



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 –October, 2011**

SPRING CHINOOK SALMON (SCS)

Dworshak

Brood Year 2010 (BY10)

At the end of the month there were 1,047,261 BY10 SCS on station averaging 40 fish per pound (fpp) and 111 mm (4.4 inches) total length. Mortality for the month averaged 0.06 percent and water temperature averaged 49.1°F in the raceways (RWs).

Brood Year 2011 (BY11)

Egg development is being accelerated as incubation temperature is approximately 3°F warmer than last year. On October 25 the replacement chiller was hooked to the old chiller and temperature was dropped from 43 to 39°F. At this temperature, fish going on feed will be delayed approximately six weeks. Target incubation temperature is 36-37°F for fish to go on feed in April, 2012. The final egg Take was enumerated on October 13 and the average survival for BY11 SCS enumerated eggs is 96.6 percent. At the end of the month there were 1,424,503 BY11 SCS eyed eggs in A and B-bank incubators.

On October 13 there were eggs from 18 out of 81 Kooskia females transferred to Clearwater State Fish Hatchery (CWH) for their Clear Creek program. These fish were spawned on August 30. The eggs from the other 63 females were culled due to testing positive for *Infectious Hematopoietic Necrosis Virus* (IHNV) or high ELISA BKD status.

COHO SALMON (COS)

Brood Year 2010

At the end of the month, there were 333,172 on station in RW's 16-21 averaging 46 fpp and 101 mm (3.96 inches) total length. Total monthly mortality was 447 and the average percent mortality for Clearwater stock Coho during October was 0.13%.

SUMMER STEELHEAD (SST)

Brood Year 2011

At the end of the month there were a total of 2,192,978 SST on station in the BPs averaging 17 fpp and 140 mm (5.5 inches) total length. Mortality was 0.4 percent for the month and temperature averaged 49.8°F in System I (reservoir water blended with river water) and 49.0°F in Systems 2 and 3 (river water).

SUMMARY

Table 1. Total Production—Fish on Station (10/31/11).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	10	RWs 1-15; 22-30	1,047,261	25,996	40	4.4	111
SCS	11	Incubation Trays	1,424,503	650	Eggs	Eggs	Eggs
COS	10	RWs 16-21	333,172	7,260	45.9	4.0	101
SST	11	System I	894,146	32,425	27.6	4.7	119
SST	11	System II	993,160	71,651	13.9	5.9	150
SST	11	System III	305,672	24,189	12.6	6.1	155
SST	11	SST on feed Tot/Ave	2,192,978	128,265	17.1	5.5	140
Total Fish/Eggs on Station EOM			4,997,914	162,171			

Brood Year 2012

The ladder was operated and 300 adult steelhead were collected to represent the early returning adults of the run. Additional fish will be collected in November and December with the first spawning effort occurring in January.

Brood Year 2010 (BY10)

Kooskia

Kooskia Coho Adult Trap Operations Brood Year 2011

Total Coho trapped at the KNFH 1,079. There were 112 adults transported from the Lapwai weir to KNFH during the month. The Coho program had separated out Coho from the steelhead trapped at DNFH and transported Coho adults to KNFH. A breakdown of the trapping can be seen in the table on page 3. Adult females are being held in raceways 12 and 10 and males are in raceways 11 and 9.

Kooskia Chinook Brood Year 2011.

The egg incubation chiller operated without problems the whole month at temperatures between 38 to 41°F. Egg takes two through four were shocked and enumerated during the month. Total females on station after culling are 204. Total eyed eggs on station after shocking and enumeration are 729,476. Hatchery staff had started the first and second picks depending on the take. The percent eye-up at this time is 95.12% and the average fecundity is 3,748 eggs per female. Numbers for each lot can be seen on page 3.

Kooskia Chinook Brood Year 2010

Fish on station the end of the month was 628,226 fry with average size of 31 fpp at 4.76 inches (121 mm) length. Total feed consumed for the month was 3,232 lbs. Mortalities for the month totaled 391. Monthly Pathology evaluation shows an increase in body fat but they would like to see more body fat going into the winter. On October 24, hatchery wells 2 and 5 big pump motors were turned off for the season and the small pump in well 2 was turned on to supply water to the incubation room. Clear Creek temperatures have dropped below 50° F for a high and the low during the month was 34° F. With the decrease in water temperature, the amount of fish feed being fed has decreased. Feed sheets and inventory summaries are attached.

Kooskia Coho Brood Year 2011



First Coho spawning day was October 25, with 174 females spawned. Eggs from three females were discarded (green). At an average fecundity of 2,900 we have 495,900 eggs on site at this time. We will be looking at the eggs the first part of November to evaluate how many females had overripe eggs and replace those with eggs from healthier females. Adult Coho at KNFH end of October.

	Adults trapped		Spawned		Mortality's		On Station	
	M	F	M	F	M	F	M	F
KNFH	410	492	143	174	23	78		
LW	38	74						
DNFH	23	42						
Total at KNFH	471	608	143	174	23	78	305	356

KNFH 2011 Spring Chinook Egg Data.

Take	Total eggs	Eyed eggs	Bad eggs	Total females	Percent eyed
2	186,246	177,570	8,676	49	95.34%
3	406,163	386,458	19,705	108	95.15%
4	172,137	165,448	6,689	47	96.11%
Total	764,546	729,476	35,070	204	95.41%

Maintenance

Dworshak

- Completed plumbing and electrical in new chiller; factor start-up performed.
- Completed new nursery supply pipeline in Mechanical II.
- Installed VFD in main pump house pump #5.
- Serviced maintenance shop air compressor, portable welder #1, new battery charger in a cart and replaced pressure washer #4 muffler.
- Replaced 3 broken and unsafe ladders.
- Replaced C bank nursery supply valve.
- Fabricated mounting frame for chiller electrical components; baffle for settling pond to catch media; baskets for fish pump suction end fittings; pipe stands for chiller plumbing; nets for fish culture; and gasket hanger for pipe chase.
- Fabricated baffle for settling pond to catch media.
- Fabricate baskets for fish pump suction end fittings.

Kooskia

- Started water in RWs 11&12 for Coho adults on Oct. 3.
- Chinook eggs, Take 2 shocked Oct. 10, enumerated Oct. 12 and picked on Oct. 16. Chinook eggs Take 3 were shocked Oct. 17 and enumerated Oct. 18.
- The chiller and biofilter were shut down and switched to creek water for hatchery operations on Oct. 24. RWs 9 & 10 were filled for Coho adult holding. Big pumps in Wells #1 & #5 were turned off; the 2-hp pump in Well #1 was turned on to provide incubation water. The adult trap was closed for Adult Coho. Take 4 chinook eggs were shocked, enumerated on Oct. 26.
- First Coho spawn on Oct. 25 and trap opened Oct. 26.
- Two power failures on Oct. 27
- Generator testing on Oct. 31.

Meetings/Training/Travel

Dworshak

- Rhett Madsen, University of Idaho (UI) student along with Christine Moffitt, UI faculty met with the fisheries staff at Dworshak to develop plans for implementation of total dissolved gas monitoring for the hatchery.
- Tom Osborne, Bonneville Power Administration (BPA) visited the hatchery to review the progress of various energy savings projects funded by BPA. Jack Christiansen provided an update of each project during the site inspection.

- Nate Wiese, Asst. Hatchery Manager, Larry Peltz, Complex Manager and Howard Burge, FRO Project Leader, traveled to Lewiston for the Lower Snake River Compensation Planning meeting to discuss collective options for increasing Chinook salmon production for meeting adult return goals in the future.
- On October 13th, the area experienced a power outage which of course affected Dworshak. The 500KW backup generator adjacent to the main pumphouse started up; however, the transfer switch to close the circuit for emergency power did not function. Ben Greene promptly diagnosed the problem and was able to manually close the circuit and provide power to two of the main pumps (we were operating off four pumps to provide critical life support to the steelhead, Chinook and Coho prior to the outage). Commercial power was restored approximately 1 hour after the outage. Additional investigations have been conducted by the USACE for long-term solutions (electrical upgrades) for maximum reliability as well as procedures developed for manual transfer. Bottom line....there were no significant impacts to the fish on station. Thanks Ben!
- Angela Feldmann traveled to Lewiston for the Northwest Safety Fest on February 25th and took a course on Ergonomics and Combustible Dust.
- On October 25th, Larry Peltz, Adam Izbicki and Mark Drobish traveled to Walla Walla to meet with the Corps' Rehabilitation Team. The team has completed the condition assessment for the facility and has 11 months to develop and select a path forward. The team will meet twice per month through September 2012.
- Brent Goosen traveled to Lewiston for the Northwest Safety Fest on February 27th and took a course on "Confined Spaces".

Kooskia

10/14 Staff attended a presentation by Scott LaPatra at Dworshak NFH on IHNV.

Miscellaneous

10/12 Orin Thomas, U.S. Army Corps of Engineers (USACE), Walla Walla District traveled to Dworshak to pick up surplus USACE owned property.

10/26 Combined Federal Campaign was kicked off with a Chili Feed/Bake Sale in the Conference Room. Dean Crandell, Spokane CFC was on hand with a few giveaways and a short presentation on giving this season. Several non-profits that are in the CFC book were on hand with a 5-minute talk about their charities: Nancy Butler, ALC; Donna, Idaho Youth Ranch, Coeur d'Alene; Patty, Idaho Education Assn, Lewiston, ID & Erica from Northwest Children's Home in Lewiston.

Safety

Personnel Actions –

10/7 Katherine Alverson, Orofino High School student EOD as a Clerk in the

10/11 Admin Office/Production Dpt. back-up.
Clarice Holt EOD as a USFWS employee. She is also a member of the Nez Perce Tribe and will continue to work with the Dworshak crew in this Intermittent appointment. Clarice is also taking classes with a goal of receiving a degree in Biology one day.

INFORMATION AND EDUCATION

Tours - 0 People - 0

Register – 64

Visitors from 10 states

Visitor Contacts – 17

Volunteers – 0 Hours – 0

Website Visitors – data not available, but created a link to bitly.com so web traffic to the Dworshak homepage will be tracked and analyzed.

Website Contacts - 1

On-site:

- Completed the re-routing of hatchery self-guided tour, removed outdated signs. Maintenance is making repairs to the large framed interpretive signs. Once the signs are repaired they will be installed along the new tour route.
- Conducted interviews for and Co-authored an article to be published in the winter edition of *Eddies* magazine.
- Shot still and video clips of STT PIT tagging and sorting for Dworshak video series.
- Updated Complex website content.

Kooskia

No guests signed our visitor log book this month. A contributing factor is the location of the book. Hatchery Personnel are trying to keep a number count of visitors on the grounds. In September 250 visitors were counted.



Larry Peltz
Complex Manager

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