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DEPARTMENT OF FISH AND GAME

ANNUAL REPORT
IRON GATE SALMON AND STEELHEAD HATCHERY
1976-77

by

Eugene E. Arnold
Region 1, Inland Fisheries

Anadromous Fisheries Branch
Administrative Report No. 77-11

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ABSTRACT

This report describes the operation of the hatchery from July 1, 1976 through June 30, 1977. 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.

Thirteen spring-run and 12,595 fall-run adult king salmon (Oncorhynchus tshawytscha) produced 21,420 and 20,948,585 eggs respectively. The 1,376 adult silver salmon (O. kisutch) produced 1,401,105 eggs. The 1,941 steelhead (Salmo gairdnerii gairdnerii) produced 1,414,708 eggs.

About 8.8 million fingerling and 168,000 yearling king salmon, 18,000 yearling silver salmon, and 186,000 fingerling and 481,000 yearling steelhead were planted in F.Y. 1976-77.

^{1/} Anadromous Fisheries Branch Administrative Report No. 77-11
Submitted July 1977.

INTRODUCTION

This report covers the sixteenth year of operation of the trapping facilities at Iron Gate Hatchery. 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 twelfth 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 eight miles east of the town of Hornbrook, Siskiyou County.

The report summarizes the numbers of fish trapped and spawned, production of eggs and fish, and water and weather conditions from July 1, 1976 through June 30, 1977.

PRODUCTION SUMMARY

The first spring-run king salmon arrived at the Iron Gate trapping facilities on July 1st and 2nd, 1976. Fall-run king salmon were taken from September 10 through November 11, 1976. Silver salmon started entering the trap on October 8, 1976 and continued until March 28, 1977. Steelhead trout were trapped from September 10, 1976 to April 20, 1977 when the trap was closed for yearly maintenance (Figure 1).

Production data are summarized in Table 1.

Table 1. Production Summary

	Adults trapped	Females spawned	Number eggs taken	Estimated number fingerlings planted	Estimated number yearlings planted	Total weight pounds planted	Number eyed eggs shipped	Fish on hand June 30, 1977
King salmon, spring run								
1975 BY					18,188	4,547		
1976 BY	13	7	21,420					8,380
King salmon, fall run								
1975 BY					149,380	15,400		
1976 BY	12,595	7,204	20,948,585	8,800,000		95,260	6,597,819	200,000
Silver salmon								
1975 BY					90,000	6,923		
1976 BY	1,376	717	1,401,150				799,479	230,000
Steelhead								
1976 BY				186,348	480,676	32,756		
1977 BY	1,941	738	1,414,708				532,700	600,000

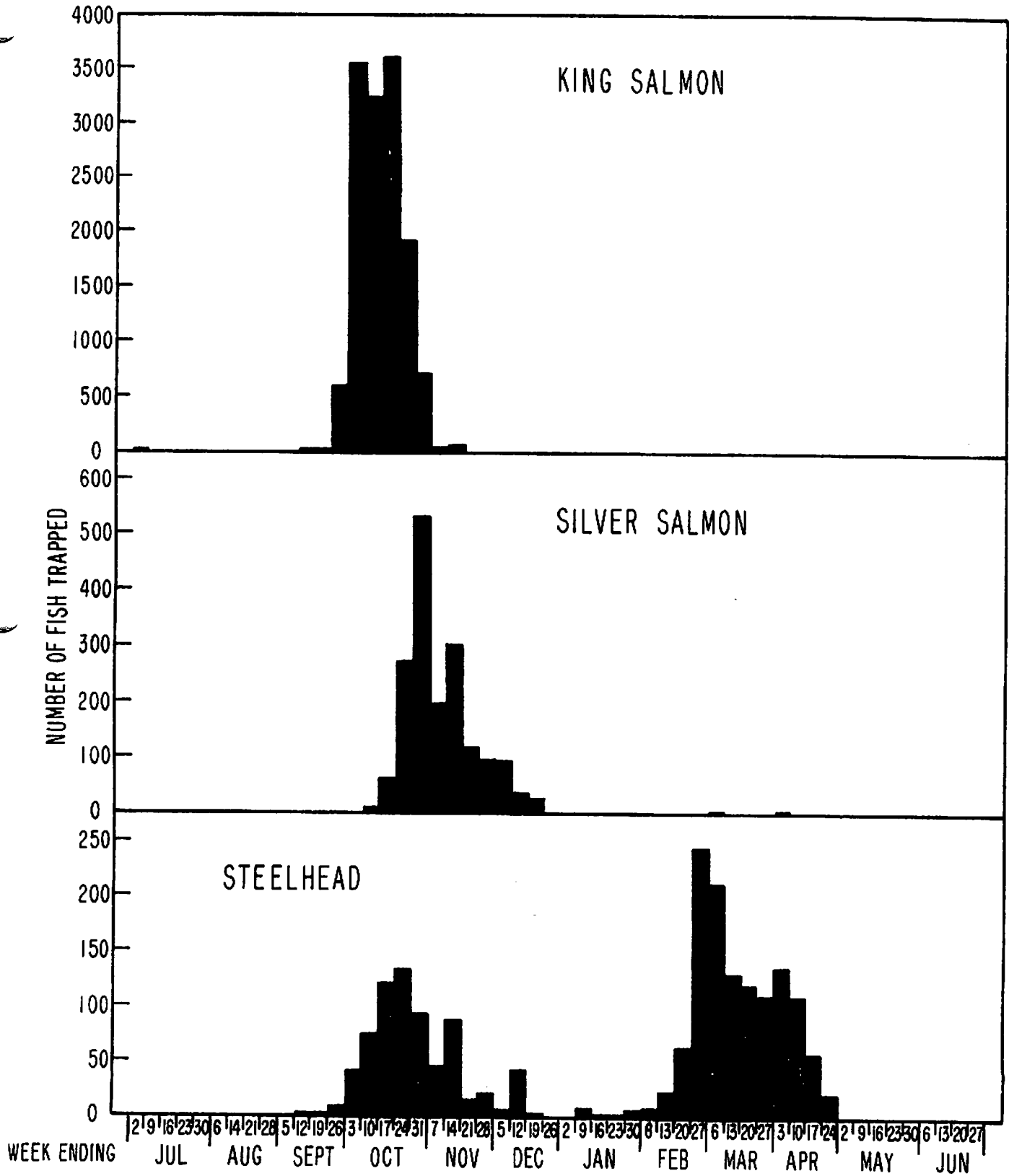


Figure 1. Weekly numbers of king salmon, silver salmon and steelhead trapped at Iron Gate Hatchery, July 1, 1976 through June 30, 1977.

KING SALMON MAINTENANCE PROGRAM

History of the 1976-77 Runs

Spring Run, 1976 Brood Year

Between July 1st and 2nd, 1976, 13 spring-run king salmon were trapped. These 13 adults were held until the fall of 1976 for spawning.

Seven spring-run females were spawned and produced 21,420 eggs, for an average of 3,060 eggs/female. Only two lots of eggs were taken; average fertility was 84%. We had approximately 8,380 fingerlings on hand June 30, 1977. All were to be held for release as yearlings.

Fall Run, 1976 Brood Year

A total of ~~13,250~~ ^{13,725} fall-run king salmon was trapped: 4,604 males, 7,991 females, and 1,130 grilse. There were 7,204 fall-run king salmon females spawned, producing 20,948,585 eggs for an average of 2,908 eggs/female. Prespawning mortality was 787 females (9.9%). Nineteen lost of eggs were taken from fall-run fish. The average fertility for the fall-run eggs was 84%.

Planting 1975-76 Broodyear King Salmon

There were 149,380 yearlings planted from October 10 to December 16, 1976, and 8,800,000 fingerlings planted from June 6 to June 20, 1977 (Table 2). Size at planting ranged from 4 to 9.7/lb for the yearlings and 92 to 93/lb for the fingerlings. An additional 200,000 fingerlings were held for planting in spring, 1978.

We shipped a total of 6,597,819 eyed king salmon eggs: 2,209,510 to Trinity River Hatchery; 4,108,140 to Mad River Hatchery; 80,109 to Humboldt State University; and 200,060 to Silverado Field Operations Base, Region 3.

Table 2. King Salmon Planting Data

Race and brood year	Date released	Average size (no./lb)	Number released	Release site
Spring run, 1975	12/16/76	4	18,188	Hatchery outlet, marked LV
Fall run, 1975	10/27/76	9.7	149,380	Hatchery outlet
Total yearlings			167,568	
Fall-run 1976	6/ 7/77	93	3,300,000	Hatchery outlet
	6/20/77	92	5,500,000	Hatchery outlet
Total fingerlings			8,800,000	

Marked King Salmon Recovered

During Fiscal Year 1976-77 11 marked king salmon were trapped (Table 3). All were Iron Gate marks.

Table 3, Marked King Salmon Recovered

Mark	Number trapped	Brood year	Race	Number released	Date released	Average size	Release site
RV	6	1972	Spring run	12,000	11/ 8/73	8/lb	Hatchery outlet
LV	5	1972	Spring run	12,000	2/27/74	9.8/lb	Hatchery outlet

SILVER SALMON MAINTENANCE PROGRAM

History of the 1976 Runs

The first silver salmon entered the trap October 8, 1976 and the last March 28, 1977. A total of 1,757 was trapped: 795 females, 581 males, and 381 grilse. Spawning of 717 females produced 1,401,150 eggs for an average of 1,954 eggs/female. Egg loss was fairly high, 20%, primarily due to white spot and soft shell. We shipped 347,789 eyed eggs to Moccasin Creek Hatchery and 451,690 eyed eggs to Crystal Lake Hatchery. Approximately 220,000 fingerlings remain on hand June 30, 1977. All are being held for release as yearlings in the spring, 1978.

Planting 1975 Broodyear Silver Salmon

There were 90,000 silver salmon planted during the 1976-77 season (Table 4).

Table 4. Silver Salmon Planting Data

Date	Average size	Number	Release site
1/28/77	13/lb	90,000	Hatchery outlet

STEELHEAD TROUT MAINTENANCE PROGRAM

History of the 1976-77 Run

Between September 10, 1976 and December 31, 1976, 695 adult steelhead entered the trap and were placed in the holding ponds to await spawning in the spring. An additional 1,246 adult steelhead were trapped in the spring between January 3, 1977 and April 20, 1977. For the ninth consecutive year, these two groups were held and spawned separately. The 227 females spawned from the fall trapped group produced 399,418 eggs, an average of 1,759 eggs/female while the 511 females from the spring trapped group produced 1,015,290 eggs for an average of 1,987 eggs/female. This made a total of 1,414,708 steelhead eggs, from 738 females. One hundred surplus adult steelhead were planted in Rock Creek, Siskiyou County. We shipped 532,700 eyed eggs to Trinity River Hatchery. We had approximately 600,000 steelhead fingerlings from the 1977 brood year on hand June 30, 1977.

Marked Steelhead Trapped

A total of 11 marked steelhead was trapped this season (Table 5). Of these, four had been reared at Iron Gate Hatchery.

*No marked SH trapped this season
Table 5. Marked Steelhead Trapped
Chart is a repeat of 75-76 report.*

Mark	Number trapped	Brood year	Number released	Date released	Average size at release	Release site
LP	1					
RP	2	1969	2,285	3/19/70	15/1b	Foots Creek-Rogue River, Oregon
LV	3					
LV-freeze brand	1	1972	2,000	5/ 1/73	15/1b	Iron Gate Hatchery
RV-freeze brand	3	1972	2,000	4/25/73	20/1b	Iron Gate Hatchery
RV-LV	1					

Planting 1976 Broodyear Steelhead

There were 667,024 1976 broodyear steelhead planted this season: 186,348 fingerlings from August 24, 1976 to March 14, 1977, and 480,676 yearlings from April 28, 1977 to May 4, 1977 (Table 6).

Memorandum

To : Recipients of Anadromous Fisheries Branch
Administrative Reports

Date: August 15, 1979

From : Department of Fish and Game

Subject: Errata to AFB Administrative Report No. 77-11

Subject report, Annual Report Iron Gate Salmon and Steelhead Hatchery 1976-77 by Eugene E. Arnold, contained the following errors:

Page 4, paragraph 3: The total number of fall-run king salmon trapped should be 13,725. *Changed*

Page 6, Marked Steelhead Trapped: This section was repeated from the 1975-76 annual report. There is no record of marked steelhead trapped at Iron Gate Hatchery in 1976-77. *Corrected*

Page 7, Steelhead Planting Data: The yearling steelhead planting data should be as follows:

Date(s)	Brood Year	TL	Number	Release site	Mark
4/28-5/3/77	1976	146 mm	429,306	Klamath River	Ad-LP
4/28-5/3/77	1976	153 mm	40,292	Klamath River	Ad-RP
4/28/77	1976(wild)*	131 mm	14,144	Klamath River	Ad-D
TOTAL			483,742		

* From Bogus Pond.

Please make the appropriate changes in copies of the report you have on hand.

D. A. Hoopaugh

David A. Hoopaugh, Editor
Anadromous Fisheries Branch

DAH:alg

Table 6. Steelhead Planting Data

Date	Brood year	Average size (no./lb)	Number	Release site
8/24/76	1976	106.6	64,000	Long Gulch-Iron Gate Lake
12/ 7/76	1976	758	80,348	Camp Creek-Iron Gate Lake
3/14/77	1976	50	42,000	Long Gulch-Iron Gate Lake
Total fingerlings			186,348	
4/28/77	1976	20	220,000	Klamath River-Iron Gate Hatchery
5/2,3,4/77	1976	13	260,676	Klamath River-Iron Gate Hatchery
Total yearlings			480,676	

See Memo

PUBLIC RELATIONS

During the 1976-77 fiscal year, 7,321 people visited the hatchery, including 555 people in organized groups.

Appendix Table 1

Yearly Comparison of Fish Trapped at Iron Gate Salmon and Steelhead Hatchery
July 1, 1967 through June 30, 1977

Species	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	7/1/73 through 6/30/74	7/1/74 through 6/30/75	7/1/75 through 6/30/76	7/1/76 through 6/30/77
<u>King salmon</u>										
Male	850	972	539	2,889	4,413	1,126	3,273	4,024	3,131	4,604
Female	1,275	1,714	474	7,395	6,033	1,919	4,135	5,371	4,571	7,991
Unsexed spring run	-	-	-	-	80	155	22	19	25	13
Total adults	2,125	2,686	1,013	10,284	10,526	3,200	7,430	9,414	7,727	12,608
Grilse	562	78	1,917	219	315	484	1,299	418	3,453	1,130
Total	2,687	2,764	2,930	10,503	10,841	3,684	8,729	9,832	11,180	13,738
<u>Silver salmon</u>										
Male	27	14	84	716	74	38	201	193	45	581
Female	24	10	118	671	52	18	212	263	37	795
Total adults	51	24	202	1,387	126	56	413	456	82	1,376
Grilse	28	333	749	236	21	35	428	41	478	381
Total	79	357	951	1,623	147	91	841	497	560	1,757
<u>Steelhead</u>										
Spring trap	-	-	813	2,073	3,583	1,060	665	2,165	1,100	1,246
Fall trap	-	-	381	292	174	226	1,200	1,062	423	695
Total adults	984	370	1,194	2,365	3,757	1,286	1,865	3,227	1,523	1,941

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Appendix Table 2

Iron Gate Salmon and Steelhead Hatchery
 Weather, Water, and Fish Data
 July 1, 1976, through June 30, 1977

July	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon	Steelhead	
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	Trout
1	50	48	75	30	clear	12				
2	50	48	84	40	clear	1				
3	50	48	86	46	pty cloudy					
4	51	47	87	44	pty cloudy					
5	51	48	93	50	clear					
6	51	48	90	47	pty cloudy					
7	51	48	84	52	pty cloudy					
8	50	58	86	62	clear					
9	50	48	84	48	clear					
10	51	48	92	48	clear					
11	51	48	79	50	cloudy-rain					
12	51	49	81	48	clear					
13	50	48	85	46	clear					
14	51	48	95	45	clear					
15	51	48	98	52	clear					
16	51	48	96	54	clear					
17	50	49	80	60	rain					
18	51	49	89	57	clear					
19	51	48	90	51	pty cloudy					
20	51	48	82	50	clear					
21	51	49	86	49	clear					
22	51	49	97	46	clear					
23	51	49	94	54	clear					
24	51	49	92	56	clear					
25	51	49	99	45	clear					
26	51	50	94	55	clear					
27	51	50	96	53	clear					
28	51	50	98	56	clear					
29	52	50	84	58	rain					
30	51	50	90	49	clear					
31	51	49	94	51	clear					
TOTALS						13				

Appendix Table 2 (cont.)

August	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	Trout
1	51	49	70	56	rain					
2	51	51	80	52	clear					
3	51	50	79	48	showers					
4	51	50	71	55	showers					
5	51	50	76	48	rain					
6	51	50	70	49	thunder-rain					
7	51	50	74	52	pty cloudy					
8	52	50	80	44	clear					
9	52	50	84	47	clear					
10	52	50	88	49	clear					
11	52	50	90	52	clear					
12	52	50	88	54	clear					
13	52	50	70	56	rain					
14	51	50	70	50	rain					
15	52	51	62	44	rain					
16	52	50	66	45	rain					
17	52	51	70	43	overcast					
18	51	51	72	49	rain					
19	51	51	80	44	clear					
20	51	51	88	46	clear					
21	52	51	94	50	clear					
22	52	51	78	46	rain					
23	51	51	82	48	clear					
24	52	51	85	48	clear					
25	53	51	86	51	rain					
26	52	51	72	38	clear					
27	52	51	85	41	clear					
28	52	51	92	49	clear					
29	52	51	94	50	clear					
30	52	51	94	51	clear					
31	52	51	96	52	clear					
TOTALS										

Appendix Table 2 (cont.)

September	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	Trout
1	53	51	94	52	clear					
2	53	50	89	48	clear					
3	52	50	90	48	clear					
4	52	50	89	50	clear					
5	53	51	83	56	pty cloudy					
6	54	51	70	51	clear					
7	53	50	75	44	clear					
8	53	51	82	48	clear					
9	53	51	89	47	clear					
10	53	51	90	45	clear	14	3			2
11	52	51	89	49	clear					
12	54	51	87	41	clear					
13	53	52	80	40	clear					
14	53	52	78	52	cloudy	8	2			2
15	53	52	73	46	cloudy					
16	54	52	68	50	cloudy					
17	53	52	71	49	pty cloudy					
18	53	52	80	40	clear					
19	53	52	80	46	pty cloudy					
20	53	52	80	44	clear	53	5			1
21	53	52	78	37	clear	46	6			1
22	54	52	78	43	clear	75	2			1
23	54	52	79	42	clear	103	8			2
24	54	52	81	41	clear	126	9			1
25	54	53	82	42	clear	98	11			3
26	53	53	82	45	clear	52	4			1
27	54	51	72	42	clear	114	8			3
28	56	53	79	48	clear	184	15			5
29	55	54	88	44	clear	187	19			1
30	54	53	86	45	pty cloudy	297	22			6
TOTALS						1,557	114			29

Appendix Table 2 (cont.)

October	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	Trout
1	54	53	79	47	pty cloudy	524	23			6
2	55	54	78	34	rain	1,261	71			9
3	56	53	64	33	clear	787	44			11
4	55	54	70	33	clear	375	31			15
5	55	54	75	34	clear	395	29			9
6	55	54	82	36	clear	682	49			15
7	56	53	82	42	clear	511	47			8
8	56	54	84	40	clear	268	22		1	8
9	56	54	78	34	clear	345	26	1	2	10
10	57	54	73	34	clear	421	24	2	1	10
11	57	55	73	38	clear	882	112	2	1	30
12	56	55	77	32	clear	678	62		2	21
13	57	55	76	30	clear	284	35	2	4	14
14	57	56	77	32	clear	348	52	3	6	21
15	58	56	76	30	clear	337	28	2	5	4
16	53	56	72	32	pty cloudy	294	21	14	3	14
17	58	56	73	28	clear	421	48	17		17
18	59	56	70	30	clear	372	46	12	17	10
19	58	54	72	26	clear	256	46	11	11	14
20	58	58	71	26	clear	246	32	34	20	24
21	58	58	70	30	clear	259	28	18	24	15
22	58	57	71	20	clear	214	31	49	12	34
23	57	56	68	32	pty cloudy	175	20	15	17	24
24	57	57	58	32	showers	176	19	26	5	12
25	57	57	50	34	rain	202	11	30	25	18
26	57	56	62	28	clear	106	9	85	10	8
27	56	55	64	24	clear	95	15	83	11	17
28	55	55	66	25	clear	143	6	71	14	14
29	55	55	60	34	cloudy	46	6	34	12	14
30	54	53	64	36	showers					
31	54	53	64	34	pty cloudy	57	9	93	13	21
TOTALS						11,160	1,002	654	216	447

Appendix Table 2 (cont.)

November	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead Trout
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	54	53	66	40	cloudy	18	4	73	29	19
2	53	52	70	35	clear	17	1	84	13	25
3	53	52	69	30	clear					
4	53	53	68	30	clear					
5	53	53	62	28	pty cloudy					
6	52	52	66	32	pty cloudy					
7	52	52	72	28	clear					
8	52	52	63	29	clear	33	8	160	14	46
9	52	52	63	30	clear					
10	52	52	62	33	pty cloudy					
11	52	51	65	38	pty cloudy	10	1	72	20	19
12	52	51	62	29	clear			25	12	24
13	52	51	55	26	cloudy					
14	51	51	46	33	rain					
15	51	51	47	40	rain					
16	51	51	53	42	cloudy					
17	51	51	49	44	cloudy			80	39	15
18	51	51	49	41	cloudy					
19	50	50	50	34	clear					
20	50	50	46	26	fog					
21	50	49	48	34	fog-clear					
22	50	49	51	29	cloudy			77	22	21
23	49	49	54	28	fog-clear					
24	49	48	53	25	fog-clear					
25	49	48	50	26	fog-clear					
26	49	48	44	24	clear-windy					
27	48	48	42	23	clear					
28	48	46	44	15	clear					
29	47	45	50	12	clear			36	11	6
30	46	45	52	16	clear					
TOTALS						78	14	657	160	175

Appendix Table 2 (cont.)

December	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead Trout
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	46	45	52	16	clear					
2	45	44	52	16	clear					
3	44	43	47	17	clear					
4	44	43	54	16	clear					
5	43	42	50	18	clear					
6	43	42	50	19	clear					
7	43	42	49	18	clear			26	2	6
8	42	42	50	16	cloudy-rain			9		35
9	43	41	43	24	pty cloudy					
10	42	41	46	16	clear					
11	41	41	46	16	clear					
12	41	40	45	14	pty cloudy					
13	41	40	48	20	clear					
14	41	40	46	19	pty cloudy			28	1	3
15	41	40	50	19	clear					
16	40	40	49	12	clear					
17	40	39	49	14	clear					
18	40	39	48	12	clear					
19	40	39	44	10	clear					
20	40	39	44	10	clear			2		
21	40	39	42	11	clear					
22	40	39	42	18	overcast					
23	40	40	50	34	pty cloudy					
24	40	40	38	11	cloudy					
25	40	40	46	12	cloudy-rain					
26	40	39	50	14	pty cloudy					
27	40	39	43	16	cloudy					
28	40	40	40	14	cloudy					
29	40	40	34	20	rain					
30	40	39	50	30	cloudy					
31	39	38	43	18	clear					
TOTALS								65	3	44

Appendix Table 2 (cont.)

January	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead Trout
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	40	39	30	30	clear					
2	40	39	34	30	snow					
3	39	38	39	26	snow					
4	39	38	37	22	cloudy					7
5	39	38	30	26	cloudy					
6	38	37	30	7	clear					
7	39	38	30	4	clear					
8	39	38	30	0	clear					
9	39	38	30	0	clear					
10	38	38	40	22	cloudy					
11	38	38	36	13	cloudy					
12	38	38	42	27	cloudy					
13	38	38	40	31	cloudy					
14	38	37	40	31	pty cloudy					2
15	37	37	35	22	pty cloudy					
16	38	37	33	20	pty cloudy					
17	38	37	32	21	pty cloudy					
18	38	37	32	20	pty cloudy					2
19	38	38	37	17	pty cloudy					
20	38	37	40	15	cloudy					
21	37	37	44	23	cloudy					
22	37	37	45	24	cloudy					
23	37	37	44	15	fog-clear					
24	37	37	43	18	clear					
25	38	37	43	12	clear					6
26	38	37	42	12	clear					
27	38	37	43	12	clear					
28	38	36	46	10	clear					
29	38	36	48	12	clear					
30	37	37	45	12	pty cloudy					
31	37	37	40	24	pty cloudy					
TOTALS										17

Appendix Table 2 (cont.)

March	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead Trout
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	40	40	44	30	snow					20
2	42	40	43	31	rain					
3	41	40	41	32	cloudy					
4	42	41	53	19	clear					
5	41	40	62	20	clear					56
6	42	40	60	25	pty cloudy					54
7	40	40	52	44	cloudy					
8	41	41	58	33	pty cloudy					85
9	41	41	42	34	cloudy					
10	42	42	48	29	clear					
11	42	41	57	21	pty cloudy					
12	42	41	50	30	pty cloudy					45
13	42	42	46	23	showers					
14	42	42	44	24	cloudy					
15	42	42	49	27	cloudy					118
16	43	42	55	22	pty cloudy					
17	43	43	49	26	pty cloudy					
18	43	43	50	29	pty cloudy					
19	43	43	54	36	pty cloudy					
20	43	42	60	24	pty cloudy					
21	43	41	58	23	clear					12
22	43	42	70	26	clear					98
23	42	42	58	33	clear					
24	43	42	48	30	rain					
25	43	41	63	20	cloudy					
26	46	42	50	20	clear					
27	45	42	50	20	clear					
28	45	42	46	24	blustery					
29	45	43	44	24	showers					112
30	46	45	53	27	snow showers					23
31	45	44	53	28	cloudy					
				30	cloudy					
TOTALS										

Appendix Table 2 (cont.)

April	Temperature (Degree F)				Weather	Fish Trapped				Steelhead Trout
	Water		Air			King Salmon	Silver Salmon	Grilse	Grilse	
	Maximum	Minimum	Maximum	Minimum		Adults	Adults	Grilse	Grilse	
1	45	44	50	23	cloudy					
2	45	42	56	24	clear					
3	43	42	72	25	clear					
4	43	43	76	30	clear					
5	44	44	78	26	clear					73
6	45	42	80	26	clear					
7	44	42	76	31	clear					
8	45	43	50	38	showers					36
9	44	43	50	38	pty cloudy					
10	44	43	64	20	clear					
11	45	44	66	32	clear					
12	45	43	76	29	clear					26
13	46	43	56	44	clear					
14	45	42	68	24	clear					30
15	45	43	76	32	clear					
16	45	43	59	36	clear					
17	46	43	60	26	clear					
18	46	43	59	23	clear					
19	46	44	69	24	clear					
20	46	43	75	27	pty cloudy					
21	45	43	74	34	clear					20
22	48	43	76	34	pty cloudy					
23	47	44	80	42	pty cloudy					
24	45	43	78	40	cloudy					
25	45	43	64	38	rain					
26	47	44	78	26	clear					
27	45	43	69	35	cloudy					
28	46	44	69	35	cloudy					
29	46	44	78	37	cloudy					
30	46	44	70	42	light rain					

TOTALS

Appendix Table 2 (cont.)

May	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead Trout
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	
1	46	44	66	45	rain					
2	48	44	63	34	cloudy					
3	47	44	54	40	cloudy					
4	46	44	60	32	cloudy					
5	46	44	50	30	cloudy-snow					
6	45	44	56	25	cloudy					
7	45	44	59	30	pty cloudy					
8	46	44	66	26	pty cloudy					
9	45	44	56	42	rain					
10	45	44	58	42	cloudy					
11	46	45	57	37	cloudy-rain					
12	45	44	64	35	cloudy					
13	46	44	72	32	cloudy					
14	45	44	58	35	clear					
15	48	44	53	36	cloudy-rain					
16	47	44	52	34	cloudy					
17	47	45	54	37	pty cloudy					
18	46	45	56	31	rain					
19	46	44	70	30	pty cloudy					
20	46	45	77	38	clear					
21	46	45	76	39	clear					
22	46	45	64	40	rain					
23	46	45	56	39	rain					
24	46	45	65	37	clear					
25	47	44	65	44	overcast					
26	47	45	62	44	pty cloudy					
27	46	45	68	27	clear					
28	47	45	70	30	clear					
29	47	44	72	34	clear					
30	47	44	82	40	clear					
31	47	45	84	44	clear					
TOTALS										

Appendix Table 2 (cont.)

June	Temperature (Degree F)				Weather	Fish Trapped				
	Water		Air			King Salmon		Silver Salmon		Steelhead
	Maximum	Minimum	Maximum	Minimum		Adults	Grilse	Adults	Grilse	Trout
1	48	45	87	45	clear					
2	48	46	76	36	clear					
3	48	46	80	42	pty cloudy					
4	47	45	88	46	clear					
5	48	45	98	50	clear					
6	47	45	92	58	pty cloudy					
7	49	45	84	57	clear					
8	48	45	82	49	clear					
9	48	45	70	42	cloudy					
10	48	45	72	52	pty cloudy					
11	47	45	70	45	pty cloudy					
12	48	45	83	46	clear					
13	47	45	83	49	clear					
14	49	45	80	48	clear					
15	49	45	86	43	clear					
16	49	45	90	46	clear					
17	50	46	68	61	light rain					
18	48	46	78	56	cloudy					
19	48	46	78	48	clear					
20	49	46	78	44	pty cloudy					
21	50	46	83	47	clear					
22	50	46	39	50	clear					
23	49	46	85	51	clear					
24	49	46	90	49	clear					
25	49	46	92	50	clear					
26	49	47	89	50	clear					
27	49	47	89	52	clear					
28	48	47	92	52	clear					
29	49	47	94	52	clear					
30	49	47	96	54	clear					
TOTALS										