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FISH & GAME DEPARTMENT

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AMERICAN FALLS RESERVOIR, FOREBAY, AND
SNAKE RIVER FISHERY INVESTIGATIONS

by

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Table Of Contents

	<u>Page</u>
ABSTRACT	1
INTRODUCTION	2
DESCRIPTION OF AREA	2
TECHNIQUES	2
RESULTS	3
Fish Plantings	3
Number of Tags Returned	3
Location of Tag Returns	3
Timing of Tag Returns	9
Length-Weight	16
Fisheries	16
DISCUSSION	18
LITERATURE CITED	19

List of Tables

Table 1. Fish plants in American Falls Reservoir from 1964 through 1973	4
Table 2. Returns of tagged rainbow trout planted in 1963 at American Falls Reservoir	6
Table 3. Returns of tagged rainbow trout planted in 1966 at American Falls Reservoir. The fish averaged 10.4 inches (total length) and 2/1 b ..	7
Table 4. Location of tag returns from 2,000 hatchery rainbow trout planted on each of three different dates in 1963 at American Falls Reservoir	8
Table 5. Location of tag returns from 1,000 hatchery rainbow trout planted on April 28, 1966 at the mouth of McTucker Creek; 500 rainbow trout planted at Sportsmens Park on April 28, 1966;	

Table of Contents (Cont.)

	<u>Page</u>
Table 6. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on April 12, 1963. An additional 25 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time.....	11
Table- 7. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on June 20, 1963. An additional 36 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time.....	12
Table 8. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at the mouth of McTucker Creek on September 13, 1963. An additional 14 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time	13
Table 9. Timing of returns from 500 catchable rainbow trout planted in American Falls Reservoir at Seagull Bay on April 29, 1966. Sequential months missing indicate no tagged fish were recovered at that time.....	14
Table 10. Timing of returns from 500 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on April 28, 1966. An additional 10 tags were recovered but no date given. Sequential months missing indicate no tagged fish were recovered at that time.....	15
Table 11. Timing of returns from 1,000 catchable rainbow trout planted in American Falls Reservoir at the mouth of McTucker Creek on April 28, 1966. One additional tag was returned but no location given. Sequential months missing indicate no tagged fish were recovered at that time	17

List of Figures - Appendix

Figure 1. Length and weight frequencies of 42 and 51 rainbow trout respectively, planted at 4.8/lb. in American Falls Reservoir on April 12, 1963. All fish were captured by anglers.....	21
Figure 2. Length and weight frequencies of 17 and 25 rainbow trout respectively, planted at 3.0/lb. in American Falls Reservoir on June 20, 1963. All fish were captured by anglers:	22

List of Figures - Appendix (Cont.)

	<u>Page</u>
Figure 3. Length and weight frequencies of 44 and 64 rainbow trout respectively, planted at 2.5/lb. in American Falls Reservoir on September 13, 1963. All fish were captured by anglers	23
Figure 4. Length frequency of 23 rainbow trout planted at 2/lb. in American Falls Reservoir on April 28, 1966. All fish were captured by anglers.....	24
Figure 5. Length frequencies of 31 rainbow trout planted at 2/lb. in American Falls Reservoir on April 28, 1966. All fish were captured by anglers.....	25
Figure 6. Length and weight frequencies of 31 and 10 rainbow trout respectively, planted at 2/lb. in American Falls Reservoir on April 29, 1966. All fish were captured by anglers.....	26

List of Tables - Appendix

Table 1. Summary of fisherman harvest of hatchery catchables on American Falls Reservoir for 1966 (Casey, 1968)	27
Table 2. Creel census summary for boat anglers on American Falls Reservoir, 1967, by two-week intervals (Casey, 1968).....	27
Table 3. Creel census information 1968 to 1969, American Falls Reservoir (Casey, 1970)	28
Table 4. Creel census summary for American Falls Reservoir during 1971 (Heimer, 1972)	29
Table 5. Creel census summary for American Falls Reservoir during 1972 (Heimer, 1973)	30

AMERICAN FALLS RESERVOIR, FOREBAY, AND
SNAKE RIVER FISHERY INVESTIGATIONS

ABSTRACT:

Annual plants of catchable size rainbow trout are made in American Falls Reservoir. In July and August, water temperature in the reservoir warms, a buildup and die-off of algae occurs, and oxygen problems result. An outmigration of fish occurs at this time with many being caught down-stream in the forebay and Snake River. A considerable amount of fishing pressure occurs at the reservoir, forebay, and river downstream because of the availability of these planted fish and their size.

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INTRODUCTION:

American Falls Reservoir, located on the main stem of the Snake River near the City of American Falls, was completed in 1927 by the Bureau of Reclamation. Concrete in portions of the dam is presently in an advanced state of deterioration due to an alkali aggregate reaction. Reservoir filling has been restricted to 66% of the total capacity for safety reasons. Proposals to replace the dam as soon as possible have been made because of the weakened condition of the dam and the resultant capacity restriction.

DESCRIPTION OF AREA:

The reservoir at capacity contains 1.7 million acre feet of water and is an integral part of the upper Snake River water storage system. At full pool, the reservoir contains an 155 mile long shoreline, is 56,000 surface acres in size, and 70 feet deep at elevation 4354.5 m.s.l.

An Idaho Power Company hydroelectric plant is located one-quarter mile downstream from American Falls Dam. The forebay for this plant is formed by a low head diversion dam which backs water against the face of American Falls Dam. The forebay is approximately 10.5 feet deep and 14 acres in size. All water released from American Falls Dam flows through the forebay and in some locations, velocities are such that it prevents total mixing of game and nongame fish species present.

It is proposed to eliminate the existing power plant and replace it with one in the central part of the forebay. Water for the operation of this plant would go directly from the reservoir into the power house and be discharged into the tailrace. The plan would eliminate the existing forebay.

A number of authors have investigated the fisheries at American Falls Reservoir. Hauck (1949) reviewed the existing fishery and made recommendations for its improvement. Casey (1968a, 1968b, and 1970) investigated the returns of planted fish and water temperatures. Heimer (1972 and 1973) checked catch rates of anglers at the reservoir, and Reid (1972) investigated the forebay fishery and Snake River downstream. Runyan (1972) found high concentrations of mercury in many of the fish species present. This report attempts to tie together this fisheries information and the effect dam replacement may have on the fishery.

TECHNIQUES:

Monel metal jaw tags were used to assess returns to the creel and migrations of the planted rainbow trout. All fish planted in the reservoir were raised at the American Falls Hatchery which made plants at three different locations as follows:

Mouth of McTucker Creek - at the extreme upper end of the reservoir on the north side of the Snake River.

Sportsmens Park - a major access site in the middle portion of the reservoir located approximately three and one-half miles east of the City of Aberdeen.

Seagull Bay - a major access site on the south shore of the reservoir approximately seven miles northeast of the City of American Falls.

RESULTS:

Fish plantings

Plants of fish at the reservoir have varied the past ten years (Table 1). The numbers of catchable (6"+) rainbow trout planted have varied from 46,830 to 90,000 with a ten year average of 69,155. Their pounds have varied from 14,105 to 30,579 with a ten year average of 22,770. Plantings of rainbow fry are made depending on the water level outlook at that time. Plantings of cutthroat fry were suspended in 1972 and 1973 because of the small number of cutthroat observed in the creel.

The forebay is not planted with fish. Those caught are the result of outmigrations from American Falls Reservoir.

Between three thousand and ten thousand catchable rainbow trout are planted in the Snake River in Power County annually.

Number of tags returned

Three groups of tagged fish were released in American Falls Reservoir in 1963 (Table 2). Returns between these groups were very comparable even though they were released at three different times during the season. Fish released on April 12 and June 20 entered the creel in much greater numbers during 1963 than the later planted fish released on September 13. Of 6,000 tagged fish planted in 1963, a total of 643, or 10.7 percent, were caught and tags reported by the anglers.

On April 28 and 29, 1966, three groups of tagged fish were released at various locations in the reservoir (Table 3). Returns of this group were also comparable even though they were released at widely scattered locations. A total of 347, or 17.4 percent, of the 2,000 tagged fish planted in 1966 were caught and tag numbers returned.

The reasons for an almost seven percent greater return of the 1966 plants over the 1963 plants is open to speculation. Temperature, oxygen, or water level variations between the two years may account for this difference. The amount of publicity given the tagged fish plants with the need stressed to return the tags may also be a factor.

Location of tag returns

In 1963, 2,000 tagged rainbow trout were planted in American Falls Reservoir on each of three different dates. A majority, 72.4 percent, of the tagged fish were caught downstream from the reservoir in either the forebay or river (Table 4). In 1963, a higher portion of the fish planted earlier in the season at Sportsmens Park migrated downstream than those in the September 13 plant at McTucker Creek.

Table 1. Fish plants in American Falls Reservoir from 1963 through 1973.

Year	Rainbow						Cutthroat	
	Catchables (6" +)		Fingerlings (3-6")		Fry (0-3")		Fry (0-3")	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1973	90,000	29,000	-	-	-	-	-	-
1972	46,830	17,250	-	-	17,381	191	-	-
1971	63,395	15,175	-	-	-	-	694,800	232
1970	74,785	23,400	75,680	880	106,000	500	237,000	79
1969	75,370	22,675	-	-	291,870	2,115	640,000	200
1968	77,700	21,525	125,583	1,719	-	-	915,200	286
1967	71,740	24,950	-	-	-	-	656,000	205
1966	76,784	29,037	-	-	431,810	1,650	704,088	264
1965	67,663	30,579	-	-	500,421	1,381	141,600	100
1964	47,281	14,105	-	-	628,089	3,290	40,446	39
1963	18,360	7,886						

Table 1 (Continued). Fish plants in American Falls Reservoir from 1963 through 1973.

Year	Coho		Brown		RainbowXCutthroat	
	Catchables (6" +)		Fry (0-3")		Fry (0-3")	
	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
1973	-	-	-	-	-	-
1972	-	-	-	-	-	-
1971	-	-	-	-	-	-
1970	8,400	1,200	-	-	-	-
1969	-	-	-	-	-	-
1968	-	-	34,188	222	-	-
1967	-	-	-	-	-	-
1966	-	-	-	-	200,025	75
1965	-	-	47,320	130	365,904	198
1964	-	-	-	-	-	-
1963	-	-	-	-	-	-

Table 2. Returns of tagged rainbow trout planted in 1963 at American Falls Reservoir

<u>Date released</u>	<u>Area released</u>	<u>Number released</u>	<u>Average length (total)</u>	<u>Average weight</u>	<u>Number returned by year</u>				<u>Total returned</u>	<u>Percent returned</u>
					<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>		
April 12, 1963	Sportsmens Park	2,000	7.0 inches	4.8/lb.	160	61	2	0	223	11.1
June 20, 1963	Sportsmens Park	2,000	8.5 inches	3.0/lb.	143	60	3	1	207	10.3
Sept. 13, 1963	Mouth of McTucker Creek	2,000	9.0 inches	2.5/lb.	24	169	9	2	204	10.2

Table 3. Returns of tagged rainbow trout planted in 1966 at American Falls Reservoir. The fish averaged 10.4 inches (total length) and 2/1b..

<u>Date Released</u>	<u>Area released</u>	<u>Number released</u>	<u>Number returned by year</u>			<u>Total returned</u>	<u>Percent returned</u>
			<u>1966</u>	<u>1967</u>	<u>1968</u>		
April 28, 1966	Mouth of McTucker Creek	1,000	166	3	0	169	16.9
April 28, 1966	Sportsmens Park	500	71	12	1	84	16.8
April 29, 1966	Seagull Bay	500	80	13	1	94	18.8

Table 4. Location of tag returns from 2,000 hatchery rainbow trout planted on each of three different dates in 1963 at American Falls Reservoir.

Location caught	Dates released and location						Total returned by location	Percent returned by location
	4/12/63 - Sportsmens Park		6/20/63 - Sportsmens Park		9/13/63 - McLucker Cr.			
	Returned by location Number	Percent	Returned by location Number	Percent	Returned by location Number	Percent		
Upstream from American Falls Reservoir	4	1.8	8	4.5	15	7.4	27	4.5
American Falls Reservoir	37	16.6	29	16.5	73	35.9	139	23.1
American Falls Forebay	148	66.4	107	60.8	83	40.9	338	56.1
Snake River from Forebay to Massacre Rocks	31	13.9	32	18.2	31	15.3	94	15.6
Lake Walcott	0	0	0	0	0	0	0	0
Downstream from Lake Walcott	3	1.3	0	0	1	.5	4	.7
Totals	223	100.0	176	100.0	203	100.0	602	100.0

On April 28 and 29, 1966, tagged rainbow trout were released at three different locations in American Falls Reservoir. A total of 57.8 percent of the 2,000 tagged fish released were caught either in the reservoir or upstream. The remainder (42.2 percent) were caught downstream from the dam (Table 5).

Tag return information for the tagged fish plants in 1963 and 1966 indicated that the closer the planting site is to the dam, the higher outmigration of fish from the reservoir.

The location of returns from the upper end of the reservoir (McTucker Creek) differ considerably, depending on the time of planting. In 1963, a total of 43.3 percent of the fish planted at McTucker Creek were caught in the reservoir or upstream which compares to 82.6 percent in 1966.

Timing of tag returns

Of 198 fish harvested from the April 12, 1963 plant with information as to date and location of catch, 130, or 65.7 percent, were caught in July and August, and 101, or 51 percent, caught in the forebay during the same two months (Table 6). Tag returns appeared comparable from month to month, with the exception of the July through September period, until all tag returns stopped.

Timing of returns from the June 20, 1963 plants generally compare to the April 12 plant; however, returns are delayed somewhat because of the later planting date. Of 140 fish harvested from the June 20 plant with information as to date and location of catch, 62, or 44.3 percent, were caught in July and August, and 27.6 percent taken from the forebay during these same two months (Table 7). After October, tag returns were comparable until returns stopped.

Timing of returns from the September plant at McTucker Creek are somewhat similar to the two earlier plants at this location. Of 190 fish harvested with information as to date and location of catch, 76, or 40.0 percent, were caught the following year (1964) in July and August (Table 8).

All plants of tagged fish at American Falls Reservoir in 1966 occurred on April 28 and 29 at either Seagull Bay, Sportsmens Park, or McTucker Creek. Although fewer tagged fish were planted in 1966 than in 1963, timing of the returns are generally similar between the two years.

Eighty-one rainbow trout were returned with the necessary information from the April 29, 1966 plant at Seagull Bay. Of this total, 55, or 67.9 percent were caught during July and August and 38.3 percent taken from the forebay during these two months (Table 9).

Of 62 tags returned with the necessary information from the April 28, 1966 plant at Sportsmens Park, 36, or 58.1 percent, were caught in July and August, and 25.8 percent taken from the forebay during these two months (Table 10.)

Table 5. Location of tag returns from 1,000 hatchery rainbow trout planted on April 28, 1966 at the mouth of McTucker Creek; 500 rainbow trout planted at Sportsmens Park on April 28, 1966; and 500 rainbow trout planted at Seagull Bay on April 29, 1966.

Location caught	Dates released and location						Total returned by location	Percent returned by location
	4/28/66 - McTucker Creek		4/28/66 - Sportsmens Park		4/29/66 - Seagull Bay			
	Returned by location Number	Percent	Returned by location Number	Percent	Returned by location Number	Percent		
Upstream from American Falls Reservoir	12	7.2	0	0	1	1.2	13	4.0
American Falls Reservoir	126	75.4	26	36.1	20	24.7	172	53.8
American Falls Forebay	14	8.3	16	22.2	32	39.5	62	19.4
Snake River from Forebay to Mass-acre Rocks	14	8.3	27	37.5	23	28.4	64	20.0
Lake Walcott	1	.8	2	2.8	4	5.0	7	2.2
Downstream from Lake Walcott	0	0	1	1.4	1	1.2	2	.6
Totals	167	100.0	72	100.0	81	100.0	320	100.0

101

Table 6. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on April 12, 1963. An additional 25 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned																
	April 1963	June 1963	July 1963	Aug. 1963	Sept. 1963	Oct. 1963	Nov. 1963	Feb. 1964	March 1964	April 1964	May 1964	June 1964	July 1964	Aug. 1964	Sept. 1964	Oct. 1964	Later
Upstream from American Falls Reservoir	-	-	1	1	-	-	-	-	1	-	1	-	-	-	-	-	-
American Falls Reservoir	3	7	16	5	1	-	-	-	-	2	-	-	2	-	-	-	-
American Falls Forebay	-	2	46	55	4	3	2	1	1	2	2	-	2	2	1	1	-
Snake River Forebay to Massacre Rocks	-	1	1	5	6	4	-	-	-	-	2	6	-	2	1	1	2
Lake Walcott	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downstream from Lake Walcott	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-
Totals	3	10	64	66	13	7	3	1	2	4	5	6	4	4	2	2	2
Percent	1.5	5.0	32.4	33.4	6.6	3.6	1.5	.5	1.0	2.0	2.5	3.0	2.0	2.0	1.0	1.0	1.0

Table 7. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on June 20, 1963. An additional 36 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned															
	July 1963	Aug. 1963	Sept. 1963	Oct. 1963	Nov. 1963	Dec. 1963	Feb. 1964	Mar. 1964	April 1964	May 1964	June 1964	July 1964	Aug. 1964	Sept. 1964	Oct. 1964	Later
Upstream from American Falls Reservoir	-	1	1	-	1	-	-	-	2	-	2	-	-	-	-	1
American Falls Reservoir	7	5	7	-	1	2	3	-	1	-	-	2	-	-	-	1
American Falls Forebay	18	21	9	2	2	-	-	3	2	6	-	2	5	1	-	-
Snake River Forebay to Massacre Rocks	4	6	6	8	-	-	-	-	-	2	2	-	-	-	2	2
Lake Walcott	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downstream from Lake Walcott	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	29	33	23	10	4	2	3	3	5	8	4	4	5	1	2	4
Percent	20.7	23.6	16.4	7.1	2.9	1.4	2.1	2.1	3.6	5.7	2.9	2.9	3.6	.7	1.4	2.9

Table 8. Timing of returns from 2,000 catchable rainbow trout planted in American Falls Reservoir at the mouth of McTucker Creek on September 13, 1963. An additional 14 tags were returned but no dates given. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned																	
	Sep. 1963	Oct. 1963	Nov. 1963	Dec. 1963	Jan. 1964	Feb. 1964	Mar. 1964	Apr. 1964	May 1964	June 1964	July 1964	Aug. 1964	Sep. 1964	Oct. 1964	Dec. 1964	Mar. 1965	May 1965	Later
Upstream from American Falls Reservoir	-	-	-	2	-	2	-	3	2	2	-	-	-	1	-	-	-	1
American Falls Reservoir	-	-	1	18	8	-	-	3	3	6	24	3	-	2	1	1	-	2
American Falls Forebay	-	1	1	-	-	7	12	6	6	1	22	13	4	2	-	2	2	-
Snake River Forebay to Massacre Rocks	1	2	-	-	-	-	-	-	-	1	6	7	7	-	-	-	-	1
Lake Walcott	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downstream from Lake Walcott	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Totals	1	3	2	20	8	9	12	12	11	10	52	24	11	5	1	3	2	4
Percent	.5	1.6	1.0	10.5	4.2	4.8	6.3	6.3	5.8	5.3	27.4	12.7	5.8	2.6	.5	1.6	1.0	2.1

Table 9. Timing of returns from 500 catchable rainbow trout planted in American Falls Reservoir at Seagull Bay on April 29, 1966. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned										
	May 1966	June 1966	July 1966	August 1966	September 1966	October 1966	March 1967	April 1967	May 1967	June 1967	Later
Upstream from American Falls Reservoir	-	-	-	-	-	-	1	-	-	-	-
American Falls Reservoir	1	2	14	-	-	-	-	2	-	-	1
American Falls Forebay	-	-	18	13	-	-	-	-	1	-	-
Snake River Forebay to Massacre Rocks	-	-	3	6	-	6	-	-	-	7	1
Lake Walcott	-	-	-	-	2	-	1	-	-	-	1
Downstream from Lake Walcott	-	-	-	1	-	-	-	-	-	-	-
Totals	1	2	35	20	2	6	2	2	1	7	3
Percent	1.2	2.5	43.2	24.7	2.5	7.4	2.5	2.5	1.2	8.6	3.7

Table 10. Timing of returns from 500 catchable rainbow trout planted in American Falls Reservoir at Sportsmens Park on April 28, 1966. An additional 10 tags were returned but no date given. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned										
	May 1966	June 1966	July 1966	August 1966	October 1966	March 1967	April 1967	May 1967	June 1967	July 1967	Later
American Falls Reservoir	1	6	15	-	-	1	1	2	-	-	-
American Falls Forebay	-	-	6	10	-	-	-	-	-	-	-
Snake River Forebay to Massacre Rocks	-	-	1	4	6	-	-	-	3	2	1
Lake Walcott	-	-	-	-	1	-	1	-	-	-	-
Downstream from Lake Walcott	-	-	-	-	-	-	-	-	1	-	-
Totals	1	6	22	14	7	1	2	2	4	2	1
Percent	1.6	9.7	35.5	22.6	11.3	1.6	3.2	3.2	6.5	3.2	1.6

Timing of returns from the April 28, 1966 plant at McTucker Creek are quite different than the other plants. Of 167 tags returned with the necessary information, 110, or 65.9 percent, were taken in April and May and all from the reservoir (Table 11).

All returns of fish caught in April occurred during the last two days of the month when 62 fish or 37.1 percent of the total tagged catch was taken. Also, all returns were from fish recovered at the planting site indicating that word rapidly spread that planted fish were available and could be readily taken.

Tag return information from fish planted in the reservoir indicate a definite downstream movement during the summer months, primarily during July and August. During late summer water temperatures warm, a heavy bloom of algae occurs, and oxygen problems result.

Length-Weight

Length-weight frequencies at the time of capture for the various groups of tagged fish are given in Figures 1 through 6, Appendix. The length of the fish caught generally exceeded 12 inches (total) and weight 16 ounces.

Assuming these fish were measured and/or weighed in approximately the same proportion as the tag returns, and also that downstream movement occurs at approximately the same time as capture, we can estimate the size of the fish which pass downstream from the dam. For example, 72.4 percent of the fish planted on April 12, 1963 were captured downstream from the dam (from Table 3). Therefore, 72.4 percent of the fish measured and weighed in Figure 1, Appendix should have been captured downstream from the dam.

Fisheries

Fishing pressure and catch vary at the reservoir depending on the time of year and specific conditions. Peak pressure occurs during June and July when large numbers of the anglers are trolling. From late August through December a small number of anglers are normally present near the dam. Ice fishing occurs from January through March and is becoming more popular every year. A gradual increase in fishing pressure occurs in April and May. Although no good estimates of angling pressure at the reservoir are available, it is generally agreed that between 15,000 and 25,000 angler days (one fishing trip by one angler in one day) and between 45,000 and 75,000 angler hours occur annually.

Catch rates for different years are given in Table 1 through 5, Appendix.

From May 29 to December 5, 1971, forebay anglers fished 37,517 hours to catch 12,054 rainbow, 1,650 coho, 11 cutthroat, and 12 whitefish (Reid, 1972). During this same time period, 48.5 percent of the fishing pressure occurred from July 19 through August 29.

From May 29 to October 30, 1971, anglers in the Snake River from the Lake Walcott flowline to American Falls forebay fished an estimated 71,947 hours to catch 21,087 rainbow, 268 cutthroat, 24 brown trout, 582 coho, and 87 whitefish (Reid, 1972).

Table 11. Timing of returns from 1,000 catchable rainbow trout planted in American Falls Reservoir at the mouth of McTucker Creek on April 28, 1966. One additional tag was returned but no location given. Sequential months missing indicate no tagged fish were recovered at that time.

Location	Month and year returned										
	April 1966	May 1966	June 1966	July 1966	August 1966	September 1966	October 1966	November 1966	July 1967	August 1967	October 1967
Upstream from American Falls Reservoir	-	-	3	3	-	2	3	-	1	-	-
American Falls Reservoir	62	48	6	8	-	-	-	1	-	-	1
American Falls Forebay	-	-	-	7	7	-	-	-	-	-	-
Snake River Forebay to Massacre Rocks	-	-	-	1	4	-	8	-	-	1	-
Lake Walcott	-	-	-	-	-	1	-	-	-	-	-
Totals	62	48	9	19	11	3	11	1	1	1	1
Percent	37.1	28.7	5.4	11.4	6.6	1.8	6.6	.6	.6	.6	.6

DISCUSSION:

The fishery in American Falls Reservoir is the result of annual plants of fish by the Idaho Fish and Game Department; however, the reservoir is gradually becoming more eutrophic (Bushnell, 1969) with a buildup of algae occurring in late July and August (Rose and Minshall, 1972). Periodic die-offs of the algae along with high water temperatures cause many of the fish present to seek more favorable conditions elsewhere. Consequently, many migrate downstream into the forebay and river creating a fishery in these areas. The reservoir, forebay, and river are all popular fishing spots as evidenced by the amount of fishing pressure each receives. Generally, trout caught from these waters are desirable because of their large size.

Fish kills during the summer probably occur annually in the reservoir; however, as most fish leave before conditions get extremely bad and because of its large size, these die-offs are small and most go undetected.

If adequate downstream passage facilities are not constructed in the new dam, oxygen caused fish kills in the reservoir could be expected to increase dramatically. This will probably not be a problem as the fish should be able to pass downstream through the turbines. Turbine mortalities are unknown at this time and could be high because of the large size of the fish. The unknown mortalities resulting from the operation of the power plant along with the loss of the forebay could eliminate a part of the fishing which now occurs in the American Falls area.

Water which is released from the reservoir in late summer is now oxygenated both by spilling over the dam and as it passes through the forebay. Elimination of the spilling and the forebay may create oxygen problems in the river downstream, resulting in an additional loss of fish habitat.

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Prepared by:

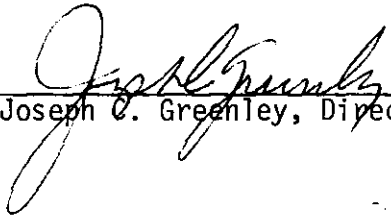
John T. Heimer
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Submitted by:

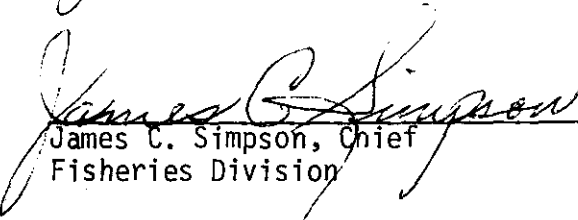
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Approved by:

IDAHO FISH AND GAME DEPARTMENT



Joseph C. Greenley, Director



James C. Simpson, Chief
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APPENDIX

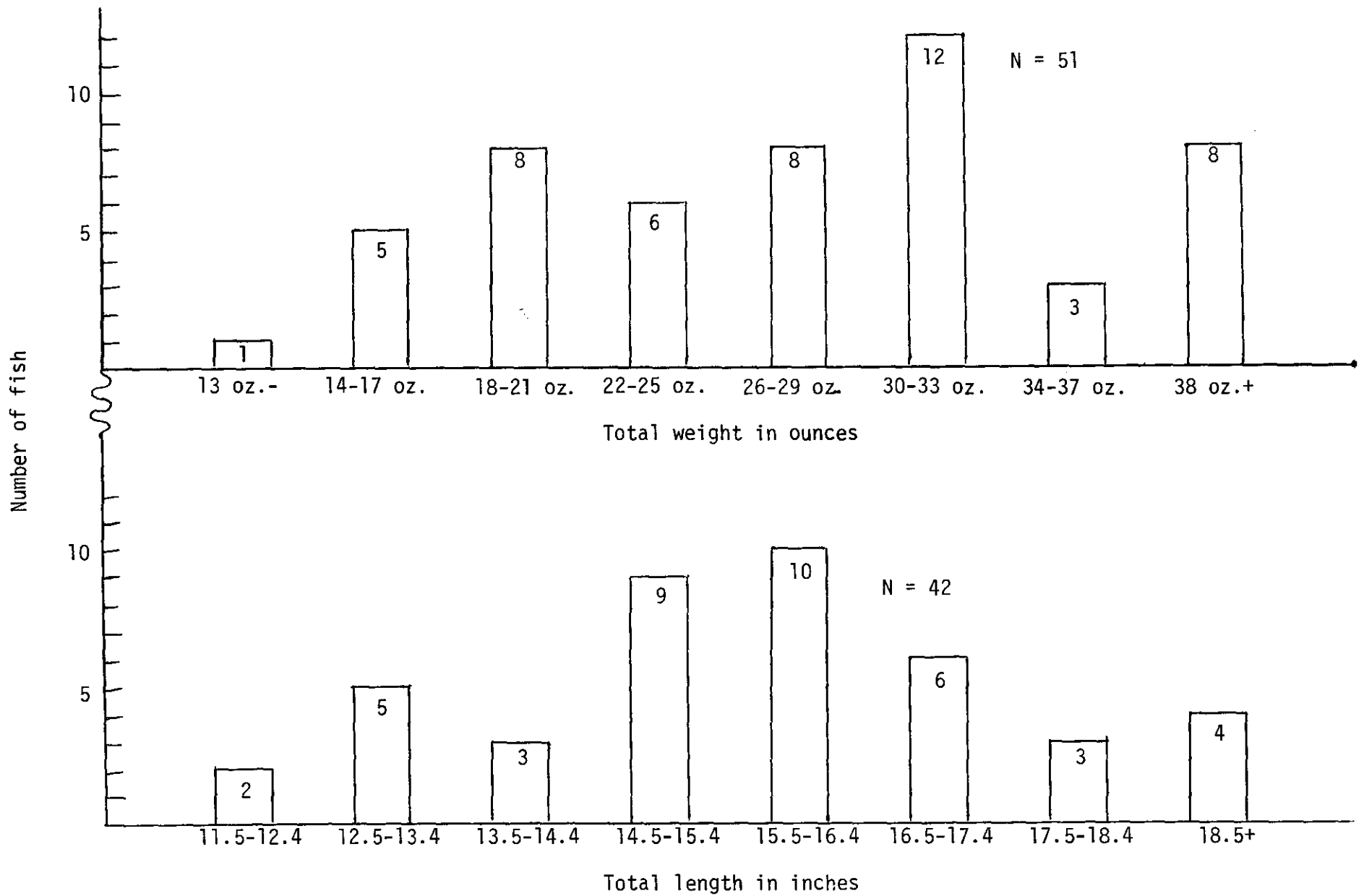


Figure 1. Length and weight frequencies of 42 and 51 rainbow trout respectively, planted at 4.8./lb. in American Falls Reservoir on April 12, 1963. All fish were captured by anglers.

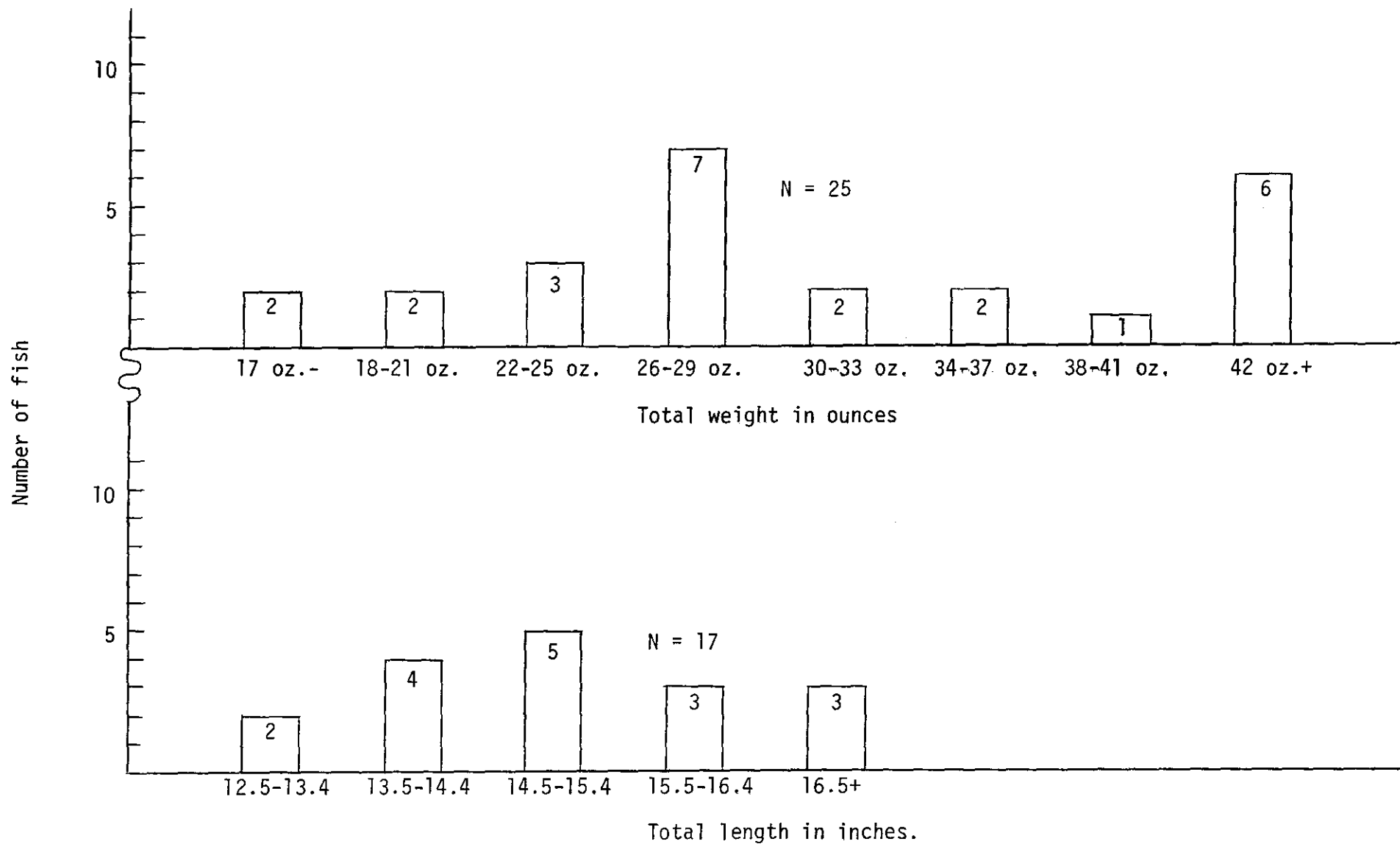


Figure 2. Length and weight frequencies of 17 and 25 rainbow trout respectively, planted at 3.0/lb. in American Falls Reservoir on June 20, 1963. All fish were captured by anglers.

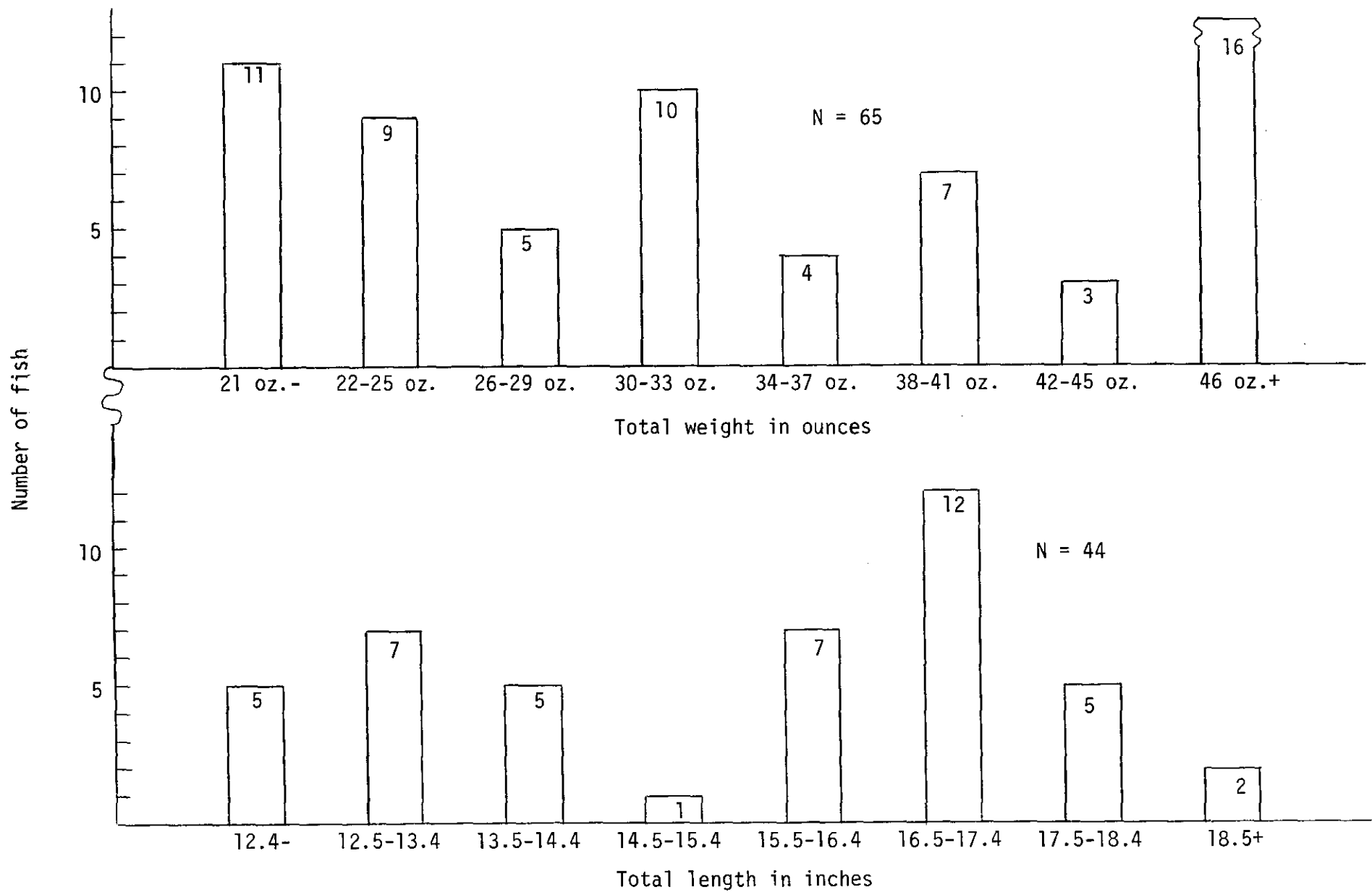


Figure 3. Length and weight frequencies of 44 and 65 rainbow trout respectively, planted at 2.5/lb. in American Falls Reservoir on September 13, 1963. All fish were captured by anglers.

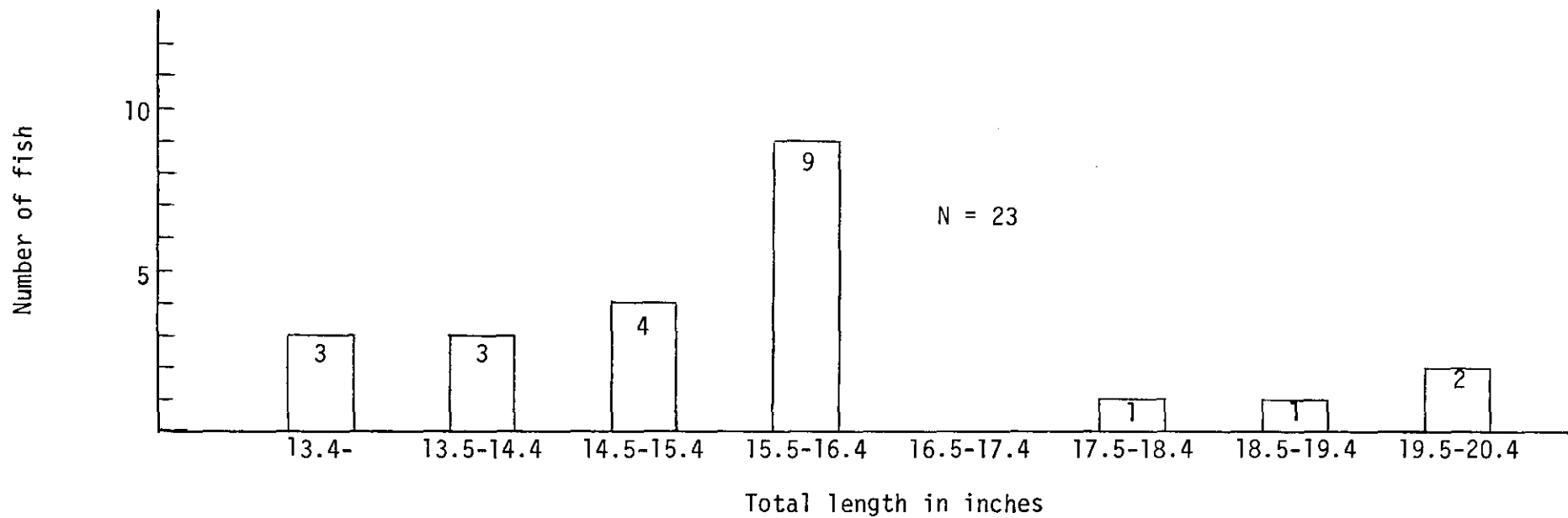


Figure 4. Length frequency of 23 rainbow trout planted at 2/1b. in American Falls Reservoir on April 28, 1966. All fish were captured by anglers.

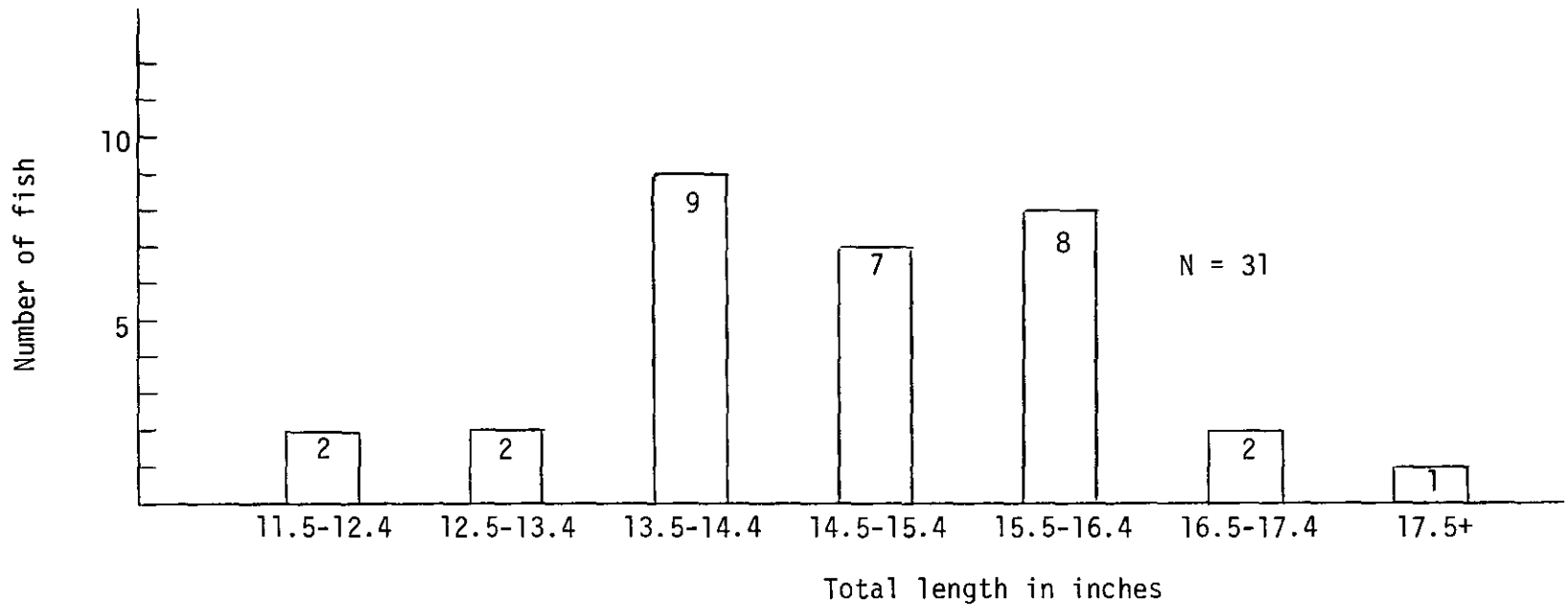


Figure 5. Length frequencies of 31 rainbow trout planted at 2/1b. in American Falls Reservoir on April 28, 1966. All fish were captured by anglers.

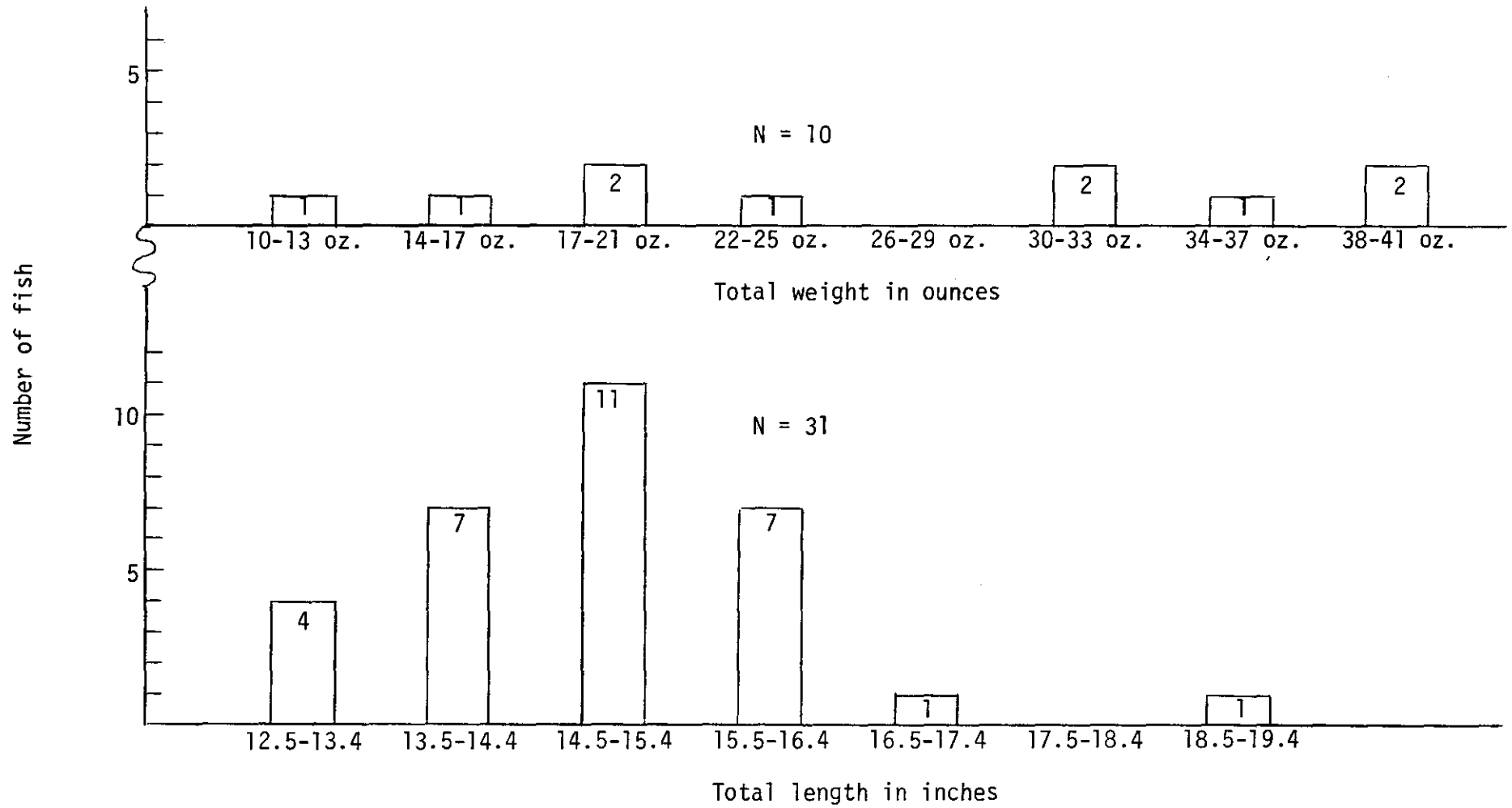


Figure 6. Length and weight frequencies of 31 and 10 rainbow trout respectively, planted at 2/1b. in American Falls Reservoir on April 29, 1966. All fish were captured by anglers.

Table 1. Summary of fisherman harvest of hatchery catchables on American Falls Reservoir for 1966 (Casey, 1968).

<u>Month</u>	<u>Fishermen</u>	<u>Hatchery rainbow</u>	<u>Wild rainbow</u>	<u>Percent wild fish</u>
June	105	68	134	66
July	1,136	1,148	242	17
Totals	1,241	1,216	376*	23

* Wild fish would also include fish that were planted as fingerlings from the planting barge.

Table 2. Creel census summary for boat anglers on American Falls Reservoir, 1967, by two-week intervals (Casey, 1968).

<u>Date</u>	<u>Fishermen</u>	<u>Hours fished</u>	<u>Catch</u>			<u>Fish/hour</u>
			<u>RB</u>	<u>CT</u>	<u>CB</u>	
June 15-30	72	259	124	5	3	.51
July 1-15	146	584	223	2	-	.39
July 15-31	71	247	47	3	2	.21
Aug. 1-15	94	276	45	-	-	.16
Totals	383	1,366	439	10	5	.33 Av.

Table 3. Creel census information 1968 and 1969, American Falls Reservoir (Casey, 1970).

<u>Month and year</u>	<u>Number fishermen</u>	<u>Number fish</u>			<u>Fish/hour</u>
		<u>Rainbow</u>	<u>HRb</u>	<u>Coho</u>	
July 1968	198	8	290	3	.43
August 1968	41	1	7	-	.07
June 1969	18	-	12	-	.13
July 1969	769	3	697	-	.22
August 1969	83	-	30	-	.10
Sept. 1969	129	-	75	-	.14

Table 4. Creel census summary for American Falls Reservoir during 1971 (Heimer, 1972).

Month	Anglers interviewed	Total hours fished	Number of fish caught				Total	Fish per hour
			Rainbow	Cutthroat	Coho	Yellow perch		
January	12	28	-	-	-	5	5	.18
March	30	63	13	-	-	-	13	.21
April	33	114	18	-	-	-	18	.16
May	44	130	16	-	-	-	16	.12
June	54	132	24	-	-	-	24	.18
July	153	577	103	1	6	-	110	.19
October	13	52	2	-	-	-	2	.04
November	23	52	4	-	-	-	4	.08
Totals	362	1,148	180	1	6	5	192	.17

Table 5. Creel census summary for American Falls Reservoir during 1972 (Heimer, 1973).

Month	Anglers interviewed	Total hours fished	Number of fish caught				Fish per hour
			Rainbow	Cutthroat	Coho	Total	
April	19	53	16	-	1	17	.32
May	19	37	-	1	-	1	.03
June	4	14	4	-	-	4	.29
July	92	381	46	-	14	60	.16
October	22	81	25	-	-	25	.31
Totals	156	566	91	1	15	107	.19