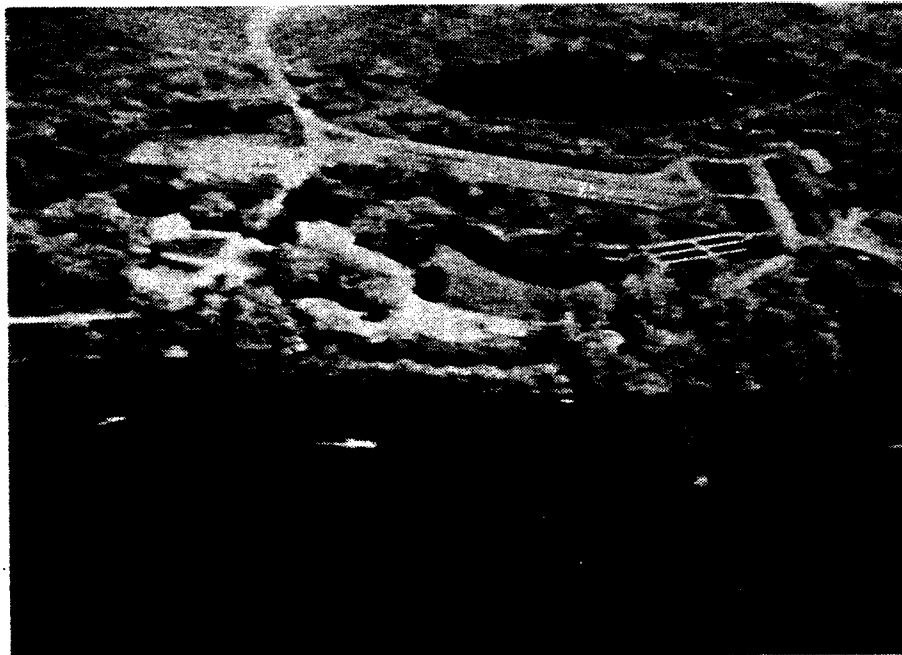




AMERICAN FALLS HATCHERY
ANNUAL REPORT

October 1, 1984 to September 30, 1985



by
Gary Baker
Fish Hatchery Superintendent II

October 1987

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ABSTRACT

During 1984 to 1985, we raised and planted 197,884 pounds of rainbow trout (1,736,261 fish). We fed a total of 274,067 pounds of feed of all sizes at a cost of \$43,006.77. Conversion was 1.38 pounds of feed fed for each pound of fish flesh produced.

We received eyed rainbow trout eggs from the following brood sources: Egan, Utah; Trout Lodge, Washington; and Mt. Lassen, California.

During June, the Department of Engineering crew worked for nearly a month on the spring pond installing new manholes, pipe and larger gravel to alleviate standing water in the old pond. They also installed a backup gasoline-powered pump on the hatchery building water supply, which was greatly needed.

Don Carr of the Engineering crew worked on the automatic feeders for nearly two weeks and finally got them working reasonably well. This entailed nearly rebuilding the entire unit. The feeders worked well until the air temperature dropped below 0°F.

Author:

Gary Baker
Fish Hatchery Superintendent II

INTRODUCTION

American Falls Hatchery is located one-half mile below American Falls Reservoir Dam on the northern bank of the Snake River. Originally constructed in 1932, this facility was completely rebuilt during 1982 to 1983. Production capability is 175,000 pounds of fish, utilizing approximately 20 cfs of water from Reuger Spring.

Rearing space consists of 20 concrete raceways measuring 100' x 8' x 4' with built-on walkways and an automatic feeder system. Incubation and fry tanks consist of 10 double-stack Heath incubators and 10 Heath round tanks (6 ft x 3.5 ft) with a center drain.

OBJECTIVE

Production of 150,000 to 175,000 pounds of 8" to 10" rainbow trout for distribution to streams, lakes and reservoirs statewide.

FISH PRODUCTION

We received 211,200 Shepherd of the Hills stock rainbow eyed eggs and 283,392 Sand Creek (Wyoming) rainbow eyed eggs from Egan Hatchery, Utah. These were hatched and reared to approximately 300 per pound and then transferred to Hagerman State Hatchery for further rearing (Table 1).

A total of 1,008,540 eyed rainbow eggs were received from Mt. Lassen Hatchery, California, on state contract during March and April of 1985. Of these, 272,770 were planted as fingerlings and 105,300 were transferred to Mackay Hatchery. We retained 504,071 fish for next year's production. Survival from eyed eggs to fingerling was 87¼%. Most of the loss was due to time in shipment and prolonged exposure to 100+% N₂ in the incubators.

FISH PRODUCTION

Table 1. Fish produced at American Falls Hatchery for the 1984 to 1985 year.

Species	0-3		3-6		6+		Total	
	No.	lb	No.	lb	b	b	No.	lb
Rbt-R1	399,713	1,222.75	0	0	559,707	165,208	959,420	166,430.65
Rbt-R4	0	0	272,770	7,475	0	.0	272,770	7,475
Rbt-R4	0	0	504,071	23,978	0	0	504,071	23,978
Totals	399,713	1,222.75	776,841	31,353	559,707	165,208	1,736,261	197,883.75

FISH FEED UTILIZED

Table 2. Fish feed utilized at American Falls Hatchery, 1984 to 1985.

Manufacturer	Size	Pounds	Costs
Rangens	All sizes	229,967	\$35,353.75
Clear Springs	1/8 pellet	40,000	6,148.00
Rangen (medicated)	Various	<u>4,100</u>	<u>1,505.02</u>
Totals		274,067	\$43,006.77

FISH TRANSFERS

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

	Pounds	Number of fish
<u>Hagerman State Hatchery</u>		
Rainbow fingerling	1,222.75	399,713
<u>McCall Hatchery</u>		
Rainbow catchables	46,800	76,220
<u>Mullan Hatchery</u>		
Rainbow catchables	4,200	18,060
<u>Clark Fork Hatchery</u>		
Rainbow catchables	24,500	82,064
<u>Mackay Hatchery</u>		
Rainbow fingerling	2,925	105,300
Rainbow catchables	12,100	38,317
<u>Ashton Hatchery</u>		
Rainbow catchables	6,500	20,150

Table 3. Fish distribution.

Region	Month	Species	Receiving water	No. fish	No. lb
1	Jan., May, July, Sept.	Rb	Clark Fork Hatchery	82,064	24,500
	July	Rb	Mullan Hatchery	18,060	4,200
	June	Rb	Hauser Lake	4,080	1,200
	June	Rb	Fernan Lake	5,100	1,500
	June	Rb	Kelso Lake	2,040	600
	June, Sept.	Rb	Cocolalla Lake	13,125	3,900
2	April	Rb	Dworshak Res.	75,750	20,000
	May, June	Rb	Elk Creek Res.	17,880	5,100
	June	Rb	Moose Creek Res.	5,280	1,600
3	May, June, July, Aug.	Rb	McCall Hatchery	76,220	46,800
	June	Rb	Upper Payette Lake	9,999	3,030
4	Feb.	Rb	Hagerman Hatchery	399,713	1,222.75
	July	Rb	Magic Res.	144,550	2,950
	April, May	Rb	Stone Res.	6,759	2,130
	May	Rb	Burley Pond	1,710	475
	May, June	Rb	Marsh Creek	2,206	621
	May, June	Rb	Cassia Creek	3,201	907
	July, Aug.	Rb	Lake Cleveland	9,120	2,225
	August	Rb	Emerald Lake	4,500	1,125
5	April, May, June, July	Rb	Pocatello Hiway Pond	14,239	4,000
	April, June, Aug.	Rb	McTucker Ponds	3,265	975
	April, July	Rb	Rose Pond	8,155	2,150
	May, June, July	Rb	Portneuf River	13,239	3,616
	May, Sept.	Rb	St. Johns Res.	7,250	2,050
	May, July	Rb	Crowthers Res.	5,993	1,425
	May, July	Rb	East Fork Rock Creek	3,140	800
	June, July, Sept.	Rb	Springfield Lake	16,165	4,675
	June, July	Rb	Toponce Creek	27,121	692
	June, July	Rb	Pebble Creek	4,502	1,253
	June	Rb	Mink Creek	1,020	300
	August	Rb	Snake River-Tilden	4,940	1,300
	August	Rb	Snake River-Blackfoot	4,000	1,000
	Aug., Sept.	Rb	Chesterfield Res.	10,345	2,900
Sept.	Rb	Pleasantview Res.	2,345	700	
6	January	Rb	Snake River Shelley	2,600	800
	July	Rb	Mackay Hatchery	38,317	12,100
	August	Rb	Mackay Hatchery	105,300	2,925
	May	Rb	Birch Creek	8,056	2,120
	July	Rb	Ashton Hatchery	20,150	6,500
	June, July, Aug.	Rb	Willow Creek	9,653	2,689
	Sept.	Rb	Ririe Res.	25,920	1,600
	Sept.	Rb	Island Park Res.	20,434	6,100

HATCHERY IMPROVEMENTS

The Department of Engineering crew installed new manholes on springs that had moved and placed perforated pipe and larger gravel in the bottom of the old pond to alleviate standing water. They also installed a gasoline-powered backup pump system on the hatchery water supply.

FISH HEALTH

Once again, we encountered minor problems with fry in the incubators prior to swim-up. It is suspected that N₂ saturation at 103% to 105% for a prolonged period on the eyed eggs and sac fry was the cause.

We had a systemic bacterial outbreak in our rainbow fingerlings when they were moved from the hatchery building to the outside raceways. The suspected cause was attributed to standing water in the spring pond utilized by various birds, muskrats, etc. The fish were treated with medicated feed containing TM, and the problem soon cleared up.

HATCHERY NEEDS

A new hatchery building to utilize gravity flow water and eliminate pumping to the primary rearing unit is needed. Asphalt surfaces on roadways surrounding the raceways, as well as for the rest of the hatchery roads are needed. An irrigation system for lawns in the yard are also needed. In addition, topsoil and landscaping in the lower yard plus removal of small raceways that are no longer usable are needed. Another permanent employee is needed to help with the workload.

MISCELLANEOUS

Bird predation was nearly nonexistent this year after we plugged all the holes in the fencing and bird netting. The herons arrived on schedule this spring, but finally gave up and moved on when they could not get into the raceways.

Once again, the crew did a considerable amount of tree, grass and shrub planting around the grounds. We had three JTPA youngsters for eight weeks to help with this chore.

Numerous tours were given to school and scout groups during the spring and summer. Other than tour groups, about 3,500 persons visited the hatchery.

ACKNOWLEDGEMENTS

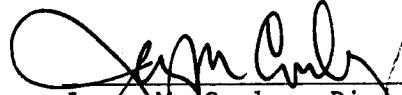
Hatchery staffing during the year included: Gary Baker, Hatchery Superintendent II; David Gillman, Hatchery Superintendent I; and Marc Arms, Laborer.

Submitted by:

Gary Baker
Fish Hatchery Superintendent II

Approved by:

IDAHO DEPARTMENT OF FISH & GAME



Jerry M. Conley, Director



David L. Hanson, Chief
Bureau of Fisheries

Mike Larkin
Resident Hatchery Supervisor