

AMERICAN FALLS HATCHERY
ANNUAL REPORT

October 1, 1989 to December 31, 1990

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INTRODUCTION

American Falls Hatchery is located on the north bank of the Snake River approximately three miles from the town of American Falls and one-half mile downstream from American Falls Reservoir. American Falls Hatchery raises catchable (9- to 12-inch) and fingerling (3- to 6-inch) rainbow trout for statewide distribution.

Production for the period ending December 31, 1990 was 487,636 (9- to 12-inch) rainbow trout and rainbow x cutthroat trout hybrids weighing 154,242 pounds and 403,143 (3- to 6-inch) rainbow x cutthroat trout hybrids weighing 15,242 pounds. Also produced were 10,563 adult rainbow trout (16- to 20-inch) weighing 21,418 pounds for Hayspur Hatchery broodstock and various reservoirs in Region 5. Total number of fish produced was 1,166,842, with a total poundage of 238,774. Fish planted or transferred by region are listed in Table 1.

HATCHERY IMPROVEMENTS

1. A 5,000-gallon water chiller was installed for long haul fish plants.
2. Metal roofing was installed on two garages and the old shop building.
3. New carpet was installed in two residences.
4. Public restrooms were renovated to comply with Labor Department safety standards.
5. A new fish loading pump was purchased.
6. Hatchery roads were upgraded.

FISH HEALTH

Fish health for the period was generally very good. We did not experience the usual outbreak of coldwater disease in the raceways that has been a problem for the past four years. This can be attributed to the fact that only Hayspur strain rainbow eggs were received. These fish appear to have some natural immunity to the bacteria at this station. All received fry will be started on TM50 feed from now on to try to eliminate this problem entirely.

All fish on the station were given a routine yearly inspection for IHN, IPNV, and whirling disease agents, with negative results.

Table 1. Fish planted or transferred by region.

Region	Numbers	Destination
1	154,310	Region wide
3	141,360	Region wide
4	235,731	Region wide
5	260,198	Region wide
6	41,298	I.F. vicinity

PUBLIC RELATIONS

Approximately 5,000 people visited the facility during this period, including the general public and various school, scout, and other tour groups. We had two major media contacts from the local newspaper and one of the local television stations. For the most part, the comments were positive considering the drought conditions and lack of waters to distribute fish into in late summer.

FISH PRODUCTION

Four years of drought conditions have necessitated some changes in production at American Falls Hatchery during this period. We have cut back on catchable trout production and have started raising more fingerlings for early fall releases. Another reason for cut backs in catchable trout production was to improve fin condition. In the past, we have had a problem with fin erosion in all the fish due to crowded conditions in the raceways. Table 2 shows the numbers of fish requested and produced.

Nearly 500,000 catchable (9- to 12-inch) rainbow trout and 400,000 fingerling (3- to 6-inch) rainbow and rainbow x cutthroat hybrids were reared and stocked or transferred statewide during this period. In addition, we reared nearly 11,000 adult brood fish for Hayspur Hatchery and various reservoirs in Region 5. All of our rainbow eyed eggs were received from Hayspur Hatchery during this production period. This Hayspur strain rainbow trout seem to rear better at this facility than any others we have tried. Eggs are listed in Table 3.

DIETS

All fish were started on Rangen soft-moist formula and were fed the same up to size 3/32-inch pellet. When the fish reached approximately 50 per pound, they were switched to 3/32-inch dry trout formula. Starting the fish in this way works very well at this station, as it gives the fish a good start on high protein, high fat content feeds, and results in fewer drop-outs and decreased mortalities in swim-up fry. Diets have improved in recent years so much that we have nearly no nutritional problems in our rainbow trout.

FOOD FED, COSTS, AND CONVERSIONS

Generally fish food costs have either remained steady, or in some instances, have actually decreased in price over the last year and a half. Feed conversions have been very good, averaging about 1.3 pounds of feed per pound of fish produced. This is well in line with goals set for our production

Table 2. Fish requested and produced.

Species and size	Production goal	Actual Production	Percent of goal achieved
Rb R 1 (9-12")	400,000	483,000	120.7%
Rb R1 (3-6")	250,000	403,000	161%

Table 3. Eggs received.

Species and strain	Source	Number	% Hatch	Destination
Rb R9	Hayspur SFH	650,000	90.2%	Statewide

facility. Table 4 shows cost by lot of fish produced. See Table 5 for actual costs and conversion.

FIN QUALITY

Past policy at the American Falls Fish Hatchery has been to maximize fish production. High fish production was usually associated with high fish densities, thus, leading to a substantial amount of fin erosion.

As sportsmen demand a quality product in the field, it is imperative to enhance the aesthetic characteristics of the hatchery fish that will be planted. A directive from Idaho Department of Fish and Game headquarters and cooperation from the regional fisheries managers have enabled this hatchery to reduce its annual production of fish and, thus, moderate rearing densities in the raceways.

Believing that lower fish densities will reduce fin erosion, fish samples were taken to assess present fin quality. Data from the present fin quality assessment can then be compared with future surveys.

Fish were sampled from two raceways representing separate lots of eggs. The pelvic, pectoral, and dorsal fins of each fish sampled were inspected for percent of fins present using the following rating system: 1-25% of fins present were given a rate of 1; 26-50%, rating of 2; 51-75%, rating of 3; 76-100%, rating of 4. The ratings were recorded, tallied, and averaged for each fin category, and then they were combined and averaged to form a collective rating for each raceway sampled.

The collective ratings from the pelvic, pectoral, and dorsal fins for fish in Raceways 10 and 7 were 2.2 and 2.0, respectively (Table 5). This translates to slightly less than 50% fin erosion. In both raceways, the pelvic fin had the least erosion, while the dorsal had the most. It is the goal of this hatchery to reduce the collective fin loss to 25% (i.e. a rating near 3.0) by next year.

Fish will be monitored periodically in the upcoming growing season to assess what time periods the fish experience fin loss. For instance, when fish are transported from the vats to the raceways, they will be inspected for fin loss. The fish will be sampled again every three months to gain insight whether the fin loss is a gradual process or occurs at certain stages of the development of the fish.

Table 4. Cost of fish production.

Species and strain	Source	Pounds distributed	Percent of budget	Cost
Rb R9 (9-12")	Hayspur	15,845	10%	\$ 17,000
Rb R9 (12-16")	Hayspur	24,250	15%	\$ 24,000
Rb R9 (9-12")	Erwin Ten.	57,142	20%	\$ 34,000
Ka K1 (9-12")	Skanes	43,498	18%	\$ 31,000
Rc RC3 (9-12")	Henrys L.	13,018	13%	\$ 22,000
RC RCTA (9-12")	Col. F&G	11,125	11%	\$ 19,000
Rb R5 (3-6")	Ennis NFH	8,150	8%	\$ 14,000
RC RC3 (3-6")	Henrys L.	1,771.5	5%	\$ 8,600

Table 5. Food fed and cost.

Source	Pounds	Cost	Cost per lb	Conversion
Rangen	323,945	\$78,394	.33	1.30

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