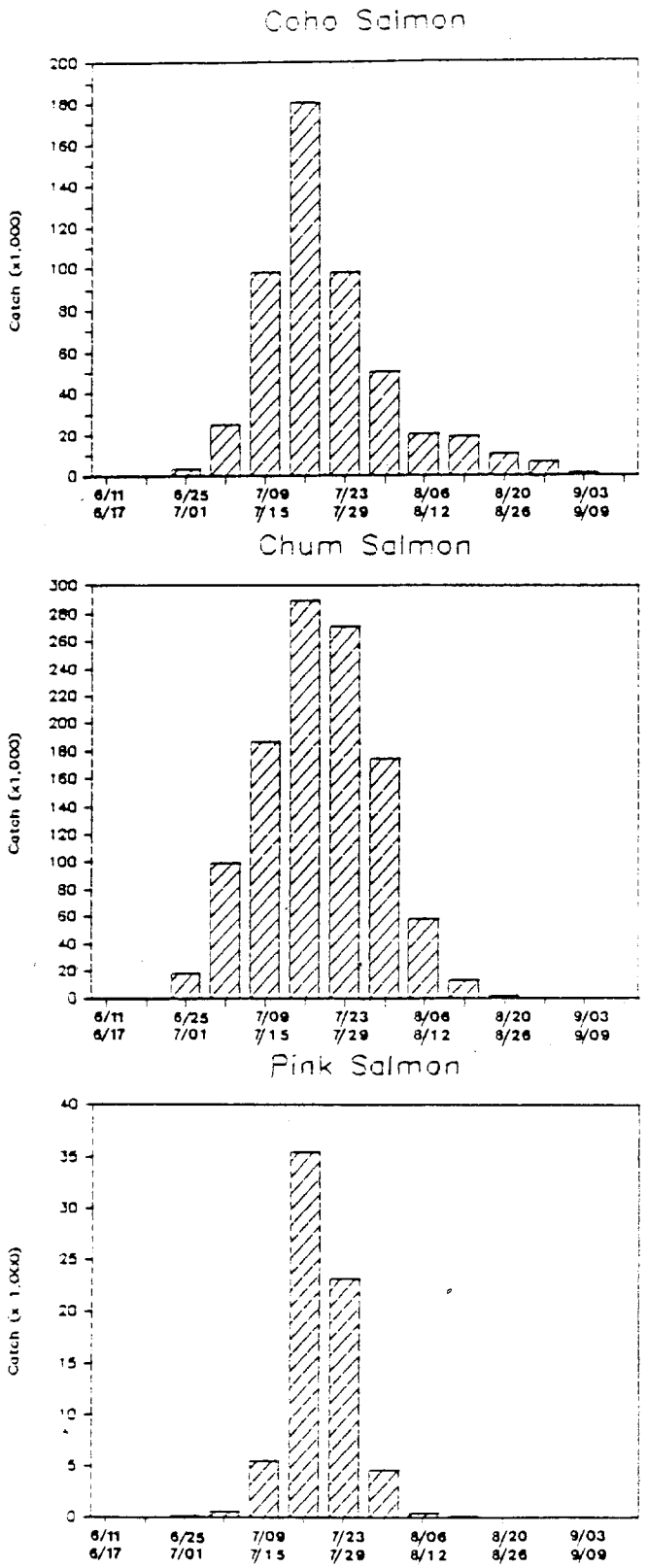


Figure 4. Weekly catches of chinook, sockeye, coho, chum, and pink salmon by commercial fisheries in Upper Cook Inlet in 1983 (continued).

Table 2. Estimated numbers of salmon harvested by subsistence and personal use fisheries in Upper Cook Inlet in 1983.

Location	Dates	Number of Permits	Chinook	Coho	Sockeye	Chum	Pink	Total
Tyonek Subsistence[1]	15 May - 15 Jun		2,750		185			2,935
	01 Jul - 15 Oct		5	59	16	6		86
	Total	73	2,755	59	201	6		3,021
Kasilof Personal Use Gillnet[2]	21 Jun - 27 Jun	686	307		8,846			9,153
Fall Coho Personal Use Gillnet[3]	17 Sep - 18 Sep	302		712				712
Kasilof Personal Use Dipnet[4]					11,124			11,124
Kenai Personal Use Dipnet[4]					7,562			7,562
Total			3,062	777	27,733	6		31,572

[1] Source: Browning, J. 1984a. Tyonek subsistence salmon fishery, 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-3.

[2] Source: Browning, J. 1984b. Kasilof personal use gillnet fishery, 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-6.

[3] Source: Browning, J. 1985. Central and Northern Districts personal use coho salmon fishery 1983 and 1984. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 85-4.

[4] Source: Mills, M. 1984. Alaska statewide sport fish harvest studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Reports, 1983-1984. Project F-9-16, 25 (SW-I-A) 122 pp.

subsistence and personal use fisheries, comprising 88% and 10%, respectively, of the seasons catch. The dipnet fishery in the Kasilof River caught the largest number (11,124) of salmon, followed by the Kasilof River gillnet fishery (9,153), the Kenai River dipnet fishery (7,562), and the Tyonek subsistence fishery (3,021). Detailed catch and effort data for the subsistence and personal use fisheries are presented in Appendix A.

Sport fishermen harvested 230,766 salmon in the Cook Inlet area in 1983 (Table 3). Sport catches of sockeye salmon were the highest (121,780). followed by similar catch levels for coho (50,309) and chinook salmon (42,020). The majority of chinook, sockeye, and coho salmon were taken from the Kenai River; while most of the chum and pink salmon were caught in the Susitna River (Figure 5).

Although not all salmon escapements are monitored and some of those monitored are only indexed, available estimates do provide information on the relative magnitude of the different runs (Table 4). Based on available estimates, the largest escapement (630,340) of sockeye salmon occurred in the Kenai River. Significant numbers of sockeye salmon were also counted in the Kasilof River (210,271), at Sunshine and Yentna Stations on the Susitna River (175,936), Fish Creek (118,797), and Crescent River (92,343). The greatest numbers of chinook salmon were enumerated in the Susitna River. Based on tag-recovery results, an estimated 86,188 chinook salmon passed Sunshine Station (river mile 80). In addition, an estimated 47,683 chinook salmon were counted (aerial or ground surveys) spawning in waters below Sunshine Station. The next largest chinook salmon escapement occurred in the Kenai River. An estimated 21,342 late run fish spawned in the Kenai River (30,516 in-river run minus 9,174 sport harvest). Chum, coho, and pink salmon escapements were greatest in the Susitna River (276,577, 24,038, 101,191, respectively, at Sunshine and Yentna Stations combined).

Age Data

Age composition of each species of fish in Upper Cook Inlet catches and escapements are presented below.

Sockeye Salmon:

Age 1.3 and age 1.2 sockeye salmon predominated (69% and 18%, respectively) in the commercial harvest (Table 5). The age composition of sockeye salmon differed significantly among fisheries. The Central District drift harvest was comprised of 74% age 1.3 and 15% age 1.2 fish; while the Northern District east-side set net harvest was made up of 12% age 1.3 fish and 78% age 1.2 fish. In general, age 1.3 sockeye salmon dominated the harvests made in the Central District and age 1.2 fish were the most numerous in the Northern District catches. Differences in the age composition of sockeye salmon harvests also occurred through time. Fish aged 1.2 comprised smaller portions of the drift harvest as the season progressed; while percentages of age 1.3 fish increased through time (Figure 6).

Age 1.3 fish also predominated in the catches made by the Tyonek subsistence and the Kasilof personal use gillnet fisheries, comprising 79% of both harvests (Table 6).

Table 3. Estimated numbers of salmon harvested by sport fisheries in Cook Inlet in 1983[1].

Location	Chinook (<51 cm)	Chinook (≥51 cm)	Sockeye	Coho	Chum	Pink	Total
Susitna River							
Willow Creek	136	398	425	576	1,490	1,647	4,672
Caswell Creek	10	262	151	408	0	126	957
Montana Creek	199	305	534	1,402	1,311	902	4,653
Sunshine Creek	105	0	685	722	42	241	1,795
Clear (Chunilna) Creek	252	682	534	836	650	73	3,027
Sheep Creek	0	0	370	596	902	682	2,550
Little Willow Creek	0	0	110	52	147	157	466
Kashwitna River	231	0	0	52	0	0	283
Deshka River	934	3,955	0	1,036	0	21	5,946
Lake Creek	535	1,888	726	1,392	52	430	5,023
Alexander Creek	672	1,039	69	408	0	126	2,314
Talachulitna River	63	273	41	84	0	0	461
Shell Lake	0	0	315	0	0	0	315
Other Streams & Lakes	230	42	412	532	440	126	1,782
Total	3,367	8,844	4,372	8,096	5,034	4,531	34,244
Kenai River							
Cook Inlet to Soldotna Bridge	1,951	13,553	22,961	12,231	0	703	51,399
Soldotna Bridge to Moose River	168	1,280	22,454	4,007	0	472	28,381
Moose River to Skilak Outlet	63	483	15,180	4,867	0	430	21,023
Skilak Inlet to Kenai Lake	21	0	10,672	1,573	0	220	12,486
Russian River	0	0	24,476	1,490	0	52	26,018
Swanson River	0	0	93	525	0	0	618
Total	2,203	15,316	95,836	24,693	0	1,877	139,925
Kasilof River	336	2,853	1,863	409	0	31	5,492
Fish Creek							
Saltwater	0	16	6,013	983	84	361	7,457
Big Lake	0	0	89	0	0	89	178
Total	0	16	6,102	983	84	450	7,635

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Table 3. Estimated numbers of salmon harvested by sport fisheries in Cook Inlet in 1983[1] (continued).

Location	Chinook (<51 cm)	Chinook (≥51 cm)	Sockeye	Coho	Chum	Pink	Total
Knik Arm Drainages[2]							
Little Susitna	340	847	2,787	2,835	450	251	7,510
Knik River & Tributaries (Including Jim Creek)	5	0	1,277	774	10	47	2,113
Wasilla Creek (Rabbit Slough)	0	0	0	345	0	10	355
Cottonwood Creek	0	0	1,632	518	0	0	2,150
Nancy Lake	0	0	587	0	0	0	587
Other Streams	0	0	164	171	73	42	450
Saltwater	37	10	1,748	513	26	209	2,453
Total	382	857	8,195	5,156	559	559	15,708
Anchorage Area Drainages[3]							
Ship Creek	0	0	0	94	0	42	136
Bird Creek	0	0	0	94	0	692	786
Twentymile River	2	0	123	712	0	31	868
Eagle River	0	0	0	74	0	0	74
Other Streams	0	0	288	250	10	325	873
Saltwater	0	0	178	314	0	42	534
Total	2	0	589	1,538	10	1,132	3,271
Westside Drainages[4]							
Polly Creek	0	0	0	188	0	0	188
Chuitna River	388	797	356	554	10	21	2,126
Theodore River	0	0	0	10	0	0	10
Kustatan River	0	0	110	1,800	0	0	1,910
Silver Salmon Creek	0	0	0	1,872	0	10	1,882
Other Streams	73	136	1,370	610	346	125	2,660
Other Lakes	0	0	1,028	40	0	0	1,068
Saltwater	94	41	343	188	0	63	729
Total	555	974	3,207	5,262	356	219	10,573

-Continued-

Table 3. Estimated numbers of salmon harvested by sport fisheries in Cook Inlet in 1983[1] (continued).

Location	Chinook (<51 cm)	Chinook (≥51 cm)	Sockeye	Coho	Chum	Pink	Total
Kenai Peninsula Drainages[5]							
Anchor River	63	1,206	0	1,395	0	252	2,916
Ninilchik River	63	808	0	210	0	42	1,123
Deep Creek	168	986	0	545	0	42	1,741
Stariski Creek	0	0	0	251	0	0	251
Other Streams	189	0	739	712	105	1,343	3,088
Other Lakes	0	0	315	199	0	0	514
Deep Creek Marine	0	2,832	562	860	0	31	4,285
Total	483	5,832	1,616	4,172	105	1,710	13,918
TOTAL	7,328	34,692	121,780	50,309	6,148	10,509	230,766

[1] Source: Mills, M. 1984. Alaska statewide sport fish harvest studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984. Project F-9-16, 25 (SW-I-A) 122 pp.

[2] Knik Arm drainages are defined in Mills (1984) as Area K which includes all waters inside the area bounded by the Little Susitna River on the north and west and the Knik Arm on the south, including all drainages of the Matanuska and Knik Rivers (boundary streams are included in the area). For the purposes of this report catches from Fish Creek and Big Lake have been removed from the Knik Arm drainage category and reported under Fish Creek.

[3] Anchorage area drainages are defined in Mills (1984) as Area L and include all waters inside the area bounded by the Eklutna River on the north, Knik Arm on the west, Turnagain Arm to and including Portage Creek at Portage on the south, and the Chugach Mountains on the east (boundary streams are included in the area.

[4] West-side drainages are defined in Mills (1984) at Area N and include all west-side Susitna River drainages and all west-side Cook Inlet waters southward to Cape Douglas. For purposes of this report all tributaries draining into the Susitna River were removed from this category and reported under Susitna River. Those waters listed by Mills as "other" were reported in the west-side drainage category.

[5] Kenai Peninsula drainages are defined in Mills (1984) as Area P and include all waters and drainages of the Kenai Peninsula from Cape Puget to, but excluding Portage Creek at Portage, and including Kalgin Island. For purposes of this report the catches from Kenai River and its tributaries and from the Kasilof River were removed from the category and reported by river. Those waters listed by Mills as "others" were reported in the Kenai Peninsula category.

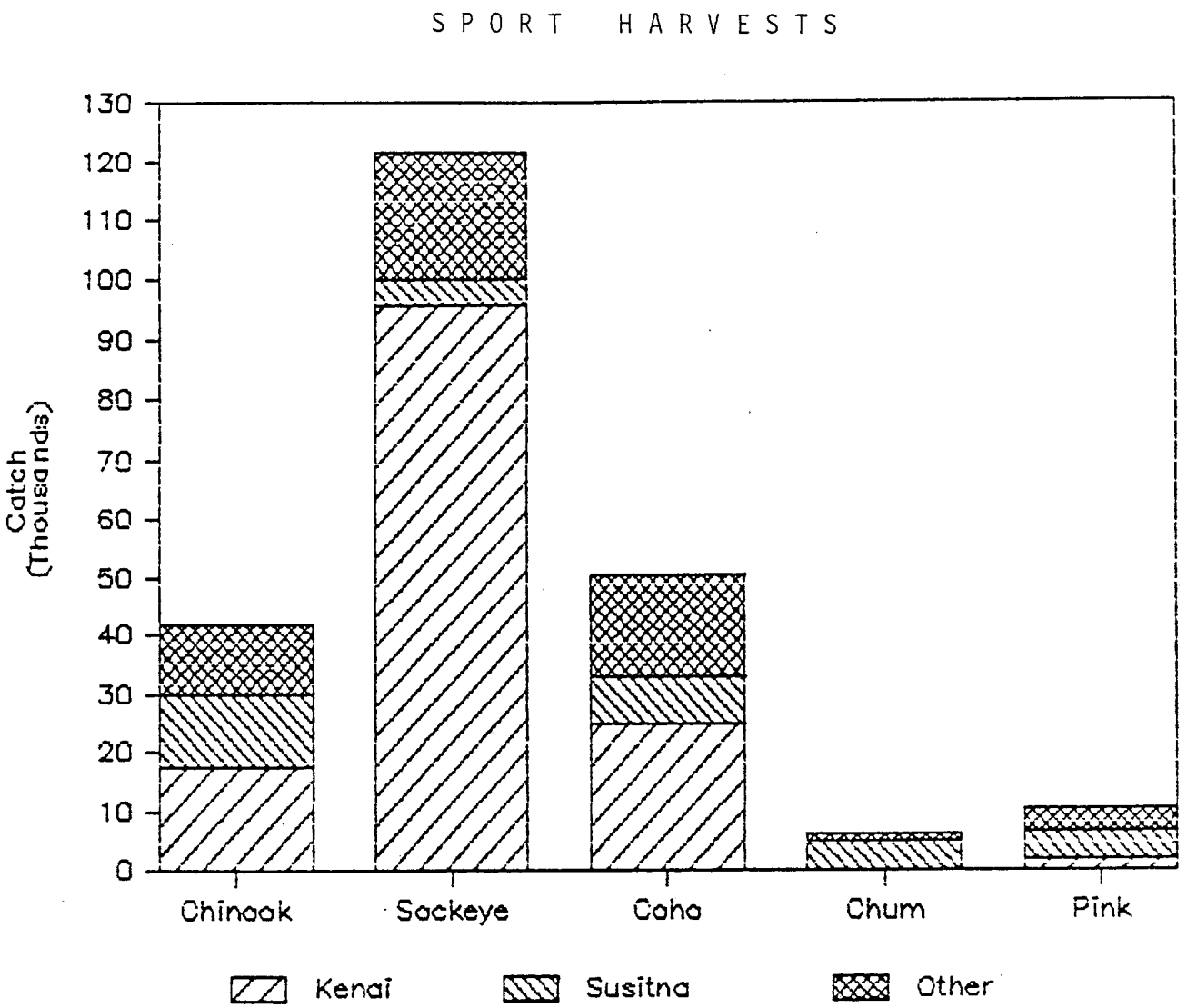

Figure 5. Numbers of salmon by species harvested by sport fisheries in Upper Cook Inlet in 1983.

Table 4. Summary of escapement estimates by system and species, Upper Cook Inlet, 1983.

System	Method	Enumerated By	Dates	Counts by Species				
				Chinook	Sockeye	Coho	Chum	Pink
Susitna River								
Susitna Station [1]	Sonar	Commercial Fish	7/01-8/08	461	112,314	11,729	7,602	28,981
Yentna Station [2]	Sonar	Su-Hydro	6/30-9/05	613	104,414	8,867	10,802	60,661
Sunshine Station [2]	Mark-Recapture	Su-Hydro	6/03-9/11	86,188	71,522	15,171	265,775	40,530
Talkeetna Station [2]	Mark-Recapture	Su-Hydro	6/07-9/12	11,673	4,235	2,399	50,370	9,483
Curry Station [2]	Mark-Recapture	Su-Hydro	6/09-9/14	9,120	1,876	761	21,089	5,471
Alexander Creek [3]	Aerial Survey	Sport Fish	7/19	3,755				
Deshka River [3]	Aerial Survey	Sport Fish	7/26	19,237				
Lake Creek [3]	Aerial Survey	Sport Fish	7/26	7,075				
Talachulitna River [1,3]	Aerial Survey	Commercial & Sport Fish	7/29	10,014		15		
Peters/Martin Creek [3]	Aerial Survey	Sport Fish	7/14	2,272				
Cache Creek [3]	Aerial Survey	Sport Fish		497				
Willow Creek [3]	Aerial & Raft Survey	Sport Fish	7/18-7/19	777				
Deception Creek [3]	Aerial Survey	Sport Fish		121				
Montana Creek [3]	Foot Survey	Sport Fish	7/14	1,641				
Kashwitna River (North Fork) [3]	Aerial Survey	Sport Fish	7/18	297				
Little Willow Creek [3]	Aerial Survey	Sport Fish	7/19	1,042				
Sheep Creek [3]	Aerial Survey	Sport Fish	8/18	975				
Goose Creek [3]	Aerial Survey	Sport Fish	7/18	477				
Indian River [2,3]	Aerial Survey	Su-Hydro & Sport Fish	7/25 & 8/02	1,193		53	722	886
Portage Creek [2,3]	Aerial Survey	Su-Hydro & Sport Fish	7/25 & 8/01	3,140		15	526	285
Clear Creek (Chunilna) [1,3]	Aerial Survey	Commercial & Sport Fish	8/01	938		100		5,000
Prairie Creek [3]	Aerial & Foot Survey	Sport Fish	7/20	3,200				
Chulitna River (Middle Fork) [3]	Raft Survey	Sport Fish	7/19	3,845				

-Continued-

Table 4. Summary of escapement estimates by system and species, Upper Cook Inlet, 1983 (continued).

System	Method	Enumerated By	Dates	Counts by Species				
				Chinook	Sockeye	Coho	Chum	Pink
Westside Systems								
Fritz Creek [1]	Aerial Survey	Commercial Fish					850	
Clearwater Creek [1]	Aerial Survey	Commercial Fish				200	10,900	
Chinitna River [1]	Aerial Survey	Commercial Fish					350	
Polly Creek [1]	Aerial Survey	Commercial Fish				400	1,000	
Harriet Creek [1]	Aerial Survey	Commercial Fish				575		
Little Jack Slough [4]	Aerial Survey	Cook Inlet Aquaculture			400	5,500		
Cannery Creek [4]	Aerial Survey	Cook Inlet Aquaculture				252		30
Drift River [4]	Aerial Survey	Cook Inlet Aquaculture				822		70
Big River [5]								
Wolverine Creek	Weir	Cook Inlet Aquaculture	6/10-8/06		18,189			
Clearwater Trib.	Aerial Survey	Cook Inlet Aquaculture			120,000			
McArthur-								
Chakachatna Rivers [1]	Aerial Survey	Commercial Fish			17,824		11	
Chuitna River [6]	Aerial Survey	Environmental Research Technology		5,750-6,500		1,600-1,800		7,150
Threemile Creek [4]	Aerial Survey	Cook Inlet Aquaculture		250				
Olsen Creek [4]	Aerial Survey	Cook Inlet Aquaculture		30				
Drill Creek [4]	Aerial Survey	Cook Inlet Aquaculture		1,000				
Coal Creek [1]	Aerial Survey	Commercial Fish			2,450			
Theodore River [3]	Aerial Survey	Sport Fish		1,519				
Lewis River [4]	Aerial Survey	Cook Inlet Aquaculture		521				
Little Susitna River [7]	Foot Survey	Sport Fish				2,666		
Nancy Lake [1]	Aerial Survey	Commercial Fish			4,800			
Fish Creek [8,9]	Weir	F.R.E.D. Division	7/05-8/30		118,797	2,342		
Chickaloon River [4]	Aerial Survey	Cook Inlet Aquaculture		4	1,000			
Mystery Creek [4]	Aerial Survey	Cook Inlet Aquaculture			2,000			
Bishop Creek [4]	Aerial Survey	Cook Inlet Aquaculture			4,500			

-Continued-

Table 4. Summary of escapement estimates by system and species, Upper Cook Inlet, 1983 (continued).

System	Method	Enumerated By	Dates	Counts by Species				
				Chinook	Sockeye	Coho	Chum	Pink
Kenai River								
Mainstem [1]	Sonar	Commercial Fish	6/22-8/12	402	630,340	2,430		
Mainstem [10]	Mark-Recapture	Sport Fish	7/02-7/31	30,516 11/				
Russian River [12]	Weir	Sport Fish	6/12-9/06	52	55,245	475		
Quartz Creek [13]	Weir	F.R.E.D. Division	6/28-10/11	351	73,345	1,542	63	54
Hidden Lake [13]	Weir	F.R.E.D. Division	7/21-8/19		1,297			
Kasilof River [1]								
Mainstem [1]	Sonar	Commercial Fish	6/11-7/31	5,889	210,271	32		2,267
Crooked Creek [14]	Weir	F.R.E.D. Division	6/11-8/04	4,392		1,114		
Crescent River [1]	Sonar	Commercial Fish	7/01-7/31		92,343			
Packer's Lake [15]	Weir	Cook Inlet Aquaculture	5/23-8/29		18,403			
Ninilchik River [10]	Aerial Survey	Sport Fish		710				
Deep Creek [10]	Aerial Survey	Sport Fish		1,010				
Anchor River [10]	Aerial Survey	Sport Fish		1,490				

1 Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game, Technical Data Report No. 122. 152 pp.

2 Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May - October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

3 Source: Hepler, K. and R. Bentz. 1984. Chinook salmon population and angler use studies of Upper Cook Inlet. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25(G-II-M); 40-58.

Table 4. Summary of escapement estimates by system and species, Upper Cook Inlet, 1983 (continued).

[4] Source: Marcusson, P. 1984. Personal communication. Cook Inlet Aquaculture Association, Soldotna, Alaska.

[5] Source: Marcusson, P. 1984b. Big River Lakes pre-enhancement investigation 1983 Cook Inlet Aquaculture Association.

[6] Source: Environmental Research and Technology. 1984. Diamond Chuitna Project aquatic biology baseline studies report, for Diamond Shamrock-Chuitna Coal Joint Venture.

[7] Source: Bentz, R. 1984. Little Susitna River coho salmon life history and angler use studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25(G-II-B): 38-63.

[8] Source: Chlupach, R. 1984a. Evaluation of returning hatchery adult sockeye 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Project Report. Draft No. 2. 01/26/84. 20 pp.

[9] Source: Chlupach, R. 1984b. Evaluation of returning hatchery adult coho salmon 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Project Report. Draft No. 2. 01/23/84. 21 pp.

[10] Source: Hammarstrom, S. and L. Larson. 1984. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-L): 1-39.

[11] The mark-recapture estimate of 30,516 chinook salmon represents the total number of chinook salmon returning to the Kenai River between 2 July and 31 July. No estimate of in-river run was made for the early run of chinook salmon or fish entering the river after 31 July. Approximately 9,174 chinook salmon were harvested by the sport fishery, therefore an estimated 21,342 escaped to spawn.

[12] Source: Nelson, David. March 1985. Personal communication. Alaska Department of Fish and Game. Division of Sport Fish. Soldotna, Alaska.

[13] Source: Hauser, W. March 1985. Personal communication. Alaska Department of Fish and Game. Fisheries Rehabilitation, Enhancement, and Development Division. Anchorage, Alaska.

[14] Source: Waite, D. 1984. Crooked chinook salmon data report, 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Draft report.

Table 4. Summary of escapement estimates by system and species, Upper Cook Inlet, 1983 (continued).

[15] Source: Marcusson, P. 1984a. Technical report Packer's Lake project. Progress Report 1983. Cook Inlet Aquaculture Association.

Table 5. Age composition summary of sockeye salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[1].

Fishery	Numbers of Fish Harvested	Sample Size	Percent Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4
Northern District East-side Set	67,204	1,151	0.4	0.7	0.8	78.3	0.2	0.1	12.3	5.2	0.3	1.7	0.0
Northern District West-side Set	117,015	794	0.6	0.0	7.9	46.7	0.0[2]	0.0	28.4	7.0	0.0	9.2	0.2
Central District Drift	3,222,007	8,541	0.1	0.0[2]	1.6	14.8	0.0[2]	0.0[2]	73.6	2.2	0.4	7.3	0.0[2]
Central District West-side Set	71,998	1,677	0.0[2]	0.0	0.2	16.6	0.0	0.0	50.5	15.1	0.3	17.3	0.0
Kalgin Island Set	62,546	740	0.3	0.0	0.9	19.6	0.0	0.0	48.9	16.7	0.2	13.3	0.1
Salamatof Beach Set	488,788	2,905	0.3	0.1	0.8	24.2	0.1	0.0	66.2	2.6	0.5	5.2	0.0
Kalifonsky Beach Set	452,560	4,404	0.0[2]	0.0	0.4	14.8	0.0	0.0	73.0	4.4	0.5	6.9	0.0
Cohoe/Ninilchik Beach Set	567,615	5,650	0.0	0.0[2]	0.3	21.0	0.0[2]	0.0	63.7	5.5	0.5	9.0	0.0
Total	5,049,733	25,862	0.1	0.0[2]	1.4	18.1	0.0[2]	0.0[2]	69.2	3.4	0.4	7.4	0.0[2]

[1] Source: Age information summarized from original age-weight-length data forms. Harvest numbers taken from Alaska Department of Fish and Game fish ticket summaries taken from files on the University of Alaska Honeywell computer system.

[2] Fish present, but represent less than 0.05% of the total catch.

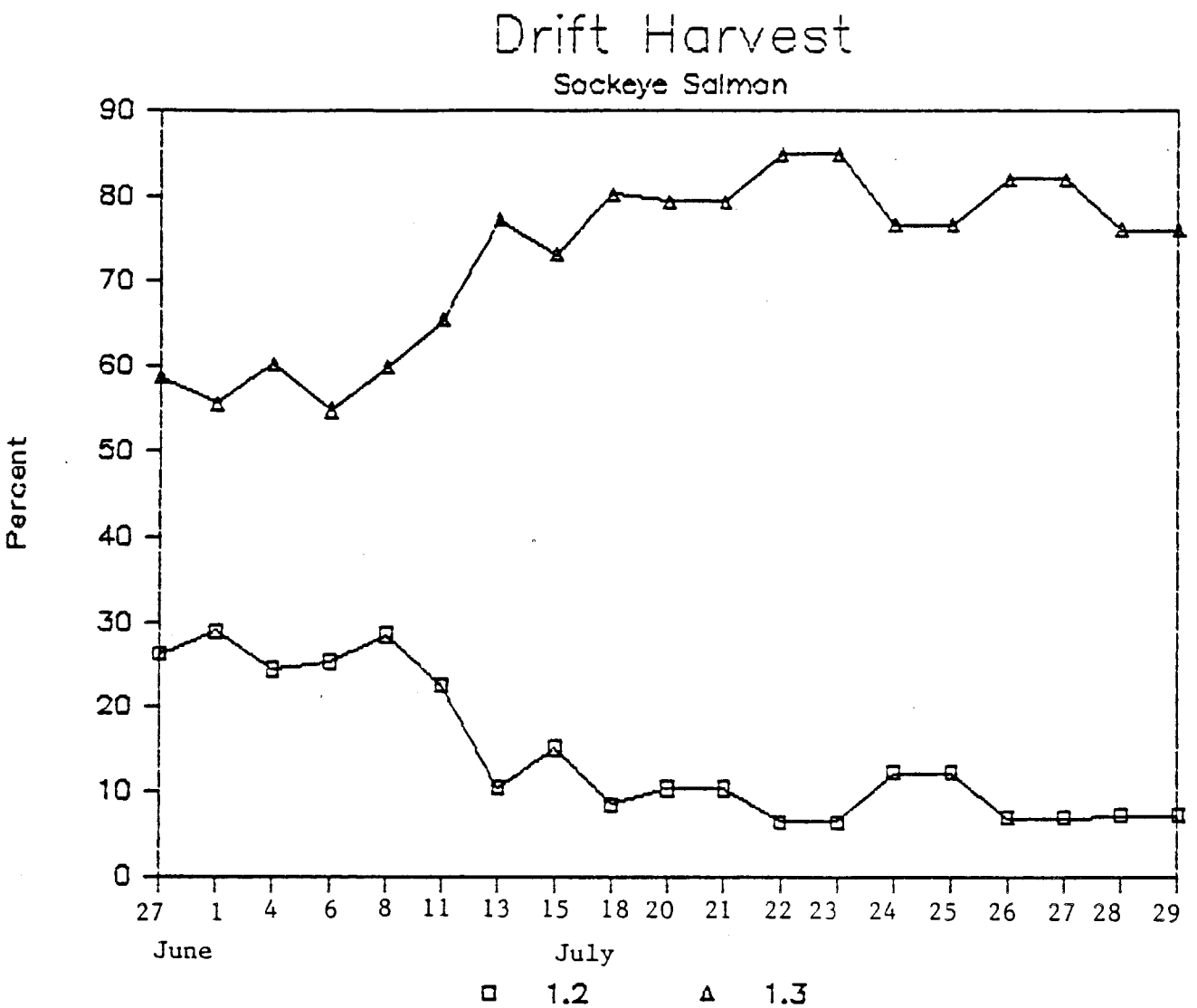

Figure 6. Percent composition of age 1.2 and age 1.3 sockeye salmon harvested by the Central District drift net fishery in Upper Cook Inlet in 1983.

Table 6. Age composition summary of sockeye salmon harvested by subsistence and personal use fisheries in Upper Cook Inlet in 1983.

			Percent Composition by Brood Year and Age Group					
			1979		1978		1977	
Fishery	Numbers of Fish Harvested	Sample Size	0.3	1.2	1.3	2.2	1.4	2.3
Tyonek Subsistence[1]	201	159	0.6	15.8	78.6		0.6	4.4
Kasilof Personal Use Gillnet[2]	8,846	328		9.8	79.2	1.9		9.1

[1] Source: Browning, J. 1984a. Tyonek subsistence salmon fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-3.

[2] Source: Browning, J. 1984b. Kasilof River personal-use gillnet fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report 84-6.

Sockeye salmon aged 1.3 comprised the largest portion of the escapements into the Kenai River (79%), Crescent River (42%), Big River (60%), and the McArthur River (55%) (Table 7). The 1.2 age group was dominant in the escapements to the Susitna River (56% at Susitna Station), Kasilof River (50%), and Fish Creek (88%). Other age groups making important contributions to sockeye salmon escapements include: age 2.2 fish in Packers Creek (40%) and in Wolverine Creek (40%), and age 2.3 fish in the Chilligan River (40%). Detailed age, sex, and size data for sockeye salmon catches and escapements are reported in Appendix C.

Chinook Salmon:

Commercial and subsistence fisheries harvested primarily age 1.4 chinook salmon (Table 8). Fish aged 1.4 represented larger percentages in the east-side beach catches (81% of Salamatof Beach, 56% of Kalifonsky Beach, and 60% of Cohoe/Ninilchik Beach) than in catches made elsewhere (41% of the Central District west-side, 49% of the drift harvest, and 37% of the Northern District harvest). The 1.3 age group was an important contributor to the set net harvests in the Northern District (42%), in the Central District west-side (38%), and in the Tyonek subsistence fishery (39%). In general, younger fish represented larger portions of the drift harvest and set net catches in the north and west, than of set net catches made on the east-side beaches.

Chinook salmon aged 1.4 predominated in most of the sport harvests (Table 9). The exceptions were: sport fisheries in Alexander Creek, Deshka River, and Talachulitna River where fish aged 1.3 were more numerous (53%, 61%, and 46%, respectively); and the fishery at Montana Creek where the 1.2 age group dominated (72%). Fish aged 1.2 and 1.3 were generally more common in sport harvests from rivers in northern Cook Inlet than in catches made from rivers along the Kenai Peninsula (Figure 7).

Most escapements of chinook salmon were not sampled for age, sex, and size information. The only age data available are: for the Kenai River late run and the Quartz Creek escapement where fish aged 1.4 were most common (79% and 80%, respectively); and for the Crooked Creek escapement where fish aged 0.2 (48%), and fish aged 0.4 (22%) were important (Table 10). Based on tag recoveries, the majority of chinook salmon returning to Crooked Creek aged 0 freshwater were from enhanced stocks; while fish aged 1 freshwater were from wild stocks. Detailed age, sex, and size data for catches and escapements of chinook salmon are presented in Appendix D.

Coho Salmon:

A high percentage of all the coho salmon sampled from commercial and sport harvests and from the escapements were fish aged 2.1. Contributions to the catch by the 2.1 age group ranged from a low of 74% in the Northern District set net, the drift, and Central District east-side set net harvests, to a high of 91% in the sport catch from the Little Susitna River (Table 11). In the escapements sampled, percentages of age 2.1 fish ranged from 36% in Crooked Creek to 83% in Big River (Table 12). The next most important age group for coho salmon was the 1.1 age group whose contribution to the catch and escapement ranged from 3% to 40%. In general, older coho salmon were more predominant in the catch than in the escapements sampled, with the exception of

Table 7. Age composition summary of sockeye salmon escapement in Upper Cook Inlet in 1983.

River	Estimated Escapement	Sample Size	Percent Composition by Brood Year and Age Group											
			1980		1979			1978			1977			1976
			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.2	2.4
Susitna River														
Susitna Station [1]	112,314	1,839	2.6	0.3	4.5	55.9	0.6	0.0	23.7	9.5	0.2	2.4	0.0	0.3
Yentna Station [2]	104,414	1,024	0.4	4.7	0.4	66.9	0.9	0.5	22.6	1.7	0.2	1.7	0.0	0.0
Sunshine Station [2]	71,522	994	0.1	0.0	0.1	63.4	0.5	0.1	33.7	1.7	0.0	0.4	0.0	0.0
Talkeetna Station [2]	4,235	344	0.3	4.1	0.0	50.9	4.9	0.0	38.0	1.8	0.0	0.0	0.0	0.0
Curry Station [2]	1,876	118	0.9	5.9	0.0	69.5	2.5	0.9	18.6	1.7	0.0	0.0	0.0	0.0
Kenai River														
Total [1]	630,340	1,765	0.0	0.3	0.3	8.4	0.5	0.0	79.0	2.2	0.3	8.9	0.0	0.1
Quartz Creek [3]	73,345	229	0.0	0.0	0.0	4.0	0.4	0.0	87.3	0.8	0.9	6.6	0.0	0.0
Russian River [4]	34,039	175	0.0	0.0	0.0	73.7	0.0	0.0	8.0	12.6	0.0	5.7	0.0	0.0
Kasilof River [1]	210,271	1,997	0.0	0.0	0.0	49.5	0.0	0.0	33.2	12.8	0.0	4.5	0.0	0.0
Crescent River [1]	92,343	662	0.0	0.0	0.0	10.9	0.6	0.0	42.3	27.4	0.2	18.6	0.0	0.0
Fish Creek [5]	118,797	1,049	0.0	9.5	0.0	87.6	0.5	0.0	0.8	1.5	0.0	0.1	0.0	0.0
Packers Creek [6]	18,403	804	0.0	0.2	0.0	24.2	3.4	0.0	28.9	40.2	0.0	3.1	0.0	0.0
Big River [7]														
Total		2,471	0.3	1.1	0.3	26.6	0.8	0.0	60.0	8.8	0.1	1.9	0.1	0.0
Wolverine Creek	18,189	280	0.0	0.4	0.0	38.2	0.0	0.0	7.5	40.0	0.0	13.9	0.0	0.0
McArthur/Chakachatna River [8]	17,824													
McArthur River		244	1.2	0.0	6.2	34.0	0.0	0.0	54.6	1.2	0.0	2.8	0.0	0.0
Chilligan River		758	0.0	0.0	0.0	2.9	2.0	0.0	37.7	17.8	0.1	39.5	0.0	0.0

-Continued-

Table 7. Age composition summary of sockeye salmon escapement in Upper Cook Inlet in 1983 (continued)

[1] Source: Age proportions through time were taken from computer summaries provided by Bruce King, Alaska Department of Fish and Game, Soldotna, Alaska. Age proportions were weighted through time by escapement counts. Percent composition by age group represent results from Method II in King, B. and K. Tarbox, 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

[2] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

[3] Source: Litchfield, D. March 1984. Personal commication. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Soldotna, Alaska.

[4] Source: Nelson, D. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Sport Fish. Soldotna, Alaska.

[5] Source: Chlupach, R. 1984. Evaluation of returning hatchery adult sockeye 1983. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Draft Report No. 2. 26 January 1984.

[6] Source: Marcusson, P. 1984a. Packers Lake project report 1983. Cook Inlet Aquaculture Association.

[7] Source: Marcusson, P. 1984b. Big River pre-enhancement investigation 1983 field season. Cook Inlet Aquaculture Association.

[8] Source: Age information summarized from original age-weight-length data forms.

Table 8. Age composition summary of chinook salmon harvested by commercial and subsistence fisheries in Upper Cook Inlet in 1983[1].

Fishery	Type	Numbers of Fish Harvested	Sample Size	Percent Composition by Brood Year and Age Group									
				1980		1979	1978			1977		1976	
				0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Northern District West-side Set	Commercial	841	41	0.0	0.0	22.0	0.0	41.5	0.0	36.5	0.0	0.0	0.0
Central District Drift	Commercial	1,124	39	0.0	2.6	30.8	0.0	15.4	2.5	48.7	0.0	0.0	0.0
Central District West-side Set	Commercial	2,015	330	0.0	0.0	19.7	0.0	38.1	0.0	40.7	0.3	0.6	0.6
Kalgin Island Set	Commercial	1,519	32	0.0	0.0	18.8	0.0	6.2	0.0	71.9	0.0	3.1	0.0
Salamatof Beach Set	Commercial	2,249	107	0.0	0.9	6.6	0.0	8.4	0.0	81.3	0.0	2.8	0.0
Kalifonsky Beach Set	Commercial	3,646	308	0.0	1.9	13.6	0.3	21.4	0.3	55.6	1.0	3.3	2.6
Cohoe/Ninilchik Beach Set	Commercial	9,148	443	0.2	1.1	18.5	0.0	19.9	0.2	59.5	0.0	0.4	0.2
Tyonek[2]	Subsistence	2,755	2,368	0.0	0.0	25.9	0.0	39.2	0.0	34.4	0.0	0.5	0.0

[1] Source: Age information summarized from original age-weight-length data forms. Harvest numbers taken from Alaska Department of Fish and Game fish ticket summaries taken from files on the University of Alaska Honeywell computer system.

[2] Source: Browning, J. 1984a. Tyonek subsistence salmon fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-3.

Table 9. Age composition summary of chinook salmon harvested by sport fisheries in Upper Cook Inlet in 1983[1].

Fishery	Numbers of Fish Harvested	Sample Size	Percent Composition by Brood Year and Age Group										
			1980		1979	1978			1977		1976		
			0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Other[3]
Kenai River[1]													
Early Run	6,360	70	0.0	0.0	7.1	0.0	14.3	0.0	62.9	4.3	4.3	7.1	
Late Run	9,174	80	0.0	0.0	3.8	0.0	5.1	0.0	86.2	0.0	2.4	2.5	
Susitna River[2]													
Clear Creek	682	129	0.0	0.0	26.4	0.0	34.8	0.0	38.8	0.0	0.0	0.0	
Willow Creek	398	295	0.0	0.0	11.2	0.0	26.8	0.0	59.7	0.0	2.3	0.0	
Montana Creek	305	222	0.0	0.0	71.6	0.0	24.4	0.0	4.0	0.0	0.0	0.0	
Alexander Creek	1,039	202	0.0	0.0	24.3	0.0	53.4	0.0	22.3	0.0	0.0	0.0	
Deshka River	3,955	522	0.0	0.2	21.0	0.0	61.0	0.0	17.8	0.0	0.0	0.0	
Lake Creek	1,888	343	0.0	0.3	21.3	0.0	22.1	0.0	55.4	0.0	0.6	0.3	
Peters/Martin Ck	114	41	0.0	0.0	4.9	0.0	34.2	0.0	58.5	0.0	2.4	0.0	
Talachulitna River	273	67	0.0	1.5	8.9	0.0	46.3	0.0	43.3	0.0	0.0	0.0	
Little Susitna River[2]	847	228	0.0	0.0	20.2	0.0	37.3	0.0	42.1	0.0	0.4	0.0	
Chuitna River[2]	797	160	0.0	0.6	17.5	0.0	30.0	0.0	51.9	0.0	0.0	0.0	
Anchor River[1]	1,206	75	0.0	0.0	0.0	0.0	30.7	0.0	69.3	0.0	0.0	0.0	
Ninilchik River[1]	808	58	0.0	0.0	5.2	0.0	36.2	0.0	58.6	0.0	0.0	0.0	
Deep Creek[1] (freshwater)	986	117	0.0	0.0	6.8	0.0	26.5	0.0	66.7	0.0	0.0	0.0	
Deep Creek Marine[1] (16 May - 26 June)	1,000	83	3	3	9.6	3	37.3	3	44.7	3	0.0	3	8.4
Deep Creek Marine[1] (27 Jun - 31 Jul)	1,707	95	3	3	3.2	3	8.4	3	81.1	3	5.2	3	2.1

-Continued-

Table 9. Age composition summary of chinook salmon harvested by sport fisheries in Upper Cook Inlet in 1983[1].

[1] Source: Hammarstrom, S. and L. Larson. 1984. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25(G-II-L) 1-39.

[2] Source: SPSS computer printouts provided by Kelly Hepler. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska.

[3] The "other" age group represents all ages other than 1.2, 1.3, 1.4, and 1.5. Hammarstrom (1984) did not break out the other age groups.

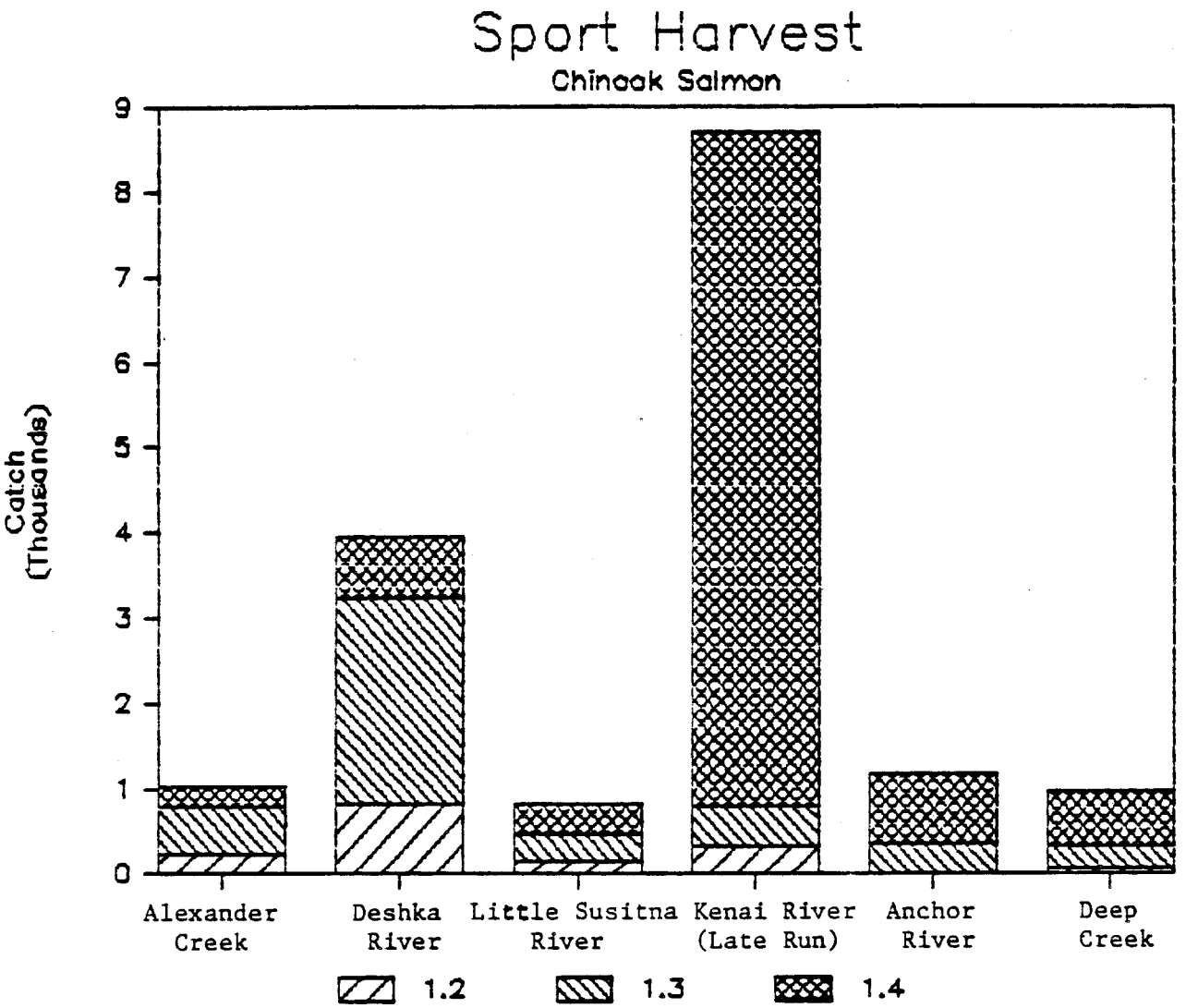

Figure 7. Numbers of age 1.2, age 1.3, and age 1.4 chinook salmon harvested by sport fisheries in selected rivers in Upper Cook Inlet in 1983.

Table 10. Age composition summary of chinook salmon escapement in Upper Cook Inlet in 1983.

				Percent Composition by Brood Year and Age Group										
				1980		1979		1978			1977		1976	
River System	Method of Enumeration	Escapement	Sample Size	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Kenai River[1] (Late Run)	Mark-Recapture	30,516[2]	1,084	0.0	0.4	0.0	5.8	0.2	10.3	0.0	79.1	0.1	3.9	0.2
Quartz Creek[3] (Kenai River)	Weir	351	56	0.0	0.0	0.0	1.8	0.0	14.3	0.0	80.3	0.0	3.6	0.0
Crooked Creek[4] (Kasilof River)	Weir	4,305[5]	572	48.4	0.4	0.6	9.0	21.7	9.6	0.0	10.3	0.0	0.0	0.0

[1] Source: Age information summarized from original age-weight-length data forms provided by Steve Hammarstrom Alaska Department of Fish and Game, Sport Fish, Soldotna, Alaska. Samples were taken with gillnets, therefore age information could be biased due to gillnet selectivity.

[2] Estimate represents total in river run from 2 July through 31 July. An estimated 9,174 chinook salmon were harvested by the sport fishery during this time, therefore approximately 21,342 chinook salmon escaped to spawn.

[3] Source: Age information summarized from original age-weight-length data forms provided by David Litchfield, Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement, and Development Division, Soldotna, Alaska.

[4] Source: Age information summarized from original age-weight-length data forms provided by David Waite, Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement, and Development Division, Soldotna, Alaska.

[5] The escapement figure does not include small chinook salmon (51 cm). Small chinook salmon were not sampled for age-weight-length data, therefore they were not included when expanding numbers of fish by age proportion.

Table 11. Age composition summary of coho salmon harvested by commercial and sport fisheries in Upper Cook Inlet in 1983.

Location	Type	Numbers of Fish Harvested	Sample Size	Percent Composition by Brood Year and Age Group		
				1980	1979	1978
				1.1	2.1	3.1
Northern District[1] West-side Set	Commercial Catch	42,089	450	22.0	74.0	4.0
Central District[1] Drift	Commercial Catch	326,962	2,908	19.2	74.1	6.7
Central District[1] West-side Set	Commercial Catch	53,696	1,580	15.0	79.7	5.3
Central District[1] East-side Set	Commercial Catch	37,666	1,121	14.0	73.8	12.2
Little Susitna[2]	Sport Catch	2,835	99	9.1	90.9	0.0
Anchor River[3]	Sport Catch	1,395	31	12.9	83.9	3.2

[1] Source: Age information summarized from original age-weight-length data forms. Harvest numbers taken from Alaska Department of Fish and Game fish ticket summaries taken from files on the University of Alaska Honeywell computer system.

[2] Source: Bentz, R. 1984. Little Susitna River coho salmon life history and angler use studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-B): 38-63.

[3] Source: Wallis, J. and S. Hammarstrom. 1984. Kenai Peninsula/Lower Cook Inlet angler use and stock assessment studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-C). 33 pp.

Table 12. Age composition summary of coho salmon escapement in Upper Cook Inlet in 1983.

System	Estimated Escapement	Sample Size	Percent Composition by Brood Year and Age Group						
			1980		1979			1978	
			1.1	2.0	1.2	2.1	3.0	2.2	3.1
Susitna River									
Susitna Station [1]	11,729	235	26.7	0.0	0.0	67.2	0.0	0.0	6.1
Yentna Station [2]	8,867	311	14.4	1.6	0.3	79.2	1.0	0.0	3.5
Sunshine Station [2]	15,171	516	35.8	0.0	0.2	63.2	0.0	0.0	0.8
Talkeetna Station [2]	2,399	231	39.5	0.0	0.4	60.1	0.0	0.0	0.0
Curry Station [2]	761	47	46.8	0.0	0.0	53.2	0.0	0.0	0.0
Crooked Creek [3] (Kasilof River)	1,114	39	2.5	0.0	0.0	36.0	0.0	2.5	59.0
Fish Creek [4]	2,342	202	16.8	0.0	0.0	76.2	0.0	0.0	7.0
Big River [5]	No estimate	297	13.5	0.0	0.0	83.1	0.0	0.0	3.4

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

[2] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

[3] Source: Waite, D. March 1984. Personal communication. Alaska Department of Fish and Game. Fisheries Rehabilitation, Enhancement, and Development Division. Soldotna, Alaska.

[4] Source: Age proportions taken from original age-weight-length data forms provided by Robert Chlupach. Alaska Department of Fish and Game. Fisheries Rehabilitation, Enhancement, and Development Division. Big Lake, Alaska.

[5] Source: Age proportions taken from original age-weight-length data forms provided by Patrick Marcusson, Cook Inlet Aquaculture Association. Soldotna, Alaska.

Crooked Creek where age 3.1 fish comprised 59% of the sample. Detailed information on age, sex, and size characteristics of catches and escapements of coho salmon are documented in Appendix E.

Chum Salmon:

Chum salmon harvested by the drift fishery and those escaping to the Susitna River were mostly age 0.3 and 0.4 fish (Table 13). The percentages of age 0.3 and 0.4 fish were similar for the drift harvest (57% age 0.3 and 41% age 0.4) and for the escapement at Susitna Station (55% age 0.3 and 45% age 0.4). The percentages of age 0.4 chum salmon increased from lower to upper river stations along the Susitna River (45% at Susitna Station, 51% at Yentna Station, 58% at Sunshine Station, 69% at Talkeetna Station, and 72% at Curry Station) (Figure 8). Age, sex, and size data are reported in detail for chum salmon in Appendix F.

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Table 13. Age composition summary of chum salmon commercial catch and escapement in Upper Cook Inlet in 1983.

Location	Type	Harvest or Escapement	Number of Samples	Percent Composition by Brood Year and Age Group			
				1980	1979	1978	1977
				0.2	0.3	0.4	0.5
Central District[1] Drift	Commercial Catch	1,044,644	4,126	2.1	56.7	41.0	0.2
Susitna Station[2]	Escapement	7,602	131	0.0	55.0	45.0	0.0
Yentna Station[3]	Escapement	10,802	553	2.2	46.1	51.4	0.3
Sunshine Station[3]	Escapement	265,775	1,043	0.3	40.0	58.5	1.2
Talkeetna Station[3]	Escapement	50,370	620	0.8	30.3	68.7	0.2
Curry Station[3]	Escapement	21,089	456	0.0	27.9	72.1	0.0

[1] Source: Age information was summarized from the original age-weight-length data forms.

[2] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

[3] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

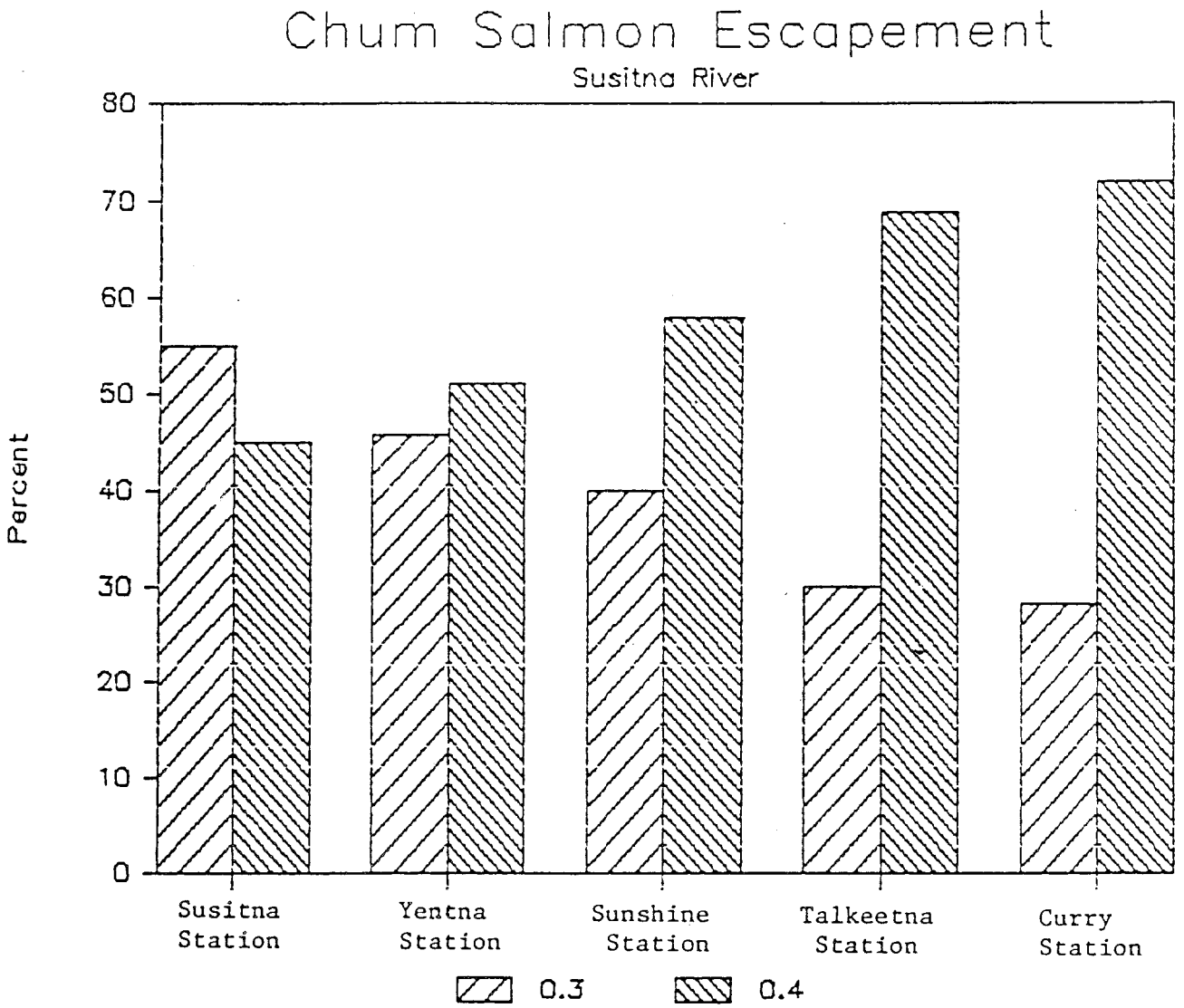

Figure 8. Percent composition of age 0.3 and age 0.4 chum salmon escaping into the Susitna River in Upper Cook Inlet in 1983.

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APPENDIX A

Catch and Effort Data for the Commercial, Subsistence, and Personal Use Fisheries

Appendix Table A-1. Commercial catch and effort of salmon in the Northern District east-side set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
6/27	25	12	41	564	3	0	0	608
7/01	29	12	32	1,433	9	0	5	1,479
7/04	29	12	5	1,729	22	1	21	1,778
7/08	27	12	3	730	43	2	15	793
7/11	30	12	2	1,822	32	1	15	1,872
7/15	48	12	1	14,620	663	123	50	15,457
7/18	66	12	2	24,221	1,905	383	181	26,692
7/20	41	12	1	4,367	216	22	86	4,692
7/22	38	12	0	6,151	199	19	66	6,435
7/25	28	12	1	3,326	190	82	114	3,713
7/29	25	12	0	1,051	31	10	27	1,119
8/01	27	12	0	2,293	130	18	16	2,457
8/05	28	12	1	2,437	2,339	1,646	153	6,576
8/07	25	15	1	1,221	513	77	81	1,893
8/08	13	12	0	351	161	14	23	549
8/12	16	12	1	373	1,367	118	0	1,859
8/15	22	12	0	338	1,435	16	1	1,790
8/19	13	12	1	79	483	22	0	585
8/22	16	12	0	41	1,369	169	0	1,579
8/26	14	12	0	15	207	7	1	230
8/29	14	12	0	32	284	30	0	346
9/02	5	12	0	3	109	3	0	115
9/05	5	12	0	7	68	2	0	77
Total			92	67,204	11,778	2,765	855	82,694

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-2. Commercial catch and effort of salmon in the Northern District west-side set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
6/27	27	12	150	29	1	0	0	180
7/01	36	12	254	357	17	15	2	645
7/04	44	12	123	483	101	1	6	714
7/08	50	12	67	280	351	0	6	704
7/11	61	12	32	1,286	823	107	34	2,282
7/15	114	12	29	23,090	7,196	8,611	813	39,739
7/18	149	12	50	47,961	17,416	6,322	4,077	75,826
7/20	132	12	37	15,378	3,450	1,089	2,723	22,677
7/22	119	12	24	15,424	3,699	899	4,547	24,593
7/25	103	12	23	6,845	3,247	946	4,485	15,546
7/29	69	12	13	2,842	1,066	1,282	1,820	7,023
8/01	59	12	34	1,967	334	249	1,621	4,205
8/05	43	12	2	829	3,271	5,038	472	9,612
8/08	9	12	0	90	178	48	25	341
8/12	20	12	0	56	263	1,080	84	1,483
8/15	18	12	0	56	239	463	25	783
8/19	9	12	2	19	153	264	8	446
8/22	9	12	1	18	236	109	0	364
8/26	3	12	0	5	48	33	1	87
Total			841	117,015	42,089	26,556	20,749	207,250

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-3. Commercial catch and effort of salmon in the Central District drift net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
6/27[1]	294	12	66	21,621	447	1,367	44	23,545
7/01	461	12	189	58,278	2,555	16,392	153	77,567
7/04	533	12	125	162,872	7,424	29,765	146	200,332
7/06[2]	280	18	182	65,568	2,054	8,779	30	76,613
7/08	556	12	58	306,289	14,019	60,691	128	381,185
7/11	569	12	87	336,053	20,126	58,730	311	415,307
7/13[3]	559	12	49	295,631	26,227	53,841	729	376,477
7/15	563	12	50	376,919	34,209	60,609	1,909	473,696
7/18[4]	551	15	21	292,408	32,824	66,526	2,656	394,435
7/20[4]	427	18	22	303,631	35,697	103,626	3,479	446,455
7/21[4]	499	24	36	333,277	26,253	61,284	3,605	424,455
7/22[4]	530	18	34	217,310	18,664	40,192	3,455	279,655
7/23[5]	202	17	38	58,116	3,305	6,682	990	69,131
7/24[5]	227	17	57	44,811	2,201	7,097	1,174	55,340
7/25[4]	499	12	30	101,930	18,089	96,750	2,416	219,215
7/26[5]	271	12	13	38,527	2,839	14,895	1,449	57,723
7/27[5]	255	12	8	59,528	4,408	21,289	630	85,863
7/28[5]	232	12	8	30,412	2,709	14,283	569	47,981
7/29[4]	516	12	12	74,230	23,371	99,512	1,049	198,174
8/01[4]	476	12	12	36,344	19,357	102,427	1,113	159,253
8/05[6]	389	12	9	4,843	11,177	59,318	444	75,791
8/08[6]	230	12	3	2,675	6,205	49,708	99	58,690
8/12[4]	91	12	9	397	694	2,788	7	3,895
8/15	63	12	5	215	3,653	4,955	21	8,849
8/19[7]	31	12	0	58	2,905	1,761	8	4,732
8/22[7]	17	12	1	14	2,652	978	11	3,656
8/26[7]	10	12	0	33	1,325	245	1	1,604
8/29[7]	6	12	0	11	828	75	2	916
9/02[7]	4	12	0	3	421	76	0	500
9/05[7]	3	12	0	2	178	0	0	180
9/12[7]	2	12	0	1	146	3	0	150
Total			1,124	3,222,007	326,962	1,044,644	26,628	4,621,365

-Continued-

[1] Drift gillnetting prohibited within 5 miles of the east-side beaches.

[2] Drift gillnetting only allowed between Cape Kasilof and Cape Ninilchik within within five miles of the beach.

[3] Drift gillnetting allowed in the portion of the Central District south of a line from Clam Gulch Tower to the southern tip of Kalgin Island to Harriet Point.

[4] Drift gillnetting allowed in all portions of the Central District except Chinitna Bay.

Appendix Table A-3. Commercial catch and effort of salmon in the Central District drift net fishery in 1983 (continued).

[5] Drift gillnetting allowed east of a line from the East Foreland to Cape Ninilchik.

[6] Drift gillnetting allowed in all portions of the Central District except Chinitna Bay and within five miles of the eastside.

[7] Drift gillnetting allowed in all portions of the Central District except within five miles of the eastside.

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-4. Commercial catch and effort of salmon in the Central District west-side set net fishery in 1983[1].

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
6/17[2]	29	12	631	1,013	0	0	0	1,644
6/20[2]	24	12	297	1,040	0	0	0	1,337
6/24[2]	31	12	446	2,200	14	6	5	2,671
6/27	38	12	178	4,138	56	32	0	4,404
7/01	38	12	120	2,901	156	134	6	3,317
7/04	38	12	74	3,150	360	326	28	3,938
7/08	24	12	26	2,297	313	248	17	2,901
7/11	33	12	17	2,035	656	1,190	10	3,908
7/13[2]	32	18	43	2,714	1,131	475	35	4,398
7/14[2]	11	24	13	557	203	80	8	861
7/15[3]	40	24	34	4,506	1,811	1,764	58	8,173
7/16[2]	18	24	10	2,977	585	89	8	3,669
7/17[2]	22	24	17	3,685	1,473	214	17	5,406
7/18[4]	51	18	15	8,193	2,812	1,811	101	12,932
7/19[5]	4	6	3	739	490	142	7	1,381
7/20[5]	51	24	24	6,814	3,152	1,263	213	11,466
7/21[5]	32	24	9	3,878	3,005	437	212	7,541
7/22[6]	53	24	18	6,279	5,496	1,798	385	13,976
7/23[2]	21	24	3	1,547	1,148	348	27	3,073
7/24[2]	13	24	1	844	1,100	363	6	2,314
7/25[4]	69	18	8	3,656	5,651	2,521	172	12,008
7/29	42	12	4	2,723	2,801	2,841	245	8,614
8/01[5]	43	12	17	1,869	4,000	2,479	264	8,629
8/05[5]	27	12	2	783	2,253	2,200	10	5,248
8/08[5]	21	12	2	281	876	1,170	6	2,335
8/12[5]	23	12	1	542	2,051	1,346	7	3,947
8/15	33	12	1	256	2,799	2,416	21	5,493
8/19	22	12	0	158	3,043	2,239	6	5,446
8/22	15	12	0	67	1,461	818	4	2,350
8/26	8	12	0	88	1,371	313	6	1,778
8/29	11	12	1	32	1,639	406	2	2,080
9/02	9	12	0	22	1,277	155	0	1,454
9/05	6	12	0	14	513	58	0	585
Total			2,015	71,998	53,696	29,682	1,886	159,277

-Continued-

[1] The Central District west-side is comprised of three subdistricts: Western, Kustatan, and Chinitna Bay.

[2] Set gillnetting allowed in the Western subdistrict only.

[3] Set gill nets in the Western subdistrict fished from 0000-2400, other west-sdie subdistricts fished from 0600-1800.

[4] Set gill nets in the Western subdistrict fished from 0000-1800, other west-side subdistricts fished from 0600-1800.

Appendix Table A-4. Commercial catch and effort of salmon in the Central District west-side set net fishery in 1983[1] (continued).

[5] Set gillnetting allowed in all west-side subdistricts except Chinitna Bay.

[6] Set gill nets in the Western subdistrict fished from 0000-2400, set gill nets in the Kustatan subdistrict fished from 0000-1800, set gill nets in Chinitna Bay fished from 0600-1800.

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-5. Commercial catch and effort of salmon in the Kalgin Island set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
6/27	20	12	1,077	8,962	53	26	1	10,119
7/01	22	12	75	3,965	339	33	2	4,414
7/04	16	12	28	867	177	4	17	1,093
7/08	17	12	19	2,081	394	20	5	2,519
7/11	19	12	80	2,732	1,374	81	10	4,277
7/15	21	12	31	2,826	1,994	473	99	5,423
7/18	35	12	45	9,563	5,697	1,074	292	16,671
7/20	20	24	21	3,780	2,651	250	169	6,871
7/21	13	24	6	4,276	1,565	375	242	6,464
7/22	27	18	31	5,330	3,730	595	236	9,922
7/25	23	12	19	5,014	4,321	304	238	9,896
7/29	20	12	23	4,528	4,339	601	269	9,760
8/01	19	12	32	2,607	3,134	1,349	252	7,374
8/05	16	12	6	1,816	1,723	172	15	3,732
8/08	23	12	11	2,280	2,347	298	29	4,965
8/12	19	12	6	1,167	1,729	1,129	16	4,047
8/15	18	12	4	449	1,976	917	5	3,351
8/19	12	12	2	108	1,559	407	0	2,076
8/22	10	12	0	71	1,061	90	1	1,223
8/26	8	12	1	73	986	129	0	1,189
8/29	7	12	2	23	1,226	106	1	1,358
9/02	6	12	0	20	902	6	0	928
9/05	6	12	0	7	446	7	0	460
9/09	4	12	0	1	263	1	0	265
9/12	2	12	0	0	145	0	0	145
Total			1,519	62,546	44,131	8,447	1,899	118,542

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-6. Commercial catch and effort of salmon in the Salamatof Beach set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
7/01	44	12	149	3,239	23	4	5	3,420
7/04	42	12	107	1,499	25	6	13	1,650
7/08	34	12	88	1,162	40	0	17	1,307
7/11	52	12	105	3,946	187	27	22	4,287
7/15	98	12	132	43,271	552	106	30	44,091
7/17	69	9	16	35,047	577	105	36	35,781
7/18	171	24	153	89,771	1,153	636	213	91,926
7/19	95	24	154	36,210	950	143	518	37,975
7/20	96	24	122	35,787	672	17	337	36,935
7/21	94	24	383	40,801	1,434	121	272	43,011
7/22	104	24	144	37,382	1,175	76	317	39,094
7/23	109	24	88	44,800	853	133	246	46,120
7/24	112	24	76	54,098	1,303	627	312	56,416
7/25	68	24	101	19,599	562	111	306	20,679
7/26	48	24	82	5,396	201	24	193	5,896
7/27	55	24	54	8,575	536	16	226	9,407
7/28	40	24	63	5,610	348	4	116	6,141
7/29	54	18	68	9,643	423	14	134	10,282
8/01	40	12	36	5,845	476	4	108	6,469
8/10	42	12	86	4,453	1,127	18	14	5,698
8/12	33	12	31	1,848	897	88	0	2,864
8/15	20	12	11	806	324	10	5	1,156
Total			2,249	488,788	13,838	2,290	3,440	510,605

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-7. Commercial catch and effort of salmon in the Kalifonsky Beach set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
7/01	55	12	368	6,409	11	2	6	6,796
7/04	39	12	193	1,762	6	1	7	1,969
7/06	56	18	536	3,239	18	17	10	3,820
7/08	41	12	79	3,033	11	0	11	3,134
7/11	49	12	283	12,753	111	22	16	13,185
7/15	68	12	291	23,767	337	30	59	24,484
7/17	53	9	32	29,725	55	1	3	29,816
7/18	103	24	157	76,060	163	3	20	76,403
7/19	63	24	119	30,269	159	19	71	30,637
7/20	80	24	121	46,961	191	3	51	47,327
7/21	84	24	94	48,643	274	2	33	49,046
7/22	75	24	120	29,833	319	2	49	30,323
7/23	68	24	116	29,554	363	7	49	30,089
7/24	59	24	107	22,262	323	25	33	22,750
7/25	54	24	127	14,732	335	6	99	15,299
7/26	66	24	173	11,408	302	9	67	11,959
7/27	73	24	204	26,958	1,119	9	64	28,354
7/28	52	24	130	10,646	541	3	43	11,363
7/29	60	18	166	12,945	776	0	19	13,906
8/01	50	12	129	9,320	758	1	19	10,227
8/10	19	12	59	1,228	747	5	6	2,045
8/12	16	12	35	599	371	0	1	1,006
8/15	12	12	7	454	299	15	1	776
Total			3,646	452,560	7,589	182	737	464,714

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-8. Commercial catch and effort of salmon in the Cohoe/ Ninilchik Beach set net fishery in 1983.

Date	Numbers of Deliveries	Hours Fished	Chinook	Sockeye	Coho	Chum	Pink	Total
7/01	70	12	501	12,281	12	1	9	12,804
7/04	87	12	525	9,839	6	1	25	10,396
7/06	92	18	1,228	8,551	13	5	41	9,838
7/08	80	12	570	11,711	28	7	51	12,367
7/11	98	12	570	34,359	80	3	99	35,111
7/13	131	18	749	54,384	180	74	357	55,744
7/14	57	24	450	13,871	113	7	315	14,756
7/15	139	18	612	32,934	334	20	568	34,468
7/17	53	9	66	42,156	60	3	39	42,324
7/18	194	24	460	115,937	408	10	1,025	117,840
7/19	99	24	310	26,241	402	19	1,587	28,559
7/20	126	24	395	31,744	498	24	1,519	34,180
7/21	115	24	387	38,384	527	9	1,084	40,391
7/22	116	24	294	27,631	688	7	1,603	30,223
7/23	77	24	350	17,941	871	17	1,043	20,222
7/24	112	24	240	22,217	920	12	1,620	25,009
7/25	79	24	163	12,290	1,007	8	1,246	14,714
7/26	87	24	309	13,915	1,488	12	812	16,536
7/27	88	24	318	17,160	2,442	9	467	20,396
7/28	69	24	200	7,715	1,371	15	269	9,570
7/29	75	18	219	8,078	1,735	15	181	10,228
8/01	78	12	146	7,436	1,722	12	132	9,448
8/10	32	12	68	500	680	0	5	1,253
8/12	11	12	9	142	189	1	6	347
8/15	16	12	9	198	465	1	30	703
Total			9,148	567,615	16,239	292	14,133	607,427

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries fish ticket summaries taken from files on the University of Alaska Honeywell computer.

Appendix Table A-9. Estimated numbers of salmon harvested by the Tyonek subsistence fishery, Upper Cook Inlet, 1983[1].

Date	Number of Nets	Fathoms	Numbers of Fish: Chinook	Sockeye	Coho	Chum	Total
5/17	10	90	49	1			50
5/19	17	132	100	3			103
5/20	16	130	236	8			244
5/24	21	170	274	12			286
5/26	16	125	355	14			369
5/27	16	128	213	7			220
5/31	16	117	284	21			305
6/02	13	92	148	15			163
6/03	13	114	167	22			189
6/07	16	115	125	21			146
6/09	13	98	266	24			290
6/10	11	80	327	18			345
6/14	11	71	152	14			166
6/18	4	33	38	5			43
6/25	4	35	16				16
7/02	2	2	1		8		9
7/09	3	2		8	4		12
7/16	2	2		7	7		14
7/23	1	2			2		2
7/30	1	2			2		2
8/06	2	2			6		6
8/13	3	2		1	11	6	18
8/20	2	2			11		11
8/27	2	2	4		3		7
9/03	1	2			5		5
Total			2,755	201	59	6	3,021

[1] Source: Browning, J. 1984a. Tyonek subsistence fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-3.

[2] No estimates of fathoms of gear for fishing periods from 2 July through 3 September.

Appendix Table A-10. Estimated numbers of salmon harvested by the Kasilof River personal use gillnet fishery in Upper Cook Inlet in 1983[1].

Date	Number of Nets	Numbers of Fish		
		Chinook	Sockeye	Total
6/21	127	55	1,510	1,565
6/22	127	83	1,510	1,593
6/23	126	51	1,319	1,370
6/24	137	30	730	760
6/25	117	30	1,218	1,248
6/26	103	23	1,070	1,093
6/27	62	35	1,489	1,524
Total		307	8,846	9,153

[1] Source: Browning, J. 1984b. Kasilof River personal use gillnet fishery, 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-6.

APPENDIX B

Escapements to Upper Cook Inlet

Appendix Table B-1. Sonar counts by date and estimated species composition[1] at Susitna Station on the Susitna River, 1983.

Date	Total Counts	Numbers of Fish				
		Chinook	Sockeye	Coho	Chum	Pink
01-Jul	39	3	18	1	3	13
02-Jul	85	7	39	3	7	30
03-Jul	73	5	35	2	6	23
04-Jul	130	9	70	6	10	35
05-Jul	172	12	92	8	13	46
06-Jul	154	11	81	7	12	44
07-Jul	141	11	66	5	12	47
08-Jul	140	9	72	5	11	41
09-Jul	128	9	66	5	10	38
10-Jul	150	9	86	8	11	36
11-Jul	509	28	304	30	36	110
12-Jul	581	28	364	39	39	110
13-Jul	1,279	59	824	91	85	221
14-Jul	2,789	21	1,874	421	275	198
15-Jul	2,629	0	1,782	425	227	195
16-Jul	3,932	0	2,765	613	297	259
17-Jul	6,641	11	4,612	646	350	1,022
18-Jul	9,864	30	7,390	539	470	1,436
19-Jul	28,707	35	21,901	1,609	1,516	3,646
20-Jul	20,523	0	17,424	921	933	1,245
21-Jul	11,525	0	8,847	921	859	897
22-Jul	4,115	0	2,571	359	220	965
23-Jul	9,493	42	6,519	882	278	1,771
24-Jul	10,804	52	7,442	868	161	2,281
25-Jul	9,881	0	7,509	519	314	1,539
26-Jul	10,957	0	7,944	594	365	2,054
27-Jul	7,714	25	3,579	781	253	3,076
28-Jul	4,515	13	2,190	483	147	1,683
29-Jul	3,206	13	1,363	291	106	1,433
30-Jul	1,844	0	794	182	38	831
31-Jul	1,142	0	500	114	24	504
01-Aug	1,301	0	733	65	23	480
02-Aug	1,057	0	483	50	15	509
03-Aug	961	0	494	47	15	405
04-Aug	600	3	241	29	67	259
05-Aug	625	2	285	31	60	247
06-Aug	525	2	235	26	52	210
07-Aug	1,271	7	440	61	162	602
08-Aug	888	5	280	42	120	440
Total	161,090	461	112,314	11,729	7,602	28,981

[1] Sonar counts apportioned by fishwheel catches. Round-off error estimated (worst case) +/-1 fish per day.

Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

Appendix Table B-2. Sonar counts by date and estimated species composition[1] at Yentna River Station on the Susitna River, 1983.

Date	Total Counts	Numbers of Fish					
		Chinook	Sockeye	Coho	Chum	Pink	Misc
30-Jun	121	24	52	6	3	26	10
01-Jul	77	15	34	4	1	17	6
02-Jul	97	19	43	5	1	21	8
03-Jul	94	18	46	3	1	19	7
04-Jul	182	33	89	6	3	37	14
05-Jul	158	29	77	5	3	32	12
06-Jul	116	22	54	5	2	24	9
07-Jul	74	14	35	3	2	15	5
08-Jul	59	11	27	2	1	13	5
09-Jul	94	18	42	4	2	20	8
10-Jul	129	24	61	5	2	27	10
11-Jul	190	35	93	6	3	39	14
12-Jul	328	59	161	10	7	67	24
13-Jul	645	14	378	15	26	204	8
14-Jul	4,022	85	2,382	92	157	1,250	56
15-Jul	3,553	7	2,596	138	234	553	25
16-Jul	5,679	12	3,852	473	262	1,046	34
17-Jul	6,999	5	3,618	480	330	2,556	10
18-Jul	10,384	25	5,065	419	456	4,404	15
19-Jul	27,354	0	17,979	1,068	1,030	7,076	201
20-Jul	31,135	46	22,468	586	819	6,836	380
21-Jul	21,977	0	13;241	694	792	6,696	554
22-Jul	7,641	0	3,018	520	736	3,268	99
23-Jul	9,912	0	3,765	638	935	4,458	116
24-Jul	7,938	0	2,941	508	378	3,990	121
25-Jul	6,811	19	3,911	248	205	2,355	73
26-Jul	8,121	21	4,531	292	258	2,930	89
27-Jul	4,938	0	2,741	283	111	1,748	55
28-Jul	2,976	0	1,170	221	154	1,410	21
29-Jul	1,749	0	875	114	42	718	0
30-Jul	1,502	2	804	106	36	550	4
31-Jul	956	5	417	73	6	454	1
01-Aug	1,015	4	461	87	11	450	2
02-Aug	2,521	4	838	167	59	1,439	14
03-Aug	790	1	422	35	22	307	3
04-Aug	755	1	426	28	3	294	3
05-Aug	785	3	407	33	7	335	0
06-Aug	857	3	338	65	56	395	0
07-Aug	789	4	285	59	49	392	0
08-Aug	792	2	299	68	87	329	7
09-Aug	114	0	49	10	10	45	0
10-Aug	111	0	52	9	8	42	0
11-Aug	842	1	345	71	82	338	5

-Continued-

Appendix Table B-2. Sonar counts by date and estimated species composition[1] at Yentna River Station on the Susitna River, 1983 (continued).

Date	Total Counts	Numbers of Fish					
		Chinook	Sockeye	Coho	Chum	Pink	Misc
12-Aug	1,321	2	594	114	148	451	12
13-Aug	1,391	2	637	120	153	467	12
14-Aug	1,048	4	319	86	159	463	17
15-Aug	733	2	198	63	135	324	11
16-Aug	1,185	0	272	78	338	381	116
17-Aug	1,306	0	312	93	370	384	147
18-Aug	798	0	216	62	209	226	85
19-Aug	602	2	157	58	148	120	117
20-Aug	681	2	196	65	159	145	114
21-Aug	431	1	99	45	153	45	88
22-Aug	236	1	49	24	77	30	55
23-Aug	451	2	94	45	148	57	105
24-Aug	498	2	113	52	176	53	102
25-Aug	394	1	89	40	138	43	83
26-Aug	242	1	59	26	91	21	44
27-Aug	533	1	129	56	199	49	99
28-Aug	418	1	98	44	151	41	83
29-Aug	304	1	69	32	108	32	62
30-Aug	159	1	35	16	55	18	34
31-Aug	191	1	40	19	63	24	44
01-Sep	119	0	27	12	42	13	25
02-Sep	99	0	22	10	33	12	22
03-Sep	154	1	34	16	53	17	33
04-Sep	140	0	34	14	52	13	27
05-Sep	124	0	34	13	52	7	18
Total	188,940	613	104,414	8,867	10,802	60,661	3,583

[1] Sonar counts apportioned to species by fishwheel catches.

Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

Appendix Table B-3. Sonar counts by date and estimated species composition[1] at the Kenai River, 1983.

Date	Total Counts	Numbers of Fish		
		Chinook	Sockeye	Coho
22-Jun	436	0	434	2
23-Jun	472	0	470	2
24-Jun	445	0	443	2
25-Jun	605	0	602	3
26-Jun	424	0	422	2
27-Jun	596	0	593	3
28-Jun	598	0	595	3
29-Jun	411	0	409	2
30-Jun	420	0	419	1
01-Jul	316	0	315	1
02-Jul	230	0	229	1
03-Jul	281	0	280	1
04-Jul	229	0	228	1
05-Jul	215	0	214	1
06-Jul	299	0	298	1
07-Jul	211	0	210	1
08-Jul	216	0	215	1
09-Jul	367	0	366	1
10-Jul	1,338	0	1,335	3
11-Jul	2,472	0	2,463	9
12-Jul	2,994	0	2,983	11
13-Jul	12,585	0	12,538	47
14-Jul	27,677	0	27,586	91
15-Jul	56,290	0	56,160	130
16-Jul	42,674	0	42,674	0
17-Jul	34,916	0	34,916	0
18-Jul	88,218	0	88,155	63
19-Jul	80,952	0	80,952	0
20-Jul	81,497	0	81,497	0
21-Jul	44,845	0	44,845	0
22-Jul	18,914	0	18,914	0
23-Jul	10,889	46	10,660	184
24-Jul	12,828	64	12,506	258
25-Jul	7,457	23	7,344	90
26-Jul	10,648	38	10,459	151
27-Jul	2,406	5	2,381	20
28-Jul	4,502	16	4,424	62
29-Jul	3,978	11	3,925	42
30-Jul	2,406	7	2,372	27
31-Jul	5,823	14	5,751	57
01-Aug	9,802	20	9,703	79
02-Aug	6,381	19	6,288	74
03-Aug	2,142	6	2,113	23

-Continued-

Appendix Table B-3. Sonar counts by date and estimated species composition[1] at the Kenai River, 1983.

Date	Total Counts	Numbers of Fish		
		Chinook	Sockeye	Coho
04-Aug	9,390	14	9,319	57
05-Aug	19,059	58	18,771	230
06-Aug	8,266	22	8,156	88
07-Aug	3,714	9	3,672	34
08-Aug	4,005	8	3,966	31
09-Aug	2,404	7	2,368	29
10-Aug	2,024	7	1,781	236
11-Aug	1,929	6	1,721	202
12-Aug	975	2	900	73
Total	633,171	402	630,340	2,430

[1] Sonar counts apportioned by fishwheel catches. Round-off error estimated (worst case) +/-1 fish per day.

Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

Appendix Table B-4. Weir counts by date of sockeye salmon at Hidden Lakes on the Kenai River, 1983.

Date	Daily	Cumulative
21-Jul	224	224
22-Jul	595	819
23-Jul	729	1,548
24-Jul	1,290	2,838
25-Jul	378	3,216
26-Jul	712	3,928
27-Jul	720	4,648
28-Jul	167	4,815
29-Jul	32	4,847
30-Jul	858	5,705
31-Jul	10	5,715
01-Aug	165	5,880
02-Aug	11	5,891
03-Aug	70	5,961
04-Aug	34	5,995
05-Aug	292	6,287
06-Aug	1,120	7,407
07-Aug	611	8,018
08-Aug	646	8,664
09-Aug	62	8,726
10-Aug	459	9,185
11-Aug	406	9,591
12-Aug	122	9,713
13-Aug	204	9,917
14-Aug	429	10,346
15-Aug	177	10,523
16-Aug	25	10,548
17-Aug	101	10,649
18-Aug	72	10,721
19-Aug	576	11,297
Total	11,297	11,297

Source: Hauser, W. March 1985. Personal communication. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Anchorage, Alaska.

Appendix Table B-5. Weir counts by date and species at the Russian River, a tributary of the Kenai River, 1983[1].

Date	Sockeye	Coho	Chinook	Total
12-Jun	24			24
13-Jun	0			0
14-Jun	44			44
15-Jun	24			24
16-Jun	11			11
17-Jun	76			76
18-Jun	193			193
19-Jun	388			388
20-Jun	372			372
21-Jun	616			616
22-Jun	1,017			1,017
23-Jun	462			462
24-Jun	1,293			1,293
25-Jun	462			462
26-Jun	354			354
27-Jun	955			955
28-Jun	0			0
29-Jun	767			767
30-Jun	3,297			3,297
01-Jul	1,184			1,184
02-Jul	538			538
03-Jul	189			189
04-Jul	2,608			2,608
05-Jul	3,098			3,098
06-Jul	1,254			1,254
07-Jul	258			258
08-Jul	1			1
09-Jul	253			253
10-Jul	289			289
11-Jul	248			248
12-Jul	148			148
13-Jul	124			124
14-Jul	171			171
15-Jul	16			16
16-Jul	0			0
17-Jul	15			15
18-Jul	65			65
19-Jul	81			81
20-Jul	125			125
21-Jul	109			109
22-Jul	19			19
23-Jul	19			19
24-Jul	2			2
25-Jul	37			37
1st Run Total	21,206			21,206

-Continued-

Appendix Table B-5. Weir counts by date and species at the Russian River, a tributary of the Kenai River, 1983[1] (continued).

Date	Sockeye	Coho	Chinook	Total
26-Jul	42			42
27-Jul	134			134
28-Jul	762			762
29-Jul	1,056			1,056
30-Jul	90			90
31-Jul	559			559
01-Aug	2,374			2,374
02-Aug	822			822
03-Aug	2,091			2,091
04-Aug	2,116			2,116
05-Aug	5,324	6	6	5,336
06-Aug	1,902			1,902
07-Aug	1,297	5	3	1,305
08-Aug	4,073	3	7	4,083
09-Aug	1,804	14	8	1,826
10-Aug	593	9	3	605
11-Aug	1,210	20	10	1,240
12-Aug	390	2		392
13-Aug	481	11	9	501
14-Aug	145			145
15-Aug	146			146
16-Aug	1,242	12		1,254
17-Aug	382	2	3	387
18-Aug	495	5		500
19-Aug	199	1	1	201
20-Aug	70			70
21-Aug	488	3	1	492
22-Aug	355	5	1	361
23-Aug	50			50
24-Aug	447	5		452
25-Aug	138			138
26-Aug	321	11		332
27-Aug	105	1		106
28-Aug	684	8		692
29-Aug	268	9		277
30-Aug	325	11		336
31-Aug	255	10		265
01-Sep	81			81
02-Sep	119	12		131
03-Sep	91	4		95
04-Sep	56	12		68
05-Sep	87	30		117
06-Sep	70	64		134
2nd Run Total	33,739	275	52	34,066

-Continued-

Appendix Table B-5. Weir counts by date and species at the Russian River, a tributary of the Kenai River, 1983[1] (continued).

	Sockeye	Coho	Chinook	Total
1st Run Total	21,206	0	0	21,206
2nd Run	33,739	275	52	34,066
Total	300[2]	200[3]		500
Season Total	55,245	475	52	55,772

1 Source: Nelson, David. March 1985. Personal communication. Alaska Department of Fish and Game. Division of Sport Fish. Soldotna, Alaska.

2 Approximately 300 sockeye were below the weir when it was removed on 9/6. Late run escapement was therefore 34,039.

3 Approximately 200 coho were below the weir when it was removed on 9/6. Coho escapement was therefore 475.

Appendix Table B-6. Weir counts by date and species at Quartz Creek on the Kenai River, 1983.

Date	Chinook	Sockeye	Coho	Total
28-Jun	1	0	0	1
29-Jun	0	0	0	0
30-Jun	1	0	0	1
01-Jul	3	0	0	3
02-Jul	0	0	0	0
03-Jul	0	0	0	0
04-Jul	1	0	0	1
05-Jul	5	0	0	5
06-Jul	6	0	0	6
07-Jul	0	0	0	0
08-Jul	1	0	0	1
09-Jul	0	0	0	0
10-Jul	0	0	0	0
11-Jul	0	0	0	0
12-Jul	5	0	0	5
13-Jul	45	1	0	46
14-Jul		Weir	Closed	0
15-Jul		Weir	Closed	0
16-Jul		Weir	Closed	0
17-Jul		Weir	Closed	0
18-Jul	32	2	0	34
19-Jul	29	12	0	41
20-Jul	21	28	0	49
21-Jul	24	29	0	53
22-Jul	15	102	0	117
23-Jul	9	29	0	38
24-Jul	1	185	0	186
25-Jul	2	206	0	208
26-Jul	18	530	0	548
27-Jul	41	1,390	0	1,431
28-Jul	13	1,541	0	1,554
29-Jul	31	1,621	0	1,652
30-Jul	8	2,225	0	2,233
31-Jul	4	3,180	0	3,184
01-Aug	4	3,260	0	3,264
02-Aug	7	7,839	0	7,846
03-Aug	5	5,198	0	5,203
04-Aug	2	3,310	0	3,312
05-Aug	5	4,900	0	4,905
06-Aug	4	5,200	0	5,204

-Continued-

Appendix Table B-6. Weir counts by date and species at Quartz Creek on the Kenai River, 1983 (continued).

Date	Chinook	Sockeye	Coho	Total
07-Aug	0	3,778	0	3,778
08-Aug	0	2,449	0	2,449
09-Aug	0	2,560	1	2,561
10-Aug	2	3,235	8	3,245
11-Aug	0	1,500	1	1,501
12-Aug	2	2,373	6	2,381
13-Aug	1	1,664	5	1,670
14-Aug	1	1,608	7	1,616
15-Aug	0	616	10	626
16-Aug	0	877	12	889
17-Aug	0	938	4	942
18-Aug	1	960	27	988
19-Aug	0	465	10	475
20-Aug	1	339	5	345
21-Aug	0	300	19	319
22-Aug	0	13	0	13
23-Aug	0	479	43	522
24-Aug	0	332	4	336
25-Aug	0	334	5	339
26-Aug	0	79	8	87
27-Aug	0	394	7	401
28-Aug	0	450	31	481
29-Aug	0	474	8	482
30-Aug	0	777	31	808
31-Aug	0	371	22	393
01-Sep	0	554	4	558
02-Sep	0	811	35	846
03-Sep	0	336	4	340
04-Sep	0	533	15	548
05-Sep	0	247	4	251
06-Sep	0	316	7	323
07-Sep	0	302	4	306
08-Sep	0	520	4	524
09-Sep	0	424	2	426
10-Sep	0	427	1	428
11-Sep	0	158	14	172
12-Sep	0	176	0	176
13-Sep	0	48	0	48
14-Sep	0	115	134	249
15-Sep	0	0	0	0

-Continued-

Appendix Table B-6. Weir counts by date and species at Quartz Creek on the Kenai River, 1983 (continued).

Date	Chinook	Sockeye	Coho	Total
16-Sep	0	43	6	49
17-Sep	0	76	6	82
18-Sep	0	12	1	13
19-Sep	0	46	49	95
20-Sep	0	17	70	87
21-Sep	0	7	167	174
22-Sep	0	7	302	309
23-Sep	0	5	10	15
24-Sep	0	0	1	1
25-Sep	0	0	0	0
26-Sep	0	0	0	0
27-Sep	0	0	0	0
28-Sep	0	4	35	39
29-Sep	0	0	39	39
30-Sep	0	2	118	120
01-Oct	0	1	8	9
02-Oct	0	1	25	26
03-Oct	0	0	0	0
04-Oct	0	1	1	2
05-Oct	0	1	7	8
06-Oct	0	0	8	8
07-Oct	0	0	1	1
08-Oct	0	0	0	0
09-Oct	0	1	0	1
10-Oct	0	1	126	127
11-Oct	0	0	60	60
Total	351	73,345	1,542	75,238
Egg-Take	80	0	322	
Total Esc[1]	271	73,345	1,220	

[1] Also passed through the weir were 63 chum salmon, and 54 pink salmon. Approximately 120 coho salmon were below the weir when it was removed.

Source: Hauser, W. March 1985. Personal communication. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Anchorage, Alaska.

Appendix Table B-7. Sonar counts by date and estimated species composition[1] at the Kasilof River, 1983.

Date	Total Counts	Numbers of Fish			
		Chinook	Sockeye	Coho	Pink
11-Jun	292	27	265	0	0
12-Jun	413	38	375	0	0
13-Jun	403	37	366	0	0
14-Jun	318	29	289	0	0
15-Jun	476	44	432	0	0
16-Jun	507	47	460	0	0
17-Jun	524	48	476	0	0
18-Jun	578	53	525	0	0
19-Jun	614	57	557	0	0
20-Jun	580	54	526	0	0
21-Jun	506	47	459	0	0
22-Jun	643	60	583	0	0
23-Jun	853	79	774	0	0
24-Jun	522	48	474	0	0
25-Jun	388	35	353	0	0
26-Jun	384	36	348	0	0
27-Jun	462	8	451	0	3
28-Jun	694	13	677	0	4
29-Jun	1,040	19	1,014	0	6
30-Jun	4,422	67	4,332	0	22
01-Jul	9,067	0	9,018	0	49
02-Jul	2,480	0	2,467	0	13
03-Jul	4,874	48	4,779	0	48
04-Jul	5,229	53	5,123	0	53
05-Jul	1,950	22	1,906	0	22
06-Jul	2,159	39	2,051	0	70
07-Jul	1,960	39	1,865	0	56
08-Jul	1,661	33	1,582	0	46
09-Jul	3,398	74	3,241	0	83
10-Jul	6,917	120	6,567	0	230
11-Jul	4,529	112	4,387	0	31
12-Jul	6,266	158	6,066	0	42
13-Jul	11,206	283	10,848	0	75
14-Jul	15,096	401	14,594	0	100
15-Jul	10,635	269	10,294	0	72
16-Jul	7,389	238	7,090	0	60
17-Jul	25,057	504	24,315	25	214
18-Jul	20,691	444	20,178	0	68
19-Jul	3,470	102	3,350	5	13
20-Jul	2,427	165	2,175	2	87
21-Jul	4,309	268	3,882	0	158
22-Jul	4,335	247	3,942	0	148
23-Jul	2,532	226	2,227	0	79

-Continued-

Appendix Table B-7. Sonar counts by date and estimated species composition[1] at the Kasilof River, 1983 (continued).

Date	Total Counts	Numbers of Fish			
		Chinook	Sockeye	Coho	Pink
24-Jul	2,062	188	1,814	0	61
25-Jul	1,710	159	1,505	0	45
26-Jul	1,186	114	1,044	0	27
27-Jul	1,066	98	938	0	30
28-Jul	908	86	799	0	23
29-Jul	1,207	105	1,061	0	41
30-Jul	1,547	136	1,360	0	50
31-Jul	3,708	312	3,259	0	138
Total	185,650	5,889	177,463	32	2,267
[2]	32,808		210,271		

[1] Sonar counts apportioned by fishwheel catches. Round-off error estimated (worst case) +/-1 fish per day.

[2] Remainder of the run extrapolated based on normal run timing as follows: Prior to 11 June, 9,848 and after 31 July, 23,324.

Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

Appendix Table B-8. Weir counts by date of chinook salmon escapement into Crooked Creek on the Kasilof River in 1983[1].

Date	Daily Numbers of Chinook	Cumulative Numbers of Chinook
11-Jun	13	13
17-Jun	102	115
20-Jun	193	308
22-Jun	147	455
24-Jun	165	620
27-Jun	163	783
29-Jun	357	1,140
01-Jul	288	1,428
04-Jul	355	1,783
06-Jul	228	2,011
08-Jul	405	2,416
09-Jul	162	2,578
11-Jul	322	2,900
13-Jul	327	3,227
15-Jul	379	3,606
18-Jul	223	3,829
19-Jul	118	3,947
20-Jul	106	4,053
22-Jul	147	4,200
25-Jul	83	4,283
28-Jul	71	4,354
01-Aug	32	4,386
04-Aug	6	4,392
Total	4,392	4,392

[1] Source: Waite, D. 1984. Crooked Creek chinook salmon data report, 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Draft Report. In addition to the chinook salmon escapement, 1,114 coho salmon returned to the Crooked Creek weir in 1983 of which 664 were passed upstream and 450 were taken for eggs.

Appendix Table B-9. Sonar counts by date and estimated species composition[1] at the Crescent River, 1983.

Date	Total Counts	Numbers of Fish	
		Sockeye	Pink
01-Jul	12	12	0
02-Jul	14	14	0
03-Jul	28	28	0
04-Jul	152	152	0
05-Jul	1,521	1,518	3
06-Jul	2,042	2,034	8
07-Jul	2,469	2,462	7
08-Jul	2,856	2,849	7
09-Jul	1,762	1,760	2
10-Jul	1,766	1,763	3
11-Jul	2,754	2,749	5
12-Jul	3,780	3,770	10
13-Jul	5,408	5,396	12
14-Jul	6,674	6,657	17
15-Jul	4,936	4,923	13
16-Jul	3,650	3,641	9
17-Jul	2,387	2,382	5
18-Jul	3,842	3,834	8
19-Jul	5,563	5,549	14
20-Jul	5,320	5,307	13
21-Jul	4,655	4,644	11
22-Jul	3,232	3,226	6
23-Jul	2,806	2,801	5
24-Jul	2,951	2,944	7
25-Jul	2,134	2,131	3
26-Jul	2,327	2,318	9
27-Jul	2,394	2,384	10
28-Jul	1,814	1,808	6
29-Jul	2,075	2,067	8
30-Jul	3,150	3,139	11
31-Jul	2,757	2,748	9
Total	87,231	87,010	221
[2]	5,112	92,343	

[1] Sonar counts apportioned by fishwheel catches. Round-off error estimated (worst case) +/-1 fish per day.

[2] Remainder of run extrapolated based on normal run timing.

Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

Appendix Table B-10. Weir counts by date and species at Fish Creek, 1983.

Date	Sockeye	Coho	Total
05-Jul	0	0	0
06-Jul	0	0	0
07-Jul	0	0	0
08-Jul	0	0	0
09-Jul	0	0	0
10-Jul	0	0	0
11-Jul	0	0	0
12-Jul	1	0	1
13-Jul	6	0	6
14-Jul	220	0	220
15-Jul	267	0	267
16-Jul	441	4	445
17-Jul	257	2	259
18-Jul	141	5	146
19-Jul	1,346	3	1,349
20-Jul	2,276	0	2,276
21-Jul	11,487	4	11,491
22-Jul	19,120	11	19,131
23-Jul	10,806	9	10,815
24-Jul	8,327	2	8,329
25-Jul	10,731	26	10,757
26-Jul	6,680	26	6,706
27-Jul	8,221	20	8,241
28-Jul	5,254	11	5,265
29-Jul	4,996	1	4,997
30-Jul	3,480	2	3,482
31-Jul	1,412	3	1,415
01-Aug	2,874	20	2,894
02-Aug	4,245	14	4,259
03-Aug	839	6	845
04-Aug	5,017	10	5,027
05-Aug	3,145	15	3,160
06-Aug	283	4	287
07-Aug	913	7	920
08-Aug	74	0	74
09-Aug	1,882	5	1,887
10-Aug	903	53	956
11-Aug	675	35	710
12-Aug	12	0	12
13-Aug	218	6	224
14-Aug	325	7	332
15-Aug	78	22	100
16-Aug	347	16	363
17-Aug	263	8	271
18-Aug	203	23	226

-Continued-

Appendix Table B-10. Weir counts by date and species at Fish Creek, 1983 (continued).

Date	Sockeye	Coho	Total
19-Aug	184	25	209
20-Aug	12	4	16
21-Aug	96	34	130
22-Aug	74	17	91
23-Aug	156	69	225
24-Aug	188	103	291
25-Aug	74	117	191
26-Aug	38	61	99
27-Aug	102	67	169
28-Aug	82	102	184
29-Aug	6	16	22
30-Aug	20	42	62
Total	118,797	1,037	119,834
[1]		2,342	

[1] Weir was removed on 31 August. Creek was floated and an additional 1,305 coho salmon were counted.

Source: Chlupach, R. 1984. Evaluation of returning hatchery adult sockeye 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Project Report. Draft No. 2. 01/26/84. 20 pp.

Source: Chlupach, R. 1984. Evaluation of returning hatchery adult coho salmon 1983. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development. Project Report. Draft No. 2. 01/23/84. 21 pp.

Appendix Table B-11. Weir counts by date of sockeye salmon at Packers Lake, 1983[1].

Date	Daily	Cumulative
23-May	1	1
24-May	4	5
25-May	3	8
26-May	1	9
27-May	4	13
28-May	0	13
29-May	15	28
30-May	9	37
31-May	1	38
01-Jun	0	38
02-Jun	0	38
03-Jun	0	38
04-Jun	2	40
05-Jun	1	41
06-Jun	20	61
07-Jun	3	64
08-Jun	126	190
09-Jun	18	208
10-Jun	8	216
11-Jun	0	216
12-Jun	0	216
13-Jun	0	216
14-Jun	145	361
15-Jun	172	533
16-Jun	64	597
17-Jun	10	607
18-Jun	5	612
19-Jun	153	765
20-Jun	3	768
21-Jun	31	799
22-Jun	102	901
23-Jun	207	1,108
24-Jun	13	1,121
25-Jun	14	1,135
26-Jun	4	1,139
27-Jun	0	1,139
28-Jun	7	1,146
29-Jun	1	1,147
30-Jun	1	1,148
01-Jul	65	1,213
02-Jul	81	1,294
03-Jul	0	1,294
04-Jul	1	1,295
05-Jul	0	1,295
06-Jul	337	1,632

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Appendix Table B-11. Weir counts by date of sockeye salmon at Packers Lake, 1983[1] (continued).

Date	Daily	Cumulative
07-Jul	825	2,457
08-Jul	266	2,723
09-Jul	1,077	3,800
10-Jul	78	3,878
11-Jul	210	4,088
12-Jul	116	4,204
13-Jul	132	4,336
14-Jul	180	4,516
15-Jul	135	4,651
16-Jul	50	4,701
17-Jul	86	4,787
18-Jul	37	4,824
19-Jul	270	5,094
20-Jul	112	5,206
21-Jul	362	5,568
22-Jul	29	5,597
23-Jul	51	5,648
24-Jul	59	5,707
25-Jul	9	5,716
26-Jul	2	5,718
27-Jul	8	5,726
28-Jul	8	5,734
29-Jul	5	5,739
30-Jul	12	5,751
31-Jul	12	5,763
01-Aug	32	5,795
02-Aug	59	5,854
03-Aug	90	5,944
04-Aug	76	6,020
05-Aug	930	6,950
06-Aug	653	7,603
07-Aug	838	8,441
08-Aug	4,372	12,813
09-Aug	1,518	14,331
10-Aug	207	14,538
11-Aug	636	15,174
12-Aug	370	15,544
13-Aug	297	15,841
14-Aug	288	16,129
15-Aug	96	16,225
16-Aug	747	16,972
17-Aug	465	17,437
18-Aug	345	17,782
19-Aug	80	17,862
20-Aug	102	17,964

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Appendix Table B-11. Weir counts by date of sockeye salmon at Packers Lake, 1983[1] (continued).

Date	Daily	Cumulative
21-Aug	106	18,070
22-Aug	90	18,160
23-Aug	72	18,232
24-Aug	59	18,291
25-Aug	44	18,335
26-Aug	29	18,364
27-Aug	23	18,387
28-Aug	9	18,396
29-Aug	7	18,403
Total	18,403	18,403

[1] Weir was removed on 29 August. No coho salmon were counted into Packers Creek before the weir was removed.

Source: Marcusson, P. 1984a. Technical report Packers Lake project. Progress Report 1983. Cook Inlet Aquaculture Association.

Appendix Table B-12. Weir counts by date of sockeye salmon at Wolverine Creek, 1983.

Date	Daily	Cumulative
10-Jun	0	0
11-Jun	0	0
12-Jun	0	0
13-Jun	792	792
14-Jun	1	793
15-Jun	23	816
16-Jun	268	1,084
17-Jun	825	1,909
18-Jun	1,254	3,163
19-Jun	677	3,840
20-Jun	556	4,396
21-Jun	1,475	5,871
22-Jun	1,484	7,355
23-Jun	763	8,118
24-Jun	507	8,625
25-Jun	206	8,831
26-Jun	408	9,239
27-Jun	350	9,589
28-Jun	451	10,040
29-Jun	0	10,040
30-Jun	1,062	11,102
01-Jul	0	11,102
02-Jul	890	11,992
03-Jul	406	12,398
04-Jul	411	12,809
05-Jul	628	13,437
06-Jul	487	13,924
07-Jul	84	14,008
08-Jul	110	14,118
09-Jul	0	14,118
10-Jul	403	14,521
11-Jul	461	14,982
12-Jul	530	15,512
13-Jul	112	15,624
14-Jul	485	16,109
15-Jul	285	16,394
16-Jul	542	16,936
17-Jul	80	17,016
18-Jul	37	17,053
19-Jul	17	17,070
20-Jul	256	17,326
21-Jul	51	17,377
22-Jul	79	17,456
23-Jul	-4	17,452
24-Jul	0	17,452

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Appendix Table B-12. Weir counts by date of sockeye salmon at Wolverine Creek, 1983 (continued).

Date	Daily	Cumulative
25-Jul	23	17,475
26-Jul	18	17,493
27-Jul	23	17,516
28-Jul	62	17,578
29-Jul	101	17,679
30-Jul	0	17,679
31-Jul	61	17,740
01-Aug	43	17,783
02-Aug	31	17,814
03-Aug	96	17,910
04-Aug	175	18,085
05-Aug	58	18,143
06-Aug	46	18,189
Total	18,189	18,189

Source: Marcusson, P. 1984b. Technical report Big River Lake pre-ehancement investigation. Cook Inlet Aquaculture Association.

APPENDIX C

Age, Sex, and Size Data for Sockeye Salmon

Appendix Table C-1. Estimated age and sex composition by date of sockeye salmon in the Northern District east-side set net fishery in Upper Cook Inlet, 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
06/27-07/15 n=510	Males	Percent	0.0	0.0	0.8	44.3	0.0	0.0	2.4	2.2	0.2	0.8	0.0	50.7
		Numbers	0	0	164	9,261	0	0	492	450	41	164	0	10,572
	Females	Percent	0.0	0.0	0.0	42.5	0.0	0.0	2.5	3.7	0.0	0.6	0.0	49.3
		Numbers	0	0	0	8,892	0	0	532	779	0	123	0	10,326
	Combined Sexes	Percent	0.0	0.0	0.8	86.8	0.0	0.0	4.9	5.9	0.2	1.4	0.0	100.0
		Numbers	0	0	164	18,153	0	0	1,024	1,229	41	287	0	20,898
		Standard Error	0	0	82	313	0	0	200	218	41	108	0	
07/16-07/28 n=519	Males	Percent	0.8	0.6	0.6	41.6	0.4	0.0	9.6	3.3	0.2	1.1	0.0	58.2
		Numbers	293	220	220	15,842	147	0	3,667	1,247	73	440	0	22,149
	Females	Percent	0.0	0.0	0.2	33.3	0.0	0.2	5.4	1.9	0.2	0.6	0.0	41.8
		Numbers	0	0	73	12,689	0	73	2,054	733	74	220	0	15,916
	Combined Sexes	Percent	0.8	0.6	0.8	74.9	0.4	0.2	15.0	5.2	0.4	1.7	0.0	100.0
		Numbers	293	220	293	28,531	147	73	5,721	1,980	147	660	0	38,065
		Standard Error	146	127	146	725	104	73	598	371	104	218	0	
07/29-09/05 n=122	Males	Percent	0.0	3.3	0.0	26.2	0.0	0.0	7.5	1.6	0.0	1.6	0.0	40.2
		Numbers	0	270	0	2,162	0	0	608	135	0	135	0	3,310
	Females	Percent	0.0	0.0	0.8	45.9	0.0	0.0	10.7	1.6	0.0	0.8	0.0	59.8
		Numbers	0	0	68	3,782	0	0	878	135	0	68	0	4,931
	Combined Sexes	Percent	0.0	3.3	0.8	72.1	0.0	0.0	18.2	3.2	0.0	2.4	0.0	100.0
		Numbers	0	270	68	5,944	0	0	1,486	270	0	203	0	8,241
		Standard Error	0	133	68	336	0	0	288	133	0	116	0	
Total	Males	Percent	0.4	0.7	0.6	40.6	0.2	0.0	7.1	2.7	0.2	1.1	0.0	53.6
		Numbers	293	490	384	27,264	147	0	4,767	1,833	114	739	0	36,031
	Females	Percent	0.0	0.0	0.2	37.7	0.0	0.1	5.2	2.5	0.1	0.6	0.0	46.4
		Numbers	0	0	141	25,363	0	73	3,464	1,647	74	411	0	31,173
	Combined Sexes	Percent	0.4	0.7	0.8	78.3	0.2	0.1	12.3	5.2	0.3	1.7	0.0	100.0
		Numbers	293	490	525	52,627	147	73	8,231	3,480	188	1,150	0	67,204
		Standard Error	146	184	181	858	104	73	693	451	111	270	0	

[1] Source: Age information summarized from the original age-weight-length data forms.

Appendix Table C-2. Estimated age and sex composition by date of sockeye salmon in the Northern District west-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
06/27-07/14 n=163	Males	Percent	0.6	0.0	3.1	23.3	0.0	0.0	7.4	6.1	0.0	2.5	0.0	43.0
		Numbers	15	0	75	568	0	0	179	149	0	60	0	1,046
	Females	Percent	0.0	0.0	1.2	27.0	0.6	0.0	22.7	1.8	0.0	3.7	0.0	57.0
		Numbers	0	0	30	657	15	0	553	45	0	89	0	1,389
	Combined Sexes	Percent	0.6	0.0	4.3	50.3	0.6	0.0	30.1	7.9	0.0	6.2	0.0	100.0
		Numbers	15	0	105	1,225	15	0	732	194	0	149	0	2,435
		Standard Error	15	0	39	96	15	0	88	52	0	46	0	
07/15-07/19 n=344	Males	Percent	0.3	0.0	3.8	23.3	0.0	0.0	11.0	2.3	0.0	3.8	0.0	44.5
		Numbers	207	0	2,685	16,523	0	0	7,849	1,652	0	2,685	0	31,601
	Females	Percent	0.6	0.0	5.8	19.8	0.0	0.0	18.0	3.5	0.0	7.6	0.3	55.5
		Numbers	413	0	4,131	14,045	0	0	12,805	2,479	0	5,370	207	39,450
	Combined Sexes	Percent	0.9	0.0	9.6	43.1	0.0	0.0	29.0	5.8	0.0	11.4	0.3	100.0
		Numbers	620	0	6,816	30,568	0	0	20,654	4,131	0	8,055	207	71,051
		Standard Error	357	0	1,130	1,899	0	0	1,742	898	0	1,216	207	
07/20-08/26 n=287	Males	Percent	0.0	0.0	3.1	24.0	0.0	0.0	12.9	2.5	0.0	3.5	0.0	46.0
		Numbers	0	0	1,365	10,465	0	0	5,612	1,062	0	1,516	0	20,020
	Females	Percent	0.0	0.0	2.1	28.6	0.0	0.0	14.3	6.6	0.0	2.4	0.0	54.0
		Numbers	0	0	910	12,437	0	0	6,218	2,882	0	1,062	0	23,509
	Combined Sexes	Percent	0.0	0.0	5.2	52.6	0.0	0.0	27.2	9.1	0.0	5.9	0.0	100.0
		Numbers	0	0	2,275	22,902	0	0	11,830	3,944	0	2,578	0	43,529
		Standard Error	0	0	573	1,285	0	0	1,145	739	0	608	0	
Total	Males	Percent	0.2	0.0	3.6	23.5	0.0	0.0	11.7	2.4	0.0	3.6	0.0	45.0
		Numbers	221	0	4,125	27,556	0	0	13,640	2,863	0	4,262	0	52,667
	Females	Percent	0.4	0.0	4.[illegible]	23.2	0.0 2/	0.0	16.7	4.6	0.0	5.6	0.2	55.0
		Numbers	413	0	5,071	27,139	15	0	19,577	5,405	0	6,521	207	64,348
	Combined Sexes	Percent	0.6	0.0	7.9	46.7	0.0 2/	0.0	28.4	7.0	0.0	9.2	0.2	100.0
		Numbers	634	0	9,196	54,695	15	0	33,217	8,268	0	10,783	207	117,015
		Standard Error	357	0	1,267	2,295	15	0	2,087	1,164	0	1,360	207	

[1] Source: Age information summarized from the original age-weight-length data forms.

[2] Fish present, but represent less than 0.05% of total catch.

Appendix Table C-3. Estimated age and sex composition by date of sockeye salmon in the Upper Cook Inlet drift net fishery in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
06/27 n=639	Males	Percent	0.0	0.0	0.0	15.2	0.0	0.0	27.1	2.7	0.0	3.4	0.0	48.4
		Numbers	0	0	0	3,282	0	0	5,854	575	0	744	0	10,455
	Females	Percent	0.0	0.0	0.0	11.2	0.0	0.0	31.6	2.2	0.2	6.4	0.0	51.6
		Numbers	0	0	0	2,436	0	0	6,835	474	34	1,387	0	11,166
	Combined Sexes	Percent	0.0	0.0	0.0	26.4	0.0	0.0	58.7	4.9	0.2	9.8	0.0	100.0
		Numbers	0	0	0	5,718	0	0	12,689	1,049	34	2,131	0	21,621
		Standard Error	0	0	0	378	0	0	421	184	34	255	0	
07/01 n=631	Males	Percent	0.0	0.2	0.6	19.5	0.0	0.0	21.1	2.8	0.0	3.5	0.0	47.7
		Numbers	0	92	369	11,360	0	0	12,284	1,663	0	2,032	0	27,800
	Females	Percent	0.0	0.0	1.1	9.7	0.0	0.0	34.5	2.4	0.0	4.6	0.0	52.3
		Numbers	0	0	647	5,634	0	0	20,134	1,385	0	2,678	0	30,478
	Combined Sexes	Percent	0.0	0.2	1.7	29.2	0.0	0.0	55.6	5.2	0.0	8.1	0.0	100.0
		Numbers	0	92	1,016	16,994	0	0	32,418	3,048	0	4,710	0	58,278
		Standard Error	0	92	304	1,055	0	0	1,154	517	0	633	0	
07/04 n=636	Males	Percent	0.0	0.0	1.0	15.1	0.0	0.0	26.9	2.0	0.0	4.2	0.0	49.2
		Numbers	0	0	1,537	24,584	0	0	43,791	3,329	0	6,914	0	80,155
	Females	Percent	0.0	0.0	0.3	9.4	0.0	0.0	33.5	1.3	0.0	6.3	0.0	50.8
		Numbers	0	0	512	15,365	0	0	54,547	2,049	0	10,244	0	82,717
	Combined Sexes	Percent	0.0	0.0	1.3	24.5	0.0	0.0	60.4	3.3	0.0	10.5	0.0	100.0
		Numbers	0	0	2,049	39,949	0	0	98,338	5,378	0	17,158	0	162,872
		Standard Error	0	0	720	2,781	0	0	3,161	1,155	0	1,984	0	
07/06 n=423	Males	Percent	0.0	0.0	1.2	13.5	0.0	0.0	26.4	2.4	0.5	6.8	0.0	50.8
		Numbers	0	0	779	8,877	0	0	17,288	1,557	311	4,517	0	33,329
	Females	Percent	0.0	0.0	1.9	11.9	0.0	0.0	28.5	2.1	0.0	4.8	0.0	49.2
		Numbers	0	0	1,246	7,787	0	0	18,689	1,402	0	3,115	0	32,239
	Combined Sexes	Percent	0.0	0.0	3.1	25.4	0.0	0.0	54.9	4.5	0.5	11.6	0.0	100.0
		Numbers	0	0	2,025	16,664	0	0	35,977	2,959	311	7,632	0	65,568
		Standard Error	0	0	553	1,393	0	0	1,592	664	220	1,026	0	

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Appendix Table C-3. Estimated age and sex composition by date of sockeye salmon in the Upper Cook Inlet drift net fishery in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/08 n=617	Males	Percent	0.0	0.0	1.0	20.3	0.0	0.0	25.8	2.1	0.3	3.2	0.0	52.7
		Numbers	0	0	2,979	62,052	0	0	78,930	6,453	993	9,928	0	161,335
	Females	Percent	0.0	0.0	0.9	8.4	0.0	0.0	34.2	0.2	0.0	3.6	0.0	47.3
		Numbers	0	0	2,978	25,814	0	0	104,744	497	0	10,921	0	144,954
	Combined Sexes	Percent	0.0	0.0	1.9	28.7	0.0	0.0	60.0	2.3	0.3	6.8	0.0	100.0
		Numbers	0	0	5,957	87,866	0	0	183,674	6,950	993	20,849	0	306,289
		Standard Error	0	0	1,704	5,582	0	0	6,047	1,838	701	3,108	0	
07/11 n=621	Males	Percent	0.0	0.0	0.3	11.6	0.0	0.0	26.0	2.4	0.0	3.2	0.0	43.5
		Numbers	0	0	1,084	39,026	0	0	87,266	8,130	0	10,840	0	146,346
	Females	Percent	0.0	0.0	0.3	11.0	0.0	0.0	39.5	1.6	0.2	3.9	0.0	56.5
		Numbers	0	0	1,084	36,857	0	0	132,795	5,420	542	13,009	0	189,707
	Combined Sexes	Percent	0.0	0.0	0.6	22.6	0.0	0.0	65.5	4.0	0.2	7.1	0.0	100.0
		Numbers	0	0	2,168	75,883	0	0	220,061	13,550	542	23,849	0	336,053
		Standard Error	0	0	1,081	5,647	0	0	6,422	2,657	542	3,468	0	
07/13 n=642	Males	Percent	0.0	0.0	0.9	5.6	0.0	0.0	26.0	0.6	0.0	2.4	0.0	35.5
		Numbers	0	0	2,763	16,577	0	0	76,901	1,842	0	6,907	0	104,990
	Females	Percent	0.0	0.0	2.2	5.0	0.0	0.0	51.2	1.1	0.2	4.8	0.0	64.5
		Numbers	0	0	6,447	14,736	0	0	151,500	3,223	460	14,275	0	190,641
	Combined Sexes	Percent	0.0	0.0	3.1	10.6	0.0	0.0	77.2	1.7	0.2	7.2	0.0	100.0
		Numbers	0	0	9,210	31,313	0	0	228,401	5,065	460	21,182	0	295,631
		Standard Error	0	0	2,029	3,593	0	0	4,894	1,515	460	3,012	0	
07/15 n=648	Males	Percent	0.2	0.0	1.2	8.3	0.0	0.0	27.6	1.1	0.0	2.6	0.0	41.0
		Numbers	582	0	4,653	31,410	0	0	104,118	4,072	0	9,888	0	154,723
	Females	Percent	0.0	0.0	1.7	6.8	0.0	0.0	45.6	0.9	0.0	4.0	0.0	59.0
		Numbers	0	0	6,399	25,593	0	0	171,591	3,490	0	15,123	0	222,196
	Combined Sexes	Percent	0.2	0.0	2.9	15.1	0.0	0.0	73.2	2.0	0.0	6.6	0.0	100.0
		Numbers	582	0	11,052	57,003	0	0	275,709	7,562	0	25,011	0	376,919
		Standard Error	582	0	2,500	5,309	0	0	6,567	2,078	0	3,688	0	

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Appendix Table C-3. Estimated age and sex composition by date of sockeye salmon in the Upper Cook Inlet drift net fishery in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/18 n=597	Males	Percent	0.0	0.0	0.3	5.2	0.0	0.0	37.0	1.0	0.0	3.7	0.0	47.2
		Numbers	0	0	979	15,184	0	0	108,245	2,939	0	10,775	0	138,122
	Females	Percent	0.0	0.0	1.0	3.3	0.0	0.0	43.4	0.7	0.0	4.4	0.0	52.8
		Numbers	0	0	2,939	9,796	0	0	126,857	1,959	0	12,735	0	154,286
	Combined Sexes	Percent	0.0	0.0	1.3	8.5	0.0	0.0	80.4	1.7	0.0	8.1	0.0	100.0
		Numbers	0	0	3,918	24,980	0	0	235,102	4,898	0	23,510	0	292,408
		Standard Error	0	0	1,377	3,348	0	0	4,754	1,537	0	3,257	0	
07/20-07/21 n=645	Males	Percent	0.2	0.0	0.8	5.7	0.0	0.0	44.0	0.5	0.5	2.9	0.0	54.6
		Numbers	987	0	4,937	36,537	0	0	280,437	2,962	2,962	18,762	0	347,584
	Females	Percent	0.0	0.0	0.9	4.7	0.0	0.0	35.5	1.2	0.0	3.1	0.0	45.4
		Numbers	0	0	5,925	29,623	0	0	226,127	7,900	0	19,749	0	289,324
	Combined Sexes	Percent	0.2	0.0	1.7	10.4	0.0	0.0	79.5	1.7	0.5	6.0	0.0	100.0
		Numbers	987	0	10,862	66,160	0	0	506,564	10,862	2,962	38,511	0	636,908
		Standard Error	987	0	3,249	7,657	0	0	10,126	3,249	1,708	5,982	0	
07/22-07/23 n=632	Males	Percent	0.0	0.0	0.3	2.5	0.0	0.0	45.4	0.8	0.3	2.8	0.0	52.1
		Numbers	0	0	871	6,973	0	0	125,075	2,179	872	7,844	0	143,814
	Females	Percent	0.0	0.0	0.2	4.0	0.2	0.0	39.7	0.3	0.3	3.2	0.0	47.9
		Numbers	0	0	436	10,895	436	0	109,386	872	871	8,716	0	131,612
	Combined Sexes	Percent	0.0	0.0	0.5	6.5	0.2	0.0	85.1	1.1	0.6	6.0	0.0	100.0
		Numbers	0	0	1,307	17,868	436	0	234,461	3,051	1,743	16,560	0	275,426
		Standard Error	0	0	754	2,701	436	0	3,901	1,148	870	2,606	0	
07/24-07/25 n=603	Males	Percent	0.2	0.2	0.7	5.3	0.0	0.0	35.7	0.8	0.5	3.5	0.0	46.9
		Numbers	244	243	973	7,787	0	0	52,564	1,217	730	5,110	0	68,868
	Females	Percent	0.2	0.0	0.8	7.0	0.0	0.0	41.0	0.8	0.0	3.3	0.0	53.1
		Numbers	243	0	1,217	10,221	0	0	60,108	1,217	0	4,867	0	77,873
	Combined Sexes	Percent	0.4	0.2	1.5	12.3	0.0	0.0	76.7	1.6	0.5	6.8	0.0	100.0
		Numbers	487	243	2,190	18,008	0	0	112,672	2,434	730	9,977	0	146,741
		Standard Error	344	243	725	1,962	0	0	2,525	764	421	1,506	0	

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Appendix Table C-3. Estimated age and sex composition by date of sockeye salmon in the Upper Cook Inlet drift net fishery in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/26-07/27 n=611	Males	Percent	0.0	0.0	0.0	3.6	0.0	0.2	44.5	0.9	0.3	3.9	0.0	53.4
		Numbers	0	0	0	3,531	0	160	43,651	802	321	3,852	0	52,317
	Females	Percent	0.2	0.0	0.2	3.4	0.0	0.0	37.6	1.1	0.3	3.8	0.0	46.6
		Numbers	160	0	160	3,370	0	0	36,912	1,124	321	3,691	0	45,738
	Combined Sexes	Percent	0.2	0.0	0.2	7.0	0.0	0.2	82.1	2.0	0.6	7.7	0.0	100.0
		Numbers	160	0	160	6,901	0	160	80,563	1,926	642	7,543	0	98,055
		Standard Error	160	0	160	1,015	0	160	1,520	551	320	1,058	0	
07/28-09/12 n=596	Males	Percent	0.0	0.0	0.5	3.9	0.0	0.0	38.4	1.8	1.5	5.7	0.0	51.8
		Numbers	0	0	751	5,759	0	0	57,341	2,754	2,254	8,514	0	77,373
	Females	Percent	0.0	0.0	0.3	3.4	0.0	0.0	37.7	0.8	0.8	5.0	0.2	48.2
		Numbers	0	0	501	5,008	0	0	56,090	1,252	1,252	7,512	250	71,865
	Combined Sexes	Percent	0.0	0.0	0.8	7.3	0.0	0.0	76.1	2.6	2.3	10.7	0.2	100.0
		Numbers	0	0	1,252	10,767	0	0	113,431	4,006	3,506	16,026	250	149,238
		Standard Error	0	0	558	1,583	0	0	2,613	989	927	1,894	250	
Total	Males	Percent	0.1	0.0[2]	0.7	8.5	0.0	0.0[2]	33.9	1.2	0.3	3.3	0.0	48.0
		Numbers	1,813	335	22,675	272,939	0	160	1,093,745	40,474	8,443	106,627	0	1,547,211
	Females	Percent	0.0[2]	0.0	0.9	6.3	0.0[2]	0.0	39.7	1.0	0.1	4.0	0.0[2]	52.0
		Numbers	403	0	30,491	203,135	436	0	1,276,315	32,264	3,480	128,022	250	1,674,796
	Combined Sexes	Percent	0.1	0.0[2]	1.6	14.8	0.0[2]	0.0[2]	73.6	2.2	0.4	7.3	0.0[2]	100.0
		Numbers	2,216	335	53,166	476,074	436	160	2,370,060	72,738	11,923	234,649	250	3,222,007
		Standard Error	1,207	260	5,407	14,128	436	160	17,742	5,935	2,421	10,487	250	

[1] Source: Age information summarized from the original age-weight-length data forms.

[2] Fish present but represent less than 0.05% of the total catch.

Appendix Table C-4. Estimated age and sex composition by date of sockeye salmon in the Central District west-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
06/17-06/20 n=89	Males	Percent	0.0	0.0	0.0	9.0	0.0	0.0	24.7	11.2	0.0	7.9	0.0	52.8
		Numbers	0	0	0	185	0	0	507	231	0	161	0	1,084
	Females	Percent	0.0	0.0	0.0	13.5	0.0	0.0	23.6	6.7	0.0	3.4	0.0	47.2
		Numbers	0	0	0	277	0	0	484	138	0	70	0	969
	Combined Sexes	Percent	0.0	0.0	0.0	22.5	0.0	0.0	48.3	17.9	0.0	11.3	0.0	100.0
		Numbers	0	0	0	462	0	0	991	369	0	231	0	2,053
		Standard Error	0	0	0	91	0	0	109	84	0	69	0	
06/24-06/27 n=548	Males	Percent	0.0	0.0	0.0	7.7	0.0	0.0	23.7	9.3	0.0	6.4	0.0	47.1
		Numbers	0	0	0	486	0	0	1,503	590	0	405	0	2,984
	Females	Percent	0.2	0.0	0.0	8.7	0.0	0.0	31.2	6.2	0.0	6.6	0.0	52.9
		Numbers	12	0	0	555	0	0	1,978	393	0	416	0	3,354
	Combined Sexes	Percent	0.2	0.0	0.0	16.4	0.0	0.0	54.9	15.5	0.0	13.0	0.0	100.0
		Numbers	12	0	0	1,041	0	0	3,481	983	0	821	0	6,338
		Standard Error	12	0	0	100	0	0	135	98	0	91	0	
07/01-07/08 n=242	Males	Percent	0.0	0.0	0.0	21.1	0.0	0.0	25.2	0.4	0.4	0.8	0.0	47.9
		Numbers	0	0	0	1,760	0	0	2,105	34	34	69	0	4,002
	Females	Percent	0.0	0.0	0.0	10.3	0.0	0.0	36.4	4.1	0.0	1.3	0.0	52.1
		Numbers	0	0	0	862	0	0	3,036	345	0	103	0	4,346
	Combined Sexes	Percent	0.0	0.0	0.0	31.4	0.0	0.0	61.6	4.5	0.4	2.1	0.0	100.0
		Numbers	0	0	0	2,622	0	0	5,141	379	34	172	0	8,348
		Standard Error	0	0	0	250	0	0	262	112	34	76	0	

-Continued-

Appendix Table C-4. Estimated age and sex composition by date of sockeye salmon in the Central District west-side set net fishery in Upper Cook Inlet in 1983 (continued)[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/11-07/17 n=538	Males	Percent	0.2	0.0	0.0	7.4	0.0	0.0	20.2	12.5	0.2	9.5	0.0	50.0
		Numbers	31	0	0	1,224	0	0	3,337	2,052	31	1,562	0	8,237
	Females	Percent	0.0	0.0	0.7	5.6	0.0	0.0	25.1	7.8	0.2	10.6	0.0	50.0
		Numbers	0	0	122	919	0	0	4,134	1,286	31	1,745	0	8,237
	Combined Sexes	Percent	0.2	0.0	0.7	13.0	0.0	0.0	45.3	20.3	0.4	20.1	0.0	100.0
		Numbers	31	0	122	2,143	0	0	7,471	3,338	62	3,307	0	16,474
		Standard Error	31	0	61	239	0	0	354	286	43	285	0	
07/18 09/05 n=260	Males	Percent	0.0	0.0	0.0	9.6	0.0	0.0	29.6	10.4	0.4	10.8	0.0	60.8
		Numbers	0	0	0	3,729	0	0	11,486	4,028	149	4,177	0	23,569
	Females	Percent	0.0	0.0	0.0	5.0	0.0	0.0	20.0	4.6	0.0	9.6	0.0	39.2
		Numbers	0	0	0	1,940	0	0	7,757	1,790	0	3,729	0	15,216
	Combined Sexes	Percent	0.0	0.0	0.0	14.6	0.0	0.0	49.6	15.0	0.4	20.4	0.0	100.0
		Numbers	0	0	0	5,669	0	0	19,243	5,818	149	7,906	0	38,785
		Standard Error	0	0	0	851	0	0	1,205	861	149	971	0	
Total	Males	Percent	0.0[2]	0.0	0.0	10.3	0.0	0.0	26.3	9.6	0.3	8.9	0.0	55.4
		Numbers	31	0	0	7,384	0	0	18,939	6,934	214	6,374	0	39,876
	Females	Percent	0.0[2]	0.0	0.2	6.3	0.0	0.0	24.2	5.5	0.0[2]	8.4	0.0	44.6
		Numbers	11	0	122	4,552	0	0	17,389	3,953	31	6,064	0	32,122
	Combined Sexes	Percent	0.0[2]	0.0	0.2	16.6	0.0	0.0	50.5	15.1	0.3	17.3	0.0	100.0
		Numbers	42	0	122	11,936	0	0	36,328	10,887	245	12,438	0	71,998
		Standard Error	33	0	61	929	0	0	1,294	923	159	1,021	0	

[1] Source: Age information summarized from the original age-weight-length data forms.

[2] Fish present but represent less than 0.05% of total catch.

Appendix Table C-5. Estimated age and sex composition by date of sockeye salmon in the Kalgin Island set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
06/27-07/08 n=174	Males	Percent	0.0	0.0	1.1	12.6	0.0	0.0	16.7	8.6	0.0	10.4	0.6	50.0
		Numbers	0	0	182	2,007	0	0	2,646	1,369	0	1,642	91	7,937
	Females	Percent	0.0	0.0	0.6	12.6	0.0	0.0	25.9	4.6	0.0	6.3	0.0	50.0
		Numbers	0	0	91	2,007	0	0	4,106	730	0	1,004	0	7,938
	Combined Sexes	Percent	0.0	0.0	1.7	25.2	0.0	0.0	42.6	13.2	0.0	16.7	0.6	100.0
		Numbers	0	0	273	4,014	0	0	6,752	2,099	0	2,646	91	15,875
		Standard Error	0	0	157	525	0	0	597	409	0	450	91	
07/09-07/21 n=152	Males	Percent	0.0	0.0	0.0	14.5	0.0	0.0	24.3	8.6	0.0	7.9	0.0	55.3
		Numbers	0	0	0	3,355	0	0	5,642	1,982	0	1,830	0	12,809
	Females	Percent	0.0	0.0	0.0	3.9	0.0	0.0	23.7	8.6	0.0	8.5	0.0	44.7
		Numbers	0	0	0	915	0	0	5,489	1,982	0	1,982	0	10,368
	Combined Sexes	Percent	0.0	0.0	0.0	18.4	0.0	0.0	48.0	17.2	0.0	16.4	0.0	100.0
		Numbers	0	0	0	4,270	0	0	11,131	3,964	0	3,812	0	23,177
		Standard Error	0	0	0	731	0	0	942	710	0	699	0	
07/22-09/09 n=414	Males	Percent	0.7	0.0	0.7	9.4	0.0	0.0	29.5	10.9	0.2	3.9	0.0	55.3
		Numbers	170	0	170	2,213	0	0	6,923	2,554	57	908	0	12,995
	Females	Percent	0.0	0.0	0.5	7.5	0.0	0.0	24.6	7.7	0.3	4.1	0.0	44.7
		Numbers	0	0	114	1,759	0	0	5,788	1,816	57	965	0	10,499
	Combined Sexes	Percent	0.7	0.0	1.2	16.9	0.0	0.0	54.1	18.6	0.5	8.0	0.0	100.0
		Numbers	170	0	284	3,972	0	0	12,711	4,370	114	1,873	0	23,494
		Standard Error	98	0	126	433	0	0	576	450	80	313	0	
Total	Males	Percent	0.3	0.0	0.6	12.1	0.0	0.0	24.3	9.4	0.1	7.0	0.1	53.9
		Numbers	170	0	353	7,575	0	0	15,211	5,904	57	4,380	91	33,741
	Females	Percent	0.0	0.0	0.3	7.5	0.0	0.0	24.6	7.3	0.1	6.3	0.0	46.1
		Numbers	0	0	205	4,681	0	0	15,383	4,528	57	3,951	0	28,805
	Combined Sexes	Percent	0.3	0.0	0.9	19.6	0.0	0.0	48.9	16.7	0.2	13.3	0.1	100.0
		Numbers	170	0	558	12,256	0	0	30,594	10,432	114	8,331	91	62,546
		Standard Error	98	0	202	999	0	0	1,255	935	80	888	91	

[1] Source: Age information summarized from the original age-weight-length data forms.

Appendix Table C-6. Estimated age and sex composition by date of sockeye salmon in the Salamatof Beach set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/01-	Males	Percent	0.0	0.0	0.0	22.8	0.0	0.0	15.3	4.3	0.0	3.4	0.0	45.8
07/08		Numbers	0	0	0	1,344	0	0	900	255	0	202	0	2,701
n=439														
	Females	Percent	0.0	0.0	1.1	23.9	0.0	0.0	21.4	3.9	0.5	3.4	0.0	54.2
		Numbers	0	0	67	1,411	0	0	1,263	228	27	202	0	3,199
	Combined Sexes	Percent	0.0	0.0	1.1	46.7	0.0	0.0	36.7	8.2	0.5	6.8	0.0	100.0
		Numbers	0	0	67	2,755	0	0	2,164	484	27	403	0	5,900
		Standard Error	0	0	30	141	0	0	136	77	19	71	0	
07/11-	Males	Percent	0.0	0.0	0.5	7.0	0.0	0.0	35.1	1.0	0.3	3.0	0.0	46.9
07/18		Numbers	0	0	823	12,073	0	0	60,363	1,646	549	5,213	0	80,667
n=627														
	Females	Percent	0.3	0.0	0.8	9.6	0.2	0.0	38.1	1.0	0.2	3.0	0.0	53.1
		Numbers	549	0	1,372	16,463	274	0	65,576	1,646	274	5,213	0	91,368
	Combined Sexes	Percent	0.3	0.0	1.3	16.6	0.2	0.0	73.2	1.9	0.5	6.1	0.0	100.0
		Numbers	549	0	2,195	28,535	274	0	125,939	3,293	823	10,426	0	172,035
		Standard Error	388	0	772	2,558	274	0	3,045	942	474	1,641	0	
07/19-	Males	Percent	0.2	0.0	0.5	13.4	0.0	0.0	31.7	1.2	0.2	2.5	0.0	49.6
07/21		Numbers	186	0	559	15,102	0	0	35,797	1,305	186	2,797	0	55,933
n=605														
	Females	Percent	0.2	0.0	0.3	19.3	0.0	0.0	27.3	1.2	0.3	1.8	0.0	50.4
		Numbers	186	0	373	21,814	0	0	30,763	1,305	373	2,051	0	56,865
	Combined Sexes	Percent	0.3	0.0	0.8	32.7	0.0	0.0	59.0	2.3	0.5	4.3	0.0	100.0
		Numbers	373	0	932	36,916	0	0	66,560	2,610	559	4,848	0	112,798
		Standard Error	263	0	416	2,154	0	0	2,257	690	322	931	0	

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Appendix Table C-6. Estimated age and sex composition by date of sockeye salmon in the Salamatof Beach set net fishery in Upper Cook Inlet in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/22-07/24 n=627	Males	Percent	0.0	0.2	0.3	10.2	0.0	0.0	31.7	1.3	0.3	2.2	0.0	46.3
		Numbers	0	217	435	13,911	0	0	43,253	1,739	435	3,043	0	63,032
	Females	Percent	0.0	0.0	0.0	15.2	0.0	0.0	33.5	2.1	0.3	2.7	0.0	53.7
		Numbers	0	0	0	20,648	0	0	45,644	2,826	435	3,695	0	73,248
	Combined Sexes	Percent	0.0	0.2	0.3	25.4	0.0	0.0	65.2	3.3	0.6	4.9	0.0	100.0
		Numbers	0	217	435	34,559	0	0	88,897	4,564	869	6,738	0	136,280
		Standard Error	0	217	307	2,370	0	0	2,594	980	434	1,181	0	
07/25-08/15 n=607	Males	Percent	0.3	0.5	0.2	9.7	0.0	0.0	38.6	1.6	0.2	2.6	0.0	53.7
		Numbers	204	305	102	6,004	0	0	23,814	1,018	102	1,628	0	33,177
	Females	Percent	0.2	0.3	0.2	15.3	0.0	0.0	26.0	1.2	0.5	2.6	0.0	46.3
		Numbers	102	204	102	9,465	0	0	16,080	712	305	1,628	0	28,598
	Combined Sexes	Percent	0.5	0.8	0.3	25.0	0.0	0.0	64.6	2.8	0.7	5.3	0.0	100.0
		Numbers	305	509	204	15,469	0	0	39,894	1,730	407	3,257	0	61,775
		Standard Error	176	227	144	1,087	0	0	1,200	414	203	561	0	
Total	Males	Percent	0.1	0.1	0.4	9.9	0.0	0.0	33.6	1.2	0.2	2.6	0.0	48.1
		Numbers	390	522	1,919	48,434	0	0	164,128	5,963	1,272	12,883	0	235,511
	Females	Percent	0.2	0.0	0.4	14.3	0.1	0.0	32.6	1.4	0.3	2.6	0.0	51.9
		Numbers	837	204	1,914	69,800	274	0	159,327	6,718	1,414	12,789	0	253,277
	Combined Sexes	Percent	0.3	0.1	0.8	24.2	0.1	0.0	66.2	2.6	0.5	5.2	0.0	100.0
		Numbers	1,227	726	3,833	118,234	274	0	323,455	12,681	2,686	25,672	0	488,788
		Standard Error	501	314	940	4,242	274	0	4,749	1,582	747	2,296	0	

[1] Source: Age information summarized from the original age-weight-length data forms.

Appendix Table C-7. Estimated age and sex composition by date of sockeye salmon in the Kalifonsky Beach set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/01	Males	Percent	0.0	0.0	0.0	16.8	0.0	0.0	28.1	2.5	0.0	1.7	0.0	49.1
n=570		Numbers	0	0	0	1,079	0	0	1,799	157	0	112	0	3,147
	Females	Percent	0.0	0.0	0.0	11.8	0.0	0.0	34.7	1.9	0.0	2.5	0.0	50.9
		Numbers	0	0	0	754	0	0	2,226	124	0	158	0	3,262
	Combined Sexes	Percent	0.0	0.0	0.0	28.6	0.0	0.0	62.8	4.4	0.0	4.2	0.0	100.0
		Numbers	0	0	0	1,833	0	0	4,025	281	0	270	0	6,409
		Standard Error	0	0	0	121	0	0	130	55	0	54	0	
07/04	Males	Percent	0.0	0.0	0.0	17.1	0.0	0.0	17.7	5.7	0.0	3.1	0.0	43.6
n=614		Numbers	0	0	0	301	0	0	313	100	0	55	0	769
	Females	Percent	0.0	0.0	0.2	16.0	0.0	0.0	29.6	4.4	0.0	6.2	0.0	56.4
		Numbers	0	0	3	281	0	0	522	78	0	109	0	993
	Combined Sexes	Percent	0.0	0.0	0.2	33.1	0.0	0.0	47.3	10.1	0.0	9.3	0.0	100.0
		Numbers	0	0	3	582	0	0	835	178	0	164	0	1,762
		Standard Error	0	0	3	33	0	0	36	21	0	21	0	
07/06-	Males	Percent	0.0	0.0	0.0	25.0	0.0	0.0	25.3	5.2	0.0	2.5	0.0	58.0
07/11		Numbers	0	0	0	4,756	0	0	4,816	981	0	476	0	11,029
n=640	Females	Percent	0.0	0.0	0.2	12.0	0.0	0.0	22.8	2.0	0.0	5.0	0.0	42.0
		Numbers	0	0	30	2,289	0	0	4,340	386	0	951	0	7,996
	Combined Sexes	Percent	0.0	0.0	0.2	37.0	0.0	0.0	48.1	7.2	0.0	7.5	0.0	100.0
		Numbers	0	0	30	7,045	0	0	9,156	1,367	0	1,427	0	19,025
		Standard Error	0	0	30	363	0	0	376	194	0	198	0	
07/12-	Males	Percent	0.0	0.0	0.0	20.2	0.0	0.0	24.0	4.8	0.0	2.8	0.0	51.8
07/16		Numbers	0	0	0	4,819	0	0	5,695	1,132	0	657	0	12,303
n=651	Females	Percent	0.2	0.0	0.2	12.0	0.0	0.0	28.6	2.9	0.2	4.1	0.0	48.2
		Numbers	37	0	37	2,848	0	0	6,826	693	37	986	0	11,464
	Combined Sexes	Percent	0.2	0.0	0.2	32.2	0.0	0.0	52.6	7.7	0.2	6.9	0.0	100.0
		Numbers	37	0	37	7,667	0	0	12,521	1,825	37	1,643	0	23,767
		Standard Error	37	0	37	436	0	0	465	248	37	236	0	

-Continued-

Appendix Table C-7. Estimated age and sex composition by date of sockeye salmon in the Kalifonsky Beach set net fishery in Upper Cook Inlet in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/17-07/21 n=652	Males	Percent	0.0	0.0	0.2	5.5	0.0	0.0	33.0	2.1	0.2	4.4	0.0	45.4
		Numbers	0	0	355	12,791	0	0	76,390	4,974	356	10,304	0	105,170
	Females	Percent	0.0	0.0	0.5	7.5	0.0	0.0	39.7	2.6	0.2	4.1	0.0	54.6
		Numbers	0	0	1,066	17,410	0	0	92,024	6,040	355	9,593	0	126,488
	Combined Sexes	Percent	0.0	0.0	0.7	13.0	0.0	0.0	72.7	4.7	0.4	8.5	0.0	100.0
		Numbers	0	0	1,421	30,201	0	0	168,414	11,014	711	19,897	0	231,658
		Standard Error	0	0	709	3,057	0	0	4,045	1,932	502	2,544	0	
07/22-07/26 n=641	Males	Percent	0.0	0.0	0.0	5.1	0.0	0.0	41.3	1.6	0.5	2.3	0.0	50.8
		Numbers	0	0	0	5,549	0	0	44,562	1,682	504	2,522	0	54,819
	Females	Percent	0.0	0.0	0.2	8.1	0.0	0.0	37.4	1.4	0.5	1.6	0.0	49.2
		Numbers	0	0	168	8,744	0	0	40,358	1,513	505	1,682	0	52,970
	Combined Sexes	Percent	0.0	0.0	0.2	13.2	0.0	0.0	78.7	3.0	1.0	3.9	0.0	100.0
		Numbers	0	0	168	14,293	0	0	84,920	3,195	1,009	4,204	0	107,789
		Standard Error	0	0	168	1,445	0	0	1,742	723	410	825	0	
07/27-08/15 n=636	Males	Percent	0.0	0.0	0.0	3.8	0.0	0.0	42.9	1.6	0.8	4.5	0.0	53.6
		Numbers	0	0	0	2,345	0	0	26,678	977	489	2,834	0	33,323
	Females	Percent	0.0	0.0	0.0	4.7	0.0	0.0	37.5	1.9	0.3	1.9	0.0	46.4
		Numbers	0	0	0	2,932	0	0	23,355	1,173	195	1,173	0	28,827
	Combined Sexes	Percent	0.0	0.0	0.0	8.5	0.0	0.0	80.4	3.5	1.1	6.4	0.0	100.0
		Numbers	0	0	0	5,277	0	0	50,033	2,150	684	4,007	0	62,150
		Standard Error	0	0	0	687	0	0	977	451	257	606	0	
Total	Males	Percent	0.0	0.0	0.1	7.0	0.0	0.0	35.4	2.2	0.3	3.7	0.0	48.7
		Numbers	0	0	355	31,642	0	0	160,252	10,004	1,348	16,960	0	220,561
	Females	Percent	0.0[2]	0.0	0.3	7.8	0.0	0.0	37.6	2.2	0.2	3.2	0.0	51.3
		Numbers	37	0	1,303	35,257	0	0	169,652	10,007	1,092	14,651	0	231,999
	Combined Sexes	Percent	0.0[2]	0.0	0.4	14.8	0.0	0.0	73.0	4.4	0.5	6.9	0.0	100.0
		Numbers	37	0	1,658	66,899	0	0	329,904	20,011	2,440	31,611	0	452,560
		Standard Error	37	0	730	3,499	0	0	4,553	2,136	699	2,760	0	

[1] Source: Age information summarized from the original age-weight-length data forms.

[2] Fish present but represent less than 0.05% of total catch.

Appendix Table C-8. Estimated age and sex composition by date of sockeye salmon in the Cohoe/Ninilchik Beach set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/01-07/04 n=640	Males	Percent	0.0	0.0	0.2	15.9	0.0	0.0	29.4	2.8	0.0	5.4	0.0	53.7
		Numbers	0	0	35	3,525	0	0	6,498	622	0	1,209	0	11,889
	Females	Percent	0.0	0.0	0.2	8.4	0.0	0.0	30.9	1.6	0.0	5.2	0.0	46.3
		Numbers	0	0	35	1,866	0	0	6,843	346	0	1,141	0	10,231
	Combined Sexes	Percent	0.0	0.0	0.4	24.3	0.0	0.0	60.3	4.4	0.0	10.6	0.0	100.0
		Numbers	0	0	70	5,391	0	0	13,341	968	0	2,350	0	22,120
		Standard Error	0	0	49	376	0	0	428	179	0	270	0	
07/06 n=637	Males	Percent	0.0	0.0	0.0	22.1	0.0	0.0	18.2	5.8	0.0	3.1	0.0	49.2
		Numbers	0	0	0	1,893	0	0	1,557	497	0	268	0	4,215
	Females	Percent	0.0	0.0	0.2	17.0	0.0	0.0	22.9	4.6	0.0	6.1	0.0	50.8
		Numbers	0	0	13	1,450	0	0	1,960	389	0	524	0	4,336
	Combined Sexes	Percent	0.0	0.0	0.2	39.1	0.0	0.0	41.1	10.4	0.0	9.2	0.0	100.0
		Numbers	0	0	13	3,343	0	0	3,517	886	0	792	0	8,551
		Standard Error	0	0	13	165	0	0	167	103	0	98	0	
07/08 n=630	Males	Percent	0.0	0.0	0.0	21.9	0.0	0.0	15.1	4.4	0.0	5.6	0.0	47.0
		Numbers	0	0	0	2,565	0	0	1,766	520	0	651	0	5,502
	Females	Percent	0.0	0.0	0.2	15.4	0.0	0.0	28.7	3.5	0.0	5.2	0.0	53.0
		Numbers	0	0	19	1,803	0	0	3,365	409	0	613	0	6,209
	Combined Sexes	Percent	0.0	0.0	0.2	37.3	0.0	0.0	43.8	7.9	0.0	10.8	0.0	100.0
		Numbers	0	0	19	4,368	0	0	5,131	929	0	1,264	0	11,711
		Standard Error	0	0	19	226	0	0	232	126	0	145	0	
07/11 n=630	Males	Percent	0.0	0.0	0.0	15.4	0.0	0.0	22.4	5.4	0.0	3.7	0.0	46.8
		Numbers	0	0	0	5,290	0	0	7,690	1,854	0	1,254	0	16,088
	Females	Percent	0.0	0.0	0.0	12.9	0.0	0.0	31.4	2.9	0.3	5.7	0.0	53.2
		Numbers	0	0	0	4,418	0	0	10,799	982	109	1,963	0	18,271
	Combined Sexes	Percent	0.0	0.0	0.0	28.3	0.0	0.0	53.8	8.3	0.3	9.4	0.0	100.0
		Numbers	0	0	0	9,708	0	0	18,489	2,836	109	3,217	0	34,359
		Standard Error	0	0	0	617	0	0	683	377	77	399	0	
07/13-07/16 n=639	Males	Percent	0.0	0.0	0.1	17.7	0.0	0.0	20.0	4.2	0.5	2.7	0.0	45.2
		Numbers	0	0	158	17,894	0	0	20,269	4,276	475	2,692	0	45,764
	Females	Percent	0.0	0.0	0.2	10.5	0.0	0.0	35.5	2.5	0.3	5.8	0.0	54.8
		Numbers	0	0	158	10,610	0	0	35,947	2,534	317	5,859	0	55,425
	Combined Sexes	Percent	0.0	0.0	0.3	28.2	0.0	0.0	55.5	6.7	0.8	8.5	0.0	100.0
		Numbers	0	0	316	28,504	0	0	56,216	6,810	792	8,551	0	101,189
		Standard Error	0	0	224	1,802	0	0	1,991	1,004	353	1,114	0	

-Continued-

Appendix Table C-8. Estimated age and sex composition by date of sockeye salmon in the Cohoe/Ninilchik Beach set net fishery in Upper Cook Inlet in 1983[1] (continued).

			Age Composition by Brood Year and Age Group											
			1980		1979			1978			1977		1976	
Date			0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
07/17-07/20 n=642	Males	Percent	0.0	0.0	0.2	12.0	0.0	0.0	35.8	3.7	0.2	6.5	0.0	58.4
		Numbers	0	0	337	25,916	0	0	77,411	8,077	337	14,136	0	126,214
	Females	Percent	0.0	0.0	0.3	6.1	0.0	0.0	28.3	1.6	0.3	5.0	0.0	41.6
		Numbers	0	0	673	13,126	0	0	61,256	3,366	673	10,770	0	89,864
	Combined Sexes	Percent	0.0	0.0	0.5	18.1	0.0	0.0	64.1	5.3	0.5	11.5	0.0	100.0
		Numbers	0	0	1,010	39,042	0	0	138,667	11,443	1,010	24,906	0	216,078
		Standard Error	0	0	582	3,284	0	0	4,092	1,911	582	2,725	0	
07/21-07/24 n=631	Males	Percent	0.0	0.0	0.0	7.3	0.0	0.0	37.2	2.1	0.0	4.4	0.0	51.0
		Numbers	0	0	0	7,740	0	0	39,542	2,187	0	4,711	0	54,180
	Females	Percent	0.0	0.0	0.2	8.4	0.0	0.0	34.2	2.9	0.0	3.3	0.0	49.0
		Numbers	0	0	168	8,918	0	0	36,344	3,029	0	3,534	0	51,993
	Combined Sexes	Percent	0.0	0.0	0.2	15.7	0.0	0.0	71.4	5.0	0.0	7.7	0.0	100.0
		Numbers	0	0	168	16,658	0	0	75,886	5,216	0	8,245	0	106,173
		Standard Error	0	0	168	1,538	0	0	1,910	914	0	1,132	0	
07/25-07/28 n=636	Males	Percent	0.0	0.0	0.2	6.5	0.2	0.0	39.6	1.7	0.9	2.5	0.0	51.6
		Numbers	0	0	80	3,293	80	0	20,239	884	482	1,285	0	26,343
	Females	Percent	0.0	0.0	0.0	10.8	0.0	0.0	34.0	1.7	0.5	1.4	0.0	48.4
		Numbers	0	0	0	5,542	0	0	17,348	883	241	723	0	24,737
	Combined Sexes	Percent	0.0	0.0	0.2	17.3	0.2	0.0	73.6	3.4	1.4	3.9	0.0	100.0
		Numbers	0	0	80	8,835	80	0	37,587	1,767	723	2,008	0	51,080
		Standard Error	0	0	80	767	80	0	894	370	239	394	0	
07/29-08/15 n=565	Males	Percent	0.0	0.7	0.3	7.2	0.0	0.0	42.7	0.4	0.4	0.0	0.0	51.7
		Numbers	0	115	58	1,187	0	0	6,976	58	58	0	0	8,452
	Females	Percent	0.0	0.0	0.2	11.9	0.0	0.0	34.8	1.2	0.0	0.2	0.0	48.3
		Numbers	0	0	29	1,939	0	0	5,702	203	0	29	0	7,902
	Combined Sexes	Percent	0.0	0.7	0.5	19.1	0.0	0.0	77.5	1.6	0.4	0.2	0.0	100.0
		Numbers	0	115	87	3,126	0	0	12,678	261	58	29	0	16,354
		Standard Error	0	58	50	271	0	0	287	86	41	29	0	
Total n=5,650	Males	Percent	0.0	0.0[2]	0.1	12.2	0.0[2]	0.0	32.1	3.3	0.3	4.6	0.0	52.6
		Numbers	0	115	668	69,303	80	0	181,948	18,976	1,351	26,207	0	298,649
	Females	Percent	0.0	0.0	0.2	8.8		0.0	31.6	2.2	0.2	4.4	0.0	47.4
		Numbers	0	0	1,095	49,672		0	179,563	12,140	1,340	25,156	0	268,966
	Combined Sexes	Percent	0.0	0.0[2]	0.3	21.0	0.0[2]	0.0	63.7	5.5	0.5	9.0	0.0	100.0
		Numbers	0	115	1,763	118,975	80	0	361,511	31,116	2,691	51,363	0	567,615
		Standard Error	0	58	655	4,202	80	0	5,096	2,417	243	395	0	

[1] Source: Age information summarized from the original age-weight-length data forms.

Appendix Table C-9. Estimated mean length[1] by sex and age for sockeye salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2].

			Length Composition by Brood Year and Age Group									
			1980		1979			1978		1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4
Northern District East-side Set	Males	Mean Length		362.4		486.8		559.0	489.3		581.8	
		Std. Error		41.6		2.5		7.6	8.3		10.4	
		Range		317-430		400-596		465-638	451-526		550-624	
		Sample Size		5		149		38	9		6	
	Females	Mean Length			562.5	487.0		550.3	485.6		560.0	
		Std. Error			35.5	2.1		5.7	4.1		16.0	
		Range			527-598	405-586		454-592	468-501		534-589	
		Sample Size			2	162		33	8		3	
	All Fish	Mean Length		362.4	562.5	486.9		554.9	487.6		574.6	
		Std. Error		41.6	35.5	1.6		4.8	4.7		8.9	
		Range		317-430	527-598	400-596		454-638	451-526		534-624	
		Sample Size		5	2	311		71	17		9	
Northern District West-side Set	Males	Mean Length			572.8	501.0		586.9	481.4		588.5	
		Std. Error			11.3	4.1		4.3	11.4		7.9	
		Range			510-618	414-567		527-628	435-550		537-630	
		Sample Size			12	81		36	9		13	
	Females	Mean Length	500.0		567.4	498.3		557.9	507.6		542.9	
		Std. Error	0.0		4.0	2.6		2.7	4.4		8.1	
		Range	500-500		540-588	407-561		502-598	477-545		472-592	
		Sample Size	1		14	94		58	19		14	
	All Fish	Mean Length	500.0		569.9	499.5		569.0	499.2		564.8	
		Std. Error	0.0		5.6	2.3		2.7	5.2		7.1	
		Range	500-500		510-618	407-567		502-628	435-550		472-630	
		Sample Size	1		26	175		94	28		27	
Central District Drift	Males	Mean Length	516.0	464.0	565.4	507.8		580.6	521.7	606.7	579.5	
		Std. Error	0.0	0.0	9.8	2.9		1.5	8.1	15.0	4.8	
		Range	516-516	464-464	516-605	351-652		474-673	464-632	544-647	504-639	
		Sample Size	1	1	9	144		406	27	6	43	
	Females	Mean Length	583.0		565.0	510.5		563.4	511.6	592.0	563.6	
		Std. Error	0.0		7.6	2.5		1.0	6.2	8.1	2.8	
		Range	583-583		509-605	466-589		471-632	455-553	579-607	507-606	
		Sample Size	1		11	84		516	19	3	64	
	All Fish	Mean Length	549.5	464.0	565.2	509.0		571.0	517.5	601.8	570.0	
		Std. Error	33.5	0.0	5.9	2.1		0.9	5.4	10.3	2.7	
		Range	516-583	464-464	509-605	351-652		471-673	455-632	544-647	504-639	
		Sample Size	2	1	20	229		923	46	9	107	

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Appendix Table C-9. Estimated mean length[1] by sex and age for sockeye salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2] (continued).

			Length Composition by Brood Year and Age Group									
			1980		1979			1978		1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4
Central District West-side Set	Males	Mean Length	523.0			499.4		562.5	503.7	610.0	555.9	
		Std. Error	0.0			4.7		2.2	3.6	0.0	3.2	
		Range	523-523			414-597		455-660	429-556	610-610	476-609	
		Sample Size	1			65		170	59	1	53	
	Females	Mean Length			528.0	496.9		542.7	490.4	635.0	548.9	
		Std. Error			0.0	4.7		1.6	3.5	0.0	3.6	
		Range			528-528	430-582		459-586	442-536	635-635	478-602	
		Sample Size			1	49		175	41	1	46	
	All Fish	Mean Length	523.0		528.0	498.4		552.5	498.2	622.5	552.7	
		Std. Error	0.0		0.0	3.4		1.5	2.6	12.5	2.4	
		Range	523-523		528-528	414-597		455-660	429-556	610-635	476-609	
		Sample Size	1		1	114		345	100	2	99	
Kalgin Island Set	Males	Mean Length			543.6	513.7		564.2	521.9		559.4	624.0
		Std. Error			18.3	4.0		2.8	4.2		5.3	0.0
		Range			500-585	445-593		456-626	444-611		487-620	624-624
		Sample Size			5	63		121	45		38	1
	Females	Mean Length			559.0	510.4		546.8	511.8		548.4	
		Std. Error			12.0	4.0		2.2	4.1		3.0	
		Range			547-571	462-588		455-613	450-582		518-580	
		Sample Size			2	36		128	36		34	
	All Fish	Mean Length			548.0	512.5		555.2	517.4		554.2	624.0
		Std. Error			13.2	2.9		1.8	3.0		3.2	0.0
		Range			500-585	445-593		455-626	444-611		487-620	624-624
		Sample Size			7	99		249	81		72	1
Salamatof Beach Set	Males	Mean Length	333.0		563.0	495.6		588.1	524.0	625.0	604.5	
		Std. Error	0.0		0.0	6.1		2.0	20.1	0.0	6.7	
		Range	333-333		563-563	429-572		483-637	427-580	625-625	581-630	
		Sample Size	1		1	30		151	7	1	6	
	Females	Mean Length			566.0	485.1		565.5	497.9	560.0	562.8	
		Std. Error			34.0	3.3		2.2	6.7	10.0	5.5	
		Range			532-600	434-545		435-696	456-540	550-570	520-597	
		Sample Size			2	58		146	12	2	18	
	All Fish	Mean Length	333.0		565.0	488.7		577.0	507.5	581.7	573.2	
		Std. Error	0.0		19.7	3.0		1.6	8.7	22.4	5.8	
		Range	333-333		532-600	429-572		435-696	427-580	550-625	520-630	
		Sample Size	1		3	88		297	19	3	24	

-Continued-

Appendix Table C-9. Estimated mean length[1] by sex and age for sockeye salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2] (continued).

			Length Composition by Brood Year and Age Group									
			1980		1979			1978		1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4
Kalifonsky Beach Set	Males	Mean Length				485.8		574.9	493.4		581.0	
		Std. Error				2.9		2.2	5.3		5.4	
		Range				419-550		475-631	446-545		528-620	
		Sample Size				72		185	25		21	
	Females	Mean Length			558.0	494.9		557.4	491.6		549.5	
		Std. Error			17.0	3.1		1.6	5.1		5.0	
		Range			541-575	440-564		465-616	460-552		504-615	
		Sample Size			2	57		223	18		31	
	All Fish	Mean Length			558.0	489.8		565.2	492.7		562.2	
		Std. Error			17.0	2.2		1.4	3.7		4.3	
		Range			541-575	419-564		465-631	446-552		504-620	
		Sample Size			2	129		409	43		52	
Cohoe/Ninilchik Beach Set	Males	Mean Length		360.0	515.0	497.3	402.0	580.2	499.3	602.0	567.8	
		Std. Error		0.0	0.0	3.0	0.0	2.1	5.6	0.0	5.8	
		Range		360-360	515-515	419-629	402-402	450-645	455-580	602-602	508-634	
		Sample Size		1	1	121	1	210	31	1	26	
	Females	Mean Length			559.5	494.6		560.0	493.6		561.2	
		Std. Error			19.5	2.9		1.7	5.0		6.6	
		Range			540-579	423-587		495-630	438-538		520-622	
		Sample Size			2	80		217	21		22	
	All Fish	Mean Length		360.0	544.7	496.2	402.0	569.9	497.0	602.0	564.8	
		Std. Error		0.0	18.6	2.1	0.0	1.4	3.9	0.0	4.3	
		Range		360-360	515-579	419-629	402-402	450-645	438-580	602-602	508-634	
		Sample Size		1	3	201	1	427	52	1	48	
Total Commercial Catch	Males	Mean Length	519.5	376.6	562.8	498.0	402.0	576.3	507.1	608.6	569.8	624.0
		Std. Error	3.5	51.4	6.9	1.3	0.0	0.9	2.3	9.9	2.1	0.0
		Range	516-523	317-464	500-618	351-652	402-402	450-673	427-632	544-647	476-639	624-624
		Sample Size	2	7	28	725	1	1317	212	9	206	1
	Females	Mean Length	541.5		563.8	495.6		557.9	499.8	588.5	555.0	
		Std. Error	41.5		3.7	1.1		0.7	1.8	12.1	1.7	
		Range	500-583		509-605	405-589		435-696	438-582	550-635	472-622	
		Sample Size	2		36	620		1496	174	6	232	
	All Fish	Mean Length	530.5	376.6	563.4	496.9	402.0	566.5	503.8	600.5	561.9	624.0
		Std. Error	18.2	51.4	3.6	0.9	0.0	0.6	1.5	7.9	1.4	0.0
		Range	500-583	317-464	500-618	351-652	402-402	435-696	427-632	544-647	472-639	624-624
		Sample Size	4	7	64	1346	1	2815	386	15	438	1

[1] Mid-eye to fork of tail lengths in millimeters.
[2] Source: Length information summarized from the original age-weight-length data forms.

Appendix Table C-10. Estimated age and sex composition of sockeye salmon harvested by subsistence and personal use fisheries in Upper Cook Inlet in 1983.

			Age Composition by Brood Year and Age Group						
			1979		1978		1977		
Location	Sex		0.3	1.2	1.3	2.2	1.4	2.3	Total
Tyonek Subsistence[1]	Males	Percent		12.0	36.5			3.1	51.6
	n=82	Numbers		24	73			6	103
	Females	Percent	0.6	3.8	42.1		0.6	1.3	48.4
	n=77	Numbers	1	8	85		1	3	98
	Combined Sexes	Percent	0.6	15.8	78.6		0.6	4.4	100.0
	n=159	Numbers	1	32	158		1	9	201
		Std. Error	1	3	3		1	2	
Kasilof Personal-Use Gillnet[2]	Males	Percent		5.3	41.6	1.6		6.7	55.2
	n=175	Numbers		469	3,680	141		593	4,883
	Females	Percent		4.5	37.6	0.3		2.4	44.8
	n=153	Numbers		398	3,326	27		212	3,963
	Combined Sexes	Percent		9.8	79.2	1.9		9.1	100.0
	n=328	Numbers		867	7,006	168		805	8,846
		Std. Error		143	195	66		138	

[1] Source: Browning, J. 1984a. Tyonek subsistence fishery 1983. Alaska Department of Fish and Game. Division of Commercial Fisheries. Upper Cook Inlet Data Report No. 84-3.

[2] Source: Browning, J. 1984b. Kasilof River personal use gillnet fishery 1983. Alaska Department of Fish and Game. Division of Commercial Fisheries. Upper Cook Inlet Data Report No. 84-6.

Appendix Table C-11. Mean length[1] by sex and age for sockeye salmon harvested by subsistence and personal use fisheries in Upper Cook Inlet in 1983.

			Length Composition by Brood Year and Age Group					
			1979		1978		1977	
Location	Sex		0.3	1.2	1.3	2.2	1.4	2.3
Tyonek Subsistence[2]	Males	Mean Length		496.3	560.4			537.6
	n=81	Std. Error		9.9	4.7			5.7
		Sample size		18	58			5
	Females	Mean Length	580.0	510.8	545.6		540.0	532.5
	n=77	Std. Error	0.0	11.1	2.5		0.0	17.5
		Sample Size	1	6	67		1	2
	All Fish	Mean Length	580.0	499.9	552.5		540.0	536.1
	n=158	Std. Error	0.0	7.9	2.6		0.0	5.6
		Sample Size	1	24	125		1	7
Kasilof Personal-Use Gillnet[3]	Males	Mean Length		517.2	551.8	522.0		556.1
	n=175	Std. Error		8.5	3.7	17.0		4.7
		Sample Size		15	134	5		21
	Females	Mean Length		517.5	551.4	573.0		566.5
	n=153	Std. Error		8.3	2.0	0.0		12.3
		Sample size		15	129	1		8
	All Fish	Mean Length		517.4	551.7	530.0		558.8
	n=328	Std. Error		5.9	2.1	14.2		4.8
		Sample Size		30	263	6		29

[1] Length measured from mid-eye to fork of tail in millimeters.

[2] Source: Browning, J. 1984a. Tyonek subsistence fishery 1983. Alaska Department of Fish and Game. Division of Commercial Fisheries. Upper Cook Inlet Data Report No. 84-3.

[3] Source: Browning, J. 1984b. Kasilof River personal use gillnet fishery 1983. Alaska Department of Fish and Game. Division of Commercial Fisheries. Upper Cook Inlet Data Report No. 84-6.

Appendix Table C-12. Estimated age and sex composition of sockeye salmon escapement at Susitna Station on the Susitna River in 1983[1].

			Age Composition by Brood Year and Age Group										
			1980		1979			1978		1977		1976	
Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Period 1	Males	Percent	4.8	0.0	3.1	27.9	0.0	8.4	3.8	0.0	1.8	0.0	49.8
01 Jul - 18 Jul		Numbers	978	0	640	5,718	0	1,730	790	0	376	0	10,232
n=569													
	Females	Percent	1.1	0.0	3.7	24.7	0.0	11.6	5.3	0.0	3.8	0.0	50.2
		Numbers	226	0	752	5,079	0	2,370	1,091	0	790	0	10,308
	Combined Sexes	Percent	5.9	0.0	6.8	52.6	0.0	20.0	9.1	0.0	5.6	0.0	100.0
		Numbers	1,204	0	1,392	10,797	0	4,100	1,881	0	1,166	0	20,540
		Std. Error	200	0	214	424	0	340	244	0	195	0	
Period 2													
19 Jul - 21 Jul	Males	Percent	1.4	0.0	2.5	29.6	0.0	19.5	1.7	0.2	0.9	0.0	55.8
n=733		Numbers	666	0	1,184	14,281	0	9,398	814	74	444	0	26,861
	Females	Percent	0.0	0.0	2.1	22.7	0.3	16.1	2.0	0.2	0.5	0.3	44.2
		Numbers	0	0	1,036	10,951	148	7,770	962	74	222	148	21,311
	Combined Sexes	Percent	1.4	0.0	4.6	52.3	0.3	35.6	3.7	0.4	1.4	0.3	100.0
		Numbers	666	0	2,220	25,232	148	17,168	1,776	148	666	148	48,172
		Std. Error	206	0	370	883	98	846	333	112	206	98	
Period 3													
22 Jul - 08 Aug	Males	Percent	2.1	0.8	2.3	31.4	1.0	5.6	7.9	0.0	1.6	0.2	52.9
n=597		Numbers	930	338	1,014	13,686	423	2,451	3,465	0	676	85	23,068
	Females	Percent	0.2	0.0	1.0	30.2	0.2	6.6	8.1	0.2	0.4	0.2	47.1
		Numbers	85	0	423	13,180	85	2,873	3,549	85	169	85	20,534
	Combined Sexes	Percent	2.3	0.8	3.3	61.6	1.2	12.2	16.0	0.2	2.0	0.4	100.0
		Numbers	1,015	338	1,437	26,866	508	5,324	7,014	85	845	170	43,602
		Std. Error	267	156	317	863	190	581	650	78	248	111	

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Appendix Table C-12. Estimated age and sex composition of sockeye salmon escapement at Susitna Station on the Susitna River in 1983[1] (continued).

			Age Composition by Brood Year and Age Group										
			1980		1979			1978		1977		1976	
Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Total													
01 Jul - 08 Aug	Males	Percent	2.3	0.3	2.5	30.0	0.4	12.1	4.5	0.1	1.3	0.1	53.6
n=1,899		Numbers	2,574	338	2,838	33,685	423	13,579	5,069	74	1,496	85	60,161
	Females	Percent	0.3	0.0	2.0	25.9	0.2	11.6	5.0	0.1	1.1	0.2	46.4
		Numbers	311	0	2,211	29,210	233	13,013	5,602	159	1,181	233	52,153
	Combined Sexes	Percent	2.6	0.3	4.5	55.9	0.6	23.7	9.5	0.2	2.4	0.3	100.0
		Numbers	2,885	338	5,049	62,895	656	26,592	10,671	233	2,677	318	112,314
		Std. Error	392	156	532	1,305	214	1,081	770	136	377	148	

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

Appendix Table C-13. Estimated age and sex composition of sockeye salmon escapement at Yentna, Sunshine, Talkeetna, and Curry Stations on the Susitna River in 1983[1].

				Age Composition by Brood Year and Age Group										
				1980		1979			1978			1977		
Location	Date	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Yentna Station	Total	Males	Percent	0.4	4.6	0.3	36.8	0.8	0.2	13.1	1.2	0.0	1.0	58.4
	02 Jul - 04 Sep		Numbers	418	4,803	313	38,424	836	209	13,678	1,253	0	1,044	60,978
	n=1,024													
		Females	Percent	0.0	0.1	0.1	30.1	0.1	0.3	9.5	0.5	0.2	0.7	41.6
			Numbers	0	104	105	31,429	104	313	9,919	522	209	731	43,436
		Combined Sexes	Percent	0.4	4.7	0.4	66.9	0.9	0.5	22.6	1.7	0.2	1.7	100.0
			Numbers	418	4,907	418	69,853	940	522	23,597	1,775	209	1,775	104,414
			Std. Error	205	688	205	1,529	307	229	1,359	420	145	420	
Sunshine Station (First Run)	Total	Males	Percent	0.0	0.0	0.0	13.5	0.0	0.0	41.0	0.0	0.7	0.0	55.2
	05 Jun - 19 Jun		Numbers	0	0	0	450	0	0	1,366	0	23	0	1,839
	n=290													
		Females	Percent	0.0	0.0	0.0	13.5	0.0	0.0	30.3	0.7	0.3	0.0	44.8
			Numbers	0	0	0	450	0	0	1,010	23	10	0	1,493
		Combined Sexes	Percent	0.0	0.0	0.0	27.0	0.0	0.0	71.3	0.7	1.0	0.0	100.0
			Numbers	0	0	0	900	0	0	2,376	23	33	0	3,332
			Std. Error	0	0	0	83	0	0	85	16	19	0	
Sunshine Station (Second Run)	Total	Males	Percent	0.1	0.0	0.0	31.1	0.3	0.0	16.6	0.8	0.0	0.0	48.9
	17 Jul - 11 Sep		Numbers	72	0	0	22,243	215	0	11,872	572	0	0	34,974
	n=994													
		Females	Percent	0.0	0.0	0.1	32.3	0.2	0.1	17.1	0.9	0.0	0.4	51.1
			Numbers	0	0	72	23,101	143	72	12,230	644	0	286	36,548
		Combined Sexes	Percent	0.1	0.0	0.1	63.4	0.5	0.1	33.7	1.7	0.0	0.4	100.0
			Numbers	72	0	72	45,344	358	72	24,102	1,216	0	286	71,522
			Std. Error	71	0	71	1,086	159	71	1,065	291	0	142	

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Appendix Table C-13. Estimated age and sex composition of sockeye salmon escapement at Yentna, Sunshine, Talkeetna, and Curry Stations on the Susitna River in 1983[1].

				Age Composition by Brood Year and Age Group										
				1980		1979			1978			1977		
Location	Date	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Talkeetna Station	Total 15 Jul - 12 Sep n=344	Males	Percent	0.3	3.8	0.0	29.4	4.9	0.0	21.2	1.2	0.0	0.0	60.8
			Numbers	13	161	0	1,244	208	0	898	51	0	0	2,575
		Females	Percent	0.0	0.3	0.0	21.5	0.0	0.0	16.8	0.6	0.0	0.0	39.2
			Numbers	0	13	0	911	0	0	711	25	0	0	1,660
		Combined Sexes	Percent	0.3	4.1	0.0	50.9	4.9	0.0	38.0	1.8	0.0	0.0	100.0
			Numbers	13	174	0	2,155	208	0	1,609	76	0	0	4,235
			Std. Error	12	43	0	110	47	0	106	29	0	0	
Curry Station	Total 17 Jul - 03 Sep n=118	Males	Percent	0.9	5.9	0.0	43.2	2.5	0.9	5.9	0.9	0.0	0.0	60.2
			Numbers	17	111	0	810	47	17	111	17	0	0	1,130
		Females	Percent	0.0	0.0	0.0	26.3	0.0	0.0	12.7	0.8	0.0	0.0	39.8
			Numbers	0	0	0	493	0	0	238	15	0	0	746
		Combined Sexes	Percent	0.9	5.9	0.0	69.5	2.5	0.9	18.6	1.7	0.0	0.0	100.0
			Numbers	17	111	0	1,303	47	17	349	32	0	0	1,876
			Std. Error	16	40	0	77	26	16	65	22	0	0	

[1] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

Appendix Table C-14. Estimated age and sex composition of sockeye salmon into the Kenai River in 1983[1].

			Age Composition by Brood Year and Age Group										
			1980		1979			1978		1977		1976	
Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Period 1	Males	Percent	0.0	0.0	0.3	3.5	0.0	26.7	1.2	0.0	4.0	0.0	35.7
22 Jun - 16 Jul		Numbers	0	0	380	5,324	0	40,687	1,901	0	6,084	0	54,376
n=449													
	Females	Percent	0.0	0.0	0.2	2.5	0.0	50.9	1.8	0.2	8.7	0.0	64.3
		Numbers	0	0	380	3,803	0	77,571	2,662	380	13,309	0	98,105
	Combined Sexes	Percent	0.0	0.0	0.5	6.0	0.0	77.6	3.0	0.2	12.7	0.0	100.0
		Numbers	0	0	760	9,127	0	118,258	4,563	380	19,393	0	152,481
		Std. Error	0	0	532	1,706	0	3,001	1,236	359	2,397	0	
Period 2													
17 Jul - 20 Jul	Males	Percent	0.0	0.0	0.0	3.1	0.0	34.6	1.1	0.1	4.5	0.0	43.4
n=854		Numbers	0	0	0	8,768	0	98,731	3,050	381	12,961	0	123,891
	Females	Percent	0.0	0.0	0.4	4.8	0.0	46.0	1.1	0.0	4.3	0.0	56.6
		Numbers	0	0	1,144	13,723	0	131,514	3,050	0	12,198	0	161,629
	Combined Sexes	Percent	0.0	0.0	0.4	7.9	0.0	80.6	2.2	0.1	8.8	0.0	100.0
		Numbers	0	0	1,144	22,491	0	230,245	6,100	381	25,159	0	285,520
		Std. Error	0	0	617	2,630	0	3,857	1,432	356	2,767	0	
Period 3													
21 Jul - 31 Jul	Males	Percent	0.0	0.0	0.0	6.5	0.5	35.5	1.4	0.5	3.7	0.0	48.1
n=239		Numbers	0	0	0	8,085	577	43,890	1,732	577	4,620	0	59,481
	Females	Percent	0.0	0.0	0.0	6.1	0.4	41.1	0.5	0.0	3.3	0.5	51.9
		Numbers	0	0	0	7,507	577	50,820	577	0	4,042	577	64,100
	Combined Sexes	Percent	0.0	0.0	0.0	12.6	0.9	76.6	1.9	0.5	7.0	0.5	100.0
		Numbers	0	0	0	15,592	1,154	94,710	2,309	577	8,662	577	123,581
		Std. Error	0	0	0	2,657	770	3,386	1,084	546	2,043	546	

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Appendix Table C-14. Estimated age and sex composition of sockeye salmon escapement into the Kenai River in 1983[1].

			Age Composition by Brood Year and Age Group										
			1980		1979			1978		1977		1976	
Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Period 4													
01 Aug - 12 Aug	Males	Percent	0.0	2.8	0.0	6.2	2.8	46.4	0.0	0.0	1.9	0.0	60.1
n=223		Numbers	0	1,955	0	4,236	1,955	31,936	0	0	1,303	0	41,385
	Females	Percent	0.0	0.0	0.0	2.4	0.0	33.2	1.4	0.5	2.4	0.0	39.9
		Numbers	0	0	0	1,629	0	22,811	978	326	1,629	0	27,373
	Combined Sexes	Percent	0.0	2.8	0.0	8.6	2.8	79.6	1.4	0.5	4.3	0.0	100.0
		Numbers	0	1,955	0	5,865	1,955	54,747	978	326	2,932	0	68,758
		Std. Error	0	766	0	1,292	766	1,856	546	316	931	0	
Total													
22 Jun - 12 Aug	Males	Percent	0.0	0.3	0.1	4.2	0.4	34.1	1.0	0.2	4.0	0.0	44.3
n=1,765		Numbers	0	1,955	380	26,413	2,532	215,244	6,683	958	24,968	0	279,133
	Females	Percent	0.0	0.0	0.2	4.2	0.1	44.9	1.2	0.1	4.9	0.1	55.7
		Numbers	0	0	1,524	26,662	577	282,716	7,267	706	31,178	577	351,207
	Combined Sexes	Percent	0.0	0.3	0.3	8.4	0.5	79.0	2.2	0.3	8.9	0.1	100.0
		Numbers	0	1,955	1,904	53,075	3,109	497,960	13,950	1,664	56,146	577	630,340
		Std. Error	0	766	814	4,308	1,086	6,228	2,247	808	4,294	546	

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

Appendix Table C-15. Estimated age and sex composition of sockeye salmon escapement into Quartz Creek and the Russian River on the Kenai River in 1983.

				Composition Brood Year Age Group							
				1979		1978		1977		1976	
Location	Date	Sex		1.2	2.1	1.3	2.2	1.4	2.3	3.3	Total
Quartz Creek[1]	Total	Males	Percent	3.1	0.4	46.3	0.4	0.9	2.2		53.3
	28 Jun - 11 Oct		Numbers	2,274	293	33,959	293	660	1,614		39,093
	n=229										
		Females	Percent	0.9	0.0	41.0	0.4	0.0	4.4		46.7
			Numbers	660	0	30,071	294	0	3,227		34,252
		Combined Sexes	Percent	4.0	0.4	87.3	0.8	0.9	6.6		100.0
			Numbers	2,934	293	64,030	587	660	4,841		73,345
			Std. Error	950	306	1,615	432	458	1,204		
Russian River[2] (Early Run)	Total	Males	Percent	4.7	0.0	21.5	1.4	0.0	24.3	0.5	52.4
	12 Jun - 25 Jul		Numbers	997	0	4,559	297	0	5,153	106	11,112
	n=214										
		Females	Percent	6.5	0.0	15.9	1.4	0.0	23.8	0.0	47.6
			Numbers	1,378	0	3,372	297	0	5,047	0	10,094
		Combined Sexes	Percent	11.2	0.0	37.4	2.8	0.0	48.1	0.5	100.0
			Numbers	2,375	0	7,931	594	0	10,200	106	21,206
			Std. Error	456	0	700	239	0	722	102	
Russian River[2] (Late Run)	Total	Males	Percent	21.7	0.0	6.9	4.6	0.0	3.4	0.0	36.6
	26 Jul - 06 Sep		Numbers	7,386	0	2,349	1,566	0	1,157	0	12,458
	n=175										
		Females	Percent	52.0	0.0	1.1	8.0	0.0	2.3	0.0	63.4
			Numbers	17,701	0	374	2,723	0	783	0	21,581
		Combined Sexes	Percent	73.7	0.0	8.0	12.6	0.0	5.7	0.0	100.0
			Numbers	25,087	0	2,723	4,289	0	1,940	0	34,039
			Std. Error	1,133	0	698	854	0	597	0	

[1] Source: Litchfield, D. March 1984. Personal communication. Alaska Department of Fish and and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Soldotna, Alaska.

[2] Source: Nelson, D. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Sport Fish. Soldotna, Alaska.

Appendix Table C-16. Estimated age and sex composition of sockeye salmon escapement into the Kasilof River in 1983[1].

			Age Composition by Brood Year and Age Group				
			1979	1978		1977	
Date	Sex		1.2	1.3	2.2	2.3	Total
Period 1	Males	Percent	11.6	33.8	2.8	3.2	51.4
11 Jun - 04 Jul		Numbers	5,195	15,049	1,254	1,433	22,931
n=515							
	Females	Percent	8.9	32.9	2.8	4.0	48.6
		Numbers	3,941	14,690	1,254	1,791	21,676
	Combined Sexes	Percent	20.5	66.7	5.6	7.2	100.0
		Numbers	9,136	29,739	2,508	3,224	44,607
		Std. Error	789	922	451	507	
Period 2							
05 Jul - 15 Jul	Males	Percent	24.6	12.4	4.5	2.8	44.3
n=527		Numbers	15,592	7,861	2,835	1,804	28,092
	Females	Percent	28.5	19.5	5.3	2.4	55.7
		Numbers	18,042	12,371	3,350	1,546	35,309
	Combined Sexes	Percent	53.1	31.9	9.8	5.2	100.0
		Numbers	33,634	20,232	6,185	3,350	63,401
		Std. Error	1,374	1,283	817	611	
Period 3							
16 Jul - 18 Jul	Males	Percent	20.9	11.6	8.0	2.1	42.6
n=650		Numbers	10,799	5,979	4,105	1,071	21,954
	Females	Percent	31.3	15.0	9.0	2.1	57.4
		Numbers	16,153	7,764	4,641	1,071	29,629
	Combined Sexes	Percent	52.2	26.6	17.0	4.2	100.0
		Numbers	26,952	13,743	8,746	2,142	51,583
		Std. Error	1,005	889	755	401	
Period 4							
19 Jul - 31 Jul	Males	Percent	29.3	4.7	6.4	0.7	41.1
n=305		Numbers	14,842	2,353	3,258	362	20,815
	Females	Percent	38.6	7.1	12.5	0.7	58.9
		Numbers	19,548	3,620	6,335	362	29,865
	Combined Sexes	Percent	67.9	11.8	18.9	1.4	100.0
		Numbers	34,390	5,973	9,593	724	50,680
		Std. Error	1,353	934	1.135	344	

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Appendix Table C-16. Estimated age and sex composition of sockeye salmon escapement into the Kasilof River in 1983[1].

			Age Composition by Brood Year and Age Group				
			1979	1978		1977	
Date	Sex		1.2	1.3	2.2	2.3	Total
Total 22 Jun - 31 Jul n=1,997	Males	Percent	22.1	14.9	5.4	2.2	44.6
		Numbers	46,428	31,242	11,452	4,670	93,792
	Females	Percent	27.4	18.3	7.4	2.3	55.4
		Numbers	57,684	38,445	15,580	4,770	116,479
	Combined sexes	Percent	49.5	33.2	12.8	4.5	100.0
		Numbers	104,112	69,687	27,032	9,440	210,271
		Std. Error	2,314	2,040	1,652	954	

[1] Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapdment studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

Appendix Table C-17. Estimated age and sex composition of sockeye salmon escapement into Crescent River, Fish Creek, and Packers Creek in 1983.

				Age Composition By Brood Year and Age Group										
				1980		1979			1978		1977		1976	
Location	Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Crescent River 1	Total 01 Jul - 31 Jul n=662	Males	Percent	0.0	0.0	0.0	7.1	0.4	16.8	14.0	0.2	6.5	0.0	45.0
			Numbers	0	0	0	6,556	369	15,514	12,928	185	6,002	0	41,554
		Females	Percent	0.0	0.0	0.0	3.8	0.2	25.5	13.4	0.0	12.1	0.0	55.0
			Numbers	0	0	0	3,509	185	23,547	12,374	0	11,174	0	50,789
		Combined Sexes	Percent	0.0	0.0	0.0	10.9	0.6	42.3	27.4	0.2	18.6	0.0	100.0
			Numbers	0	0	0	10,065	554	39,061	25,302	185	17,176	0	92,343
			Std. Error	0	0	0	1,115	276	1,768	1,596	160	1,393	0	
Fish Creek 2	Period 1 12 Jul - 31 Jul n=666	Combined Sexes	Percent	0.0	8.7	0.0	89.3	0.0	0.9	1.1	0.0	0.0	0.0	100.0
			Numbers	0	8,306	0	85,254	0	859	1,050	0	0	0	95,469
			Std. Error	0	1,040	0	1,140	0	348	385	0	0	0	
	Period 2 01 Aug - 30 Aug n=383	Combined Sexes	Percent	0.0	12.8	0.0	80.4	2.4	0.5	3.1	0.0	0.8	0.0	100.0
			Numbers	0	2,986	0	18,756	560	117	723	0	186	0	23,328
			Std. Error	0	395	0	470	181	83	205	0	105	0	0
	Total 12 Jul - 30 Aug n=1,049	Combined Sexes	Percent	0.0	9.5	0.0	87.6	0.5	0.8	1.5	0.0	0.1	0.0	100.0
			Numbers	0	11,292	0	104,010	560	976	1,773	0	186	0	118,797
			Std. Error	0	1,112	0	1,233	181	358	436	0	105	0	
Packers Creek 3	Total 23 May - 29 Aug n=804	Males	Percent	0.0	0.0	0.0	12.5	2.6	13.7	16.7	0.0	1.0	0.0	46.5
			Numbers	0	0	0	2,300	479	2,521	3,073	0	184	0	8,557
		Females	Percent	0.0	0.2	0.0	11.7	0.8	15.2	23.5	0.0	2.1	0.0	53.5
			Numbers	0	37	0	2,154	147	2,797	4,325	0	386	0	9,846
		Combined Sexes	Percent	0.0	0.2	0.0	24.2	3.4	28.9	40.2	0.0	3.1	0.0	100.0
			Numbers	0	37	0	4,454	626	5,318	7,398	0	570	0	18,403
			Std. Error	0	28	0	272	115	288	311	0	110	0	

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

[2] Source: Chlupach, R. 1984. Evaluation of returning hatchery adult sockeye 1983. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Draft Report No. 2. 26 January 1984.

Samples were not collected randomly by sex; therefore the age composition was not presented by sex.

[3] Source: Marcusson, P. 1984a. Packers Lake project report 1983. Cook Inlet Aquaculture Association.

Appendix Table C-18. Estimated age and sex composition of sockeye salmon escapement into Big River and Wolverine Creek in 1983[1].

				Age Composition By Brood Year and Age Group										
				1980		1979			1978		1977			
Location	Date	Sex		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	Total
Big River	Period 1 25 May - 13 Jun n=1,343	Males	Percent	0.2	0.0	0.2	7.4	0.0	36.1	1.4	0.0	0.5	0.0	45.8
		Females	Percent	0.1	0.1	0.4	6.8	0.0	44.4	2.1	0.0	0.3	0.0	54.2
		Combined Sexes	Percent	0.3	0.1	0.6	14.2	0.0	80.5	3.5	0.0	0.8	0.0	100.0
			Std. Error	0.1	0.1	0.2	1.0	0.0	1.1	0.5	0.0	0.2	0.0	
	Period 2 14 Jun - 27 Jul n=1,128	Males	Percent	0.3	0.5	0.1	19.4	1.2	15.7	5.8	0.0	1.5	0.1	44.6
		Females	Percent	0.0	1.9	0.1	21.9	0.4	19.9	9.1	0.1	1.7	0.3	55.4
		Combined Sexes	Percent	0.3	2.4	0.2	41.3	1.6	35.6	14.9	0.1	3.2	0.4	100.0
			Std. Error	0.2	0.5	0.1	1.5	0.4	1.4	1.1	0.1	0.5	0.2	
	Total 25 May - 27 Jul n=2,471	Males	Percent	0.2	0.2	0.1	12.9	0.6	26.8	3.4	0.0	1.0	0.0	45.2
		Females	Percent	0.1	0.9	0.2	13.7	0.2	33.2	5.4	0.1	0.9	0.1	54.8
		Combined Sexes	Percent	0.3	1.1	0.3	26.6	0.8	60.0	8.8	0.1	1.9	0.1	100.0
			Std. Error	0.2	0.5	0.2	1.7	0.4	1.8	1.2	0.1	0.6	0.2	
Wolverine Creek	Total 13 Jun - 28 Jul n=280	Males	Percent	0.0	0.4	0.0	17.1	0.0	4.6	17.9	0.0	10.0	0.0	50.0
			Numbers	0	73	0	3,110	0	837	3,256	0	1,819	0	9,095
		Females	Percent	0.0	0.0	0.0	21.1	0.0	2.9	22.1	0.0	3.9	0.0	50.0
			Numbers	0	0	0	3,838	0	527	4,020	0	709	0	9,094
		Combined Sexes	Percent	0.0	0.4	0.0	38.2	0.0	7.5	40.0	0.0	13.9	0.0	100.0
			Numbers	0	73	0	6,948	0	1,364	7,276	0	2,528	0	18,189
			Std. Error	0	68	0	525	0	285	529	0	374	0	0

[1] Source: Marcusson, P. 1984b. Big River pre-enhancement investigation 1983 field season. Cook Inlet Aquaculture Association. 27 pp.

Appendix Table C-19. Estimated age and sex composition of sockeye salmon escapement into the McArthur River and the Chilligan River in 1983[1].

				Age Composition By Brood Year and Age Group								
				1980	1979			1978		1977		
Location	Date	Sex		0.2	0.3	1.2	2.1	1.3	2.2	1.4	2.3	Total
McArthur River	Total 12 Aug - 14 Aug n=244	Males	Percent	0.8	2.1	26.2	0.0	23.4	0.4	0.0	0.8	53.7
		Females	Percent	0.4	4.1	7.8	0.0	31.2	0.8	0.0	2.0	46.3
		Combined Sexes	Percent	1.2	6.2	34.0	0.0	54.6	1.2	0.0	2.8	100.0
			Std. Error	0.7	1.5	3.0	0.0	3.2	0.7	0.0	1.1	
Chilligan River [2]	Total 13 Sep - 14 Sep n=758	Males	Percent	0.0	0.0	2.1	2.0	14.9	13.6	0.1	15.7	48.4
		Females	Percent	0.0	0.0	0.8	0.0	22.8	4.2	0.0	23.8	51.6
		Combined Sexes	Percent	0.0	0.0	2.9	2.0	37.7	17.8	0.1	39.5	100.0
			Std. Error	0.0	0.0	0.6	0.5	1.8	1.4	0.1	1.8	

[1] Source: Information summarized from original age-weight-length data form.

[2] The Chilligan River is a tributary to the Chakachatna River.

Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983.

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Susitna Station [2]	Males	Mean Length				482.0			573.0	481.0			
		Std. Error				2.9			3.2	7.0			
		Sample size				214			85	26			
	Females	Mean Length				481.0			556.0	473.0			
		Std. Error				2.6			2.0	6.1			
		Sample Size				184			93	34			
	All Fish	Mean Length				482.0			564.0	477.0			
		Std. Error				2.0			1.9	4.6			
		Sample Size				398			178	60			
Yentna Station [3]	Males	Mean Length	403.0	329.0	469.0	473.0	358.0	586.0	577.0	490.0		564.0	
		Std. Error	4	4	16.7	2.9	4	1.5	4.3	4		4	
		Range	380-436	291-465	448-502	342-622	324-388	584-587	442-645	426-551		520-600	
		Sample Size	4	47	3	377	8	2	134	13		10	
	Females	Mean Length		403.0	570.0	484.0	571.0	543.0	548.0	507.0	564.0	544.0	
		Std. Error		0.0	0.0	2.1	0.0	5.7	5.0	4	23.5	4	
		Range		403-403	570-570	422-566	571-571	535-554	439-615	492-522	540-587	498-568	
		Sample Size		1	1	308	1	3	98	5	2	7	

-Continued-

Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Sunshine Station [3] (First Run)	Males	Mean Length				477.0			527.0		548.0		
		Std. Error				12.0			7.8		42.5		
		Range				355-565			355-690		505-590		
		Sample Size				39			119		2		
	Females	Mean Length				499.0			521.0	455.0	505.0		
		Std. Error				14.8			6.4	25.0	0.0		
		Range				370-640			400-615	430-455	505-505		
		Sample Size				39			88	2	1		
Sunshine Station [3] (Second Run)	Males	Mean Length	400.0			476.0	382.0		573.0	506.0			
		Std. Error	0.0			4.3	13.0		4.3	4			
		Range	400-400			325-665	360-405		400-655	400-580			
		Sample Size	1			309	3		165	8			
	Females	Mean Length			460.0	482.0	460.0	565.0	541.0	483.0		530.0	
		Std. Error			0.0	2.9	90.0	0.0	3.6	4		4	
		Range			460-460	390-580	370-550	565-565	420-640	430-520		485-560	
		Sample Size			1	321	2	1	170	9		4	

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Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to major river systems in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Talkeetna Station [3]	Males	Mean Length	420.0	343.0		472.0	355.0		590.0	521.0			
		Std. Error	0.0	4		7.1	4		4.9	4			
		Range	420-420	320-435		330-625	320-460		480-670	440-570			
		Sample Size	1	13		101	17		73	4			
	Females	Mean Length		365.0		496.0			561.0	533.0			
		Std. Error		0.0		6.4			7.8	17.5			
		Range		365-365		375-600			480-690	515-550			
		Sample Size		1		74			58	2			
Curry Station [3]	Males	Mean Length	400.0	337.0		467.0	347.0	485.0	569.0	570.0			
		Std. Error	0.0	4		4	13.7	0.0	4	0.0			
		Range	400-400	300-405		420-640	320-365	485-485	520-605	570-570			
		Sample Size	1	7		51	3	1	7	1			
	Females	Mean Length				502.0			551.0	380.0			
		Std. Error				4			4	0.0			
		Range				435-545			480-580	380-380			
		Sample Size				31			15	1			

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Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Kenai River [2]	Males	Mean Length				524.0			598.0			595.0	
		Std. Error				8.7			2.1			4.2	
		Sample Size				25			215			26	
	Females	Mean Length				520.0			577.0			582.0	
		Std. Error				5.5			1.2			4.2	
		Sample Size				30			269			35	
	All Fish	Mean Length				522.0			586.0			587.0	
		Std. Error				5.0			1.1			3.0	
		Sample Size				55			484			61	
Quartz Creek [5] (Kenai River)	Males	Mean Length				511.0	350.0		596.0	520.0	622.0	576.0	
		Std. Error				9.4	0.0		1.8	0.0	12.5	15.3	
		Range				480-545	350-350		555-645	520-520	610-635	520-605	
		Sample Size				7	1		106	1	2	5	
	Females	Mean Length				508.0			569.0	535.0		558.0	
		Std. Error				12.5			1.7	0.0		6.2	
		Range				495-520			530-605	535-535		525-585	
		Sample Size				2			94	1		10	
	All Fish	Mean Length				510.0	350.0		584.0	528.0	622.0	564.0	
		Std. Error				7.4	0.0		1.6	7.5	12.5	6.6	
		Range				480-545	350-350		530-645	520-535	610-635	520-605	
		Sample Size				9	1		200	2	2	15	

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Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Russian River-Early Run (Kenai River) [6]	Males	Mean Length				527.0			596.0	525.0		596.0	550.0
		Std. Error				8.3			2.6	8.7		2.6	0.0
		Range				485-570			555-630	510-540		540-635	550-550
		Sample Size				10			46	3		52	1
	Females	Mean Length				535.0			591.0	540.0		593.0	
		Std. Error				4.3			4.2	13.2		2.5	
		Range				505-560			540-660	520-565		550-645	
		Sample Size				14			34	3		51	
	All Fish	Mean Length				532.0			594.0	532.0		595.0	550.0
		Std. Error				4.2			2.4	7.8		1.8	0.0
		Range				485-570			540-660	510-565		540-645	550-550
		Sample Size				24			80	6		103	1
Russian River-Late Run (Kenai River) [6]	Males	Mean Length				532.0			608.0	548.0		614.0	
		Std. Error				5.9			4.4	10.0		6.5	
		Range				420-590			580-630	490-590		585-630	
		Sample Size				38			12	8		6	
	Females	Mean Length				531.0			605.0	529.0		589.0	
		Std. Error				2.6			25.0	11.3		11.2	
		Range				480-590			580-630	410-585		570-615	
		Sample Size				91			2	14		4	
	All Fish	Mean Length				531.0			607.0	536.0		604.0	
		Std. Error				2.5			4.6	8.1		6.9	
		Range				420-590			580-630	410-590		570-630	
		Sample Size				129			14	22		10	

-Continued-

Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group										
			1980		1979			1978			1977		1976
Location	Sex		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Kasilof River [2]	Males	Mean Length				493.0			558.0				
		Std. Error				1.9			1.9				
		Sample Size				113			170				
	Females	Mean Length				491.0			547.0				
		Std. Error				2.5			1.9				
		Sample Size				78			187				
	All Fish	Mean Length				492.0			552.0				
		Std. Error				1.5			1.3				
		Sample Size				191			357				
Crescent River [2]	Males	Mean Length				467.0			570.0	494.0		569.0	
		Std. Error				6.1			2.1	3.9		3.5	
		Sample Size				47			111	93		43	
	Females	Mean Length				487.0			542.0	488.0		550.0	
		Std. Error				6.5			1.8	3.0		2.1	
		Sample Size				25			169	89		80	
	All Fish	Mean Length				474.0			553.0	491.0		556.0	
		Std. Error				4.6			1.3	2.5		1.8	
		Sample Size				72			280	182		123	

-Continued-

Appendix Table C-20. Mean length[1] by sex and age for sockeye salmon returning to river systems in Upper Cook Inlet in 1983.

[1] Length measured from mid-eye to fork of tail in millimeters.

[2] Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game Technical Data Report No. 122. 152 pp.

[3] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May - October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

[4] Standard errors not reported in Barrett et al. 1984.

[5] Source: Litchfield, D. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Soldotna, Alaska.

[6] Source: Nelson, D. 1984. Russian River sockeye salmon study. Alaska Department of Fish and Game. Anadromous Fish Studies, Annual Report of Progress, 1983-1984, Project F-9-16, 25(G-II-C): 66 pp.

APPENDIX D

Age, Sex, and Size Data for Chinook Salmon

Appendix Table D-1. Estimated age and sex composition of chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[1].

				Age Composition By Brood Year and Age Group										
				1980		1979	1978			1977		1976		
Location	Date	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Northern District West-side Set	Total 27 Jun - 22 Aug n=41	Males	Percent	0.0	0.0	4.9	0.0	22.0	0.0	14.6	0.0	0.0	0.0	41.5
			Numbers	0	0	41	0	185	0	123	0	0	0	349
		Females	Percent	0.0	0.0	17.1	0.0	19.5	0.0	21.9	0.0	0.0	0.0	58.5
			Numbers	0	0	144	0	164	0	184	0	0	0	492
		Combined Sexes	Percent	0.0	0.0	22.0	0.0	41.5	0.0	36.5	0.0	0.0	0.0	100.0
			Numbers	0	0	185	0	349	0	307	0	0	0	841
			Std. Error	0	0	55	0	66	0	64	0	0	0	
Central District Drift	Total 27 Jun - 22 Aug n=39	Males	Percent	0.0	2.6	15.4	0.0	2.6	0.0	17.9	0.0	0.0	0.0	38.5
			Numbers	0	29	173	0	29	0	202	0	0	0	433
		Females	Percent	0.0	0.0	15.4	0.0	12.8	2.5	30.8	0.0	0.0	0.0	61.5
			Numbers	0	0	173	0	144	28	346	0	0	0	691
		Combined Sexes	Percent	0.0	2.6	30.8	0.0	15.4	2.5	48.7	0.0	0.0	0.0	100.0
			Numbers	0	29	346	0	173	28	548	0	0	0	1,124
			Std. Error	0	29	83	0	65	28	90	0	0	0	
Central District West-side Set	Total 17 Jun - 29 Aug n=330	Males	Percent	0.0	0.0	15.2	0.0	14.8	0.0	15.5	0.3	0.6	0.0	46.4
			Numbers	0	0	306	0	299	0	312	6	12	0	935
		Females	Percent	0.0	0.0	4.5	0.0	23.3	0.0	25.2	0.0	0.0	0.6	53.6
			Numbers	0	0	91	0	469	0	508	0	0	12	1,080
		Combined Sexes	Percent	0.0	0.0	19.7	0.0	38.1	0.0	40.7	0.3	0.6	0.6	100.0
			Numbers	0	0	397	0	768	0	820	6	12	12	2,015
			Std. Error	0	0	40	0	49	0	50	6	8	8	

-Continued-

Appendix Table D-1. Estimated age and sex composition of chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[1] (continued).

				Age Composition By Brood Year and Age Group										
				1980		1979	1978			1977		1976		
Location	Date	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Kalgin Island Set	Total 27 Jun - 29 Aug n=32	Males	Percent	0.0	0.0	12.5	0.0	3.1	0.0	50.0	0.0	3.1	0.0	68.7
			Numbers	0	0	190	0	47	0	760	0	47	0	1,044
		Females	Percent	0.0	0.0	6.3	0.0	3.1	0.0	21.9	0.0	0.0	0.0	31.3
			Numbers	0	0	96	0	47	0	332	0	0	0	475
		Combined Sexes	Percent	0.0	0.0	18.8	0.0	6.2	0.0	71.9	0.0	3.1	0.0	100.0
			Numbers	0	0	286	0	94	0	1,092	0	47	0	1,519
			Std. Error	0	0	106	0	65	0	121	0	47	0	
Salamatof Beach Set	Total 01 Jul - 15 Aug n=107	Males	Percent	0.0	0.9	4.7	0.0	6.5	0.0	34.7	0.0	0.9	0.0	47.7
			Numbers	0	20	106	0	146	0	780	0	20	0	1,072
		Females	Percent	0.0	0.0	1.9	0.0	1.9	0.0	46.6	0.0	1.9	0.0	52.3
			Numbers	0	0	43	0	43	0	1,048	0	43	0	1,177
		Combined Sexes	Percent	0.0	0.9	6.6	0.0	8.4	0.0	81.3	0.0	2.8	0.0	100.0
			Numbers	0	20	149	0	189	0	1,828	0	63	0	2,249
			Std. Error	0	20	53	0	59	0	83	0	35	0	
Kalifonsky Beach Set	Total 01 Jul - 15 Aug n=308	Males	Percent	0.0	1.9	4.5	0.0	12.0	0.3	28.3	1.0	2.3	1.0	51.3
			Numbers	0	69	164	0	438	11	1,032	36	84	36	1,870
		Females	Percent	0.0	0.0	9.1	0.3	9.4	0.0	27.3	0.0	1.0	1.6	48.7
			Numbers	0	0	332	11	343	0	995	0	36	59	1,776
		Combined Sexes	Percent	0.0	1.9	13.6	0.3	21.4	0.3	55.6	1.0	3.3	2.6	100.0
			Numbers	0	69	496	11	781	11	2,027	36	120	95	3,646
			Std. Error	0	27	68	11	82	11	99	20	36	32	

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Appendix Table D-1. Estimated age and sex composition of chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[1] (continued).

				Age Composition By Brood Year and Age Group										
				1980		1979	1978			1977		1976		
Location	Date	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Cohoe/Ninilchik Beach Set	Total 01 Jul - 15 Aug n=443	Males	Percent	0.2	1.1	12.0	0.0	8.6	0.0	27.8	0.0	0.2	0.2	50.1
			Numbers	18	101	1,098	0	787	0	2,543	0	18	18	4,583
		Females	Percent	0.0	0.0	6.5	0.0	11.3	0.2	31.7	0.0	0.2	0.0	49.9
			Numbers	0	0	595	0	1,034	18	2,900	0	18	0	4,565
		Combined Sexes	Percent	0.2	1.1	18.5	0.0	19.9	0.2	59.5	0.0	0.4	0.2	100.0
			Numbers	18	101	1,693	0	1,821	18	5,443	0	36	18	9,148
			Std. Error	19	44	165	0	169	19	208	0	27	19	

[1] Source: Age information summarized from original age-weight-length data form.

Appendix Table D-2. Mean length[1] by sex and age for chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2].

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Northern District West-side Set	Males n=17	Mean Length			630.5		896.4		983.8			
		Std. Error			69.5		29.1		32.8			
		Range			561-700		802-1060		845-1060			
		Sample Size			2		9		6			
	Females n=24	Mean Length			659.4		790.4		869.8			
		Std. Error			46.1		44.7		21.1			
		Range			515-855		621-1027		763-968			
		Sample Size			7		8		9			
	All Fish n=41	Mean Length			653.0		846.5		915.4			
		Std. Error			37.3		28.5		23.0			
		Range			515-855		621-1060		763-1060			
		Sample Size			9		17		15			
Central District Drift	Males n=15	Mean Length		426.0	581.5		684.0		1006.4			
		Std. Error		0.0	59.0		0.0		52.9			
		Range		426-426	417-774		684-684		735-1133			
		Sample Size		1	6		1		7			
	Females n=24	Mean Length			613.0		853.0	623.0	989.0			
		Std. Error			24.9		71.2	0.0	21.7			
		Range			551-695		581-981	623-623	813-1111			
		Sample Size			6		5	1	12			
	All Fish n=39	Mean Length		426.0	597.3		824.8	623.0	995.4			
		Std. Error		0.0	30.9		64.6	0.0	23.0			
		Range		426-426	417-774		581-981	623-623	735-1133			
		Sample Size		1	12		6	1	19			

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Appendix Table D-2. Mean length[1] by sex and age for chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Central District West-side Set	Males n=147	Mean Length			593.0		832.6		958.4	765.0	1065.0	
		Std. Error			8.3		11.6		13.4	0.0	0.0	
		Range			477-771		570-1071		493-1078	765-765	1065-1065	
		Sample Size			50		48		47	1	1	
	Females n=177	Mean Length			627.7		804.9		904.9			910.5
		Std. Error			10.5		6.4		7.0			10.5
		Range			523-701		622-930		585-1078			900-921
		Sample Size			15		77		83			2
	All Fish n=324	Mean Length			601.0		815.5		924.3	765.0	1065.0	910.5
		Std. Error			7.0		6.1		6.9	0.0	0.0	10.5
		Range			477-771		570-1071		493-1078	765-765	1065-1065	900-921
		Sample Size			65		125		130	1	1	2
Kalgin Island Set	Males n=22	Mean Length			603.5		830.0		1059.6		1037.0	
		Std. Error			27.8		0.0		13.4		0.0	
		Range			521-639		830-830		946-1180		1037-1037	
		Sample Size			4		1		16		1	
	Females n=10	Mean Length			615.5		913.0		1017.9			
		Std. Error			64.5		0.0		23.0			
		Range			551-680		913-913		958-1103			
		Sample Size			2		1		7			
	All Fish n=32	Mean Length			607.5		871.5		1046.9		1037.0	
		Std. Error			24.4		41.5		12.1		0.0	
		Range			521-680		830-913		946-1180		1037-1037	
		Sample Size			6		2		23		1	

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Appendix Table D-2. Mean length[1] by sex and age for chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Salamatof Beach Set	Males n=32	Mean Length		518.0	569.2		964.6		1067.9		1057.0	
		Std. Error		0.0	39.8		37.3		12.0		0.0	
		Sample Size		1	5		7		37		1	
	Females n=38	Mean Length			724.0		889.5		1008.4		1074.5	
		Std. Error			26.0		23.5		7.8		65.5	
		Sample Size			2		2		50		2	
	All Fish n=70	Mean Length		518.0	613.8		947.6		1033.8		1068.9	
		Std. Error		0.0	35.9		34.2		9.6		43.7	
		Sample Size		1	7.0		9		87		3	
Kalifonsky Beach Set	Males n=154	Mean Length		400.1	637.4		865.0	547.0	1051.6	861.7	1135.4	1141.0
		Std. Error		13.2	22.7		20.5	0.0	6.9	32.6	25.6	38.2
		Sample Size		6	14		37	1	87	3	7	3
	Females n=154	Mean Length			612.8	936.0	844.0		1004.5		1033.7	973.0
		Std. Error			11.6	0.0	22.5		7.1		33.6	44.7
		Sample Size			28	1	29		84		3	5
	All Fish n=308	Mean Length		400.1	620.9	936.0	855.8	547.0	1028.5	861.7	1104.6	1037.6
		Std. Error		13.2	15.3	0.0	21.4	0.0	7.0	32.6	28.0	42.2
		Sample Size		6	42	1	66	1	171	3	10	8

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Appendix Table D-2. Mean length[1] by sex and age for chinook salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Cohoe/Ninilchik Beach Set	Males n=222	Mean Length	540.0	414.6	627.4		850.0		1034.9		1146.0	1020.0
		Std. Error	0.0	12.4	8.9		19.4		6.3		0.0	0.0
		Sample Size	1	5	53		38		123		1	1
	Females n=221	Mean Length			663.6		870.1	640.0	990.4		996.0	
		Std. Error			21.5		15.3	0.0	6.0		0.0	
		Sample Size			29		50	1	140		1	
	All Fish n=443	Mean Length	540.0	414.6	640.1		861.4	640.0	1011.2		1071.0	1020.0
		Std. Error	0.0	12.4	13.4		17.0	0.0	6.4		75.0	0.0
		Sample Size	1	5	82		88	1	263		2	1

[1] Length measured from mid-eye to fork of tail in millimeters.

[2] Source: Length information summarized from original age-weight-length data forms.

Appendix Table D-3. Estimated age and sex composition of chinook salmon harvested by the Tyonek subsistence fishery in Upper Cook Inlet in 1983[1].

		Age Composition By Brood Year and Age Group										
		1980		1979	1978			1977		1976		
Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Males	Percent	0.0	0.0	22.4	0.0	18.4	0.0	18.0	0.0	0.4	0.0	59.2
(n=1,401)	Numbers	0	0	617	0	507	0	496	0	11	0	1,631
Females	Percent	0.0	0.0	3.5	0.0	20.8	0.0	16.4	0.0	0.1	0.0	40.8
(n=967)	Numbers	0	0	96	0	573	0	452	0	3	0	1,124
Combined Sexes	Percent	0.0	0.0	25.9	0.0	39.2	0.0	34.4	0.0	0.5	0.0	100.0
(n=2,368)	Numbers	0	0	713	0	1,080	0	948	0	14	0	2,755
	Std. Error	0	0	9	0	10	0	10	0	1	0	

[1] Source: Browning, J. 1984a. Tyonek subsistence salmon fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report Number 84-3.

Appendix Table D-4. Mean length[1] by sex and age for chinook salmon harvested by the Tyonek subsistence fishery in Upper Cook Inlet, 1983[2].

		Length Composition by Brood Year and Age Group			
		1979	1978	1977	1976
Sex		1.2	1.3	1.4	1.5
Males	Mean Length	586.0	810.0	964.0	1063.0
(n=1,401)	Std. Error	2.6	3.0	3.7	33.3
	Sample Size	528	436	427	10
Females	Mean Length	626.0	803.0	924.0	991.0
(n=967)	Std. Error	4.6	2.3	2.9	77.6
	Sample Size	84	490	390	3
All Fish	Mean Length	592.0	806.0	945.0	1049.0
(n=2,368)	Std. Error	2.3	1.8	2.4	31.3
	Sample Size	612	926	817	13

[1] Lengths measured from mid-eye to fork of tail in millimeters.

[2] Source: Browning, J. 1984a. Tyonek subsistence salmon fishery 1983. Alaska Department of Fish and Game. Upper Cook Inlet Data Report No. 84-3. 13 pp.

Appendix Table D-5. Estimated age and sex composition of chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet, 1983[1].

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Clear Creek	Males	Percent	0.0	0.0	26.4	0.0	23.2	0.0	11.6	0.0	0.0	0.0	61.2
(Chunilna Creek)	(n=79)	Numbers	0	0	180	0	158	0	79	0	0	0	417
	Females	Percent	0.0	0.0	0.0	0.0	11.6	0.0	27.2	0.0	0.0	0.0	38.8
	(n=50)	Numbers	0	0	0	0	79	0	186	0	0	0	265
	Combined Sexes	Percent	0.0	0.0	26.4	0.0	34.8	0.0	38.8	0.0	0.0	0.0	100.0
	(n=129)	Numbers	0	0	180	0	237	0	265	0	0	0	682
		Std. Error	0	0	24	0	26	0	26	0	0	0	
Willow Creek	Males	Percent	0.0	0.0	11.2	0.0	14.9	0.0	25.8	0.0	1.0	0.0	52.9
	(n=156)	Numbers	0	0	45	0	59	0	103	0	4	0	211
	Females	Percent	0.0	0.0	0.0	0.0	11.9	0.0	33.9	0.0	1.3	0.0	47.1
	(n=139)	Numbers	0	0	0	0	47	0	135	0	5	0	187
	Combined Sexes	Percent	0.0	0.0	11.2	0.0	26.8	0.0	59.7	0.0	2.3	0.0	100.0
	(n=295)	Numbers	0	0	45	0	106	0	238	0	9	0	398
		Std. Error	0	0	4	0	5	0	6	0	2	0	
Montana Creek	Males	Percent	0.0	0.0	71.6	0.0	18.5	0.0	1.8	0.0	0.0	0.0	91.9
	(n=204)	Numbers	0	0	218	0	56	0	6	0	0	0	280
	Females	Percent	0.0	0.0	0.0	0.0	5.9	0.0	2.2	0.0	0.0	0.0	8.1
	(n=18)	Numbers	0	0	0	0	18	0	7	0	0	0	25
	Combined Sexes	Percent	0.0	0.0	71.6	0.0	24.4	0.0	4.0	0.0	0.0	0.0	100.0
	(n=222)	Numbers	0	0	218	0	74	0	13	0	0	0	305
		Std. Error	0	0	5	0	5	0	2	0	0	0	

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Appendix Table D-5. Estimated age and sex composition of chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet, 1983[1] (continued).

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Alexander Creek	Males	Percent	0.0	0.0	23.3	0.0	33.6	0.0	9.9	0.0	0.0	0.0	66.8
	(n=135)	Numbers	0	0	242	0	349	0	103	0	0	0	694
	Females	Percent	0.0	0.0	1.0	0.0	19.8	0.0	12.4	0.0	0.0	0.0	33.2
	(n=67)	Numbers	0	0	10	0	206	0	129	0	0	0	345
	Combined Sexes	Percent	0.0	0.0	24.3	0.0	53.4	0.0	22.3	0.0	0.0	0.0	100.0
	(n=202)	Numbers	0	0	252	0	555	0	232	0	0	0	1,039
		Std. Error	0	0	28	0	33	0	27	0	0	0	
Deshka River	Males	Percent	0.0	0.2	19.9	0.0	30.5	0.0	7.1	0.0	0.0	0.0	57.7
	(n=301)	Numbers	0	8	787	0	1,206	0	281	0	0	0	2,282
	Females	Percent	0.0	0.0	1.1	0.0	30.5	0.0	10.7	0.0	0.0	0.0	42.3
	(n=221)	Numbers	0	0	44	0	1,206	0	423	0	0	0	1,673
	Combined Sexes	Percent	0.0	0.2	21.0	0.0	61.0	0.0	17.8	0.0	0.0	0.0	100.0
	(n=522)	Numbers	0	8	831	0	2,412	0	704	0	0	0	3,955
		Std. Error	0	7	66	0	79	0	62	0	0	0	
Lake Creek	Males	Percent	0.0	0.3	20.4	0.0	12.8	0.0	24.8	0.0	0.3	0.0	58.6
	(n=201)	Numbers	0	6	385	0	241	0	468	0	6	0	1,106
	Females	Percent	0.0	0.0	0.9	0.0	9.3	0.0	30.6	0.0	0.3	0.3	41.4
	(n=142)	Numbers	0	0	17	0	176	0	578	0	5	6	782
	Combined Sexes	Percent	0.0	0.3	21.3	0.0	22.1	0.0	55.4	0.0	0.6	0.3	100.0
	(n=343)	Numbers	0	6	402	0	417	0	1,046	0	11	6	1,888
		Std. Error	0	5	38	0	38	0	46	0	7	5	

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Appendix Table D-5. Estimated age and sex composition of chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet, 1983[1] (continued).

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Peters/Martin Creek [2]	Males (n=21)	Percent	0.0	0.0	4.9	0.0	29.3	0.0	14.6	0.0	2.4	0.0	51.2
		Numbers	0	0	6	0	32	0	17	0	3	0	56
	Females (n=20)	Percent	0.0	0.0	0.0	0.0	4.9	0.0	43.9	0.0	0.0	0.0	48.8
		Numbers	0	0	0	0	6	0	50	0	0	0	56
	Combined Sexes (n=41)	Percent	0.0	0.0	4.9	0.0	34.2	0.0	58.5	0.0	2.4	0.0	100.0
		Numbers	0	0	6	0	38	0	67	0	3	0	114
		Std. Error	0	0	3	0	7	0	7	0	2	0	
Talachulitna River	Males (n=44)	Percent	0.0	1.5	8.9	0.0	28.4	0.0	26.9	0.0	0.0	0.0	65.7
		Numbers	0	4	24	0	78	0	73	0	0	0	179
	Females (n=23)	Percent	0.0	0.0	0.0	0.0	17.9	0.0	16.4	0.0	0.0	0.0	34.3
		Numbers	0	0	0	0	49	0	45	0	0	0	94
	Combined Sexes (n=67)	Percent	0.0	1.5	8.9	0.0	46.3	0.0	43.3	0.0	0.0	0.0	100.0
		Numbers	0	4	24	0	127	0	118	0	0	0	273
		Std. Error	0	4	8	0	15	0	14	0	0	0	

[1] Source of age proportions: SPSS computer printouts provided by Kelly Hepler, Alaska Department of Fish and Game, Division of Sport Fish, Anchorage, Alaska.

Source of harvest numbers: Mills, M. 1984. Alaska statewide sport fish harvest studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (SW-I-A). 122 pp.

[2] Source of harvest numbers: Hepler, K. and R. Bentz. 1984. Chinook salmon population and angler use studies of Upper Cook Inlet waters. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (G-II-M): 40-58.

Appendix Table D-6. Estimated age and sex composition of chinook salmon harvested by sport fisheries in northern Cook Inlet, 1983[1].

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Little Susitna River	Males (n=143)	Percent	0.0	0.0	20.2	0.0	20.2	0.0	24.6	0.0	0.4	0.0	65.4
		Numbers	0	0	171	0	171	0	209	0	3	0	554
	Females (n=79)	Percent	0.0	0.0	0.0	0.0	17.1	0.0	17.5	0.0	0.0	0.0	34.6
		Numbers	0	0	0	0	145	0	148	0	0	0	293
	Combined Sexes (n=228)	Percent	0.0	0.0	20.2	0.0	37.3	0.0	42.1	0.0	0.4	0.0	100.0
		Numbers	0	0	171	0	316	0	357	0	3	0	847
		Std. Error	0	0	19	0	23	0	24	0	3	0	
Chuitna River	Males (n=66)	Percent	0.0	0.6	17.5	0.0	9.4	0.0	13.8	0.0	0.0	0.0	41.3
		Numbers	0	5	139	0	75	0	110	0	0	0	329
	Females (n=94)	Percent	0.0	0.0	0.0	0.0	20.6	0.0	38.1	0.0	0.0	0.0	58.7
		Numbers	0	0	0	0	164	0	304	0	0	0	468
	Combined Sexes (n=160)	Percent	0.0	0.6	17.5	0.0	30.0	0.0	51.9	0.0	0.0	0.0	100.0
		Numbers	0	5	139	0	239	0	414	0	0	0	797
		Std. Error	0	4	21	0	26	0	28	0	0	0	

[1] Source of age proportions: SPSS computer printouts provided by Kelly Hepler, Alaska Department of Fish and Game, Division of Sport Fisheries, Anchorage, Alaska.

Source of harvest numbers: Mills, M. 1984. Alaska statewide sport fish harvests studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (SW-I-A). 122 pp.

Appendix Table D-7. Estimated age and sex composition of chinook salmon harvested by sport fisheries in the Kenai River, Upper Cook Inlet, 1983[1].

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Early Run - Kenai River [2]	Males (n=34)	Percent	0.0	0.0	5.7	0.0	10.0	0.0	25.7	2.9	2.9	1.4	48.6
		Numbers	0	0	363	0	636	0	1,635	184	184	89	3,091
	Females (n=36)	Percent	0.0	0.0	1.4	0.0	4.3	0.0	37.2	1.4	1.4	5.7	51.4
		Numbers	0	0	89	0	273	0	2,366	89	89	363	3,269
	Combined Sexes (n=70)	Percent	0.0	0.0	7.1	0.0	14.3	0.0	62.9	4.3	4.3	7.1	100.0
		Numbers	0	0	452	0	909	0	4,001	273	273	452	6,360
		Std. Error	0	0	196	0	267	0	368	154	154	196	
Late Run - Kenai River [3]	Males (n=38)	Percent	0.0	0.0	3.8	0.0	3.8	0.0	38.7	0.0	1.2	0.0	47.5
		Numbers	0	0	349	0	349	0	3,550	0	110	0	4,358
	Females (n=42)	Percent	0.0	0.0	0.0	0.0	1.3	0.0	47.5	0.0	1.2	2.5	52.5
		Numbers	0	0	0	0	119	0	4,358	0	110	229	4,816
	Combined Sexes (n=80)	Percent	0.0	0.0	3.8	0.0	5.1	0.0	86.2	0.0	2.4	2.5	100.0
		Numbers	0	0	349	0	468	0	7,908	0	220	229	9,174
		Std. Error	0	0	196	0	226	0	354	0	157	160	

[1] Source: Hammarstrom, S. and L. Larson. 1984a. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25(G-II-L) 1-39.

Hammarstrom (1984a) estimated that 15,534 chinook salmon (greater than 51 cm) were harvested from the early and late runs into the Kenai River combined. Mills (1984) estimated that 15,316 chinook salmon were harvested by sport fishermen in the Kenai River. We used Hammarstrom's estimated sport harvests because estimates for the early and late runs were made separately.

[2] Harvests from the early run included those fish caught in the downstream section (Soldotna Bridge to Beaver Creek) from 1 June through 1 July, and those fish caught in the upstream section (Naptown Rapids to Skilak Lake) from 1 June through 10 July.

[3] Harvests from the late run include those fish caught in the downstream section after 1 July, and in the upstream section after 10 July.

Appendix Table D-8. Estimated age and sex composition of chinook salmon harvested by sport fisheries along the lower Kenai Peninsula, Cook Inlet, 1983[1].

			Age Composition By Brood Year and Age Group										
			1980		1979	1978			1977		1976		
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	Other [2]	Total
Anchor River	Combined Sexes	Percent	0.0	0.0	0.0	0.0	30.7	0.0	69.3	0.0	0.0	0.0	100.0
	(n=75)	Numbers	0	0	0	0	370	0	836	0	0	0	1,206
		Std. Error	0	0	0	0	63	0	63	0	0	0	
Ninilchik River	Combined Sexes	Percent	0.0	0.0	5.2	0.0	36.2	0.0	58.6	0.0	0.0	0.0	100.0
	(n=58)	Numbers	0	0	42	0	293	0	473	0	0	0	808
		Std. Error	0	0	23	0	50	0	51	0	0	0	
Deep Creek	Combined Sexes	Percent	0.0	0.0	6.8	0.0	26.5	0.0	66.7	0.0	0.0	0.0	100.0
(freshwater)	(n=117)	Numbers	0	0	67	0	261	0	658	0	0	0	986
		Std. Error	0	0	22	0	38	0	41	0	0	0	
Deep Creek [3]	Combined Sexes	Percent			9.6		37.3		44.7		0.0	8.4	100.0
Marine	(n=83)	Numbers	2	2	96	2	373	2	447	2	0	84	1,000
(16 May - 26 June)		Std. Error			31		51		53		0	29	
Deep Creek [3]	Combined Sexes	Percent			3.2		8.4		81.1		5.2	2.1	100.0
Marine	(n=95)	Numbers	2	2	55	2	143	2	1,384	2	89	36	1,707
(27 Jun - 31 Jul)		Std. Error			30		47		67		38	25	

[1] Source of age proportions: Hammarstrom, S. and L. Larson. 1984. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25 (G-II-L): 1-39 pp.

Source of harvest numbers: Mills, M. 1984. Alaska statewide sport fish harvests studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984. Project F-9-16, 25(SW-I-A). 122 pp.

[2] The "other" age category represents all ages other than 1.2, 1.3, 1.4, and 1.5. Hammarstrom did not break out the other age groups.

[3] Source of harvest numbers: Hammarstrom, S. and L. Larson. 1984. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-L): 1-39.

Appendix Table D-9. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet, 1983[2].

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Clear Creek (Chunilna Creek)	Males (n=79)	Mean Length			592.0		792.0		989.0			
		Std. Error			10.3		16.5		19.1			
		Range			450-670		600-930		850-1120			
		Sample Size			34		30		15			
	Females (n=50)	Mean Length					821.0		922.0			
		Std. Error					13.4		8.6			
		Range					690-920		780-1000			
		Sample Size					15		35			
	All Fish (n=129)	Mean Length			592.0		802.0		942.0			
		Std. Error			10.3		12.0		9.3			
		Range			450-670		600-930		780-1120			
		Sample Size			34		45		50			
Willow Creek	Males (n=156)	Mean Length			639.0		784.0		1006.0		1100.0	
		Std. Error			8.1		12.4		6.0		35.1	
		Range			510-690		550-950		860-1130		1030-1140	
		Sample Size			33		44		76		3	
	Females (n=139)	Mean Length					835.0		950.0		988.0	
		Std. Error					10.0		4.5		20.2	
		Range					640-980		810-1060		930-1020	
		Sample Size					35		100		4	
	All Fish (n=295)	Mean Length			639.0		807.0		974.0		1036.0	
		Std. Error			8.1		8.6		4.2		28.4	
		Range			510-690		550-980		810-1130		930-1140	
		Sample Size			33		79		176		7	

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Appendix Table D-9. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet in 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Montana Creek	Males	Mean Length			590.0		686.0		975.0			
	(n=204)	Std. Error			4.5		12.2		38.6			
		Range			460-710		570-880		900-1080			
		Sample Size			159		41		4			
	Females	Mean Length					788.0		924.0			
	(n=18)	Std. Error					24.5		37.6			
		Range					640-940		800-1020			
		Sample Size					13		5			
	All Fish	Mean Length			590.0		711.0		947.0			
	(n=222)	Std. Error			4.5		12.4		26.9			
		Range			460-710		570-940		800-1080			
		Sample Size			159		54		9			
Alexander Creek	Males	Mean Length			586.0		782.0		952.0			
	(n=135)	Std. Error			8.5		8.2		14.4			
		Range			460-730		550-930		855-1080			
		Sample Size			47		68		20			
	Females	Mean Length			672.0		798.0		926.0			
	(n=67)	Std. Error			177.5		9.1		11.2			
		Range			495-850		690-930		810-1070			
		Sample Size			2		40		25			
	All Fish	Mean Length			589.0		788.0		938.0			
	(n=202)	Std. Error			10.0		6.2		9.1			
		Range			460-850		550-930		810-1080			
		Sample Size			49		108		45			

-Continued-

Appendix Table D-9. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet in 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Deshka River	Males	Mean Length		370.0	585.0		784.0		955.0			
	(n=301)	Std. Error		0.0	5.6		5.0		11.6			
		Range		370-370	410-685		520-900		820-1140			
		Sample Size		1	104		159		37			
	Females	Mean Length			614.0		796.0		894.0			
	(n=221)	Std. Error			17.9		3.4		5.9			
		Range			550-680		700-900		805-1010			
		Sample Size			6		159		56			
	All Fish	Mean Length		370.0	587.0		790.0		918.0			
	(n=522)	Std. Error		0.0	5.4		3.0		6.6			
		Range		370-370	410-685		520-900		805-1140			
		Sample Size		1	110		318		93			
Lake Creek	Males	Mean Length		470.0	623.0		819.0		1006.0		1035.0	
	(n=201)	Std. Error		0.0	8.2		11.5		8.3		0.0	
		Range		470-470	480-910		680-1070		630-1200		1035-1035	
		Sample Size		1	70		44		85		1	
	Females	Mean Length			732.0		839.0		956.0		1060.0	
	(n=142)	Std. Error			45.7		7.5		5.2		0.0	
		Range			645-800		730-955		840-1160		1060-1060	
		Sample Size			3		32		105		1	
	All Fish	Mean Length		470.0	628.0		827.0		978.0		1048.0	
	(n=343)	Std. Error		0.0	8.4		7.4		5.0		12.5	
		Range		470-470	480-910		680-1070		630-1200		1035-1060	
		Sample Size		1	73		76		190		2	

-Continued-

Appendix D-9. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in the Susitna River, Upper Cook Inlet, 1983[2] (continued).

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Peters/Martin Creek	Males (n=21)	Mean Length			605.0		815.0		1008.0		1030.0	
		Std. Error			85.0		15.8		25.1		0.0	
		Range			520-690		730-910		940-1090		1030-1030	
		Sample Size			2		12		6		1	
	Females (n=20)	Mean Length					865.0		936.0			
		Std. Error					55.0		9.8			
		Range					810-920		862-1010			
		Sample Size					2		18			
	All Fish (n=41)	Mean Length			605.0		822.0		954.0		1030.0	
		Std. Error			85.0		15.4		11.4		0.0	
		Range			520-690		730-920		862-1090		1030-1030	
		Sample Size			2		14		24		1	
Talachulitna River	Males (n=44)	Mean Length		375.0	622.0		832.0		962.0			
		Std. Error		0.0	22.3		15.2		15.7			
		Range		375-375	550-690		720-965		810-1060			
		Sample Size		1	6		19		18			
	Females (n=23)	Mean Length					842.0		927.0			
		Std. Error					14.9		15.4			
		Range					785-990		855-995			
		Sample Size					12		11			
	All Fish (n=67)	Mean Length		375.0	622.0		836.0		949.0			
		Std. Error		0.0	22.3		10.8		11.6			
		Range		375-375	550-690		720-990		810-1060			
		Sample Size		1	6		31		29			

1 Lengths measured from mid-eye to fork of tail in millimeters.

2 Source: SPSS computer printouts provided by Kelly Hepler, Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage, Alaska.

Appendix Table D-10. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in northern Cook Inlet in 1983[2].

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Little Susitna	Males (n=149)	Mean Length			598.0		806.0		977.0		1030.0	
		Std. Error			8.7		13.7		10.0		0.0	
		Range			470-710		570-1010		720-1130		1030-1030	
		Sample Size			46		46		56		1	
	Females (n=79)	Mean Length					835.0		904.0			
		Std. Error					7.7		8.1			
		Range					650-920		780-1000			
		Sample Size					39		40			
	All Fish (n=228)	Mean Length			598.0		819.0		946.0		1030.0	
		Std. Error			8.7		8.3		7.6		0.0	
		Range			470-710		570-1010		720-1130		1030-1030	
		Sample Size			46		85		96		1	
Chuitna River	Males (n=66)	Mean Length		292.0	619.0		779.0		975.0			
		Std. Error		0.0	18.2		17.4		12.0			
		Range		292-292	460-1020		653-891		878-1094			
		Sample Size		1	28		15		22			
	Females (n=94)	Mean Length					829.0		934.0			
		Std. Error					7.5		5.2			
		Range					731-910		854-1014			
		Sample Size					33		61			
	All Fish (n=160)	Mean Length		292.0	619.0		813.0		945.0			
		Std. Error		0.0	18.2		8.1		5.3			
		Range		292-292	460-1020		653-910		854-1094			
		Sample Size		1	28		48		83			

[1] Lengths measured from mid-eye to fork of tail in millimeters.

[2] Source: SPSS computer printouts provided by Kelly Hepler, Alaska Department of Fish and Game, Division of Sport Fisheries, Anchorage, Alaska.

Appendix Table D-11. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries in the Kenai River, Upper Cook Inlet, 1983[2].

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Early Run - [3] Kenai River	Males (n=34)	Mean Length			590.0		866.0		1030.0	865.0	1100.0	1000.0
		Std. Error			31.1		34.6		21.8	125.0	30.0	0.0
		Range			520-660		750-1010		760-1130	740-990	1070-1130	1000-1000
		Sample size			4		7		18	2	2	1
	Females (n=36)	Mean Length			550.0		763.0		967.0	770.0	900.0	920.0
		Std. Error			0.0		85.7		8.8	0.0	0.0	21.6
		Range			550-550		600-890		840-1050	770-770	900-900	860-960
		Sample Size			1		3		26	1	1	4
	All Fish (n=70)	Mean Length			582.0		836.0		993.0	833.0	1033.0	935.0
		Std. Error			25.4		36.0		11.2	78.8	68.9	23.2
		Range			520-660		600-1010		760-1130	740-990	900-1130	860-1000
		Sample Size			5		10		44	3	3	5
Late Run - [4] Kenai River	Males (n=38)	Mean Length			673.0		959.0		1094.0		1070.0	
		Std. Error			18.6		42.6		10.7		0.0	
		Range			650-710		900-1040		910-1210		1070-1070	
		Sample Size			3		3		31		1	
	Females (n=42)	Mean Length					970.0		1008.0		1160.0	1045.0
		Std. Error					0.0		10.7		0.0	25.0
		Range					970-970		809-1100		1160-1160	1020-1070
		Sample size					1		38		1	2
	All Fish (n=80)	Mean Length			673.0		960.0		1046.0		1115.0	1045.0
		Std. Error			18.6		30.3		9.1		45.0	25.0
		Range			650-710		900-1040		809-1210		1070-1160	1020-1070
		Sample Size			3		4		69		2	2

[1] Length measured from mid-eye to fork of tail in millimeters.

[2] Source of information are the original age-weight-length data forms provided by Stephen Hammarstrom, Alaska Department of Fish and Game, Division of Sport Fisheries, Soldotna, Alaska.

[3] Early run fish were considered by Hammarstrom (1984) as being available in downstream section (Soldotna Bridge to Beaver Creek) from 1 June through 1 July, and in the upstream section (Naptowne Rapids to Skilak Lake) from 1 June through 10 July.

[4] Late run fish were considered by Hammarstrom (1984) as being available in the downstream section (Soldotna Bridge to Beaver Creek) from 2 July through 31 July and in the upstream section (Naptowne Rapids to Skilak Lake) from 11 July through 31 July.

Appendix Table D-12. Mean length[1] by sex and age for chinook salmon harvested by sport fisheries along the lower Kenai Peninsula, Cook Inlet, 1983[2].

			Length Composition By Brood Year and Age Group									
			1980		1979	1978			1977		1976	
Location	Sex		0.2	1.1	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Anchor River	All Fish	Mean Length					779.0		884.0			
	(n=75)	Std. Error					8.0		7.9			
		Range					690-860		790-1005			
		Sample Size					23		52			
Ninilchik River	All Fish	Mean Length			600.0		771.0		870.0			
	(n=58)	Std. Error			23.6		7.6		7.3			
		Range			565-645		705-835		800-920			
		Sample Size			3		21		34			
Deep Creek	All Fish	Mean Length			559.0		767.0		867.0			
(freshwater)	(n=117)	Std. Error			10.7		8.5		6.4			
		Range			530-620		680-835		760-1025			
		Sample Size			8		31		78			
Deep Creek	All Fish	Mean Length			718.0		877.0		949.0			
Marine	(n=76)	Std. Error			3		3		3			
(16 May - 26 Jun)		Range			680-800		760-960		900-1000			
		Sample Size			8		31		37			
Deep Creek	All Fish	Mean Length			728.0		900.0		1170.0		1180.0	
Marine	(n=93)	Std. Error			3		3		3		3	
(27 Jun - 31 Jul)		Range			710-750		810-990		980-1370		1050-1250	
		Sample Size			3		8		77		5	

1 Lengths measured from mid-eye to fork of tail in millimeters.

2 Source: Hammarstrom, S. and L. Larson. 1984. Evaluation of chinook salmon fisheries of the Kenai Peninsula. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984. Project F-9-16, 25(G-II-L): 39 pp.

3 Standard errors not reported by Hammarstrom (1984).

Appendix Table D-13. Estimated age and sex composition of chinook salmon escapement into river systems in Upper Cook Inlet, 1983.

			Age Composition By Brood Year and Age Group											
			1980		1979		1978			1977		1976		
Location	Sex		0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4	Total
Kenai River [1]	Males	Percent	0.0	0.3	0.0	3.8	0.1	4.3	0.0	32.1	0.1	1.8	0.1	42.6
(Late Run-	(n=462)	Numbers	0	92	0	1,160	30	1,312	0	9,796	30	549	31	13,000
2 Jul-31 Jul)														
	Females	Percent	0.0	0.1	0.0	2.0	0.1	6.0	0.0	47.0	0.0	2.1	0.1	57.4
	(n=622)	Numbers	0	30	0	610	31	1,831	0	14,343	0	641	30	17,516
	Combined Sexes	Percent	0.0	0.4	0.0	5.8	0.2	10.3	0.0	79.1	0.1	3.9	0.2	100.0
	(n=1,084)	Numbers	0	122	0	1,770	61	3,143	0	24,139	30	1,190	61	30,516
		Std. Error	0	57	0	213	41	277	0	370	29	176	41	
Quartz Creek [2]	Males	Percent	0.0	0.0	0.0	1.8	0.0	10.7	0.0	32.1	0.0	1.8	0.0	46.4
(Kenai River)	(n=26)	Numbers	0	0	0	6	0	38	0	113	0	6	0	163
	Females	Percent	0.0	0.0	0.0	0.0	0.0	3.6	0.0	48.2	0.0	1.8	0.0	53.6
	(n=30)	Numbers	0	0	0	0	0	13	0	169	0	6	0	188
	Combined Sexes	Percent	0.0	0.0	0.0	1.8	0.0	14.3	0.0	80.3	0.0	3.6	0.0	100.0
	(n=56)	Numbers	0	0	0	6	0	51	0	282	0	12	0	351
		Std. Error	0	0	0	6	0	15	0	17	0	8	0	
Crooked Creek [3]	Males	Percent	46.8	0.4	0.4	8.7	9.3	6.6	0.0	4.0	0.0	0.0	0.0	76.2
(Kasilof River)	(n=436)	Numbers	2,015	17	17	375	400	284	0	172	0	0	0	3,280
	Females	Percent	1.6	0.0	0.2	0.3	12.4	3.0	0.0	6.3	0.0	0.0	0.0	23.8
	(n=136)	Numbers	69	0	9	13	534	129	0	271	0	0	0	1,025
	Combined Sexes	Percent	48.4	0.4	0.6	9.0	21.7	9.6	0.0	10.3	0.0	0.0	0.0	100.0
	(n=572)	Numbers	2,084	17	26	388	934	413	0	443	0	0	0	4,305 [4]
		Std. Error	84	11	13	48	69	49	0	51	0	0	0	

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Appendix Table D-13. Estimated age and sex composition of chinook salmon escapement into river systems in Upper Cook Inlet, 1983 (continued).

[1] Source: Age information summarized from original age-weight-length data forms provided by Steve Hammarstrom, Alaska Department of Fish and Game, Sport Fisheries, Soldotna, Alaska. The estimate of 30,516 represents a mark-recapture estimate of total in-river run from 2 July through 31 July. An estimated 9,174 chinook salmon were harvested by the sport fishery during this time, therefore approximately 21,342 chinook salmon escaped to spawn.

[2] Source: Age proportions taken from original age-weight-length data forms provided by David Litchfield, Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement, and Development Division, Soldotna, Alaska.

[3] Source: Age proportions taken from original age-weight-length data forms provided by David Waite, Alaska Department of Fish and Game, Fisheries Rehab-litation, Enhancement, and Development Division, Soldotna, Alaska.

[4] The escapement figures does not include small chinook salmon (<51 cm). Small chinook salmon were not sampled for age-weight-length data, therefore we did not include them when expanding the escapement by the age composition.

Appendix Table D-14. Mean length[1] by sex and age for chinook salmon escapement into river systems in Upper Cook Inlet in 1983.

			Length Composition By Brood Year and Age Group										
			1980		1979		1978			1977		1976	
Location	Sex		0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	1.5	2.4
Quartz Creek [2] (Kenai River)	Males (n=26)	Mean Length				560.0		822.0		989.0		1085.0	
		Std. Error				0.0		13.0		13.0		0.0	
		Range				560-560		780-860		905-1055		1085-1085	
		Sample Size				1		6		18		1	
	Females (n=30)	Mean Length						818.0		924.0		960.0	
		Std. Error						7.5		6.7		0.0	
		Range						810-825		845-1000		960-960	
		Sample Size						2		27		1	
	All Fish (n=56)	Mean Length				560.0		821.0		950.0		1022.0	
		Std. Error				0.0		9.7		8.1		62.5	
		Range				560-560		780-860		845-1055		960-1085	
		Sample Size				1		8		45		2	
Crooked Creek [3] (Kasilof River)	Males (n=436)	Mean Length	611.0	345.0	720.0	588.0	899.0	760.0		923.0			
		Std. Error	3.3	15.0	80.0	9.6	9.9	11.5		15.5			
		Sample Size	268	2	2	50	53	38		23			
	Females (n=136)	Mean Length	668.0		780.0	640.0	862.0	787.0		863.0			
		Std. Error	11.5		0.0	10.0	5.5	14.1		6.5			
		Sample Size	9		1	2	71	17		36			
	All Fish (n=572)	Mean Length	613.0	345.0	740.0	590.0	878.0	768.0		886.0			
		Std. Error	3.3	15.0	50.3	9.3	5.5	9.1		8.1			
		Sample Size	277	2	3	52	124	55		59			

[1] Lengths measured from mid-eye to fork of tail in millimeters.

[2] Source: Length composition taken from original age-weight-length data forms provided by David Litchfield, Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement, and Development Division, Soldotna, Alaska.

[3] Source: Length composition taken from original age-weight-length data forms provided by David Waite, Alaska Department of Fish and Game, Fisheries Rehabilitation Enhancement, and Development Division, Soldotna, Alaska.

APPENDIX E

Age, Sex, and Size Data for Coho Salmon

Appendix Table E-1. Estimated age and sex composition of coho salmon in the Northern District west-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
6/27-8/26	Males	Percent	8.0	33.6	2.0	43.6
n=450		Number	3,367	14,123	842	18,332
	Females	Percent	14.0	40.4	2.0	56.4
		Number	5,892	17,023	842	23,757
	Combined	Percent	22.0	74.0	4.0	100.0
		Number	9,259	31,146	1,684	42,089
		Standard Error	818	867	387	

[1] Source: Age information was summarized from the original age-weight-length data forms.

Appendix Table E-2. Estimated age and sex composition by date of coho salmon in the Central District drift net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
6/27-7/13	Males	Percent	8.3	41.6	5.1	55.0
(n=373)		Numbers	6,054	30,274	3,711	40,039
	Females	Percent	5.6	36.2	3.2	45.0
		Numbers	4,102	26,367	2,344	32,813
	Combined	Percent	13.9	77.8	8.3	100.0
		Numbers	10,156	56,641	6,055	72,852
		Standard Error	1,303	1,566	1,039	
7/15-7/20	Males	Percent	7.6	37.7	2.9	48.2
(n=628)		Numbers	7,852	38,770	2,944	49,566
	Females	Percent	6.7	41.6	3.5	51.8
		Numbers	6,870	42,695	3,599	53,164
	Combined	Percent	14.3	79.3	6.4	100.0
		Numbers	14,722	81,465	6,543	102,730
		Standard Error	1,432	1,657	1,001	
7/21-7/25	Males	Percent	10.6	30.8	3.6	45.0
(n=480)		Numbers	7,279	21,125	2,426	30,830
	Females	Percent	14.0	37.7	3.3	55.0
		Numbers	9,563	25,835	2,284	37,682
	Combined	Percent	24.6	68.5	6.9	100.0
		Numbers	16,842	46,960	4,710	68,512
		Standard Error	1,343	1,449	791	
7/26-7/29	Males	Percent	15.5	35.4	2.9	53.8
(n=489)		Numbers	5,180	11,790	954	17,924
	Females	Percent	13.3	31.7	1.2	46.2
		Numbers	4,430	10,564	409	15,403
	Combined	Percent	28.8	67.1	4.1	100.0
		Numbers	9,610	22,354	1,363	33,327
		Standard Error	678	704	297	

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Appendix Table E-2. Estimated age and sex composition by date of coho salmon in the Central District drift net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
8/01-8/05	Males	Percent	8.8	23.6	3.1	35.5
(n=445)		Numbers	2,676	7,205	960	10,841
	Females	Percent	13.9	48.1	2.5	64.5
		Numbers	4,254	14,684	755	19,693
	Combined	Percent	22.7	71.7	5.6	100.0
		Numbers	6,930	21,889	1,715	30,534
		Standard Error	603	648	331	
8/08-9/12	Males	Percent	9.6	28.0	3.0	40.6
(n=493)		Numbers	1,812	5,320	579	7,711
	Females	Percent	14.6	41.4	3.4	59.4
		Numbers	2,776	7,865	655	11,296
	Combined	Percent	24.2	69.4	6.4	100.0
		Numbers	4,588	13,185	1,234	19,007
		Standard Error	362	390	207	
Total	Males	Percent	9.4	35.0	3.6	48.0
(n=2908)		Numbers	30,853	114,484	11,574	156,911
	Females	Percent	9.8	39.1	3.1	52.0
		Numbers	31,995	128,010	10,046	170,051
	Combined	Percent	19.2	74.1	6.7	100.0
		Numbers	62,848	242,494	21,620	326,962
		Standard Error	2,551	2,892	1,717	

[1] Source: Age information was summarized from the original age-weight-length data forms.

Appendix Table E-3. Estimated age and sex composition by date of coho salmon in the Central District west-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
6/24-7/25	Males	Percent	5.3	44.2	1.2	50.7
(N=337)		Numbers	1,582	13,093	351	15,026
	Females	Percent	7.4	38.3	3.6	49.3
		Numbers	2,197	11,335	1,054	14,586
	Combined	Percent	12.7	82.5	4.8	100.0
		Numbers	3,779	24,428	1,405	29,612
		Standard Error	537	610	340	
7/29-8/01	Males	Percent	6.1	37.5	3.2	46.8
(N=712)		Numbers	411	2,550	220	3,181
	Females	Percent	7.7	41.4	4.1	53.2
		Numbers	525	2,818	277	3,620
	Combined	Percent	13.8	78.9	7.3	100.0
		Numbers	936	5,368	497	6,801
		Standard Error	83	98	63	
8/05-8/08	Males	Percent	7.9	42.4	3.4	53.7
(N=177)		Numbers	247	1,326	106	1,679
	Females	Percent	9.6	34.5	2.2	46.3
		Numbers	301	1,078	71	1,450
	Combined	Percent	17.5	76.9	5.6	100.0
		Numbers	548	2,404	177	3,129
		Standard Error	87	97	53	
8/12-9/05	Males	Percent	9.6	37.6	2.0	49.2
(N=354)		Numbers	1,359	5,318	280	6,957
	Females	Percent	10.2	37.2	3.4	50.8
		Numbers	1,439	5,278	480	7,197
	Combined	Percent	19.8	74.8	5.4	100.0
		Numbers	2,798	10,596	760	14,154
		Standard Error	296	323	168	

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Appendix Table E-3. Estimated age and sex composition by date of coho salmon in the Central District west-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
Total	Males	Percent	6.7	41.5	1.8	50.0
(N=1,580)		Numbers	3,599	22,287	957	26,843
	Females	Percent	8.3	38.2	3.5	50.0
		Numbers	4,462	20,509	1,882	26,853
	Combined	Percent	15.0	79.7	5.3	100.0
		Numbers	8,061	42,796	2,839	53,696
		Standard Error	625	704	388	

[1] Source: Age information was summarized from the original age-weight-length data forms.

Appendix Table E-4. Estimated age and sex composition by date of coho salmon in the Central District east-side set net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
7/01-7/21	Males	Percent	6.5	28.3	8.7	43.5
(N= 46)		Numbers	626	2,716	836	4,178
	Females	Percent	10.9	39.1	6.5	56.5
		Numbers	1,045	3,760	627	5,432
	Combined	Percent	17.4	67.4	15.2	100.0
		Numbers	1,671	6,476	1,463	9,610
		Standard Error	542	670	513	
7/22-7/26	Males	Percent	6.2	37.0	7.4	50.6
(N= 81)		Numbers	661	3,967	793	5,421
	Females	Percent	3.7	35.8	9.9	49.4
		Numbers	397	3,834	1,058	5,289
	Combined	Percent	9.9	72.8	17.3	100.0
		Numbers	1,058	7,801	1,851	10,710
		Standard Error	356	531	451	
7/27-7/29	Males	Percent	9.1	39.9	2.3	51.3
(N=263)		Numbers	848	3,709	212	4,769
	Females	Percent	6.9	38.8	3.0	48.7
		Numbers	636	3,603	283	4,522
	Combined	Percent	16.0	78.7	5.3	100.0
		Numbers	1,484	7,312	495	9,291
		Standard Error	207	232	127	
8/01	Males	Percent	9.6	39.1	4.6	53.3
(N=345)		Numbers	283	1,157	137	1,577
	Females	Percent	7.5	36.3	2.9	46.7
		Numbers	223	1,070	86	1,379
	Combined	Percent	17.1	75.4	7.5	100.0
		Numbers	506	2,227	223	2,956
		Standard Error	56	65	39	

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Appendix Table E-4. Estimated age and sex composition by date of coho salmon in the Central District east-side set net fishery in Upper Cook Inlet in 1983[1] (continued).

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Date	Sex		1.1	2.1	3.1	Total
8/10	Males	Percent	2.6	30.3	3.5	36.4
(N=231)		Numbers	66	774	88	928
	Females	Percent	6.1	52.8	4.7	63.6
		Numbers	155	1,349	122	1,626
	Combined	Percent	8.7	83.1	8.2	100.0
		Numbers	221	2,123	210	2,554
		Standard Error	45	60	44	
8/12-8/15	Males	Percent	7.7	31.6	8.4	47.7
(N=155)		Numbers	197	805	213	1,215
	Females	Percent	5.8	41.3	5.2	52.3
		Numbers	148	1,051	131	1,330
	Combined	Percent	13.5	72.9	13.6	100.0
		Numbers	345	1,856	344	2,545
		Standard Error	68	88	68	
Total	Males	Percent	7.1	34.9	6.1	48.1
(N=1,121)		Numbers	2,681	13,128	2,279	18,088
	Females	Percent	6.9	38.9	6.1	51.9
		Numbers	2,604	14,667	2,307	19,578
	Combined	Percent	14.0	73.8	12.2	100.0
		Numbers	5,285	27,795	4,586	37,666
		Standard Error	688	894	701	

[1] Source: Age information was summarized from the original age-weight-length data forms.

Appendix Table E-5. Estimated mean length[1] by sex and age for coho salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2].

			Length Composition by Brood Year and Age Group		
			1980	1979	1978
Location	Sex		1.1	2.1	3.1
Northern District Westside Set	Males (n=66)	Mean Length	506.0	579.1	583.0
		Std. Error	13.0	5.3	15.5
		Range	460-606	459-658	552-600
		Sample Size	13	50	3
	Females (n=115)	Mean Length	539.1	546.8	595.7
		Std. Error	10.4	3.8	8.5
		Range	462-620	442-615	580-609
		Sample Size	18	94	3
	All Fish (n=181)	Mean Length	525.2	558.0	589.3
		Std. Error	8.5	3.3	8.4
		Range	460-620	442-658	552-609
		Sample Size	31	144	6
Central District Drift	Males (n=284)	Mean Length	553.5	561.0	583.2
		Std. Error	6.2	2.3	5.7
		Range	462-657	480-655	528-641
		Sample Size	42	211	31
	Females (n=320)	Mean Length	553.1	560.9	558.3
		Std. Error	4.6	2.0	6.1
		Range	475-620	454-657	509-603
		Sample Size	59	241	20
	All Fish (n=604)	Mean Length	553.3	561.0	573.4
		Std. Error	3.7	1.5	4.5
		Range	462-657	454-657	509-641
		Sample Size	101	452	51
Central District Westside Set	Males (n=190)	Mean Length	561.7	567.2	571.8
		Std. Error	9.8	3.0	9.1
		Range	490-693	391-645	534-620
		Sample Size	23	155	12
	Females (n=146)	Mean Length	559.1	564.5	584.3
		Std. Error	5.8	2.8	6.9
		Range	505-615	479-621	546-609
		Sample Size	27	111	8
	All Fish (n=336)	Mean Length	560.3	566.1	576.8
		Std. Error	5.4	2.1	6.1
		Range	490-693	391-645	534-620
		Sample Size	50	266	20

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Appendix Table E-5. Estimated mean length[1] by sex and age for coho salmon harvested by commercial fisheries in Upper Cook Inlet in 1982[2] (continued).

			Length Composition by Brood Year and Age Group		
			1980	1979	1978
Location	Sex		1.1	2.1	3.1
Central District Eastside Set	Males (n=220)	Mean Length	557.4	595.3	601.5
		Std. Error	9.1	3.1	6.7
		Range	490-650	465-680	524-661
		Sample Size	20	176	24
	Females (n=250)	Mean Length	562.5	590.6	597.7
		Std. Error	10.1	2.6	8.7
		Range	478-655	422-680	471-648
		Sample Size	20	206	24
	All Fish (n=470)	Mean Length	560.0	592.8	599.6
		Std. Error	6.7	2.0	5.5
		Range	478-655	422-680	471-661
		Sample Size	40	382	48

[1] Length measured in millimeters from mid-eye to fork of tail.

[2] Source: Length information was summarized from the original age-weight-length data forms.

Appendix Table E-6. Estimated age and sex composition of coho salmon harvested by sport fisheries in Upper Cook Inlet, 1983.

			Age Composition by Brood Year and Age Group			
			1980	1979	1978	
Location	Sex		1.1	2.1	3.1	Total
Little Susitna[1]	Combined Sexes	Percent	9.1	90.9	0.0	100.0
	(n=99)	Numbers	258	2,577	0	2,835
		Std. Error	81	81	0	
Anchor River[2]	Males	Percent	3.2	45.2	0.0	48.4
	(n=15)	Numbers	45	630	0	675
	Females	Percent	9.7	38.7	3.2	51.6
	(n=16)	Numbers	135	540	45	720
	Combined Sexes	Percent	12.9	83.9	3.2	100.0
	(n=31)	Numbers	180	1,170	45	1,395
		Std. Error	84	93	44	

[1] Source: Bentz, R. 1984. Little Susitna River coho salmon life history and angler use studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-B): 38-63.

[2] Source: Wallis, J. and S. Hammarstrom. 1984. Kenai Peninsula/Lower Cook Inlet angler use and stock assessment studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report 1983-1984. Project F-9-16, 25(G-II-C): 33 pp.

Appendix Table E-7. Estimated mean length[1] by sex and age for coho salmon harvested by sport fisheries in Upper Cook Inlet in 1983.

Location	Sex	Length Composition by Brood Year and Age Group	1980 1.1	1979 2.1	1978 3.1
Anchor River[2]	Males (n=15)	Mean Length	675.0	697.0	
		Std. Error	0.0	12.2	
		Sample Size	1	14	
	Females (n=16)	Mean Length	670.0	684.0	610.0
		Std. Error	7.6	10.0	0.0
		Sample Size	3	12	1

[1] Length measured in millimeters from mid-eye to fork of tail.

[2] Source: Wallis, J. and S. Hammarstrom. 1984. Kenai Peninsula/Lower Cook Inlet angler use and stock assessment studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration. Annual Performance Report 1983-1984. Project F-9-16, 25(G-I-C): 33 pp.

Appendix Table E-8. Estimated age and sex composition of coho salmon escapement into river systems in Upper Cook Inlet, 1983.

			Age Composition by Brood Year and Age Group							
			1980		1979			1978		
Location	Sex		1.1	2.0	1.2	2.1	3.0	2.2	3.1	Total
Susitna Station [1]	Males	Percent	8.9	0.0	0.0	26.1	0.0	0.0	1.7	36.7
	(n=86)	Numbers	1,044	0	0	3,061	0	0	199	4,304
	Females	Percent	17.8	0.0	0.0	41.1	0.0	0.0	4.4	63.3
	(n=149)	Numbers	2,088	0	0	4,821	0	0	516	7,425
	Combined Sexes	Percent	26.7	0.0	0.0	67.2	0.0	0.0	6.1	100.0
	(n=235)	Numbers	3,132	0	0	7,882	0	0	715	11,729
		Std. Error	336	0	0	356	0	0	182	
Yentna Station [2]	Males	Percent	9.6	1.6	0.0	54.7	1.0	0.0	2.9	69.8
	(n=217)	Numbers	851	142	0	4,850	89	0	257	6,189
	Females	Percent	4.8	0.0	0.3	24.5	0.0	0.0	0.6	30.2
	(n=94)	Numbers	426	0	27	2,172	0	0	53	2,678
	Combined Sexes	Percent	14.4	1.6	0.3	79.2	1.0	0.0	3.5	100.0
	(n=311)	Numbers	1,277	142	27	7,022	89	0	310	8,867
		Std. Error	174	62	27	201	49	0	91	
Sunshine Station [2]	Males	Percent	21.3	0.0	0.0	34.7	0.0	0.0	0.6	56.6
	(n=292)	Numbers	3,231	0	0	5,265	0	0	91	8,587
	Females	Percent	14.5	0.0	0.2	28.5	0.0	0.0	0.2	43.4
	(n=224)	Numbers	2,200	0	30	4,324	0	0	30	6,584
	Combined Sexes	Percent	35.8	0.0	0.2	63.2	0.0	0.0	0.8	100.0
	(n=516)	Numbers	5,431	0	30	9,589	0	0	121	15,171
		Std. Error	315	0	29	317	0	0	59	

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Appendix Table E-8. Estimated age and sex composition of coho salmon escapement into river systems in Upper Cook Inlet, 1983 (continued).

			Age Composition by Brood Year and Age Group							
			1980		1979			1978		
Location	Sex		1.1	2.0	1.2	2.1	3.0	2.2	3.1	Total
Talkeetna Station [2]	Males	Percent	25.6	0.0	0.4	33.3	0.0	0.0	0.0	59.3
	(n=137)	Numbers	614	0	10	799	0	0	0	1,423
	Females	Percent	13.9	0.0	0.0	26.8	0.0	0.0	0.0	40.7
	(n=94)	Numbers	333	0	0	643	0	0	0	976
	Combined Sexes	Percent	39.5	0.0	0.4	60.1	0.0	0.0	0.0	100.0
	(n=231)	Numbers	947	0	10	1,442	0	0	0	2,399
		Std. Error	74	0	9	74	0	0	0	
Curry Station [2]	Males	Percent	34.0	0.0	0.0	36.2	0.0	0.0	0.0	70.2
	(n=33)	Numbers	259	0	0	275	0	0	0	534
	Females	Percent	12.8	0.0	0.0	17.0	0.0	0.0	0.0	29.8
	(n=14)	Numbers	97	0	0	130	0	0	0	227
	Combined Sexes	Percent	46.8	0.0	0.0	53.2	0.0	0.0	0.0	100.0
	(n=47)	Numbers	356	0	0	405	0	0	0	761
		Std. Error	54	0	0	54	0	0	0	
Crooked Creek [3]	Combined Sexes	Percent	2.5	0.0	0.0	36.0	0.0	2.5	59.0	100.0
(Kasilof River)	(n=39)	Numbers	28	0	0	401	0	28	657	1,114
		Std. Error	28	0	0	85	0	28	87	
Fish Creek [4]	Males	Percent	8.4	0.0	0.0	29.7	0.0	0.0	2.5	40.6
	(n=82)	Numbers	196	0	0	696	0	0	59	951
	Females	Percent	8.4	0.0	0.0	46.5	0.0	0.0	4.5	59.4
	(n=120)	Numbers	197	0	0	1,089	0	0	105	1,391
	Combined Sexes	Percent	16.8	0.0	0.0	76.2	0.0	0.0	7.0	100.0
	(n=202)	Numbers	393	0	0	1,785	0	0	164	2,342
		Std. Error	59	0	0	67	0	0	40	

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Appendix Table E-8. Estimated age and sex composition of coho salmon escapement into river systems in Upper Cook Inlet, 1983 (continued).

			Age Composition by Brood Year and Age Group							
			1980		1979			1978		
Location	Sex		1.1	2.0	1.2	2.1	3.0	2.2	3.1	Total
Big River [5]	Males (n=151)	Percent	6.4	0.0	0.0	43.4	0.0	0.0	1.0	50.8
	Females (n=146)	Percent	7.1	0.0	0.0	39.7	0.0	0.0	2.4	49.2
	Combined Sexes (n=297)	Percent	13.5	0.0	0.0	83.1	0.0	0.0	3.4	100.0
		Std. Error	3.9	0.0	0.0	4.7	0.0	0.0	1.1	

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

[2] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May - October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

[3] Source: Waite, D. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Soldotna, Alaska.

[4] Source: Age proportions taken from original age-weight-length data forms provided by Robert Chlupach. Alaska Department of Fish and Game. Division of Fisheries Rehabilitation, Enhancement, and Development. Big Lake, Alaska.

[5] Source: Age proportions taken from original age-weight-length data forms provided by Patrick Marcusson. Cook Inlet Aquaculture Association. Soldotna, Alaska.

Appendix Table E-9. Estimated mean length[1] by sex and age for coho salmon escapements in Upper Cook Inlet in 1983.

			Length Composition by Brood Year and Age Group						
			1980		1979			1978	
Location	Sex		1.1	2.0	1.2	2.1	3.0	2.2	3.1
Susitna Station [2]	Males	Mean Length	499.0			534.0			
	(n=63)	Std. Error	12.6			6.2			
		Sample Size	16			47			
	Females	Mean Length	486.0			523.0			
	(n=106)	Std. Error	9.0			5.1			
		Sample Size	32			74			
	All Fish	Mean Length	490.0			527.0			
	(n=169)	Std. Error	7.3			3.9			
		Sample Size	48			121			
Yentna Station [3]	Males	Mean Length	492.0	293.0		543.0	315.0		596.0
	(n=217)	Std. Error	13.9	4		6.1	9.0		4
		Range	405-598	240-330		320-655	300-331		552-625
		Sample Size	30	5		170	3		9
	Females	Mean Length	492.0		531.0	538.0			570.0
	(n=94)	Std. Error	20.3		0.0	7.5			27.5
		Range	395-571		531-531	387-609			542-597
		Sample Size	15		1	76			2
Sunshine Station [3]	Males	Mean Length	487.0			539.0			625.0
	(n=292)	Std. Error	6.4			5.7			13.2
		Range	385-625			395-630			600-645
		Sample Size	110			179			3
	Females	Mean Length	491.0		475.0	540.0			570.0
	(n=224)	Std. Error	7.8		0.0	4.6			0.0
		Range	400-585		475-475	410-640			570-570
		Sample Size	75		1	147			1

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Appendix Table E-9. Estimated mean length[1] by sex and age for coho salmon escapements in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group						
			1980		1979			1978	
Location	Sex		1.1	2.0	1.2	2.1	3.0	2.2	3.1
Talkeetna Station [3]	Males	Mean Length	482.0		450.0	542.0			
	(n=137)	Std. Error	10.0		0.0	8.2			
		Range	380-595		450-450	430-640			
		Sample Size	59		1	77			
	Females	Mean Length	499.0			552.0			
	(n=94)	Std. Error	12.9			6.8			
		Range	395-590			450-680			
		Sample Size	32			62			
Curry Station [3]	Males	Mean Length	477.0			554.0			
	(n=33)	Std. Error	11.4			14.6			
		Range	430-530			480-610			
		Sample Size	16			17			
	Females	Mean Length	480.0			553.0			
	(n=14)	Std. Error	4			4			
		Range	354-555			500-590			
		Sample Size	6			8			
Crooked Creek [5]	All Fish	Mean Length	600.0			626.0		515.0	641.0
	(n=39)	Std. Error	0.0			8.8		0.0	6.8
		Range	600-600			550-680		615-615	590-695
		Sample Size	1			14		1	23

1 Length measured in millimeters from mid-eye to fork of tail.

2 Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game. Technical Data Report No. 122. 152 pp.

3 Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1. 380 pp.

4 Standard errors no reported in Barrett (1984).

5 Source: Waite, D. March 1985. Personal communication. Alaska Department of Fish and Game. Fisheries Rehabilitation, Enhancement, and Development Division. Soldotna, Alaska.

APPENDIX F

Age, Sex, and Size Data for Chum Salmon

Appendix Table F-1. Estimated age and sex composition by date of chum salmon in the Central District drift net fishery in Upper Cook Inlet in 1983[1].

			Age Composition by Brood Year and Age Group				
			1980	1979	1978	1977	
Date	Sex		0.2	0.3	0.4	0.5	Total
6/27-7/08	Males	Percent	0.4	14.1	32.6	0.0	47.1
	(n=218)	Number	505	16,425	38,156	0	55,086
	Females	Percent	0.2	16.4	36.3	0.0	52.9
	(n=245)	Number	253	19,204	42,451	0	61,908
	Combined Sexes	Percent	0.6	30.5	68.9	0.0	100.0
	(n=463)	Number	758	35,629	80,607	0	116,994
		Standard Error	436	2,500	2,515	0	
7/11-7/13	Males	Percent	0.4	24.0	28.0	0.2	52.6
	(n=271)	Number	437	27,104	31,476	219	59,236
	Females	Percent	0.0	17.5	29.5	0.4	47.4
	(n=244)	Number	0	19,673	33,225	437	53,335
	Combined Sexes	Percent	0.4	41.5	57.5	0.6	100.0
	(n=515)	Number	437	46,777	64,701	656	112,571
		Standard Error	308	2,441	2,449	377	
7/15-7/18	Males	Percent	0.6	24.1	19.3	0.0	44.0
	(n=239)	Number	702	30,672	24,584	0	55,958
	Females	Percent	0.0	30.0	25.8	0.2	56.0
	(n=304)	Number	0	38,164	32,779	234	71,177
	Combined Sexes	Percent	0.6	54.1	45.1	0.2	100.0
	(n=543)	Number	702	68,836	57,363	234	127,135
		Standard Error	404	2,715	2,712	234	
7/20-7/23	Males	Percent	0.5	25.0	18.6	0.0	44.1
	(n=249)	Number	1,126	52,946	39,428	0	93,500
	Females	Percent	0.2	31.6	24.1	0.0	55.9
	(n=315)	Number	376	66,840	51,068	0	118,284
	Combined Sexes	Percent	0.7	56.6	42.7	0.0	100.0
	(n=564)	Number	1,502	119,786	90,496	0	211,784
		Standard Error	748	4,418	4,410	0	
7/24-7/27	Males	Percent	1.0	24.7	11.0	0.2	36.9
	(n=178)	Number	1,450	34,500	15,366	290	51,606
	Females	Percent	1.0	42.9	19.0	0.2	63.1
	(n=305)	Number	1,450	60,013	26,673	290	88,425
	Combined Sexes	Percent	2.0	67.6	30.0	0.4	100.0
	(n=483)	Number	2,899	94,514	42,038	580	140,031
		Standard Error	907	2,982	2,918	409	

-Continued-

Appendix Table F-1. Estimated age and sex composition by date of chum salmon in the Central District drift net fishery in Upper Cook Inlet in 1983[1] (continued).

			Age Composition by Brood Year and Age Group				
			1980	1979	1978	1977	
Date	Sex		0.2	0.3	0.4	0.5	Total
7/28-8/05	Males	Percent	1.2	24.4	11.9	0.0	37.5
	(n=186)	Number	2,616	52,748	25,720	0	81,084
	Females	Percent	2.6	43.2	16.7	0.0	62.5
	(n=310)	Number	5,667	93,289	36,182	0	135,138
	Combined Sexes	Percent	3.8	67.6	28.6	0.0	100.0
	(n=496)	Number	8,283	146,037	61,902	0	216,222
		Standard Error	1,863	4,545	4,388	0	
8/05-8/08	Males	Percent	3.3	27.9	11.8	0.0	43.0
	(n=236)	Number	3,575	30,384	12,908	0	46,867
	Females	Percent	2.6	39.1	15.3	0.0	57.0
	(n=313)	Number	2,780	42,697	16,682	0	62,159
	Combined Sexes	Percent	5.9	67.0	27.1	0.0	100.0
	(n=549)	Number	6,355	73,081	29,590	0	109,026
		Standard Error	1,088	2,184	2,066	0	
8/12-9/12	Males	Percent	2.4	18.5	6.0	0.0	26.9
	(n=138)	Number	254	2,015	658	0	2,927
	Females	Percent	3.3	56.5	13.3	0.0	73.1
	(n=375)	Number	361	6,151	1,442	0	7,954
	Combined Sexes	Percent	5.7	75.0	19.3	0.0	100.0
	(n=513)	Number	615	8,166	2,100	0	10,881
		Standard Error	108	203	185	0	
Total	Males	Percent	1.0	23.6	18.0	0.1	42.7
	(n=1,715)	Number	10,665	246,794	188,296	509	446,264
	Females	Percent	1.1	33.1	23.0	0.1	57.3
	(n=2,411)	Number	10,887	346,031	240,502	961	598,380
	Combined Sexes	Percent	2.1	56.7	41.0	0.2	100.0
	(n=4,126)	Number	21,552	592,825	428,798	1,470	1,044,644
		Standard Error	2,549	8,571	8,438	603	

[1] Source: Age information was summarized from the original age-weight-length data forms.

Appendix Table F-2. Estimated mean length[1] by sex and age for chum salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[2].

Location	Sex		Length Composition by Brood Year and Age Group		
			1980	1979	1978
			0.2	0.3	0.4
Central District Drift	Males (n=293)	Mean Length	544.4	595.5	609.2
		Std. Error	5.4	2.4	2.3
		Range	520-582	521-699	534-690
		Sample Size	12	152	129
	Females (n=424)	Mean Length	553.3	586.8	607.1
		Std. Error	5.0	1.5	1.9
		Range	535-577	510-650	536-670
		Sample Size	9	254	161
	All Fish (n=717)	Mean Length	548.2	590.1	608.0
		Std. Error	3.8	1.3	1.5
		Range	520-582	510-699	534-690
		Sample Size	21	406	290

[1] Length measured in millimeters from mid-eye to fork of tail.

[2] Source: Length information summarized from original age-weight-length data forms.

Appendix Table F-3. Estimated age and sex composition of chum salmon escapement into the Susitna River, Upper Cook Inlet, 1983.

			Age Composition by Brood Year and Age Group				
			1980	1979	1978	1977	
Location	Sex		0.2	0.3	0.4	0.5	Total
Susitna Station [1]	Males	Percent	0.0	18.6	11.9	0.0	30.5
	(n=40)	Numbers	0	1,414	905	0	2,319
	Females	Percent	0.0	36.4	33.1	0.0	69.5
	(n=91)	Numbers	0	2,767	2,516	0	5,283
	Combined Sexes	Percent	0.0	55.0	45.0	0.0	100.0
	(n=131)	Numbers	0	4,181	3,421	0	7,602
		Std. Error	0	329	329	0	
Yentna Station [2]	Males	Percent	1.3	21.9	31.3	0.3	54.8
	(n=303)	Numbers	140	2,366	3,381	32	5,919
	Females	Percent	0.9	24.2	20.1	0.0	45.2
	(n=250)	Numbers	98	2,614	2,171	0	4,883
	Combined Sexes	Percent	2.2	46.1	51.4	0.3	100.0
	(n=553)	Numbers	238	4,980	5,552	32	10,802
		Std. Error	66	223	224	24	
Sunshine Station [2]	Males	Percent	0.0	16.1	32.5	1.0	49.6
	(n=517)	Numbers	0	42,790	86,376	2,658	131,824
	Females	Percent	0.3	23.9	26.0	0.2	50.4
	(n=526)	Numbers	797	63,520	69,102	532	133,951
	Combined Sexes	Percent	0.3	40.0	58.5	1.2	100.0
	(n=1,043)	Numbers	797	106,310	155,478	3,190	265,775
		Std. Error	449	4,026	4,049	895	

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Appendix Table F-3. Estimated age and sex composition of chum salmon escapement into the Susitna River, Upper Cook Inlet, 1983.

			Age Composition by Brood Year and Age Group				
			1980	1979	1978	1977	
Location	Sex		0.2	0.3	0.4	0.5	Total
Talkeetna Station [2]	Males	Percent	0.3	14.4	45.3	0.2	60.2
	(n=373)	Numbers	151	7,253	22,818	101	30,323
	Females	Percent	0.5	15.9	23.4	0.0	39.8
	(n=247)	Numbers	252	8,009	11,786	0	20,047
	Combined Sexes	Percent	0.8	30.3	68.7	0.2	100.0
	(n=620)	Numbers	403	15,262	34,604	101	50,370
		Std. Error	179	925	933	90	
Curry Station [2]	Males	Percent	0.0	16.9	48.2	0.0	65.1
	(n=297)	Numbers	0	3,564	10,165	0	13,729
	Females	Percent	0.0	11.0	23.9	0.0	34.9
	(n=159)	Numbers	0	2,320	5,040	0	7,360
	Combined Sexes	Percent	0.0	27.9	72.1	0.0	100.0
	(n=456)	Numbers	0	5,884	15,205	0	21,089
		Std. Error	0	439	439	0	

[1] Source: King, B. March 1984. Personal communication. Alaska Department of Fish and Game. Division of Commercial Fisheries. Soldotna, Alaska.

[2] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

Appendix Table F-4. Estimated mean length[1] by sex and age for chum salmon escapements into Upper Cook Inlet in 1983.

			Length Composition by Brood Year and Age Group			
			1980	1979	1978	1977
Location	Sex		0.2	0.3	0.4	0.5
Susitna Station [2]	Males	Mean Length		591.0	619.0	
	(n=36)	Std. Error		6.7	9.3	
		Sample Size		22	14	
	Females	Mean Length		568.0	598.0	
	(n=82)	Std. Error		11.4	4.7	
		Sample Size		43	39	
	All Fish	Mean Length		576.0	604.0	
	(n=118)	Std. Error		7.9	4.2	
		Sample Size		65	53	
Yentna Station [3]	Males	Mean Length	508.0	582.0	616.0	584.0
	(n=303)	Std. Error	4	5.0	3.9	26.0
		Range	492-528	462-666	448-700	558-610
		Sample Size	7	121	173	2
	Females	Mean Length	515.0	570.0	598.0	
	(n=250)	Std. Error	4	3.2	3.9	
		Range	452-553	489-652	509-658	
		Sample Size	5	134	111	
Sunshine Station [3]	Males	Mean Length		579.0	622.0	664.0
	(n=517)	Std. Error		4.3	2.8	4
		Range		410-685	495-750	500-895
		Sample Size		168	339	10
	Females	Mean Length	525.0	561.0	598.0	685.0
	(n=526)	Std. Error	7.6	2.8	3.6	35.0
		Range	515-540	450-650	460-750	650-720
		Sample Size	3	250	271	2
Talkeetna Station [3]	Males	Mean Length	510.0	585.0	625.0	650.0
	(n=373)	Std. Error	0.0	5.7	2.8	0.0
		Range	510-510	470-680	515-700	650-650
		Sample Size	2	89	281	1
	Females	Mean Length	512.0	572.0	610.0	
	(n=247)	Std. Error	6.1	4.6	3.6	
		Range	500-520	465-630	510-710	
		Sample Size	3	99	145	

-Continued-

Appendix Table F-4. Estimated mean length[1] by sex and age for chum salmon escapements in Upper Cook Inlet in 1983 (continued).

			Length Composition by Brood Year and Age Group			
			1980	1979	1978	1977
Location	Sex		0.2	0.3	0.4	0.5
Curry Station [3]	Males	Mean Length		586.0	631.0	
	(n=297)	Std. Error		4.6	2.8	
		Range		505-640	500-715	
		Sample Size		77	220	
	Females	Mean Length		579.0	618.0	
	(n=159)	Std. Error		6.8	3.6	
		Range		470-640	555-690	
		Sample Size		50	109	

[1] Length measured in millimeters from mid-eye to fork of tail.

[2] Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game. Technical Data Report No. 122. 152 pp.

[3] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1. 380 pp.

[4] Standard errors not reported in Barrett (1984).

APPENDIX G

Size Data for Pink Salmon

Appendix Table G-1. Estimated mean length[1] by sex for selected pink salmon catches and escapements in Upper Cook Inlet in 1983.

Location	Sex	Length Composition	
Central District Drift Commercial Catch [2]	All Fish	Mean Length	467.6
		Std. Error	1.6
		Range	402-511
		Sample Size	158
Central District East-side Set Commercial Catch [2]	Males	Mean Length	459.3
		Std. Error	2.1
		Range	392-502
		Sample Size	118
	Females	Mean Length	455.4
		Std. Error	2.8
		Range	341-516
		Sample Size	82
	All Fish	Mean Length	457.7
		Std. Error	1.7
		Range	341-516
		Sample Size	200
Susitna Station [3] Escapement	Males	Mean Length	420.0
		Std. Error	2.2
		Sample Size	143
	Females	Mean Length	417.0
		Std. Error	2.0
		Sample Size	172
	All Fish	Mean Length	418.0
		Std. Error	1.5
		Sample Size	315
Yentna Station [4] Escapement	Males	Mean Length	432.0
		Sample Size	535
	Females	Mean Length	421.0
		Sample Size	591
	All Fish	Mean Length	426.0
		Sample Size	1,126

-Continued-

Appendix Table G-1. Estimated mean length[1] by sex for selected pink salmon catches and escapements in Upper Cook Inlet in 1983 (continued).

Location	Sex		Length Composition
Sunshine Station [4] Escapement	Males	Mean Length	435.0
		Sample Size	503
	Females	Mean Length	423.0
		Sample Size	484
	All Fish	Mean Length	429.0
		Sample Size	987
Talkeetna Station [4] Escapement	Males	Mean Length	428.0
		Sample Size	309
	Females	Mean Length	426.0
		Sample Size	365
	All Fish	Mean Length	425.0
		Sample Size	674
Curry Station [4] Escapement	Males	Mean Length	425.0
		Sample Size	199
	Females	Mean Length	425.0
		Sample Size	192
	All Fish	Mean Length	425.0
		Sample Size	391

[1] Mid-eye to fork of tail lengths in millimeters.

[2] Source: Length information summarized from the original age-weight-length data forms.

[3] Source: King, B. and K. Tarbox. 1984. Upper Cook Inlet salmon *(Oncorhynchus* spp.*)* escapement studies, 1983. Alaska Department of Fish and Game. Technical Data Report No. 122. 152 pp.

[4] Source: Barrett, B., F. Thompson, and S. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Alaska Department of Fish and Game. Susitna Hydro Aquatic Studies. Report No. 1.

APPENDIX H

Weights of Commercial Salmon Harvests

Appendix Table H-1. Estimated number of kilograms of salmon harvested by commercial fisheries in Upper Cook Inlet in 1983[1].

Fishery	Chinook	Sockeye	Coho	Chum	Pink	Total
Northern District East-side Set Net	3,479	726,528	180,244	43,638	5,952	959,841
Northern District West-side Set Net	35,047	1,372,388	593,117	447,904	140,411	2,588,867
Central District Drift Net	57,778	46,221,234	4,934,763	17,869,987	200,464	69,284,226
Central District West-side Set Net	109,350	913,095	839,086	497,117	13,362	2,372,010
Kalgin Island Set Net	65,792	850,817	684,336	137,909	13,023	1,751,877
Salamatof Beach Set Net	161,189	7,079,213	208,562	38,592	24,703	7,512,259
Kalifornsky Beach Set Net	259,889	6,455,188	123,634	4,054	5,143	6,847,908
Cohoe/Ninilchik Beach Set Net	650,077	7,930,623	284,517	4,954	103,237	8,973,408
Total	1,342,601	71,549,086	7,848,259	19,044,155	506,295	100,290,396

[1] Source: Alaska Department of Fish and Game, IBM computer runs of fish tickets dated 31 August 1984.

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