

IDAHO

DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

AMERICAN FALLS HATCHERY

Annual Report



1 October 1983 - 30 September 1984

by
Gary Baker
Fish Hatchery Superintendent II

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AMERICAN FALLS HATCHERY

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ABSTRACT

During 1983-84, most of the construction at this facility was finished. The final results include: 20 new concrete raceways, 100'x 8'x4'; draining, capping and covering with gravel the old spring pond; installation of new concrete pipelines to the raceways; completely enclosing the raceways with chain link fence and bird netting; installation of packed columns on each raceway; installation of automatic feeder system; graveling and landscaping around new raceways and covered the scars caused from construction; tearing out small raceways in the yard and filling in holes; new domestic water system and lines to residences; and installation of electric pump for hatchery building water supply and water alarm for the same. American Falls received its first fish from Hayspur Hatchery as fingerlings on November 4, 1983. They consisted of stock from Hayspur brood fish and from Whitney stock. The Hayspur stock was much better fish overall.

We planted 107,750 pounds of rainbow or 577,769 fish. One hundred ninety-seven thousand, three hundred and four (197,304) pounds of feed was fed for an overall conversion of 1.831. Feed cost per pound of fish produced was .341. Fish on hand as of October 1, 1984: 541,637 Rbt-R1 or 24,727 lbs.

Author:

Gary Baker
Fish Hatchery Superintendent II

OBJECTIVE

The objective for the American Falls Hatchery is:

Production of 175,000 pounds of 8-10 inch rainbow trout for distribution to streams, lakes and reservoirs statewide.

INTRODUCTION

American Falls Hatchery is located one-half mile below American Falls Reservoir Dam on the north side of the Snake River. Originally constructed in 1932, the facility was completely rebuilt in 1982-83. Production capability is 175,000 pounds of fish, utilizing approximately 20 cfs of water from Reuger Spring.

Raceways consist of 20 concrete 100'x8'x4' double-pass structures with built on walkways and an automatic feeder system. Incubation and fry tanks consist of 18 double-stack Heath incubators and 10 Heath round tanks 6'x3.5' with center drain.

FISH PRODUCTION

Table 1. Fish produced at the American Falls Hatchery for the 1983-84 year.

Species	<u>Size 1</u>		<u>Size 2</u>		<u>Size 3</u>		<u>Total</u>	
	No.	Lbs.	No.	Lbs.	No.	Lbs.	No.	Lbs.
Rbt-R1	0	0	308,270	10,205	122,521	51,791	430,791	61,996
Rbt-R2	0	0	0	0	146,978	45,576	146,978	45,576
Rbt-R1	0	0	541,637	24,727	0	0	541,637	24,727
Totals	0	0	849,907	34,932	269,499	97,367	1,119,406	132,299

Two hundred fifty thousand, five hundred and sixty (250,560) rainbow eggs were received from Hayspur on November 10, 1983; these were disposed of as sac fry due to potential disease problems in brood fish.

A total of 1,136,456 eyed rainbow eggs were received from Trout Lodge during December, 1983; January, 1984; April, 1984 and May, 1984. Three hundred and eight thousand, two hundred seventy (308,270) of these were planted as fingerlings and 541,637 were retained for next year's production. There was a 75% survival from eyed egg to fingerling size. This could have been better if the bird screens had been in place earlier. The later eggs were very small and there was some loss prior to hatching due to nitrogen problems in the incubators.

FISH FEED UTILIZED

Table 2. Fish feed utilized at the American Falls Hatchery, 1983-1984.

<u>Manufacturer</u>	<u>Size</u>	<u>Lbs.</u>	<u>Costs</u>
Rangen (dry)	All sizes	197,304	\$36,770.20

No medicated feed was fed during this period at American Falls Hatchery.

FISH DISTRIBUTION

Fish distribution is summarized in Table 3.

FISH TRANSFERS

Transfers were made from the American Falls Hatchery to the following hatcheries:

Mullan Hatchery

Rainbow catchables: 7,000 lbs.--23,800 fish

McCall Hatchery

Rainbow catchables: 14,800 lbs.--50,955 fish

Mackay Hatchery

Rainbow catchables: 7,000 lbs.--17,800 fish

HATCHERY IMPROVEMENTS

Complete reconstruction of the facility (details covered in the Abstract). The hatchery acquired through trade: 1983 Dodge 1/2 ton 4x4 pickup for feeding, a 1984 Mitsubishi 4x4 lawn tractor with snow blower and mid-mount lawn mower, wood stoves in 3 residences, insulation in the attic of the No. 1 residence and various tools for the shop, which are valued at approximately \$300.00.

Table 3. Fish distribution.

Region	Month	Species	Receiving water	Number of fish	Number of pounds
1	April	Rb	Mullan Hatchery	23,800	7,000
3	June	Rb	McCall Hatchery	9,855	2,700
	July	Rb	McCall Hatchery	41,100	12,100
4	May, June	Rb	Stone Reservoir	8,060	2,650
	May	Rb	Burley Boys Pond	1,520	400
	Sept	Rb	Emerald Lake	10,315	3,850
	July, Aug	Rb	Lake Cleveland	8,905	2,550
	June, July	Rb	Marsh Creek	2,540	811
	June, July	Rb	Cassia Creek	2,801	940
5	Mar, May, July	Rb	Pocatello Highway Pond	9,178	2,966
	Mar, Sept	Rb	Pleasantview Reservoir	4,900	1,700
	Apr, June, Aug	Rb	McTucker Ponds	3,088	919
	Apr, May, June, July	Rb	Springfield Lake	53,354	7,736
	May	Rb	Crowthers Reservoir	3,300	1,000
	May, Sept	Rb	St. Johns Reservoir	5,203	1,810
	May, June, July	Rb	Portneuf River	9,233	2,925
	May	Rb	Wiregrass Reservoir	6,006	1,820
	May, July	Rb	E. Fk. Rock Creek	3,680	1,200
	May	Rb	Foster Reservoir	33,516	1,470
	May	Rb	Daniels Reservoir	35,958	1,960
	May	Rb	24-Mile Reservoir	33,560	530
	May	Rb	Twin Lakes	30,600	425
	May, June	Rb	Treasureton Reservoir	32,400	450
	June	Rb	Deep Creek Reservoir	3,000	1,000
	June, July	Rb	Chesterfield Reservoir	15,400	4,400
	June	Rb	Rose Pond	2,738	750
	June, July	Rb	Pebble Creek	5,002	1,520

Table 3. Continued.

Region	Month	Species	Receiving water	Number of fish	Number of pounds
5	June, July	Rb	Toponce Creek	3,140	1,005
	June	Rb	Blackfoot River	3,000	750
	July	Rb	Mink Creek	520	200
	August	Rb	Snake R. (Tilden-Blackfoot)	9,027	2,655
	Sept	Rb	American Falls Reservoir	9,180	3,400
6	May	Rb	Ririe Reservoir	111,72	4,900
	May, June, July, Aug	Rb	Willow Creek	13,160	4,780
	Aug, Sept	Rb	Snake River (Idaho Falls)	6,590	2,400

SPECIAL STUDIES

No special studies were done at the hatchery during this period.

FISH HEALTH

No major problems were encountered fish-health wise. Minor problems with the fry in the incubators resulted in some losses prior to swim-up. It is suspected that NO₂ saturation at 103-105% for a prolonged period on eyed eggs and sac fry was the cause.

HATCHERY NEEDS

A new hatchery building to utilize gravity flow water is needed so the hatchery personnel will not have to depend on pumped water for incubators and rearing tanks. Barring this, a back-up system for the pump is needed because there is none now. Asphalt surface on roadways surrounding the raceways as well as for the rest of the hatchery roads is needed. A weed mower attachment is also needed for the lawn tractor.

MISCELLANEOUS

Bird predation was a major problem during the year. The bird screens were not completely installed until October. Night herons were the main culprit; sometimes there would be as many as 200 on the raceways in the morning. The hatchery personnel helped with the loading of hay, pellets and grain during winter feeding of big game and birds in December, January and February.

The crew did a lot of cleanup and landscaping after the construction was completed and they planted grass and shrubs around the grounds to cover up construction scars. They also built screens, etc., for the new raceways. Numerous tours were given to school and scout groups during the spring and summer. Hatchery visitors were down in numbers because most people did not know construction was finished. About 2,500 people visited the hatchery other than tour groups.

ACKNOWLEDGEMENTS

Hatchery staffing during the year included:

Gary Baker, Hatchery Superintendent II; David Billman, Hatchery Superintendent I; Roland Warren, Hatchery Superintendent I; Bradley George, Bio-Aide.