IDAHO
DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

AMERICAN FALLS HATCHERY

Annual Report

1 October 1981 - 30 September 1982

by

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November 1983

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AMERICAN FALLS HATCHERY

ABSTRACT

The 1981-82 fish year began with the following numbers of rainbow trout, no 0"-3"; 157,738 3"-6"; 229,023 6" plus; and 679 broodstock.

473,262 eggs taken from 232 female rainbow trout at American Falls; 246,912 trout eggs shipped from White Sulphur Springs, WV.; 250,000 eggs from Aqua Life Trout Corporation; 1,449,550 coho salmon eggs from Oregon and Washington; and-604,350 sockeye salmon eggs from Fulton River BC.

Trout and salmon planted are as follows:

Rainbow trout - 698,528 weighing 179,110 pounds.
Sockeye salmon - 260,393 weighing 5,325 pounds. Coho salmon - 536,173 weighing 3,308 pounds.

282,510 pounds of food fed to rainbow trout and coho salmon with production 179,110 pounds of fish and a conversion rate of 1.57.

11,950 pounds of feed fed to sockeye salmon to produce 5,325 pounds of fish with a conversion rate of 2.24.

Problems were again encountered with low dissolved oxygen and high nitrogen while incubating coho and salmon eggs.

Disease problems were back with us again this year. IPN or IHN were the main diseases, with bacterial disease causing a minor problem. ERM did not cause any problem, because all the fish had been vaccinated.

About 4,000 people visited our hatchery this year. Senior citizens, students, and Boy and Girl Scout troops made up about 85 percent of the visitors.

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Superintendent II

OBJECTIVES

Production of 130,000 pounds of 8-10" rainbow trout to be planted in streams, lakes, reservoirs, and rivers throughout Idaho.

To maintain a good harvest level of these fish for recreational purposes.

INTRODUCTION

American Falls Hatchery is located one-half mile below American Falls Reservoir dam. The facility was constructed in 1932, later construction added nine raceways and a hatching house. The hatchery is capable of producing 130,000 pounds of fish utilizing 16 cfs of water from Reuger Springs.

Raceways available are of the following description:

4-12'x400'
4-12'x130'
1-12'x300'
3- 8'xlOO'
4- 4'xlOO'
8- 3'x 50'

Hatchery space:

20-Heath incubators
10-Heath round tanks 6'x3.5'-center drains
Old hatchery building
20-cement vats 28"x30"x14' with bottom drains

FISH PRODUCTION

The 1981-82 production year began with the following rainbow trout: no 0"-3"; 157,738 3"-6"; 229,023 6"-plus and 679 broodstock-size fish.

We took 473,262 eggs from 232 females averaging 1,940 eggs per female. A 74% eye-up. This gave us 350,818 eyed eggs. Another 15% did not shock out and had to be handpicked out of the trays. The total hatch was 58%.

246,912 eggs were received from White Sulphur Springs, WV. These eggs ran 643 per ounce. 50,000 eggs were removed in the first pickoff. 169,000 fry placed in starting tanks seemed to do very well after they started growing.

250,000 eggs were received 3/1/32 from Aqua Life, Inc. We had a very good hatch on this group of eggs, 95%, but lost two tanks of about 60,000 fish when suckers became stuck in the water control valves; this happened during the night. 60,000 more were lost to IPN or IHN virus.

604,350 sockeye salmon eggs were received from Fulton River, BC. First pickoff was 169,830, or 71% eye-up. I don't think that these eggs had been shocked or picked. We had 65% hatch, and 43.09% release into Stanley Lake in June 1982.

We received 1,449,550 coho salmon eggs from Little White Salmon, Sandy River Salmon and Minter Creek hatcheries. Our losses were 20% during the incubator period, because of low dissolved oxygen and high nitrogen. There was a very high loss when we put these fish in the starting tanks, due to coagulated egg yolk. We planted 536,173 fish, for 36.99% release.

Rainbow trout planted: 698,528 fish, weighing 179,110 pounds. Sockeye salmon planted: 260,393 fish, weighing 5,325 pounds. Coho salmon planted: 537,173 fish, weighing 3,308 pounds.

FISH FEED UTILIZED

Starter Mesh	2819	100	28.19
No. 1 fry	.2769	450	124.60
No. 1 fry	.2474	150	37.11
No. 2 fry	.2769	1,350	372.82
No. 2 fry	.2474	200	49.48
No. 3 fry	.2578	2,000	515.60
No. 3 fry	.2474	2,100	519.54
No. 4 fry	.2578	4,000	1,031.20
No. 4 fry	.2474	4,300	1,187.52
No. 5 fry	.1925	4,800	924.00
3/32 pellets.	.2315	1,100	254.65
4/32 pellets	.1882	140,250	26,395.05
4/32 pellets	.1691	115,660	19,558.09
No. 1 TM-50 Medic.	.3990	250	99.75
7/32 pellets brood	.2650	1,950	516.75
7/32 pellets brood	.2300	500	115.00
7/32 pellets brood	.1953	2,850	556.61
TOTAL POUNDS AND DOLLARS		282,010	52,285.31

698,528 rainbow trout and 536,173 coho salmon were fed 282,010 pounds of feed to produce 179,110 pounds of fish. Conversion rate was 1.57 with a cost of .1854¢ per pound of feed.

Oregon Moist Starter Mash	.3800	300	114.00
Oregon Moist 1/32 pellets	.3800	1,900	722.00
No. 1 fry dry	.2769	750	208.68
No. 2 fry dry	.2769	150	41.54
No. 2 fry dry	.2474	350	86.59
No. 3 fry dry	.2474	5,950	1,472.03
No. 1,3,4 TM - 50 Medic.	.3305	2,550	842.78
TOTAL POUNDS AND DOLLARS		11,950	3,487.62

260,393 sockeye salmon were fed 11,950 pounds of feed to produce 5,325 pounds of fish raised. Conversion rate of 2.24 with a cost per pound for feed .2917 cents.

FISH DISTRIBUTION

Fish Distribution is summarized in Table 1.

MEDICATED FEEDS

Medicated feed was fed to coho and sockeye salmon. No medicated feeds were fed to rainbow trout during the year. Two thousand eight hundred pounds of TM-50, costing $942.53, was fed to salmon. This helped the sockeye, but did little or nothing for the coho.

Rainbow trout were treated for bacterial problems with cutrine 4X Purina. Sockeye were given one a week prophylactic treatments with cutrine and 4X Purina. It helped very much. Sockeye was treated on time with a 3% salt solution followed with 4X Purina and started on medicated feed for fourteen days. Cutrine and 4X Purina treatments lasted for three days. Sockeye showed great improvement after the first day.

All treatments were under the direction of Harold Ramsey, who made a number of calls and several trips to the hatchery.

Major factors contributing to fish health problems were 1) reused water, 2) low dissolved oxygen, 3) high nitrogen percentage, 4) over-crowding fish, and 5) poor facilities.

FISH TRANSFERS

Hagerman Hatchery:

Rainbow trout-5,100 lbs, 13,380 fish.
Coho salmon-1,886 lbs, 299,874 fish.

Kamiah Holding Pond:

Coho Salmon-3,600 lbs., 5,760 fish.

Table 1. Fish distribution

Region	Month	Species	Receiving_ Waters	No. Fish	Pounds Fish
1	May	Rainbow	Cocallala Lake	5,400	2,700
	May	Rainbow	Spirit Lake	7,200	3,600
2	June	Rainbow	Winchester Lake	4,320	2,700
	June	Rainbow	Kamiah Pond	5,760	3,600
			Total Region 1 & 2	22,680	12,600
4	May	Coho Salmon	Hagerman Hatchery	299,874	1,886
	Feb. Mar.	Rainbow	Hagerman Hatchery	13,380	5,100
	Oct. June	Rainbow	Emerald Lake	29,309	13,425
	Nov. Mar.	Rainbow	Stone Reservoir	5,220	1,900
	April	Rainbow	Walcott Lake	15,080	5,200
	May	Rainbow	Burley Boys Pond	1,530	850
	May	Rainbow	Cassia Creek	3,120	1,200
	May	Rainbow	Marsh Creek	2,145	825
	June-Sept	Rainbow	Lake Cleveland	8,714	4,675
			Region 4 Total Rainbow	78,498	33,175
			Total Coho Salmon	299,874	1,886
5	April-Aug	Rainbow	American Falls Reservoir	75,057	26,550
	November	Rainbow	Pleasantview Reservoir	2,280	600
	April	Rainbow	St. John's Reservoir	4,320	2,700
	Dec. June	Rainbow	McTucker Ponds	8,376	3,000
	Feb. June	Rainbow	Springfield Lake	17,240	7,400
	April	Rainbow	Hawkins Reservoir	15,190	4,900
	May-June	Rainbow	Portneuf River	10,020	5,550
	May	Rainbow	Crowthers Reservoir	3,300	1,100
	April	Rainbow	Devils Reservoir	20,150	6,500
	April	Rainbow	Deep Creek Reservoir	20,935	8,900
	April	Rainbow	Daniels Reservoir	20,358	12,600
	April	Rainbow	Chesterfield Reservoir	15,080	5,800
	April	Rainbow	Wiregrass Reservoir	4,170	2,450
	May-July	Rainbow	East Fork Rock Creek	3,060	1,350

Table 1. Fish distribution (continued)

Region	Month	Species	Receiving Waters	No. Fish	Pounds Fish
5	June-July	Rainbow	Toponce Creek	3,430	1,960
	June-July	Rainbow	Pebble Creek	4,490	2,550
	July	Rainbow	Mink Creek	500	312
	July	Rainbow	Rose Pond	1,600	1,000
	July	Rainbow	Morgan & Trail Bridge	1,920	1,200
	August	Rainbow	Blackfoot River & Blackfoot Reservoir	87,945	12,650
	July	Rainbow	Snake River-Rose vicinity	4,000	2,000
	July	Rainbow	Bingham-Bonneville county line-Tilden	5,000	2,500
	May	Rainbow	Sterling Creek	520	200
	May-July	Rainbow	Hi-Way Pond, Pocatello	3,020	1,887
			Region 5 Total Rainbow	331,961	115,659
6	April	Coho Salmon	Ririe Reservoir	75,600	300
	May	Rainbow	Ririe Reservoir	14,000	7,000
	July-Aug	Rainbow	Willow Creek	7,080	3,600
	May	Coho Salmon	Island Park Reservoir	163,699	1,122
	July-Aug	Rainbow	Island Park Reservoir	240,421	5,700
	June	Sockeye Salmon	Stanley Lake	260,393	5,325
			Region 6 Total Rainbow	261,501	16,300
			Total Coho Salmon	239,299	1,422
			Total Sockeye Salmon	260,393	5,325

HATCHERY NEEDS

At the present time, we have planted all catchable fish, fingerling, and brood fish that we could get our hands on. We still have some fish that were in the water supply pond when it was drained that we did not get out. Some fish have moved up from the river. These fish will find a home when the water is cut off to build the new raceways.

Our needs will be met hopefully through the construction of the new facilities. These facilities will include, from the water source to the new raceways, 1) bird screens over the raceways, 2) water degassers, and 3) new feeders.

IMPROVEMENTS

Replaced the gauges and flow meters on both trucks, put alarms inside of the cab and lights to tell when the oxygen is out. Works very good; we did not lose a load of fish this year.

A new trash pump to clean the fecal material out to the raceways was purchased. At the present time, Hagerman is getting all the bugs worked out of this system.

SPECIAL STUDIES

Idaho Power Company brought fish from Batise Springs Hatchery. Thirty-two thousand fish, 6,000 received jaw tags. These 6,000 along with 6,000 from American Falls Hatchery, were planted at Seagull Bay Marina on American Falls Reservoir.

Idaho Power Company funding was received for the fish and creel census program on American Falls Reservoir and the Snake River below the dam to Eagle Rock. This program is under the supervision of John Heimer, Regional Fisheries Manager for Region 5. The two bio-aide people we housed, who were connected with the project, left,with the hatchery picking up the power bill, the lodging and cleaning up

GENERAL

All hatchery personnel have attended workshops or conferences and regional staff meetings throughout the year. Gene McPherson attended a fish disease lab held back east. I think that these schools are very good for a fish culturist to go to as we never get enough education.

I worked with Chris Chaffin on the fair booth at Blackfoot State Fair. We updated the aquariums for the fish, put in oxygen stones, a

refrigeration unit to lower the water temperature, and a pump to circulate the water in the system. Fish looked good for-about three days, so we changed the fish in the aquarium. I took the fish to the fair and helped in the booth one day. We had a lot of people visit the booth, and they thought it was great.

During the year, people at the hatchery helped haul hay and pellets for the deer and elk. Wrote a few citations for illegal fishing and hunting after hours and during closed seasons.

Gave tours, made a presentation at the Lions Club, and assisted with the recovery of some birds that were hurt.

I took the Director goose hunting on a bluebird day, never saw a bird close enough to shoot at. He did say one thing, "The phone sure did not stop him from sleeping."

ACKNOWLEDGEMENTS

Hatchery staffing during the year included Fention S. Hays, Superintendent II; Mel Sadecki, Superintendent I; Dave Horton, Fish Culturist, terminated; Terry Rutter and Wade Bonner, laborers.

I would like to thank the truck drivers Ralph Taylor and Bill Fiscus for getting the fish planted and all the people in the Region 4, 5, and 6 offices for their help. Boise office personnel should receive a hand too, for keeping things straight when we were going the wrong direction. Special thanks to Mel Sadecki, while I was down. Gene McPherson also spent the winter with us.

Thanks to the unpaid help that did odd jobs for us throughout the year, Wanda Hays, Donna Sadecki and Donna McPherson.