Volume 26 Study AFS-41

STATE OF ALASKA

Bill Sheffield, Governor

Annual Performance Report for

HARVEST ESTIMATES OF SELECTED FISHERIES THROUGHOUT SOUTHEAST ALASKA

by

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Volume 26 Study AFS-41

RESEARCH PROJECT SEGMENT

State: Alaska

Name: Sport Fish Investigations of Alaska

Project: F-9-17

Study: AFS-41

Study Title: A STUDY OF CHINOOK SALMON IN SOUTHEAST ALASKA

Job: AFS-41-12(B)

Job Title: Harvest Estimate of Selected Fisheries Throughout Southeast Alaska

Cooperator: Lee M. Neimark

Period Covered: July 1, 1984 to June 30, 1985

ABSTRACT

Creel surveys of the major recreational chinook fisheries were conducted in southeast Alaska in 1983. Two surveys of the fishing grounds were conducted each week (by airplane or boat) to obtain instantaneous observations of total angling effort. Anglers were interviewed upon completion of their trips to determine effort, harvest, and catch rates. In Juneau, anglers were also questioned to determine their opinion of permitting additional pink salmon hatchery enhancement. Scale samples and gonad samples were collected from chinook salmon for age and maturity analysis. The contribution of chinook and coho hatchery stocks to the recreational fisheries was estimated from the recovery of coded-wire tags.

Juneau marine boat anglers were surveyed from April 29 through September 29. During that period, they fished an estimated 318,822 rod-hours and their harvest included 6,474 chinook salmon, *Oncorhynchus tshawytscha* (Walbaum); 10,100 coho salmon, *O. kisutch* (Walbaum); 2,260 pink salmon, *O. gorbuscha*; and 14,609 Pacific halibut, *Hippoglossus stenolepis* (Schmidt). Ketchikan marine boat anglers fished 223,725 rod-hours and harvested 1,820 chinook, 14,231 coho, 20,356 pink salmon and 8,913 Pacific halibut during the same period. In Petersburg, marine boat anglers fished 17,541 rod-hours from April 29 through July 14 and harvested 943 chinook, 0 coho, 2 pink salmon, and 263 Pacific halibut. In Wrangell, marine boat anglers fished 26,224 rod-hours from April 15 to June 30 and harvested 1,116 chinook, 0 coho, 0 pinks, and 507 Pacific halibut.

Female chinook salmon with mean egg diameters less than 2.5 mm were classified as immature, those with egg diameters between 2.5 mm and 4.5 mm were classified as fall spawners, and those with larger egg diameters were classified as spring spawners. Wrangell fisheries targeted heavily on spring spawners bound for the Stikine River; Haines fisheries targeted heavily on spring spawners bound for the Chilkat River. A spring closure of Stephens Passage effectively reduced the Juneau harvest of chinook salmon headed to spawning grounds in the Taku River.

The Crystal Lake Hatchery Alaska Department of Fish and Game produced most of the chinook, and Neets Bay Hatchery (Southern Southeast Regional Aquaculture Association) produced most of the coho harvested in the Southeast recreational fisheries. Ketchikan anglers received the most benefit from hatchery production: almost a quarter of their chinook harvest and over a third of their coho harvest were hatchery reared. Southeast roadside anglers benefited from hatchery production of pink salmon, but only a minority of Juneau anglers favored pink salmon enhancement of the marine fishery.

KEY WORDS

Creel survey, harvest estimate, catch, effort, recreational fishery, derby, length, maturity, tag, hatchery, enhancement, chinook salmon, *Oncorhynchus tshawytscha* (Walbaum), coho salmon, *Oncorhynchus kisutch* (Walbaum), pink salmon, *Oncorhynchus gorbuscha* (Walbaum), Pacific halibut, *Hippoglossus stenolepis* (Schmidt), Juneau, Petersburg, Wrangell, Ketchikan, Southeast, Alaska.

BACKGROUND

Creel data are used to evaluate regulatory proposals submitted to the Board of Fisheries to amend sport and commercial fishing regulations. In-season monitoring of harvests provides managers with the opportunity to regulate the sport fishery at an optimal level. Creel surveys of the marine boat sport fishery have been conducted in the Juneau area every year since 1960 (Schmidt and Robards, 1973, 1974, 1975; Mattson, 1975; Robards, 1976, 1977, 1978; Marriott et al., 1979; Schwan, 1980, 1981, 1982; Neimark and Schwan, 1983; Neimark, 1984a). These surveys collected angler-effort and harvest data, as well as biological data, to answer specific management questions.

In 1984, two management issues, both relating to hatchery enhancement of the sport fishery, received special attention. In Ketchikan, the creel survey was extended through September to estimate the coho harvest and determine the contribution of hatchery-reared coho to the Ketchikan sport fishery. In Juneau, where several permit applications for pink salmon hatcheries are being studied, anglers were surveyed to determine their opinion of enhancing the pink salmon fishery.

A list of common names, scientific names, and abbreviations of all species mentioned in this report is presented in Table 1.

Table 1. List of Common Names, Scientific Names, and Abbreviations.

Common Name	Scientific Name and Author	Abbreviation
Chinook salmon	*Oncorhynchus tschawytscha* (Walbaum)	KS
Chum salmon	*Oncorhynchus keta* (Walbaum)	CS
Coho salmon	*Oncorhynchus kisutch* (Walbaum)	SS
Pink salmon	*Oncorhynchus gorbuscha* (Walbaum)	PS
Sockeye salmon	*Oncorhynchus nerka* (Walbaum)	RS
Cod	Family Gadidae	CD
Cutthroat trout	*Salmo clarki* Richardson	CT
Dolly Varden	*Salvelinus malma* (Walbaum)	DV
Pacific halibut	*Hippoglossus stenolepis* Schmidt	H
Flatfish	Order Pleuronectiformes	FF
Greenlings	Family Hexagrammidae	HX
Other species		OT

RECOMMENDATIONS

Management

1. Reevaluate the 28-inch minimum-size limit for chinook salmon.

2. Maintain the annual spring closure of chinook fishing in Stephens Passage to protect Taku River spawners.

3. Support pink salmon hatchery enhancement of roadside recreational fisheries.

4. Support chinook and coho salmon hatchery enhancement of marine recreational fisheries.

Research

1. Develop a dependable method for determining the maturity of male chinook salmon.

2. Review the contributions of the various hatchery brood lots so that rearing conditions and release locations can be adjusted to maximize the return to the recreational fisheries.

OBJECTIVES

1. To determine the harvest and catch rates of chinook salmon by area, by week.

2. To determine the number of undersized chinook salmon caught and released.

3. To determine the mean length, maturity and probable origin of chinook salmon taken in the recreational fishery.

4. To determine the contribution of hatchery chinook stocks to the recreational fishery via recovery of coded-wire-tagged fish.

TECHNIQUES USED

Eight separate creel surveys were conducted in southeast Alaska. Angler effort, catch, biological data, and fish tags were collected during interviews with anglers at harbors and boat ramps. However, the scope of each survey, the sampling periods, and exact methodology varied according to the objectives and logistical and budgetary constraints (Table 2).

Angler Effort and Harvest

Fishing parties returning to the harbor were asked where they had fished. Figures 1-3 display fishing areas within the Juneau, Ketchikan,

Table 2. Creel-Survey Locations, Sampling Periods, and Contact Areas.

Location	Sampling Period	Contact Areas
Juneau Non-derby (except during Fishing derby)	4/29-9/29/84	Auke Bay, Tee Harbor
Ketchikan	4/29-6/30/84	Bar Harbor, Clover Pass
	7/01-9/29/84	Bar Harbor, Clover Pass, Mountain Point
Haines Non-Derby (except during Fishing derby)	5/06-6/30/84	Letnikof Cove, Chilkat State Park*
Petersburg	4/29-7/14/84	Town Harbor, Papke's Landing**
Wrangell	4/15-6/30/84	Town Harbor
Juneau derby	8/3-8/15/84	Judge's Float
Sitka derby	5/26-28, 6/2/3	Judge's Float
Haines derby	5/26-28, 6/2/3	Judge's Float
Blind Slough	6/3-7/14/84	Blind Slough

* Sampling at Chilkat State Park was suspended after the first 2 weeks because no anglers had been contacted.

** Sampling at Papkee's Landing was suspended after the first 2 weeks because very few anglers had been contacted.

LEGEND

Fishing Areas Within the Juneau Recreational Fishing Grounds.

1. Berner's Bay
2. Echo Cove
3. Bridget Cove
4. North Island
5. End of Road Bluffs
6. Benjamin Island
7. Eagle river
8. Pearl Harbor
9. Shrine Island
10. Aaron Island
11. Breadline
12. Steven's Point
13. Lena Point
14. Indian Point
15. Auke Bay
16. Coghlan Island
17. Portland Island
18. Spuhn Island
19. Fritz Cove
20. Juneau Harbor
21. Gastineau
22. Dupont
23. Marmion
24. Point Salisbury
25. Point Bishop
26. Circle Point
27. Taku Harbor
28. South Island
29. Grand Island
30. Doty's Cove
31. Point Arden
32. False Point Arden
33. Green Cove
34. Icy Point
35. Oliver's Inlet
36. Icy-Hilda Coast
37. Point Hilda
38. Point Young
39. Young's Bay/Grouse Point
40. Whitemaker
41. Middle Point
42. Horse & Colt Islands
43. Outer Point
44. Piling Point
45. South Shelter
46. Barlow Cove
47. Favorite Reef
48. Barlow Point
49. Point Retreat
50. Handtrollers Cove
51. East Shelter
52. North Pass
53. North Shelter
54. West Lincoln Island
55. Lincoln Island
56. Little Island
57. St. James Bay
58. Boat Harbor
66. Amalga Harbor
67. Point Louisa
68. West Shelter Island

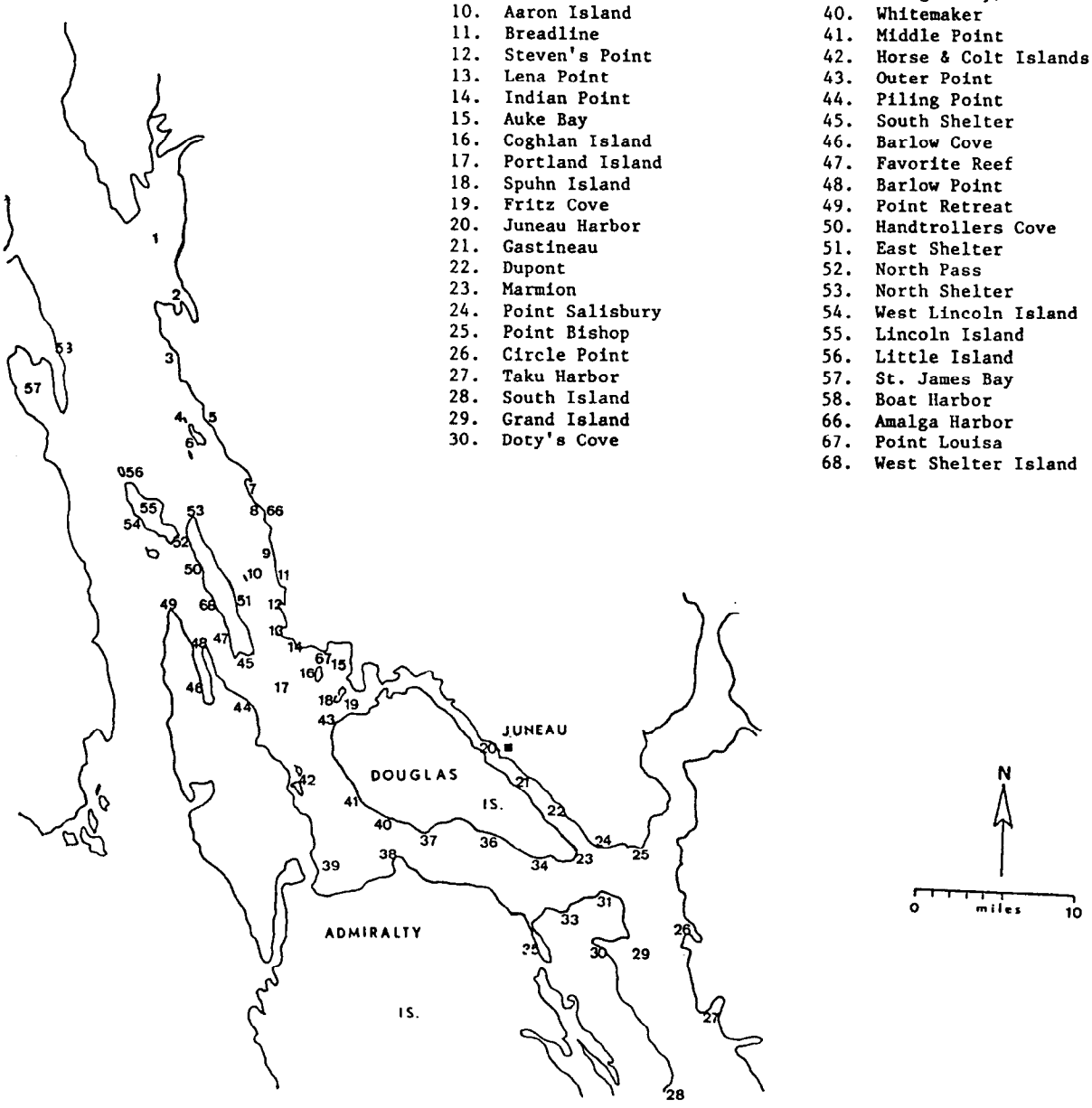


Figure 1. Fishing Areas within the Juneau Recreational Fishing Grounds.

LEGEND

Fishing Areas Within the Ketchikan Recreational Fishing Grounds.

1. Annette Island
2. Betton Island
3. Back Island
4. Blank Inlet
5. Boca de Quadra
6. Bold Island
7. Bostwick Point
8. Bushy Point
9. Caamano Point
10. California Head
11. Helm Bay
12. Carroll Point
13. Chasina Point
14. China Town
15. Clarence Strait
16. Clover Pass
17. Dall Head
18. Grant Island
19. Grindall Island
20. Ham Island
21. Herring Bay
22. Hump Island
23. Ice House Cove
24. Indian Point
25. Island Point
26. Kah Shakes
27. Lucky Cove
28. Lyman Point
29. Mary Island
30. Mountain Point
31. Niblack Point
32. Nicholas Passage
33. Pennock Island
34. Point Alava
35. Princess Bay
36. Revillagegedo Island
37. Ship Island
38. Skin Island
39. Southeast Behm Canal
40. South Vallenar Point
41. Spire Island
42. Tatoosh Island
43. Thorne Arm
44. Tongass Narrows
45. Trunk Island
46. Vallenar Point
47. Ward Cove

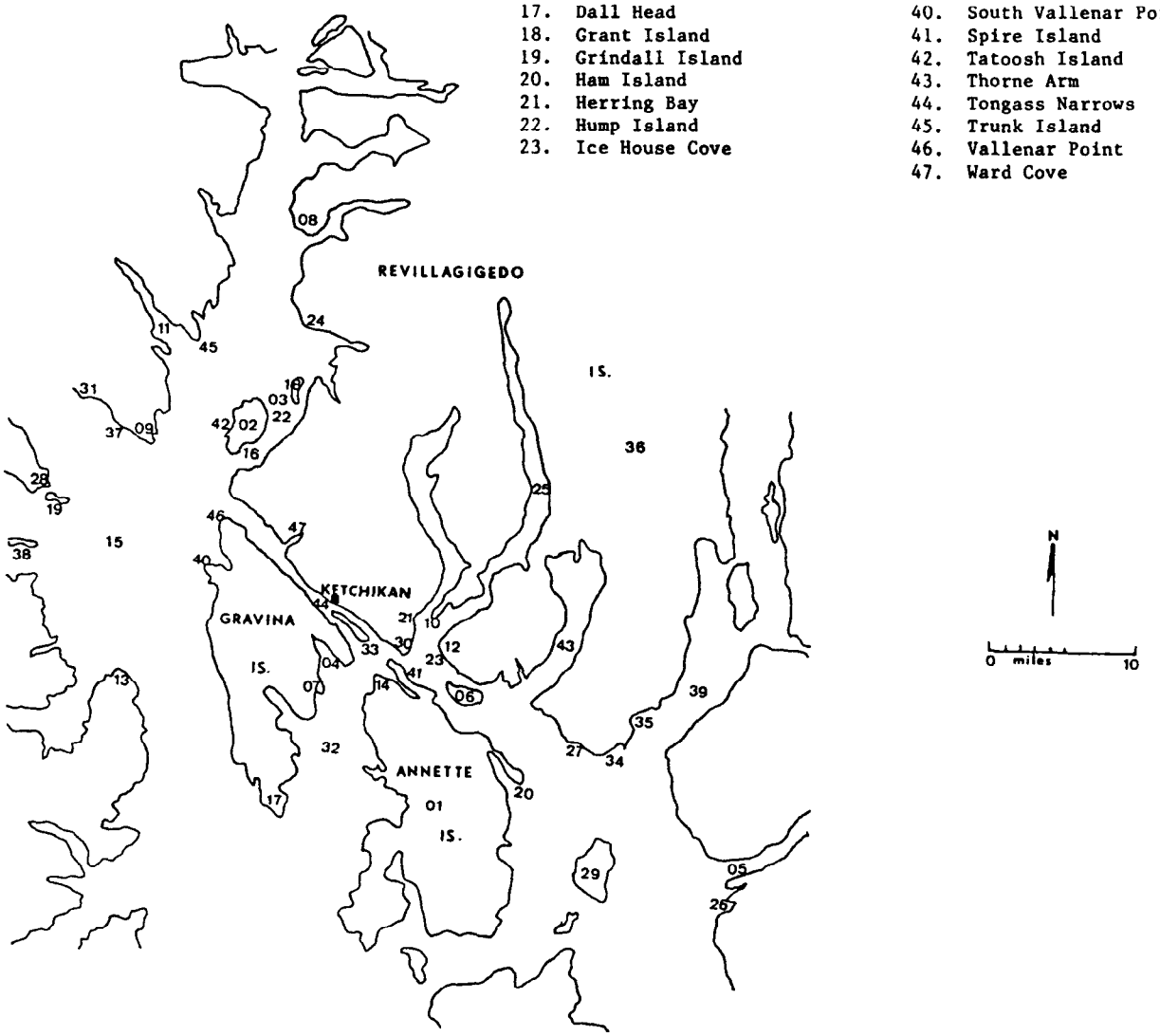


Figure 2. Fishing Areas within the Ketchikan Recreational Fishing Grounds.

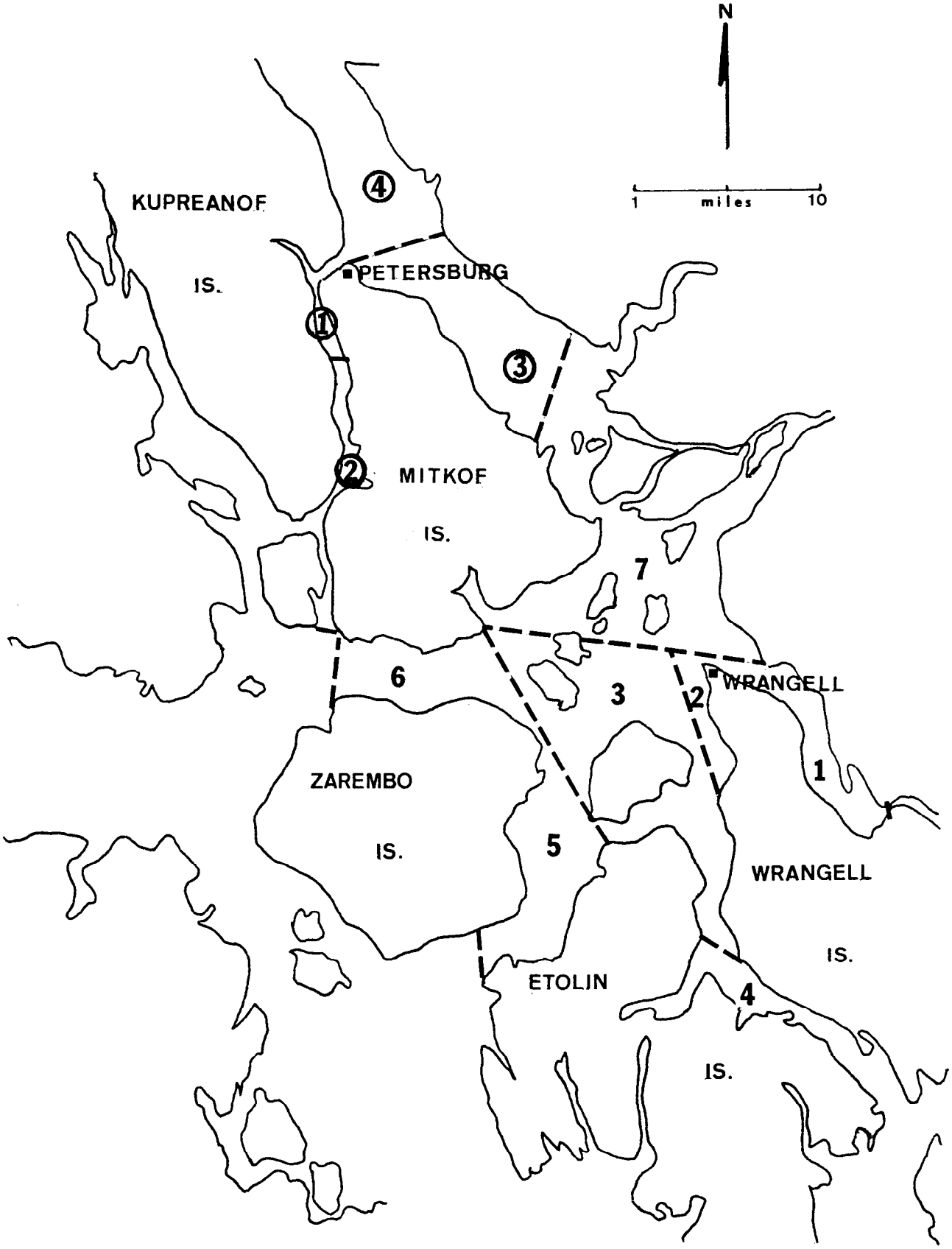


Figure 3. Fishing Areas Within the Petersburg and Wrangell Recreational Fishing Grounds.

LEGEND TO FIGURE 3 (Cont.)

Fishing Areas within the Petersburg and Wrangell Recreational Fishing Grounds.

Petersburg Areas (Circled Numbers)

1. Northern Wrangell Narrows
That portion of the Wrangell Narrows bounded on the north by a line from Hungry Point on Mitkof Island to Prowley Point on Kupreanof Island south to a line across lower Scow Bay at Mountain Point on Kupreanof Island.

2. Southern Wrangell Narrows
The waters of the Wrangell Narrows south of Mountain Point to Point Alexander on Mitkof Island. Fishing may be concentrated around Papke's Landing and Point Alexander.

3. Northern Frederick Sound
The waters of Frederick Sound enclosed by a line from Hungry Point on Mitkof Island to a point on the mainland south of Ice Cove, and a line from Ideal Cove on Mitkof Island to Jap Creek on the Mainland.

4. Southern Frederick Sound
The waters of Frederick Sound north of a line from Hungry Point on Mitkof Island to a point on the mainland south of Icy Cove, and south of a line from Cape Strait on Kupreanof Island to Wood Point on the mainland.

Wrangell Areas (Uncircled Numbers)

1. Eastern Passage
That portion of Eastern Passage south of a line from Point Highfield to Babbler Point, and north of a line at the "Narrows".

2. Northwest Wrangell Island
The area inside a line from "The Bluffs" to the closed waters line from Point Highfield to Blind Slough.

3. Elephant's Nose
The area enclosed by a line from Point Highfield to Blind Slough to Reef Point on Woronofski Island to Nemo Point on Wrangell Island. This area includes "The Nose"-- a popular fishing area at the northeast end of Woronofski Island.

4. Zimovia Strait
The waters of Zimovia Strait inside a line from Nemo Point to Reef Point, to a line from Fishermen's Chuck on Etolin Island to a point on Deer Island, and that portion of Blake Channel south of the "Narrows".

LEGEND TO FIGURE 3 (Cont.)

Fishing Areas Within the Petersburg and Wrangell Recreational Fishing Grounds

5. Stikine Strait
   The waters inside a line from Blind Slough to Reef Point on Woronofski Island to Nemo Point on Wrangell Island, and a line from Round Point on Zarembo Island to Steamer Point on Etolin Island.

6. Summer Strait
   The waters inside of a line from Point Alexander on Mitkof Island to Low Point on Zarembo Island east to a line from Blind Slough on Mitkof Island to Reef Point on Woronofski Island

7. Gray's Pass
   The waters enclosed by a line from Blind Slough on Mitkof Island to Point Highfield on Wrangell Island to Babbler Point on the mainland. This area includes Gray's Pass, the most popular fishing area near Wrangell.

Petersburg and Wrangell recreational fishing grounds, respectively. The fine divisions of the Juneau and Ketchikan fishing grounds were taken from previous creel-survey designs. The Blind Slough and Haines fisheries were not subdivided by fishing area.

Parties were asked, within each fishing area, how many rods were fished, the time they spent fishing, what their target species were, the number of each species kept, and the number of chinook salmon caught and released. The sampling design varied between the regional sampling centers (Juneau, Ketchikan, Wrangell and Petersburg), dependent upon run timing and availability of money and personnel. Although each sampling center contains many dock areas, boat ramps and entry points into the marine fishery, personnel limitations restricted sampling to the main docks. Random sampling of several different docks every week, though desirable from a statistical standpoint, could not be utilized because comparable, weekly-catch statistics were a desired objective.

A random stratified design was used to select sampling periods. Four time strata were selected--weekday-morning (6 a.m.-3 p.m.), weekday-evening (3 p.m.-12 midnight), weekend morning and weekend evening. It was assumed that no anglers completed fishing before 6 a.m. or after midnight. Legal holidays were included in the weekend strata. (In 1983, holidays were included in the weekend strata only if the holiday fell on a weekend.) In Wrangell, Petersburg and Blind Slough, each of these strata was sampled once per week. In Juneau and Ketchikan, the strata were sampled once per week at each harbor. In Haines, sampling effort was randomly distributed throughout the entire sample period, May 6 through June 30. Usually two sample periods fell within a week, but data were not analyzed within weekly strata.

In Juneau, Ketchikan, Wrangell and Petersburg, where multiple harbors, boat ramps and moorages exist, only fractions of the local sport fleets could be contacted by the interview technicians. To determine these fractions, surveys of total fishing activity were conducted.

In both Juneau and Ketchikan, two aerial surveys were flown each week to count all boats engaged in sport fishing. The flights occurred at the busiest fishing hours: early afternoon on the weekends and after working hours on the weekdays. In Wrangell and Petersburg, boats were used to enumerate the sport fleet: counts were made twice weekly before afternoon sampling began. The ratio of the number of recreational boats counted during the season to the number of boats interviewed during the season that reported fishing, during the observation periods, within the observation areas was used to expand effort and harvest in each period.

This was the same calculation used in the 1983 creel surveys, with one minor enhancement. In 1983, the assumption was made that, during the observation periods, all boats would have been counted. In actuality, the boat counts were not all inclusive. For example, in Juneau, aerial surveys were not flown over the areas closed to chinook fishing during spring 1983 or spring 1984. Therefore, in 1983, parties who reported

fishing for halibut in areas closed to chinook salmon fishing during the aerial surveys would have been included only in the number of boats interviewed. This slightly decreased the expansion ratio and artificially lowered the harvest estimates.

In 1984, these parties were not included in either the boat count or the interview count, so they had no effect on the expansion ratio. Similarly, in Wrangell, only Areas 1-3 were consistently surveyed for fishing activity. Thus, the 1984 expansion ratio for Wrangell was calculated by dividing the number of boats counted in Areas 1-3 by the number of parties that reported fishing in Areas 1-3 during the boat counts.

The expanded effort and harvest estimates from sampled strata were used to estimate effort and harvest each week in unsampled strata. Strata estimates were summed to produce weekly estimates, and weekly estimates were summed to produce seasonal estimates of effort and harvest.

Catch rates were calculated from the unexpanded interview data in each creel survey. Both non-targeted and targeted-catch rates were reported. The non-targeted-catch rate of a species was calculated by dividing all hours of angling effort by the total harvest (caught and kept) of that species. For calculations of targeted-catch rates, angling effort was first subdivided into hours expended for salmonids and hours expended for bottom fish. Then, the targeted-catch rate of a salmonid, for example, Dolly Varden, was calculated by dividing all hours of salmon fishing by the Dolly Varden harvest of salmon anglers. Similarly, the halibut targeted-catch rate was the ratio of bottom-fishing effort to the harvest of halibut by anglers who were bottom fishing.

Biological Data Collection

Biological data were collected from all chinook salmon and tagged salmon and from coho salmon and halibut when time permitted.

1. Chinook salmon were measured (snout to fork of tail). Their gonads were extracted, and a scale sample was taken. Several scales were removed from the second row above the lateral line on a diagonal from the insertion of the dorsal fin to the origin of the anal fin. Anglers were encouraged to aid in the collection of gonad and scale samples when survey technicians were not present. Gonad samples were kept frozen until analysis. After thawing, egg diameters were measured to the nearest 0.1 mm. Testes were weighed (wet weight) to the nearest gram.

   The gonad size-frequency distributions of the male and female chinook samples were plotted and inspected to determine if separate size groupings representing immature and mature chinook could be ascertained.

2. Adipose-fin clipped salmon were measured (snout to fork of tail) and their heads retained. The coded-wire tags were extracted at

the Alaska Department of Fish and Game (ADF&G) tag lab. The contribution of a hatchery stock to the sport fishery was calculated by first totaling the number of coded-wire tags (CWT) recovered during the randomly scheduled creel-survey sample periods. That total was then divided by the percentage of the harvest examined for tags. (Salmon containing an imbedded CWT are marked externally by the removal of their adipose fin.) Finally, that dividend was further divided by the percentage of that stock tagged prior to release from the hatchery. Salmon that possessed neither an adipose fin nor a CWT were excluded from the calculation. They probably had shed their tags, since the natural occurrence of a salmon without an adipose fin is relatively rare. Therefore, the true hatchery contributions were slightly higher than calculated. It was assumed that all chinook harvested in Blind Slough were from the Crystal Lake hatchery, and all coho harvested in Salmon Creek were from the Salmon Creek hatchery.

Pink Salmon Enhancement Survey

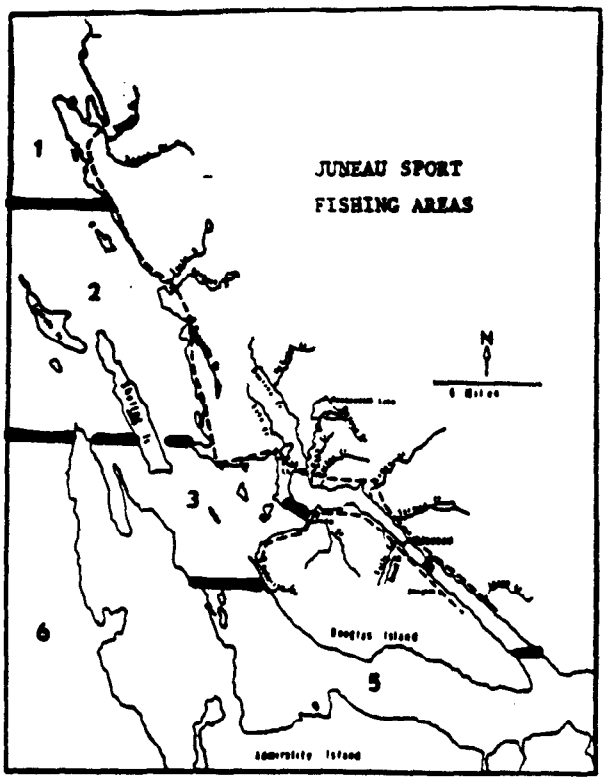
Juneau anglers departing the Auke Bay and Tee Harbor docks were offered a questionnaire to complete (Fig. 4). One question was "Would you favor hatchery production to increase the availability of pink salmon to marine boat anglers in the following areas?" (The sport fishing grounds were divided into six areas to determine if enhancement activities might be more acceptable in some areas than others.) Four additional questions were asked to determine the respondent's desire to catch pink salmon in the marine or roadside fisheries, to determine if the respondent had already previously completed a survey form and to determine whether the respondent was a Juneau resident.

The questionnaires were collected during the creel-survey interview, after the respondents had completed their fishing trips. Additionally, one member of each returning party was asked: 1) whether the party had caught and kept or caught and released any pink or coho salmon 2) whether the party actively sought or avoided areas of high pink salmon concentrations and 3) how the party rated the abundance of pink salmon (far too few, too few, about right, too many, or far too many).

FINDINGS

Effort and Harvest

Over 17,000 anglers were in fishing parties that were interviewed during the 1984 creel surveys in Blind Slough, Haines, Juneau, Ketchikan, Petersburg and Wrangell. The effort and harvests of these sample populations are shown in Tables 3-8. The expanded estimates of weekly effort, harvest, effort by area, and harvest by area of chinook, coho, and pink salmon and halibut for these surveyed fisheries are shown in Tables 9-32. Harvest estimates were also prepared for selected roadside recreational fisheries in Haines, Juneau, Petersburg and



PINK SALMON INTEREST POLL

The Alaska Department of Fish and Game, Sport Fish Division is canvassing anglers to determine their desires for additional pink salmon hatcheries in the Juneau area. Please assist us by completing this form near the end of your fishing trip. We encourage you to complete this form even though you may have filled out the same questionnaire earlier this season. If you fish regularly, and fill out several forms, your responses can be weighted more heavily than the occasional angler's. The forms will be collected by a creel survey technician when you return to dock.

OFFICE USE

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1) Would you favor hatchery production to increase the availability of pink salmon to marine boat anglers in the following areas? (Refer to map.)

Area 1 (includes: Berner's Bay, Echo Cove, Bridget Cove)
___ Approve ____ Disapprove ____ Don't Care ____

Area 2 (includes: Tee Harbor, Amalga Harbor, Breadline, North Pass, Pt. Retreat)
___ Approve ____ Disapprove ____ Don't Care ____

Area 3 (includes: Auke Bay, Fritz Cove, Outer Point, South Shelter)
___ Approve ____ Disapprove ____ Don't Care ____

Area 4 (Gastineau Channel)
___ Approve ____ Disapprove ____ Don't Care ____

Area 5 (includes: Dupont, South Douglas Island, Young's Bay)
___ Approve ____ Disapprove ____ Don't Care ____

Area 6 (includes: Hawk Inlet and Couverdon)
___ Approve ____ Disapprove ____ Don't Care ____

2) Did you hope to catch pink salmon today?
___ Yes ____ No ____ No Opinion ____

3) Do you fish for pink salmon along the roadside?
___ Never ____ Occasionally ____ Often ____

___ 4) Have you filled out one of these survey forms before? Yes ___ No ___

___ 5) Are you a Juneau resident? Yes ___ No ___

Figure 4. Pink Salmon Enhancement Questionnaire

Table 3. Sampled Effort and Harvest of the Blind Slough Sport Fishery, 1984.

SAMPLED EFFORT AND HARVEST OF THE BLIND SLOUGH SPORT FISHERY, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
8 6/03-6/09	10	19	19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 6/10-6/16	35	121	114	7	4	0	0	2	0	0	0	0	4	0	0	0	0	0	0	2
10 6/17-6/23	51	172	169	3	14	0	0	14	0	0	0	0	5	0	0	0	0	0	0	2
11 6/24-6/30	31	96	96	0	4	0	0	11	0	0	0	0	3	0	0	0	0	0	0	3
12 7/01-7/07	28	62	62	0	3	0	4	7	0	0	0	0	0	0	0	0	0	0	0	0
13 7/08-7/14	17	63	63	0	2	0	1	16	0	0	0	0	0	0	0	0	0	0	0	0
ALL	172	532	522	10	28	0	5	50	0	0	0	0	12	0	0	0	0	0	0	7

Table 4. Sampled Effort and Harvest of the Haines Sport Fishery, 1984. (Excludes Derby Data).

SAMPLED EFFORT AND HARVEST OF THE HAINES SPORT FISHERY, 1984. (EXCLUDES DERBY DATA)

	ANGLER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHINOOK <28IN KEPT	CHINOOK >28IN KEPT	CHINOOK <28IN RELE	CHINOOK >28IN RELE	COHO	PINK	CHUM	SOCKEYE	DOLLY	HALIBUT KEPT	HALIBUT RELE	FLATFISH	COD	ROCKFISH	GREENLING	OTHER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
SAMPLE PERIOD																				
5/06-6/30	367	1575	1498	76	1	99	67	0	0	0	0	0	25	6	0	7	6	0	0	0

Table 5. Sampled Effort and Harvest of the Juneau Sport Fleet, 1984.

SAMPLED EFFORT AND HARVEST OF THE JUNEAU SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	238	906	698	208	0	19	7	0	0	0	0	0	3	9	16	1	3	2	0	0
4 5/06-5/12	336	1306	984	322	0	24	17	0	0	0	0	0	1	44	35	1	0	0	0	0
5 5/13-5/19	325	1193	830	363	0	20	10	0	0	0	0	0	1	45	59	3	0	1	0	0
6 5/20-5/26	247	998	750	248	0	44	34	1	0	0	0	0	8	47	39	0	10	1	0	0
7 5/27-6/02	252	1118	883	235	0	16	19	0	0	0	0	0	3	43	59	1	0	6	0	0
8 6/03-6/09	476	2040	1391	649	2	43	25	3	0	0	0	0	5	111	101	0	0	5	0	0
9 6/10-6/16	359	1653	958	695	1	33	12	0	1	0	1	1	1	141	76	1	7	5	0	0
10 6/17-6/23	414	1634	1049	585	0	40	27	0	5	1	2	0	3	105	81	0	11	3	0	0
11 6/24-6/30	450	2044	1132	912	0	52	37	0	12	10	2	0	4	121	41	0	4	7	0	0
12 7/01-7/07	469	2011	1366	645	2	89	72	3	24	9	5	0	3	114	86	3	0	22	0	0
13 7/08-7/14	292	1321	845	476	3	37	53	7	43	32	2	1	1	84	88	1	4	2	0	0
14 7/15-7/21	468	2247	1428	819	2	68	87	6	52	19	1	0	0	171	72	0	0	4	0	0
15 7/22-7/28	633	2842	1654	1188	0	62	63	0	47	36	1	0	0	245	185	0	6	2	1	0
16 7/29-8/04	647	4503	4399	103	1	55	68	1	115	54	5	0	1	65	21	0	1	2	0	1
17 8/05-8/11	577	3749	3491	258	0	51	94	0	81	28	6	0	2	135	59	0	0	0	0	0
18 8/12-8/18	470	2002	1502	500	0	25	37	1	139	39	5	0	0	126	56	0	0	0	0	0
19 8/19-8/25	296	1196	970	227	0	12	18	0	134	14	5	0	0	41	20	0	0	0	0	0
20 8/26-9/01	314	1328	1198	130	0	18	48	4	215	12	0	0	0	42	19	0	4	9	0	0
21 9/02-9/08	387	1744	1342	402	0	21	11	0	192	6	5	0	0	70	41	0	0	0	0	0
22 9/09-9/15	280	1157	896	261	0	11	12	0	86	3	4	0	0	66	13	0	0	1	0	0
23 9/16-9/22	160	613	314	299	1	10	3	0	18	0	1	0	0	28	39	0	0	0	0	0
24 9/23-9/29	175	670	230	441	0	20	3	0	4	0	0	0	0	56	13	0	3	9	0	0
ALL	8265	38273	28308	9965	12	770	757	26	1168	263	45	2	36	1909	1219	11	53	81	1	1

Table 6. Sampled Effort and Harvest of the Ketchikan Sport Fleet, 1984.

SAMPLED EFFORT AND HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	161	803	186	617	0	1	3	1	0	0	0	0	0	34	8	17	26	50	0	0
4 5/06-5/12	154	858	330	528	0	8	3	0	0	0	0	0	0	30	14	1	6	82	0	0
5 5/13-5/19	121	715	368	347	0	10	6	1	0	0	0	0	0	25	0	0	6	27	3	0
6 5/20-5/26	152	932	743	189	0	20	13	3	0	0	0	0	0	33	1	0	12	28	0	0
7 5/27-6/02	507	2751	2427	324	0	62	47	0	0	0	1	0	0	35	0	9	8	23	0	0
8 6/03-6/09	413	2436	2211	226	2	59	99	0	0	0	0	0	0	25	13	4	15	33	0	3
9 6/10-6/16	346	1913	1707	206	1	45	17	0	1	0	1	0	1	27	4	3	8	65	0	9
10 6/17-6/23	219	1179	691	488	0	5	11	0	0	0	0	0	0	52	16	10	31	86	0	0
11 6/24-6/30	127	587	324	263	0	1	4	0	6	1	0	0	1	35	0	1	7	49	0	8
12 7/01-7/07	232	1135	553	582	0	6	5	2	31	55	1	0	0	50	0	1	9	99	1	0
13 7/08-7/14	394	1485	1038	448	3	6	9	0	35	387	4	2	0	75	4	1	11	52	0	0
14 7/15-7/21	459	1815	1198	617	4	5	17	1	41	475	2	0	15	96	4	1	53	101	0	0
15 7/22-7/28	496	2085	1279	806	0	3	9	0	30	348	3	0	0	129	5	7	25	107	0	0
16 7/29-8/04	257	1139	738	400	0	2	17	1	26	181	1	0	2	53	1	2	5	61	0	2
17 8/05-8/11	313	1246	727	519	0	4	12	0	11	156	0	0	0	69	4	2	36	47	0	2
18 8/12-8/18	378	1714	1135	579	0	5	34	0	118	363	3	0	0	134	15	6	20	73	0	0
19 8/19-8/25	309	1578	1140	438	0	1	11	0	137	188	7	0	0	80	7	0	11	62	0	13
20 8/26-9/01	398	1776	1498	278	0	4	8	0	309	215	14	0	0	38	1	0	8	67	0	0
21 9/02-9/08	319	1412	1256	156	0	2	5	0	476	60	15	0	0	35	2	0	15	23	0	1
22 9/09-9/15	223	1090	968	121	0	1	3	0	276	22	1	0	0	42	0	2	4	28	0	0
23 9/16-9/22	162	755	546	209	0	0	2	0	88	6	5	0	0	22	4	0	20	56	0	10
24 9/23-9/29	65	250	139	112	0	0	7	0	10	0	1	0	0	18	0	0	8	4	0	1
ALL	6205	29655	21203	8452	10	250	342	9	1595	2457	59	2	19	1137	103	67	344	1223	4	49

Table 7. Sampled Effort and Harvest of the Petersburg Sport Fleet, 1984.

SAMPLED EFFORT AND HARVEST OF THE PETERSBURG SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	87	335	221	114	0	14	2	0	0	0	0	0	7	20	13	1	2	1	0	0
4 5/06-5/12	137	537	361	176	0	18	0	7	0	0	0	0	7	18	10	0	5	0	0	2
5 5/13-5/19	104	400	281	119	0	21	0	0	0	0	0	0	0	8	2	0	1	0	0	0
6 5/20-5/26	97	323	244	79	0	30	1	3	0	0	0	0	6	5	0	0	0	6	0	0
7 5/27-6/02	122	491	406	85	0	33	1	11	0	0	0	0	0	4	0	0	0	0	0	0
8 6/03-6/09	135	600	469	131	0	46	0	1	0	0	0	0	6	21	9	0	2	4	0	0
9 6/10-6/16	121	524	443	81	0	25	3	0	0	1	0	0	0	12	2	0	1	4	0	0
10 6/17-6/23	122	538	414	124	1	15	4	4	0	0	0	0	0	24	10	0	0	2	0	0
11 6/24-6/30	94	353	242	111	0	15	1	0	0	0	0	0	0	11	4	0	0	5	0	0
12 7/01-7/07	60	222	93	129	0	7	0	0	0	0	0	0	0	14	2	0	0	0	0	0
13 7/08-7/14	82	352	85	267	0	2	0	0	0	0	0	0	0	31	20	0	0	0	0	0
ALL	1161	4676	3260	1416	1	226	12	26	0	1	0	0	26	168	72	1	11	22	0	2

Table 8. Sampled Effort and Harvest of the Wrangell Sport Fleet, 1984.

SAMPLED EFFORT AND HARVEST OF THE WRANGELL SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
1 4/15-4/21	33	124	111	13	0	1	0	1	0	0	0	0	0	3	1	0	0	6	0	7
2 4/22-4/28	42	159	39	120	0	3	0	1	0	0	0	0	0	3	6	10	1	0	0	3
3 4/29-5/05	45	169	140	29	0	9	1	3	0	0	0	0	0	2	1	0	0	0	0	0
4 5/06-5/12	127	516	459	58	1	10	2	2	0	0	0	0	0	4	0	0	1	4	0	7
5 5/13-5/19	226	1004	993	11	0	39	8	10	0	0	0	0	1	7	0	0	0	4	0	0
6 5/20-5/26	267	1508	1466	42	0	74	11	6	0	0	0	0	0	4	2	1	1	0	0	3
7 5/27-6/02	193	1147	1122	26	0	58	7	11	0	0	0	0	1	11	0	0	0	0	0	0
8 6/03-6/09	79	376	286	90	0	24	1	3	0	0	0	0	0	13	0	2	1	0	0	0
9 6/10-6/16	43	215	151	64	0	7	0	5	0	0	0	0	0	15	0	0	0	0	0	0
10 6/17-6/23	54	246	137	109	0	3	0	2	0	0	0	0	0	10	5	0	0	0	0	0
11 6/24-6/30	48	251	50	202	0	5	0	0	0	0	0	0	0	21	1	0	0	0	0	0
ALL	1157	5715	4952	763	1	233	30	44	0	0	0	0	2	93	16	13	4	14	0	20

Table 9. Effort and Harvest of Blind Slough Sport Fishery, 1984.

EFFORT AND HARVEST OF BLIND SLOUGH SPORT FISHERY, 1984.

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
8 6/03-6/09	29	59	59	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 6/10-6/16	100	315	301	14	14	0	0	4	0	0	0	0	8	0	0	0	0	0	0	4
10 6/17-6/23	177	606	601	5	55	0	0	40	0	0	0	0	10	0	0	0	0	0	0	4
11 6/24-6/30	92	278	278	0	11	0	0	37	0	0	0	0	15	0	0	0	0	0	0	15
12 7/01-7/07	92	202	202	0	10	0	12	25	0	0	0	0	0	0	0	0	0	0	0	0
13 7/08-7/14	52	181	181	0	10	0	2	35	0	0	0	0	0	0	0	0	0	0	0	0
ALL	542	1640	1621	19	105	0	14	141	0	0	0	0	33	0	0	0	0	0	0	23

Table 10. Effort and Harvest of the Haines Sport Fleet, 1984. (Excludes Derby Data.)

EFFORT AND HARVEST OF THE HAINES SPORT FLEET, 1984. (EXCLUDES DERBY DATA)

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
SAMPLE PERIOD																				
5/06-6/30	2477	10253	9855	398	10	760	406	0	0	0	0	0	215	24	0	40	46	0	0	0

Table 11. Effort and Harvest of the Juneau Sport Fleet, 1984.

EFFORT AND HARVEST OF THE JUNEAU SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	1690	6522	5358	1164	0	153	52	0	0	0	0	0	39	62	114	5	16	18	0	0
4 5/06-5/12	2383	9195	6914	2281	0	202	96	0	0	0	0	0	5	329	336	5	0	0	0	0
5 5/13-5/19	2202	8290	5955	2335	0	158	52	0	0	0	0	0	13	279	383	16	0	5	0	0
6 5/20-5/26	1954	7486	5765	1721	0	305	238	5	0	0	0	0	88	352	248	0	52	13	0	0
7 5/27-6/02	1754	7415	6009	1406	0	98	145	0	0	0	0	0	31	269	367	5	0	31	0	0
8 6/03-6/09	3279	13565	9475	4091	10	316	176	16	0	0	0	0	26	706	763	0	0	34	0	0
9 6/10-6/16	2432	10772	6234	4538	5	210	101	0	13	0	5	5	5	893	432	13	36	34	0	0
10 6/17-6/23	3261	12057	7710	4347	0	308	233	0	26	5	18	0	16	800	753	0	104	39	0	0
11 6/24-6/30	3276	13969	8304	5665	0	417	246	0	132	67	18	0	28	766	243	0	44	36	0	0
12 7/01-7/07	4073	17209	11611	5598	16	787	634	23	228	88	44	0	23	991	756	28	0	171	0	0
13 7/08-7/14	2264	10053	6150	3902	31	292	461	67	308	267	18	13	13	691	681	5	21	10	0	0
14 7/15-7/21	3455	15521	10020	5501	18	538	621	31	355	114	13	0	0	1164	567	0	0	21	0	0
15 7/22-7/28	5155	21994	12880	9115	0	484	505	0	391	272	5	0	0	1835	1252	0	31	10	5	0
16 7/29-8/04	8892	64192	63448	744	18	762	983	21	1588	602	72	0	11	834	310	0	5	10	0	18
17 8/05-8/11	5253	33854	31271	2583	0	473	837	0	723	266	48	0	17	1287	540	0	0	0	0	0
18 8/12-8/18	4156	17406	12691	4715	0	215	331	5	1271	326	49	0	0	1102	430	0	0	0	0	0
19 8/19-8/25	2526	10390	8441	1949	0	109	124	0	1291	119	34	0	0	367	104	0	0	0	0	0
20 8/26-9/01	2215	8836	8118	718	0	93	295	21	1478	70	0	0	0	233	98	0	52	47	0	0
21 9/02-9/08	3193	14053	10790	3263	0	168	88	0	1576	49	39	0	0	585	362	0	0	0	0	0
22 9/09-9/15	2156	8551	6449	2103	0	104	85	0	593	16	28	0	0	559	83	0	0	5	0	0
23 9/16-9/22	952	3420	1814	1606	5	60	31	0	109	0	13	0	0	145	202	0	0	0	0	0
24 9/23-9/29	1069	4074	1327	2747	0	119	16	0	21	0	0	0	0	360	75	0	16	47	0	0
ALL	67589	318822	246732	72090	104	6370	6349	189	10100	2260	404	18	315	14609	9100	78	375	530	5	18

Table 12. Effort (Rod-Hours) of the Juneau Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE JUNEAU SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA																							
BERNERS BAY	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	10	0	0	70	0	0	10	132
BRIDGET COVE	47	0	16	10	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	114
NORTH ISLAND	78	0	78	67	31	0	145	0	27	82	0	83	0	760	116	0	0	0	0	0	0	0	1465
BENJAMIN ISLAND	69	36	49	0	119	78	145	52	116	62	78	74	31	1393	95	269	0	0	41	0	0	147	2854
EAGLE RIVER	0	0	0	0	5	62	60	52	0	101	38	0	477	395	428	329	0	0	0	26	0	114	2086
SHRINE ISLAND	13	251	10	228	279	352	47	104	204	83	166	116	0	1662	284	0	0	0	72	0	0	0	3872
AARON ISLAND	216	197	233	197	150	966	522	1028	538	665	520	402	479	3657	251	697	181	129	217	34	21	16	11316
BREADLINE	2982	3550	2877	3104	2779	2512	555	650	803	322	242	104	552	4095	1697	265	106	340	811	613	47	0	29005
STEVEN'S POINT	782	850	489	349	475	849	422	858	138	728	202	84	120	461	727	296	371	1091	864	678	93	147	11079
LENA POINT	72	188	129	171	374	327	204	228	106	190	98	647	230	1703	1164	1154	623	820	1105	1356	304	379	11573
INDIAN POINT	0	0	16	0	0	124	0	219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	358
AUKE BAY	52	0	0	0	0	57	49	52	39	215	39	3	142	0	65	82	0	0	21	0	62	57	934
COGHLAN ISLAND	78	8	245	16	0	21	124	186	233	171	36	425	375	364	288	409	441	644	78	197	114	97	4547
PORTLAND ISLAND	2	10	57	54	65	281	749	283	127	114	106	0	116	1186	429	10	43	109	226	52	16	179	4213
SPUHN ISLAND	78	0	0	0	0	0	5	21	91	0	8	80	92	0	142	13	0	94	5	62	0	0	691
FRITZ COVE	0	0	0	0	0	0	0	116	0	0	0	0	104	0	0	0	0	0	0	0	0	21	241
PT. BISHOP	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	0	0	103
TAKU HARBOR	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	31
GRAND ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31
FALSE PT. ARDEN	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26

Table 12. (cont'd) Effort (Rod-Hours) of the Juneau Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE JUNEAU SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA																							
OLIVER'S INLET	0	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	89
ICY-HILDA COAST	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	0	228
PT. HILDA	0	0	0	0	0	0	0	0	26	0	0	109	0	890	0	176	0	147	109	0	0	0	1457
YOUNG'S BAY	0	0	0	0	0	31	98	181	21	27	171	41	0	776	394	62	0	127	136	220	160	54	2501
WHITEMARKER	0	0	0	0	0	0	18	31	23	0	0	0	0	0	655	0	21	36	116	26	0	0	927
MIDDLE POINT	0	0	0	39	0	0	189	155	197	276	0	52	41	229	1458	945	70	160	565	490	41	507	5415
HORSE AND COLT ISLANDS	21	96	0	0	0	104	28	41	31	116	0	109	111	0	261	273	0	93	0	5	10	0	1300
OUTER POINT	41	72	83	88	41	0	536	1549	1098	1042	489	730	1183	1220	2834	656	648	404	2243	550	541	251	16298
PILING POINT	0	0	8	28	0	0	16	0	0	0	0	19	57	595	39	0	0	0	0	8	0	0	769
S. SHELTER ISLAND	349	857	1526	563	175	3105	2351	2881	4778	6777	3660	7689	11149	13759	9183	4400	2711	2724	1908	990	1343	1263	84141
BARLOW COVE	44	31	109	16	31	129	124	168	142	221	44	21	65	0	0	0	0	0	0	0	19	0	1164
FAVORITE REEF	98	52	111	305	39	243	101	189	442	137	197	533	358	1127	673	1101	50	0	58	406	0	72	6295
BARLOW POINT	19	10	41	78	62	421	181	102	157	660	541	578	474	2312	907	264	140	67	233	98	0	155	7500
PT. RETREAT	343	528	131	348	228	516	797	964	901	873	494	717	977	2089	851	902	295	264	994	225	36	188	13652
HAND TROLLER COVE	101	300	207	0	294	355	75	101	348	408	35	322	798	2162	692	821	844	934	472	637	60	0	9963
E. SHELTER ISLAND	0	19	57	72	72	282	114	135	96	184	0	0	127	1595	793	27	398	0	82	0	0	0	4052
NORTH PASS	464	947	786	1030	1673	1571	1265	752	1280	1857	1359	1342	2520	11955	5729	2634	2227	524	1500	613	307	189	42523
N. SHELTER ISLAND	179	388	150	269	41	378	908	254	820	863	577	414	377	5177	1886	880	116	0	673	155	16	65	14584
LINCOLN ISLAND	58	93	494	118	181	190	468	254	488	501	172	505	534	1330	747	202	78	31	516	179	3	47	7187
LITTLE ISLAND	62	0	0	0	0	0	0	0	89	0	0	31	0	31	0	0	68	0	0	0	0	0	281

Table 12. (cont'd) Effort (Rod-Hours) of the Juneau Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE JUNEAU SPORT FLEET, 1984

	WEEK																						
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM	ROD-HOURS SUM
AREA																							
ST. JAMES BAY	0	269	72	0	109	83	31	0	0	0	0	0	0	588	0	0	421	0	0	252	0	0	1825
PT. COUVERDEN	0	28	52	0	10	0	0	13	93	210	0	0	140	135	0	5	93	0	516	62	0	0	1357
SWANSON HARBOR	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	13
FUNTER BAY	0	0	31	145	0	0	0	0	0	16	699	0	0	0	103	16	116	0	0	65	0	0	1190
HAWK INLET	3	0	0	168	0	52	0	0	0	23	0	0	0	0	0	0	0	0	8	0	0	0	254
VANDERBILT REEF	0	0	12	0	83	0	0	41	0	0	0	0	0	0	0	0	0	0	367	207	0	0	710
POUNDSTONE REEF	0	124	0	0	0	155	135	233	0	0	0	0	0	217	0	287	0	18	0	0	0	0	1170
AMALGA HARBOR	114	57	0	0	5	39	0	0	0	0	78	0	0	9	81	142	0	0	0	62	0	0	587
PT. LOUISA	0	72	58	31	0	114	179	88	83	109	0	70	10	0	203	0	0	0	47	0	62	0	1125
W. SHELTER ISLAND	0	147	16	0	93	89	0	16	18	87	0	116	272	2290	681	36	323	78	0	0	0	0	4262
OTHER	158	5	147	0	0	19	132	62	287	0	5	65	83	0	0	0	0	0	0	285	0	85	1335
ALL	6522	9195	8290	7486	7415	13565	10772	12057	13969	17209	10053	15521	21994	64192	33854	17406	10390	8836	14053	8551	3420	4074	318825

Table 13. Chinook Harvest of the Juneau Sport Fleet, 1984.

CHINOOK HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM
AREA																							
BRIDGET COVE	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
NORTH ISLAND	0	0	0	0	0	0	5	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	36
BENJAMIN ISLAND	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
EAGLE RIVER	0	0	0	0	5	0	0	0	0	0	0	0	0	29	5	0	0	0	0	0	0	0	39
SHRINE ISLAND	0	0	0	16	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	26
AARON ISLAND	0	0	0	0	0	31	0	0	0	8	10	0	5	78	26	0	0	0	0	0	0	0	159
BREADLINE	109	52	60	129	21	49	5	34	18	10	0	0	18	24	0	0	5	10	16	0	0	0	559
STEVEN'S POINT	5	28	41	23	0	23	10	18	0	18	0	0	0	0	0	0	0	0	8	0	0	0	176
LENA POINT	0	5	0	0	5	23	13	0	16	0	5	0	26	0	0	5	0	16	0	57	5	0	176
AUKE BAY	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
COGHLAN ISLAND	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	10	0	0	18	0	0	34
PORTLAND ISLAND	0	0	0	0	0	0	5	0	0	0	5	0	0	0	9	0	0	0	0	0	0	5	24
SPUHN ISLAND	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	21
PT. HILDA	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	5	0	0	0	0	27
YOUNG'S BAY	0	0	0	0	0	5	5	0	0	0	0	0	0	62	0	0	0	0	8	5	0	0	85
WHITEMARKER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	8	0	0	0	25
MIDDLE POINT	0	0	0	0	0	0	0	0	0	0	0	0	0	21	126	88	10	10	16	5	5	0	281
OUTER POINT	0	0	0	0	0	0	16	88	26	54	0	0	18	0	28	23	5	21	31	0	36	5	351
S. SHELTER ISLAND	5	18	28	0	0	62	67	67	248	502	124	373	311	123	159	57	52	16	36	18	13	85	2365
BARLOW COVE	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 13. (cont'd) Chinook Harvest of the Juneau Sport Fleet, 1984.

CHINOOK HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK																						
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM
AREA																							
FAVORITE REEF	0	0	0	0	0	0	0	5	13	0	5	39	0	11	9	0	0	0	0	0	0	13	94
BARLOW POINT	0	0	0	0	10	5	10	10	0	47	114	31	0	37	26	0	0	0	0	0	0	0	291
PT. RETREAT	5	0	0	21	0	10	28	10	0	0	0	36	36	0	0	0	0	0	0	0	0	0	147
HAND TROLLER COVE	0	0	5	0	0	5	0	0	0	16	0	26	0	62	0	0	13	0	0	0	0	0	127
E. SHELTER ISLAND	0	0	0	0	0	23	0	0	0	0	0	0	16	74	0	0	13	0	0	0	0	0	126
NORTH PASS	18	10	23	70	57	52	28	41	49	44	44	52	49	157	43	36	0	5	16	0	0	10	806
N. SHELTER ISLAND	5	39	0	26	0	26	0	10	16	34	10	0	5	59	9	0	0	0	16	0	5	0	259
LINCOLN ISLAND	0	10	0	5	0	0	0	0	5	0	0	0	0	5	17	5	0	0	16	0	0	0	64
ST. JAMES BAY	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
PT. COUVERDEN	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
FUNTER BAY	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
HAWK INLET	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
PT. LOUISA	0	13	0	0	0	5	0	13	0	31	0	0	0	0	0	0	0	0	0	0	0	0	62
W. SHELTER ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	18
OTHER	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
ALL	153	202	158	305	98	326	215	308	417	802	323	556	484	781	473	215	109	93	168	104	65	119	6474

Table 14. Coho Harvest of the Juneau Sport Fleet, 1984.

COHO HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK																ALL
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO	COHO
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA																	
BERNERS BAY	0	0	0	0	0	10	0	0	0	0	0	0	8	0	0	0	18
NORTH ISLAND	0	0	0	8	0	5	0	16	0	0	0	0	0	0	0	0	28
BENJAMIN ISLAND	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	5	70
EAGLE RIVER	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
SHRINE ISLAND	0	0	0	0	0	0	0	18	13	0	0	0	16	0	0	0	47
AARON ISLAND	0	0	0	0	0	5	0	47	0	0	0	10	0	0	5	0	67
BREADLINE	0	10	0	26	0	0	26	72	52	23	5	36	83	62	10	0	405
STEVEN'S POINT	0	0	0	0	0	0	0	26	18	52	124	142	142	31	10	0	546
LENA POINT	0	0	0	0	0	31	5	68	28	80	36	272	160	54	49	0	784
COGHLAN ISLAND	0	0	0	0	0	0	0	0	0	26	28	5	16	0	0	0	75
PORTLAND ISLAND	0	0	0	0	0	0	0	31	0	0	0	31	8	0	0	0	70
SPUHN ISLAND	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
PT. HILDA	0	0	0	0	0	0	0	43	0	0	0	57	0	0	0	0	100
YOUNG'S BAY	0	0	0	0	0	0	0	0	0	0	0	5	31	16	0	0	52
WHITEMARKER	0	0	0	0	0	0	0	0	34	0	5	10	8	0	0	0	58
MIDDLE POINT	0	0	0	0	0	0	0	0	34	18	10	62	8	0	0	0	133
HORSE AND COLT ISLANDS	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
OUTER POINT	0	5	13	8	16	5	5	0	22	31	10	101	256	31	18	5	526
PILING POINT	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*0*	*0*	*5*
S. SHELTER ISLAND	0	0	106	65	116	179	202	522	142	269	264	321	155	36	16	10	2404
FAVORITE REEF	0	0	0	0	0	0	0	29	0	34	0	0	16	13	0	0	91
BARLOW POINT	0	0	0	0	13	0	0	18	26	0	10	10	0	5	0	0	83
PT. RETREAT	0	0	0	0	10	26	36	54	17	147	16	26	39	5	0	0	377
HAND TROLLER COVE	0	0	0	0	0	10	23	141	9	171	264	290	78	116	0	0	1102
E. SHELTER ISLAND	0	5	0	0	0	0	10	37	9	0	52	0	31	0	0	0	144
NORTH PASS	13	5	0	111	75	62	62	258	100	251	272	57	303	116	0	0	1686
N. SHELTER ISLAND	0	0	13	0	21	5	0	95	190	83	0	0	70	5	0	0	482
LINCOLN ISLAND	0	0	0	0	0	10	5	0	0	0	13	16	49	47	0	0	140
ST. JAMES BAY	0	0	0	0	0	0	0	18	0	0	0	0	0	13	0	0	31
PT. COUVERDEN	0	0	0	0	0	0	0	16	0	0	0	0	101	16	0	0	132
FUNTER BAY	0	0	0	0	57	0	0	0	0	0	13	0	0	10	0	0	80
AMALGA HARBOR	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10
PT. LOUISA	0	0	0	10	0	5	0	0	9	0	0	0	0	0	0	0	24
W. SHELTER ISLAND	0	0	0	0	0	0	5	77	9	10	168	21	0	0	0	0	290
OTHER	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
ALL	13	26	132	228	308	355	391	1588	723	1271	1291	1478	1576	593	109	21	10100

Table 15. Pink Salmon Harvest of the Juneau Sport Fleet, 1984.

PINK SALMON HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK													
	10	11	12	13	14	15	16	17	18	19	20	21	22	ALL
	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM	PINK SUM
AREA														
SHRINE ISLAND	0	0	0	0	0	0	18	0	0	0	0	0	0	18
BREADLINE	0	5	0	0	0	13	97	9	18	0	5	0	0	147
STEVEN'S POINT	0	0	0	91	0	0	26	26	39	16	18	8	0	223
LENA POINT	0	0	0	10	10	0	31	14	26	13	0	10	0	115
AUKE BAY	0	0	0	0	0	26	0	0	0	0	0	0	0	26
COGHLAN ISLAND	0	0	0	0	0	0	0	0	0	0	5	0	0	5
PT. HILDA	0	0	0	0	10	0	22	0	0	0	0	0	0	32
HORSE AND COLT ISLANDS	0	0	0	0	0	0	0	9	5	0	0	0	0	14
OUTER POINT	0	10	0	5	5	0	22	0	5	0	5	0	0	53
S. SHELTER ISLAND	0	5	57	16	52	75	98	49	75	0	21	8	10	465
FAVORITE REEF	0	0	0	0	0	10	11	0	0	0	0	0	0	21
BARLOW POINT	0	0	0	16	0	0	0	17	47	0	0	0	0	79
PT. RETREAT	0	13	0	21	5	5	82	43	26	16	0	0	5	216
HAND TROLLER COVE	0	5	0	0	0	36	5	78	26	13	5	0	0	168
E. SHELTER ISLAND	0	0	0	0	0	0	0	0	0	13	0	0	0	13
NORTH PASS	5	5	21	49	26	60	105	17	41	49	10	23	0	412
N. SHELTER ISLAND	0	18	10	16	0	0	66	0	18	0	0	0	0	128
LINCOLN ISLAND	0	0	0	0	5	10	0	0	0	0	0	0	0	16
FUNTER BAY	0	0	0	44	0	0	0	0	0	0	0	0	0	44
AMALGA HARBOR	0	0	0	0	0	0	0	5	0	0	0	0	0	5
PT. LOUISA	0	0	0	0	0	10	0	0	0	0	0	0	0	10
W. SHELTER ISLAND	0	0	0	0	0	0	18	0	0	0	0	0	0	18
OTHER	0	5	0	0	0	26	0	0	0	0	0	0	0	31
ALL	5	67	88	267	114	272	602	266	326	119	70	49	16	2260

Table 16. Halibut Harvest of the Juneau Sport Fleet, 1984.

HALIBUT HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HALI-BUT SUM
AREA																							
NORTH ISLAND	0	0	16	5	0	0	16	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	41
BENJAMIN ISLAND	0	0	0	0	0	0	0	5	5	0	10	31	5	18	0	16	0	0	0	0	0	5	96
EAGLE RIVER	0	0	0	0	0	0	0	5	0	0	0	0	26	5	104	65	0	0	0	13	0	10	228
SHRINE ISLAND	0	0	0	0	0	13	0	16	10	0	31	26	0	0	0	0	0	0	0	0	0	0	96
AARON ISLAND	31	62	21	5	26	62	83	127	140	83	52	26	60	165	5	166	13	21	65	21	0	0	1231
BREADLINE	0	0	0	13	0	0	21	0	0	0	0	0	5	5	9	0	0	0	0	0	0	0	53
STEVEN'S POINT	0	18	5	0	16	31	36	67	0	93	0	0	0	5	31	13	5	10	0	52	0	16	399
LENA POINT	0	0	0	5	10	0	31	26	0	47	0	18	0	0	78	155	5	5	8	13	5	65	471
AUKE BAY	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	5	0	0	0	0	5	0	23
COGHLAN ISLAND	0	0	0	0	0	10	16	0	0	0	5	21	96	0	0	0	13	13	0	80	0	5	259
PORTLAND ISLAND	0	0	13	5	0	26	36	26	0	0	0	0	0	22	26	0	5	0	28	21	0	65	273
SPUHN ISLAND	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	5	0	21	0	0	39
FRITZ COVE	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	21
PT. BISHOP	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ICY-HILDA COAST	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
PT. HILDA	0	0	0	0	0	0	0	0	0	0	0	5	0	11	0	5	0	0	0	0	0	0	21
YOUNG'S BAY	0	0	0	0	0	0	0	21	0	16	10	5	0	0	0	16	0	0	0	5	0	0	72
WHITEMARKER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	8	0	0	0	16
MIDDLE POINT	0	0	0	0	0	0	5	5	47	16	0	10	0	0	0	65	0	0	54	39	0	62	303
HORSE AND COLT ISLANDS	0	52	0	0	0	10	0	0	0	39	0	0	0	0	9	0	0	5	0	5	0	0	120

Table 16. (cont'd) Halibut Harvest of the Juneau Sport Fleet, 1984.

HALIBUT HARVEST OF THE JUNEAU SPORT FLEET, 1984

	WEEK																						
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HALI-BUT SUM
AREA																							
OUTER POINT	0	0	0	5	21	0	21	23	93	65	78	47	109	0	181	26	0	26	28	16	16	5	758
PILING POINT	0	0	0	0	0	0	0	0	0	0	0	13	36	0	0	0	0	0	0	0	0	0	49
S. SHELTER ISLAND	5	41	5	34	5	207	316	186	127	220	160	613	1082	380	465	202	62	119	60	0	98	70	4458
BARLOW COVE	0	0	0	0	0	0	5	0	21	54	5	0	0	0	0	0	0	0	0	0	0	0	85
FAVORITE REEF	0	0	5	31	0	0	10	0	62	83	10	57	36	0	103	155	0	0	0	78	0	0	631
BARLOW POINT	0	5	0	21	0	26	10	10	0	8	36	52	54	0	9	0	0	0	52	0	0	5	288
PT. RETREAT	5	75	26	78	41	49	67	140	88	124	72	21	47	21	0	65	0	0	39	16	0	21	994
HAND TROLLER COVE	0	13	0	0	0	0	0	21	5	0	0	5	10	37	0	0	5	13	0	0	0	0	109
E. SHELTER ISLAND	0	0	21	21	16	18	21	18	0	0	0	0	0	55	5	0	39	0	0	0	0	0	213
NORTH PASS	0	10	60	0	98	83	26	21	72	65	36	119	119	29	142	88	39	16	85	0	21	16	1144
N. SHELTER ISLAND	5	16	21	98	0	41	16	5	21	49	13	10	31	22	0	52	0	0	16	0	0	0	415
LINCOLN ISLAND	0	10	26	26	5	26	26	26	18	16	16	26	57	21	9	0	0	0	41	5	0	10	364
LITTLE ISLAND	10	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	26	0	0	0	0	0	47
ST. JAMES BAY	0	0	36	0	0	0	16	0	0	0	0	0	0	0	0	0	129	0	0	78	0	0	259
PT. COUVERDEN	0	0	0	0	0	0	0	0	31	16	0	0	41	0	0	0	26	0	54	21	0	0	189
FUNTER BAY	0	0	5	0	0	0	0	0	0	0	91	0	0	0	60	10	0	0	0	0	0	0	166
HAWK INLET	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
VANDERBILT REEF	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	78
POUNDSTONE REEF	0	10	0	0	0	21	31	39	0	0	0	0	0	21	0	0	0	0	0	0	0	0	122
AMALGA HARBOR	0	0	0	0	0	0	0	0	0	0	65	0	0	5	26	0	0	0	0	0	0	0	96
PT. LOUISA	0	0	0	5	0	52	0	0	5	0	0	0	0	0	9	0	0	0	0	0	0	0	71
W. SHELTER ISLAND	0	0	0	0	0	0	0	0	0	0	0	21	0	0	9	0	0	0	0	0	0	0	29
OTHER	5	16	21	0	0	10	85	0	10	0	0	26	0	0	0	0	0	0	0	78	0	5	256
ALL	62	329	279	352	269	706	893	800	766	991	691	1164	1835	834	1287	1102	367	233	585	559	145	360	14609

Table 17. Effort and Harvest of the Ketchikan Sport Fleet, 1984.

EFFORT AND HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	1070	5194	1174	4020	0	5	22	5	0	0	0	0	0	218	39	194	201	356	0	0
4 5/06-5/12	1094	5474	2615	2858	0	47	22	0	0	0	0	0	0	147	69	5	29	432	0	0
5 5/13-5/19	778	4356	2372	1984	0	56	44	5	0	0	0	0	0	167	0	0	37	155	15	0
6 5/20-5/26	982	5736	4562	1174	0	135	71	15	0	0	0	0	0	206	5	0	59	174	0	0
7 5/27-6/02	3416	17932	15472	2460	0	466	231	0	0	0	5	0	0	363	0	44	54	260	0	0
8 6/03-6/09	2851	14698	13179	1520	25	363	567	0	0	0	0	0	0	152	64	49	110	243	0	22
9 6/10-6/16	2368	12164	10319	1845	5	265	106	0	5	0	5	0	12	243	20	15	47	444	0	110
10 6/17-6/23	1855	10163	5693	4470	0	47	128	0	0	0	0	0	0	402	196	108	233	687	0	0
11 6/24-6/30	999	4344	2396	1948	0	12	42	0	66	5	0	0	5	312	0	5	34	321	0	39
12 7/01-7/07	1964	9554	4584	4970	0	57	41	21	250	466	10	0	0	445	0	8	77	888	8	0
13 7/08-7/14	2948	11388	8333	3055	31	54	108	0	257	3259	36	26	0	541	28	13	72	345	0	0
14 7/15-7/21	3427	13200	8559	4641	21	49	103	5	288	3651	18	0	77	803	21	13	489	896	0	0
15 7/22-7/28	4129	16639	10357	6282	0	23	54	0	263	2765	15	0	0	1027	41	51	260	829	0	0
16 7/29-8/04	2173	10127	6815	3312	0	18	157	13	273	1635	13	0	26	396	13	26	49	631	0	26
17 8/05-8/11	2245	8563	5632	2931	0	21	62	0	103	1429	0	0	0	371	21	10	185	265	0	10
18 8/12-8/18	3128	13318	8767	4551	0	41	368	0	916	2572	15	0	0	983	147	70	134	693	0	0
19 8/19-8/25	2788	13714	9978	3736	0	5	80	0	1207	1679	67	0	0	775	36	0	95	543	0	167
20 8/26-9/01	3694	16602	14219	2383	0	44	80	0	2912	2142	180	0	0	342	13	0	88	777	0	0
21 9/02-9/08	2791	12466	11148	1318	0	18	46	0	4387	494	129	0	0	304	15	0	118	198	0	8
22 9/09-9/15	2330	11664	10205	1459	0	13	31	0	2580	214	13	0	0	479	0	26	51	345	0	0
23 9/16-9/22	1074	5178	3992	1186	0	0	26	0	677	46	41	0	0	152	21	0	103	304	0	51
24 9/23-9/29	317	1251	730	521	0	0	33	0	47	0	5	0	0	84	0	0	37	19	0	5
ALL	48420	223725	161100	62625	81	1739	2420	63	14231	20356	553	26	120	8913	748	636	2564	9805	22	439

Table 18. Effort (Rod-Hours) of the Ketchikan Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK																						
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA																							
ANNETTE ISLAND	0	15	0	0	0	0	0	0	0	0	0	43	64	0	206	0	0	0	0	0	0	0	329
BETTON ISLAND	75	627	125	97	275	141	633	55	393	170	375	221	583	429	126	50	581	29	529	514	164	161	6352
BLACK ISLAND	141	142	113	226	308	167	61	0	0	165	0	0	0	0	14	0	0	0	0	17	60	0	1414
BLANK INLET	612	220	444	503	1224	950	455	731	0	241	46	480	714	329	325	561	255	20	197	315	0	93	8714
BOCA DE QUADRA	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	21
BOLD ISLAND	29	0	0	0	53	0	88	0	0	0	30	140	97	0	150	264	0	90	31	0	0	0	974
BOSTWICK POINT	187	61	223	49	97	196	159	0	66	0	0	160	94	0	211	260	0	245	108	38	47	0	2203
BUSHY POINT	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
CAAMANO POINT	0	0	86	402	88	725	389	1510	398	401	445	440	1418	875	134	490	203	627	472	315	0	0	9419
CALIFORNIA HEAD	0	0	55	123	93	353	88	0	0	0	57	0	103	0	33	10	34	0	0	27	150	0	1128
HELM BAY	0	29	0	54	0	20	0	0	0	0	0	183	0	0	0	0	0	0	0	0	0	0	287
CARROLL POINT	408	0	0	120	334	0	49	0	0	124	113	594	203	463	286	278	107	216	70	0	41	0	3406
CHASINA POINT	0	0	0	0	0	0	59	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
CHINA TOWN	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	46
CLARENCE STRAIT	0	0	0	0	20	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
CLOVER PASS	532	1457	1094	2039	8845	4914	5038	1844	1589	1866	3350	4380	6007	4164	4192	6126	6838	10682	8408	6754	3112	119	93351
DALL HEAD	0	0	0	159	0	29	0	0	96	131	258	284	247	0	5	0	0	182	0	0	0	0	1393
GRANT ISLAND	255	186	335	0	1839	658	233	47	344	0	62	62	111	0	290	279	0	90	0	167	59	0	5016
GRINDALL ISLAND	74	270	0	0	220	49	39	472	0	134	326	340	260	0	0	99	653	0	165	0	0	28	3129
HERRING BAY	0	0	0	98	0	0	0	0	0	0	57	55	170	0	31	15	0	0	0	0	18	0	445

Table 18. (cont'd) Effort (Rod-Hours) of the Ketchikan Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA																							
HUMP ISLAND	0	15	0	0	0	0	0	0	0	0	51	0	0	53	0	51	0	0	0	0	0	5	175
ICE HOUSE COVE	74	0	0	49	0	178	218	147	44	205	216	148	58	0	160	0	108	0	0	0	23	0	1630
INDIAN POINT	0	123	0	0	431	771	0	37	191	0	0	0	0	0	0	0	0	0	0	0	31	0	1583
ISLAND POINT	0	0	0	22	0	0	0	0	0	39	0	41	0	0	51	0	46	0	0	0	0	0	200
KAH SHAKES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	54	0	0	0	64
LUCKY COVE	0	0	0	0	103	141	0	540	0	0	0	0	76	21	0	10	0	0	0	0	0	0	890
MARY ISLAND	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	0	0	0	0	167
MOUNTAIN POINT	332	467	661	548	655	1441	1139	1669	117	1201	3528	2537	1840	963	423	611	345	511	265	460	91	0	19805
NIBLACK POINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	0	0	257	0	124	0	0	478
NICHOLAS PASSAGE	0	0	0	0	0	0	0	0	0	0	0	0	200	0	15	0	0	96	24	31	0	0	367
PENNOCK ISLAND	261	70	0	0	87	45	0	0	0	93	30	65	160	0	23	0	0	60	0	0	15	0	910
POINT ALAVA	0	0	218	0	0	236	0	0	49	0	0	0	0	0	111	0	0	0	0	0	0	0	614
REVILLAGEGEDO IS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0	0	0	0	0	0	116
SHIP ISLAND	0	0	0	0	0	0	0	94	196	293	0	0	0	89	10	82	113	0	0	0	0	0	879
SKIN ISLAND	0	0	164	270	0	0	0	0	0	0	0	0	0	0	0	389	0	0	0	0	0	0	823
S. VALLENAR POINT	46	108	0	0	0	0	25	0	0	0	0	0	51	0	85	0	0	0	0	0	0	0	315
SPIRE ISLAND	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0	0	0	0	0	139
TATOOSH ISLAND	388	83	23	348	478	489	281	59	84	0	0	198	371	154	79	19	0	54	162	747	21	144	4183
THORNE ARM	0	0	0	0	0	118	0	0	0	0	0	0	154	0	167	21	193	0	0	0	75	0	728
TONGASS NARROWS	167	51	0	17	193	103	560	386	2	234	21	0	144	13	21	0	58	0	0	21	175	0	2166
VALLENAR POINT	563	804	347	81	1336	657	1422	833	172	1014	617	656	997	837	386	1326	2070	1594	1382	1370	247	207	18919
WARD COVE	416	0	255	10	204	150	148	44	0	17	0	26	27	93	23	0	0	113	0	0	0	0	1526
OTHER	535	744	212	521	1050	2089	1078	1634	604	3226	1759	2145	2467	1644	897	2259	1993	1645	600	765	847	495	29207
ALL	5194	5474	4356	5736	17932	14698	12164	10163	4344	9554	11388	13200	16639	10127	8563	13318	13714	16602	12466	11664	5178	1251	223725

Table 19. Chinook Harvest of the Ketchikan Sport Fleet, 1984.

CHINOOK HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK																				
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	ALL
	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM
AREA																					
BETTON ISLAND	0	0	0	0	0	17	0	0	0	0	13	0	0	0	0	0	0	0	0	0	30
BLACK ISLAND	0	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
BLANK INLET	0	0	0	5	5	15	5	0	0	0	0	13	13	0	0	0	0	0	0	0	55
BOSTWICK POINT	0	5	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
CAAMANO POINT	0	0	0	5	0	20	25	5	0	0	0	5	5	0	0	0	0	0	0	13	77
CALIFORNIA HEAD	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
CARROLL POINT	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	18
CHASINA POINT	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
CLOVER PASS	0	17	15	32	157	125	83	5	12	21	31	18	0	0	0	0	0	18	10	0	544
DALL HEAD	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
GRANT ISLAND	0	0	0	0	93	20	0	0	0	0	0	5	0	0	0	0	0	0	0	0	118
GRINDALL ISLAND	5	0	0	0	15	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0	35
HERRING BAY	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
ICE HOUSE COVE	0	0	0	0	0	0	5	0	0	0	13	0	0	0	0	0	0	0	0	0	18
INDIAN POINT	0	0	0	0	79	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
MOUNTAIN POINT	0	5	10	20	5	71	22	12	0	21	10	0	0	0	0	0	0	0	0	0	176
PENNOCK ISLAND	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
POINT ALAVA	0	0	22	0	0	10	0	0	0	0	0	0	0	0	5	0	0	0	0	0	37
SHIP ISLAND	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25
SKIN ISLAND	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
TATOOSH ISLAND	0	0	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
TONGASS NARROWS	0	0	0	0	0	5	37	0	0	0	0	0	0	0	0	0	0	0	0	0	42
VALLENAR POINT	0	15	5	5	29	10	39	0	0	8	0	10	5	5	5	41	0	13	0	0	191
WARD COVE	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
OTHER	0	5	0	12	54	34	44	0	0	8	13	13	0	13	10	0	5	13	0	0	224
ALL	5	47	56	135	466	388	270	47	12	57	85	70	23	18	21	41	5	44	18	13	1820

Table 20. Coho Harvest of the Ketchikan Sport Fleet, 1984.

COHO HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK															
	9	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM	COHO SUM
AREA																
ANNETTE ISLAND	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
BETTON ISLAND	0	0	8	0	0	0	0	0	0	44	0	144	21	0	0	216
BLACK ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
BLANK INLET	0	0	0	5	0	0	0	0	5	23	0	0	0	0	5	38
CAAMANO POINT	5	54	10	26	88	70	70	0	44	15	142	293	103	0	0	919
CALIFORNIA HEAD	0	0	0	10	0	13	0	0	0	0	0	0	0	5	0	28
HELM BAY	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
CARROLL POINT	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
CLOVER PASS	0	12	44	116	95	54	165	57	360	901	2255	3576	1743	502	0	9880
DALL HEAD	0	0	54	0	15	62	0	0	0	0	139	0	0	0	0	270
GRANT ISLAND	0	0	0	0	0	0	0	0	0	0	15	0	26	0	0	41
GRINDALL ISLAND	0	0	0	70	10	0	0	0	46	13	0	0	0	0	0	139
HERRING BAY	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
ICE HOUSE COVE	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
ISLAND POINT	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
MOUNTAIN POINT	0	0	15	13	46	13	0	0	5	5	0	23	64	0	0	185
NIBLACK POINT	0	0	0	0	0	0	0	0	0	0	0	0	93	0	0	93
REVILLAGEGEDO IS.	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
SHIP ISLAND	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21
SKIN ISLAND	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
TATOOSH ISLAND	0	0	0	0	0	0	13	0	0	0	0	23	185	0	19	240
VALLENAR POINT	0	0	95	5	15	5	13	0	234	170	178	327	260	139	5	1446
WARD COVE	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
OTHER	0	0	8	13	0	46	13	18	188	15	178	0	80	31	19	608
ALL	5	66	250	257	288	263	273	103	916	1207	2912	4387	2580	677	47	14231

Table 21. Pink Salmon Harvest of the Ketchikan Sport Fleet, 1984.

PINK SALMON HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK													
	11	12	13	14	15	16	17	18	19	20	21	22	23	ALL
	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK	PINK
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA														
ANNETTE ISLAND	0	0	0	5	0	0	0	0	0	0	0	0	0	5
BETTON ISLAND	0	0	70	77	219	154	13	15	39	0	51	0	0	638
BLACK ISLAND	0	0	0	0	0	0	5	0	0	0	0	0	0	5
BLANK INLET	0	8	0	41	0	10	0	0	13	0	0	0	0	72
BOLD ISLAND	0	0	0	10	0	0	5	0	0	0	0	0	0	15
BOSTWICK POINT	0	0	0	31	0	0	0	31	0	0	0	0	0	62
CAAMANO POINT	0	67	157	95	492	126	5	59	15	26	0	0	0	1043
CALIFORNIA HEAD	0	0	0	0	0	0	0	5	0	0	0	0	0	5
HELM BAY	0	0	0	90	0	0	0	0	0	0	0	0	0	90
CARROLL POINT	0	0	0	10	5	0	39	0	0	0	0	0	0	54
CLOVER PASS	0	80	1627	2332	1496	1146	1068	1861	1125	1782	373	175	46	13112
DALL HEAD	0	15	0	51	26	0	0	0	0	0	0	0	0	93
GRANT ISLAND	0	0	0	0	10	0	0	26	0	10	0	0	0	46
GRINDALL ISLAND	0	10	257	10	0	0	0	13	0	0	0	0	0	291
HERRING BAY	0	0	5	15	10	0	0	0	0	0	0	0	0	31
ICE HOUSE COVE	0	8	18	36	0	0	5	0	0	0	0	0	0	67
ISLAND POINT	0	0	0	0	0	0	0	0	62	0	0	0	0	62
KAH SHAKES	0	0	0	0	0	0	0	0	0	0	31	0	0	31
LUCKY COVE	0	0	0	0	77	0	0	0	0	0	0	0	0	77
MOUNTAIN POINT	0	62	842	409	106	49	77	191	0	26	0	0	0	1761
PENNOCK ISLAND	0	0	0	21	10	0	0	0	0	0	0	0	0	31
REVILLAGEGEDO IS.	0	0	0	0	0	0	0	13	0	0	0	0	0	13
SHIP ISLAND	0	15	0	0	0	10	0	51	15	0	0	0	0	93
SKIN ISLAND	0	0	0	0	0	0	0	46	0	0	0	0	0	46
S. VALLENAR POINT	0	0	0	0	15	0	0	0	0	0	0	0	0	15
TATOOSH ISLAND	0	0	0	39	13	13	0	0	0	5	0	13	0	82
VALLENAR POINT	0	193	26	288	152	70	10	157	384	160	39	26	0	1503
OTHER	5	8	257	88	134	57	201	103	26	134	0	0	0	1012
ALL	5	466	3259	3651	2765	1635	1429	2572	1679	2142	494	214	46	20356

Table 22. Halibut Harvest of the Ketchikan Sport Fleet, 1984.

HALIBUT HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM
AREA																							
BETTON ISLAND	0	0	10	15	0	0	0	0	17	0	0	26	0	0	0	0	5	0	0	0	0	0	73
BLACK ISLAND	5	5	0	25	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
BLANK INLET	54	5	10	49	20	5	15	37	0	15	0	64	41	31	15	116	0	0	23	90	0	9	600
BOLD ISLAND	0	0	0	0	0	0	0	0	0	0	13	13	10	0	41	31	0	0	8	0	0	0	116
BOSTWICK POINT	49	0	15	0	0	20	0	0	0	0	0	26	10	0	26	31	0	39	23	21	10	0	269
CAAMANO POINT	0	0	25	10	0	15	5	81	0	8	0	57	103	5	15	26	0	13	0	0	0	0	362
CALIFORNIA HEAD	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	13
HELM BAY	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
CARROLL POINT	5	0	0	0	0	0	0	0	0	0	0	25	0	0	0	23	5	26	23	0	0	0	107
CLOVER PASS	0	10	5	22	88	5	5	66	49	10	46	49	57	36	15	62	23	0	8	26	64	0	647
DALL HEAD	0	0	0	12	0	0	0	0	29	0	0	10	13	0	0	0	0	0	0	0	0	0	65
GRANT ISLAND	0	0	10	0	0	0	0	5	5	0	21	0	0	0	13	26	0	0	0	0	0	0	79
GRINDALL ISLAND	5	0	0	0	0	0	0	71	0	62	15	72	116	0	0	0	206	0	82	0	0	9	639
HUMP ISLAND	0	0	0	0	0	0	0	0	0	0	5	0	0	10	0	0	0	0	0	0	0	0	15
ICE HOUSE COVE	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	5	0	0	0	5	0	31
INDIAN POINT	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
ISLAND POINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21
MARY ISLAND	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
MOUNTAIN POINT	10	0	0	0	10	47	5	25	25	23	72	147	21	31	0	70	31	18	8	26	10	0	576
NIBLACK POINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	51	0	0	0	0	64

Table 22. (cont'd) Halibut Harvest of the Ketchikan Sport Fleet, 1984.

HALIBUT HARVEST OF THE KETCHIKAN SPORT FLEET, 1984

	WEEK																					
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ALL
	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM
AREA																							
NICHOLAS PASSAGE	0	0	0	0	0	0	0	0	0	0	0	0	13	0	5	0	0	26	0	21	0	0	64
PENNOCK ISLAND	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
POINT ALAVA	0	0	54	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	59
SHIP ISLAND	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	61
SKIN ISLAND	0	0	29	44	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	115
S. VALLENAR POINT	0	39	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	55
SPIRE ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	0	0	0	0	51
TATOOSH ISLAND	0	0	10	5	10	0	0	0	0	0	0	0	13	57	0	0	0	0	10	13	0	0	117
THORNE ARM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	26	0	0	0	10	0	41
TONGASS NARROWS	0	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	51	0	0	0	10	0	72
VALLENAR POINT	47	83	0	0	29	5	189	0	37	15	31	36	59	15	67	108	103	77	15	64	0	14	996
WARD COVE	25	0	0	0	5	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	40
OTHER	15	5	0	20	196	37	20	118	83	312	332	278	533	206	124	445	268	93	103	219	41	51	3497
ALL	218	147	167	206	363	152	243	402	312	445	541	803	1027	396	371	983	775	342	304	479	152	84	8913

Table 23. Effort and Harvest of the Petersburg Sport Fleet, 1984.

EFFORT AND HARVEST OF THE PETERSBURG SPORT FLEET, 1984.

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
3 4/29-5/05	299	1129	764	366	0	32	5	0	0	0	0	0	40	53	37	6	12	2	0	0
4 5/06-5/12	459	1729	1209	520	0	69	0	16	0	0	0	0	16	56	23	0	19	0	0	5
5 5/13-5/19	341	1218	878	341	0	76	0	0	0	0	0	0	0	19	5	0	2	0	0	0
6 5/20-5/26	585	1819	1512	307	0	153	12	16	0	0	0	0	14	21	0	0	0	14	0	0
7 5/27-6/02	470	1650	1397	252	0	139	2	25	0	0	0	0	0	9	0	0	0	0	0	0
8 6/03-6/09	576	2455	1882	574	0	204	0	2	0	0	0	0	35	104	52	0	5	16	0	0
9 6/10-6/16	405	1800	1526	274	0	110	7	0	0	2	0	0	0	45	5	0	6	23	0	0
10 6/17-6/23	463	2004	1498	506	2	59	16	9	0	0	0	0	0	87	51	0	0	5	0	0
11 6/24-6/30	356	1442	983	459	0	66	2	0	0	0	0	0	0	46	9	0	0	29	0	0
12 7/01-7/07	239	898	356	541	0	24	0	0	0	0	0	0	0	57	7	0	0	0	0	0
13 7/08-7/14	322	1397	332	1065	0	8	0	0	0	0	0	0	0	113	74	0	0	0	0	0
ALL	4516	17541	12336	5205	2	941	44	69	0	2	0	0	105	610	263	6	43	89	0	5

Table 24. Effort (Rod-Hours) of the Petersburg Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE PETERSBURG SPORT FLEET, 1984.

	WEEK											
	3	4	5	6	7	8	9	10	11	12	13	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA												
N. WRANGELL NARROWS	572	963	449	838	504	273	132	321	307	201	502	5060
S. WRANGELL NARROWS	67	180	140	104	42	35	17	120	6	23	0	734
N. FREDERICK SOUND	170	226	300	525	859	1038	1170	983	917	275	287	6751
S. FREDERICK SOUND	320	360	330	352	245	1110	480	580	212	399	608	4996
ALL	1129	1729	1218	1819	1650	2455	1800	2004	1442	898	1397	17541

Table 25. Chinook Harvest of the Petersburg Sport Fleet, 1984.

CHINOOK HARVEST OF THE PETERSBURG SPORT FLEET, 1984.

	WEEK											
	3	4	5	6	7	8	9	10	11	12	13	ALL
	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK	CHI-NOOK
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA												
N. WRANGELL NARROWS	2	49	12	16	49	6	0	2	14	10	6	165
S. WRANGELL NARROWS	2	7	13	23	19	0	0	0	0	0	0	64
N. FREDERICK SOUND	14	0	5	49	62	84	79	51	52	10	2	408
S. FREDERICK SOUND	14	14	47	65	9	113	31	8	0	3	0	305
ALL	32	69	76	153	139	204	110	61	66	24	8	943

Table 26. Pink Salmon Harvest of the Petersburg Sport Fleet, 1984.

PINK SALMON HARVEST OF THE PETERSBURG SPORT FLEET, 1984

	WEEK 9	ALL
	PINK SUM	PINK SUM
AREA		
S. FREDERICK SOUND	2	2
ALL	2	2

Table 27. Halibut Harvest of the Petersburg Sport Fleet, 1984.

HALIBUT HARVEST OF THE PETERSBURG SPORT FLEET, 1984.

	WEEK											
	3	4	5	6	7	8	9	10	11	12	13	ALL
	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM	HALIBUT SUM
AREA												
N. WRANGELL NARROWS	0	2	9	0	2	14	7	10	13	3	13	74
S. WRANGELL NARROWS	0	9	0	0	0	0	0	0	0	0	0	9
N. FREDERICK SOUND	12	12	9	12	5	37	16	39	17	17	5	180
S. FREDERICK SOUND	42	32	0	9	2	53	22	37	16	36	96	346
ALL	53	56	19	21	9	104	45	87	46	57	113	610

Table 28. Effort and Harvest of the Wrangell Sport Fleet, 1984.

EFFORT AND HARVEST OF THE WRANGELL SPORT FLEET, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
1 4/15-4/21	147	565	497	69	0	3	0	3	0	0	0	0	0	10	8	0	0	51	0	24
2 4/22-4/28	208	810	207	603	0	25	0	3	0	0	0	0	0	15	30	34	3	0	0	10
3 4/29-5/05	193	699	601	98	0	56	8	20	0	0	0	0	0	7	3	0	0	0	0	0
4 5/06-5/12	566	2302	1849	453	8	39	12	7	0	0	0	0	0	29	0	0	3	34	0	24
5 5/13-5/19	1104	5051	5013	38	0	183	37	59	0	0	0	0	8	44	0	0	0	14	0	0
6 5/20-5/26	1309	6798	6656	142	0	377	52	20	0	0	0	0	0	14	17	3	3	0	0	10
7 5/27-6/02	734	4214	4128	86	0	247	24	78	0	0	0	0	3	37	0	0	0	0	0	0
8 6/03-6/09	430	1827	1354	473	0	107	8	10	0	0	0	0	0	90	0	17	3	0	0	0
9 6/10-6/16	237	1193	892	301	0	34	0	22	0	0	0	0	0	112	0	0	0	0	0	0
10 6/17-6/23	325	1466	755	711	0	15	0	17	0	0	0	0	0	64	42	0	0	0	0	0
11 6/24-6/30	264	1299	244	1055	0	22	0	0	0	0	0	0	0	86	3	0	0	0	0	0
ALL	5516	26224	22194	4029	8	1108	142	240	0	0	0	0	12	507	105	54	14	98	0	68

Table 29. Effort (Rod-Hours) of the Wrangell Sport Fleet, 1984.

EFFORT (ROD-HOURS) OF THE WRANGELL SPORT FLEET, 1984.

	WEEK											
	1	2	3	4	5	6	7	8	9	10	11	ALL
	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS	ROD-HOURS
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
AREA												
EASTERN PASSAGE	25	22	380	495	1532	1984	2683	766	587	47	0	8521
NW. WRANGELL ISLAND	99	369	186	646	1358	2588	805	198	22	52	294	6616
ELEPHANT'S NOSE	51	353	134	1083	1605	1999	535	738	408	900	798	8605
ZIMOVIA STRAIT	150	41	0	78	137	56	100	125	108	466	61	1322
STIKINE STRAIT	10	0	0	0	81	110	46	0	0	0	0	247
SUMNER STRAIT	0	0	0	0	332	61	46	0	68	0	145	652
GRAY'S PASS	230	25	0	0	7	0	0	0	0	0	0	262
ALL	565	810	699	2302	5051	6798	4214	1827	1193	1466	1299	26224

Table 30. Mean Length of Coho Harvested in Southeast Alaska Recreational Fisheries.

Area	N	Fork Length (mm)			
		Mean	S.D.	Minimum	Maximum
Juneau	27	680	53	580	780
Ketchikan	3	560	118	460	690
Petersburg	1	710	...	710	710

Table 31. Chinook Harvest of the Wrangell Sport Fleet, 1984.

CHINOOK HARVEST OF THE WRANGELL SPORT FLEET, 1984

	WEEK											
	1	2	3	4	5	6	7	8	9	10	11	ALL
	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM	CHI-NOOK SUM
AREA												
EASTERN PASSAGE	0	0	36	3	44	98	172	56	22	0	0	431
NW. WRANGELL ISLAND	0	25	12	34	57	189	41	7	0	0	3	369
ELEPHANT'S NOSE	0	0	8	10	71	71	14	44	8	12	19	257
ZIMOVIA STRAIT	0	0	0	0	10	0	10	0	3	3	0	27
STIKINE STRAIT	0	0	0	0	0	8	3	0	0	0	0	12
SUMNER STRAIT	0	0	0	0	0	10	7	0	0	0	0	17
GRAY'S PASS	3	0	0	0	0	0	0	0	0	0	0	3
ALL	3	25	56	47	183	377	247	107	34	15	22	1116

Table 32. Halibut Harvest of the Wrangell Sport Fleet, 1984.

HALIBUT HARVEST OF THE WRANGELL SPORT FLEET, 1984.

	WEEK											
	1	2	3	4	5	6	7	8	9	10	11	ALL
	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HAL-IBUT SUM	HALI-BUT SUM
AREA												
EASTERN PASSAGE	0	0	0	0	3	0	7	20	34	0	0	64
NW. WRANGELL ISLAND	0	0	7	0	12	0	7	0	0	0	0	25
ELEPHANT'S NOSE	0	15	0	29	29	14	17	49	52	61	41	306
ZIMOVIA STRAIT	0	0	0	0	0	0	0	20	0	3	3	27
STIKINE STRAIT	0	0	0	0	0	0	7	0	0	0	0	7
SUMNER STRAIT	0	0	0	0	0	0	0	0	25	0	42	68
GRAY'S PASS	10	0	0	0	0	0	0	0	0	0	0	10
ALL	10	15	7	29	44	14	37	90	112	64	86	507

Ketchikan (Tables 33-36). The recreational harvests of salmon at hatchery terminal-areas were the focus of interest in the Juneau, Petersburg and Ketchikan roadside surveys.

Weekly catch rates for the Blind Slough, Haines, Juneau, Ketchikan, Petersburg and Wrangell marine fisheries are displayed in Tables 37-42, and the seasonal averages are compared in Table 43. (Seasonal averages are not directly comparable because the survey periods varied between fisheries. Also, comparisons of weekly rates are more meaningful for those species that were not present during the entire survey period, since seasonal rates are biased by fishing effort that occurred during weeks when the species were unavailable.)

Catch rates in each area within the Juneau, Ketchikan, Petersburg and Wrangell fishing grounds are displayed in Tables 44-47.

Length-Frequency Distribution

The mean lengths and size ranges of the harvested chinook and coho salmon, and Pacific halibut are displayed in Tables 48-50. The size-frequency distributions of these species are plotted in Figures 5-7 for each fishery where sufficient data were gathered.

Maturity

There were roughly three size-classes of egg diameters collected in the southeast Alaskan sport fisheries. The three size-classes may be seen in the frequency-distribution plot (Fig. 8, April-June) and presumably correspond to three maturity stages. (Of course, there is some overlap of egg diameters between the three stages.) The chinook salmon that possessed egg diameters less than 2.5 mm were immature. Those with egg diameters in the 2.5-mm to 4.5-mm range were ripening, and it would have been several months before they would have been ready to spawn; therefore, these chinook would have spawned in the fall (fall-spawners). Those that had egg diameters greater than 4.5 mm were ready to spawn and would have spawned in the spring (spring spawners). The diameter of eggs collected later in the season (Fig. 8, July-September) was almost always less than 2.5 mm. Except for a few stragglers harvested in early July, most mature fish were unavailable to the southeast Alaskan sport fisheries. The spring spawners were preoccupied in their spawning streams, while the fall spawners had likely moved south, en route to their spawning streams down the coast.

Neither the testes weight nor the ratio of testes weight to body size was useful for separating male chinook salmon into separate maturity stages. For this reason, the maturity composition of the population was inferred solely from the maturity composition of the females in the samples. Maturity state was assigned with the following assumptions:

1. Eggs less than 2.5 mm in diameter came from an immature fish.

Table 33. Harvest of the Haines Roadside Recreational Fishery, 1984. (Note: Surveys did not always start on the first day of the month or end on the last day of the month. Refer to Ericksen (1985) for details of the survey.)

EXPANDED HARVEST BY AREA MONTH

AREA	MO	DV-K	DV-R	SS-K	SS-R	PS-K	PS-R	CT-K	CT-R	RS-K	RS-R	RB-K	RB-R	CS-K	CS-R	H-K	H-R	BT-K	CD-K	FF-K	RF-K	DT-K
CHILKAT PARK	JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILKAT PARK		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LETNIKOF COVE	JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	0	0
	AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LETNIKOF COVE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	0	0
MUD BAY ROAD	JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MUD BAY ROAD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PORTAGE COVE	JUL	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	114
	AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PORTAGE COVE		0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	114
TANANI BAY	JUL	98	23	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
	AUG	0	96	0	0	192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TANANI BAY		98	119	0	0	260	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
LUTAK INLET	JUL	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AUG	6	6	0	0	96	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SEP	0	0	0	0	166	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUTAK INLET		6	6	0	0	283	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILKOOT BELOW WEIR W	JUL	416	270	0	0	67	11	0	0	359	79	0	0	0	0	0	0	0	0	0	0	0
	AUG	190	12	0	0	1506	514	0	0	184	37	0	0	12	0	0	0	0	0	0	0	0
	SEP	218	25	35	0	958	1023	0	0	5	0	0	0	71	25	0	0	0	0	0	0	0
	OCT	15	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILKOOT BELOW WEIR W		839	307	64	0	2531	1548	0	0	548	116	0	0	83	25	0	0	0	0	0	0	0
CHILKOOT BELOW WEIR E	JUL	378	338	0	0	68	0	0	0	297	54	0	0	0	0	0	0	0	0	0	0	0
	AUG	274	41	0	0	547	177	0	0	117	20	0	0	10	0	0	0	0	0	0	0	0
	SEP	29	0	0	0	211	345	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0
	OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILKOOT BELOW WEIR E		681	379	0	0	826	522	0	0	414	74	0	0	20	10	0	0	0	0	0	0	0
CHILKOOT ABOVE WEIR	JUL	350	117	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0
	AUG	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SEP	19	87	146	10	0	107	0	0	0	0	0	0	10	19	0	0	0	0	0	0	0
	OCT	10	15	255	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0
CHILKOOT ABOVE WEIR		425	219	401	10	0	107	0	0	0	17	0	0	10	29	0	0	0	0	0	0	0
CHILKOOT LANDING	JUL	799	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AUG	951	98	0	0	83	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SEP	420	325	21	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
	OCT	311	8	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHILKOOT LANDING		2481	538	149	0	83	0	8	0	0	10	0	0	0	0	0	0	0	0	0	0	0
CHILKAT RIVER-AIRPORT	SEP	6	0	327	29	0	0	0	0	0	0	0	0	155	275	0	0	0	0	0	0	0
	OCT	0	0	7	0	0	0	0	0	0	0	0	0	442	501	0	0	0	0	0	0	0
CHILKAT RIVER-AIRPORT		6	0	334	29	0	0	0	0	0	0	0	0	597	776	0	0	0	0	0	0	0
CHILKAT RIVER 6-10MI	SEP	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OCT	64	0	5	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0
CHILKAT RIVER 6-10MI		64	0	65	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0
CHILKAT RIVER 11-17MI	SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0
CHILKAT RIVER 11-17MI		0	0	0	0	0	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0
CHILKAT RIVER 18-21MI	SEP	4	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OCT	40	0	29	0	0	0	0	0	0	0	0	0	51	189	0	0	0	0	0	0	0
CHILKAT RIVER 18-21MI		44	0	38	0	0	0	0	0	0	0	0	0	51	189	0	0	0	0	0	0	0
		4644	1568	1051	39	3983	2218	8	23	962	217	0	0	761	1150	0	0	0	0	152	0	114

Table 34. Harvest of the Juneau Roadside Recreational Fishery at the Auke Creek, Kowee Creek, Salmon Creek, and Sheep Creek Hatchery Terminal Areas, 1984.

AREA		DV-K	DV-R	SS-K	SS-R	PS-K	PS-R	CT-K	CT-R	RS-K	RS-R	RB-K	RB-R	CS-K	CS-R	H-K	H-R	BT-K	CD-K	FF-K	RF-K	OT-K
AUKE	7/27- 9/24	0	0	0	0	188	1127	0	0	0	0	0	0	150	188	0	0	0	0	0	0	0
KOWEE	7/27- 9/24	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SALMON	7/27-10/28	154	154	1698	401	803	617	0	0	0	0	0	0	185	556	0	0	0	0	0	0	0
SHEEP	7/27- 8/25	0	0	0	0	2945	2712	0	0	0	0	0	0	0	29	0	0	0	0	29	0	0
		154	177	1698	401	3936	4456	0	0	0	0	0	0	335	773	0	0	0	0	29	0	0

Table 35. Petersburg Roadside Creel Survey (8/13/84-9/22/84).

PETERSBURG ROADSIDE CREEL SURVEY (8/13/84-9/22/84)
EXPANDED HARVEST BY AREA

AREA	DV-K	DV-R	SS-K	SS-R	PS-K	PS-R	CT-K	CT-R	KS-K	KS-R	RB-K	RB-R	CS-K	CS-R	H-K	H-R	BT-K	CD-K	FF-K	RF-K	OT-K
BLIND SLOUGH - BOAT	0	0	587	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLIND SLOUGH - BANK	148	16	1415	0	0	0	132	33	0	0	0	0	16	0	0	0	0	0	0	0	0
OHMER CREEK - BOAT	91	0	45	0	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OHMER CREEK - BANK	0	0	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	239	16	2281	0	76	0	132	33	0	0	0	0	16	0	0	0	0	0	0	0	0

Table 36. Effort and Harvest of the Ketchikan Roadside Recreational Fishery at Mt. Point Rocks, 1984.

EFFORT AND HARVEST OF THE MT. POINT ROCKS SPORT FISHERY, 1984

	ANGL-ER-DAYS	ROD-HRS	SALMON HRS	BOTTOM HRS	CHIN-OOK <28IN KEPT	CHIN-OOK >28IN KEPT	CHIN-OOK <28IN RELE	CHIN-OOK >28IN RELE	COHO	PINK	CHUM	SOC-KEYE	DOL-LY	HALI-BUT KEPT	HALI-BUT RELE	FL-AT-FI-SH	COD	ROC-KFI-SH	GRE-ENL-ING	OT-HER
	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM	SUM
WEEK																				
13 7/08-7/14	149	617	617	.	0	0	0	0	9	260	0	0	0	0	0	0	0	0	0	0
14 7/15-7/21	227	485	485	.	0	0	30	0	5	96	0	0	0	0	0	0	0	0	0	0
15 7/22-7/28	204	492	492	.	0	0	0	0	0	93	0	0	0	0	0	0	0	5	0	0
16 7/29-8/04	215	501	501	.	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0
17 8/05-8/11	299	814	814	.	0	0	0	0	10	477	0	0	0	0	0	0	0	0	0	0
18 8/12-8/18	350	578	578	.	0	0	7	0	0	232	0	0	0	0	0	0	0	0	0	0
19 8/19-8/25	298	334	334	.	0	0	0	0	10	78	0	0	0	0	0	0	0	0	0	0
20 8/26-9/01	182	248	248	.	0	0	0	0	5	65	0	0	0	0	0	0	0	0	0	0
21 9/02-9/08	47	44	44	.	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
22 9/09-9/15	22	30	30	.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23 9/16-9/22	4	2	2	.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL	1997	4144	4144	.	0	0	37	0	39	1522	0	0	0	0	0	0	0	5	0	0

Table 37. Blind Slough 1984 Weekly Catch Rates (Hours per Fish).

BLIND SLOUGH 1984 WEEKLY CATCH RATES (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
7	16	16	100.0	.	.	.	.	.	.	.	.	.	.	.	.
8	19	19	100.0	.	.	19	.	.	19	.	.	.	19	.	.
9	121	114	94.2	7	5.8	30	.	.	28	.	.	.	28	.	.
10	172	169	98.5	3	1.5	12	.	.	12	.	.	.	12	169	.
11	96	96	100.0	.	.	24	.	.	24	.	.	.	24	32	.
12	62	62	100.0	.	.	21	.	.	21	.	.	.	21	.	.
13	63	63	100.0	.	.	31	.	.	31	.	.	.	31	.	.

Table 38. Haines 1984 Weekly Catch Rates (Hours per Fish).

HAINES 1984 WEEKLY CATCH RATES (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
4	115	108	93.5	8	6.5	115	.	.	108	.	.	.	108	.	.
5	112	102	91.1	10	8.9	22	.	.	20	.	.	.	20	34	.
6	67	67	100.0	.	.	34	.	.	34	.	.	.	34	.	.
7	81	81	100.0	.	.	12	.	.	12	.	.	.	12	9	.
8	319	319	100.0	.	.	9	.	.	9	.	.	.	9	46	.
9	645	623	96.6	22	3.4	17	.	645	16	.	.	.	16	104	22
10	205	172	84.1	33	15.9	20	.	41	17	.	.	.	17	.	16
11	31	26	85.8	4	14.2	.	.	.	.	.	.	.	.	.	.

Table 39. Juneau 1984 Weekly Catch Rates (Hours per Fish).

JUNEAU 1984 WEEKLY CATCH RATES (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
3	906	698	77.1	208	22.9	48	.	101	37	.	.	.	37	233	23
4	1306	984	75.3	322	24.7	54	.	30	41	.	.	.	41	984	7
5	1193	830	69.6	363	30.4	60	.	27	41	.	.	.	41	830	8
6	998	750	75.2	248	24.8	23	.	21	17	.	.	.	17	94	7
7	1118	883	79.0	235	21.0	70	.	26	55	.	.	.	55	294	6
8	2040	1391	68.2	649	31.8	45	.	18	32	.	.	.	32	278	6
9	1653	958	57.9	695	42.1	49	1653	12	31	958	.	958	28	958	6
10	1634	1049	64.2	585	35.8	41	327	16	28	262	1049	524	23	350	6
11	2044	1132	55.4	912	44.6	39	170	17	23	94	126	1132	16	283	8
12	2011	1366	67.9	645	32.1	22	84	18	16	65	195	273	11	683	7
13	1321	845	64.0	476	36.0	33	31	16	22	20	29	423	8	845	7
14	2247	1428	63.6	819	36.4	32	43	13	21	28	79	1428	10	.	6
15	2842	1654	58.2	1188	41.8	46	60	12	29	38	50	1654	12	.	5
16	4503	4399	97.7	103	2.3	80	39	69	81	40	81	880	20	4399	7
17	3749	3491	93.1	258	6.9	74	46	28	68	44	125	582	21	1745	4
18	2002	1502	75.0	500	25.0	80	14	16	60	11	39	300	7	.	5
19	1196	970	81.1	227	18.9	100	9	29	88	7	69	194	6	.	6
20	1328	1198	90.2	130	9.8	74	6	32	67	6	100	.	5	.	4
21	1744	1342	76.9	402	23.1	83	9	25	67	7	224	268	6	.	7
22	1157	896	77.5	261	22.5	105	13	18	100	11	299	224	9	.	4
23	613	314	51.2	299	48.8	56	34	22	35	17	.	314	11	.	12
24	670	230	34.2	441	65.8	34	168	12	14	57	.	.	11	.	9

Table 40. Ketchikan 1984 Weekly Catch Rates (Hours per Fish).

KETCHIKAN 1984 WEEKLY CATCH RATES (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
3	803	186	23.2	617	76.8	803	0	24	0	0	0	0	0	0	19
4	858	330	38.4	528	61.6	107	0	29	55	0	0	0	55	0	18
5	715	368	51.4	347	48.6	72	0	29	46	0	0	0	46	0	14
6	932	743	79.7	189	20.3	47	0	28	37	0	0	0	37	0	7
7	2751	2427	88.2	324	11.8	44	0	79	40	0	0	2427	40	0	14
8	2436	2211	90.7	226	9.3	40	0	97	37	0	0	0	37	0	19
9	1913	1707	89.2	206	10.8	42	1913	71	37	1707	0	1707	36	0	11
10	1179	691	58.6	488	41.4	236	0	23	138	0	0	0	138	0	11
11	587	324	55.2	263	44.8	587	98	17	324	54	0	0	46	0	10
12	1135	553	48.7	582	51.3	189	37	23	111	18	10	553	6	0	12
13	1485	1038	69.9	448	30.1	165	42	20	130	31	3	259	2	0	6
14	1815	1198	66.0	617	34.0	202	44	19	150	29	3	599	2	80	7
15	2085	1274	61.1	806	38.7	695	70	16	425	51	4	425	3	0	6
16	1139	738	64.8	400	35.2	569	44	21	738	31	4	738	4	0	9
17	1246	727	58.4	519	41.6	311	113	18	242	73	5	0	4	0	8
18	1714	1135	66.2	579	33.8	343	15	13	227	10	3	378	2	0	5
19	1578	1140	72.2	438	27.8	1578	12	20	1140	8	6	163	3	0	6
20	1776	1498	84.4	278	15.6	444	6	47	499	5	7	107	3	0	8
21	1412	1256	89.0	156	11.0	706	3	40	1256	3	21	84	2	0	4
22	1090	968	88.9	121	11.1	1090	4	26	968	4	44	968	3	0	4
23	755	546	72.3	209	27.7	0	9	34	0	6	91	109	6	0	10
24	251	139	55.4	106	42.4	0	25	14	0	14	0	0	14	0	8

Table 41. Petersburg 1984 Weekly Catch Rates (Hours per Fish).

PETERSBURG 1984 WEEKLY CATCH RATE (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
3	335	221	66.0	114	34.0	24	.	17	16	.	.	.	16	111	6
4	537	361	67.2	176	32.8	30	.	30	23	.	.	.	23	52	14
5	400	281	70.2	119	29.8	19	.	50	13	.	.	.	13	.	15
6	323	244	75.6	79	24.4	11	.	65	9	.	.	.	9	41	16
7	491	406	82.7	85	17.3	15	.	123	13	.	.	.	13	.	43
8	601	469	78.1	131	21.9	13	.	29	10	.	.	.	10	78	7
9	524	443	84.5	81	15.5	21	.	44	19	.	443	.	18	.	10
10	538	414	77.0	124	23.0	34	.	22	26	.	.	.	26	.	6
11	353	242	68.5	111	31.5	24	.	32	17	.	.	.	17	.	10
12	222	93	42.1	129	57.9	32	.	16	16	.	.	.	16	.	9
13	352	85	24.1	267	75.9	176	.	11	42	.	.	.	42	.	10

Table 42. Wrangell 1984 Weekly Catch Rates (Hours per Fish).

WRANGELL 1984 WEEKLY CATCH RATES (HOURS PER FISH)

WEEK	ROD HOURS	SALMON HOURS	% SALMON HOURS	BOTTOM HOURS	% BOTTOM HOURS	CHI-NOOK (NON)	COHO (NON)	HAL-IBUT (NON)	CHI-NOOK (TAR)	COHO (TAR)	PINK (TAR)	CHUM (TAR)	SALMON (TAR)	DOLLY (TAR)	HAL-IBUT (TAR)
1	124	111	89.6	13	10.4	124	.	41	111	.	.	.	111	.	.
2	159	39	24.4	120	75.6	53	.	53	13	.	.	.	13	.	40
3	169	140	82.9	29	17.1	19	.	85	16	.	.	.	16	.	14
4	516	459	88.8	58	11.2	47	.	129	42	.	.	.	42	.	19
5	1004	993	98.9	11	1.1	26	.	143	25	.	.	.	25	993	11
6	1508	1466	97.2	42	2.8	20	.	377	20	.	.	.	20	.	.
7	1147	1122	97.8	26	2.2	20	.	104	19	.	.	.	19	1122	4
8	376	286	76.2	90	23.8	16	.	29	12	.	.	.	12	.	13
9	215	151	70.2	64	29.8	31	.	14	22	.	.	.	22	.	5
10	246	137	55.7	109	44.3	82	.	25	46	.	.	.	46	.	11
11	251	50	19.7	202	80.3	50	.	12	10	.	.	.	10	.	10

Table 43. Sport Fish Catch Rates in Southeast Alaska, 1984.

		Unexpanded Effort					Fish harvested per hour (Non-targetted)			Fish Harvested Per Hour (Non-Targetted Effort)						
Creel Survey	Dates	Rod Hours	Percent Salmon Hours	Salmon Hours	Percent Bottom Fish Hours	Bottom Fish Hours	Chinook	Coho	Halibut	Chinook	Coho	Pink	Chum	All Salmon	Dolly Varden	Halibut
Blind Slough	06/03-07/14	548	98	538	2	10	20	...	...	19	...	...	...	19	135	...
Haines	05/06-06/30	1,575	95	1,498	5	76	16	...	262	15	...	...	...	15	60	26
Juneau	04/29-09/29	28,308	74	28,308	26	9,965	49	33	20	38	25	112	643	13	809	6
Ketchikan	04/29-09/20	29,655	72	21,203	28	8,447	114	19	26	87	13	9	366	5	1,414	8
Petersburg	04/29-07/14	4,676	70	3,260	30	1,416	21	...	28	15	...	3,260	...	15	155	10
Wrangell	04/15-06/30	5,715	87	4,952	13	763	24	...	61	21	...	...	...	21	2,476	12

Table 44. Juneau 1984 Targeted Catch Rates (Hours per Fish) by Area.

JUNEAU 1984 TARGETED CATCH RATES (HOURS PER FISH) BY AREA

AREA NO.	AREA	SALMON HRS.	BOTTOM HRS.	CHINOOK	COHO	PINK	HALIBUT
.		.	.	.	.	.	.
1	BERNERS BAY	19	2	.	6	.	.
3	BRIDGET COVE	20	2	20	.	.	.
4	NORTH ISLAND	126	41	25	63	.	6
6	BENJAMIN ISLAND	147	172	37	24	.	13
7	EAGLE RIVER	64	168	21	64	.	8
9	SHRINE ISLAND	266	104	53	67	266	8
10	AARON ISLAND	532	767	48	76	.	5
11	BREADLINE	3600	76	52	75	212	25
12	STEVEN'S POINT	1199	313	52	15	60	7
13	LENA POINT	1114	225	51	12	93	6
14	INDIAN POINT	21	27	.	.	.	.
15	AUKE BAY	60	66	60	.	30	22
16	COGHLAN ISLAND	365	212	91	30	365	5
17	PORTLAND ISLAND	281	212	94	47	.	7
18	SPUHN ISLAND	52	52	13	52	.	9
19	FRITZ COVE	11	22	.	.	.	6
25	PT. BISHOP	20	.	.	.	.	.
27	TAKU HARBOR	6	.	.	.	.	.
29	GRAND ISLAND	6	.	.	.	.	.
32	FALSE PT. ARDEN	.	2	.	.	.	.
35	OLIVER'S INLET	12	.	.	.	.	.
36	ICY-HILDA COAST	2	42	.	.	.	21
37	PT. HILDA	153	30	51	10	38	30
39	YOUNG'S BAY	204	119	29	25	.	9
40	WHITEMARKER	121	.	40	15	.	.
41	MIDDLE POINT	553	175	18	26	.	5
42	HORSE AND COLT ISLANDS	81	85	.	41	41	7
43	OUTER POINT	1760	388	41	25	220	6
44	PILING POINT	54	21	.	54	.	3
45	S. SHELTER ISLAND	7278	2474	28	29	132	5
46	BARLOW COVE	61	106	61	.	.	8
47	FAVORITE REEF	418	302	52	46	139	6
48	BARLOW POINT	568	347	16	57	41	10
49	PT. RETREAT	998	817	37	23	42	7
50	HAND TROLLER COVE	1048	84	105	9	58	8
51	E. SHELTER ISLAND	328	93	36	30	328	5
52	NORTH PASS	4079	779	40	22	91	6
53	N. SHELTER ISLAND	1341	346	43	28	112	7
55	LINCOLN ISLAND	429	575	54	19	143	11
56	LITTLE ISLAND	.	47	.	.	.	8
57	ST. JAMES BAY	87	76	43	43	.	3
60	PT. COUVERDEN	126	90	126	8	.	3
61	SWANSON HARBOR	.	3	.	.	.	.
62	FUNTER BAY	65	71	65	5	65	4
63	HAWK INLET	37	10	19	.	.	5
64	VANDERBILT REEF	2	87	.	.	.	7
65	POUNDSTONE REEF	15	111	.	.	.	7
66	AMALGA HARBOR	47	27	.	24	47	3
67	PT. LOUISA	105	30	17	35	52	8
68	W. SHELTER ISLAND	360	34	360	14	360	9
99	OTHER	75	138	37	37	12	5

Table 45. Ketchikan 1984 Targeted Catch Rates (Hours per Fish) by Area.

KETCHIKAN 1984 TARGETED CATCH RATES (HOURS PER FISH) BY AREA

AREA NO.	AREA	SALMON HRS.	BOTTOM HRS.	CHINOOK	COHO	PINK	HALIBUT
1	ANNETTE ISLAND	41	23	.	41	41	.
2	BETTON ISLAND	532	265	177	22	7	26
3	BLACK ISLAND	147	108	49	147	147	14
4	BLANK INLET	773	556	97	155	64	9
5	BOCA DE QUADRA	.	4	.	.	.	.
6	BOLD ISLAND	56	108	.	.	19	6
7	BOSTWICK POINT	92	215	31	.	10	6
8	BUSHY POINT	6	.	.	.	.	.
9	CAAMANO POINT	934	268	67	10	10	9
10	CALIFORNIA HEAD	132	44	66	44	132	44
11	HELM BAY	26	7	.	26	4	.
12	CARROLL POINT	163	367	82	163	33	20
13	CHASINA POINT	17	.	17	.	.	.
14	CHINA TOWN	9	.	.	.	.	.
15	CLARENCE STRAIT	6	.	.	.	.	.
16	CLOVER PASS	10311	1059	156	10	7	17
17	DALL HEAD	152	57	152	5	9	19
18	GRANT ISLAND	481	203	34	96	120	18
19	GRINDALL ISLAND	165	260	28	8	5	4
21	HERRING BAY	57	5	29	57	10	.
22	HUMP ISLAND	4	24	.	.	.	8
23	ICE HOUSE COVE	169	92	169	56	15	15
24	INDIAN POINT	213	17	21	.	.	.
25	ISLAND POINT	27	10	.	13	2	3
26	KAH SHAKES	9	.	.	.	2	.
27	LUCKY COVE	114	.	.	.	8	.
29	MARY ISLAND	7	16	.	.	.	16
30	MOUNTAIN POINT	2123	597	82	92	9	8
31	NIBLACK POINT	24	28	.	1	.	6
32	NICHOLAS PASSAGE	.	46	.	.	.	4
33	PENNOCK ISLAND	51	86	.	.	9	86
34	POINT ALAVA	86	16	14	.	.	3
36	REVILLAGEGEDO IS.	9	.	.	9	9	.
37	SHIP ISLAND	86	33	43	21	6	7
38	SKIN ISLAND	43	91	.	14	5	5
40	S. VALLENAR POINT	15	45	.	.	5	4
41	SPIRE ISLAND	9	5	.	.	.	.
42	TATOOSH ISLAND	467	163	156	20	52	16
43	THORNE ARM	50	53	.	.	.	11
44	TONGASS NARROWS	209	106	30	.	.	15
46	VALLENAR POINT	1855	778	64	11	9	6
47	WARD COVE	127	80	64	127	.	27
99	OTHER	1405	2614	43	21	16	6

Table 46. Petersburg 1984 Targeted Catch Rates (Hours per Fish) by Area.

PETERSBURG 1984 TARGETED CATCH RATES (HOURS PER FISH) BY AREA

AREA NO.	AREA	SALMON HRS.	BOTTOM HRS.	CHINOOK	COHO	PINK	HALIBUT
1	N. WRANGELL NARROWS	797	394	30	.	.	18
2	S. WRANGELL NARROWS	158	61	16	.	.	.
3	N. FREDERICK SOUND	1555	314	15	.	.	9
4	S. FREDERICK SOUND	749	646	10	.	749	7

Table 47. Wrangell 1984 Targeted Catch Rates (Hours per Fish) by Area.

WRANGELL 1984 TARGETED CATCH RATES (HOURS PER FISH) BY AREA

AREA NO.	AREA	SALMON HRS.	BOTTOM HRS.	CHINOOK	COHO	PINK	HALIBUT
1	EASTERN PASSAGE	1984	19	21	.	.	5
2	NW. WRANGELL ISLAND	1313	120	17	.	.	30
3	ELEPHANT'S NOSE	1239	508	26	.	.	12
4	ZIMOVIA STRAIT	218	73	27	.	.	18
5	STIKINE STRAIT	51	3	25	.	.	.
6	SUMNER STRAIT	78	38	16	.	.	3
7	GRAY'S PASS	70	3	70	.	.	.

Table 48. Mean lengths of Chinook Harvested in Southeast Alaska Recreational Fisheries, 1984.

Location	N	Fork Length (mm)			
		Mean	S.D.	Minimum	Maximum
Bell Island	124	793	106	640	1070
Juneau	371	798	106	470	1170
Ketchikan	307	842	150	270	1240
Petersburg	110	862	124	400	1134
Thomas Basin	34	953	90	740	1180
Wrangell	125	898	126	667	1400

Table 49. Lengths of Coho Harvested in the Juneau and Ketchikan Recreational Fisheries, 1984.

Location	N	Fork Length (mm)			
		Mean	S.D.	Minimum	Maximum
Juneau	24	681	97	285	800
Ketchikan	43	772	115	680	860

Table 50. Lengths and Weights of Halibut Harvested in Southeast Alaska Recreational Fisheries, 1984.

	N	Mean Size	Standard Deviation	Minimum	Maximum
Juneau					
Length	503	774 mm	251 mm	122 mm	1,830 mm
Weight	503	17.7 lb	25.2 lb	0.0 lb	196.9 lb
Ketchikan					
Length	688	811 mm	200 mm	110 mm	2,005 mm
Weight	688	17.8 lb	21.8 lb	0.0 lb	264.8 lb
Petersburg					
Length	39	882 mm	311 mm	450 mm	2,215 mm
Weight	39	30.0 lb	62.1 lb	2.1 lb	365.6 lb
Wrangell					
Length	44	980 mm	304 mm	550 mm	1,950 mm
Weight	44	36.0 lb	42.4 lb	4.0 lb	241.9 lb
All Southeast					
Length	1,275	806 mm	236 mm	110 mm	2,330 mm
Weight	1,275	19.1 lb	28.8 lb	0.0 lb	430.7 lb

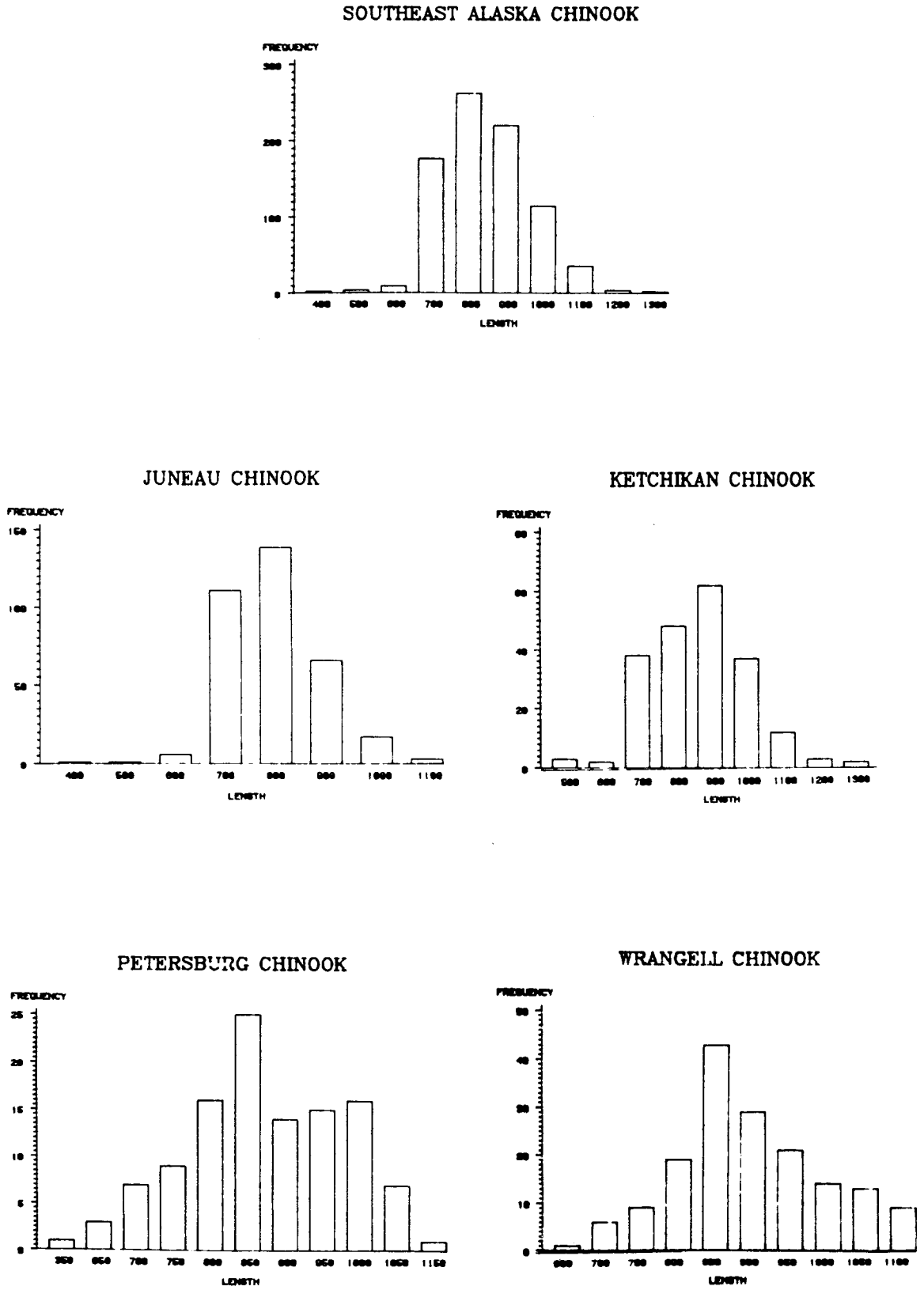
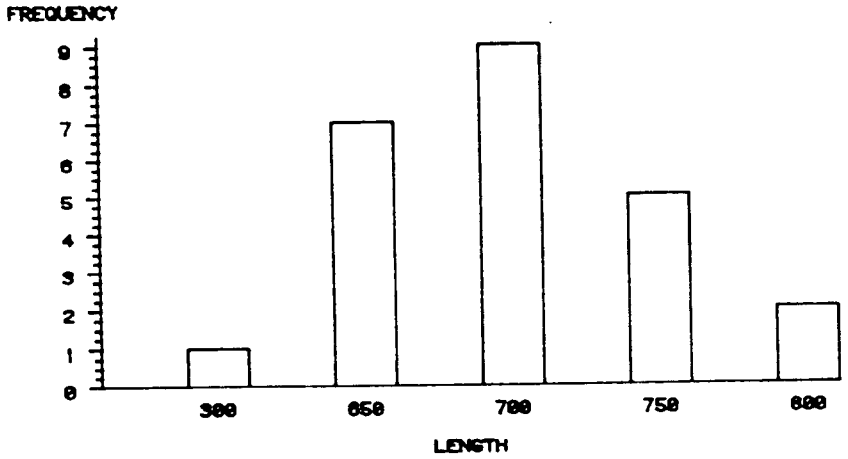


Figure 5. Frequency Size Distribution of Chinook Harvested in Southeast Alaskan Recreational Fisheries, 1984.

JUNEAU COHO



KETCHIKAN COHO

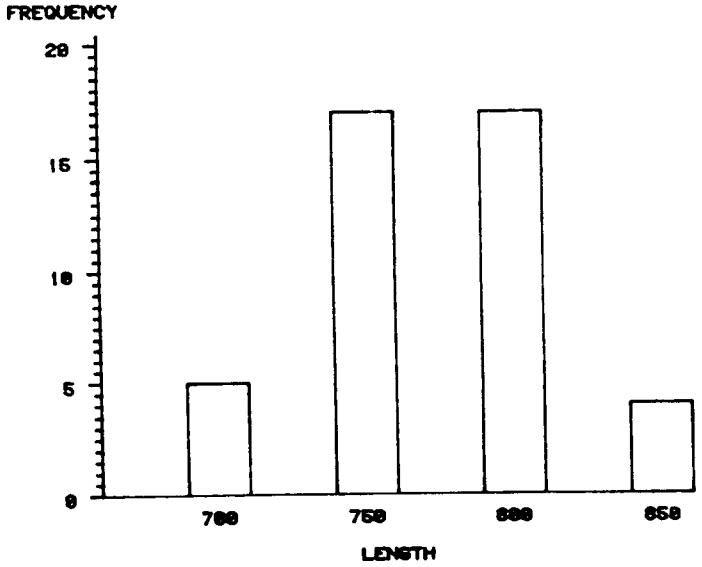


Figure 6. Frequency Size Distribution of Coho Salmon Harvested in Southeast Alaska Recreational Fisheries, 1984.

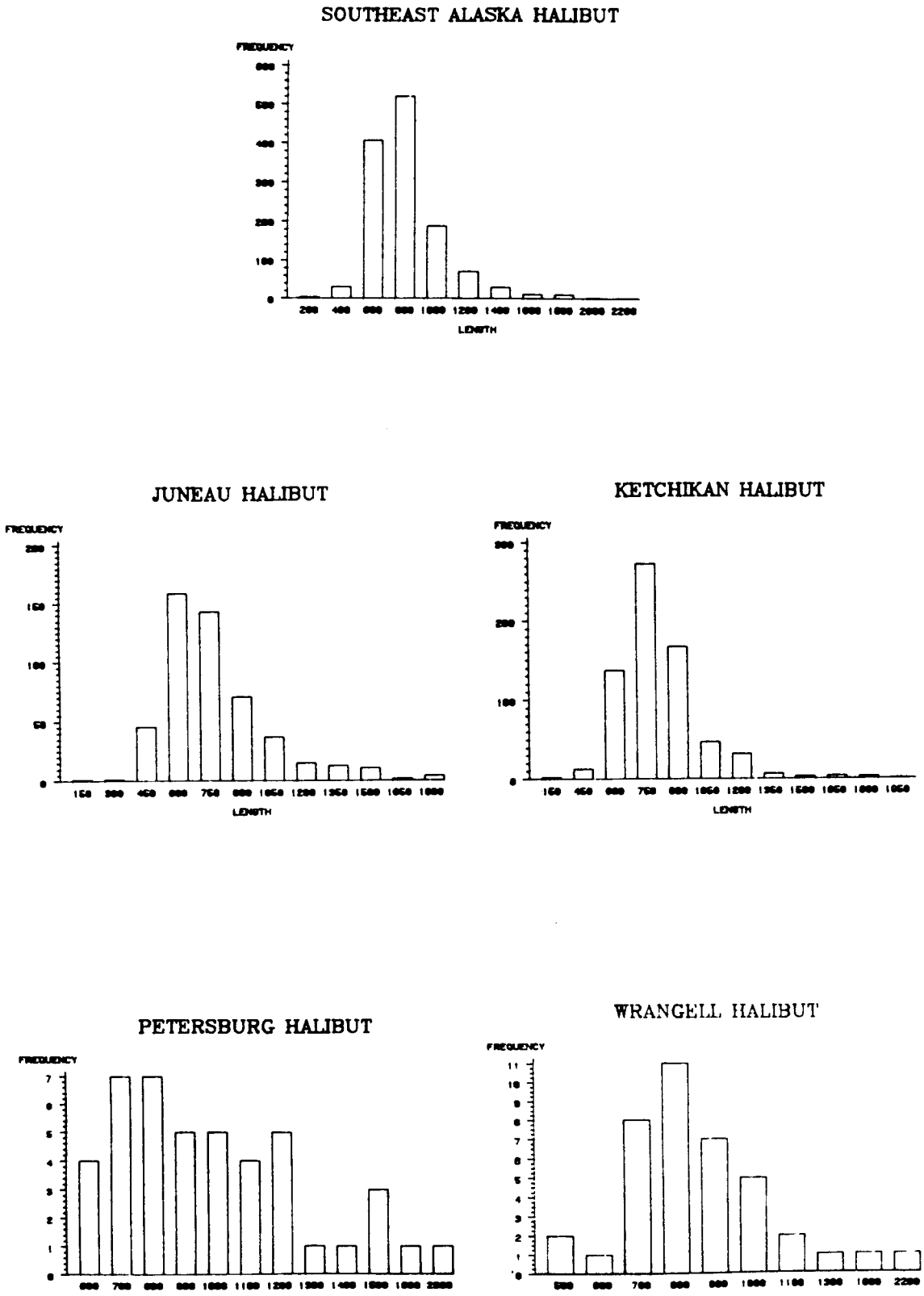
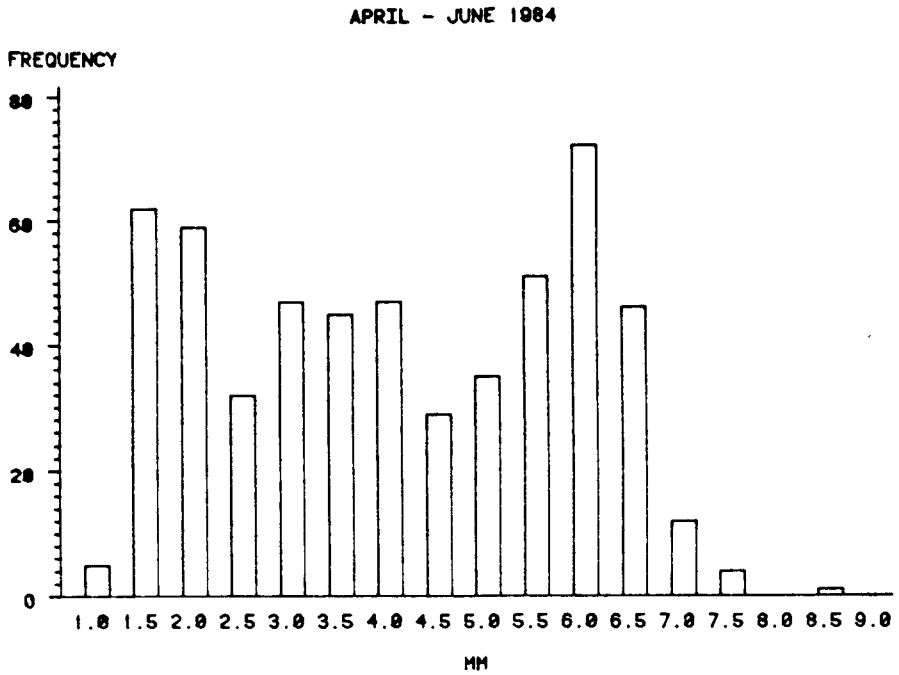


Figure 7. Frequency Size Distribution of Halibut Harvested in Southeast Alaskan Recreational Fisheries, 1984.



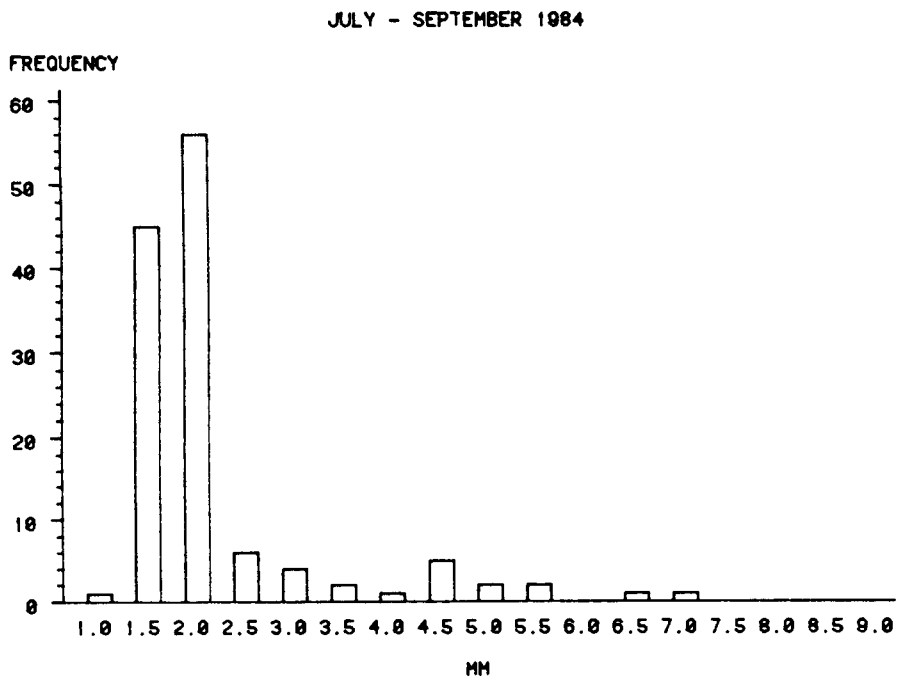


Figure 8. Frequency Distributions of Mean Egg Diameters from Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries during April-June and July-September, 1984.

2. Eggs between 2.5 mm and 4.5 mm in diameter came from a mature fall spawner.

3. Eggs greater than 4.5 mm in diameter collected in April through July came from a mature spring spawner.

4. Eggs greater than 4.5 mm in diameter collected after August came from a fall spawner since the fish was apparently mature and had not yet entered a spawning stream.

The maturity compositions of chinook samples harvested in southeast Alaskan sport fisheries are shown in Table 51.

The numbers of immature and mature chinook harvested in the sport fisheries were determined by apportioning the April-June harvests according to the April-June maturity compositions and by apportioning the July-September harvests according to the July-September maturity compositions (Table 52).

Tag Recoveries

The examination of 2,724 chinook and 3,307 coho salmon (Table 53) resulted in the recovery of 147 CWT from hatchery-reared chinook (Table 54) and 71 CWT from hatchery-reared coho (Table 55). (These totals do not include the chinook and coho tags collected from anglers outside the random-sampling periods, nor do they include recoveries from roadside [shore] fisheries. Refer to Tables 34 and 35.) The random recoveries represent a handsome contribution of 1,230 chinook (Table 56) and 5,675 coho (Table 57) to the surveyed fisheries during the survey periods.

The ADF&G Crystal Lake Hatchery in Petersburg, Alaska, was the largest producer of chinook for the Southeast recreational fisheries. The SSRAA Neets Bay hatchery, located 15 miles north of Ketchikan, produced the majority of the coho. Ketchikan anglers received the most benefit from hatchery production: almost a quarter of their chinook harvest and over a third of their coho harvest were hatchery-reared fish.

Ketchikan creel-survey technicians were stationed south of town (at Mountain Point), in town (at Bar Harbor) and north of town (at Clover Pass) to avoid biasing tag-recovery data with a disproportionate number of tags from the hatcheries south of town (Whitman Lake), in town (Deer Mountain) or north of town (Neets Bay). To test whether this design eliminated that possible source of bias, the pattern of angling effort, reported by anglers to the survey technicians, was compared with the presumably unbiased pattern of effort observed during aerial surveys of the fishing grounds. If a disproportionate amount of data (including tags) had been collected at one of the interview locations, then the repeated effort would not have matched the observed effort. However, this was not the case. The patterns of reported and observed effort matched closely. For example, the top three areas of angling effort reported (Clover Pass, 41%; Mountain Point, 11%; and Vallenar Point, 9%) matched the top three areas of angling effort observed (Clover Pass,

Table 51. Maturity of Sampled Females Chinook That Were Harvested in Southeast Alaskan Sport Fisheries, 1984.

Area	Sample Period	April-June				July-September				April-September			
		Sample Size	Immature (%)	Mature Fall (%)	Mature Spring (%)	Sample Size (%)	Immature (%)	Mature Fall (%)	Mature Spring (%)	Sample Size	Immature (%)	Mature Fall (%)	Mature Spring (%)
Haines Derby	5/26-5/28, 6/02-6/03	67	13	5	82					67	13	5	82
Haines Non-Derby	5/06-6/30	32	13	9	78					32	13	9	78
Juneau Derby	8/03-8/05					123	98	2	0	123	98	2	0
Juneau Non-Derby	4/29-9/29	144	55	19	26	111	93	7	0	272*	70	15	15
Ketchikan	4/29-9/29	49	10	27	63	12	25	67	8	61	13	26	61
Petersburg	4/29-7/14	75	9	36	55	3	33	33	33	78	10	36	54
Sitka Derby	5/26-5/28, 6/02-6/03	145	22	68	10		145	22	68	10			
Wrangell	4/15-6/30	38	0	18	82		38	0	18	82			

* Includes samples that were missing date information.

Table 52. Numbers of Immature and Mature Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries, 1984. Maturity Classification Based on Mean Egg Diameters from a Total Sample of 816 Female Chinook Salmon.

Area	Sample Period	April-June				July-September				April-September			
		Immature	Mature Fall Spawners	Mature Spring Spawners	Total	Immature	Mature Fall Spawners	Mature Spring Spawners	Total	Immature	Mature Fall Spawners	Mature Spring Spawners	Total
Haines derby	5/26-5/28, 6/02-6/03	40	16	256	312*					40	16	256	312
Haines non-derby	5/06-6/30	100	69	601	770					100	69	601	770
Juneau derby	8/03-8/05					838	17	0	855*	838	17	0	855
Juneau non-derby	4/29-9/29	1,200	415	567	2,182	3,196	241	0	3,437	4,396	656	567	5,619
Ketchikan	4/29-9/29	143	385	898	1,426	98	264	32	394	241	649	930	1,820
Petersburg	4/29-7/14	82	328	501	911	11	11	11	32	93	339	512	943
Sitka derby	5/26-5/28, 6/02-6/03	78	240	35	353**					78	240	35	353
Wrangell	4/15-6/30	0	201	915	1,116					0	201	915	1,116

* Total derby harvest (including chinook harvested, but not entered in the derby).

** Chinook entered in the derby.

Table 53. Numbers of Chinook and Coho Salmon Examined for Coded-Wire Tags in Southeast Alaskan Sport Fisheries, 1984.

Fishery	Chinook			Coho		
	Number Harvest	Number Examined	Percent Examined	Number Harvest	Number Examined	Percent Examined
Haines derby	312	257	82	0	0	0
Haines non-derby	770	89	12	0	0	0
Juneau derby	764*	764	100	961*	961	100
Juneau non-derby	5,710	662	12	9,139	930	10
Ketchikan	1,820	239	13	14,231	1,416	10
Petersburg**	943	172	18	0	0	0
Sitka derby	353	353	100	0	0	0
Wrangell	1,116	188	17	0	0	0
Total	11,788	2,724	23	24,331	3,307	14

* Only those salmon that were entered in the derby. Salmon caught on a derby-day but not entered in the derby are included in the Juneau non-derby fishery for purposes of the tag-recovery analysis.

** Excluding Blind Slough.

Table 54. Coded-Wire Tag Recoveries from Hatchery-Reared Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries, 1984.

HATCHERY CONTRIBUTIONS TO SE ALASKAN SPORT FISHERIES, 1984.
CHINOOK SALMON

			CITY						
			JUNEAU (DERBY)	JUNEAU (NONDERBY)	KETCHIKAN	PETERSBURG	SITKA (DERBY)	WRANGELL	TOTAL
			RECOVERIES	RECOVERIES	RECOVERIES	RECOVERIES	RECOVERIES	RECOVERIES	RECOVERIES
			SUM	SUM	SUM	SUM	SUM	SUM	SUM
REGION	AGENCY	HATCHERY							
BRITISH COLUMBIA	CDFO	KITIMAT RIVER	1	1	.	.	.	.	2
		PUNTLEDGE RIVER	1	.	.	.	.	.	1
		QUINSAM RIVER	.	1	2	.	2	1	6
		ROBERTSON CREEK	.	.	.	.	1	.	1
		TLUPANA RIVER	.	.	.	.	1	.	1
OREGON	ODFW	BONNEVILLE	.	2	.	.	1	.	3
		MCKENZIE	.	1	.	.	.	.	1
SOUTHEAST ALASKA	ADFG	CRYSTAL LAKE	22	9	.	17	.	.	48
		DEER MOUNTAIN	3	3	27	1	.	.	34
		SNETTISHAM	9	7	.	.	.	.	16
	NMFS	LITTLE PORT WALTER	3	5	.	6	.	.	14
	SSRA	WHITMAN LAKE	2	3	14	.	.	.	19
WASHINGT-ON	WDF	PRIEST RAPIDS	1	.	.	.	.	.	1
TOTAL			42	32	43	24	5	1	147

Table 55. Coded-Wire Tag Recoveries from Hatchery-Reared Coho Salmon Harvested in Southeast Alaskan Sport Fisheries, 1984.

HATCHERY CONTRIBUTIONS TO SE ALASKAN SPORT FISHERIES, 1984.
COHO SALMON

			CITY			
			JUNEAU (DERBY)	JUNEAU (NONDERBY)	KETCHIKAN	TOTAL
			RECOVERIES	RECOVERIES	RECOVERIES	RECOVERIES
			SUM	SUM	SUM	SUM
REGION	AGENCY	HATCHERY				
SOUTHEAST ALASKA	ADFG	DEER MOUNTAIN	.	.	6	6
		SNETTISHAM	2	2	.	4
	NMFS	AUKE CREEK	1	.	.	1
	NSRA	SALMON CREEK	8	20	.	28
	SSRA	NEETS BAY	.	.	16	16
		WHITMAN LAKE	.	.	16	16
TOTAL			11	22	38	71

Table 56. Hatchery-Reared Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries, 1984.

HATCHERY CONTRIBUTIONS TO SE ALASKAN SPORT FISHERIES, 1984.

			CITY						
			JUNEAU (DERBY)	JUNEAU (NONDERBY)	KETCHIKAN	PETERSBURG	SITKA (DERBY)	WRANGELL	TOTAL
			CHINOOK	CHINOOK	CHINOOK	CHINOOK	CHINOOK	CHINOOK	CHINOOK
			SUM	SUM	SUM	SUM	SUM	SUM	SUM
REGION	AGENCY	HATCHERY							
BRITISH COLUMBIA	CDFO	KITIMAT RIVER	1	12	.	.	.	.	13
		PUNTLEDGE RIVER	4	.	.	.	.	.	4
		QUINSAM RIVER	.	9	99	.	11	66	185
		ROBERTSON CREEK	.	.	.	.	1	.	1
		TLUPANA RIVER	.	.	.	.	2	.	2
OREGON	ODFW	BONNEVILLE	.	81	.	.	1	.	82
		MCKENZIE	.	9	.	.	.	.	9
SOUTHEAST ALASKA	ADFG	CRYSTAL LAKE	78	178	.	100	.	.	356
		DEER MOUNTAIN	3	28	217	6	.	.	254
		SNETTISHAM	10	69	.	.	.	.	79
	NMFS	LITTLE PORT WALTER	3	45	.	34	.	.	82
	SSRA	WHITMAN LAKE	2	28	116	.	.	.	146
WASHINGTON	WDF	PRIEST RAPIDS	17	.	.	.	.	.	17
TOTAL			118	459	432	140	15	66	1230

Table 57. Hatchery-Reared Coho Salmon Harvested in Southeast Alaskan Sport Fisheries, 1984.

HATCHERY CONTRIBUTIONS TO SE ALASKAN SPORT FISHERIES, 1984.

			CITY			
			JUNEAU (DERBY)	JUNEAU (NONDERBY)	KETCHIKAN	TOTAL
			COHO	COHO	COHO	COHO
			SUM	SUM	SUM	SUM
REGION	AGENCY	HATCHERY				
SOUTHEAST ALASKA	ADFG	DEER MOUNTAIN	.	.	223	223
		SNETTISHAM	12	121	.	133
	NMFS	AUKE CREEK	1	.	.	1
	NSRA	SALMON CREEK	17	343	.	360
	SSRA	NEETS BAY	.	.	3685	3685
		WHITMAN LAKE	.	.	1273	1273
TOTAL			30	464	5181	5675

38%; Mountain Point, 10%; and Vallenar Point, 10%). Therefore, stationing technicians at Mountain Point, Bar Harbor, and Clover Pass effectively eliminated a potential source of bias in the calculation of the contributions of the three Ketchikan-area hatcheries.

Hatchery salmon harvested in southeast Alaska were reared by government and private agencies in Alaska, British Columbia, Washington, and Oregon. Each time these agencies released a brood of salmon, they marked brood members with an adipose-fin clip and a CWT so that brood survival and contributions to the fisheries could be monitored. The contributions of chinook brood-lots to southeast Alaskan recreational fisheries are displayed in Tables 58-63. (The solitary Haines derby chinook which had shed its tag is not shown.) Contributions of coho brood lots are displayed in Tables 64-66.

Hatchery managers should review these contributions to determine which brood lots were most beneficial to anglers. Rearing methods and release sites could then be adjusted to maximize the return to the recreational fisheries.

Besides the CWT from hatchery salmon, random sampling recovered six CWT from wild coho. These include one Auke Creek coho (code 03-17-57) caught in the Juneau derby, four Auke Creek coho (code 03-17-57) caught in the Juneau (non-derby) fishery and one Chickamin River coho (code 04-21-44) caught in the Ketchikan fishery.

Pink Salmon Enhancement Survey

A total of 1,700 questionnaires were distributed, and 614 were collected. No effort was made to ensure that the sample of contacted anglers was truly representative of the entire Juneau angling population; however, a good cross section was contacted. Overall, a plurality of respondents disapproved of hatchery production to increase the availability of pink salmon to marine boat anglers (Fig. 9). Respondents were understandably most concerned about enhancement activities in the popular fishing areas (Areas 2 and 3 on the questionnaire map).

No space was provided on the questionnaire for comments because comments are typically difficult to analyze quantitatively. However, some anglers elected to write comments in the margins of their questionnaires. Most of these respondents indicated that they were not against enhancement but would greatly prefer coho and chinook enhancement projects (Table 67).

A closer examination of the survey results, by harbor, revealed that Auke Bay boat ramp respondents actually favored pink salmon enhancement, while Tee Harbor respondents were strongly opposed (Table 68).

Some anglers had the opportunity to respond more than once to the survey, which was distributed twice weekly between July 1 and September 5. The overall results would have been more evenly divided if

Table 58. Hatchery Contributions (by Tag Code) to the Juneau Derby Chinook Fishery, August 3-5, 1984.

Region	Agency*	Hatchery or Total	Code	Recovered	Chinook	% Cont.
			NO TAG	7	...	...
British Columbia	CDFO	Kitimat River	022222	1	1	0.2
British Columbia	CDFO	Puntledge River	021948	1	4	0.5
British Columbia	CDFO	Total	...	2	5	0.7
British Columbia	...	Total	...	2	5	0.7
Southeast Alaska	ADFG	Crystal Lake	042042	3	3	0.4
Southeast Alaska	ADFG	Crystal Lake	042043	4	4	0.6
Southeast Alaska	ADFG	Crystal Lake	042202	15	71	9.3
Southeast Alaska	ADFG	Crystal Lake Total	...	22	78	10.3
Southeast Alaska	ADFG	Deer Mountain	042121	3	3	0.4
Southeast Alaska	ADFG	Snettisham	042049	9	10	1.3
Southeast Alaska	ADFG	Total	...	34	91	12.0
Southeast Alaska	NMFS	Little Port Walter	031716	1	1	0.1
Southeast Alaska	NMFS	Little Port Walter	031753	1	1	0.1
Southeast Alaska	NMFS	Little Port Walter	031762	1	1	0.1
Southeast Alaska	NMFS	Little Port Walter Total	...	3	3	0.3
Southeast Alaska	NMFS	Total	...	3	3	0.3
Southeast Alaska	SSRAA	Whitman Lake	044005	2	2	0.3
Southeast Alaska	...	Total	...	39	96	12.6
Washington	WDF	Priest Rapids	632252	1	17	2.2
Washington	WDF	Total	...	49	118	15.5

* CDFO = Canadian Department of Fisheries and Oceans; ADFG = Alaska Department of Fish and Game; NMFS = National Marine Fisheries Service; SSRAA = Southern Southeast Regional Aquaculture Association; WDF= Washington Department of Fisheries.

Table 59. Hatchery Contributions (by Tag Code) to the Juneau (Non-Derby) Chinook Fishery, April 29-September 29, 1984.

Region	Agency*	Hatchery or Total	Code	Recovered	Chinook	% Cont.
			NO TAG	5	...	...
British Columbia	CDFO	Kitimat River	022222	1	12	0.2
British Columbia	CDFO	Quinsam River	082123	1	9	0.2
British Columbia	CDFO	Total	...	2	21	0.4
British Columbia	...	Total	...	2	21	0.4
Oregon	ODFW	Bonneville	072141	1	72	1.3
Oregon	ODFW	Bonneville	072507	1	9	0.2
Oregon	ODFW	Bonneville Total	...	2	81	1.5
Oregon	ODFW	McKenzie	072517	1	9	0.2
Oregon	ODFW	Total	...	3	90	1.7
Oregon	...	Total	...	3	90	1.7
Southeast Alaska	ADFG	Crystal Lake	042042	1	9	0.2
Southeast Alaska	ADFG	Crystal Lake	042043	5	46	0.8
Southeast Alaska	ADFG	Crystal Lake	042202	3	123	2.2
Southeast Alaska	ADFG	Crystal Lake Total	...	9	178	3.2
Southeast Alaska	ADFG	Deer Mountain	041943	2	19	0.3
Southeast Alaska	ADFG	Deer Mountain	042121	1	9	0.2
Southeast Alaska	ADFG	Deer Mountain Total	...	3	28	0.5
Southeast Alaska	ADFG	Snettisham	042049	7	69	1.2
Southeast Alaska	ADFG	Total	...	19	275	4.9
Southeast Alaska	NMFS	Little Port Walter	031716	1	9	0.2
Southeast Alaska	NMFS	Little Port Walter	031754	1	9	0.2
Southeast Alaska	NMFS	Little Port Walter	031801	1	9	0.2
Southeast Alaska	NMFS	Little Port Walter	031802	1	9	0.2
Southeast Alaska	NMFS	Little Port Walter	031803	1	9	0.2
Southeast Alaska	NMFS	Little Port Walter	Total	5	45	1.0
Southeast Alaska	NMFS	Total		5	45	1.0
Southeast Alaska	SSRAA	Whitman Lake	044005	3	28	0.5
Southeast Alaska	SSRAA	Total	...	27	348	6.4
Southeast Alaska	...	Total	...	37	459	8.5

* CDFO = Canadian Department of Fisheries and Oceans; ODFW = Oregon Department of Fish and Wildlife; ADFG = Alaska Department of Fish and Game; NMFS = National Marine Fisheries Service; SSRAA = Southern Southeast Regional Aquaculture Association.

Table 60. Hatchery Contributions (by Tag Code) to the Ketchikan Chinook Fishery, April 29-September 29, 1984.

Region	Agency*	Hatchery or Total	Code	Recovered	Chinook	% Cont.
			NO TAG	3	...	...
British Columbia	CDFO	Quinsam River	021943	1	59	3.2
British Columbia	CDFO	Quinsam River	022304	1	40	2.2
British Columbia	CDFO	Quinsam River Total	...	2	99	5.4
British Columbia	CDFO	Total	...	2	99	5.4
British Columbia	...	Total	...	2	99	5.4
Southeast Alaska	ADFG	Deer Mountain	041917	1	8	0.4
Southeast Alaska	ADFG	Deer Mountain	041932	1	8	0.4
Southeast Alaska	ADFG	Deer Mountain	041938	6	49	2.7
Southeast Alaska	ADFG	Deer Mountain	041939	4	32	1.8
Southeast Alaska	ADFG	Deer Mountain	041940	1	8	0.4
Southeast Alaska	ADFG	Deer Mountain	041943	3	25	1.3
Southeast Alaska	ADFG	Deer Mountain	041945	4	31	1.7
Southeast Alaska	ADFG	Deer Mountain	042039	1	8	0.4
Southeast Alaska	ADFG	Deer Mountain	042040	2	15	0.8
Southeast Alaska	ADFG	Deer Mountain	042121	4	33	1.8
Southeast Alaska	ADFG	Deer Mountain Total	...	27	217	11.7
Southeast Alaska	ADFG	Total	...	27	217	11.7
Southeast Alaska	SSRAA	Whitman Lake	B40907	2	16	0.9
Southeast Alaska	SSRAA	Whitman Lake	B40908	1	8	0.4
Southeast Alaska	SSRAA	Whitman Lake	044005	11	92	5.1
Southeast Alaska	SSRAA	Whitman Lake Total	...	14	116	6.4
Southeast Alaska	SSRAA	Total	...	14	116	6.4
Southeast Alaska	...	Total	...	41	333	18.1
			...	46	432	23.5

* CDFO = Canadian Department of Fisheries and Oceans; ADFG = Alaska Department of Fish and Game; SSRAA = Southern Southeast Regional Aquaculture Association.

Table 61. Hatchery Contributions (by Tag Code) to the Petersburg Chinook Fishery, April 29-July 14, 1984.

City	Region	Agency*	Hatchery or Total	Code	Rec.	KS	% Cont.
				NO TAG	3	...	...
Petersburg	Southeast Alaska	ADFG	Crystal Lake	042042	7	41	4.4
Petersburg	Southeast Alaska	ADFG	Crystal Lake	042043	10	59	6.3
Petersburg	Southeast Alaska	ADFG	Crystal Lake Total	...	17	100	10.7
Petersburg	Southeast Alaska	ADFG	Deer Mountain	041945	1	6	0.6
Petersburg	Southeast Alaska	ADFG	Total	...	18	106	11.3
Petersburg	Southeast Alaska	NMFS	Little Port Walter	031703	2	11	1.2
Petersburg	Southeast Alaska	NMFS	Little Port Walter	031704	1	5	0.6
Petersburg	Southeast Alaska	NMFS	Little Port Walter	031709	1	6	0.6
Petersburg	Southeast Alaska	NMFS	Little Port Walter	031710	1	6	0.6
Petersburg	Southeast Alaska	NMFS	Little Port Walter	031716	1	6	0.6
Petersburg	Southeast Alaska	NMFS	Little Port Walter Total		6	34	3.6
Petersburg	Southeast Alaska	NMFS	Total	...	6	34	3.6
Petersburg	Southeast Alaska	...	Total	...	24	140	14.9
Petersburg		...	Total	...	27	140	14.9

* ADFG = Alaska Department of Fish and Game; NMFS = National Marine Fisheries Service.

Table 62. Hatchery Contributions (by Tag Code) to the Sitka Derby Chinook Fishery, May 26-28 and June 2-3, 1984.

City	Region	Agency*	Hatchery or Total	Code	Rec.	KS	% Cont.
				NO TAG	1	...	...
Sitka derby	British Columbia	CDFO	Quinsam River	021950	1	7	1.9
Sitka derby	British Columbia	CDFO	Quinsam River	022303	1	4	1.0
Sitka derby	British Columbia	CDFO	Quinsam River (total)		2	11	2.9
Sitka derby	British Columbia	CDFO	Robertson Creek	021908	1	1	0.3
Sitka derby	British Columbia	CDFO	Tlupana River	021837	1	2	0.4
Sitka derby	British Columbia	CDFO	Total	...	4	14	3.6
Sitka derby	British Columbia	...	Total	...	4	14	3.6
Sitka derby	Oregon	ODFW	Bonneville	072142	1	1	0.3
Sitka derby	...	...	Total	...	6	15	3.9

* CDFO = Canadian Department of Fisheries and Oceans; ODFW = Oregon Department of Fish and Wildlife.

Table 63. Hatchery Contributions (by Tag Code) to the Wrangell Chinook Sport Fishery, April 15-June 30, 1984.

City	Region	Agency	Hatchery or Total	Code	Rec.	KS	% Cont.
				NO TAG	1	...	...
Wrangell	British Columbia	CDFO*	Quinsam River	021758	1	66	5.9
Wrangell	...	...	Total	...	2	66	5.9

* CDFO = Canadian Department of Fisheries and Oceans.

Table 64. Hatchery Contributions (by Tag Code) to the Juneau Derby Coho Fishery, August 3-5, 1984.

Region	Agency*	Hatchery or Total	Code	Rec.	Coho	% Cont.
			NO TAG	2	...	...
Southeast Alaska	ADFG	Snettisham	042232	1	7	0.7
Southeast Alaska	ADFG	Snettisham	042233	1	5	0.5
Southeast Alaska	ADFG	Snettisham Total	...	2	12	1.2
Southeast Alaska	ADFG	Total	...	2	12	1.2
Southeast Alaska	NMFS	Auke Creek	031756	1	1	0.1
Southeast Alaska	NSRAA	Salmon Creek	031758	2	3	0.3
Southeast Alaska	NSRAA	Salmon Creek	035602	6	14	1.5
Southeast Alaska	NSRAA	Salmon Creek Total	...	8	17	1.8
Southeast Alaska	NSRAA	Total	...	8	17	1.8
Southeast Alaska	...	Tagged Total	...	11	30	3.1
Southeast Alaska	...	Total	...	13	30	3.1

* ADFG = Alaska Department of Fish and Game; NMFS = National Marine Fishery Service; NSRAA = Northern Southeast Regional Aquaculture Association.

Table 65. Hatchery Contributions (by Tag Code) to the Juneau (Non-Derby) Coho Fishery, April 29-September 29, 1984.

Region	Agency*	Hatchery or Total	Code	Recovery	Coho	% Cont.
Southeast Alaska	ADFG	Snettisham	042160	1	55	0.6
Southeast Alaska	ADFG	Snettisham	042232	1	66	0.7
Southeast Alaska	ADFG	Snettisham Total	...	2	121	1.3
Southeast Alaska	ADFG	Total	...	2	121	1.3
Southeast Alaska	NSRAA	Salmon Creek	031758	4	54	0.6
Southeast Alaska	NSRAA	Salmon Creek	031760	1	10	0.1
Southeast Alaska	NSRAA	Salmon Creek	035602	7	160	1.8
Southeast Alaska	NSRAA	Salmon Creek	036203	8	119	1.3
Southeast Alaska	NSRAA	Salmon Creek Total...		20	343	3.8
Southeast Alaska	NSRAA	Total	...	20	343	3.8
Southeast Alaska	...	Total	...	22	464	5.1

* ADFG = Alaska Department of Fish and Game; NSRAA = Northern Southeast Regional Aquaculture Association.

Table 66. Hatchery Contributions (by Tag Code) to the Ketchikan Coho Fishery, April 29-September 29, 1984.

Region	Agency*	Hatchery or Total	Code	Rec.	Coho	% Cont.
Southeast Alaska	ADFG	Deer Mountain	042225	6	223	1.6
Southeast Alaska	SSRAA	Neets Bay	042237	4	670	4.7
Southeast Alaska	SSRAA	Neets Bay	042238	8	2,010	14.1
Southeast Alaska	SSRAA	Neets Bay	042239	4	1,005	7.1
Southeast Alaska	SSRAA	Neets Bay Total	...	16	3,685	25.9
Southeast Alaska	SSRAA	Whitman Lake	042212	9	201	1.4
Southeast Alaska	SSRAA	Whitman Lake	042213	1	67	0.5
Southeast Alaska	SSRAA	Whitman Lake	042214	6	1,005	7.1
Southeast Alaska	SSRAA	Whitman Lake Total	...	16	1,273	9.0
Southeast Alaska	SSRAA	Total	...	32	4,958	34.9
Southeast Alaska	...	Total	...	38	5,181	36.5
TOTAL			...	42	5,181	36.5

* ADFG = Alaska Department of Fish and Game; SSRAA = Southern Southeast Regional Aquaculture Association.

Table 67. Comments Written by Respondents on the Pink Salmon Enhancement Questionnaire.

1. How about silvers?
2. Waste of time and money--more than enough pinks around now. I do, however, like catching and eating pinks!
3. More coho fisheries.
4. Why would anyone want to catch pinks?
5. More kings.
6. More kings.
7. Increase king salmon production.
8. More kings.
9. More kings.
10. Build a coho hatchery for this area--have enough pink salmon.
11. Would rather the hatcheries were used for kings and cohos.
12. Pink salmon in these areas are already adequately stocked. Enhance the coho and king fishery!
13. I use a limited number of pinks a year for canning and smoking but prefer cohos or kings. Only use pinks because of abundant number already in area.
14. Pink salmon are not the game fish that I seek! I'm more interested in seeing the coho and king salmon fishery enhanced!
15. We would strongly approve of a coho hatchery in any of areas 2-6.
16. I don't know enough about this region. [From a non-resident.]
17. Why not coho or king hatcheries.
18. No more humpies!
19. Is this a joke or something? Don't you guys have anything better to waste paper on? [This respondent disapproved of hatchery enhancement in all areas.]
20. Try kings and silvers for a change.
21. What about silvers and kings?
22. No pinks.
23. No pinks.
24. Should increase king production not pinks!
25. Why would anyone want more pinks? If you want to have hatcheries, do sockeye or steelhead or coho.
26. No pinks. Silvers or Kings.
27. No pinks. Silvers or Kings.
28. Are you kidding? [This respondent disapproved of hatchery production in all areas.]
29. You idiots, people want kings and coho not pinks. Shape up hey!
30. Silvers or kings not pinks.
31. Now if you asked about sockeye or steelhead, I would have approved.
32. More kings and cohos. I have lots of cat food already.
33. How about chinook!!!
34. Any type of enhancement is great but what about kings and silvers??
35. Spend the money on something worthwhile.
36. Fix the boat ramps.
37. Fix the boat ramps.
38. Better silver.
39. Better coho.
40. How about some effort on enhancing the coho stocks?

Table 68. Comparison of Responses from Anglers at Auke Bay Boat Ramp and Tee Harbor to the Pink Salmon Enhancement Questionnaire.

Area	No Response	Approved	Disapproved	Didn't Care
		AUKE BAY BOAT RAMP (N = 356)		
1	6	36	34	23
2	7	42	35	16
3	5	44	34	17
4	7	35	35	23
5	8	33	34	25
6	10	23	35	31
		TEE HARBOR (N = 258)		
1	4	17	56	23
2	1	21	61	17
3	3	19	60	19
4	5	26	52	18
5	5	18	58	19
6	5	17	57	21

this were not allowed, since first-time respondents included a higher percentage of Auke Bay anglers and probably a lower percentage of avid anglers (Table 69).

Logically, the strongest advocates of pink salmon enhancement were those respondents who hoped to catch pink salmon (Table 70) or frequently fished for pink salmon along the roadside (Table 71).

While some anglers had hoped to catch pink salmon, most replied to verbal questioning that they neither sought nor avoided areas of high pink salmon concentration (166 anglers sought pinks, 268 avoided them, 866 did neither). Opinions on the abundance of pinks varied, though the largest group of respondents said there were far too few pinks present on the day they had gone fishing (471 anglers answered far too few, 47 answered "too few", 227 answered "about right", 44 answered "too many", 86 answered "far too many", and 426 had no opinion). The results to the pink salmon-enhancement questionnaire are presented in Fig. 9. Anglers also reported releasing both pink and coho salmon, though pinks were released much more readily.

DISCUSSION

Effort and Harvest

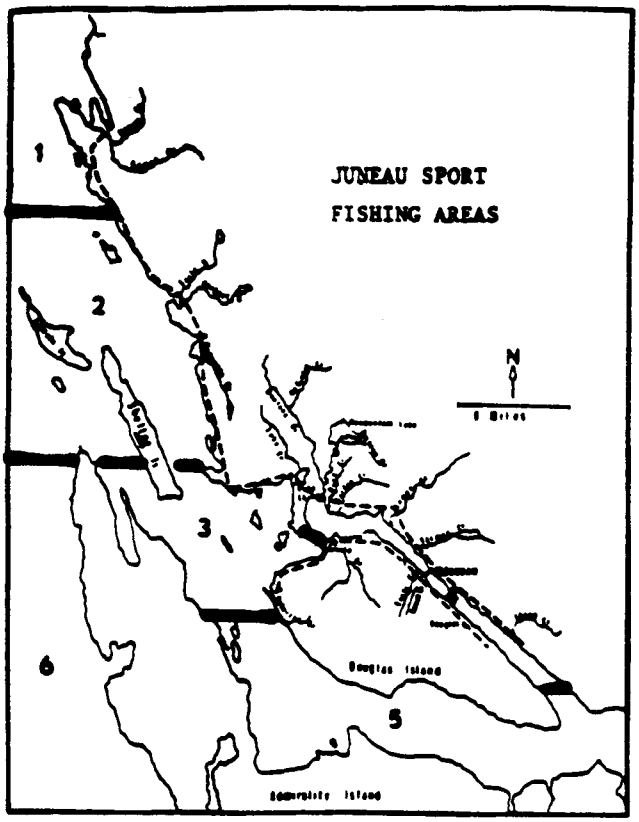
Salmon were the main target of Southeast anglers. Approximately 75% of the recreational fishing effort was spent in pursuit of chinook, coho, and pink salmon; the remaining 25% was spent on bottom fish, primarily halibut (Fig. 10). The heaviest concentration of recreational fishing effort occurred around Juneau, the largest city in the region.

Juneau anglers enjoyed 319,000 hours of fishing. This was a very moderate increase (3%) over 1983 for a comparable period (Statistical Weeks 3-24) and continued an increasing trend since 1981 (Fig. 11).

A healthy 19% of Juneau's angling activity occurred during the Golden North Salmon Derby. Angler validations reached a new high, 12,762 (Table 72).

Three $100,000 prizes were offered in this year's Golden North Salmon Derby. A chinook, a coho, and a pink salmon each containing a hidden tag worth $100,000 encouraged anglers to enter a much higher percentage of their catch, although no one was lucky enough to catch one of the three tagged fish.

Juneau anglers were rewarded with the best chinook fishing since 1973 (Fig. 12; Table 73); however, coho fishing was only fair--the catch rate declined for the second straight season, decreasing to 0.05 coho per hour of fishing (Fig. 13; Table 74). This prompted the Territorial Sportsmen organization to sponsor a regulatory proposal (#585) to the



PINK SALMON INTEREST POLL

The Alaska Department of Fish and Game, Sport Fish Division is canvassing anglers to determine their desires for additional pink salmon hatcheries in the Juneau area. Please assist us by completing this form near the end of your fishing trip. We encourage you to complete this form even though you may have filled out the same questionnaire earlier this season. If you fish regularly, and fill out several forms, your responses can be weighted more heavily than the occasional angler's. The forms will be collected by a creel survey technician when you return to dock.

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1) Would you favor hatchery production to increase the availability of pink salmon to marine boat anglers in the following areas? (Refer to map.)

Area 1 (includes: Berner's Bay, Echo Cove, Bridget Cove)
Approve 28% Disapprove 43% Don't Care 23%

Area 2 (includes: Tee Harbor, Amalga Harbor, Breadline, North Pass, Pt. Retreat)
Approve 34% Disapprove 46% Don't Care 17%

Area 3 (includes: Auke Bay, Fritz Cove, Outer Point, South Shelter)
Approve 34% Disapprove 45% Don't Care 18%

Area 4 (Gastineau Channel)
Approve 31% Disapprove 42% Don't Care 21%

Area 5 (includes: Dupont, South Douglas Island, Young's Bay)
Approve 27% Disapprove 44% Don't Care 23%

Area 6 (includes: Hawk Inlet and Couverdon)
Approve 21% Disapprove 44% Don't Care 27%

2) Did you hope to catch pink salmon today?
Yes 21% No 70% No Opinion 7%

3) Do you fish for pink salmon along the roadside?
Never 67% Occasionally 28% Often 4%

4) Have you filled out one of these survey forms before? Yes 21% No 78%

5) Are you a Juneau resident? Yes 91% No 9%

Figure 9. Responses to the Pink Salmon Enhancement Questionaire. These results include all responses. They will total less than 100% when anglers neglected to answer a particular question.

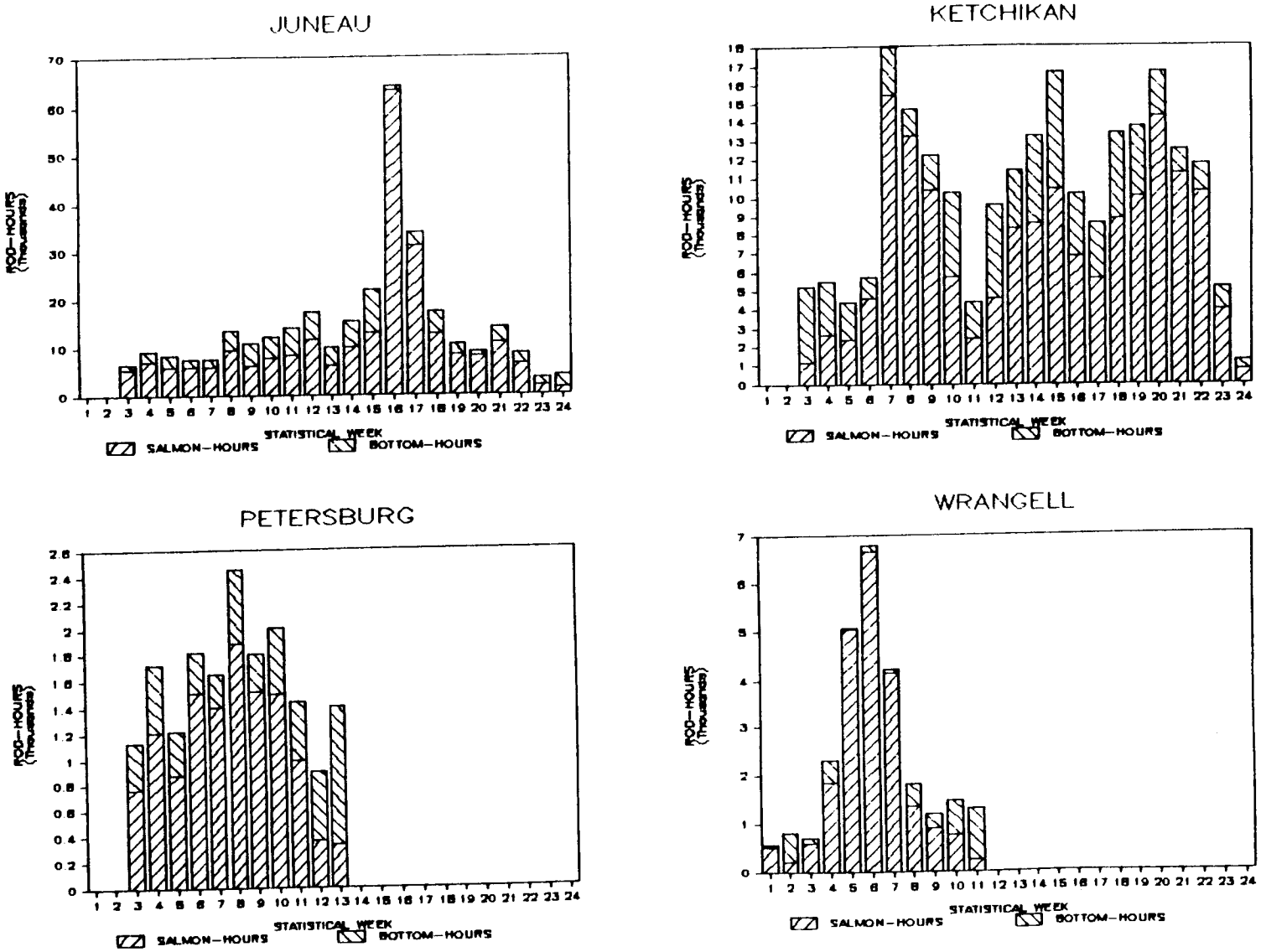


Figure 10. Distribution of Recreational Fishing Effort (Salmon-Hours and Bottomfish-Hours) in Juneau, Ketchikan, Petersburg, and Wrangell, 1984.

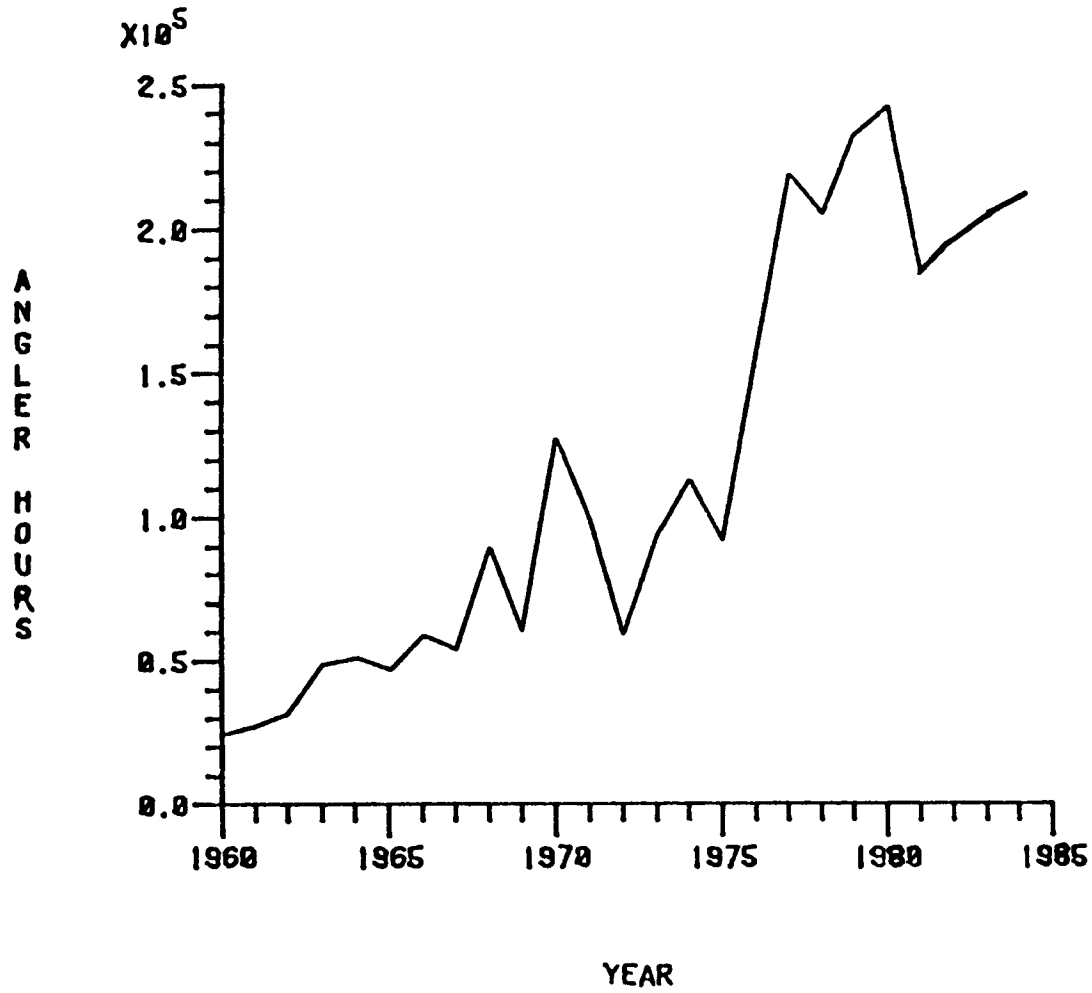


Figure 11. Seasonal Angler-Hours in the Juneau Marine Sport Fishery, May 1 to September 3, 1983. (Excludes Salmon Derby Angler Hours.)

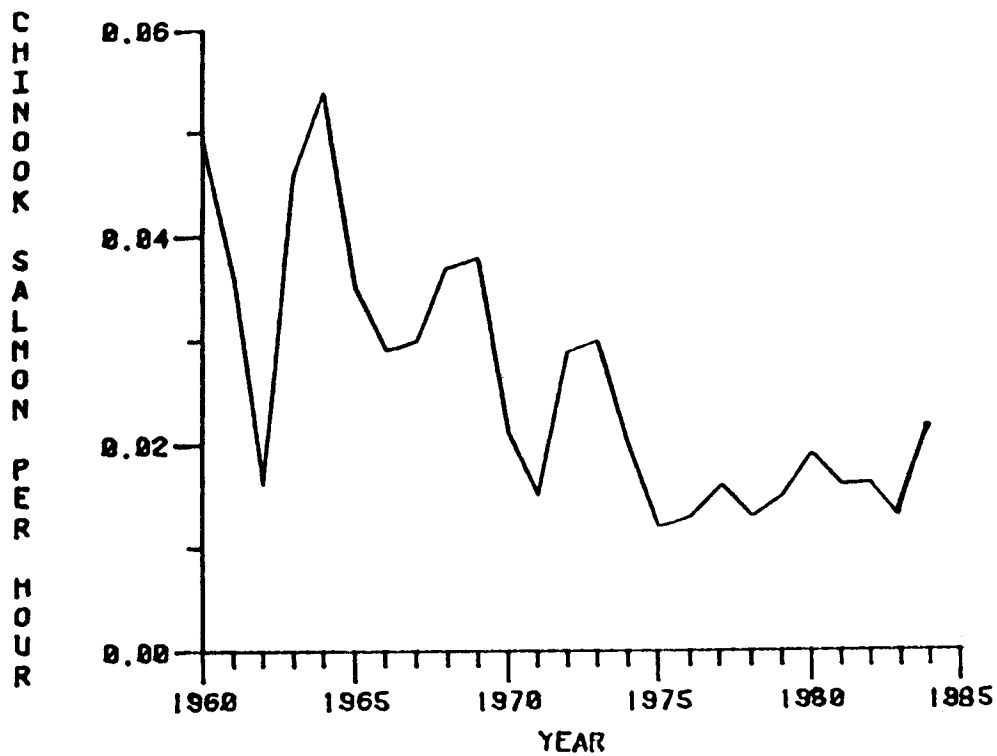


Figure 12. Seasonal Catch Rates for Chinook in the Juneau Area Sport Fishery, 1960-1983. (Based on Non-Derby Hours Fished for All Species.)

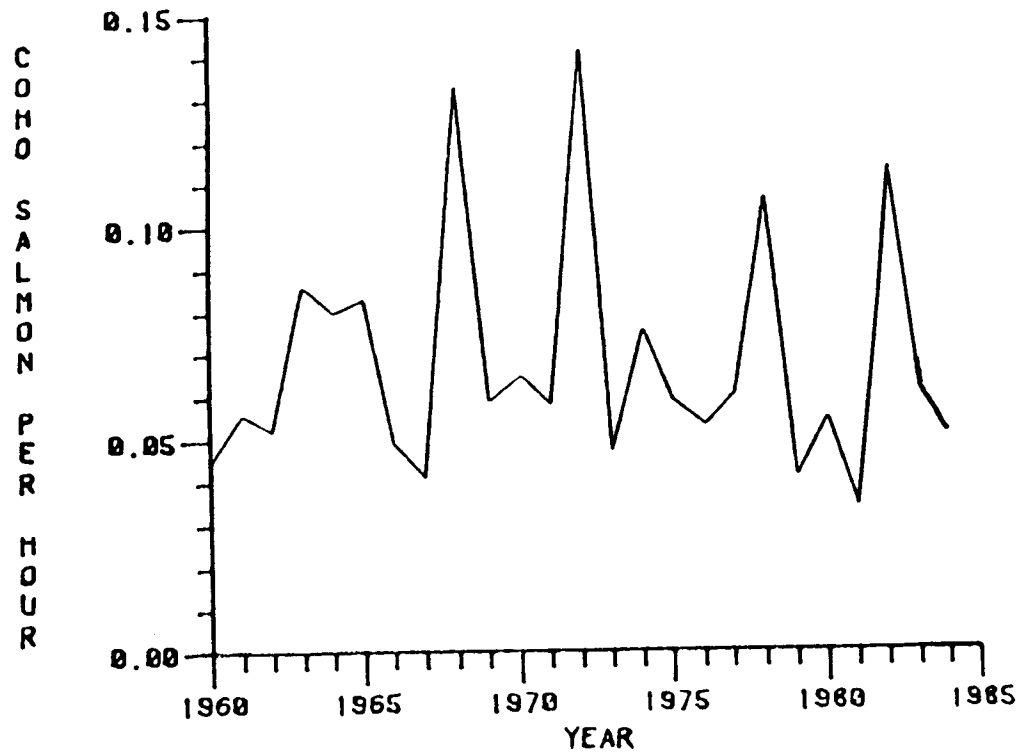


Figure 13. Catch Rates for Coho Salmon in the Juneau Area Sport Fishery, 1960-1983. (Based on Non-Derby Hours Fished for All Species between May 26 and September 3.)

Table 69. First-Time Responses (As Percentages) from Anglers at Auke Bay and Tee Harbor to the Pink Salmon Enhancement Questionnaire.

Area	No Response	Approved	Disapproved	Didn't Care
		AUKE BAY AND TEE HARBOR COMBINED (N = 482)		
1	5	32	38	24
2	5	38	39	18
3	4	39	39	19
4	5	34	38	22
5	6	30	39	25
6	7	23	40	30
		AUKE BAY (N = 305)		
1	6	37	34	23
2	7	45	32	16
3	5	47	32	16
4	6	36	34	24
5	8	33	33	26
6	9	23	35	33
		TEE HARBOR (N = 177)		
1	3	24	46	27
2	1	27	51	21
3	2	24	51	23
4	4	32	44	20
5	5	24	50	22
6	5	22	48	25

Table 70. Comparison of Responses (As Percentages) to the Pink Salmon Enhancement Questionnaire, Classified by the Respondent's Desire to Catch Pink Salmon.

Area	No Response	Approved	Disapproved	Didn't Care
DID HOPE TO CATCH PINK SALMON (N = 130)				
1	4	67	8	22
2	1	78	8	13
3	4	76	8	12
4	6	67	8	18
5	7	61	12	21
6	9	52	11	28
DID NOT HOPE TO CATCH PINK SALMON (N = 431)				
1	5	16	58	22
2	5	19	61	16
3	4	19	60	18
4	6	19	55	19
5	6	16	57	21
6	7	11	58	24

Table 71. Comparison of Responses (As Percentages) to the Pink Salmon Enhancement Questionnaire, Classified by the Respondent's Roadside Pink Salmon Fishing Habits.

Area	No Response	Approved	Disapproved	Didn't Care
	OFTEN FISHES FOR PINK SALMON ALONG THE ROADSIDE (N = 22)			
1	0	64	9	27
2	0	68	9	23
3	0	77	9	14
4	5	68	5	23
5	0	45	9	45
6	5	22	18	55
	OCCASIONALLY FISHES FOR PINK SALMON ALONG THE ROADSIDE (N = 173)			
1	4	38	34	24
2	5	46	34	15
3	5	46	34	16
4	8	46	25	21
5	8	39	28	24
6	11	27	33	29
	NEVER FISHES FOR PINK SALMON ALONG THE ROADSIDE (N = 410)			
1	5	22	50	23
2	4	26	53	17
3	3	26	52	19
4	6	22	52	21
5	6	20	53	21
6	6	18	51	25

Table 72. Effort and Harvest Generated by the Golden North Salmon Derby, 1971-1984.

Year	Dates Held	Angler Validations	Chinook Salmon		Coho Salmon		Pink Salmon		Chum Salmon		Sockeye Salmon		Halibut	Steelhead
			Entered	Taken Home	Entered	Taken Home	Entered	Taken Home	Entered	Taken Home	Entered	Taken Home	Taken Home	Entered
1971	July 16-18	7,434	682	...	1,331	...	409	...	226	...	...	...	...	...
1972	July 21-23	8,199	528	...	1,817	...	328	...	123	...	...	...	...	...
1973	July 20-22	7,915	637	...	449	...	278	...	34	...	...	...	...	...
1974	July 26-28	7,714	291	...	1,526	...	226	...	24	...	...	...	...	...
1975	July 18-20	7,847	276	184	315	354	174	531	15	14	0	0	...	...
1976	July 23-25	8,466	136	167	536	1,135	58	96	4	12	1	0	...	...
1977	Aug. 05-07	8,762	161	355	1,206	2,419	259	55	28	1	1	0	...	...
1978	Aug. 11-13	8,283	210	40	1,779	1,076	122	98	13	9	0	0	...	...
1979	Aug. 03-05	8,327	350	657	663	2,561	98	242	52	44	0	5	490	...
1980	Aug. 22-24	7,386	271	206	694	1,583	67	145	97	33	0	0	502	...
1981	Aug. 07-09	7,524	436	437	541	1,223	104	186	22	3	0	0	1,002	...
1982	Aug. 13-15	9,067	407	609	1,640	3,680	500	1,487	15	...	0	0	1,171	...
1983	Aug. 05-07	10,775	310	562	1,243	1,721	728	763	57	86	7	10	900	1
1984	Aug. 03-05	12,762	764	91	961	634	457	119	100	0	2	0	1,435	0

Table 73. Chinook Salmon Catch Rates (Chinook Retained per Hour of Non-Targeted Effort) in Juneau, 1960-1984.*

Year	Period and Date**													
	1 4/15- 4/30	2 5/01- 5/14	3 5/15- 5/28	4 5/29- 6/11	5 6/12- 6/25	6 6/26- 7/09	7 7/10- 7/23	8 7/24- 8/06	9 8/07- 8/20	10 8/21- 9/03	11 9/04- 9/17	12 9/18- 10/01	13 10/02- 10/15	Seasonal Mean**
1960	...	.092	.047	.072	.063	.065	.033	.020	.031	.008	.000	...	...	.049
1961	...	.051	.064	.060	.034	.036	.029	.035	.020	.005	...	...	...	.036
1962	...	.022	.033	.030	.014	.003	.014	.034	.008	.015	...	...	...	.016
1963	...	.090	.089	.086	.048	.060	.045	.030	.019	.020	.013	...	...	.046
1964	...	.075	.070	.065	.053	.045	.078	.039	.022	.013	...	...	...	.054
1965	...	.055	.069	.059	.028	.027	.037	.032	.014	.013	...	...	...	.035
1966	...	.000	.036	.026	.033	.027	.020	.022	.028	.034	...	...	...	.029
1967	...	.008	.031	.045	.035	.032	.025	.019	.012	.018	...	...	...	.030
1968	...	...	...	.028	.033	.036	.048	.035	.028	.023	...	...	...	.037
1969	...	...	...	.036	.047	.048	.034	.033	.030	...	...	...	...	.038
1970	...	...	...	.046	.025	.016	.028	.015	.017	.013	...	...	...	.021
1971	...	.014	.041	.052	.038	.032	.034	.033	.040	.027	.015	...	...	.015
1972	...	...	...	.016	.031	.023	.033	.029	.049	.024	.028	...	...	.029
1973	...	.050	.029	.032	.035	.048	.057	.029	.012	.023	...	...	...	.030
1974	...	.007	.017	.015	.036	.031	.017	.018	.014	.017	.017	...	...	.020
1975	...	.030	.018	.034	.022	.018	.030	.007	.007	.002	.004	.004	...	.012
1976	...	.023	.026	.024	.030	.020	.016	.007	.006	.006	.003	.002	.000	.013
1977	...	.015	.032	.023	.025	.011	.016	.010	.001	.003	.003	.000	...	.016
1978	...	.037	.029	.024	.023	.008	.004	.005	.001	.004	.002	.000	...	.013
1979	...	.032	.037	.019	.016	.009	.021	.010	.004	.008	.004	.001	...	.015
1980	...	.028	.036	.033	.024	.019	.013	.014	.010	.008	.010	.009	...	.019
1981	...	.036	.024	.025	.020	.013	.016	.009	.007	.008	.006	.004	...	.016
1982	...	.019	.023	.029	.015	.024	.014	.012	.008	.019	.019	.027	...	.017
1983	.002	.016	.020	.012	.020	.014	.018	.010	.008	.009	.012	.017	...	.013
1984	...	.019	.029	.019	.023	.035	.031	.022	.015	.012	.011	.024	...	.023

* Excludes derby data.

** Actual dates for each period may slightly vary between years.

Table 74. Coho Salmon Catch Rates (Coho Retained per Hour of Non-Targeted Effort) in Juneau, 1960-1984.*

Year	Period and Dates** 1	2 5/01-5/14	3 5/15-5/28	4 5/29-6/11	5 6/12-6/25	6 6/26-7/09	7 7/10-7/23	8 7/24-8/06	9 8/07-8/20	10 8/21-9/03	11 9/04-9/17	12 9/18-10/01	13 10/02-10/15	Seasonal Mean** (6/26-9/03)
1960	...	.000	.000	.003	.002	.003	.009	.055	.065	.092	.034	...	...	.045
1961	...	.000	.000	.000	.001	.006	.042	.079	.054	.100	...	...	...	.056
1962	...	.000	.000	.000	.010	.002	.014	.034	.086	.126	...	...	...	.052
1963	...	.000	.000	.002	.006	.020	.044	.102	.145	.121	.143	...	...	.086
1964	...	.000	.001	.002	.004	.035	.041	.099	.095	.131	...	...	...	.080
1965	...	.000	.000	.015	.007	.026	.074	.093	.114	.108	...	...	...	.083
1966	...	.000	.000	.001	.002	.019	.028	.049	.085	.063	...	...	...	.049
1967	...	.000	.000	.000	.006	.015	.019	.034	.074	.063	...	...	...	.041
1968	...	...	...	.000	.061	.072	.119	.143	.149	.232	...	...	...	.133
1969	...	...	...	.000	.012	.026	.030	.081	.099	...	...	...	...	.059
1970	...	...	...	.002	.002	.021	.042	.057	.100	.106	...	...	...	.065
1971	...	.000	.000	.002	.005	.013	.038	.080	.087	.073	.196	...	...	.058
1972	...	...	...	.000	.051	.093	.102	.237	.127	.133	.120	...	...	.142
1973	...	...	.000	.005	.006	.023	.023	.034	.061	.096	...	...	...	.047
1974	...	.000	.002	.001	.008	.044	.066	.087	.089	.092	.133	...	...	.076
1975	...	.000	.000	.004	.002	.025	.036	.061	.097	.066	.081	.060	...	.059
1976	...	.000	.000	.002	.006	.029	.040	.054	.063	.079	.065	.060	.005	.053
1977	...	.000	.001	.000	.013	.044	.081	.068	.058	.056	.045	.016	...	.061
1978	...	.000	.000	.000	.015	.065	.092	.129	.143	.106	.065	.055	...	.107
1979	...	.000	.000	.000	.002	.014	.037	.039	.043	.090	.078	.003	...	.041
1980	...	.000	.000	.001	.001	.015	.047	.068	.089	.083	.057	.060	...	.055
1981	...	.000	.000	.000	.000	.021	.034	.046	.085	.101	.067	.018	...	.034
1982	...	.000	.000	.002	.007	.069	.084	.112	.147	.153	.105	.031	...	.113
1983	.000	.000	.000	.000	.002	.003	.034	.054	.078	.109	.102	.061	...	.063
1984	...	.000	.000	.000	.002	.009	.027	.024	.060	.138	.096	.017	...	.050

* Excludes derby data

** Actual dates for each period may vary slightly between years.

Board of Fisheries that would mandate the Department of Fish and Game to "provide more cohos for escapement, for the sport fisheries and genetic diversification of the stocks."

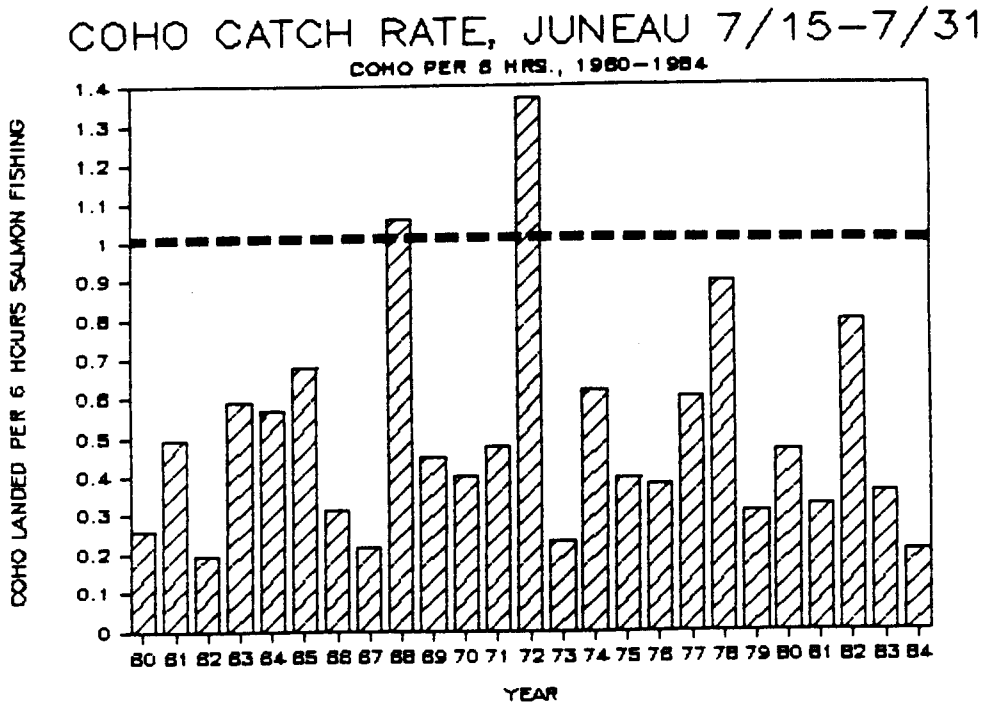
This was to be accomplished with two closures of the commercial salmon troll fishery: 10 days in July and 10 days in August. Specifically, the intent of the proposal was to boost the sport harvest rate to one coho per 6 hours of salmon fishing during the period July 15 through July 31 and one coho per 4 hours fishing during the period August 1 through August 31. The early season goal has been attained only twice since 1960, and the late season goal has never been attained (Fig. 14).

In an average year, the catch rates would have to be doubled to attain these goals. This probably could not be immediately accomplished with only two 10-day closures. However, a partial reduction in the commercial troll harvest should bolster escapements and eventually improve coho abundance and catch rates. Feasible alternatives to further restricting the troll fleet include increasing hatchery production, increasing the efficiency of the sport fleet by easing gear restrictions (i.e., the rod limit per sport angler) and informing anglers of the best fishing areas and most effective fishing techniques.

The Juneau pink salmon catch rate was also down in 1984. The rate dropped sharply to one pink per 112 hours of salmon fishing for the period April 29 through September 29 (Table 43), compared to one pink per 33 hours of salmon fishing in 1983 for the period April 17 through October 1 (Neimark, 1984a). The halibut catch rate held steady at the bountiful 1983 season rate of one halibut per 6 hours of bottom fishing. Seasonal comparisons may be clarified by weekly records of effort and harvest, since sampling did not encompass identical statistical weeks for each year or fishery (Figs. 15-18). (Catch-rate curves were generated from unexpanded data; harvest curves were generated from expanded data.)

A comparison of data from the same Statistical Weeks in 1983 and 1984 showed that fishing effort increased in Juneau (+3%) and Petersburg (+29%) but decreased in Wrangell (-25%) and Ketchikan (-33%). The decline at Ketchikan may have been related to the relatively poor chinook catch rate there. The lower catch rate and reduced effort combined to substantially lower the Ketchikan chinook harvest. Conversely, higher catch rates and increased effort combined to raise the chinook harvest in Juneau and Petersburg; in Wrangell, the effect of decreased effort was balanced by increased catch rates.

In 1983, coho and pink salmon data were collected only in Juneau. Catch rates and harvests of these species declined in 1984. Ketchikan fared considerably better. The 1984 Ketchikan harvest of 14,231 coho surpassed the Juneau harvest of 10,100 coho, and the Ketchikan harvest of 20,356 pinks dwarfed the Juneau harvest of 2,260 pinks. Halibut harvests declined in 1984 in all four major, surveyed fisheries.



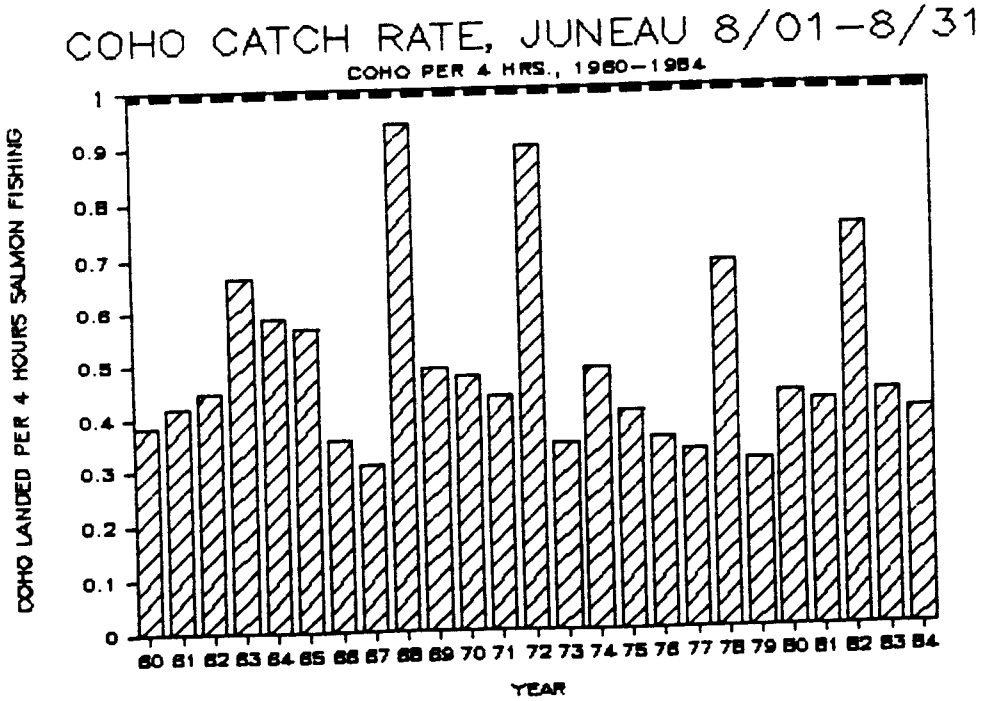


Figure 14. Juneau Area Marine Recreational Coho Salmon Catch Rates (July 15-31 and August 1-31), 1960-1984.

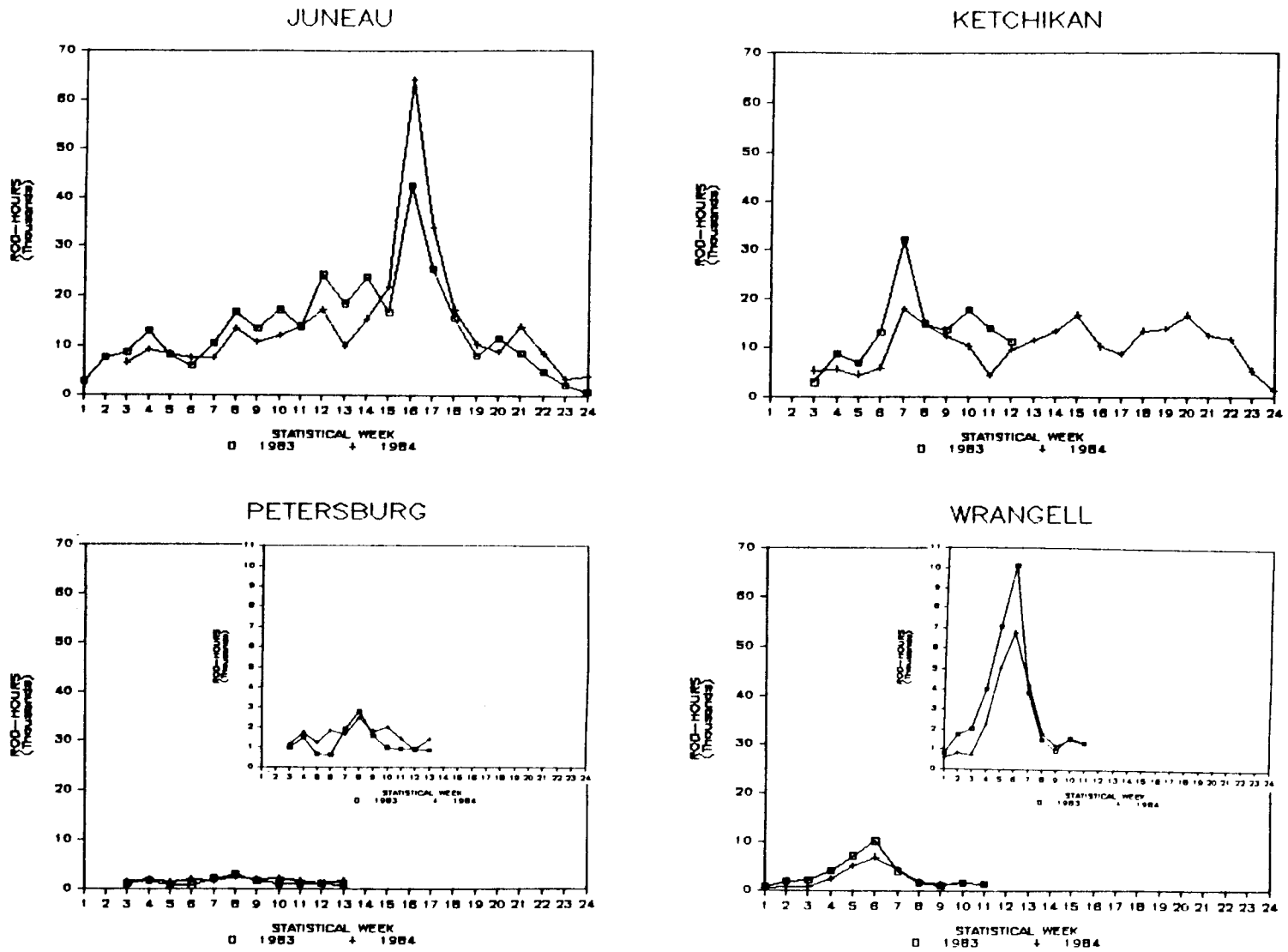


Figure 15. Comparison of Rod-Hours of Recreational Fishing Effort (by Statistical Week) Expended in Juneau, Ketchikan, Petersburg, and Wrangell in 1983 and 1984.

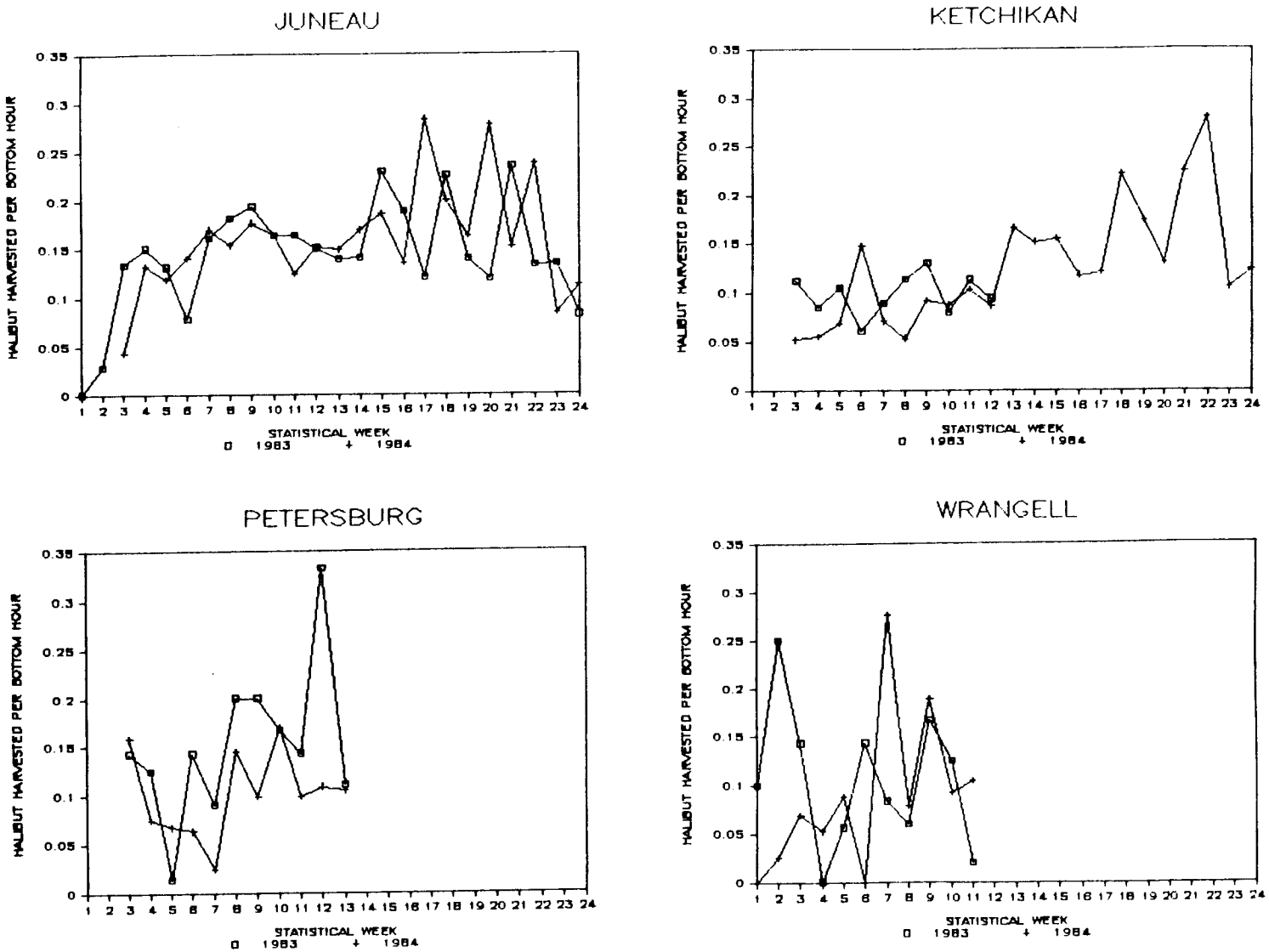


Figure 16. Comparison of the Number of Halibut Harvested in the Juneau, Ketchikan, Petersburg, and Wrangell Recreational Fisheries (by Statistical Week) in 1983 and 1984.

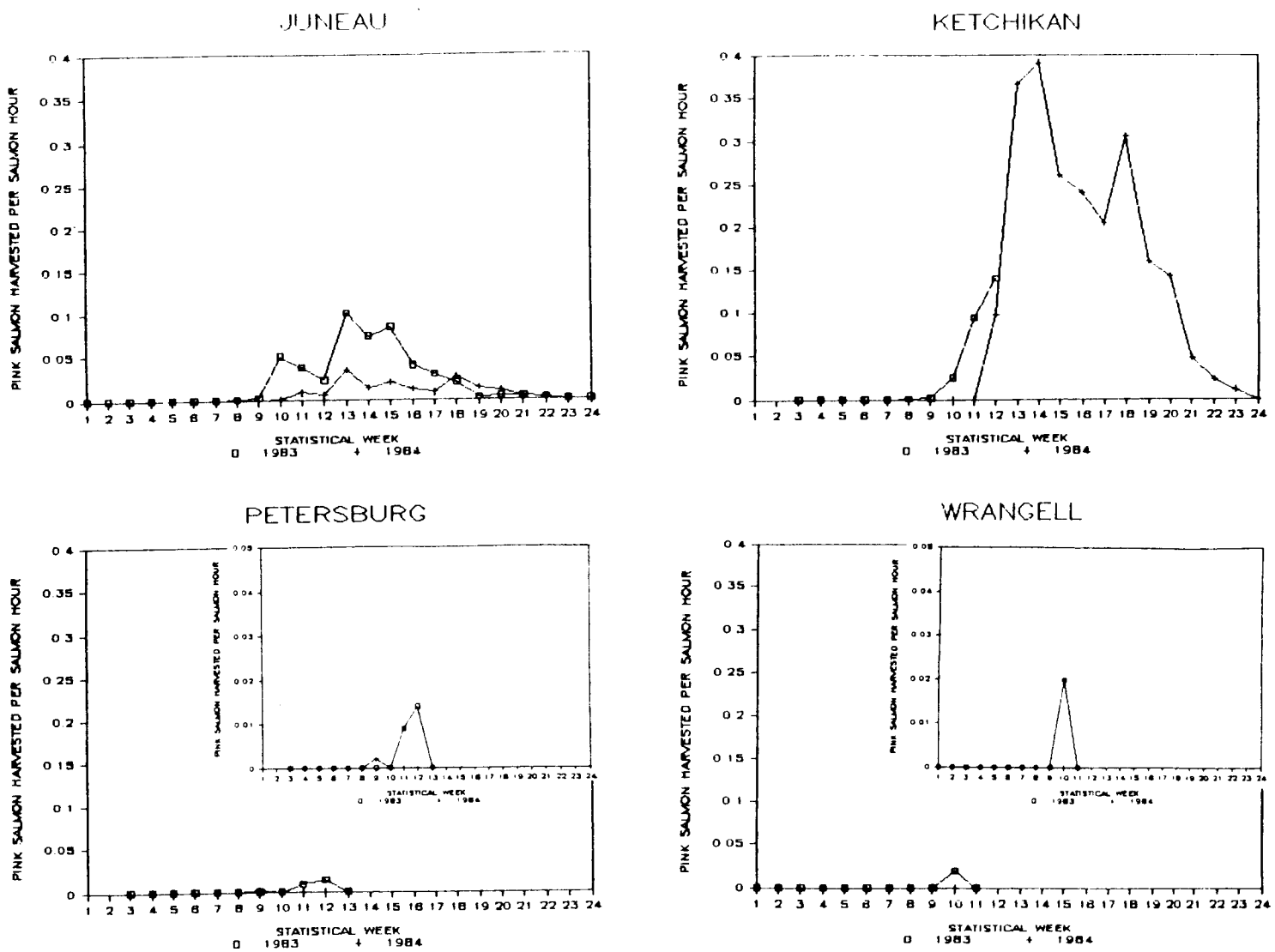


Figure 17. Comparison of the Number of Pink Salmon Harvested in the Juneau, Ketchikan, Petersburg, and Wrangell Recreational Fisheries (by Statistical Week) in 1983 and 1984.

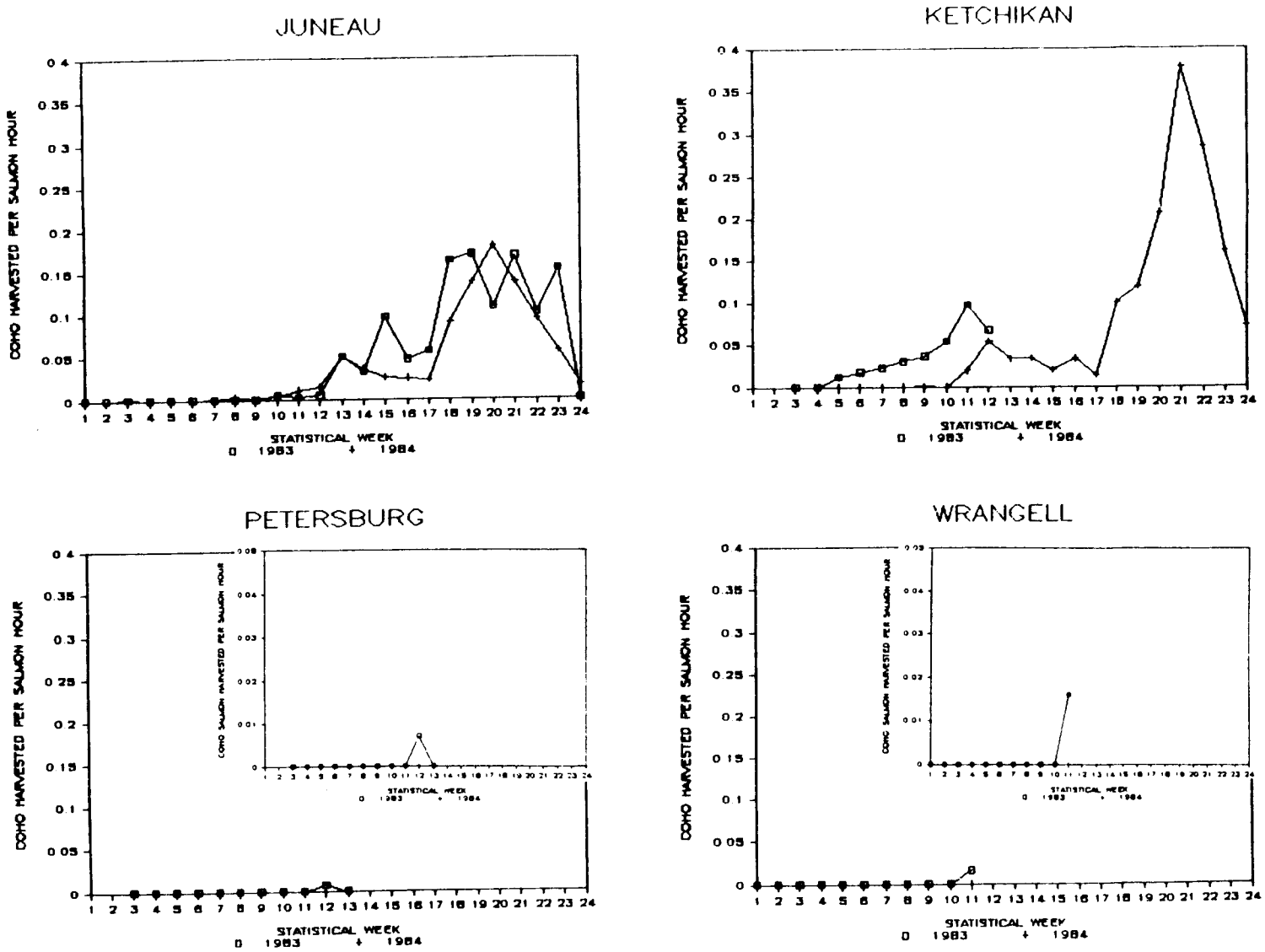


Figure 18. Comparison of the Number of Coho Salmon Harvested in the Juneau, Ketchikan, Petersburg, and Wrangell Marine Recreational Fisheries (by Statistical Week) in 1983 and 1984.

Length-Frequency Distribution

Length data were collected to construct a data base on key recreational species in each area. Changes in a population's length-frequency distribution can indicate fundamental changes in population structure and viability. No obvious anomalies were detected in the 1984 data.

The 28-inch (snout to tip-of-tail) minimum-size limit for chinook salmon was a key factor that shaped the length-frequency distribution of the chinook sport harvest. Roughly half of all chinook hooked in Juneau and Ketchikan were undersized and had to be released (Table 75). Such high release rates might at first indicate that the minimum-size limit was an effective conservation regulation. However, estimates of mortality (immediate and delayed) due to hooking and handling in troll fisheries range between 16% and 71% (Wright, 1970). The majority of studies with large sample sizes indicate mortalities of 35-40%. If a substantial percentage of the released chinook perished, then the regulation did more to frustrate anglers than it did to conserve chinook stocks. More research is needed to quantify the hooking-and-handling-mortality rate so that the most sensible management regulations can be adopted.

Maturity

It is not sufficient just to determine the number of chinook salmon harvested. Managers also need to know the maturity composition of the harvest since this will have a direct effect on subsequent recruitment. The method used in this study required subjective interpretations of egg-diameter histograms. It was reassuring that a characteristic trimodal distribution (representing immature, fall-spawning, and spring-spawning females) was readily discernible (Fig. 8, April-June). It was also reassuring that the results of the histogram interpretations were very similar to results obtained in an earlier study (Kissner, 1974) Kissner determined that fall-spawning females had egg diameters of 2.0-3.9 mm (from samples collected in May from the Taku, Haines, Ketchikan, and Sitka fisheries) and 2.25-4.99 mm (from samples collected during late July from the Juneau derby and Fairweather fisheries). Results in this study were quite comparable: egg diameters of fall spawners were between 2.5 mm and 5.0 mm.

Kissner was also able, with slightly less success, to determine a classification scheme for male chinook after inspecting histograms of the Maturity Index. The Index was derived from the ratio of gonad weight to body weight. Unfortunately, use of a similar index in our study (the ratio of gonad weight to body length) was not very successful: histograms of this index had a trimodal distribution that was only vaguely discernible and indicated considerable overlap between groups. No distinct groups were observed in histograms of gonad weight alone.

The greater variation of body size and gonad size in mature males makes maturity classification more difficult. For this reason, the maturity composition of the sport harvest was based upon egg diameters of the

Table 75. Ratio of Undersized Chinook Salmon Caught and Released to all Chinook Caught in Southeast Alaskan Recreational Fisheries, 1984.

Area	Number Kept		Number Released		Ratio of Number <28 in. Released to Total Caught
	<28 in.	>28 in.	<28 in.	>28 in.	
Blind Slough*	105	0	14	141	0.05
Haines	10	760	406	0	0.35
Juneau	104	6,474	6,349	189	0.48
Ketchikan	81	1,739	2,420	63	0.56
Petersburg	2	941	44	69	0.04
Wrangell	8	1,091	142	240	0.11

* Special regulations in Blind Slough permitted only the harvest of chinook less than 28 inches in length. This fishery targeted specifically on the undersized chinook which returned to the Crystal Lake Hatchery and were not desired for brood stock.

Table 76. Maturity of Female Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries, 1983.

Area	Sample Period	April-June				July-September				April-September			
		Sample Size	Immature (%)	Mature Fall (%)	Mature Spring (%)	Sample Size	Immature (%)	Mature Fall (%)	Mature Spring (%)	Sample Size	Immature (%)	Mature Fall (%)	Mature Spring (%)
Bell Island	5/22-7/02	72	49	19	32	72	49	19	32	...	...	...	...
Haines Derby*	5/28-5/29, 6/04-6/05	84	6	6	88	84	6	6	88	...	...	...	...
Juneau Derby	4/17-10/01	88	97	3	0	88	97	3	0	...	...	...	...
Juneau Non-Derby	8/05-8/07	131	42	18	40	100	96	3	1	238**	64	13	23
Ketchikan	5/01-7/09	66	27	29	44	5	40	0	60	72**	28	28	44
Petersburg	5/01-7/16	13	15	39	46	13	15	39	46	...	...	...	...
Thomas Basin	6/05-7/02	1	0	100	0	1	0	100	0	...	...	...	...
Wrangell	4/17-7/02	32	13	31	56	32	13	31	56	...	...	...	...
Yes Bay	6/10-7/02	13	38	31	31	1	100	0	0	14	43	29	29

* Subjective judgement based upon egg size. No egg diameters were actually measured.

** Includes samples that were missing date information.

female samples alone. However, this could have introduced some bias since the maturity composition of the male segment of the population might not be the same as the maturity composition of the female segment. A better method for determining the maturity of male chinook salmon is needed.

The results of the analysis, based upon egg diameters (Table 52), indicated that the Haines and Wrangell spring chinook fisheries harvested the highest proportions of mature spring spawners (Haines derby, 82%; Haines non-derby, 78%; Wrangell, including derby, 82%). These fisheries targeted heavily on spring spawning runs in the Chilkat or Stikine Rivers.

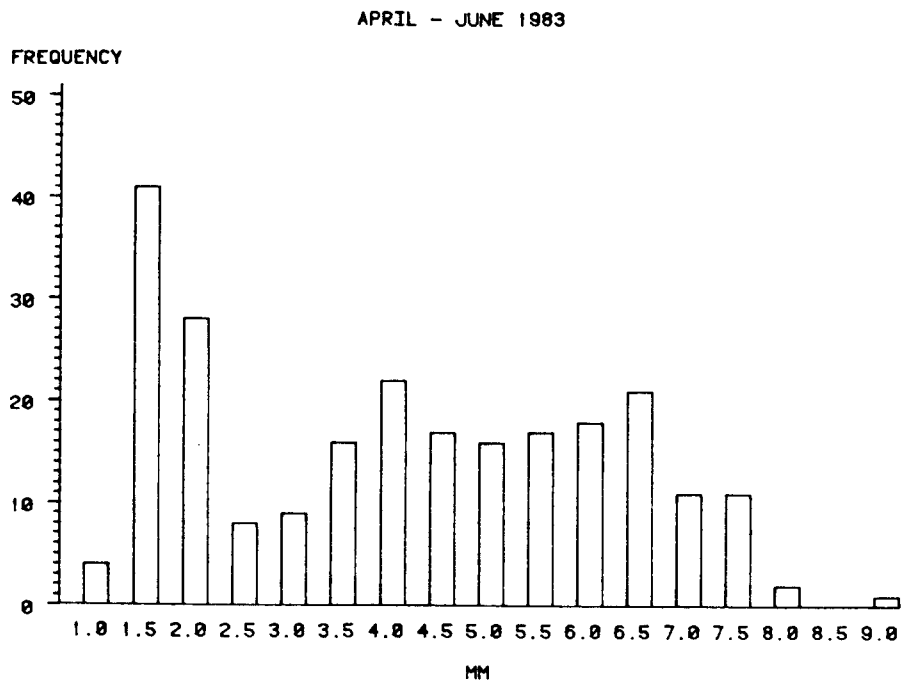
During Sitka Salmon Derby, anglers harvested the highest proportion of fall-spawning chinook (68%). These chinook must have been bound for river systems in British Columbia, Washington or Oregon, since Alaska has almost no fall-spawning chinook stocks. Sitka is located on Baranof Island, closer to the Pacific Ocean migration route of southern chinook stocks. This complements the finding that all the hatchery chinook harvested in the Sitka derby had been reared in British Columbia and Oregon (Table 56).

During the Golden North Salmon Derby in Juneau, anglers harvested the highest proportion of immature chinook (98%). The Derby occurred in August after spring spawners had enjoyed their mating rituals and fall spawners had left the waters of the Inside Passage for points south. Juneau derby anglers are left with immature chinook and coho salmon to harvest. Therefore, this derby is much less detrimental to Alaskan chinook stocks than the spring chinook salmon derbies held in Haines, Ketchikan, Petersburg and Wrangell. Mature spring spawners in Juneau waters gain additional protection from a spring (April 16 through June 14) closure of Stephens Passage, enacted to protect Taku River spawners. The regulation was apparently effective since the Juneau harvest during April through June included only 26% spring spawners.

The 1984 results were in general agreement with preliminary results from 1983 (Neimark, 1984a). These results were preliminary because they were based on the assumptions that, during April through July, chinook with mean egg diameters less than 2.0 mm were immature, chinook with mean egg diameters of 2.0-3.9 mm were fall spawners, and those with mean egg diameters of 4.0 mm or larger were spring spawners. During August and September, the assumption was made that chinook with mean egg diameters less than 3.0 mm were immature, and those with mean egg diameters of 3.0 mm or larger were fall spawners. Those assumptions were based upon results by Kissner (1974) and upon a cursory inspection of the data, before any egg-diameter histograms had been plotted.

Figure 19 shows the egg-diameter histograms for 1983. These display the same pattern as the histograms for the 1984 data (Fig. 8). Therefore, the same classifications derived for the 1984 data may be applied to the 1983 data:

1. Eggs less than 2.5 mm in diameter came from an immature chinook.



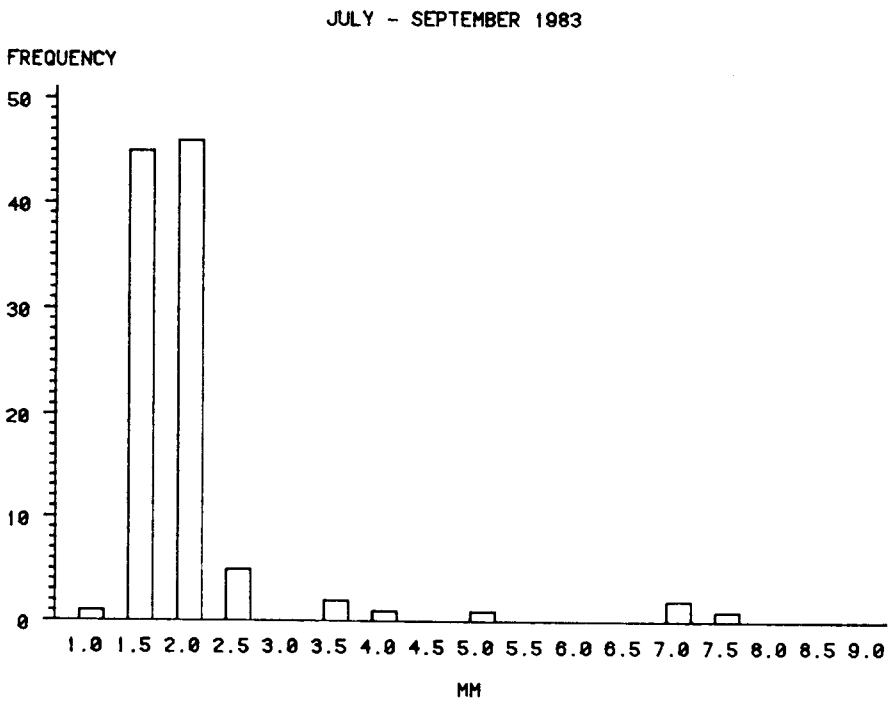


Figure 19. Frequency Distributions of Mean Egg Diameters from Chinook Salmon Harvested in Southeast Alaskan Sport Fisheries During April-June and July-September, 1983.

2. Eggs between 2.5 mm and 4.5 mm in diameter came from a mature fall spawner.

3. Eggs greater than 4.5 mm in diameter collected in April through July came from a mature spring spawner.

4. Eggs greater than 4.5 mm in diameter collected after August came from a fall spawner.

These assumptions did not alter the final 1983 results drastically (Table 76). As in 1984, the Haines and Wrangell recreational fisheries harvested the highest percentage of mature spring spawners, while the Juneau fishery harvested a lower percentage.

Tag Recoveries

Hatcheries produced a record number of chinook and coho salmon for sport harvest. Anglers in Juneau, Ketchikan, Petersburg and Wrangell all enjoyed increased numbers of hatchery chinook (Table 77). (Only the Sitka derby data displayed a decrease in hatchery harvest, but the high contribution estimated for 1983 was based upon only two tag recoveries and was believed to be an artifact of sample size: Neimark 1984a.) Ketchikan anglers harvested the highest percentage of hatchery chinook (23.7%), up from 9.6% in 1983; while Juneau anglers harvested the highest number of hatchery chinook, 577 fish, up from 46 fish in 1983.

The ADF&G Crystal Lake Hatchery produced the most chinook for southeast Alaska recreational fisheries. It contributed to the marine harvests in Juneau and Petersburg (Table 56) and created a roadside fishery in Blind Slough that generated 1,640 hours of angling effort with a harvest of 105 jack chinook salmon (Table 9). In addition, Crystal Lake Hatchery was an important producer of coho salmon for the Petersburg roadside fishery: an estimated 2,002 coho were taken at Blind Slough, and 279 coho were taken at Ohmer Creek, an alternate release site (Table 35). The Petersburg marine creel survey ended July 14, before any contribution of Crystal Lake coho to the marine fishery could be detected (excluding the harvests at the mouths of Blind Slough and Ohmer Creek).

The Neets Bay and Whitman Lake Hatcheries produced most of the hatchery coho harvested in southeast Alaskan sport fisheries (Table 57). Both are located near Ketchikan, where the hatchery coho harvest jumped from 398 fish (9.9%) in 1983, fish to 5,181 fish (36.4%) in 1984, the largest recorded for southeast Alaska (Table 77). Neets Bay and Whitman Lake Hatcheries are private, non-profit hatcheries operated by the Southern Southeast Regional Aquaculture Association (SSRAA).

Its sister organization, the Northern Southeast Regional Aquaculture Association (NSRAA), operated the Salmon Creek Hatchery, which was the largest producer of hatchery coho for Juneau anglers. The Salmon Creek facility produced 360 coho for the Juneau marine fishery and 1,698 coho for the Juneau roadside fishery at Salmon Creek (Table 34). Additionally, Salmon Creek coho smolt were used to stock Twin Lakes,

Table 77. Contributions of Hatchery-Reared Chinook Salmon and Coho Salmon to Southeast Alaskan Marine Recreational Fisheries, 1983 and 1984. (The Number of Hatchery-Reared Salmon and the Percentage of Hatchery-Reared Salmon in the Total Harvest of Each Fishery Are Displayed.)

Area	Year	Survey Dates	Hatchery Chinook Harvest (No.)	Hatchery Chinook Harvest (%)	Hatchery Coho Harvest* (No.)	Hatchery Coho Harvest* (%)
Juneau**	1983	04/17-10/01	46	1.1%	227	1.8%
	1984	04/29-09/29	577	8.9%	494	4.9%
Ketchikan	1983	05/01-07/09	350	9.6%	398	9.9%
	1984	04/29-09/29	432	23.7%	5,181	36.4%
Petersburg	1983	05/01-07/16	23	5.8%	0	0.0%
	1984	04/29-07/14	140	14.8%	0	0.0%
Sitka Derby	1983	...	100	68.0%	0	0.0%
	1984	05/26-05/28, 06/02-06/03	15	4.2%	0	0.0%
Wrangell	1983	04/17-07/02	0	0.0%	0	0.0%
	1984	04/15-06/30	66	5.9%	0	0.0%

* Surveys in Petersburg, Wrangell, and Ketchikan (1983 only), and during the Sitka derby ended before most coho fishing began; therefore, the number of hatchery coho harvested in these areas may have been greater.

** Including the Golden North Salmon Derby harvest.

creating a land locked coho fishery for Juneau (Neimark, 1984b, 1984c). It was unfortunate that the Salmon Creek Hatchery permanently halted production in 1984, after failing to secure water rights to Salmon Creek reservoir, which is controlled by a local hydroelectric power company. However, Juneau anglers will still benefit from previous releases of coho which are scheduled to return in 1985.

Pink Salmon Enhancement Survey

It was not possible to measure the contribution of hatchery pink salmon to the marine recreational fisheries since most hatcheries do not tag their pink salmon releases. Yet it was easy to see the bountiful harvests of roadside anglers fishing near pink salmon hatcheries. In Ketchikan, over 1,500 pinks were harvested at Mt. Point Rocks, near the Whitman Lake hatchery (Table 36), and, in Juneau, almost 4,000 pinks were harvested near the Auke Creek, Salmon Creek, and Sheep Creek hatcheries (Table 34). The roadside harvest greatly surpassed the Juneau marine harvest of 2,260 pinks (Table 11) and clearly demonstrated the benefit of pink salmon enhancement for roadside fisheries.

On the other hand, even in a year of poor pink salmon fishing, only a minority of Juneau anglers favored pink salmon enhancement of the marine fishery (Fig. 9). Many of the anglers that did favor enhancement were also roadside pink salmon fishermen. Instead, anglers expressed a preference for production of the more desirable (Schwan, 1984) chinook and coho species.

Many private, non-profit hatcheries prefer to raise pink salmon because the pink's shorter, less complex, life cycle results in a quicker return on investment. However, marine anglers would gain more from hatcheries which offered to produce chinook or coho salmon, or other preferred recreational species like steelhead trout. The State could also provide these hatcheries additional financial incentives, beyond the existing subsidized loan program, in the forms of reduced interest rates or extended terms. In return, the State would benefit from a probable increase in the value of the marine recreational fishery, including dollars generated by the sport-fishing industry and tourism, and an increased in opportunities for recreation and relaxation for sport anglers.

LITERATURE CITED

Ericksen, R.P. 1985. 1984 Haines-Skagway Management Report. Alaska Department of Fish and Game: 20 pp.

Kissner, P.D., Jr. 1974. A study of chinook in southeast Alaska. Alaska Department of Fish and Game, Anadromous Fish Studies, Annual Report of Progress, 1973-1974, Project F-9-6, 15 (AFS-41-2): 30 pp.

Marriott, R.A., A.E. Schmidt, and D.E. Jones. 1979. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1978-1979, Project F-9-11 20(G-I-Q): 58 pp.

Mattson, R.W. 1975. The Juneau area chinook salmon fisheries, with particular emphasis on the sport fishery, 1960-1973. Master's thesis, University of Washington, Seattle: 82 pp.

Neimark, L.M. 1984a. Harvest estimates of selected fisheries throughout Southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress, 1984-1985, Project F-9-16, 25 (G-I-Q-1): 1-105.

_____. 1984b. Harvest estimates of selected fisheries throughout southeast Alaska--Part 2, Juneau Roadside. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress, 1983-1984, Project F-9-16, 25 (G-I-Q-2): 106-132.

_____. 1984c. Enhancement of the recreational fishing opportunities in the Juneau area. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress, 1983-1984, Project F-9-16, 25 (G-III-A).

Neimark, L.M., and M. W. Schwan. 1983. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress, 1982-1983, Project F-9-15, 24 (G-I-Q-B): 31 pp.

Robards, F.S. 1976. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1975-1976, Project F-9-8, 17 (G-I-Q): 13 pp.

_____. 1977. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1976-1977, Project F-9-9, 18 (G-I-Q): 41 pp.

_____. 1978. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1977-1978, Project F-9-10, 19 (G-I-Q): 48 pp.

Schmidt, A.E., and F.S. Robards. 1973. Inventory and cataloging of the sport fish and sport fish waters in southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress 1972-73, Project F-9-5, 14 (G-I-A): 62 pp.

_____. 1974. Inventory and cataloging of the sport fish and sport fish waters in southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Progress, 1973-1974, Project F-9-6, 15 (G-I-A): 125 pp.

_____. 1975. Inventory and cataloging of the sport fish and sport fish waters in southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Report of Performance, 1974-1975, Project F-8-7, 16 (G-I-A): 111 pp.

Schwan, M.W. 1980. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1979-1980, Project F-9-12, 21 (G-I-Q-B): 16-62.

_____. 1981. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-13, 22 (G-I-Q-B): 23-46.

_____. 1982. Harvest estimates of selected fisheries throughout southeast Alaska. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report, 1981-1982, Project F-9-14, 23 (G-I-Q-B): 34 pp.

_____. 1984. Recreational fisheries of southeast Alaska, including Yakutat: an assessment. Alaska Department of Fish and Game: 143 pp.

Wright, S. 1970. A review of the subject of hooking mortalities in Pacific salmon (*Oncorhynchus*). State of Washington, Department of Fisheries, Management and Research Division. A Report Prepared for the Salmon Research Staff of the Pacific Marine Fisheries Commission: 38 pp.

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