

IDAHO
DEPARTMENT OF FISH GAME

Jerry M. Conley, Director
American Falls Hatchery
Annual Report



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by
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American Falls Hatchery

ABSTRACT

We began the 1980 fish year with 30,000 0-3 inch; 100,850 3-6 inch; and 270,021 6 inch + rainbow trout on hand.

During the course of the year we stocked 282,854 rainbow trout weighing 103,690 pounds and 270,070 brown trout weighing 809.5 pounds.

We ended the fish year with 0, 0-3 inch; 148,761 3-6 inch; and 277,808, 6 inch + rainbow on hand.

We fed 285,980 pounds of feed for a conversion rate of 2.86 pounds of feed per pound of fish.

We took 4,329,000 rainbow trout eggs from our hatchery brood stock; 2,099,000 were kept for use at our hatchery and the others being shipped to Grace and Hagerman hatcheries. Additional rainbow eggs were purchased from Caribou Trout Company.

There were 900,000 brown trout eggs received from the National Fish Hatchery in Crawford, Nebraska and Plymouth Rock Trout Company. Due to disease problems only 270,000 brown trout fry and fingerlings were stocked.

We were visited by 5,000 people including school students, scout troops and Senior Citizen groups during 1980.

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OBJECTIVES

The objectives of American Falls Hatchery are to produce 130,000 pounds of 8-10 inch rainbow trout for distribution to 16 streams and rivers and 20 lakes and reservoirs throughout southeastern Idaho (Table 1).

INTRODUCTION

American Falls Hatchery is located one-half mile below American Falls Dam. The facility was constructed in 1932 and with the exception of 9 raceways and a hatch house it has remained basically unchanged.

Using 16 cfs of water from Reuger Springs, the hatchery is capable of producing 130,000 pounds of fish in raceways of the following descriptions:

- 4 - 12 foot x 400 foot
- 4 - 12 foot x 130 foot
- 1 - 12 foot x 300 foot
- 3 - 8 foot x 100 foot
- 4 - 4 foot x 100 foot
- 8 - 3 foot x 50 foot

FISH PRODUCTION

We began the 1980 fish year with 30,000 0-3 inch; 100,850 3-6 inch; and 270,021 6 inch + rainbow trout on hand.

During the course of the year we stocked 282,854 rainbow trout weighing 103,690 pounds and 270,070 brown trout weighing 809.5 pounds.

We ended the fish year with 0 0-3 inch; 148,761 3-6 inch; and 277,808 6 inch + rainbow trout on hand.

The brown trout we raised were from eggs received from the National Fish Hatchery at Crawford, Nebraska and from Plymouth Rock Trout Company, Plymouth Rock, Massachusetts. Crawford National Fish Hatchery shipped us 201,000 eggs from their Plymouth Rock State Fish Hatchery stock. From 10 December through 23 January, we received 851,288 brown trout eggs from Plymouth Rock Trout Company. Hatching success was 95% for all the brown trout eggs, however, due to bacterial disease and suspected IPN we suffered a 69.9% loss and planted only 270,000 fish.

Our rainbow trout were produced from eggs originating at our own facility and also from Caribou Trout Company, Soda Springs, Idaho. We had 4,219 female brood fish here at the hatchery which produced an average of 1,790 eggs each for a total of 4,329,569 eggs taken. "Eye-up" averaged 75% or 3,248,906 eggs. Fifteen percent of these eggs were not fertile, but would not shock out. We retained 2,099,180 eggs for our own use and shipped 911,726 to Hagerman Hatchery and 238,000 eggs to Grace Hatchery.

FISH HEALTH

Disease and predation by birds put a large dent in our production during the 1980 fish year.

Although losses from it were not extreme, gill disease was our most persistent problem and daily cleaning and frequent Purina 4X and Cutrine treatments were required.

ERM was also a major problem which was treated with Sulfa and TM50 medicated feed. A vaccination program was initiated and hopefully ERM will no longer be a major problem.

Gyrodactylus, Trichodina, Hexamita and Costia caused problems of varying degrees.

The diseases causing the highest losses were suspected IHN and positively identified IPN. The diseases caused or contributed to heavy losses of fish originating here and also of fish transferred in from other stations. Some examples include: 197,917 fish transferred from Mackay showed 80,000 loss and 36,975 from Hagerman National showed 16,000 loss. IPN remained a major problem until the fish outgrew it; there was no space available for thinning the fish. IPN persisted until fish crowding was reduced through stocking or mortality.

Another problem with eggs originating from our brood stock was poor eye-up. Eye-up averaged 75%, but even this low figure is misleading. Approximately 15% of these "eyed" eggs are infertile blanks that cannot be shocked out. The possible cause of our poor eye-up could be many, e.g.; age or brood stock, condition of brood stock, water temperature during late summer and early fall and the diseases which may or may not be carried by our brood stock. The fact that our brood stock are in 100% reuse water and exposed to heavy loads of fecal material, etc., may also be a problem.

The major factors leading to our health problem as we see them are overcrowding due to lack of space versus production goals, heavy reliance on reuse water and the general poor condition of the hatchery facilities.

FISH TRANSFERS

We received fish from other hatcheries during the year to supplement our production and to make up for our high disease losses. Mackay Hatchery sent us 197,917 fingerlings on 10/20/79; Hagerman National sent us 36,975 fish on 2/5/80; Hagerman State shipped us 6,840 fish on 9/3/80 and Hayspur sent us 38,025 fish on 9/12/80.

FISH FEED UTILIZED

In the production of 100,125 pounds of fish, we fed 285,980 pounds of feed for a conversion rate of 2.86 pounds of feed per pound of fish. The total pounds of feed included 7,350 pounds of medicated feed, 28,700 pounds of brood stock feed and 250 pounds of Oregon Moist Pellets.

HATCHERY NEEDS

Due to a combination of poor design and deterioration due to the age of the facility, our needs can be easily stated, but not so easily satisfied. The hatchery needs to be rebuilt from the water supply on down to the discharge.

MISCELLANEOUS

During the year hatchery personnel assisted John Heimer in fish sampling, and enforcement personnel on opening day of fishing.

We assisted students in their studies with information for papers and discussions and specimens for their classes and studies. We entertained approximately 5,000 visitors including school groups, scout groups, Senior Citizen groups and patients of the Blackfoot Hospital as well as numerous individuals. We built a new spawning shed and at least 38 new fish screens. We repaired virtually every piece of equipment on the hatchery (or at least it seemed like it). We cut and hauled trees to relieve leaf and bird problems. We pulled weeds, cut brush and mowed lawns. We scrubbed and swept and painted, and we can see a difference, and it has made us tired and frustrated and happy.

ACKNOWLEDGMENTS

Hatchery staffing during the fish year included: Fenton Hays, Superintendent II; Mel Sadecki, Superintendent I; Alan Williams, Fish Culturist; Linda Cacopardo, Laborer; Wanda Hays and Donna Sadecki, the hardworking, unpaid help.

FISH DISTRIBUTIONS

Table 1.

Region	Month	Species	Receiving Water	Number of Fish	Pounds of Fish	
4	Mar-June	Rainbow	Emerald Lake	21,640	5,125	
	July-Aug	Rainbow	Lake Cleveland	9,400	3,000	
	May	Rainbow	Burley Boys Pond	1,495	575	
	May	Rainbow	Marsh Creek	2,925	1,125	
	May	Rainbow	Cassia Creek	2,795	1,075	
	April	Rainbow	Stone Reservoir	2,900	1,000	
	June	Rainbow	Rupert Gravel Pond	3,705	650	
	5	July	Rainbow	Calder Creek (American Falls Dam)	3,660	2,550
October		Albinos	Snake River	350	700	
May		Rainbow	Sterling Creek	500	190	
June		Rainbow	Snake River (Blackfoot, Bingham, Bonneville County Line)	5,800	1,000	
May-July		Rainbow	East Fork Rock Creek	3,156	970	
Apr-Aug		Rainbow	Portneuf River	12,700	3,650	
April		Brown	Portneuf River	42,240	75	
April		Brown	Bear River	42,240	75	
June		Rainbow	Mink Creek	950	500	
Jun-Aug		Rainbow	Pebble Creek	4,565	1,450	
Jun-July		Rainbow	Toponce	5,480	1,350	
**				Morgan & Trail Bridge		
**				Tilden Bridge		
June		Rainbow	Wolverine Creek	950	500	
Mar-Apr		Rainbow	American Falls Res.	52,696	22,095	
Apr-June		Rainbow	Hawkins Reservoir	14,950	4,000	
May-June		Rainbow	Wiregrass Reservoir	5,180	1,550	
Apr-June		Rainbow	Chesterfield Res.	19,124	4,650	
Apr-June		Brown	Chesterfield Res.	40,332	63.5	
May-Sept		Rainbow	Springfield Res.	19,270	6,975	
May-June		Rainbow	McTucker Pond	4,675	1,285	
April		Rainbow	Deep Creek Reservoir	15,680	5,600	
April		Rainbow	Devils Reservoir	15,680	5,600	
April	Rainbow	Daniels Reservoir	16,380	12,600		
May	Rainbow	Crawthers Reservoir	2,745	450		
November	Rainbow	Pleasantview Res.	2,940	700		
***			St. John's Reservoir			
6	October	Rainbow	Ririe Reservoir	10,110	6,900	
	Nov-Sept	Rainbow	Camas Creek	7,370	1,700	
	May-July	Rainbow	Willow Creek	11,595	4,075	
		Rainbow-Brood	Trudes Pond			
		Stock Culls		500	900	
		Rainbow-Brood	Sheridan Reservoir			
		Stock Culls		207	500	
	Oct-Apr	Brown	SF Snake River	100,360	54.2	
April	Brown	Willow Creek	44,908	54.5		

** Recommended not to plant this year.

*** No planting due to work on dam.