

## AMERICAN FALLS HATCHERY ANNUAL REPORT

### 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 Dam and Reservoir. American Falls Hatchery raises catchable (9- to 12-inch) and fingerling (3- to 6-inch) rainbow trout, and fingerling (3- to 6-inch) rainbow + cutthroat hybrid trout for statewide distribution. Production for the period ending September 30, 1989, was 412,809 9- to 18-inch rainbow trout weighing 172,865 pounds, 506,914 2- to 6-inch rainbow trout weighing 3,215 pounds, 61,644 3- to 6-inch brown trout weighing 701 pounds, 100,000 rainbow + cutthroat trout weighing 1,500 pounds, 107,300 Skane Kamloop trout weighing 5,049 pounds, 259,633 Fish Lake rainbow trout weighing 11,621 pounds, 46,383 Tasmanian rainbow + Colorado River cutthroat weighing 110 pounds (Table 1).

### HATCHERY IMPROVEMENTS

1. Installation of metal siding on one residence by private contractor.
2. Installation of shade-type bird screens on upper half of the large raceways by hatchery personnel.
3. A new power panel for the feeder motors and compressors, with low voltage protection.
4. A new base for the hatchery entrance sign was built by hatchery personnel.

### FISH HEALTH

During July, August, and early September, an outbreak of systemic bacteria once again occurred in the fingerling rainbow and Kamloop. This is an annual thing at American Falls; the only difference noted this year was that it occurred in the hatchery building also. In the past it has been confined to the large raceways about 2-3 weeks after the fish are moved outside. Diagnosis by pathology staff was the same as in the past, VEN-like lesions on the dorsal, caudal, and ventral surfaces with secondary invasion of myxobacteria and motile gram negative rods. We treated these fish with 4% TM50 and 2% Sulfamerazine in the feed with no results. The fish were also treated with Chloramine T, benzalkonium chloride, and Cutrine to no avail. The outbreak this year was more severe than in the past. Rainbow trout of the Fish Lake stock from Erwin National Fish Hatchery in Tennessee were especially hard hit. They appeared to have no natural immunity to this particular pathogen. The Kamloops of the Skane stock did break out with the disease, but were successfully treated with TM50 and Sulfamerazine. Hayspur rainbow stock on station did not show any signs of the disease. It appears that they do have some natural immunity. We will be

Table 1. Fish requested and produced.

Species and size	Production goal	Actual production	Percent of goal achieved
Rb. R4 (9-12")	400,000	397,310	99.3%
Rb. R4 (3-6")	0	130,626	N/A
BN. PR (3-6")	70,000	61,644	88%
Hybrid (3-6")	70,000	68,861	98.4%
Rb. R1 (0-2")	0	376,288	N/A

receiving only Hayspur-strain rainbow for the next fish year, so we may not experience this at all, or not nearly as bad. All fish on the station were given a routine yearly inspection for IHNV, IPNV, and whirling disease agents with negative results.

#### **PUBLIC RELATIONS**

Approximately 5,000 persons visited the facility during this period, including the general public and various school, scout, and other tour groups. We had people from nearly every state and some foreign countries visit us during the summer months. Most visitors from other states and countries are amazed at the amount of water and the quality of the water found in Idaho hatcheries.

#### **FISH PRODUCTION**

Three years of near drought conditions have had an effect on hatchery production at American Falls hatchery. Our spring water source has dropped to near record lows in late summer. If this trend continues, we may have to look at reducing numbers of catchables raised and stocking more fingerling early in the season. Problems were encountered with late fall stocking of hybrids due to low or no water in the reservoirs where they were scheduled to be stocked. During this period, 397,437 catchable (9- to 12-inch) rainbow trout were reared and stocked or transferred statewide. Production goals were 400,000 fish, or 150,000 pounds (Table 2). We received eyed eggs from eight sources, including: Erwin National Fish Hatchery, Erwin, Tennessee; Ennis National Fish Hatchery, Ennis, Montana; Saratoga National Fish Hatchery, Wyoming; Daniel State Fish Hatchery, Wyoming; Skanes Kamloop Hatchery, Washington; Glenwood Springs State Fish Hatchery, Colorado; Henrys Lake State Fish Hatchery, Idaho; and Hayspur State Fish Hatchery, Idaho (Table 3).

#### **DIETS**

Once again, all fish were started on Rangen's soft-moist formula, and were fed the same up to size 1/16-inch pellet for rainbow and 3/32-inch pellet for the browns and hybrids. When the rainbow reached approximately 50 per pound, they were switched to 3/32-inch Rangen's dry trout formula. This seems to work very well at this station as it gives the fish a good start on high protein, higher fat content feeds when they are first starting to feed and results in fewer dropouts. Hybrids, browns, and any other exotics are usually stocked as fingerlings, and there is no need to switch them to the dry diet.

#### **FISH FOOD USED; COSTS AND CONVERSIONS**

Species and strains produced, their source, and rearing costs are shown in Table 4. Fish food used, conversions, and food costs are shown in Table 5.

Table 2. Fish stocked and transferred.

Date	Region	Species and number	pounds	Receiving waters
10/24	5	R4- 2,640	1,200	Johnson Res.
10/25	5	R4- 2,420	1,100	Treasureton Res.
10/26	4	R4- 1,650	750	Niagara Springs
3/7	1	R4-20,400	6,800	Clark Fork Hatchery
3/8	5	R4- 2,520	900	Snake R. (Tilden)
3/14	4	R4- 2,170	775	Niagara Springs
3/20	5	R4- 2,240	800	Snake R. (Rose)
3/23	1	R4-19,600	7,000	Mullan Hatchery
3/24	5	R4- 2,100	750	Pleasantview Res.
3/28	6	R4- 2,100	750	Snake R. (Ida. Falls)
4/7	4	R1-376,288	755	Hagerman Hatchery
4/17	4	R4- 4,060	1,450	Stone Res.
4/17	5	R4- 2,030	725	McTucker Ponds
4/17	5	R4- 3,360	1,200	Springfield Lake
4/18	5	R4- 6,720	2,400	Springfield Lake
4/19	6	R4- 1,512	540	Snake R. (Ida. Falls)
4/20	5	R4-39,496	15,991	American Falls Res.
4/21	5	R4- 8,100	3,000	Hawkins Res.
4/21	6	R4- 1,499	555	Snake R. (Gem Lake)
4/24	4	BN-25,322	248	Sublette Res.
4/26	6	R4- 1,499	555	Snake R. (Gem Lake)
4/26	6	R4- 1,499	555	Snake R. (Ida. Falls)
4/27	4	R4- 1,499	555	Niagara Springs
5/1	6	BN-36,322	453	Ashton Hatchery
5/2	5	R4- 2,160	800	Wiregrass Res.
5/3	5	R4- 3,340	1,237	St. Johns Res.
5/5	5	R4- 2,660	950	Snake R. (Tilden)
5/5	5	R4- 2,380	850	Snake R. (Am. Falls)
5/8	5	R4- 3,360	1,200	Crowthers Res.
5/9	5	R4- 4,760	1,700	Crowthers Res.
5/10	5	R4- 1,960	700	Snake R. (Rose)
5/15	5	R4- 5,040	1,800	Portneuf River
5/16	4	R4- 3,443	1,275	Stone Res.
5/16	4	R4- 810	300	Cassia Creek
5/16	4	R4- 540	200	Marsh Creek
5/17	3	R4-20,520	7,600	McCall Hatchery
5/18	3	R4-16,240	5,600	McCall Hatchery
5/22	5	R4- 1,000	345	Rose Pond
5/22	6	R4- 2,001	690	Willow Creek
5/23	5	R4- 801	300	Pebble Creek
5/23	5	R4- 1,015	350	Toponce Creek
5/24	5	R4- 2,125	850	E. Fk. Rock Creek
5/31	6	R4-18,200	7,000	Ashton Hatchery
6/1	3	R4-14,125	5,650	McCall Hatchery
6/2	5	R4- 300	120	Portneuf River

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Table 2. Continued.

Date	Region	Species and number	pounds	Receiving waters
6/6	5	R4- 2,000	800	Snake R. (Am. Falls)
6/8	5	R4- 3,000	1,200	Portneuf River
6/12	5	R4- 875	350	Rose Pond
6/13	5	R4- 675	241	Pebble Creek
6/13	5	R4- 865	309	Toponce Creek
6/14	5	R4- 1,120	400	E. Fk. Rock Creek
6/15	3	R4-15,680	5,600	McCall Hatchery
6/20	1	R4- 6,900	3,000	Clark Fork Hatchery
6/20	1	R4- 6,900	3,000	Mullan Hatchery
6/22	4	R4- 1,000	357	Niagara Springs
6/23	6	R4- 1,498	535	Snake R. (Gem Lake)
6/26	5	R4- 4,620	1,650	Hawkins Res.
6/27	6	R4-13,920	4,800	Ashton Hatchery
6/28	1	R4-19,200	6,400	Mullan Hatchery
6/29	6	R4- 1,800	600	Willow Creek
7/6	1	R4-16,330	7,100	Clark Fork Hatchery
7/10	5	R4- 1,000	400	E. Fk. Rock Creek
7/10	5	R4- 1,800	720	Snake R. (Am. Falls)
7/11	3	R4-14,560	5,600	McCall Hatchery
7/11	5	R4- 1,725	750	Portneuf River
7/18	5	R4- 990	300	Pebble Creek
7/18	5	R4- 990	300	Toponce Creek
7/19	6	R4- 1,815	550	Willow Creek
7/20	6	R4- 2,262	870	Snake R. (Ida. Falls)
7/26	6	R4- 2,860	1,100	Snake R. (Gem Lake)
7/26	4	R9- 522	1,015	Big Wood River
7/27	1	R4-10,400	4,000	Clark Fork Hatchery
7/27	1	R4- 7,290	2,700	Mullan Hatchery
7/31	6	R4- 2,275	875	Snake R. (Ida. Falls)
8/10	6	R4- 4,760	1,700	Ashton Hatchery
8/25	6	R4- 1,800	750	Snake R. (Gem Lake)
8/29	6	R4- 2,880	1,200	Snake R. (Ida. Falls)
9/6	4	R4- 496	620	Niagara Springs
9/19	6	R4- 1,250	500	Snake R. (Gem Lake)
9/20	6	R4- 2,625	1,050	Snake R. (Ida. Falls)

Table 3. Eggs received.

Species and strain	Source	Number	% hatch	Destination
Bn (Ply R.)	Saratoga NFH	139,000	70%	Regs. 4 & 6
Rb. R1	Erwin NFH	500,000	80%	Statewide
Rb. R7	Ennis NFH	99,000	80%	Hagerman SF u
Rb. R1	Daniel SFH	300,000	89%	Hagerman SFH
Rb. R1	Erwin NFH	92,000	75%	Statewide
Kam. K1	Skane PFH	200,000	83%	Statewide
K1+C3	Henrys Lake	156,000	90%	Region 5
Rb+C0	Colo. SFH	50,000	95%	Statewide

Table 4. Cost of fish production.

<u>Species and strain</u>	<u>Source</u>	<u>Pounds planted</u>	<u>Percent of budget</u>	<u>Cost</u>
Rb. R4	Mt. Lassen	150,310	60%	\$100,860
Rb. R1	Various	0	20%	\$ 33,620
Kam K1	Skane PFH	0	10%	\$16,810
BN PR	Daniel Wyo.	701	5%	\$8,405
C3+K1	Henrys Lake	1,500	2.5%	\$4,202
C0+R1	Colorado SFH	0	2.5%	\$4,202

Table 5. Fish food used and cost.

<u>Source</u>	<u>Pounds</u>	<u>Cost</u>	<u>Cost/lb. fish</u>	<u>Conversion</u>
Rangen's	236,252	\$ 60,836	.34	1.32