



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Dworshak Fisheries Complex
P.O. Box 18
Ahsahka, ID
Phone: (208) 476-4591 FAX: (208) 476-3252



MEMORANDUM

To: Fisheries Supervisor, Columbia Basin Ecoregion
Region 1, Portland, OR

From: Complex Manager
Dworshak Fisheries Complex

Subject: **Monthly Activity Report – March. 2010**

Fish Management Culture

Dworshak

SPRING CHINOOK SALMON (SCS)

Brood Year (BY) 2008

Brood Year 2008 SCS were released the evening of March 31, 2010. There were a total of 1,109,195 BY08 SCS released into the North Fork of the Clearwater River from Dworshak raceways (RW's). These fish weighed 66,051 lbs and averaged 16.8 fish per pound (fpp) and 148 mm (5.8 inches) total length. Water temperature averaged 41.6°F degrees and growth was 5 mm for the month. Mortality for the month averaged 0.34 percent.

On March 31, all of the Chinook were released directly from the hatchery to take advantage of flow increases in the Clearwater River resulting from recent rains.

Brood Year 2009

At the end of the month there were approximately 584,100 sac-fry in incubators at Dworshak NFH. These fry are being incubated on 37°F water and are projected to go on feed in April, 2010. There are also a comparable amount of Dworshak stock SCS sac-fry at Kooskia NFH which will be transferred to Dworshak during April.

COHO SALMON (COS)

Brood Year 2008

On February 12 and 24, there were a total of 347,437 BY08 COS transferred to Kooskia NFH. These fish averaged 14 fpp and 149 mm (5.9 inches) total length at the time of transfer.

SUMMER STEELHEAD (SST)

Brood Year 2009

By the end of the month there were 1,238,876 SST on station averaging 6.9 fpp and 189 mm (7.4 inches) total length. High mortality from *Infectious Hematopoietic Necrosis Virus* (IHNV), gas bubble, and cold-water disease occurred over the summer of 2009 pushing the steelhead mortality near 1.3 million mark.

System I had 367,043 BY09 SST averaging 6.4 fpp and 194 mm (7.6 inches) total length by the end of the month. Mortality was 0.2 percent and water temperature averaged 41.6°F for the month.

System II had 658,399 BY09 SST averaging 7.4 fpp and 185 mm (7.3 inches) total length by the end of the month. Mortality was 0.5 percent and water temperature averaged 41.6°F for the month.

System III had 213,434 BY09 SST averaging 6.7 fpp and 192 mm (7.5 inches) total length by the end of the month. Mortality was 0.7 percent for the month. Water temperature averaged 41.6°F for the month.

Brood Year 2010

At the end of the month there were 1.4 million SST in the nursery in various stages of development from eyed-eggs to feeding fry. Spawning continued each Tuesday and Takes 1-8 were complete by the end of the month. Thus far the percent eye-up of eggs from Takes 1-6 enumerated at Dworshak is 93 percent.

RAINBOW TROUT (RBT)

Brood Year 2009

At the end of the month there were 12,237 BY09 RBT in BP61 averaging 1.6 fpp and 294 mm (11.6 inches) total length. Mortality was 5.5 percent and water temperature in the tanks averaged 41.6°F during the month. These fish will be utilized for the Kids' Fishing Day in 2010.

Brood Year 2010

At the end of the month there were 4,439 triploid RBT averaging 943 fpp and 35 mm (1.4 inches) total length in two circular tanks in the incubation room. These fry were moved into the tanks on March 12 and started on feed March 16. These RBT will be for Kids Fishing Day in 2011.

SUMMARY

Table 1 Total Production—Fish on Station (03/31/10).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SST	10	Nursery	1,388,198	1,988	698.3	1.6	41
SST	09	System I	367,043	57,368	6.4	7.6	194
SST	09	System II	658,399	89,259	7.4	7.3	185
SST	09	System III	213,434	32,065	6.7	7.5	192
RBT	10	Incub. Circ Tanks	4,439	4.7	942.5	1.4	35
RBT	09	BP 61	12,237	7,554	1.6	11.6	294
Total			2,643,750	188,239			

Kooskia

Kooskia Trap Operations BY09

The trap was opened March 24 for BY 2009 Adult SST collection.

Kooskia Brood Year 2009

All remaining Kooskia Stock BY09 Takes were tanked by March 16. Kooskia stock BY09 SCS number 708,127 and averaged 972 fpp and 1.51 inches long. Growth for the month was .24 inches. Kooskia stock SCS are currently being reared in the outside nursery tanks on reuse with well water makeup. The reuse water temperature averaged 48.2°F during March. Mortalities were slightly elevated at the beginning of the month due to moving out stress and the removal of deformed fry.

Summary of Kooskia Stock BY09 SCS move out.

Take	Date Tanked	Number Tanked	Total	% survival
			Egg/Fry Mortality	Eyed egg to tank fry
1	2/24/2010	83,681	1,151	98.64%
2	3/9/2010	166,864	4,496	97.38%
3	3/16/2010	200,075	4,925	97.60%
4	3/9/2010	267,061	4,764	98.25%
Total		717,681	15,336	97.87%

Dworshak Brood Year 2009

Dworshak Stock BY09 SCS number 561,586 averaging 844 fpp at 1.58 inches long. Growth for the month was .32 inches. Dworshak stock SCS are currently being reared in the inside nursery tanks on reuse with well water makeup. The reuse water temperature averaged 48.2F during March.

Summary of Dworshak Stock BY09 SCS move out.

Take	Date Tanked	Number Tanked	Total Egg/Fry Mortality	% survival Eyed egg to tank fry
1	2/24/2010	186,271	3,729	98.04%
3	2/25/2010	380,292	4,708	98.78%
Total		566,563	8,437	98.41%

Kooskia Brood Year 2008

All Kooskia BY08 SCS were direct released into Clear Creek March 30, 2010 at 6 pm. Release total was 632,330 fish at 26.3 fpp and 128mm in length. Growth for the month was .21 inches. Sample counts were taken prior to release to determine actual fish size. An Idaho Fish Health Center (IFHC) 60 fish pre-release exam was conducted March 17th. The fish appeared to be in good overall health. No formalin or drug treatments were recommended this month.

Coho Brood Year 2008

A total of 346,031 Clearwater stock Coho were released from KNFH on two dates. On February 23rd, a total of 50,371 Clearwater stock Coho were released from raceways #1 and #2 due to logistical constraints of the hatchery. On March 30th, a total of 295,660 Clearwater stock Coho were released from hatchery raceways into Clear Creek.

Table 1. Broodyear 2008 Clearwater Stock Coho final release summary 2010.

Raceway Number	Number of Fish	Weight (lbs)	Fish Per Pound (fpp)	Length (in)	Length (mm)	Date released from KFH
1	25,000	1,870	13.37	5.98	152	2/23/10
2	25,371	1,898	13.37	5.98	152	2/23/10
1	48,658	3,516	13.84	5.91	150	3/30/10
2	45,054	3,564	12.64	6.09	155	3/30/10
3	50,101	3,318	15.10	5.74	146	3/30/10
4	45,118	3,665	12.31	6.15	156	3/30/10
5	48,611	3,316	14.66	5.80	147	3/30/10
6	47,914	3,565	13.44	5.97	152	3/30/10
7	10,204	821	21.01	5.14	131	3/30/10
TOTALS	346,031	25,533	14.42	5.86	149	

TAGGING: On March 10th, a total of 4,951 Clearwater stock Coho were PIT tagged with 12mm tags. Tags are manufactured by Digital Angel Corporation and are exclusively distributed by Biomark. The tag file was uploaded under Bill Arnsberg’s coordinator ID “BDA” and the Tag file in PTAGIS is BDA10069.25H. The tagging was done by the Fall Chinook tagging crew.

RELEASES: The February 23rd release occurred because there is not enough rearing space to hold all 350,000 Coho smolts without jeopardizing the entire group of fish. The March 30th release occurred based on increasing stream and river flows and weather conditions that were favorable to survival during emigration. The first group was acclimated 17 days; the second group was acclimated four weeks. Acclimation is anticipated to increase adult return survival and homing to Kooskia hatchery.

MORTALITY: The average monthly mortality for Clearwater stock Coho was 0.36%. A total of 1,079 mortalities were collected during acclimation. (See attached spreadsheet).

FEED: Coho fry were fed Bio-Clark’s Fry 2.5 mm feed at 1 % body weight of fish). Fish are being fed three times per week (Monday, Wednesday, and Friday) to control the growth rate. The Idaho Fish Health Center recommended this feeding schedule rather than feeding everyday to keep them from exceeding target-size at release in April 2010.

FISH HEALTH: No fish health concerns for the month of March. A pre-release assessment was completed by the Idaho Fish Health center prior to release.

Eagle Creek National Fish Hatchery

On March 4th, Coho smolts reared at Eagle Creek National Fish Hatchery (NFH) were transported by Neil Ring Trucking to KNFH for final acclimation. Following 26 days of acclimation – 291,164 Eagle Creek stock smolts were released on March 30th into Clear Creek. This is the first year, Eagle Creek stock smolts have been acclimated; in past years they were direct released. We anticipate acclimation will improve adult return numbers.

Table 2. Broodyear 2008 Eagle Creek stock Coho final release summary 2010.

Raceway Number	Number of Fish	Weight (lbs)	Fish Per Pound (fpp)	Length (in)	Release Date
7	45,809	1,845	24.83	4.86	3/30/10
8	49,582	2,095	23.67	4.94	3/30/10
9	49,621	2,095	23.69	4.94	3/30/10
10	49,588	2,090	23.73	4.94	3/30/10
11	49,691	2,090	23.78	4.93	3/30/10
12	46,873	1,982	23.65	4.94	3/30/10
TOTALS	291,164	12,197	20.48	4.22	

GROWTH: Coho fingerlings increased from 21.08 fish per pound to 20.48 fish per pound.

MORTALITY: The average monthly mortality was 0.69% for Eagle Creek stock Coho during acclimation at Kooskia NFH; total mortalities were 2,036 collected by hatchery staff (see attached spreadsheet).

FEED: Coho fry were fed Bio-Clark's Fry 2.5 mm feed at 1.5 % body weight of fish.

Broodyear 2009 Coho Salmon (COS)

During the month all button-up Coho fry were ponded to conclude incubation at KNFH. This year incubation occurred at KNFH to allow management to improve the rearing of Coho smolts to target size. This occurred to ensure the Dworshak Steelhead mitigation program was not displaced by Coho. In previous years, Coho incubation and early rearing at Dworshak NFH required accelerated incubation and nursery rearing that resulted in smolts being larger than the target of 20 fpp at release. As a result of increased size of fry, later rearing of smolts required restricted feeding to control final release size. Hence, health problems often occurred in conjunction with reduced feeding routines. By March 2011, management should know how well the incubation and early rearing at KNFH meets the release size goal for Coho smolts and improves health of these fish.

On March 22nd, a total of 362,042 Clearwater stock Coho were ponded into ten nursery rearing tanks; eight inside the main hatchery building and two in the outside nursery. This ponding date for fry is at least two months later than used to occur when Coho were incubated at DNFH.

Table 4. Brood year 2009 Coho inventory summary on April, 1st 2010.

Vat Number	Number of fish	Weight (lbs)	FPP	Length (inch)	Date Ponded
1	38,708	50	776.40	1.54	3/22/10
2	38,331	55	694.10	1.60	3/22/10
3	38,620	52	736.10	1.57	3/22/10
4	38,346	56	685.20	1.61	3/22/10
13	32,533	43	750.00	1.56	3/22/10
14	33,712	44	764.50	1.55	3/22/10
15	33,842	49	690.00	1.61	3/22/10
16	33,701	44	764.50	1.55	3/22/10
31	33,790	48	700.00	1.60	3/22/10
32	38,449	53	726.40	1.58	3/22/10
TOTAL	360,032	494	728.72	1.58	

MORTALITY: The average percent mortality for Clearwater stock Coho in March was 0.56%. Total monthly mortality was 2,010 fry as collected by staff (see attached spreadsheet).

GROWTH: All Coho rearing units were sample counted at the end of March to determine the feed program for the ensuing month.

FEED: All Coho were started on feed on March 23rd. Coho fry are being fed Bio Starter #0 Crum feed at 3% total body weight. Feeding frequency is one time per hour totaling eight times per day.

Maintenance

Dworshak

- Electrical: troubleshot and repaired front gate operator; installed new starter control on pond cleaning pump; took motor temps and amp readings on all main pumps; extended and reconnected temp sensor circuit for Nursery Room; moved control circuit for Boilers #2 & 3 in Mech II; troubleshot heat and smoke from #1 boiler in Mech II; lockout and tag out #6 pump in Main Pump House; installed new overload heaters on Magic Valley Fish pump; replaced switch on belt sander; reconfigured and tested all low alarm points in Nursery Room; troubleshot and repaired specimen oven in Idaho Fish Health Center (IFHC) and troubleshot problem with lobby elevator in Main Building.
- Checked Main Pumps, moss trap, traveling water screens, fire maintenance pumps, cleaned buildings and grounds daily.
- Fabrication projects: two camera underwater mounts for Idaho FRO biologist to be installed at John Day dam in Oregon; new aluminum fish crowder and stand pipe screening for Chinook A & B bank.
- Worked on rebuilding Mech II boilers.
- Added water and balance C & D bank packed tower.
- Hauled Coho smolts to KNFH and outplanted steelhead adults to Five Mile Creek.
- Changed oil in vehicles and shop equipment; performed vehicle maintenance and removing snow removal equipment.
- Moved a large rock downriver that was in front of hatchery discharge pipe; repaired and re-shaped anchor that was used for project

Kooskia

- Cummins NW performed service on both backup generators. The technician determined that all four head gaskets on the main generator were leaking and that the cooling system was also in need of replacement.
- Reuse return pump was taken to Dickerson Pump in Spokane for repair.
- Construction on the new quarters continues with flooring, cabinetry, HVAC, appliance installation, finish plumbing, and electrical work being conducted.

Screen Chamber project: Lan Pacific submitted 100% design drawings. The project is now scheduled for actual construction to begin June 2010.

Egg recirculation system and well rehab:

Work on well # 5 was finished up first week of March. Work began on well #1, March 15. The well was test pumped, camera inspected, and a new pitless adapter was fitted. The camera showed the well to be clean so no cleaning was performed.

- March 15: Burton Construction conducting well # 1 test pumping.
- March 19: Burton Construction conducting well #1 camera inspection and vault demolition.
- March 29: Burton Construction fitting new pitless adapter on well #5. The hatchery received the well inspection video DVD.
- March 24: The recirculation system work began with demolition of the old reservoir tower

Meetings/Training/Travel

Dworshak

- 3/3 Larry Peltz, Complex Manager, Mark Drobish, Hatchery Manager, Jerry McGehee and Tom Rogers, Idaho Fish & Game (IDF&G) and Scott Marshall, Lower Snake River Compensation Plan (LSRCP) to discuss Potential opportunities for holding adult Fall Chinook salmon and Development of the localized broodstock for steelhead returning to the South Fork of the Clearwater River.
- 3/8 Met with Scott Marshall, LSRCP and IDF&G staff to discuss new summer Chinook program for the Clearwater River Drainage.
- 3/8-10 Mark Drobish, Hatchery Manager & Joan George, Admin. Officer traveled to Portland, OR for Admin. Training at the Regional Office.
- 3/15 Larry Peltz, traveled to Joseph, OR for a meeting to discuss steelhead HGMP with Nez Perce Tribe (NPT) and IDF&G.
- 3/16 Larry Peltz in Enterprise, OR for a meeting to discuss regional Chinook Salmon management for 2010
- 3/17 Larry Peltz, Mark Drobish, Ed Larson, Nez Perce Tribe, Tim Dykstra, U.S. Army Corps of Engineers met at Dworshak National Fish Hatchery (DNFH) to discuss tribal access issues.
- 3/18 Larry Peltz, Mark Drobish, Ed Larson, Tim Dykstra and Scott Bettin from Bonneville Power Administration (BPA) met at DNFH to discuss hatchery issues.
- 3/22-26 Mark Drobish attended, “ *Advanced Supervision: Building on Experience,* ” at the National Conservation Training Center in Shepherdstown, West Virginia.
- 3/23 Larry Peltz, Tim Dykstra and Ed Larsen met with representatives for U.S. Senators Mike Crapo and Jim Risch and U.S. Representative Walt Minnick for a discussion on IHN and a tour of the hatchery.

Kooskia

- March 22: Adam Izbicki attended a Supervisors meeting at Dworshak

Kooskia

No visitors signed the guest book. No guided tours, but many visitors stopping to check the trap, see the big fish, and take a look around the hatchery grounds.

On-site:

- Completed and distributed March Complex Happenings newsletter.
- Coordinated plans for Hatchery in the Classroom program for the remainder of 2010 steelhead season.

Off-site:

- Delivered steelhead eggs and provided instruction to 2 schools – Prairie Elementary in Cottonwood (35 students) and Clearwater Valley Elementary in Kooskia (18 students).

A handwritten signature in black ink that reads "Larry Peltz". The signature is written in a cursive, flowing style.

Larry Peltz

Complex Manager

cc: Kooskia NFH
Hagerman NFH
CFRU – Moscow
Dworshak Production (2)
LSRCP – Boise

Kooskia

Kooskia Trap Operations BY09

Kooskia Brood Year 2009

Dworshak Brood Year 2009

Brood Year 2008 Coho Salmon (COS)

Kooskia Brood Year 2008

Maintenance

Dworshak

Kooskia

Meetings/Training/Travel

Dworshak

- 3/8-10 Mark Drobish, Hatchery Manager & Joan George, Admin. Officer
Traveled to Portland, OR for Admin. Training at the Regional Office.
- 3/15 & 16 Larry Peltz, Complex Manager, traveled to Joseph, OR for a meeting.
- 3/17 Larry Peltz, Mark Drobish, Ed Larson, Nez Perce Tribe, Tim Dykstra,
U.S. Army Corps of Engineers met at Dworshak National Fish Hatchery
(DNFH).
- 3/18 Larry Peltz, Mark Drobish, Ed Larson, Tim Dykstra and representatives
From Bonneville Power Administration (BPA) met at DNFH.
- 3/23 Larry Peltz, Tim Dykstra and Ed Larsen met with representatives for
U.S. Senator Mike Crapo and U.S. Representative Walt Minnick for a
Discussion on IHN and a tour of the hatchery.

Kooskia

Miscellaneous

Personnel Actions –

- 3/19 Terry Weeks, Maintenance worker was promoted to WG-10.
- 3/22 Jack Christiansen, Engineer, EOD.

Safety/Wellness –

Information/Education (I/E)

Dworshak

Tours - 2

People -

Register –

Visitor Contacts – 0

Volunteers – Hours –Website Visitors – data not available

On-site:

Off-site:

Kooskia

No visitors signed the guest book. No guided tours, but many visitors stopping to check the trap, see the big fish, and take a look around the hatchery grounds.

On-site:

Off-site:

Larry Peltz

Complex Manager

cc: Kooskia NFH
Hagerman NFH
CFRU – Moscow
Dworshak Production (2)
LSRCP – Boise