

REF 90198

ANNUAL REPORT  
IRON GATE SALMON AND STEELHEAD HATCHERY  
EIGHTH YEAR OF OPERATION, 1972-73<sup>1/</sup>

by

Eugene E. Arnold  
Region 1, Inland Fisheries

ABSTRACT

This report describes the operation of the hatchery from July 1, 1972 through June 30, 1973. The hatchery was constructed to maintain runs of king salmon (Oncorhynchus tshawytscha), silver salmon (O. kisutch) and steelhead (Salmo gairdnerii gairdnerii) that formerly utilized spawning and rearing areas upstream from Iron Gate Dam on the Klamath River.

Tables present daily records of water temperatures and weather conditions, daily numbers of salmonids entering the hatchery, and total numbers of salmonids reared and released.

---

<sup>1/</sup> Anadromous Fisheries Branch Administrative Report No. 74-3  
Submitted July 1973

## INTRODUCTION

This report covers the twelfth year of operation of the trapping facilities at Iron Gate. These facilities were completed by the Pacific Power and Light Company in February 1962, and have been operated by the Department of Fish and Game during the spring and fall of each year.

The hatchery was constructed by the Pacific Power and Light Company to compensate for spawning and nursery areas blocked by the Iron Gate project. This is the eighth report since the hatchery was completed in February 1966. The Department of Fish and Game, under agreement with the Pacific Power and Light Company, began operation of the hatchery in March 1966. The trapping facilities and hatchery are located on the Klamath River 8 miles east of the town of Hornbrook, Siskiyou County.

This report summarizes the numbers of fish trapped and spawned, production of eggs and fish, and water and weather conditions from July 1, 1972 through June 30, 1973.

## PRODUCTION SUMMARY

The first fall-run king salmon arrived at the Iron Gate trapping facilities on September 14, 1972, and the last on November 8, 1972. Spring-run king salmon were taken from July 1, 1972 until August 8, 1972 (for spawning in the fall of 1972), and from May 4, 1973 until June 30, 1973 (for spawning in the fall of 1973). Silver salmon started entering the trap October 13, 1972, and continued until December 20, 1972. Steelhead trout were trapped from September 28, 1972 to May 22, 1973 (Figure A-1). Production data are as follows:

	Number trapped	Females spawned	Number eggs taken	Number fingerlings planted	Number yearlings planted	Total weight planted (kg)	On hand June 30, 1972
<b>King salmon</b>							
Fall-run 1972 BY	3,499	1,706	6,298,549	4,900,000		24,432	100,000
Spring-run 1971 BY	0				9,250	905	0
Spring-run 1972 BY*	101	22	78,775				38,000
Spring-run 1973 BY	49						
<b>Silver salmon</b>							
1971 BY	0				47,700	1,803	0
1972 BY	91	17	36,218				19,900
<b>Steelhead</b>							
1972 BY	0			193,000	520,400	17,787	0
1973 BY	1,286	556	1,244,334				1,075,000

\* A total of 80 adult 1972 brood year spring-run adults was trapped during the previous reporting period. Surviving fish from this group were combined with 101 trapped this year for spawning in the fall of 1972.

## KING SALMON MAINTENANCE PROGRAM

### History of the 1972-73 Run

#### Spring Run, 1972 Brood Year

Between July 1, 1972 and August 8, 1972, 101 1972 brood year spring-run king salmon were trapped. Four of these were grilse. They were added to the 80 1972 brood year spring-run king salmon taken in June 1972, and the combined group was spawned in the fall of 1972. The fish ladder was closed in mid-August 1972 to conserve the cold water pool in Iron Gate Reservoir.

Twenty-two spring-run females were spawned. They produced 78,775 eggs. This was an average of 3,581 eggs/female. A total of five lots of eggs was taken. The average fertility of these eggs was 85%. Spring- and fall-run salmon are being reared separately.

#### Fall Run, 1972 Brood Year

The fish ladder was reopened September 14, 1972. A total of 3,499 fall-run king salmon was trapped: 1,126 males, 1,897 females and 476 grilse.

There were 1,706 fall-run king salmon females spawned, producing 6,298,549 eggs, for an average of 3,690 eggs/female. Prespawning mortality was 191 females (10.1%). Twenty-four lots of eggs were taken from fall-run fish. The average fertility of the fall-run eggs was 85%.

#### Spring Run, 1973 Brood Year

The 1973 brood year spring-run king salmon began entering the trap May 4, 1973. A total of 49 adults and no grilse had been collected by June 30, 1973. These will be held and spawned in the fall of 1973.

#### Marked King Salmon

During fiscal year 1972-73, eight marked king salmon were trapped. Five were Iron Gate Marks; three were strays. The marks were as follows:

Mark	Number trapped	Brood year	Number released	Date released	Average wt. at release (g)	Release site
IP	3	1967	3,360	11/68	22.7	Iron Gate Hatchery
IV	2	1970*	6,487	3/72	108.1	Iron Gate Hatchery
Ad-An	1	1968*	60,000	12/69	**	Rogue River
IV	1	1967	100,000	11/68	26.1	Trinity River Hatchery
RP	1	?	?	?	?	?

\* Spring run.

\*\* Average length of fish released was 17.8 cm.

Planting 1971 Brood Year Spring-run King Salmon and 1972 Brood Year Fall-run King Salmon

Race and brood year	Date released	Average weight (g)	Number released	Release site
Spring run, 1971 BY	11/ 3/72	82.5	4,650*	Hatchery outlet
	2/ 6/73	113.5	4,600**	"
Fall run, 1972 BY	5/25/73	5.0	2,500,000	"
	6/ 4/73	4.9	2,400,000	"

\* Marked LV, fall release.

\*\* Marked RV, spring release.

SILVER SALMON MAINTENANCE PROGRAM

History of the 1972 Run

The first silver salmon entered the trap October 13, 1972, and the last December 20, 1972. A total of 91 was trapped: 38 males, 18 females, and 35 grilse. Ten were marked (see following table). Spawning of 17 females produced 36,218 eggs for an average of 2,130 eggs/female. All 1972 brood year silver salmon will be held over for release as yearlings.

Marked Silver Salmon Trapped

Mark	Number trapped	Brood year	Number released	Date released	Average wt. at release (g)	Release site
An-LV	3	1969	29,500	12/70	45.4	Iron Gate Hatchery
Ad-An-RV	2	1969	17,780	3/71	75.7	"
An-RV	5	1969	27,075	3/71	75.7	"

Planting 1971 Brood Year Silver Salmon

Date	Average wt (g)	Number	Release site
10/26/72	37.8	47,700	Hatchery outlet

# STEELHEAD TROUT MAINTENANCE PROGRAM

## History of the 1972-73 Run

Between September 28, 1972 and November 21, 1972, 226 adult steelhead entered the trap and were placed in the holding ponds to await spawning in the spring. An additional 1,060 adult steelhead were trapped in the spring between January 30, 1973 and May 22, 1973. For the fifth consecutive year, these two groups were held and spawned separately. Fifty-seven females from the fall-trapped group produced 125,113 eggs, an average of 2,195 eggs/female. Four hundred and ninety-nine spring-trapped females produced 1,119,221 eggs, an average of 2,243 eggs/female. This made a total of 1,244,334 steelhead eggs, from 556 females, for the season.

### Marked Steelhead Trapped

A total of 268 marked steelhead was trapped this season. Of these, 201 had been reared at Iron Gate Hatchery. The Ad-RV were progeny of fall-trapped adults; the LV-RV were progeny of spring-trapped adults (see following table).

Mark	Number trapped	Brood year	Number released	Date released	Average wt. at release (g)	Release site
Ad-RV	114	{ 1970	50,000	5/ 3/71	45.4	Iron Gate Hatchery
Ad-RV		{ 1969	47,395	5/ 4/70	48.3	"
Ad-RV		{ 1968	36,524	5/12/69	46.3	"
LV-RV	87	{ 1970	50,000	5/ 3/71	43.7	"
LV-RV		{ 1969	57,230	6/18/70	45.9	"
Ad	24	{ 1969	43,750	4 & 5/70	28-45	China Slide (Trinity River)
Ad		{ 1969	67,400	5/70	25-28	Pecwan (Klamath River)
LV	1	{ 1969	20,000	4/70	56.8	Trinity River Hatchery
LV		{ 1970	35,100	4/71	69.8	"
RV	14	{ 1969	21,000	4/70	52.2	Pecwan (Klamath River)
RV		{ 1970	35,000	4/71	46.8	"
Ad-LV	28	1969	36,113	3/70	*	Upper Rogue River

\* Average length of fish released was 12.7 cm.

### Planting 1972 Brood Year Steelhead

A total of 713,400 1972 brood year steelhead was planted this season-- 193,000 fingerlings in the fall of 1972, and 520,400 yearlings in the spring of 1973 (see following table).

Date	Average wt (g)	Number	Release site
9/28/72	3.1	150,000	Hatchery outlet
10/19/72	9.1	43,000	"
TOTAL FINGERLINGS		193,000	
4/25/73	22.7	10,000*	"
5/ 1/73	30.3	9,000*	"
5/ 4/73	30.3	100,000	"
5/ 8/73	37.8	12,000*	"
5/11/73	37.8	178,000	"
5/11/73	34.9	130,400	"
5/15/73	32.4	81,000*	"
TOTAL YEARLINGS		520,400	
TOTAL 1972 BROOD YEAR		713,400	

\* Includes 2,000 marked LV plus freeze brand and 2,000 marked RV plus freeze brand (a total of 16,000 marked fish was released between April 25 and May 15, 1973).

On April 24, 1968, the Department entered into an agreement with the Pacific Power and Light Company and the Oregon Game Commission to rear, mark and release 100,000 yearling steelhead at Iron Gate Hatchery annually for a 4-year period. This was done as part of efforts to establish a steelhead fishery in the river between Copco Lake, which lies just south of the California-Oregon border, and Klamath Falls. When these fish return as adults, they are trucked to the upper Klamath River by the Oregon Game Commission. This agreement has involved four separate brood years of steelhead. The marking phase of the agreement was concluded in 1970.

This year, 207 adult steelhead trapped at Iron Gate Hatchery were transported by the Oregon Game Commission and planted in the Klamath River above Copco Lake. This is the third year adults marked for this program have returned to the hatchery.

#### PUBLIC RELATIONS

During the period of this report, 7,626 people visited the hatchery. Included in the total were 714 people in many organized groups which were conducted through the installation.

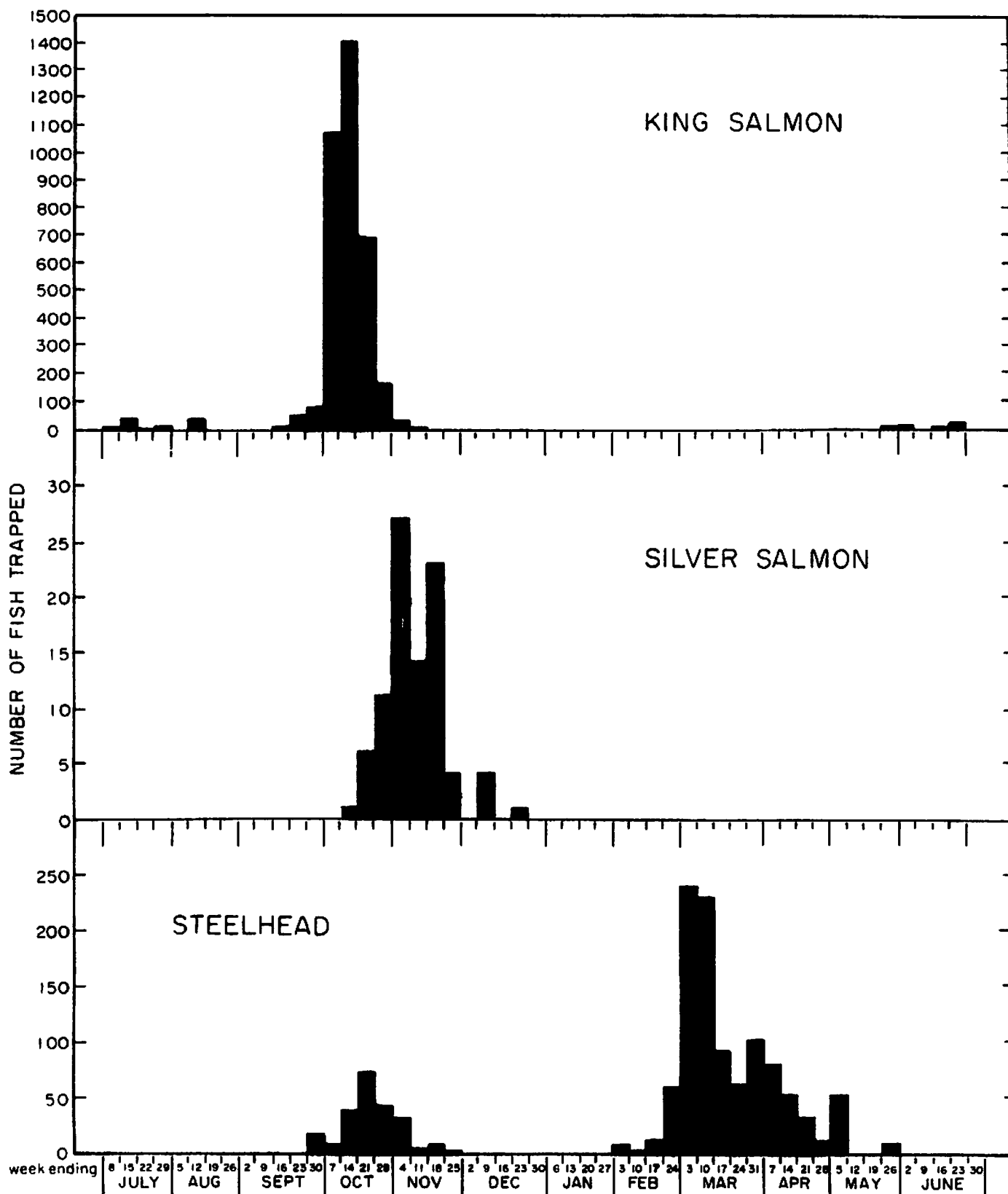


Figure A-1. Weekly numbers of king salmon, silver salmon and steelhead trapped at Iron Gate Hatchery, July 1, 1972 through June 30, 1973.

TABLE A - 1

Yearly Comparison of Fish Trapped at  
Iron Gate Salmon and Steelhead Hatchery  
July 1, 1965 through June 30, 1973

Species	7/1/65 through 6/30/66	7/1/66 through 6/30/67	7/1/67 through 6/30/68	7/1/68 through 6/30/69	7/1/69 through 6/30/70	7/1/70 through 6/30/71	7/1/71 through 6/30/72	7/1/72 through 6/30/73
King Salmon								
Male	141	1,129	850	972	539	2,889	4,413	1,126
Female	224	1,610	1,275	1,714	474	7,395	6,033	1,919
Total Adults	365	2,739	2,125	2,686	1,013	10,284	10,526	3,200*
Grilse	313	325	562	78	1,917	219	315	484
Total	678	3,064	2,687	2,764	2,930	10,503	10,846	3,684*
Silver Salmon								
Male	2	2	27	14	84	716	74	38
Female	0	2	24	10	118	671	52	18
Total Adults	2	4	51	24	202	1,387	125	56
Grilse	0	0	28	333	749	236	21	35
Total	2	4	79	357	951	1,623	146	91
Steelhead								
Spring Trap					813	2,073	3,583	1,060
Fall Trap					381	292	174	226
Total Adults	227	299	934	370	1,194	2,365	2,757	1,286

\* This total includes 155 unsexed spring-run king salmon.



Table A-2  
Iron Gate Salmon and Steelhead Hatchery  
Weather, Water, and Fish Data Report  
July 1, 1972, through June 30, 1973

July	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	36.1	11.1	11.1	10.0	clear	5				
2	38.9	13.9	11.7	10.6	clear					
3	37.8	18.9	11.1	10.6	clear	3				
4	38.9	15.6	10.6	10.6	clear					
5	36.7	13.3	10.6	10.6	clear					
6	32.2	13.3	11.1	10.6	clear	3				
7	32.2	8.9	11.1	10.0	clear					
8	28.3	7.8	10.6	10.0	clear					
9	27.8	7.2	11.1	10.6	clear					
10	28.9	7.2	11.1	10.0	clear					
11	31.1	11.1	11.7	10.6	clear	40				
12	36.1	12.2	11.1	10.6	clear					
13	33.3	11.1	11.7	10.0	clear					
14	40.0	13.3	11.7	10.0	clear					
15	40.6	20.0	11.1	10.0	clear					
16	38.3	15.0	11.7	10.0	clear					
17	37.8	15.0	11.7	10.0	clear					
18	33.3	12.8	11.1	10.6	clear					
19	28.9	9.4	11.7	10.0	clear	2				
20	26.7	13.9	11.7	10.0	clear					
21	30.0	7.2	11.1	10.0	cloudy					
22	31.1	10.0	11.7	11.1	cloudy					
23	28.3	11.7	11.1	10.6	pty cloudy					
24	32.2	13.9	11.7	10.6	pty cloudy	2	2			
25	33.9	11.1	11.1	10.0	clear					
26	32.8	11.1	11.1	10.0	clear	4	2			
27	35.0	10.6	11.7	10.6	clear					
28	37.8	12.2	11.1	10.0	clear					
29	33.9	12.2	11.7	10.0	pty cloudy					
30	33.9	12.2	11.7	10.0	pty cloudy					
31	33.3	10.0	11.7	10.6	clear					
Totals						59	4			

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

August	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	28.9	9.4	11.7	10.6	clear					
2	31.7	7.8	11.7	10.0	clear					
3	36.7	8.3	12.8	11.7	clear					
4	38.9	12.2	13.3	12.2	clear					
5	38.9	13.9	13.3	12.8	clear					
6	41.7	14.4	13.3	12.8	clear					
7	42.2	14.4	13.3	12.8	clear					
8	37.8	18.3	13.3	12.8	pty cloudy		8			
9	36.7	15.6	13.9	12.8	pty cloudy		30			
10	37.2	13.9	13.9	12.8	clear					
11	32.2	13.3	13.3	12.8	clear					
12	35.0	10.0	13.9	12.8	pty cloudy					
13	26.7	11.7	13.9	12.8	pty cloudy					
14	25.6	7.2	13.3	13.3	pty cloudy					
15	21.1	10.0	13.3	13.3	cloudy					
16	21.1	8.9	13.3	12.8	cloudy					
17	24.4	2.8	13.3	12.8	clear					
18	27.8	6.7	13.3	12.8	cloudy					
19	28.3	11.1	13.3	12.8	pty cloudy					
20	28.3	11.1	13.3	12.8	cloudy					
21	31.7	8.9	13.3	12.8	clear					
22	27.8	9.4	13.3	13.3	clear					
23	32.2	7.2	13.9	12.8	clear					
24	28.9	8.9	13.9	13.3	clear					
25	33.9	8.3	13.3	12.8	clear					
26	35.6	12.8	13.9	12.8	clear					
27	37.8	11.7	13.9	13.3	clear					
28	37.8	12.8	13.9	13.3	clear					
29	35.0	14.4	13.9	11.7	clear					
30	32.2	12.2	12.2	11.7	clear					
31	34.4	10.6	12.2	11.1	clear					
Totals							38			

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

September	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	35.6	11.7	12.2	11.7	clear					
2	35.0	12.2	12.2	11.7	pty cloudy					
3	35.0	15.6	12.2	11.7	pty cloudy					
4	32.2	15.6	12.2	11.7	cloudy					
5	25.0	13.9	12.2	11.7	rain					
6	23.3	5.6	12.2	11.7	clear					
7	28.9	5.6	12.2	11.7	clear					
8	28.9	5.6	12.2	11.7	clear					
9	26.7	5.6	12.8	11.7	clear					
10	25.6	3.3	12.8	12.2	clear					
11	21.7	2.8	12.2	12.2	clear					
12	24.4	0.6	12.8	11.7	clear					
13	27.2	4.4	12.2	11.7	clear					
14	31.1	2.2	12.8	11.7	clear	2	5			
15	32.2	2.8	12.8	12.2	clear					
16	32.2	5.6	12.2	11.7	clear					
17	30.6	6.7	12.2	11.7	clear					
18	25.6	5.6	12.8	11.7	clear	1				
19	18.9	8.9	13.3	11.7	pty cloudy					
20	22.2	-1.1	12.8	11.7	pty cloudy					
21	23.3	3.9	12.8	12.2	cloudy	8				
22	22.2	2.8	13.9	12.2	clear	2				
23	18.9	4.4	13.9	12.2	cloudy	26	8			
24	18.9	0.6	12.8	13.3	pty cloudy					
25	17.8	1.7	13.3	12.8	pty cloudy	2	1			
26	16.7	8.9	12.8	12.8	rain	5				
27	20.0	7.8	12.8	12.8	rain	7	4			
28	18.9	1.1	13.3	13.3	pty cloudy	7				10
29	25.6	1.7	13.3	13.9	clear	20				5
30	28.3	3.3	13.9	13.3	clear	29	3			4
Totals						109	21			19

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

October	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	28.9	5.6	14.4	13.9	clear	75	2			
2	28.9	4.4	13.9	13.3	clear	83	10			2
3	28.9	4.4	13.9	13.9	clear	90	25			
4	27.8	4.4	13.9	13.9	clear	126	18			3
5	23.3	7.2	13.9	13.9	clear	128	28			
6	25.0	0	13.9	13.9	clear	187	30			
7	26.7	10.0	14.4	13.9	pty cloudy	217	56			2
8	25.6	5.6	13.9	13.9	pty cloudy	193	30			1
9	20.0	5.6	13.9	13.3	rain	148	18			2
10	17.8	7.2	13.3	13.3	rain	236	28			3
11	17.8	5.6	13.3	13.3	rain	90	18			3
12	20.6	4.4	13.3	13.3	cloudy	156	25			9
18	22.8	4.4	13.3	13.3	cloudy	192	23	1		8
14	20.0	4.4	13.3	13.3	cloudy	232	18			13
15	22.2	3.9	13.3	13.3	rain	80	8			2
16	18.9	2.8	13.3	13.3	rain	169	28	1		16
17	18.9	1.7	13.3	13.3	pty cloudy	42	16		1	12
18	21.1	2.2	13.3	12.8	clear	81	24	2	2	8
19	21.1	0.6	12.8	12.8	clear	75	6			6
20	20.0	0	12.8	12.8	pty cloudy	75	17			21
21	21.1	0.6	12.8	12.8	clear	58	6			9
22	21.1	2.8	12.8	12.8	clear	37	4	3		10
23	20.6	1.7	12.8	12.8	clear	48	6	2		9
24	19.4	1.1	12.8	12.8	pty cloudy	24	1		1	11
25	21.1	-2.2	12.8	12.8	clear					
26	14.4	-1.1	12.2	12.2	clear	30	2	2		2
27	15.6	-5.6	12.2	11.7	clear	8	4	1	2	11
28	15.0	-3.3	12.2	11.7	rain					
29	9.4	-1.1	12.2	11.7	pty cloudy	14	1	2	1	11
30	11.1	-6.7	11.7	11.1	pty cloudy					
31	15.6	-4.4	11.1	11.1	pty cloudy	10		3	6	16
Totals						2,904	452	17	13	190

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

November	Temperature (C*)					Fish trapped				
	Air		Water		Weather	King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	10.0	4.4	10.6	10.6	cloudy	1	2	4	4	
2	16.7	-0.6	10.6	10.0	cloudy					
3	14.4	3.3	10.0	10.0	cloudy	4	1	3	4	5
4	12.2	5.0	10.0	9.4	rain					
5	12.2	-0.6	10.0	9.4	clear	3		3	2	1
6	13.3	-0.6	9.4	9.4	cloudy	2		5	4	3
7	10.0	3.3	10.0	9.4	cloudy					
8	11.1	2.2	9.4	8.9	pty cloudy					
9	10.0	1.1	9.4	8.9	rain					
10	12.2	-1.1	8.9	8.9	pty cloudy					
11	11.1	4.4	8.9	8.3	cloudy					
12	12.2	-1.7	8.9	8.3	pty cloudy			5	4	6
13	11.1	5.0	8.9	7.8	pty cloudy			6	1	
14	12.2	1.1	8.3	8.3	pty cloudy			6	1	1
15	8.9	-5.0	8.3	7.8	pty cloudy					
16	12.2	2.2	7.8	7.2	rain					
17	10.0	-3.9	7.8	7.2	pty cloudy					
18	11.1	-1.1	7.2	6.7	pty cloudy					
19	9.4	2.8	7.2	6.7	rain					
20	8.9	1.7	6.7	6.7	pty cloudy					
21	6.7	0	6.7	6.7	rain			3	1	1
22	7.8	-2.8	6.7	6.1	clear					
23	6.7	-5.6	6.7	6.1	cloudy					
24	10.0	-6.1	6.1	5.6	clear					
25	11.1	-1.1	6.1	5.6	cloudy					
26	11.1	5.6	5.6	5.6	rain					
27	9.4	-5.6	5.6	5.6	clear					
28	12.2	-0.6	5.0	5.0	clear					
29	12.8	-3.9	5.0	4.4	clear					
30	14.4	-5.0	5.0	4.4	clear					
Totals						10	3	35	21	17

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

December	Temperature (C*)				Weather	Fish trapped				Steelhead
	Air		Water			King salmon		Silver salmon		
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	9.4	-5.0	5.0	4.4	fog					
2	7.2	-6.1	4.4	4.4	fog					
3	2.8	2.2	4.4	4.4	snow					
4	2.2	-8.3	4.4	4.4	pty cloudy			3	1	
5	-2.2	-7.8	5.0	4.4	snow					
6	3.3	-6.7	4.4	4.4	pty cloudy					
7	1.7	-12.2	4.4	4.4	cloudy					
8	-9.4	-20.0	4.4	3.9	pty cloudy					
9	-13.9	-27.8	3.9	3.3	cloudy					
10	-11.1	-26.7	3.9	3.3	clear					
11	-5.6	-25.6	3.9	3.3	clear					
12	1.1	-16.1	3.9	3.3	snow					
13	0.6	-15.0	3.9	2.8	cloudy					
14	-2.2	-11.1	3.3	2.8	clear					
15	4.4	-13.3	3.3	2.8	cloudy					
16	6.7	-12.2	2.8	2.8	cloudy					
17	7.8	0.6	3.3	2.2	rain					
18	6.7	0.0	3.3	2.2	rain					
19	7.2	0.0	3.9	3.3	rain					
20	9.4	1.1	3.9	2.8	cloudy			1		
21	13.3	2.8	4.4	3.3	rain					
22	10.6	3.3	4.4	3.9	rain					
23	8.9	-2.2	3.9	3.3	rain					
24	10.0	-1.7	3.9	3.3	pty cloudy					
25	21.1	-4.4	3.9	3.9	clear					
26	8.9	-5.0	3.9	3.3	pty cloudy					
27	4.4	-3.3	3.9	3.9	rain					
28	6.1	-2.8	3.9	3.3	cloudy					
29	4.4	-7.8	3.9	3.3	cloudy					
30	7.2	-2.2	3.3	2.8	cloudy					
31	7.8	-5.0	3.3	2.8	clear					
Totals								4	1	

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

January	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Gilse	Adults	Gilse	
1	7.2	-8.3	3.3	2.8	clear					
2	5.6	-6.7	3.3	3.3	clear					
3	5.6	-7.8	3.3	3.3	cloudy					
4	3.3	-12.2	3.3	3.3	clear					
5	1.1	-12.2	3.3	3.3	cloudy					
6	4.4	-13.3	3.3	2.8	clear					
7	8.3	-12.8	3.3	2.8	clear					
8	-1.1	-10.0	3.3	2.8	snow					
9	3.9	-3.3	2.8	2.8	snow					
10	2.8	-1.7	2.8	2.8	snow					
11	3.3	-1.1	2.8	2.8	rain					
12	12.8	0.0	2.8	2.8	rain					
13	13.3	3.3	2.8	2.2	pty cloudy					
14	12.8	-2.2	2.8	2.2	pty cloudy					
15	10.0	0.0	2.8	2.8	rain					
16	10.0	0.0	2.8	2.8	rain					
17	10.0	-3.3	2.8	2.8	pty cloudy					
18	7.2	-1.1	2.8	2.8	cloudy					
19	4.4	-5.6	2.8	2.8	cloudy					
20	3.3	-6.7	2.8	2.2	snow					
21	4.4	-1.1	3.3	2.8	cloudy					
22	5.6	-1.1	3.3	3.3	pty cloudy					
23	4.4	-8.3	3.3	3.3	pty cloudy					
24	5.6	-10.0	3.3	3.3	pty cloudy					
25	4.4	-2.2	3.9	3.3	snow					
26	4.4	-10.0	3.9	3.3	clear					
27	4.4	-7.2	3.9	3.3	clear					
28	12.2	-6.7	3.9	3.3	pty cloudy					
29	12.2	-6.7	3.9	3.3	pty cloudy					
30	8.3	-5.6	3.9	3.3	pty cloudy					7
31	7.8	-6.7	3.3	3.3	pty cloudy					1
Totals										8

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

February	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	8.9	-6.7	3.3	3.3	pty cloudy					
2	9.4	-2.2	3.3	3.3	cloudy					
3	11.1	1.1	3.3	3.3	rain					
4	8.3	-2.8	3.3	3.3	rain					
5	11.1	0.6	3.3	3.3	pty cloudy					
6	10.0	-2.2	3.3	3.3	pty cloudy					
7	11.1	-1.1	3.3	3.3	rain					4
8	11.1	-2.2	3.3	3.3	cloudy					
9	11.7	0.6	3.3	3.3	cloudy					
10	9.4	1.1	3.9	3.3	rain					
11	7.8	-1.1	3.9	3.3	cloudy					
12	9.4	-1.1	3.9	3.9	cloudy					
13	12.2	-6.1	3.9	3.9	clear					11
14	11.1	2.2	3.9	3.9	rain					
15	12.2	1.1	3.9	3.9	clear					2
16	13.9	-4.4	3.9	3.9	clear					
17	13.3	-3.3	5.0	3.9	clear					
18	12.2	-7.8	4.4	4.4	clear					
19	14.4	-8.3	4.4	3.9	clear					
20	16.7	-6.7	5.0	4.4	clear					35
21	17.2	-6.7	5.0	5.0	clear					3
22	16.7	-3.9	5.0	4.4	clear					
23	16.7	-3.9	5.0	4.4	clear					22
24	12.8	1.1	5.0	4.4	cloudy					
25	14.4	1.1	5.6	5.0	cloudy					
26	11.1	5.0	5.6	5.6	rain					16
27	11.7	0.6	5.6	5.6	rain					76
28	12.2	0.6	6.1	5.6	cloudy					46
Totals										215

\* Temperature measured to nearest whole degree F, and later converted to C.



Table A-2 (Continued)

March	Temperature (C*)				Weather	Fish trapped				Steelhead
	Air		Water			King salmon		Silver salmon		
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	12.2	0.6	5.6	5.6	cloudy					29
2	13.9	-6.1	6.1	6.1	clear					74
3	13.9	0.0	6.1	5.6	rain					
4	10.0	-1.1	6.1	5.6	cloudy					
5	12.2	-6.7	6.7	6.1	cloudy					114
6	12.2	3.3	6.7	6.1	cloudy					34
7	7.8	1.7	6.7	6.1	cloudy					
8	15.6	-4.4	6.1	6.1	cloudy					82
9	12.8	2.2	7.2	6.1	cloudy					
10	11.7	5.6	6.1	6.1	rain					
11	11.7	-3.9	6.7	6.1	rain					
12	11.1	-6.1	6.7	6.1	cloudy					78
13	8.3	-6.1	6.7	6.1	cloudy					4
14	13.9	-5.6	6.1	6.1	clear					8
15	17.8	-5.6	6.7	6.1	clear					2
16	14.4	1.7	6.7	5.6	rain					
17	7.8	-2.8	6.7	6.7	cloudy					
18	15.0	-3.9	7.2	6.7	pty cloudy					
19	12.2	-5.6	6.7	6.1	pty cloudy					37
20	10.0	-3.3	7.2	6.7	rain					
21	9.4	0.6	7.2	7.2	rain					
22	10.6	-1.1	7.2	7.2	cloudy					27
23	16.7	-5.6	7.2	7.2	clear					
24	20.0	-5.0	7.2	7.2	clear					
25	17.8	0.6	7.2	7.2	clear					
26	15.6	-1.1	7.2	7.2	cloudy					36
27	11.1	0.6	7.8	7.2	rain					
28	9.4	0.6	7.8	7.2	pty cloudy					
29	11.1	-6.7	7.2	7.2	pty cloudy					32
30	10.0	1.1	7.2	7.2	rain					35
31	10.0	-5.6	7.2	7.2	rain					
Totals										592

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

April	Temperature (C*)				Weather	Fish trapped				Steelhead
	Air		Water			King salmon		Silver salmon		
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	8.9	-1.1	7.8	7.2	rain					
2	15.6	-5.6	7.8	7.2	clear					45
3	19.4	-5.6	7.8	7.2	clear					
4	24.4	-3.3	7.8	7.2	clear					
5	22.2	-3.3	7.8	7.2	clear					
6	20.0	7.8	7.2	7.2	clear					36
7	17.8	2.2	9.4	7.8	clear					
8	16.7	-4.4	8.9	7.8	clear					
9	25.0	6.1	7.8	7.8	clear					
10	21.7	1.7	8.3	7.8	clear					39
11	24.4	0.0	7.8	7.8	cloudy					
12	21.1	4.4	8.3	8.3	cloudy					
13	14.4	1.7	8.3	7.8	cloudy					15
14	18.3	-1.7	8.3	7.8	cloudy					
15	18.9	2.2	7.8	7.8	clear					
16	15.6	6.7	8.3	7.8	rain					24
17	11.1	2.8	8.3	7.8	rain					
18	12.2	-2.8	8.3	7.8	rain					10
19	12.2	0.0	8.3	7.2	pty cloudy					
20	12.2	1.1	8.3	7.2	pty cloudy					
21	20.0	-2.2	8.3	7.2	clear					
22	21.1	5.0	8.3	7.2	pty cloudy					
23	16.7	0.0	10.6	7.2	pty cloudy					12
24	21.1	-0.6	11.1	10.0	clear					
25	25.6	0.0	10.0	10.0	clear					
26	28.3	2.8	11.1	10.6	pty cloudy					
27	20.0	4.4	12.2	10.6	clear					
28	17.8	-1.1	11.1	10.0	clear					
29	15.6	3.9	11.1	10.0	clear					
30	18.3	-2.2	11.1	10.0	clear					
Totals										181

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

May	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	23.3	-0.6	10.6	10.0	clear					37
2	23.9	5.0	10.6	10.0	pty cloudy					15
3	21.1	6.7	10.6	10.0	pty cloudy					
4	12.8	3.3	11.1	11.1	pty cloudy	1				2
5	19.4	4.4	11.1	10.6	pty cloudy					
6	20.0	2.2	11.1	10.6	pty cloudy	1				
7	22.8	1.1	11.1	11.1	pty cloudy					
8	22.8	8.9	11.1	10.6	clear					
9	23.3	0.6	11.7	11.1	clear					
10	23.3	1.7	11.7	11.7	clear					
11	26.1	1.1	11.7	11.7	clear					
12	32.8	1.1	11.7	11.1	clear					
13	34.4	8.9	11.7	11.1	clear					
14	32.2	5.6	12.2	11.1	pty cloudy					
15	31.1	10.6	12.8	10.6	pty cloudy					
16	30.6	11.1	10.6	10.0	clear					
17	33.9	11.7	10.6	10.6	pty cloudy					
18	30.0	10.6	11.7	10.6	pty cloudy					
19	23.9	8.3	11.7	10.6	pty cloudy					
20	21.7	4.4	11.7	8.3	clear	5				4
21	28.3	11.1	11.1	8.9	clear					2
22	26.1	5.6	11.7	11.7	clear					4
23	25.0	7.8	11.7	11.1	pty cloudy					
24	18.9	5.6	11.1	11.1	rain	1				
25	15.6	2.8	11.1	11.1	pty cloudy					
26	21.7	1.7	11.1	10.6	clear					
27	23.9	4.4	11.1	11.1	clear					
28	32.2	5.0	11.1	11.1	clear					
29	35.6	7.8	11.1	11.1	pty cloudy	3				
30	30.0	15.6	11.1	11.1	rain					
31	29.4	10.0	11.1	11.1	pty cloudy	2				
Totals						13				64

\* Temperature measured to nearest whole degree F, and later converted to C.

Table A-2 (Continued)

June	Temperature (C*)				Weather	Fish trapped				
	Air		Water			King salmon		Silver salmon		
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Grilse	Steelhead	
1	20.0	3.9	11.7	11.1	clear	2				
2	22.2	6.7	11.7	11.1	clear					
3	23.9	6.1	11.1	11.1	clear					
4	30.6	6.1	11.1	11.1	clear					
5	32.8	8.3	11.1	10.6	clear					
6	32.8	10.0	11.1	10.6	clear					
7	28.9	10.0	11.7	11.1	clear					
8	31.7	8.3	11.7	10.6	clear					
9	33.3	8.9	12.2	11.7	clear					
10	30.0	12.2	11.7	11.1	clear					
11	31.1	7.8	11.7	11.7	clear	5				
12	26.7	9.4	11.7	8.3	pty cloudy	1				
13	20.0	14.4	9.4	8.3	pty cloudy					
14	17.8	5.0	9.4	8.3	pty cloudy					
15	21.7	7.2	9.4	8.3	pty cloudy					
16	25.6	11.1	8.9	7.8	pty cloudy					
17	17.8	6.7	10.0	8.3	pty cloudy					
18	26.1	1.1	8.9	8.3	clear	10				
19	32.2	5.6	8.9	8.3	clear	10				
20	35.0	10.0	8.9	8.3	clear					
21	36.7	6.7	8.9	8.9	pty cloudy					
22	27.8	14.4	8.9	8.3	cloudy	8				
23	26.1	12.8	8.9	8.3	cloudy					
24	30.6	12.2	8.3	8.3	cloudy					
25	32.2	12.2	9.4	8.3	pty cloudy					
26	35.6	12.8	9.4	8.3	clear					
27	36.7	14.4	9.4	8.3	clear					
28	31.1	12.2	9.4	8.3	clear					
29	35.0	10.6	9.4	8.3	clear					
30	33.9	12.8	9.4	8.3	clear					
Totals						36				
Grand Totals						3,169	480	56	35	1,286

\* Temperature measured to nearest whole degree F, and later converted to C.