

TRINITY RIVER SALMON AND STEELHEAD HATCHERY: THIRD YEAR OF OPERATION, 1960-1961 1/

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This is the third annual report of the Lewiston Fish Trapping Facilities, now known as the Trinity River Salmon and Steelhead Hatchery, which is operated under agreement with the United States Bureau of Reclamation. This agency finances construction and operation of this unit.

This report summarizes information for the period July 1, 1960, through June 30, 1961, concerning the number of fish trapped; fish spawned; production of eggs, fry, and fingerlings; operation of the incubator hatchery; river flows; and air and water temperatures.

#### KING SALMON MAINTENANCE PROGRAM

King salmon of the 1960 fall run, which consisted of an estimated 6,910 fish, were trapped at the Lewiston Fish Trapping Facilities. All of the ripe or nearly ripe adults were held in the spawning tanks at the hatchery. No fish were transported above the Trinity Dam. The unripe fish were transported by truck to a site located about fifty miles downstream from the trapping facilities. As the season advanced this distance was shortened to about six miles downstream. Many of these fish returned to the trapping facilities and were held for spawning or, if still unripe, again were moved downstream. About one-sixth of the adults were marked by fin-clipping so that an estimate could be made of the actual number of king salmon appearing at the Lewiston Fish Trapping Facilities in 1960.

*J.M. Baker*  
A total of 216 spring-run king salmon was trapped between July 1 and July 18, 1960. Including spring-run fish trapped before July 1, this made a total spring run of 556 fish in 1960.

Between October 13 and December 15, 1960, a total of 1,433,600 king salmon eggs were taken from 494 females. From these eggs, 993,900 swim-up fry were reared and released into the Trinity River between January 30 and March 7, 1961.

#### SILVER SALMON MAINTENANCE PROGRAM

In the fall of 1960, 208 silver salmon were trapped at Lewiston. A total of 162,200 eggs were taken from 62 females during the period December 1 - 21. These eggs produced 114,900 swim-up fry, which were released into the Trinity River at Lewiston during February, 1961.

#### STEELHEAD TROUT MAINTENANCE PROGRAM

From July 1, 1960, to June 30, 1961, 3,526 adult steelhead were trapped at Lewiston. Nine hundred and fifty of these fish were released into Trinity Lake prior to January, 1961. The remaining adults were held in the spawning tanks at the hatchery.

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(Complete report available on request)

A total of 3,047,600 eggs were taken from 1,046 females between March 2 and June 15, 1961. From these eggs, 2,413,900 swim-up fry were released in the Trinity River during April, May and June, 1961. An additional 41,000 fish are being held for release as advanced fingerlings in the fall of 1961.

#### INCUBATOR HATCHERY

It was expected that the diversion tunnel at the Trinity Dam would be closed in early 1961. This closure would prevent the young salmon and steelhead from migrating out of the lake. The Trinity River Hatchery to be constructed at the Lewiston Dam will not be completed until the fall of 1962. Therefore, it was necessary to erect a temporary incubator hatchery at the trapping facilities. The hatchery was completed in September, 1960. It contains 640 incubator trays, and has equipment for heating and recirculating the water.

The hatchery was put into operation on October 18, 1960 when the first king salmon eggs were taken. All of the equipment functioned properly. During cold weather the water was held at the desired temperature by means of warm air from the space heater. This method maintained a uniform water temperature. During May and June it was necessary to add ice to the reservoir of the circulation system to keep the water temperature at a safe level.

The first 400,000 king salmon eggs were almost a total loss. Most of the eggs exhibited some development, but the larval fish died before or after hatching. This loss was attributed to high water temperatures (60 - 70 degrees F.) during the time of egg development within the parent fish.

#### SUMMARY

Operations at the Lewiston Fish Trapping Facilities were changed during 1960-61 from the operations of previous years. All king salmon and silver salmon trapped were either spawned or returned to the Trinity River below the facilities. No salmon were moved above Trinity Dam, due to the closure of the outlet early in 1961. Part of the steelhead run was transported above the Trinity Dam, the remainder being spawned at the hatchery.

A total of 993,900 king salmon, 114,900 silver salmon, and 2,413,900 steelhead swim-up fry were produced and planted in the Trinity River. An Additional 41,000 steelhead are being held for release as advanced fingerlings.

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APPENDIX

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APPENDIX

Table A-1 gives a yearly comparison of the numbers of fish of the different species trapped at the Lewiston Fish Trapping Facilities from September 29, 1958, through June 30, 1961.

Tables A-2 through A-13 give the daily air and water temperatures, weather conditions, river flow, and numbers of fish of each species trapped at the Lewiston Fish Trapping Facilities during the report period.

Figures A-1 through A-4 show the numbers of spring-run king salmon, fall-run king salmon, silver salmon, and steelhead trout trapped during each week over the report period.

TABLE A-1

Yearly Comparison of Fish Trapped at Lewiston  
September 29, 1958 through June 30, 1961

Species	Sept. 29, 1958 through June 30, 1959	July 1, 1959 through June 30, 1960	July 1, 1960 through June 30, 1961
King salmon			
Adults	3,013	4,549	2,730
Grilse	878	2,701	4,130
Totals	3,891	7,250	6,910
Silver salmon			
Adults	583	93	138
Grilse	33	26	70
Totals	616	119	208
Steelhead trout			
Adults	2,880	2,071	3,526

TABLE A-2  
Lewiston Fish Trapping Facilities  
July, 1960

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped				
	Air		Water				King salmon		Silver salmon	Steelhead trout	
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse	
1	85	44	71	66	Clear	810	19	4		6	
2	90	44	72	66	Clear	770					
3	94	45	73	67	Clear	740					
4	97	49	74	69	Clear	710	51	8		8	
5	99	49	74	68	Clear	680	47	10		4	
6	100	53	76	69	Cloudy	670					
7	101	52	75	69	Cloudy	650	25	1		7	
8	103	53	76	70	Cloudy	640					
9	100	41	74	69	Clear	600					
10	93	45	74	69	Clear	550					
11	85	45	75	68	Clear	510	17	2		2	
12	88	43	76	67	Clear	470					
13	90	43	75	67	Clear	450					
14	91	49	76	68	Clear	440					
15	92	49	76	70	Clear	420	2	1		4	
16	96	45	77	70	Clear	410					
17	99	48	78	70	Clear	390					
18	102	49	77	70	Clear	380	23	6			
19	107	52	78	71	Clear	360					
20	104	54	80	72	Clear	340					
21	103	48	80	73	Clear	330					
22	102	45	79	72	Clear	320					
23	100	42	78	72	Clear	300					
24	97	47	78	70	Clear	295					
25	98	61	76	72	Clear	285					
26	95	55	78	71	Clear	280					
27	96	56	78	72	Clear	275					
28	99	55	79	73	Clear	270					
29	100	62	80	75	Cloudy	260					
30	97	57	79	74	Cloudy	260					
31	87	49	77	73	Cloudy	255					
<b>Totals</b>							<b>184</b>	<b>32</b>			<b>31</b>

\*From U. S. Bureau of Reclamation records

TABLE A-3  
Lewiston Fish Trapping Facilities  
August, 1960

Date	Temperatures (degrees F.)				Flow of Trinity River at Lewiston (c.f.s.)*	Weather	Fish trapped			
	Air		Water				King salmon Adults	Silver salmon Adults	Grilse	Steelhead trout
	Maximum	Minimum	Maximum	Minimum						
1	85	44	76	70	250	Clear				
2	89	45	77	70	239	Clear				
3	89	44	77	70	236	Clear				
4	92	46	78	70	231	Clear				
5	95	46	78	71	223	Clear				
6	95	49	79	72	215	Clear				
7	101	51	79	72	210	Clear				
8	103	54	80	73	207	Clear				
9	100	52	80	73	199	Clear				
10	95	49	80	73	191	Clear				
11	98	47	78	73	185	Cloudy				
12	97	53	78	72	185	Cloudy				
13	103	55	78	72	182	Clear				
14	99	46	76	72	177	Cloudy				
15	87	43	77	70	174	Cloudy				
16	87	42	76	68	172	Cloudy				
17	93	47	77	69	172	Clear				
18	99	49	77	70	167	Clear				
19	103	56	77	70	165	Clear				
20	101	45	78	70	159	Clear				
21	95	44	76	70	153	Clear				
22	79	38	72	68	153	Cloudy				
23	69	35	72	65	156	Cloudy				
24	76	39	72	64	162	Clear				
25	78	38	72	65	167	Clear	47	18		
26	85	39	74	66	165	Clear	7	3	3	
27	83	39	73	66	159	Clear				
28	85	35	74	66	156	Clear				
29	90	41	74	67	153	Cloudy	65	18	4	
30	91	42	74	67	150	Clear				
31	90	43	74	66	144	Clear				
Totals							119	39	7	

\*From U. S. Bureau of Reclamation records

TABLE A-4  
Lewiston Fish Trapping Facilities  
September, 1960

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped			
	Air		Water				King salmon		Silver salmon	Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse
1	86	42	72	66	Cloudy	144				
2	81	44	72	66	Cloudy	144	43	9	7	
3	81	48	72	67	Cloudy	144				
4	83	39	71	65	Cloudy	141	19	13	6	
5	80	39	73	65	Clear	144				
6	89	42	73	66	Clear	147				
7	88	41	73	66	Clear	146				
8	89	39	73	66	Clear	145				
9	94	42	68	66	Cloudy	145				
10	80	45	73	65	Cloudy	145				
11	94	48	73	68	Cloudy	141				
12	94	48	74	68	Cloudy	139				
13	92	37	74	66	Cloudy	137				
14	93	38	72	65	Cloudy	135	170	114	20	
15	92	38	71	65	Cloudy	131				
16	88	40	72	64	Clear	128				
17	90	37	71	64	Cloudy	125				
18	93	37	70	64	Clear	117				
19	94	45	70	64	Clear	119				
20	91	43	70	64	Clear	122				
21	81	37	68	64	Clear	116				
22	80	31	66	62	Clear	116	84	69	9	
23	85	32	67	62	Clear	119				
24	90	38	68	63	Clear	124				
25	95	42	69	64	Clear	128				
26	95	41	69	64	Cloudy	128	96	54	11	
27	95	50	70	64	Clear	124				
28	87	41	70	64	Clear	123				
29	91	42	68	64	Clear	123				
30	92	41	68	63	Clear	152				
Totals							412	290	53	

\*From U. S. Bureau of Reclamation records



TABLE A-5  
Lewiston Fish Trapping Facilities  
October, 1960

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped							
	Air		Water				King salmon		Silver salmon		Steelhead trout			
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse				
1	92	44	68	63	Clear	141								
2	92	44	68	63	Cloudy	141								
3	89	41	66	63	Clear	132								
4	80	42	67	62	Cloudy	119								
5	77	43	63	62	Rain	118								
6	77	51	65	62	Rain	136	397	315						14
7	70	53	63	62	Rain	254	296	300						17
8	63	35	67	58	Clear	260								
9	63	27	58	57	Cloudy	244								
10	61	31	58	54	Cloudy	189	375	116						4
11	65	35	58	55	Cloudy	183								
12	64	33	59	55	Cloudy	174								
13	66	27	58	54	Clear	171	116	63		1				77
14	68	26	58	53	Clear	169	89	25		1				17
15	74	29	59	53	Clear	164								
16	78	34	60	54	Clear	163								
17	83	35	60	54	Clear	159	270	195						61
18	84	34	60	55	Cloudy	157	127	129						23
19	82	36	60	56	Cloudy	155	110	92		1				20
20	80	35	60	56	Cloudy	154	73	79						33
21	78	36	60	56	Cloudy	154	22	30						42
22	74	39	60	56	Cloudy	153								
23	79	35	58	57	Cloudy	152								
24	72	35	59	56	Cloudy	150	268	180						92
25	71	30	58	54	Clear	151	42	45						9
26	71	32	58	55	Clear	151	136	83						22
27	60	28	55	52	Clear	155	22	40						7
28	59	31	56	52	Cloudy	160	48	38						5
29	70	41	56	52	Clear	158								
30	72	30	56	52	Cloudy	157								
31	78	29	56	52	Clear	155	177	190						9
<b>Totals</b>							<b>2,568</b>	<b>1,920</b>	<b>2</b>	<b>1</b>				<b>452</b>

\*From U. S. Bureau of Reclamation records

TABLE A-6  
 Lewiston Fish Trapping Facilities  
 November, 1960

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped				
	Air		Water				King salmon	Grilse	Silver salmon	Grilse	Steelhead trout
	Maximum	Minimum	Maximum	Minimum							
1	75	32	56	52	Clear	151	37	78		5	
2	75	30	54	52	Cloudy	149	124	160		10	
3	63	35	52	20	Cloudy	148	43	62		8	
4	60	37	51	48	Clear	143	16	36			
5	64	28	51	47	Cloudy	144					
6	70	42	52	48	Rain	146					
7	56	39	52	49	Cloudy	149	88	98		1	
8	61	30	52	49	Clear	153					
9	63	27	52	48	Cloudy	156	85	135		4	
10	61	31	52	48	Cloudy	156	84	137		4	
11	65	42	52	51	Rain	133	274	452		17	
12	59	38	50	49	Rain	209	118	162		10	
13	47	34	49	48	Rain	235					
14	42	31	48	47	Rain	212					
15	47	29	47	47	Cloudy	218	111	132		32	
16	45	36	48	47	Cloudy	236	15	40		12	
17	50	40	48	47	Rain	233	19	45		21	
18	47	37	48	46	Cloudy	280	14	87		57	
19	54	34	47	46	Cloudy	275	53			117	
20	54	32	46	45	Cloudy	272					
21	54	32	48	46	Clear	269	33	25		3	
22	55	29	46	46	Rain	267	7	46		179	
23	42	33	45	44	Rain	218	2	12		189	
24	44	41	46	46	Rain	250				46	
25	53	40	46	45	Rain	289	11	19		124	
26	50	36	45	44	Rain	726	20	25		86	
27	47	33	44	44	Cloudy	758					
28	48	29	45	43	Cloudy	774					
29	46	29	43	42	Rain	786	25	36		44	
30	50	30	43	43	Rain	466					
<b>Totals</b>						1,179	1,832	115	68	1,006	

\*From U. S. Bureau of Reclamation records

TABLE A-7  
Lewiston Fish Trapping Facilities  
December, 1960

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped				
	Air		Water				King salmon		Silver salmon		Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse	
1	49	40	44	44	Rain	866	1	7	21	1	46
2	43	37	44	43	Rain	898					
3	47	39	44	44	Cloudy						
4	46	38	44	43	Cloudy						
5	58	26	43	42	Clear	904	2	1			12
6	49	21	42	41	Clear	900					
7	51	20	42	40	Clear	900					
8	55	19	42	40	Clear	898					
9	54	20	42	40	Cloudy	896					
10	50	30	41	40	Rain						
11	48	36	42	41	Clear	892					
12	47	30	43	41	Clear	890					
13	47	31	43	42	Cloudy	884					
14	42	31	42	41	Cloudy	881					
15	47	32	42	42	Rain	878					
16	43	38	42	42	Rain	884					
17	46	40	43	42	Rain	1,065					
18	46	43	45	43	Rain	1,065					
19	53	38	43	42	Fog	1,125					
20	47	35	42	41	Fog	1,135					
21	41	35	42	42	Cloudy	1,138					
22	39	30	42	40	Clear	1,138					
23	49	30	42	41	Fog	1,138					
24	48	33	42	41	Fog						
25	46	34	42	41	Cloudy						
26	48	35	42	41	Clear						
27	55	26	42	40	Clear	1,135					
28	53	22	41	40	Clear	1,135					
29	52	20	42	39	Clear	1,132					
30	52	20	41	39	Clear	1,130					
31	49	18	41	40	Clear						
<b>Totals</b>							<b>3</b>	<b>8</b>	<b>21</b>	<b>1</b>	<b>58</b>

\*From U. S. Bureau of Reclamation records

TABLE A-8  
Lewiston Fish Trapping Facilities  
January, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped			
	Air		Water				King Salmon		Silver Salmon	Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse
1	47	17	40	39	Clear					
2	42	14	40	38	Clear					
3	49	14	40	39	Clear	1,150				
4	49	14	41	39	Clear	1,140				
5	49	15	41	39	Clear					
6	51	21	42	40	Clear	1,130				
7	57	25	41	40	Rain					
8	49	26	42	40	Cloudy					
9	41	32	42	41	Rain	1,115				
10	45	35	42	41	Clear	1,110				
11	51	34	42	41	Clear	1,105				
12	46	31	42	41	Clear	1,095				
13	49	27	42	40	Cloudy	1,090				
14	49	34	42	41	Cloudy	369**				
15	58	36	42	41	Cloudy	356				
16	47	30	42	41	Clear	356				
17	44	29	41	40	Clear	200				
18	55	25	41	40	Clear	196				
19	52	25	42	39	Clear	172				
20	52	23	41	39	Clear	172				
21	55	19	39	41	Clear					
22	63	29	40	39	Clear					
23	57	27	42	41	Clear	180				
24	54	34	44	42	Clear	176				
25	53	33	42	42	Cloudy	180				
26	45	37	43	42	Rain	184				
27	55	42	44	43	Cloudy	184				
28	51	41	44	43	Cloudy					
29	49	41	44	43	Rain				55	
30	42	39	44	42	Rain	228				
31	50	41	46	43	Clear	461				
Totals									55	

\*From U. S. Bureau of Reclamation Records

\*\*Storage commenced at Trinity Dam

TABLE A-9  
Lewiston Fish Trapping Facilities  
February, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped			
	Air		Water				King Salmon		Silver Salmon	Steelhead trc
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse
1	60	38	45	44	Rain	446				
2	52	42	45	44	Rain	481				
3	54	36	46	44	Rain	526			23	
4	58	39	45	44	Rain					
5	58	40	45	44	Cloudy					
6	54	39	46	45	Clear	351			1	
7	55	28	44	43	Rain	286			36	
8	43	33	43	43	Rain	200				
9	42	38	44	43	Rain	347				
10	51	41	44	44	Rain	371				
11	52	37	44	44	Rain	395				
12	40	30	44	43	Rain	353				
13	43	33	43	43	Rain	325				
14	40	36	44	43	Rain	315				
15	49	35	44	42	Rain	313				
16	56	30	46	43	Clear	301				
17	53	28	46	43	Cloudy	226			20	
18	49	26	46	44	Clear					
19	53	27	46	43	Clear					
20	62	26	47	44	Clear	206				
21	63	32	47	44	Cloudy	198			40	
22	64	35	47	44	Clear					
23	55	22	46	42	Clear	188				
24	57	24	46	42	Cloudy	184				
25	53	32	46	42	Rain					
26	52	19	46	42	Clear					
27	55	21	47	43	Clear	178				
28	56	28	47	44	Clear	176				
<b>Totals</b>									<b>119</b>	

\* From U. S. Bureau of Reclamation records

TABLE A-10

Lewiston Fish Trapping Facilities  
March, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped		
	Air		Water				King Salmon	Silver Salmon	Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults
1	64	29	47	44	Cloudy	176			
2	58	34	48	44	Cloudy	176			149
3	55	23	45	43	Cloudy	170			60
4	46	29	46	42	Cloudy				
5	55	37	46	44	Rain				
6	49	32	45	43	Rain	185			25
7	47	27	46	43	Cloudy	176			
8	50	30	44	44	Rain	176			
9	41	31	44	43	Rain	185			20
10	46	31	46	43	Cloudy	197			
11	52	34	47	44	Cloudy				
12	51	37	47	46	Rain				
13	43	37	49	44	Cloudy	205			220
14	60	40	48	47	Rain	205			73
15	52	40	47	45	Rain	446			
16	49	29	47	44	Rain	446			22
17	44	32	47	44	Clear	286			
18	49	26	49	45	Clear				
19	62	38	48	47	Rain				
20	46	28	48	44	Clear	298			106
21	57	28	50	45	Cloudy	274			
22	66	35	48	47	Rain	259			88
23	49	35	48	46	Rain	241			
24	56	39	48	47	Rain	232			
25	49	36	47	45	Cloudy				
26	53	33	47	46	Rain				
27	49	33	48	46	Cloudy	256			
28	53	23	51	45	Clear	235			80
29	65	27	52	46	Clear	226			27
30	74	30	53	48	Clear	214			
31	72	36	54	50	Clear	191			
<b>Totals</b>									<b>870</b>

\* From U. S. Bureau of Reclamation records

TABLE A-11.

Lewiston Fish Trapping Facilities  
April, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped			
	Air		Water				King Salmon		Silver Salmon	Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse
1	70	39	54	50	Cloudy					
2	77	40	56	50	Clear					
3	83	39	57	52	Clear	188			338	
4	81	41	56	52	Clear	190			139	
5	71	32	54	50	Clear	186				
6	72	29	54	50	Clear	186				
7	72	29	55	50	Clear	184			72	
8	70	30	55	50	Clear					
9	74	42	55	50	Clear					
10	69	29	56	50	Clear	180			65	
11	76	32	56	50	Cloudy	178				
12	80	38	55	51	Rain	180				
13	55	27	55	49	Clear	178			51	
14	65	29	56	50	Clear	178				
15	73	35	56	50	Clear					
16	79	39	58	52	Clear					
17	82	38	57	53	Cloudy	176			67	
18	69	38	52	49	Cloudy	176				
19	48	23	53	48	Cloudy	176				
20	56	29	50	47	Rain	176			9	
21	48	38	48	47	Rain	178				
22	50	31	47	44	Snow					
23	46	33	50	44	Rain					
24	53	29	54	47	Rain	182				
25	61	32	55	50	Cloudy	182			6	
26	67	29	56	50	Cloudy	180				
27	65	34	56	50	Clear	180				
28	69	35	57	51	Clear	180			86	
29	77	55	54	52	Rain					
30	64	46	57	50	Cloudy					
Totals									833	

\* From U. S. Bureau of Reclamation records

TABLE A-12

Lewiston Fish Trapping Facilities  
May, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped		
	Air		Water				King Salmon	Silver Salmon	Steelhead trout
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults
1	69	40	56	52	Clear	180			
2	62	33	56	50	Clear	175			
3	68	30	53	49	Clear	175			14
4	62	26	56	49	Cloudy	175			
5	61	31	52	50	Rain	175			
6	57	40	52	49	Rain				
7	58	36	54	48	Cloudy				
8	66	35	57	50	Cloudy	175			10
9	67	46	53	52	Rain	175			
10	55	38	50	49	Rain	177			
11	55	33	54	47	Cloudy	179			
12	57	35	56	49	Cloudy	177			14
13	55	35	57	51	Cloudy	175			
14	70	38	58	51	Clear				
15	72	35	58	52	Clear				
16	76	37	59	54	Cloudy	175			
17	74	40	60	53	Cloudy	175			
18	77	42	60	53	Clear	182			4
19	81	47	60	55	Cloudy	184			
20	72	52	56	55	Clear				
21	54	43	58	51	Clear				
22	68	43	59	54	Cloudy	182			
23	62	40	58	52	Cloudy	182			
24	65	33	60	52	Clear	182			
25	74	39	61	53	Clear	182			
26	69	45	59	54	Rain	186			
27	59	35	57	52	Cloudy				
28	68	42	58	54	Cloudy				
29	67	42	55	54	Rain	184			
30	57	45	56	52	Rain				
31	59	47	57	52	Cloudy				

Totals

42

\* From U. S. Bureau of Reclamation records



TABLE A-13

Lewiston Fish Trapping Facilities  
June, 1961

Date	Temperatures (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish trapped				
	Air		Water				King Salmon		Silver Salmon	Steelhead trou	
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse	
1	72	48	59	54	Rain	182					
2	68	53	57	55	Cloudy	186					
3	70	50	60	54	Cloudy						
4	72	52	62	55	Cloudy						
5	72	52	61	56	Cloudy	182					
6	72	44	58	55	Rain	182					
7	65	42	61	54	Clear	184					
8	74	42	60	54	Cloudy	180					
9	71	38	60	53	Clear	182					
10	75	37	62	54	Cloudy						
11	75	41	62	55	Cloudy						
12	62	39	63	55	Clear	182					
13	85	45	64	57	Clear	180					
14	96	48	64	57	Clear	180					
15	103	50	66	57	Clear	200					
16	105	49	65	58	Clear	182					
17	103	51	65	57	Clear						
18	95	48	65	57	Clear						
19	93	45	66	57	Clear	180					
20	99	49	66	58	Clear	180					
21	99	50	66	59	Clear	182					
22	99	53	66	58	Cloudy	182					
23	97	51	66	58	Clear	182					
24	96	52	66	58	Clear						
25	93	54	66	59	Clear						
26	105	54	66	58	Clear	184					
27	93	43	65	58	Clear	184					
28	87	42	64	58	Clear	182					
29	82	38	62	56	Clear	185					
30	80	41	62	56	Clear	182					
<b>Totals</b>											
Grand totals, July 1, 1960, through June 30, 1961							4,465	4,130	138	70	3,526

\* From U. S. Bureau of Reclamation records

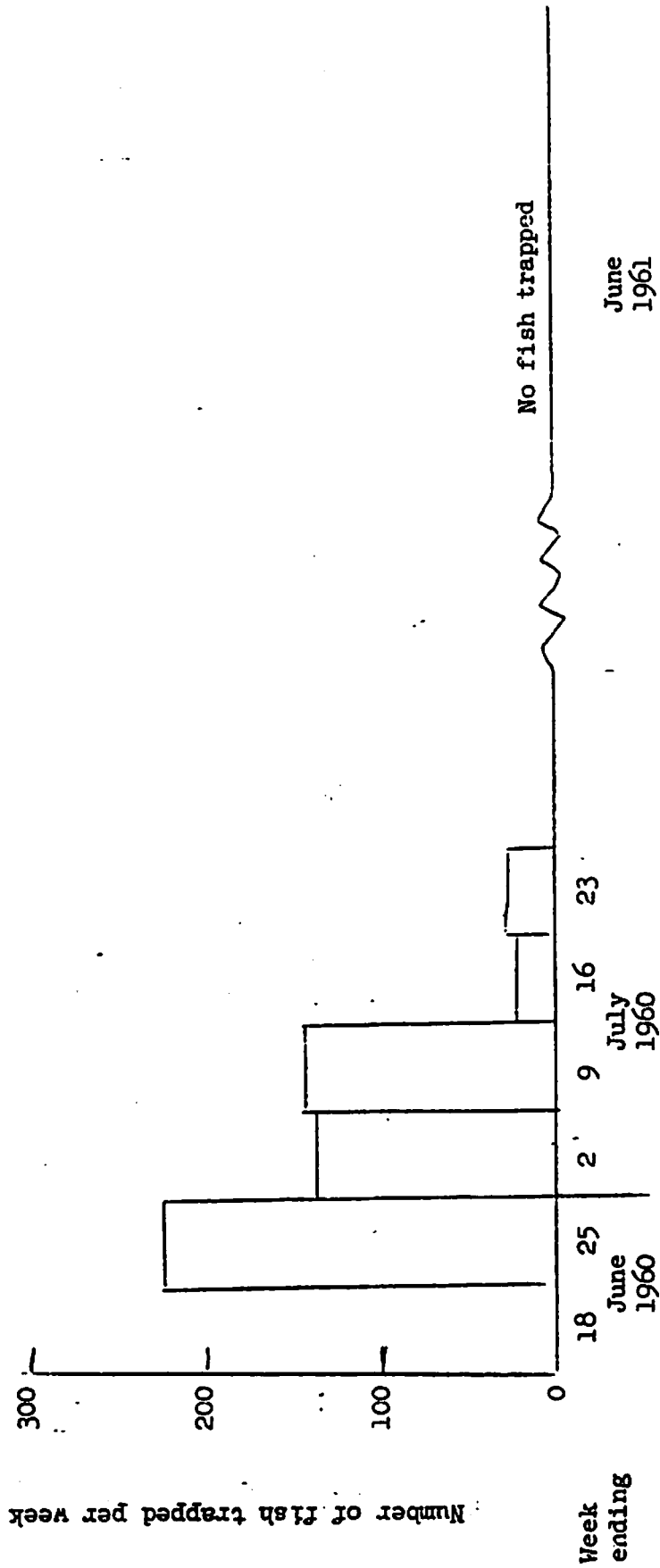


FIGURE A-1. Spring-run king salmon trapped at Lewiston Fish Trapping Facilities, June 14, 1960, to June 30, 1961

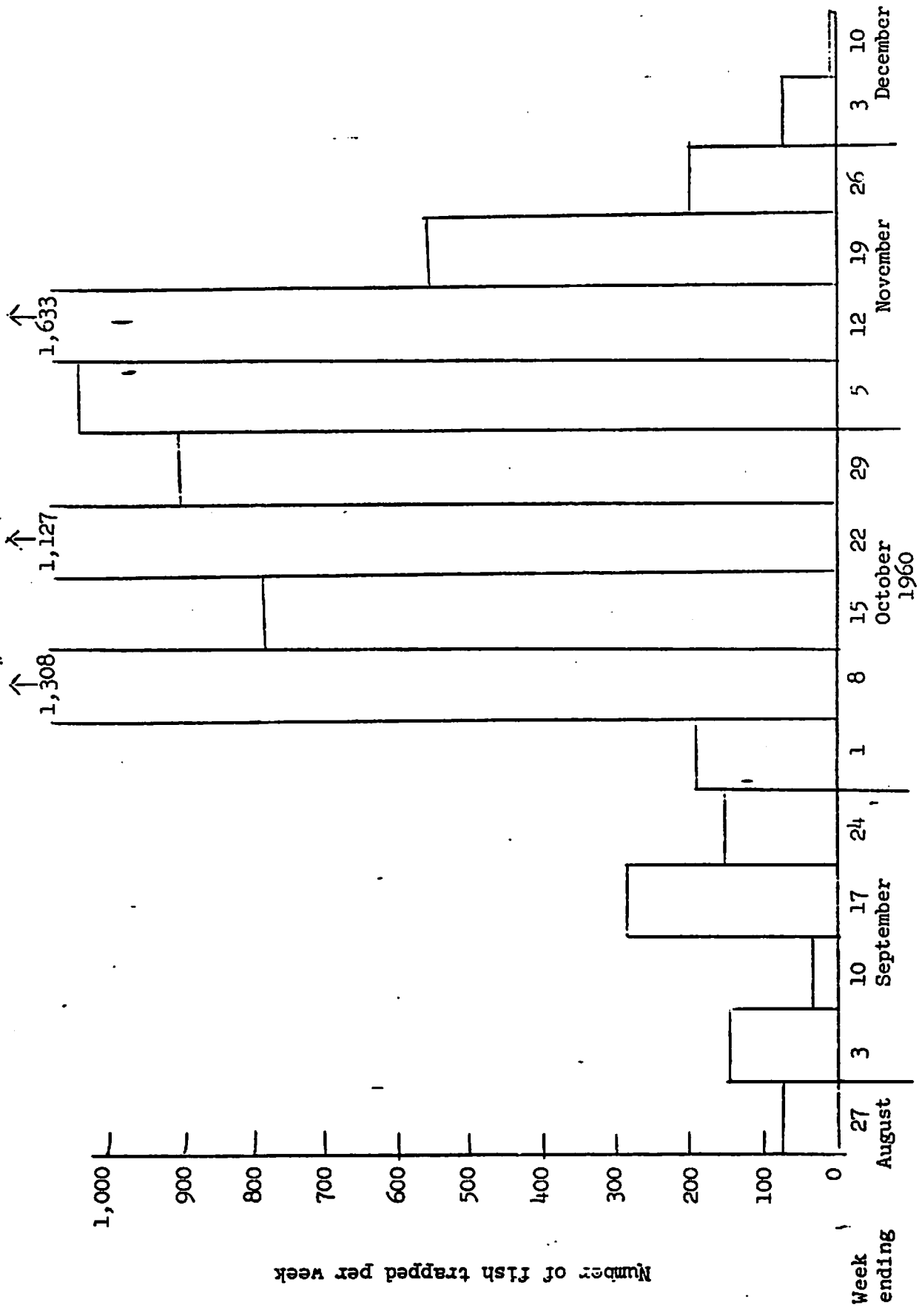


FIGURE A-2. Fall-run king salmon trapped at Lewiston Fish Trapping Facilities, August 25, 1960, to December 1, 1960

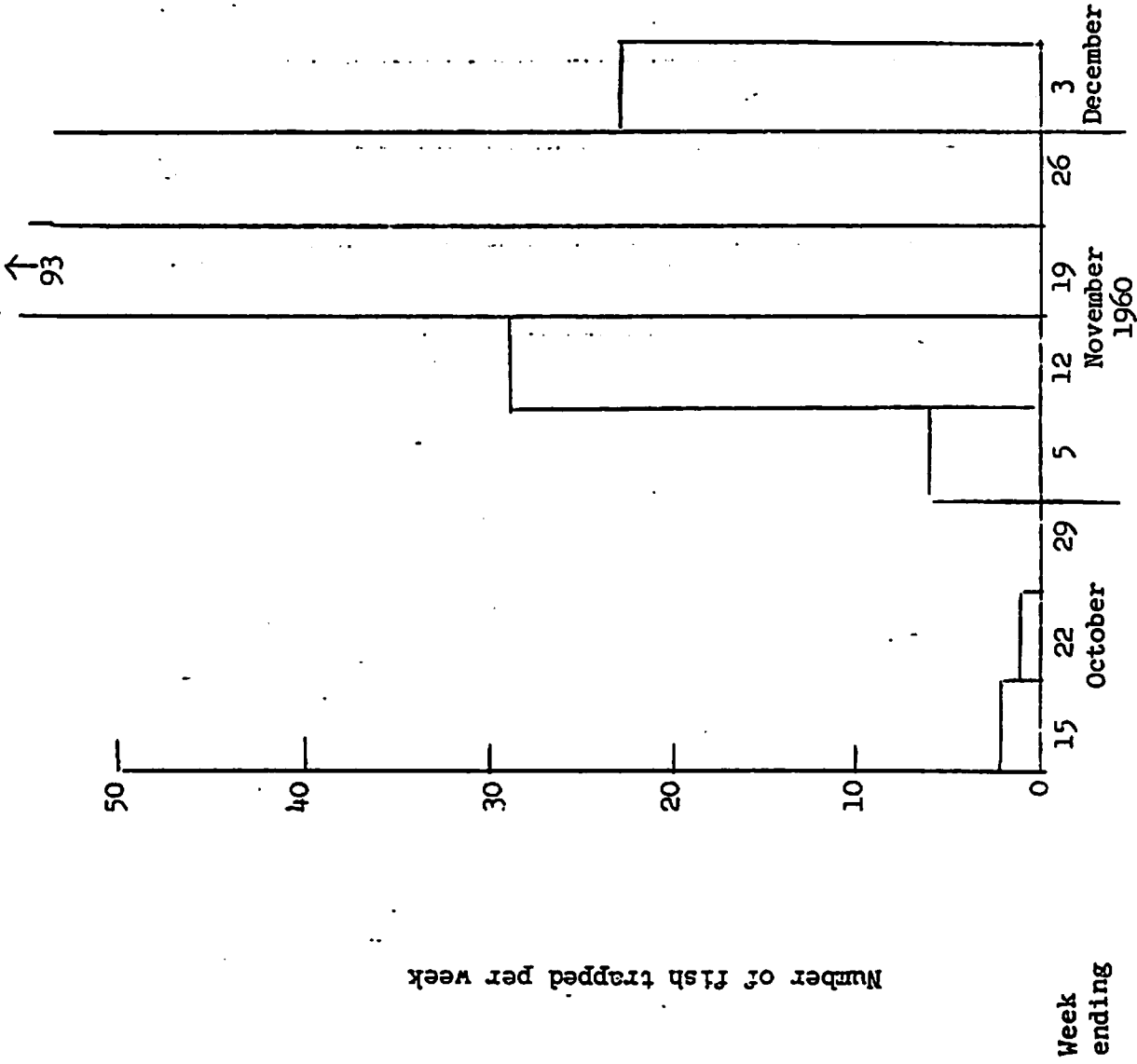


FIGURE A-3. Silver salmon trapped at Lewiston Fish Trapping Facilities, October 13, 1960, to December 1, 1960

C

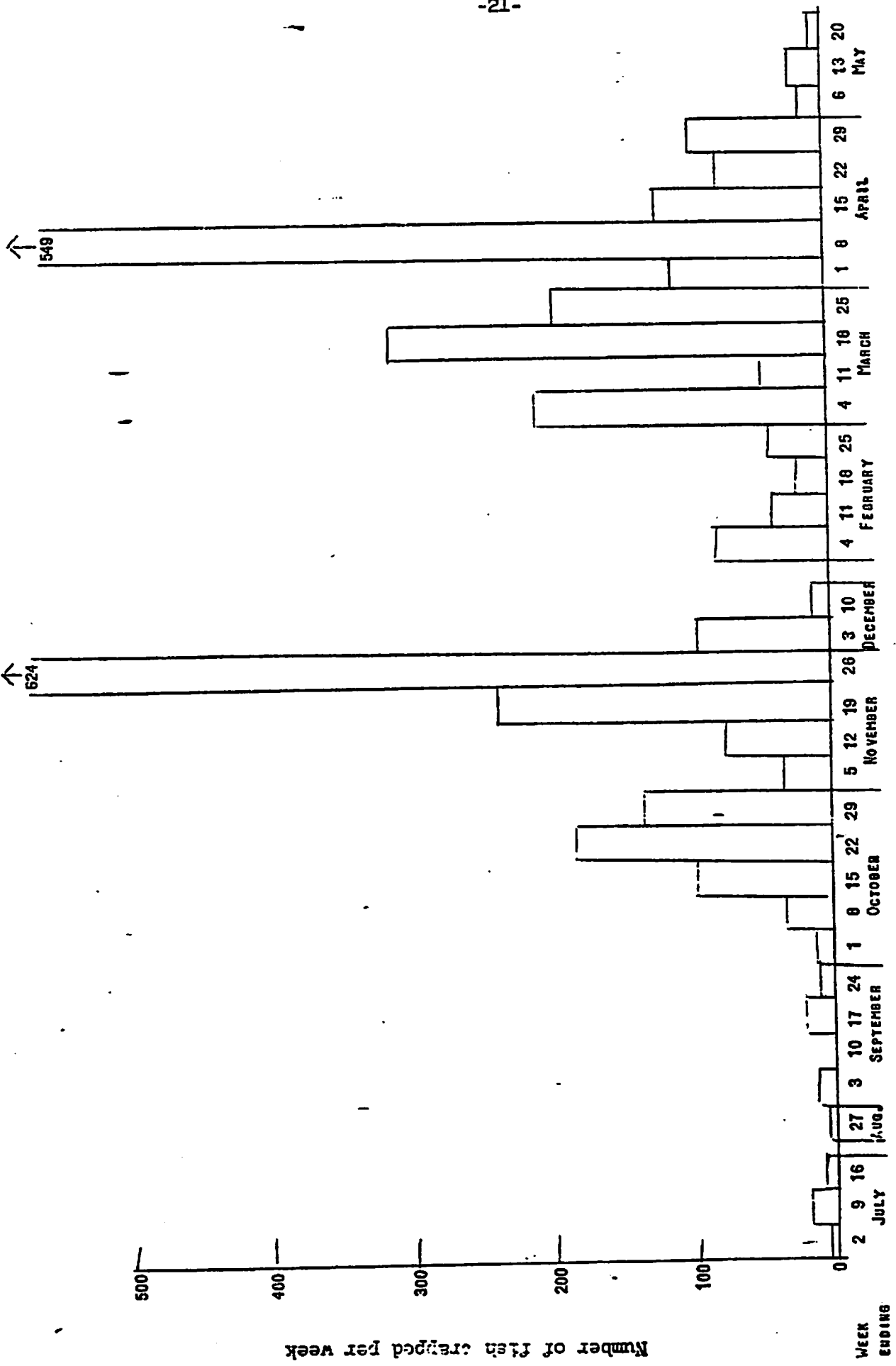


FIGURE A-4. Steelhead trout trapped at Lewiston Fish Trapping Facilities, July 1, 1960, to May 18, 1961

Number of fish trapped per week

WEEK ENDING