

FISHERY RESEARCH



TECHNICAL ASSISTANCE AND MODELING

1989-90 Steelhead Season Harvest
and Effort (Telephone Survey)

Job Performance Report
Project F-73-R-13
Subproject I, Study I, Job 2



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JOB PERFORMANCE REPORT

State of: Idaho Name: Technical Assistance and Modeling
Project No.: F-73-R-13 Title: 1989-90 Steelhead Season Harvest,
and Effort (Telephone Survey)
Subproject: I Study: I
Job: 2
Period Covered: March 1, 1990 to March 31, 1991

ABSTRACT

An estimated total of 44,632 anglers out of 63,298 steelhead permit holders fished 239,730 days to land 115,035 steelhead in the fish run year 1989-1990. Anglers harvested 48,885 hatchery steelhead, while releasing 66,162 steelhead composed of 60% wild fish and 40% hatchery steelhead.

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F89-S90

OBJECTIVES

To obtain fall 1989 to spring 1990 steelhead harvest and effort estimates by major drainage.

TECHNIQUES USED

Fall and spring steelhead catch, harvest, and fishing effort estimates were obtained from a telephone survey, as reported by Pollard (1985). A random sample of 6,926 (17.5%) of the 39,577 steelhead permit holders and nonresident salmon and steelhead 3-day permit holders was obtained from the State Auditor's IBM mainframe computer using a SAS (Statistical Analysis Systems 1982) program in March 1990 for the fall survey. In June 1990, a random sample of 3,954 (16.7%) of 23,721 steelhead permit holders from the 1990 spring season was obtained by using a systematic sampling process using dBase III.

Each steelhead permit holder selected for the survey was mailed a letter explaining the purpose of the survey and the questions to be asked (Appendix I). The letter was followed within two weeks by a phone call. Telephone interviewers were trained to solicit complete replies and read from standard scripts (Appendix II) so the same questions were asked of each permit holder in the same manner. A list of names of steelhead fishing holes was also provided to the interviewers so the correct river section fished could be determined (Appendix III).

A maximum of five tries to contact each sampled permit holder within one month were performed to increase the number of respondents. Each completed telephone response, or completed survey letter, was entered in IBM compatible personal computers using the Ashton-Tate software dBase III+. Manipulation of the data was accomplished within dBase III+ files using Clipper by Nantucket to compile the programs for faster execution. The estimates of fishing pressure and harvest were accomplished using LOTUS and SYSTAT.

FINDINGS

Fall Season

The fall steelhead fishing season in 1989 was open from September 1 through December 31. Daily bag limits allowed 2 fish per day, 4 in possession, and 10 per season depending on the river drainage (Appendix IV). Anglers were required to release wild steelhead, as determined by the presence of an adipose fin.

A total of 39,577 steelhead permits were sold for 1989. Of the 6,926 permit holders randomly selected, 3,855 (56%) permit holders sampled were contacted during the fall season telephone survey. The estimated composition of steelhead anglers was 31,630 (80%) residents and 7,947 (20%) nonresidents.

A total of 27,061 (68%) permit holders fished for steelhead in the fall of 1989 (Table 1), with 21,198 residents (67%) and 5,863 nonresidents (73%). An estimated 16% of anglers fished more than one river section.

Estimated total effort for fall 1989 was 144,971 (+ 7,326) days (Tables 1, 2). Resident anglers fished 118,372 days, while nonresidents fished 26,599 days (Appendices V and VI). The mean number of days fished was 3.7 per angler, with no significant difference between residents or nonresidents. A mode of two days fished occurred for all anglers (Figure 1).

Forty-eight percent of anglers who fished caught at least one fish. More nonresidents (53%) caught fish than resident (46%). The estimated mean catch per angler was 2.4 fish per season. The distributions for the percentage of anglers and the number of fish caught are given in Figure 2.

An estimated 28,818 (+ 2,087) steelhead were harvested in the fall of 1989. Residents harvested a total of 22,628 steelhead, while nonresidents harvested 6,190. Sixty-one percent of fall anglers did not harvest a steelhead and only one percent harvested ten or more steelhead (Figure 3). The mean number of steelhead kept per angler was 1.07 fish (+ 0.1). No significant difference between resident and nonresident anglers was found.

The largest pressure (65,479 days) and harvest (15,954 fish) occurred in the Clearwater River drainage. The Salmon River drainage had the largest number of fish caught and released (16,357). November was the most productive fall month in all drainages, with 46% of the harvest occurring (Table 3, Appendix VII, Appendix VIII). The highest overall catch rate (1.8 days/fish) occurred on Snake River sections.

Anglers released 51% of their catch (14,362 hatchery and 15,488 wild steelhead). This pattern of releasing more fish than harvesting is similar to the previous four years.

Spring Season

The spring steelhead fishing season in 1990 was open from January 1 through April 30, depending on section. Daily bag limits allowed 2 or 3 fish per day, 4 or 6 in possession, and 10 or 20 per season, depending on the river drainage (Appendix IX). Also in the spring of 1990, anglers were required to release wild steelhead, as determined by the presence of an adipose fin.

A total of 23,721 steelhead permits were sold during the spring of 1990, with 2,970 (12.5%) randomly selected permit holders contacted for the spring season telephone survey. An estimate of the composition of steelhead angler population was 81% residents and 19% nonresidents.

Table 1. Estimate angler participation and harvest in the Idaho fall steelhead fishery, 1989 with 95% confidence intervals.

	ESTIMATE	UPPER CONFIDENCE INTERVAL	LOWER CONFIDENCE INTERVAL

Total number of anglers:	39,57		
Residents sampled:	3,081		
Nonresidents samples:	774		
Total sampled:	3,855		

Number that did fish:	27,061	27,730	26,392
Resident:	21,198	21,804	20,592
Nonresident:	5,863	6,150	5,576
Number of days fished:	144,971	152,297	137,645
Resident:	118,372	125,132	111,612
Nonresident:	26,599	29,400	23,798
Number anglers that caught fish:	12,947	13,625	12,269
Resident:	9,764	10,359	9,169
Nonresident:	3,183	3,501	2,865
Number of hatchery fish released:	12,250	14,845	9,655
Resident:	7,064	8,704	5,424
Nonresident:	5,186	7,186	3,186
Number of wild fish released:	24,033	26,868	21,198
Resident:	17,751	20,131	15,371
Nonresident:	6,282	7,816	4,748
Total number fish released	36,283	41,040	31,526
Resident:	24,815	28,283	21,347
Nonresident:	11,468	14,707	8,229
Total number fish kept:	28,818	30,905	26,731
Resident:	22,628	24,533	20,723
Nonresident:	6,190	7,115	5,265
Total number fish caught:	65,101	70,977	59,225
Resident:	47,443	52,045	42,841
Nonresident:	17,658	21,291	14,025

Table 2. Total number of resident and nonresident steelhead anglers, days fished, fish caught, and catch rate in fall 1989 by section and drainage.

SECTION	ANGLERS	DAYS FISHED	HATCHERY FISH RELEASED	WILD FISH RELEASED	FISH HARVESTED	FISH per DAY
1	2,916	12,905	976	3,111	3,173	0.5
2	1,520	4,260	616	780	1,088	0.5
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SNAKE TOTALS	4,436	17,165	1,592	3,891	4,261	0.5
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3	10,123	52,708	4,322	7,525	12,535	0.46
4	1,088	3,922	297	770	945	0.51
5	1,735	7,309	606	369	2,290	0.45
6	196	800	20	51	133	0.26
7	154	740	0	10	51	0.08
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CLEARWATER TOTALS	13,296	65,479	5,245	8,725	15,954	0.46
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10	1,529	6,663	1,048	1,694	1,232	0.60
11	2,854	10,061	647	1,663	1,232	0.35
12	575	1,766	205	319	277	0.45
13	513	1,684	144	288	287	0.43
14	1,982	9,311	1,006	2,967	1,499	0.59
15	3,675	16,056	1,027	3,295	2,946	0.45
16	1,181	4,117	380	811	452	0.40
17	472	2,248	144	195	185	0.23
18	195	493	0	41	21	0.13
19	298	1,119	318	113	62	0.44
20	103	441	21	31	82	0.30
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SALMON TOTALS	13,377	53,959	4,940	11,417	8,275	0.46
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OXBOW	72	103	0	0	31	0.3
BOISE	903	7,156	452	0	236	0.1
PAYETTE	144	1,109	21	0	61	0.0
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STATEWIDE TOTALS	32,228	144,971	12,250	24,033	28,818	0.45

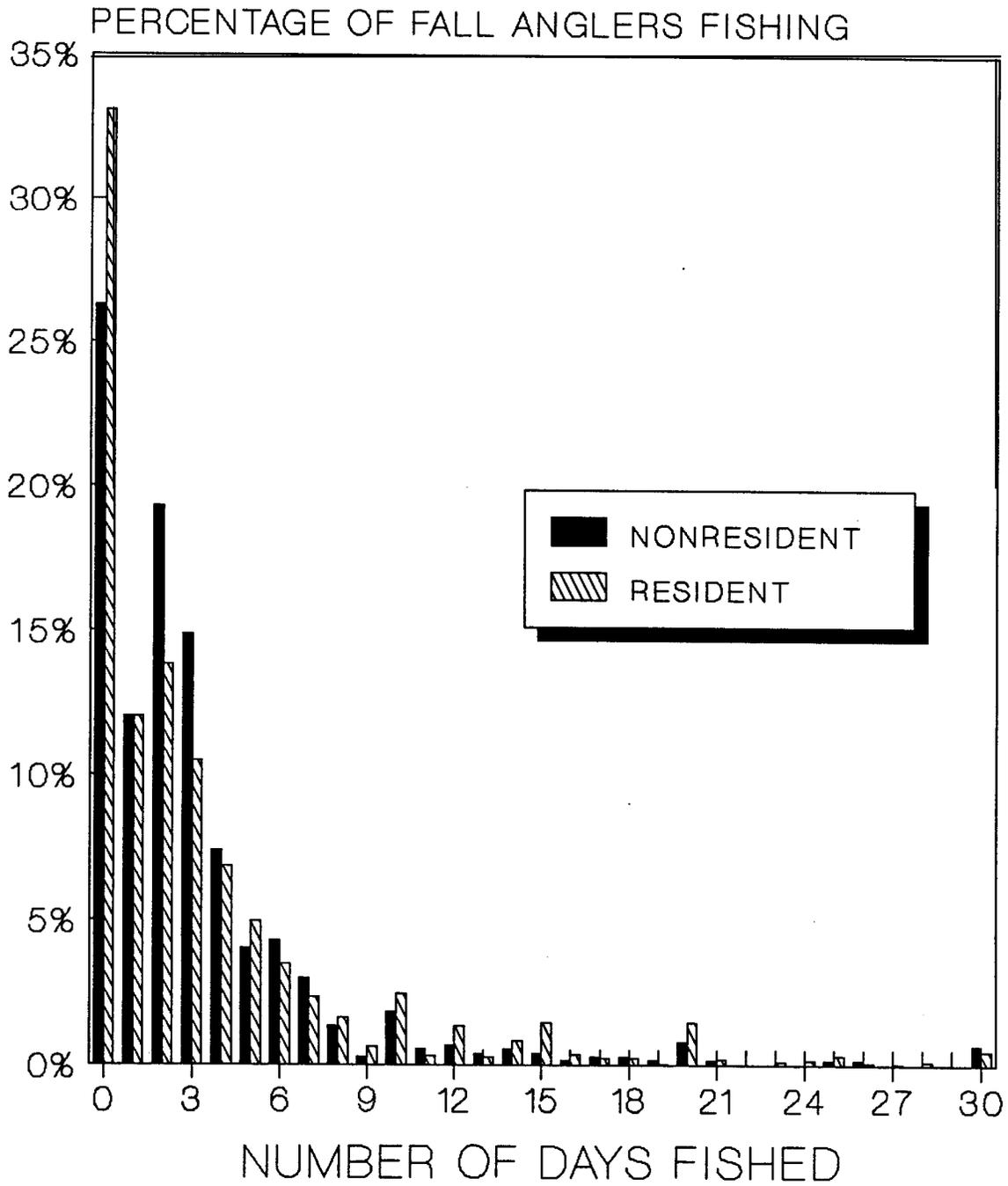


Figure 1. Percentage of resident and nonresident steelhead anglers fishing a given number of days, fall 1989.

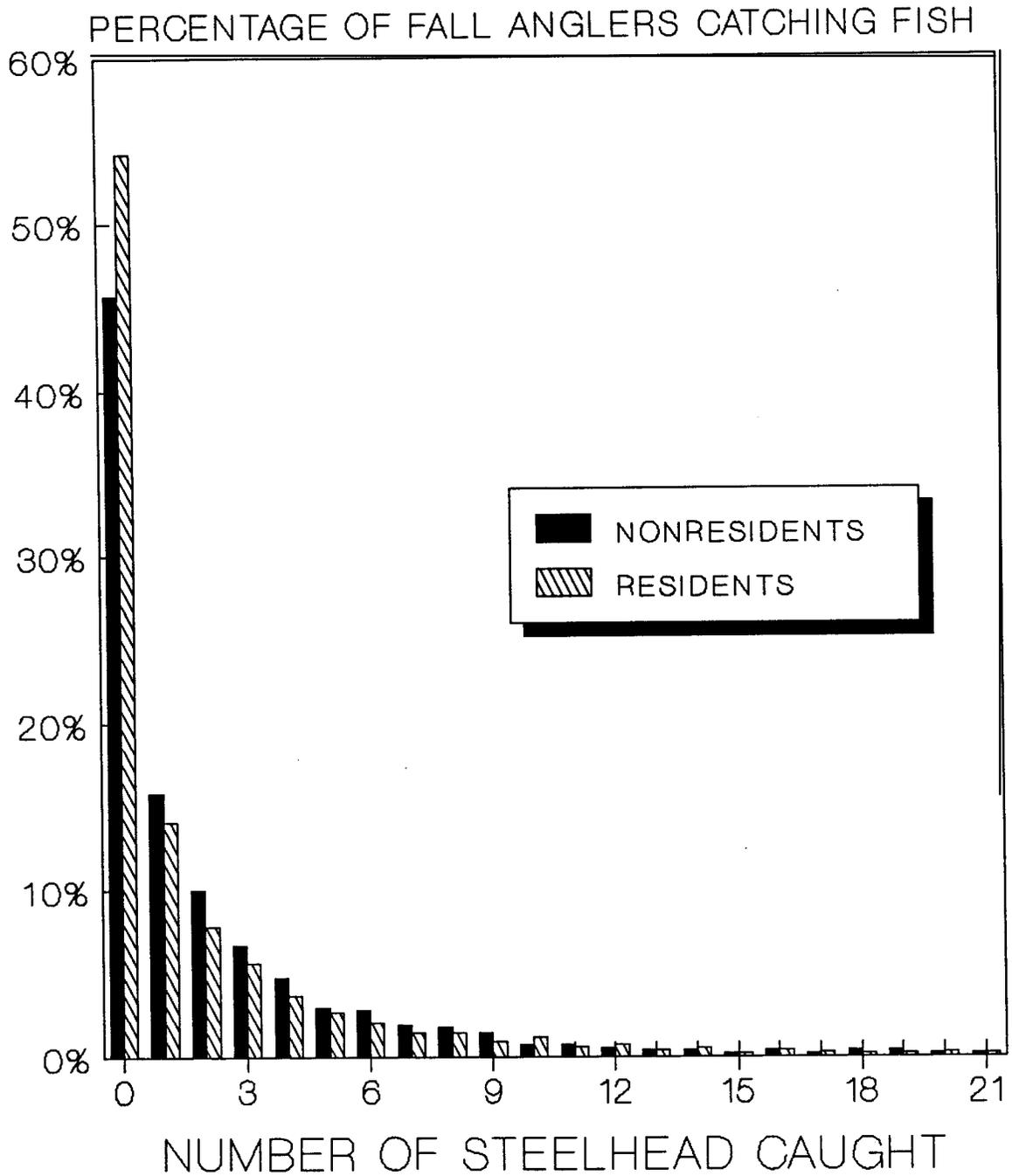


Figure 2. Percentage of resident and nonresident anglers catching a given number of steelhead, fall 1989.

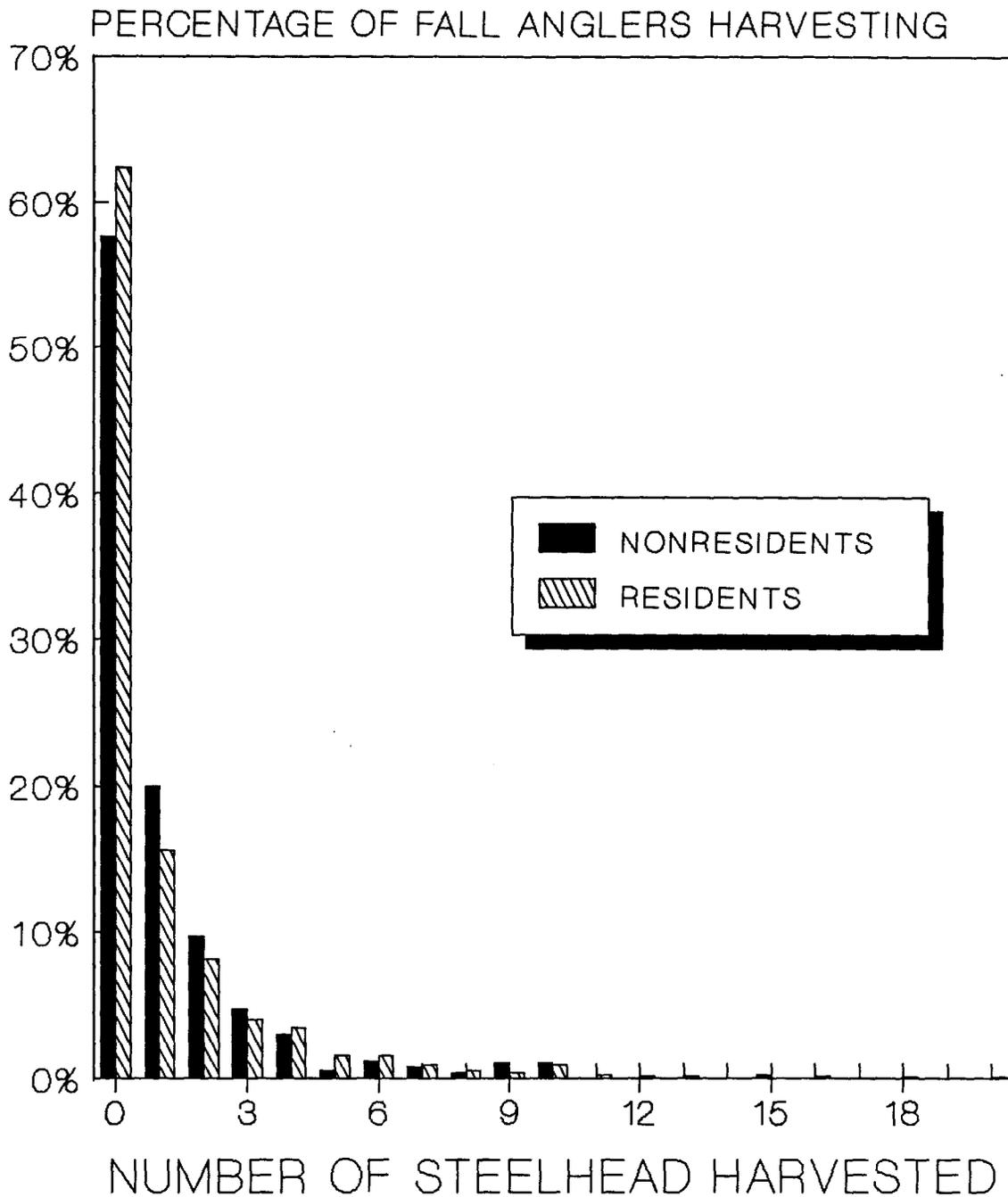


Figure 3. Percentage of resident and nonresident anglers harvesting a given number of steelhead, fall 1989.

Table 3. Total number of steelhead by section and month harvested by resident and nonresident anglers, fall 1989.

FISH HARVESTED						
SECTION	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL	-----
1	51	965	1,633	523	3,172	
2	21	328	555	185	1,088	
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SNAKE TOTALS	72	1,293	2,188	708	4,261	
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3	113	3,798	5,667	2,956	12,535	
4	0	236	432	278	945	
5	31	431	1,119	708	2,289	
6	31	10	41	51	133	
7	0	0	41	10	51	
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CLEARWATER TOTALS	175	4,475	7,300	4,003	15,954	
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10	61	647	401	123	1,232	
11	10	595	493	13	1,23	
12	0	113	113	51	277	
13	0	154	134	0	287	
14	0	316	831	51	1,49	
15	10	1,458	1,28	195	2,94	
16	92	205	123	31	452	
17	0	0	51	133	185	
18	0	0	21	0	21	
19	0	51	10	1	62	
20	0	31	51	0	82	
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SALMON TOTALS	17	3,570	3,51	71	8,27	
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OXBOW	0	31	0	0	31	
BOISE	0	10	185	41	236	
PAYETTE	0	10	0	51	62	
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STATEWIDE TOTALS	420	9,389	13,185	5,521	28,818	

A total of 17,571 (74%) permit holders fished for steelhead in the spring of 1990 (Table 4), with 13,833 residents (71%) and 3,738 nonresidents (84%). Twelve percent of anglers fished more than one river section.

Total effort was 94,759 (\pm 5456) angler days (Tables 4, 5), with resident anglers expending 79,142 days and nonresidents expending 15,617 days fishing (Appendices X and XI). The mean number of days fished per angler was 5.4. A mode of two days occurred for residents, while a mode of three days occurred for nonresidents (Figure 4).

Thirty-three percent of the anglers who fished caught at least one fish. A higher percentage of nonresidents (42%) caught a steelhead than residents (31%). The mean catch was 2.8 fish/angler (\pm 0.4) per season. The number of anglers catching at least one fish was 7,907 (33.3%). The distributions for the percentage of anglers and the number of fish caught are given in Figure 5.

The estimated steelhead harvest in the spring of 1990 was 20,067 (\pm 1,684). Residents harvested 15,544 steelhead, while nonresidents harvested 4,523 steelhead. Sixty-three percent spring steelhead anglers did not harvest a fish, and 1% of the anglers harvested ten fish or more (Figure 6). The mean spring harvest of steelhead was 1.14 fish/angler (\pm 0.1). A difference of .35 fish/angler between resident (2.65) and nonresident (2.89) harvest rates was not statistically significant.

The largest effort (44,088 days) occurred on the Clearwater River drainage, but the Salmon River drainage yielded the highest number of fish caught (23,857 including the catch-and-release fish). March was the most productive spring month in the Salmon river drainage, resulting in 2,965 fish being harvested (2,462 by residents and 503 by nonresidents) (Table 6, Appendices XII and XIII). However, in the Snake and Clearwater sections below Orfino the most productive month was January, with 4,266 harvested. The highest overall catch rate (1.13 fish/day) occurred on the Little Salmon River.

Anglers released 60% of their catch (14,362 hatchery and 15,488 wild steelhead). This pattern of releasing more fish than harvesting is similar to the previous five years.

SUMMARY

For steelhead fish run year 1989-1990, a total of 239,730 angler days were expended by 45,301 anglers, yielding a harvest of 48,885 steelhead. This is the highest harvest of steelhead (Table 7) and is correlated with a record run of steelhead passing Lower Granite Dam (Figure 7).

Anglers released 66,162 steelhead composed of 60% wild fish and 40% hatchery fish. This follows the pattern in recent years of anglers releasing more fish than harvesting.

Table 4. Estimate angler participation and harvest in the Idaho spring steelhead fishery, 1990 with 95% confidence intervals.

	ESTIMATE	UPPER CONFIDENCE INTERVAL	LOWER CONFIDENCE INTERVAL
Total number of anglers:	23,721		
Residents sampled:	2,415		
Nonresidents samples:	555		
Total sampled:	2,970		
<hr/>			
Number that did fish:	17,571	18,003	17,139
Resident:	13,833	14,222	13,444
Nonresident:	3,738	3,895	3,581
Number of days fished:	94,759	100,215	89,303
Resident:	79,142	84,389	73,895
Nonresident:	15,617	17,038	14,196
Number anglers that caught fish:	7,907	8,370	7,444
Resident:	6,046	6,456	5,636
Nonresident:	1,861	2,073	1,649
Number of hatchery fish released:	14,362	18,608	10,116
Resident:	11,781	15,704	7,858
Nonresident:	2,581	4,204	958
Number of wild fish released:	15,488	17,795	13,181
Resident:	12,667	14,901	10,433
Nonresident:	2,821	3,369	2,273
Total number fish released	29,879	35,632	24,126
Resident:	24,480	29,936	19,024
Nonresident:	5,399	7,171	3,627
Total number fish kept:	20,067	21,751	18,383
Resident:	15,544	17,065	14,023
Nonresident:	4,523	5,233	3,813
Total number fish caught:	49,934	56,593	43,275
Resident:	40,014	46,319	33,709
Nonresident:	9,920	12,002	7,838

Table 5. Total number of resident and nonresident steelhead anglers, days fished, fish caught, and catch rate in spring 1990 by section and drainage.

SECTION	ANGLERS	HATCHERY		WILD		FISH per DAY
		DAYS FISHED	FISH RELEASED	FISH RELEASED	FISH HARVESTED	
1	519	2,348	240	519	464	0.52
2	711	2,452	160	599	360	0.46
SNAKE						
TOTALS	1,230	4,800	400	1,118	824	0.49
3	5,503	26,565	4,217	3,929	7,700	0.60
4	1,461	5,726	423	432	1,287	0.3
5	1,957	8,634	1,094	384	2,685	0.48
6	136	735	112	88	72	0.3
7	559	2,428	112	104	256	0.1
CLEARWATER						
TOTALS	9,616	44,088	5,958	4,937	12,000	0.5
10	336	1,670	200	320	320	0.50
11	479	1,877	359	631	280	0.68
12	383	1,454	64	64	200	0.23
13	216	823	224	463	216	1.10
14	759	2,763	711	1,087	432	0.81
15	2,380	10,527	1,509	2,715	1,886	0.58
16	1,582	6,829	855	1,254	815	0.43
17	951	5,096	487	415	432	0.26
18	687	2,796	623	543	248	0.51
19	1,200	3,418	1,119	799	368	0.67
20	983	3,730	1,438	1,142	1,638	1.13
SALMON						
TOTALS	9,956	40,983	7,589	9,433	6,835	0.58
OXBOW	24	80	0	0	8	0.1
BOISE	966	4,776	399	0	376	0.16
PAYETTE	8	32	16	0	24	1.2
STATEWIDE						
TOTALS	21,800	94,759	14,362	15,488	20,067	0.53

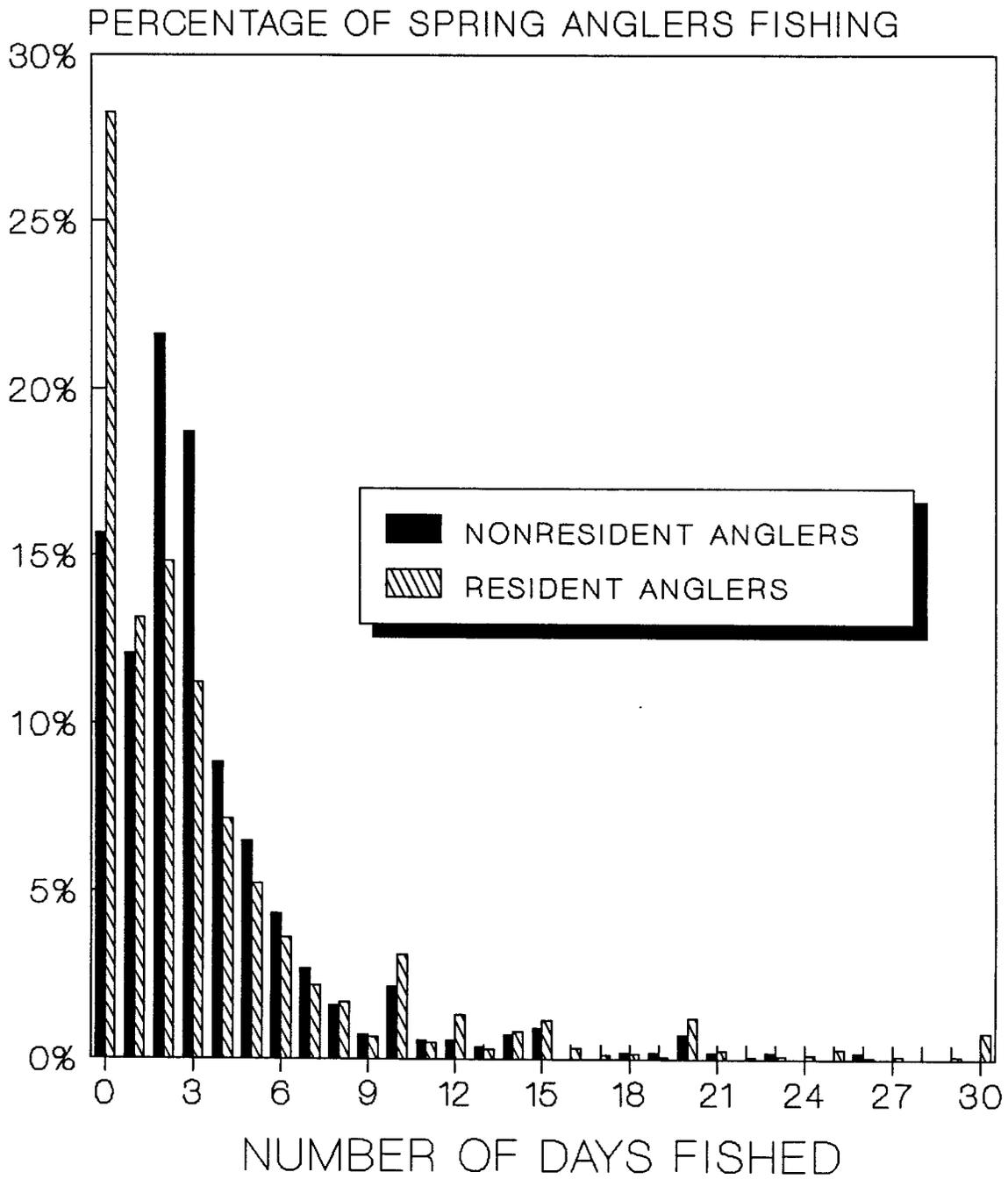


Figure 4. Percentage of resident and nonresident steelhead anglers fishing a given number of days, spring 1990.

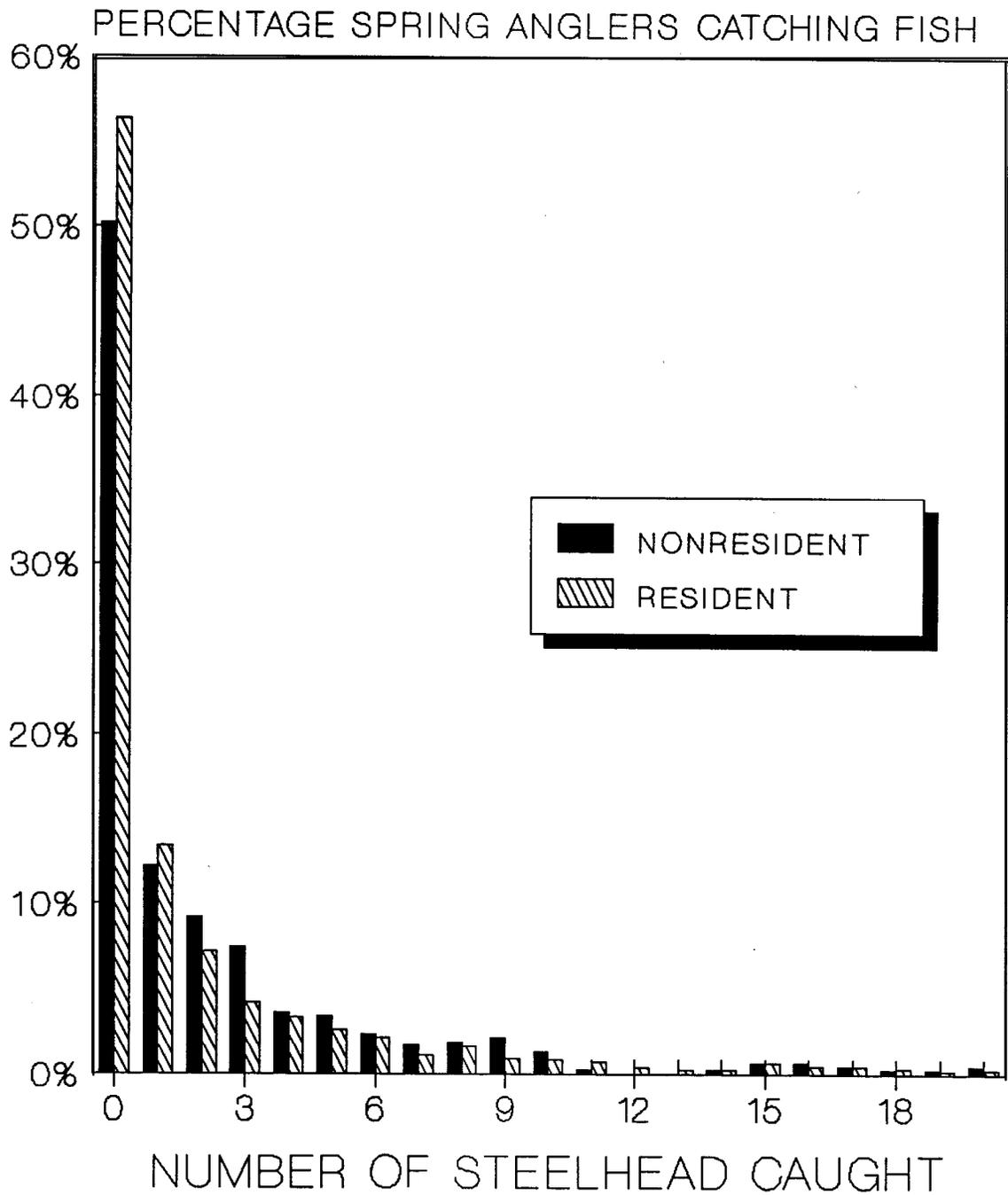


Figure 5. Percentage of resident and nonresident anglers catching a given number of steelhead, spring 1990.

PERCENTAGE SPRING ANGLERS HARVESTING FISH

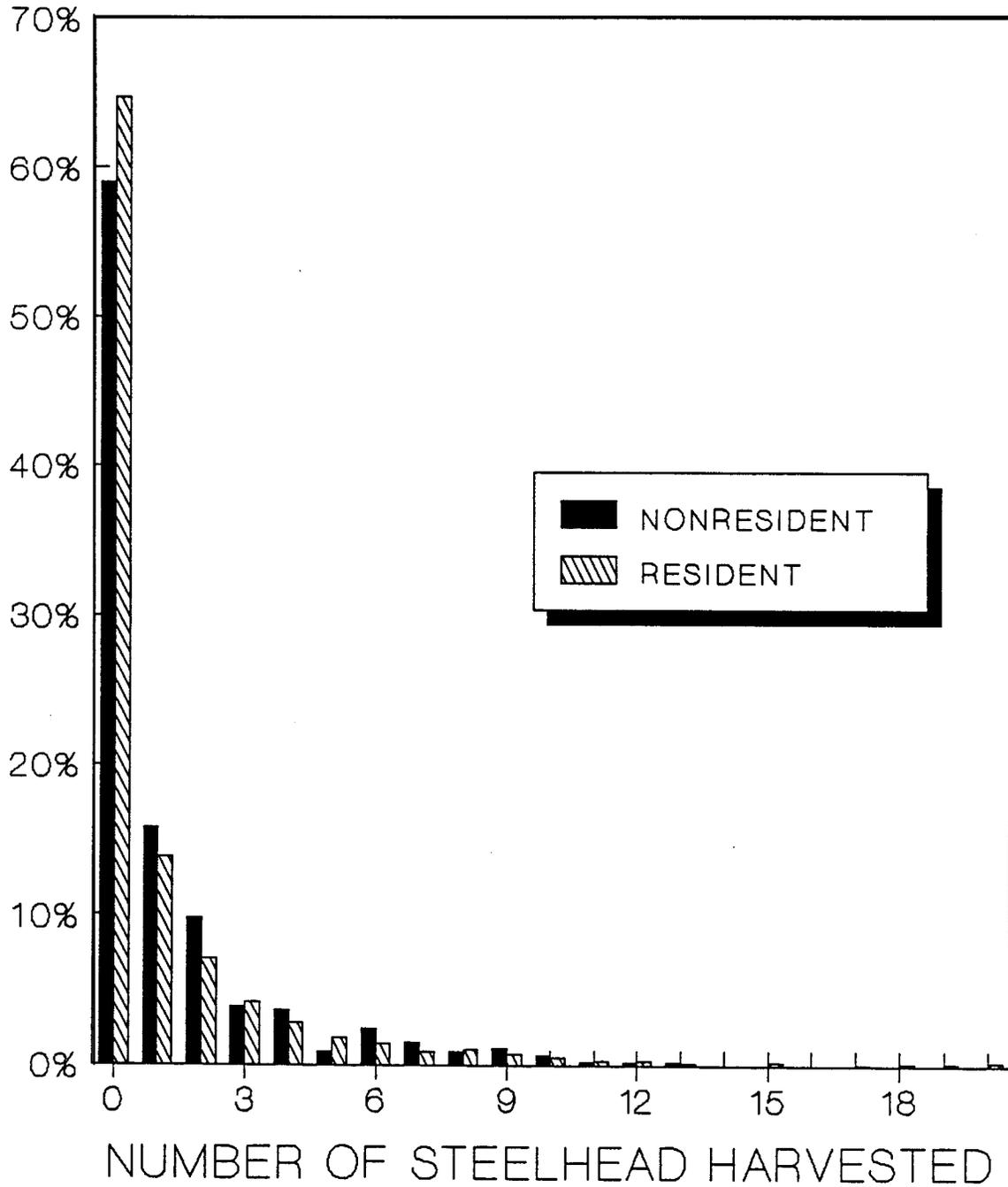


Figure 6. Percentage of resident and nonresident anglers harvesting a given number of steelhead, spring 1990.

Table 6. Total number of steelhead by section and month harvested by resident and nonresident anglers, spring 1990.

FISH HARVESTED					
SECTION	JANUARY	FEBRUARY	MARCH	APRIL	TOTAL
1	160	192	64	48	464
2	176	104	56	24	360
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SNAKE					
TOTAL	336	296	120	72	824
3	3,027	2,604	1,757	312	7,700
4	200	312	623	152	1,287
5	903	543	975	264	2,685
6	0	0	72	0	72
7	24	16	152	64	256
<hr/>					
CLEARWATER					
TOTALS	4,154	3,475	3,579	792	12,000
10	80	176	64	0	320
11	80	136	40	24	280
12	24	120	32	24	200
13	64	56	96	0	216
14	40	120	256	16	432
15	112	336	1,198	240	1,886
16	248	319	216	32	815
17	40	64	256	72	432
18	40	16	104	88	248
19	16	16	64	272	368
20	48	208	639	743	1,638
<hr/>					
SALMON					
TOTALS	792	1,567	2,965	1,511	6,835
OXBOW	0	0	8	0	8
BOISE	64	24	240	48	376
PAYETTE	0	24	0	0	24
STATEWIDE					
TOTALS	5,346	5,386	6,912	2,423	20,067

Table 7. Estimated steelhead harvest by fish run year, 1976 to 1989 (the fish run year is calculated from June 1 to May 31).
(CS = closed season and NA = no data available.)

Stream or section	Fish run year													
	76-7777-78	78-79	79-8080-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90		
Salmon-10	627	837	CS	340	663	1,281	1,583	1,457	1,358	1,454	2,588	682	798	1,552
Salmon-11	353	1,039	CS	257	512	879	962	910	730	910	1,638	1,036	688	1,512
Salmon-12 & 13 comb.	354	1,055	CS	342	1,339	1,715	1,004	877	470	1,704	2,134	1,061	730	980
Salmon-14	710	1,718	CS	548	1,348	1,781	1,656	1,863	888	1,697	3,315	661	1,172	1,931
Salmon-15 & 16	711	2,886	162	1,024	2,670	3,165	5,991	9,586	2,327	7,569	11,656	2,500	3,693	6,099
Salmon-17	91	130	136	124	679	600	1,591	2,822	407	2,680	2,662	328	810	617
Salmon-18	25	12	CS	8	25	41	156	621	48	389	614	127	320	269
Salmon-19	12	40	CS	CS	CS	CS	305	629	108	1,601	1,573	150	512	430
Little Salmon	CS	CS	CS	CS	CS	CS	CS	CS	CS	93	877	439	224	1,720
Salmon-unknown	NA	NA	12	168	230	303	NA	NA	NA	NA	NA	NA	NA	NA
SALMON TOTAL	2,883	7,717	310	2,811	7,466	9,765	13,248	18,765	6,336	18,097	27,057	6,983	8,947	15,110
Lower Clearwater	CS	NA	1,921	CS	3,523	354	9,218	6,165	18,024	8,292	8,694	6,300	8,032	20,235
Upper Clearwater	CS	NA	253	CS	156	31	1,402	687	1,233	658	1,889	1,001	707	2,232
Clearwater-unknown	NA	NA	125	CS	217	12	0	0	NA	NA	NA	NA	NA	NA
N. F. Clearwater	0	NA	484	CS	256	144	1,201	414	2,216	920	3,931	1,150	1,771	4,975
M. F. Clearwater	0	0	CS	CS	CS	CS	CS	CS	25	0	590	83	368	205
S.F. Clearwater	0	0	CS	CS	CS	CS	CS	CS	284 ^b	230	704	233	693	307
CLEARWATER TOTAL	0	14,157 ^a	2,783	CS	4,152	541	11,821	7,266	21,782	10,100	15,808	8,767	11,571	27,954
Lower Snake	96	NA	CS	17	358	484	1,535	1,024	3,319	2,417	3,050	1,666	1,939	3,637
Upper Snake	50	NA	CS	7	100	126	1,308	1,046	553	1,204	1,477	572	837	1,448
SNAKE TOTAL	146	NA	CS	24	458	610	2,843	2,070	3,872	3,621	4,527	2,238	2,776	5,085
Unknown streams	66	50	3	4	NA	NA	NA	NA	NA	767 ^b	508 ^b	NA	227 ^c	736 ^d
STATE TOTALS	3,095	21,924	3,096	2,839	12,076	10,916	27,912	28,101	31,990	32,585	47,900	17,987	23,521	48,885

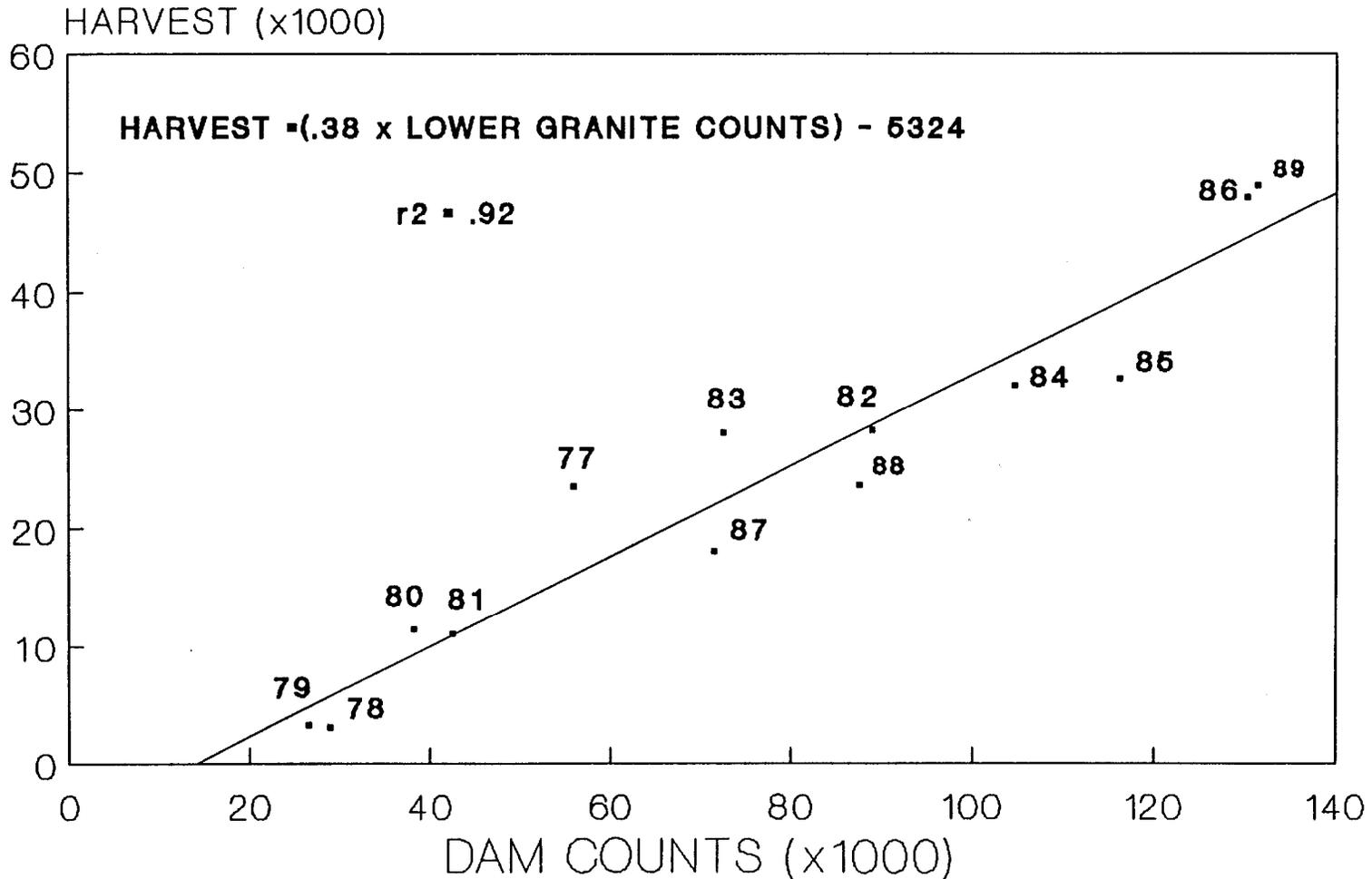
^aIncludes main stem Clearwater and North Fork Clearwater rivers.

^bBoise River.

^cBoise & Payette rivers.

^dHatchery fish that were transplanted to Boise River, Oxbow, and Payette River.

PREDICTED STEELHEAD HARVEST FROM LOWER GRANITE DAM COUNTS



DATA FROM 1977 TO 1989 FISH RUNS

Figure 7. Steelhead harvest versus Lower Granite counts for fish run years 1977 through 1989.

RECOMMENDATIONS

1. Analyze historic steelhead calendar year data as fish run year to provide information for better predictive models.
2. Calibrate the telephone survey for memory bias against ground census.

ACKNOWLEDGMENTS

I wish to express my sincere appreciation to Sharon Bushong who helped with the supervision of the telephone crew and data entry, for without her help and enthusiasm, this project would not have been completed with such accuracy and speed.

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A P P E N D I C E S

F 8 9 - S 9 0



IDAHO FISH & GAME
600 South Walnut / Box 25
Boise, Idaho 83707

June, 1990

We are seeking information regarding steelhead fishing in Idaho during the 1990 spring steelhead season (January 1 through April 30, 1990). Your assistance in answering the following questions will help the future of steelhead fishing. Please take a few minutes to fill in the answers to the questions below and place this letter near your telephone. PLEASE DO NOT RETURN THIS LETTER BY MAIL (unless you have no telephone or do not wish to be contacted by telephone). In the near future, you will receive a telephone call asking the following questions:

1. Did you fish for steelhead in Idaho during the 1990 spring season?
Yes _____ No _____
2. How many days did you fish in each river section? (See enclosed list of Steelhead Holes by River Section.)

Number of days fished	River	Section number
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Did you catch one or more steelhead (including fish released)?
Yes _____ No _____

4. If you caught and released steelhead, how many did you release, by river section?

Number released		River	Section number
Hatchery fish	Wild fish		
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Cecil D. Andrus / Governor
Jerry M. Conley / Director



Appendix I. Continued.

5. If you caught and released hatchery steelhead, as evidenced by a missing adipose fin, from the mouth of the Salmon River to the mouth of the East Fork of the Salmon River (Sections 10 through 19), how many of them were over 31"? _____

6. If you caught and kept steelhead, how many did you harvest by month and river section? (Check dates recorded on your steelhead permit.)

	Month	River	Section number
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
2.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____

Sincerely,



Jerry M. Conley
Director

JMC:TM:bm
R7FS030BM

Appendix II. Telephone script.

Hello, this is _____ with the Idaho Department of Fish and Game calling for _____

Your name was selected from among those who purchased a permit to fish for steelhead in fall of 1989 and I would like to ask you a few questions so we can estimate the catch of steelhead during the fall season.

Did you fish for steelhead in Idaho between September 1, and December 31, 1989?

[No]

I have no more questions. Thank you for your help.

[Yes]

How many days did you fish in each river section?

	# Days
Section #	

Did you catch any steelhead including any that you might have released?

[No]

I have no more questions. Thank you for your time and assistance.

[Yes]

Did you catch and release any steelhead?

[Yes]

How many steelhead released were hatchery fish and how many were wild fish, by section.

If you caught and released hatchery steelhead, as evidenced by a missing adipose fin, from the mouth of the Salmon River to the mouth of the East Fork of the Salmon River (Sections 10 through 19), how many of them were over 31"? _____

[No]

[Go to next question.]

Did you catch and keep any steelhead during the 1989 fall season?

[Yes]

What was the date and river section for each fish kept?

[No]

[Go to closing statement.]

These are all the questions I have. On behalf of the Idaho Department of Fish and Game, I thank you for your help.

TM:mw
R9FS016MW

Appendix III. List of steelhead holes in a given section.

DESCRIPTION OF SECTIONS

1. **Snake River, below Salmon River:**
Asotin, Heller Bar, Grande Ronde, Lime Point, Captain John Creek
2. **Snake River, above Salmon River to Hells Canyon Dam:**
Imnaha, Pittsburg Landing, Doug Bar
3. **Clearwater River, below Orofino Bridge:**
Lewiston, Potlatch Creek, Hog Island, Lapwai Creek, Myrtle Beach, Cherry Lane, Lenore, Peck, McGill Hole, Pink House, Spalding Park, Slaughterhouse, Cat Hole, Tepee Hole, KOA, Bevenlins
4. **Clearwater River, above Orofino Bridge:**
Greer, Fish Hatchery Hole, Kamiah, Kooskia, Five-Mile, Six-Mile, Miller Hole, Sawmill
5. **North Fork Clearwater River from mouth to Dworshak Dam**
6. **Middle Fork Clearwater River:**
Clearwater to Clear Creek
7. **South Fork Clearwater River:**
Mt. Idaho Bridge, Mile Post 21
10. **Salmon River, below Whitebird Creek:**
Cottonwood Creek, Graves Creek, Deep Creek, Hammer Creek, Divide Creek, Rice Creek, Pine Creek, Snow Hole, Slide Hole, Deer Creek Bridge
11. **Salmon River, Whitebird Creek to Little Salmon:**
Whitebird Creek, Silver Bridge on Time Zone, Blackhawk Bar, Lucille, Slate Creek, Skookumchuck, Race, Fiddle, John Day Creek, Chair Creek, Riggins Boat Ramp
12. **Salmon River, Little Salmon to Vinegar Creek:**
Wind River, Vinegar Creek, Luke and French Creek, Spring Bar, Riggins Hot Springs, Allison Creek, Shorts Bar, Partridge Creek
13. **Salmon River, Vinegar Creek to South Fork:**
Shepp Ranch, Bull Creek, Warren Creek, Mann's Creek, South Fork Hole
14. **Salmon River, South Fork to Middle Fork:**
Mackay Bar, China Bar, Sabe Creek, Whitewater Ranch, Corn Creek, Chamberlain Creek, Buckskin Bills, Five-mile Creek, Bargamin Creek, (Salmon Falls - Boat), Long Tom Bridge, Big Mallard Creek, Little Mallard Creek, Bear Creek Hole, Smith Gulch

15. Salmon River, Middle Fork to North Fork:

Owl, Pine, Spring Creek, Indian, Dump, Panther Creek, Deadwater, Shoup, Colson Creek, Rams Head Lodge, Dutch Oven, Cove Creek, Newland Ranch, Trapper Gulch, Ebenizer Flats,

16. Salmon River, North Fork to Lemhi River:

Ramshorn, Salmon, Carmen, Lemhi, Fourth of July Creek, Kriley, Red Bluff

17. Salmon River, Lemhi River to Pahsimeroi River:

Ellis Down to Lemhi, Pahsimeroi, Dug Out, Shoup Bridge, Williams Lake, Twelvemile Creek, Iron Creek, Hot Creek, Cronks Canyon, Boat Hole, Sevenmile Creek, Elk Bend, Midway

18. Salmon River, Pahsimeroi River to East Fork:

Challis, Warm Springs Creek, Bayhorse, Morgan Creek, Chivers Access, Highway 93 Bridge

19. Salmon River, above the East Fork:

Basin Creek Down, Sunbeam Dam, Clayton, Robinson Bar, Yankee Fork, Thompson Creek, Squaw Creek, Stanley, Valley Creek, Redfish Lake Creek, Rough Creek, Holman Creek, Deadmans Rock, Ranger Hole, Torreys

20. Little Salmon River:

Rapid River, Pollock, Stinky Hot Springs, Boulder Creek

27. Snake River, Oxbow

28. Boise River

Appendix IV. 1989 fall steelhead regulations.

PERMIT VALIDATION

- When a steelhead trout has been hooked, landed, and reduced to possession, the angler must immediately:
 - Completely remove one numbered notch (*) from the permit;
 - Look up the number code from the River Location Code List and write it in the space provided; and
 - Enter the month and day the fish was caught.

*For example, a fish caught from the Salmon River between the Middle and North Forks on October 22 would be entered as:

Fish	Month/Day	Location Code
	10/22	15

However, when a steelhead is released unharmed, as in catch-and-release fishing, the angler is not required to make an entry on the permit.



STEELHEAD HARVEST SURVEY

Steelhead harvest and angler participation are estimated by a telephone survey conducted within a few weeks after the season closes. You may be called and asked about your effort and success. Please save your permit until 3 months after the season has closed or until you are contacted by an Idaho Fish and Game caller.

SALMON RIVER BOATING PERMITS

Permits for boating the Salmon River between Corn Creek and Long Tom Bar from June 20 through September 7 are required. Contact the U.S. Forest Service, State Creek Ranger Station, for permit information—telephone 208-639-2211.

RIVER LOCATION CODES	
SNAKE RIVER	
Snake River, below Salmon River, including Clearwater River below the Memorial Bridge (U.S. 12) at Lewiston	.01
Snake River, above Salmon River	.02
Snake River, below	.27
CLEARWATER RIVER	
Clearwater River, from Memorial Bridge (U.S. 12) at Lewiston to the Orofino Bridge	.03
Clearwater River, above Orofino Bridge	.04
North Fork Clearwater River	.05
South Fork Clearwater River	.07
SALMON RIVER	
Salmon River, below Whitebird Creek	.10
Salmon River, Whitebird Creek to Little Salmon	.11
Salmon River, Little Salmon to Vinegar Creek	.12
Salmon River, Vinegar Creek to South Fork	.13
Salmon River, South Fork to Middle Fork	.14
Salmon River, Middle Fork to North Fork	.15
Salmon River, North Fork to Lemhi River	.16
Salmon River, Lemhi River to Patishamoni River	.17
Salmon River, Patishamoni River to East Fork	.18
Salmon River, above the East Fork	.19
OTHER	
Little Salmon River	.20
Boise River	.28
Payette River	.29



IT PAYS TO BE COURTEOUS

Improved steelhead runs in Idaho have produced more eager fishermen and subsequent problems with crowding and littering. You can help make everyone's outing more enjoyable by following a few simple guidelines. PLEASE:

DO NOT LITTER. Put all refuse in appropriate receptacles or carry it out with you. Use sanitary facilities whenever possible.

COOPERATE WITH OTHER ANGLERS! Good sportsmanship dictates that you wait your turn to fish if another angler is fishing a hole first. Don't crowd in. Boat anglers should be careful not to cross the lines of or crowd bank anglers. Fishermen on the bank need to recognize that boats often must pass through narrow slots close to shore. Power boats need to avoid floatboats and wading anglers and be aware of the impacts of wakes, speed and noise.

Litter, waste and sportsman conflicts may well affect future fishing opportunities. Help protect your fishing and contribute to everyone's enjoyment by being courteous and responsible.

DO NOT LITTER




IDAHO DEPARTMENT OF FISH AND GAME
JERRY M. CONLEY, DIRECTOR

For general information, call or write Idaho Department of Fish and Game, 602 E. Walnut, P.O. Box 24, Boise, ID 83701; phone (208) 325-0700.

Regional Offices

COSBY (PAIDLINE) 208-6111
 1000 N. 1st St., Boise, ID 83702
 Lemhi 208-832-4444
 Lewiston 208-832-4444
 1000 N. 1st St., Boise, ID 83702
 1515 Commercial, Lewiston, ID 83204
 100 W. 4th, Boise, ID 83702
 1515 Commercial, Lewiston, ID 83204
 100 W. 4th, Boise, ID 83702
 P.O. Box 1008
 Moscow, ID 83847

1989 IDAHO FALL STEELHEAD SEASONS AND REGULATIONS



GENERAL INFORMATION LICENSES — STEELHEAD PERMITS

- Resident Fishing License \$11.00
- Nonresident Fishing License \$36.00
- Steelhead Permit (Lic. Required) \$ 6.00
- Nonresident Salmon and Steelhead 3-day License/Permit \$21.00

Anyone, except those expressly exempt, must have a valid fishing license and steelhead permit to fish for, reduce to possession, or catch and release steelhead.

Any person who does not qualify as a resident must purchase either a nonresident season fishing license and a full-season steelhead permit or a nonresident 3-day fishing license with steelhead permit.

In order to qualify for resident status, a person must be domiciled in the state for at least six months.

Children (including nonresident children) under the age of 14 are exempt from purchasing steelhead permits. They may fish without permits if they are accompanied by a valid permit holder, provided that any fish caught must be recorded on the permit holder's card and counted in the permit holder's legal bag and possession limit.

A resident child under 14 may purchase a permit so

Appendix IV. Continued.

SEASONS AND LIMITS

Daily bag, possession, and season limits for the Snake, Salmon, and Clearwater rivers shall not be construed as cumulative limits. An angler may take a total of 10 steelhead during the 1989 Fall season.

SALMON RIVER from its mouth upstream to the Highway 75 bridge immediately upstream from the mouth of the East Fork Salmon River.

Season: September 1, 1989 through December 31, 1989
 Limits: 2 per day
 4 in possession
 10 per season

Special Restrictions:

- Only steelhead 31 inches total length or under, which have been marked by clipping the adipose fins (as evidenced by a healed scar) may be kept.

- Steelhead are the only game fish that may be reduced to possession between Horse Creek and North Fork Salmon River during the steelhead season.

SALMON RIVER from the Highway 75 bridge immediately upstream from the mouth of the East Fork Salmon River upstream to Redfish Lake Creek.

Season: September 1, 1989 through December 31, 1989
 Limits: 2 per day
 4 in possession
 10 per season

LITTLE SALMON RIVER from its mouth upstream to the U.S. Highway 95 bridge near Smokey Boulder Road.

Season: September 1, 1989 through December 31, 1989
 Limits: 2 per day
 4 in possession
 10 per season

STEELHEAD

"Steelhead" are defined as rainbow trout over 22 inches in length taken from the Snake River drainage below Hells Canyon Dam, the Salmon River drainage (excluding lakes), and the Clearwater River drainage (excluding that portion above Dworshak Dam, and lakes), in the Boise River from its mouth upstream to Barber Dam, and in the Payette River from its mouth upstream to the Black Canyon Dam, during seasons open for the taking of steelhead, rainbow trout over 22 inches in length are defined as steelhead.

IDENTIFICATION OF SPECIES IN POSSESSION AND DURING TRANSPORTATION OR SHIPMENT

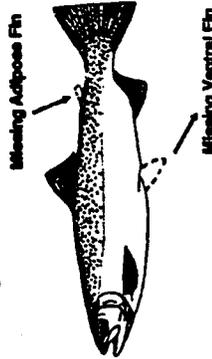
No person shall have in the field or in transit any steelhead trout from which the head or tail has been removed.

METHODS OF TAKE

- No person shall kill or retain in possession any steelhead which has been hooked other than in the head. Any steelhead hooked other than in the head must be released unharmed.
- Steelhead caught in a legal manner must be either released or killed immediately after landing.
- Steelhead may be taken only with barbless hooks in the Salmon, Snake and Clearwater river drainages. Bending the barb down to the shank of a single, double, or treble hook will meet this requirement.
- Steelhead may be taken with barbed hooks in the Boise and Payette river drainages.
- All fish that are hooked, landed, and not immediately released shall be counted in the limits of the person taking the fish.

WHICH STEELHEAD CAN YOU KEEP?

Only steelhead with a missing adipose fin (as evidenced by a healed scar) may be kept in the Snake, Salmon and Clearwater drainages. Steelhead with adipose fins may be kept in the Boise and Payette river drainages.



IS YOUR STEELHEAD MISSING A LEFT VENTRAL FIN?

If it is, here's why:

This missing left ventral fin signals the presence of a small coded wire tag planted in the nose cartilage of the fish. The tag is used in a variety of experiments designed to aid in the perpetuation of steelhead runs in Idaho.

The Department is no longer requesting anglers to voluntarily turn in heads of fish with missing ventral fins. However, if a Department field worker contacts you and requests to remove the snout, your cooperation will be appreciated.

CATCH-AND-RELEASE

- Any person may fish for steelhead on a catch-and-release basis August 1 through December 31 in any water open to fishing for other species EXCEPT in the Middle and South Forks of the Salmon River and their tributaries.

Only artificial lures or flies with barbless hooks are permitted when fishing on a catch-and-release basis. All steelhead caught in catch-and-release waters shall be released unharmed immediately.

However, once an angler has attained his bag, possession or season limit on those waters with steelhead head limits he must cease fishing for steelhead including catch-and-release fishing.

TO RELEASE FISH UNHARMED:

- Do not squeeze the fish.
 - Do not touch the gills or hold fish by gill covers.
 - Leave the fish in the water while removing the hook.
 - Use long-nosed pliers to rotate the hook from the fish's mouth. If the hook cannot be easily removed, cut the leader and release the fish.
 - If the fish is exhausted, hold it in an upright position in the water and gently move it back and forth until it is able to swim away.
- Using these precautions will permit the fish to survive for another day.



Barbless hooks are usually not difficult to remove from fish. Barb (1) is easily bent down (2) by moderate pressure applied with pliers.

SNAKE RIVER from the Washington state line at the confluence of the Snake and Clearwater rivers to Hells Canyon Dam, including the Clearwater River from its mouth to the Memorial Bridge of U.S. Highway 12 at Lewiston.

Season: September 1, 1989 through December 31, 1989
 Limits: 2 per day
 4 in possession
 10 in possession

Special Restrictions: Fishing from a boat within 150 yards of Hells Canyon Dam is PROHIBITED.

CLEARWATER RIVER AND MIDDLE FORK CLEARWATER RIVER from the Memorial Bridge of U.S. Highway 12 at Lewiston upstream to a posted line 150 yards downstream of the mouth of Clear Creek; South Fork of the Clearwater River from its mouth upstream to the confluence of American and Red rivers; and the North Fork of the Clearwater River from its mouth upstream to Dworshak Dam.

Season: October 15, 1989 through December 31, 1989
 Limits: 2 per day
 4 in possession
 10 per season

Special Restrictions:

- Fishing from the shoreline along the perimeter of Dworshak National Fish Hatchery is PROHIBITED.
- Fishing from motorized watercraft is PROHIBITED on the Clearwater River Bridge at Ordino upstream to the mouth of Clear Creek.
- Fishing from any watercraft is PROHIBITED between a posted line approximately 150 yards upstream from the mouth of the North Fork of the Clearwater River and the Ahsatika Highway Bridge.

FISHING IN BOUNDARY WATERS

SNAKE RIVER BETWEEN IDAHO AND OREGON OR WASHINGTON: The holder of a valid Idaho fishing license may fish the Snake River where it forms the boundary between the states of Idaho and Oregon or Washington, subject to the fish and game laws of Idaho but may not fish from the shoreline, sloughs or tributaries on the Oregon or Washington side. An Oregon or Washington license holder has the same rights and restrictions with reference to the Idaho side. Any angler who fishes on the Snake River or any other water forming an Idaho boundary is entitled to only one daily bag limit per day regardless of the number of licenses he may possess.

Appendix V

Total number of resident steelhead anglers, days fished, fish caught, and catch rate in fall 1989 by section and drainage.

SECTION	ANGLERS	HATCHERY		WILD		FISH per DAY
		DAYS FISHED	FISH RELEASED	FISH RELEASED	FISH HARVESTED	
1	1,961	8,388	483	2,105	2,146	0.56
2	1,181	3,090	133	236	729	0.36
<hr/>						
SNAKE						
TOTALS	3,142	11,478	616	2,341	2,875	0.51
3	7,515	41,733	1,786	5,174	9,835	0.40
4	780	3,183	133	554	688	0.43
5	1,283	5,944	421	236	1,571	0.37
6	175	749	10	41	133	0.25
7	133	719	0	10	51	0.08
<hr/>						
CLEARWATER						
TOTALS	9,886	52,328	2,350	6,015	12,278	0.39
10	1,170	5,554	986	1,396	1,068	0.62
11	2,423	9,024	216	1,376	1,027	0.29
12	513	1,643	205	298	267	0.47
13	400	1,417	41	226	236	0.35
14	1,653	7,987	739	2,218	1,294	0.53
15	3,018	14,034	914	2,854	2,546	0.45
16	883	3,306	349	657	380	0.42
17	472	2,248	144	195	185	0.23
18	164	431	0	41	21	0.14
19	236	770	10	103	62	0.23
20	103	441	21	31	82	0.30
<hr/>						
SALMON						
TOTALS	11,035	46,855	3,625	9,395	7,168	0.43
OXBOW	51	62	0	0	10	0.16
BOISE R.	862	6,540	452	0	236	0.11
PAYETTE	144	1,109	21	0	61	0.07
<hr/>						
STATEWIDE						
TOTALS	25,120	118,372	7,064	17,751	22,628	0.40

Appendix VI Total number of nonresident steelhead anglers, days fished, fish caught, and catch rate in fall 1989 by section and drainage.

SECTION	ANGLERS	DAYS FISHED	HATCHERY FISH RELEASED	WILD FISH RELEASED	FISH HARVESTED	FISH per DAY
1	955	4,517	493	1,006	1,027	0.56
2	339	1,170	483	544	359	1.18
<hr/>						
SNAKE TOTALS	1,294	5,687	976	1,550	1,386	0.69
<hr/>						
3	2,608	10,975	2,536	2,351	2,700	0.69
4	308	739	164	216	257	0.86
5	452	1,365	185	133	719	0.76
6	21	51	10	10	0	0.39
7	21	21	0	0	0	0.00
<hr/>						
CLEARWATER TOTALS	3,410	13,151	2,895	2,710	3,676	0.71
<hr/>						
10	359	1,109	62	298	164	0.47
11	431	1,037	431	287	205	0.89
12	62	123	0	21	10	0.25
13	113	267	103	62	51	0.81
14	329	1,324	267	749	205	0.92
15	657	2,022	113	441	400	0.47
16	298	811	31	154	72	0.32
17	0	0	0	0	0	0.00
18	31	62	0	0	0	0.00
19	62	349	308	10	0	0.91
20	0	0	0	0	0	0.00
<hr/>						
SALMON TOTALS	2,342	7,104	1,315	2,022	1,107	0.63
<hr/>						
OXBOW	21	41	0	0	21	0.00
BOISE R.	41	616	0	0	0	0.00
PAYETTE	0	0	0	0	0	0.00
<hr/>						
STATEWIDE TOTALS	7,108	26,599	5,186	6,282	6,190	0.66

Appendix VII Total number of steelhead by section and month harvested by resident anglers, fall 1989.

FISH HARVESTED					
SECTION	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
1	41	554	1,150	400	2,146
2	0	133	452	144	729
<hr/>					
SNAKE TOTALS	41	687	1,602	544	2,875
<hr/>					
3	72	2,895	4,384	2,484	9,835
4	0	103	329	257	688
5	21	226	934	390	1,571
6	31	10	41	51	133
7	0	0	41	10	51
<hr/>					
CLEARWATER TOTALS	124	3,234	5,729	3,192	12,279
<hr/>					
10	51	565	329	123	1,068
11	10	472	421	123	1,027
12	0	103	113	51	267
13	0	123	113	0	236
14	0	234	708	51	1,294
15	0	1,242	1,109	195	2,546
16	92	133	123	31	380
17	0	0	51	133	185
18	0	0	21	0	21
19	0	51	10	1	62
20	0	31	51	0	82
<hr/>					
SALMON TOTALS	153	2,954	3,049	708	7,166
<hr/>					
OXBOW	0	10	0	0	10
BOISE	0	10	185	41	236
PAYETTE	0	10	0	51	62
<hr/>					
STATEWIDE TOTALS	318	6,905	10,565	4,536	22,627

Appendix VIII Total number of steelhead by section and month harvested by nonresident anglers, fall 1989.

FISH HARVESTED						
SECTION	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	HARVESTED	
1	10	411	483	123	1,027	
2	21	195	103	41	359	
SNAKE						
TOTALS	31	606	586	164	1,386	
3	41	903	1,283	472	2,700	
4	0	133	103	21	257	
5	10	205	185	318	719	
6	0	0	0	0	0	
7	0	0	0	0	0	
CLEARWATER						
TOTALS	51	1,241	1,571	811	3,675	
11	0	123	72	10	205	
12	0	10	0	0	10	
13	0	31	21	0	51	
14	0	82	123	0	205	
15	10	216	175	0	400	
16	0	72	0	0	72	
17	0	0	0	0	0	
18	0	0	0	0	0	
19	0	0	0	0	0	
20	0	0	0	0	0	
SALMON						
TOTALS	20	616	463	10	1,109	
OXBOW	0	21	0	0	21	
BOISE	0	0	0	0	0	
PAYETTE	0	0	0	0	0	
STATEWIDE TOTALS	102	2,484	2,620	985	6,191	

PERMIT VALIDATION

When a steelhead trout has been hooked, landed, and reduced to possession, the angler must immediately:

- Completely remove one numbered notch (N) from the permit;
- Lock up the number code from the River Location Code List and write it in the space provided; and
- Enter the month and day the fish was caught.

For example, a fish caught from the Salmon River between the Middle and North Forks on October 22 would be entered as:—

Fish	Month/Day	Location Code
	10/22	15

REMOVE NOTCH
However, when a steelhead is released unharmed, as in catch-and-release fishing, the angler is not required to make an entry on the permit.



STEELHEAD HARVEST SURVEY

Steelhead harvest and angler participation are estimated by a telephone survey conducted within a few weeks after the season closes. You may be called and asked about your effort and success. Please save your permit until 3 months after the season has closed or until you are contacted by an Idaho Fish and Game caller.

SALMON RIVER BOATING PERMITS

Permits for boating the Salmon River between Corn Creek and Long Tom Bar from June 20 through September 7 are required. Contact the U.S. Forest Service, State Creek Ranger Station, for permit information—telephone 208-639-2211.

RIVER LOCATION CODES

SNAKE RIVER	
Snake River, below Salmon River	.01
Snake River, above Salmon River	.02
Snake River, Oxbow	.27
CLEARWATER RIVER	
Clearwater River, below Orofino Bridge	.03
Clearwater River, above Orofino Bridge	.04
North Fork Clearwater River	.05
South Fork Clearwater River	.07
SALMON RIVER	
Salmon River, below Whitebird Creek	.10
Salmon River, Whitebird Creek to Little Salmon	.11
Salmon River, Little Salmon to Vinegar Creek	.12
Salmon River, Vinegar Creek to South Fork	.13
Salmon River, South Fork to Middle Fork	.14
Salmon River, Middle Fork to North Fork	.15
Salmon River, North Fork to Lemhi River	.16
Salmon River, Lemhi River to Pahasimeroi River	.17
Salmon River, Pahasimeroi River to East Fork	.18
Salmon River, above the East Fork	.19
OTHER	
Little Salmon River	.20
Boise River	.28
Payette River	.29

IT PAYS TO PICK UP

Fishermen's litter is the most frequently cited offense of landowners who refuse access to some of Idaho's premium fishing spots. Carrying a "trash sack" ... and using it will pay big dividends in future fishing opportunities!

Access sites and more sanitary facilities are being developed throughout the state. Your conscientious and consistent use of these facilities, along with the application of a thoughtful outdoor ethic will help assure a better variety of good fishing locations in future years.

COURTESY IS CONTAGIOUS. Improved steelhead runs in Idaho have produced more eager fishermen and a fair number of crowding problems. You can help make your outing and everyone else's more enjoyable by being courteous. Wait your turn to fish if another angler is fishing a hole first. Don't crowd in. Boat anglers need to be careful not to cross lines of or crowd bank anglers. Bank fishermen need to recognize that boats often must pass through narrow slots close to shore. Power boats need to avoid floatboats and wading anglers and be aware of the impacts of wakes, speed and noise.

Be a LITTER GITTER



Make courtesy and responsible outdoor behavior a routine part of every outdoor experience. You'll see the benefits!

1990 IDAHO SPRING STEELHEAD SEASONS AND REGULATIONS



GENERAL INFORMATION

Resident Fishing License \$11.00
 Nonresident Fishing License \$36.00
 Steelhead Permit (Lic. Required) \$ 6.00
 Nonresident 3-Day
 Salmon/Steelhead License \$21.00

Anyone, except those expressly exempt, must have a valid fishing license and steelhead permit to fish for, reduce to possession, or catch and release steelhead.

Any person who does not qualify as a resident must purchase either a nonresident season fishing license and a full-season steelhead permit or a nonresident 3-day Salmon/Steelhead license.

In order to qualify for resident status, a person must be domiciled in the state for at least six months.

Children (including nonresident children) under the age of 14 are exempt from purchasing steelhead permits. They may fish without permits if they are accompanied by a valid permit holder, provided that any fish caught must be recorded on the permit holder's card and counted in the permit holder's legal bag and possession limit.

A resident child under 14 may purchase a permit so that he may catch his or her own limit of steelhead.

Callhatch
IDAHO
 1890 • CENTENNIAL • 1990

IDAHO DEPARTMENT OF FISH AND GAME
JERRY M. CONLEY, DIRECTOR

For general information, call or write: Idaho Department of Fish and Game, 600 S. Walnut, P.O. Box 26, Boise, ID 83707; phone (208) 334-3700.

Regional Offices:

COEUR D'ALENE 796-3111
 2020 Government Way
 Coeur d'Alene, ID 83814

LEWISTON 743-5884
 1540 Western Avenue
 Lewiston, ID 83801

BOISE 105 W. 4th, 267-7455
 Boise, ID 83724

MCCALL 466-5852
 1400 N. 1st, 268-2771
 McCall, ID 83456

JOHNSE 264-5280
 908 East Main
 Johnson City, ID 83428

POCAHONTE 422-4790
 1345 Sherman Road
 Pocatello, ID 83204

DAVID FALLS 263-7765
 1000 N. 1st, 263-7765
 Idaho Falls, ID 83401

SALMON 734-2771
 P.O. Box 1328
 Salmon, ID 83429



REPORT ALL WILDLIFE VIOLATIONS

SPRING SEASONS AND LIMITS

Daily bag, possession, and season limits for the Snake, Salmon, and Clearwater rivers are not cumulative limits.

- An angler may take a total of 20 steelhead in Idaho during the Spring 1990 steelhead season provided at least 10 are harvested from the Clearwater, Snake, or Little Salmon rivers and no more than 10 are harvested from the Boise, Payette, or Salmon rivers, excluding the Little Salmon River.

SALMON RIVER from its mouth upstream to Long Tom Creek (1/4 mile upstream from the Middle Fork Salmon River).

Season: January 1, 1990 through March 31, 1990
Limits: 2 per day, 4 in possession, 10 per season

SALMON RIVER from Long Tom Creek (1/4 mile upstream from the Middle Fork Salmon River) upstream to the Highway 75 bridge just upstream from the mouth of the East Fork Salmon River.

Season: January 1, 1990 through April 30, 1990
Limits: 2 per day, 4 in possession, 10 per season

The following Special Restrictions (2) apply to the two (2) sections of the Salmon River, described above:

Special Restrictions:

- Only steelhead 31 inches total length or under, which have been marked by clipping the adipose fins (as evidenced by a healed scar) may be kept.
- Steelhead are the only game fish that may be reduced to possession between Horse Creek and North Fork Salmon River during the steelhead season.

SALMON RIVER from the Highway 75 bridge just above the East Fork Salmon River upstream to Redfish Lake Creek.

Season: January 1, 1990 through April 30, 1990
Limits: 2 per day, 4 in possession, 10 per season

LITTLE SALMON RIVER from its mouth upstream to the U.S. Highway 95 bridge near Smokey Boulder Road.

Season: January 1, 1990 through April 30, 1990
Limits: 3 per day, 6 in possession, 20 per season

SNAKE RIVER from the Washington state line at the confluence of the Snake and Clearwater rivers upstream to Oxbow Dam, including that portion of the Clearwater River from its confluence with the Snake River upstream to the Memorial Bridge of U.S. Highway 12 at Lewiston.

Season: January 1, 1990 through April 30, 1990
Limits: 2 per day, 4 in possession, 20 per season

CLEARWATER RIVER AND MIDDLE FORK CLEARWATER RIVER from the Memorial Bridge of U.S. Highway 12 at Lewiston upstream to a posted line 150 yards downstream of the mouth of Clear Creek; North Fork Clearwater River from its mouth upstream to Dworshak Dam; South Fork Clearwater River from its mouth upstream to the confluence of American and Red rivers.

Season: January 1, 1990 through April 30, 1990
Limits: 3 per day, 6 in possession, 20 per season

Special Restrictions:

- Fishing from the shoreline along the perimeter of Dworshak National Fish Hatchery is PROHIBITED.
- Fishing from any motorized watercraft is PROHIBITED between a posted line approximately 150 yards upstream from the mouth of the North Fork Clearwater River and the Ahsahka Highway Bridge.
- Fishing from motorized watercraft is PROHIBITED from the Clearwater River Bridge at Orofino upstream to the mouth of Clear Creek.

BOISE RIVER from its mouth upstream to Barber Dam.

Season: January 1, 1990 through April 30, 1990
Limits: 2 per day, 4 in possession, 10 per season

PAYETTE RIVER from its mouth upstream to Black Canyon Dam.

Season: January 1, 1990 through April 30, 1990
Limits: 2 per day, 4 in possession, 10 per season

FISHING IN BOUNDARY WATERS

SNAKE RIVER BETWEEN IDAHO AND OREGON OR WASHINGTON: The holder of a valid Idaho fishing license may fish the Snake River where it forms the boundary between the states of Idaho and Oregon or Washington, subject to the fish and game laws of Idaho but may not fish from the shoreline, sloughs or tributaries on the Oregon or Washington side. An Oregon or Washington license holder has the same rights and restrictions with reference to the Idaho side.

Any angler who fishes on the Snake River or any other water forming an Idaho boundary is entitled to only one daily bag limit per day regardless of the number of licenses he may possess.

STEELHEAD

"Steelhead" are defined as rainbow trout over 20 inches in length in the Snake River drainage below Oxbow Dam, the Salmon River drainage (excluding lakes and the Lemhi and the Pahsimero rivers), and the Clearwater River drainage (excluding that portion above Dworshak Dam, and lakes). In the Boise River from its mouth upstream to Barber Dam, and in the Payette River from its mouth upstream to Black Canyon Dam, during seasons open for the taking of steelhead, rainbow trout over 20 inches in length with an adipose fin clip (as evidenced by a healed scar) are defined as steelhead.

METHODS OF TAKE

- Steelhead may be taken only with barbless hooks in the Salmon, Snake, and Clearwater drainages. Bending the barb(s) down to the shank of a single, double, or treble hook will meet this requirement.
- Steelhead may be taken with barbed hooks in the Boise and Payette river drainages.

OTHER REGULATIONS

- No person shall kill or retain in possession any steelhead which has been hooked other than in the head. Any steelhead hooked other than in the head must be released unharmed.
- Any steelhead caught in a legal manner must be either released or killed immediately after it is landed.
- All fish that are hooked, landed, and not immediately released shall be counted in the limits of the person hooking the fish.
- Once an angler has attained his bag, possession or season limit on those waters with steelhead limits, he must cease fishing for steelhead, including catch-and-release fishing.
- No person shall fish in waters having special limits while possessing fish of those species in excess of special limits.

IDENTIFICATION OF SPECIES IN POSSESSION AND DURING TRANSPORTATION OR SHIPMENT

No person shall have in the field or in transit any steelhead trout from which the head or tail has been removed.

WHICH STEELHEAD CAN YOU KEEP?

Only steelhead with a missing adipose fin (as evidenced by a healed scar) may be kept. Certain sections of the Salmon River have a 31-inch maximum length limit. See "Seasons and Limits."



TO RELEASE FISH UNHARMED:

1. Do not squeeze the fish.
2. Do not touch the gills or hold fish by gill covers.
3. Leave the fish in the water while removing the hook.
4. Use long-nosed pliers to rotate the hook from the fish's mouth. If the hook cannot be easily removed, cut the leader and release the fish.
5. If the fish is exhausted, hold it in an upright position in the water and gently move it back and forth until it is able to swim away.



Using these precautions will permit the fish to survive for another day



Barbless hooks are usually not difficult to remove from fish. Barb (1) is easily bent down (2) by moderate pressure applied with pliers.

Appendix X Total number of resident steelhead anglers, days fished, fish caught, and catch rate in spring 1990 by section and drainage.

SECTION	ANGLERS	DAYS FISHED	HATCHERY FISH RELEASED	WILD FISH RELEASED	FISH HARVESTED	FISH per DAY
2	615	2,292	160	567	320	0.46
SNAKE						
TOTALS	982	3,921	240	910	552	0.43
3	3,858	20,351	4,105	2,923	5,551	0.62
4	942	4,097	80	248	704	0.25
5	1,414	6,805	1,022	272	2,101	0.50
6	80	519	72	24	24	0.23
7	495	2,276	104	80	248	0.19
CLEARWATER						
TOTALS	6,789	34,048	5,383	3,547	8,628	0.52
10	288	1,422	64	264	232	0.39
11	455	1,829	343	623	272	0.68
12	359	1,390	64	64	200	0.24
13	200	791	224	431	216	1.10
14	631	2,284	631	879	328	0.80
15	1,901	8,626	1,014	2,188	1,431	0.54
16	1,294	6,134	847	1,078	775	0.44
17	879	4,800	367	391	376	0.24
18	615	2,612	551	487	216	0.48
19	1,048	2,939	224	663	296	0.40
20	911	3,538	1,438	1,142	1,622	1.19
SALMON						
TOTALS	8,581	36,365	5,767	8,210	5,964	0.55
OXBOW	24	80	0	0	8	0.10
BOISE R.	942	4,696	375	0	368	0.16
PAYETTE	8	32	16	0	24	1.25
STATEWIDE						
TOTALS	17,326	79,142	11,781	12,667	15,544	0.51

Appendix XI Total number of nonresident steelhead anglers, days fished, fish caught, and catch rate in spring 1990 by section and drainage.

SECTION	ANGLERS	DAYS FISHED	HATCHERY	WILD	FISH HARVESTED	FISH per DAY
			FISH RELEASED	FISH RELEASED		
1	152	719	160	176	232	0.79
2	96	160	0	32	40	0.45
<hr/>						
SNAKE TOTALS	248	879	160	208	272	0.73
<hr/>						
3	1,645	6,214	112	1,006	2,149	0.53
4	519	1,629	343	184	583	0.68
5	543	1,829	72	112	584	0.42
6	56	216	40	64	48	0.70
7	64	152	8	24	8	0.26
<hr/>						
CLEARWATER TOTALS	2,827	10,040	575	1,390	3,372	0.53
<hr/>						
10	48	248	136	56	88	1.13
11	24	48	16	8	8	0.67
12	24	64	0	0	0	0.00
13	16	32	0	32	0	1.00
14	128	479	80	208	104	0.82
15	479	1,901	495	527	455	0.78
16	288	695	8	176	40	0.32
17	72	296	120	24	56	0.68
18	72	184	72	56	32	0.87
19	152	479	895	136	72	2.30
20	72	192	0	0	16	0.08
<hr/>						
SALMON TOTALS	1,375	4,618	1,822	1,223	871	0.85
<hr/>						
OXBOW	0	0	0	0	0	0.00
BOISE R.	24	80	24	0	8	0.40
PAYETTE	0	0	0	0	0	0.00
<hr/>						
STATEWIDE TOTALS	4,474	15,617	2,581	2,821	4,523	0.64

Appendix XII Total number of steelhead by section and month
harvested by resident anglers, spring 1990

FISH HARVESTED					
SECTION	JANUARY	FEBRUARY	MARCH	APRIL	TOTAL
1	72	128	24	8	232
2	136	104	56	24	320
<hr/>					
SNAKE TOTAL	208	232	80	32	552
<hr/>					
3	2,620	1,917	942	72	5,551
4	176	208	232	88	704
5	823	415	727	136	2,101
6	0	0	24	0	24
7	24	16	144	64	248
<hr/>					
CLEARWATER TOTALS	3,643	2,556	2,069	360	8,628
<hr/>					
10	56	144	32	0	232
11	80	136	40	16	272
12	24	120	32	24	200
13	64	56	96	0	216
14	40	88	184	16	328
15	72	280	855	224	1,431
16	248	311	192	24	775
17	16	40	248	72	376
18	40	16	88	72	216
19	16	16	56	208	296
20	48	208	639	727	1,622
<hr/>					
SALMON TOTALS	704	1,415	2,462	1,383	5,964
<hr/>					
OXBOW	0	0	8	0	8
BOISE	64	24	232	48	368
PAYETTE	0	24	0	0	24
<hr/>					
STATEWIDE TOTALS	4,619	4,251	4,851	1,823	15,544

Appendix XIII Total number of steelhead by section and month
harvested by nonresident anglers, spring 1990

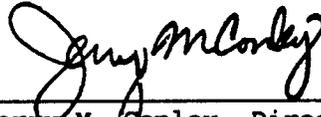
FISH HARVESTED					
SECTION	JANUARY	FEBRUARY	MARCH	APRIL	HARVESTED
1	88	6	4	40	232
2	40	0	0	0	40
<hr/>					
SNAKE TOTALS	12	6	4	40	272
<hr/>					
3	407	687	815	240	2,149
4	24	104	391	64	583
5	80	128	248	128	584
6	0	0	48	0	48
7	0	0	8	0	8
<hr/>					
CLEARWATER TOTALS	511	919	1,510	432	3,372
<hr/>					
10	24	32	32	0	88
11	0	0	0	8	8
12	0	0	0	0	0
13	0	0	0	0	0
14	0	32	72	0	104
15	40	56	343	16	455
16	0	8	24	8	40
17	24	24	8	0	56
18	0	0	16	16	32
19	0	0	8	64	72
20	0	0	0	16	16
<hr/>					
SALMON TOTALS	88	152	503	128	871
<hr/>					
OWBOW	0	0	0	0	0
BOISE	0	0	8	0	8
PAYETTE	0	0	0	0	0
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STATEWIDE TOTALS	727	1,135	2,061	600	4,523

Submitted by:

Thomas J. McArthur
Fisheries Staff Biologist

Approved by:

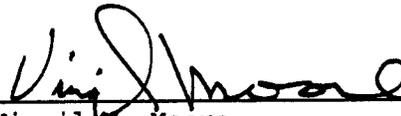
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Jerry M. Conley, Director



Steven M. Huffaker, Chief
Bureau of Fisheries



Virgil K. Moore
Fishery Research Manager
