



Dworshak Fisheries Complex

Monthly Activity Report



January, 2012

U.S. Fish & Wildlife Service, Region 1

Volume 1, Issue 3

Special points of interest:

- Total Fish/Eggs on station at Dworshak: 4,968,202
- Total Fish/Eggs on station at Kooskia: 1,760,332
- Unusually warm water temperatures push SST ahead of schedule
- Boiler Commissioning was successfully conducted

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Manager's Message....

We are lucky. This bolt of lightning struck me when I arrived at work the morning of January 12th and found out that we had a power outage at 3 am that morning. Numerous staff got out of their nice warm beds to respond to the alarm system at the hatchery. The respondents made the necessary adjustments to assure life support to our 4 million fish and 2 million eggs. This is no simple task when most of your water supply is dependent on electricity for pumping. No fish were lost and by noon the local power company had fixed the problem. This is not an isolated occurrence. It happens frequently. The professionalism, diligence and knowledge of our staff have prevented a

major loss of fish due to mechanical failure. This is a fact of significance at a facility that relies on aging infrastructure and antiquated technology to raise fish. I think the efforts of those staff members that respond to alarms are largely taken for granted. It should not be that way. On second thought we aren't lucky. Our alarm respondents are good at what they do and for that I salute you and extend my thanks.

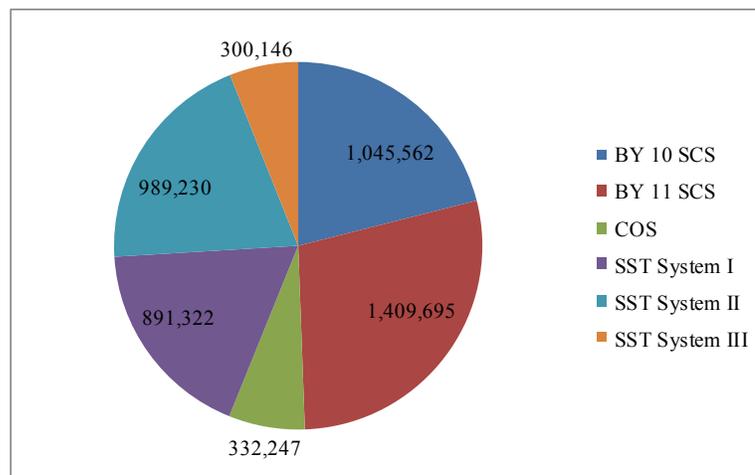
Larry Peltz



Complex Manager Larry Peltz
Credit: USFWS

Production Summary: Dworshak National Fish Hatchery

Figure 1. Total Production—Fish on Station (1/31/12).



BY11 Chinook sac fry.
Credit: Angela Feldmann/USFWS

SCS=Spring Chinook; COS= Coho; SST= Steelhead





Systems 2 & 3 are slightly ahead of schedule due to warm water temperatures.

Credit: Nate Wiese/
USFWS

“The new chiller continues to be fine-tuned to delay development of SCS fry to allow for feeding to begin in April, 2012.”



Rick Allain feeds SCS on a snowy January day.

Credit: Angela Feldmann/USFWS

Hatchery Headlines: Dworshak Spring Chinook Salmon (SCS)

Brood Year 2010 (BY10)

At the end of the month there were 1,045,562 BY10 SCS on station averaging 28 fish per pound (fpp) and 125 mm (4.9 inches) total length. Mortality for the month averaged 0.06 percent and water temperature averaged 42.5°F in the raceways (RWs).

Brood Year 2011 (BY11)

There were 1,409,695 BY11 SCS sac-fry in A and B-bank incubators. Mortality for the month averaged 0.2 percent and water temperature averaged 36.8°F. The new chiller continues to be fine-tuned to delay development of these fry to allow for feeding to begin in April, 2012.

Hatchery Headlines: Dworshak Summer Steelhead (SST)

Brood Year 2011

At the end of the month there were a total of 2,180,698 BY11 SST on station in the BPs averaging 8 fpp and 178 mm (7.0 inches) total length. Mortality was 0.2 percent for the month and temperature averaged 42.7°F in System I (reservoir water blended with river water) and 42.5°F in Systems 2 and 3 (river water).

Brood Year 2012

The BY12 SST spawning season began on January 4. During the month 156 fall-returning females were spawned along with 56 ripe females which were collected at the end of January. Incubation temperature averaged 43°F for the month. Carcasses from fish anesthetized with carbon dioxide were donated to a local food bank; those with MS222 were returned to the river for stream nutrification. Spawning of BY12 SST will continue in February.

Hatchery Headlines: Dworshak Coho Salmon (COS)

Brood Year 2010

At the end of the month, there were 332,247 on station in RW's 16-21 averaging 31 fpp and 115 mm (4.5 inches) total length. Mortality for the month averaged 0.13 percent and water temperature averaged 42.5°F.

Total Fish on Station: Dworshak, 1/31/2012

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	10	RWs 1-15; 22-30	1,045,562	37,835	28	4.9	125
SCS	11	Incubation Trays	1,409,695	650	Sac Fry	Sac Fry	Sac Fry
COS	10	RWs 16-21	332,247	10,848	30.6	4.5	115
SST	11	System I	891,322	87,350	10.2	6.5	166
SST	11	System II	989,230	131,628	7.5	7.2	184
SST	11	System III	300,146	42,060	7.1	7.4	187
SST	11	SST on feed Tot/Ave	2,180,698	261,038	8.4	7.0	178
Total Fish/Eggs on Station EOM			4,968,202	310,371			

Hatchery Headlines: Kooskia

Kooskia NFH Monthly Activity Report: January, 2012

This activity report is implemented by the Tribal Fish Hatchery manager, Kent Hills. All information in this report was collected and performed by the hatchery staff during the preceding month.

Past Activity Reports have only included Spring Chinook Salmon (SCS) because they are the required mitigation species for which KNFH was constructed. Under SRBA and the Clearwater Annual Operating Plan, the Tribe, Service and Idaho Fish & Game have agreed to implement other fish production actions related to KNFH mitigation. Future reports will include additional information about other species reared, processed and released in relation to KNFH operations; e.g., Coho, Steelhead, and other spring Chinook stocks.

Kooskia Adult Trap Operations Brood Year 2012

The adult trap will start operations in March for Steelhead collection.

Kooskia Coho Brood Year 2011

Egg take four was shocked and enumerated this month. A total of 28 females produced 56,692 eyed good eggs and 20,025 bad eggs for a total egg count of 76,717 eggs. Percent eye-up was 73.9% and the average fecundity was 2,740. Total Coho eggs and sack fry on station is 417,931. Coho personnel have been picking mortality's out of the trays this month and deterring fungus production. Total mortality for the month was 29,656. Kooskia personnel have been working on prepping and installing the screens for the inside vats.

Kooskia Chinook Brood Year 2010

Number of fish on station at the end of the month was 626,324 juvenile Chinook with an average size of 29.2 fpp at 4.85 inches (123 mm) length. The fish in January showed a slight increase in size due to milder temperatures. Total feed consumed for the month was 1,144 lbs. Mortalities for the month totaled 872. Monthly Pathology evaluation shows that food was present in all fish sampled; fat content was low, the fish have low levels of *Sanguinicola* found on the gills and moderate levels of external skin *Epistylis* and *Ambiphya*. Clear Creek temperatures for the month are the same as last month; 36° F for a high and the low during the month was 32° F



Kooskia NFH is owned by the USFWS and managed by Nez Perce Tribal Fisheries.

Credit:USFWS

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, three, and four were in the sack fry stage for the month. Total sac fry on station is 716,077. All trays were cleaned of egg shells and dead fry. Button-up fry will be moved in February to the outside vats and started on feed.

Information and Education Corner

Dworshak

Stats: Tours-0; Register- 51 visitors from 5 states, two; Website visitors- 400 ; Blog Visitors- 393 from 10 countries!

On Site:

There were three articles posted to Dworshak Fisheries Complex Blog. Please visit the site: [The Fish Ladder: Notes from Dworshak Fisheries Complex](#), and feel free to contribute!

I continued working with Aron Jackson and Tim Cochnauer on their expansion of the HIC program. We have 10 Lewiston area schools signed up for the program. Classroom mentors will start picking up eggs and equipment in early February. There are four additional schools participating in HIC programs this year.

Filmed and photographed the Boiler Control training on January 24. A DVD of this will be available to staff who may have missed the training or need a refresher.

As we continue steelhead spawning I've coordinated volunteers to assist with spawning efforts.

Kooskia

Hatchery personnel are trying to keep count of visitors to the grounds. There were approximately 65 visitors for the month by the manual count.



Carts were upgraded with diamond plate beds. This upgrade makes the carts easier to clean and disinfect.

Credit: Nate Wiese/USFWS

“Metal Benders completed the boiler control project this month.”



Wes Ketcham explains the boiler control panel to Maintenance staff.

Credit: Angela Feldmann/USFWS

Maintenance Activities

Dworshak

This month Metal Benders finished the boiler control project. Operational training for hatchery staff was held by Wes Ketcham of Infinium Engineering. So far the system appears to be intuitive and fairly easy to operate.

The maintenance crew also attended Lock out tag out training at Dworshak Dam in an effort to coordinate the two facilities lock out tag out clearance program.

On January 12th at approximately 2 am, the hatchery experienced a partial power outage. Power was out for approximately 8 hours. Quick response and action from hatchery personnel along with power to the main pumphouse provided for a No-Fish loss event.

Other activities included:

PM performed on Cushman Titans.

Manlift repairs were completed and returned to service.

Repaired Portable Honda generator.

Replaced JD Gator Drive Belt.

Dodge Caravan Annual PM.

Dodge Caravan new intake manifold gasket.

Replaced worn tires and cracked windshield on Fish Truck.

Replaced vacuum pump on Nielsen fish pump.

Performed Main Pump PM

Performed Rotating Screen PM.

Repaired stripped stud bolt on Komatsu forklift.

New belts and PM service on Mech II air compressors.

Replaced the 40 HP fire and maintenance water pump.

Repaired visitor lot lighting.

Ordered replacement 15 HP fire and maintenance pumps.

Replaced plywood beds with diamond plate on all production Cushman Carts

Retrofitted all 80 upwelling jars with new hose thread fittings and replaced the 10-year old Tyvex tubing. This will reduce the risk of a catastrophic water loss during steelhead egg incubation.

Kooskia

Jan 04: Power outage at the hatchery at 1:30am.

Jan 12: Turned on well #5 to 100 gpm due to low creek flow with the cold weather and to decrease mortality due to fish jumping up on the ice sheets. New Junction Boxes were mounted in the return pump chamber for pump wiring and wiring of the new control floats.

Jan 20: Turned off well #5, water to the Burrows ponds. Clear Creek flows have increased because of warmer weather and rain. Marilyn Blair from the Idaho Fish Health Center did the monthly evaluation of the BY10 fish in the Burrows ponds.

Jan 30: Installed new bearings in the Chromalux Heater motor and reinstalled it in the incubation room. Started cleaning and setting up the outside incubation area for spring Chinook fry in February.

Jan 31: Installed the new PVC control valve on the truck filling station.

Idaho Fish Health Center

Complex Hatcheries

Kooskia: Guppy visited for routine exam on 1/12. Kidney samples were taken for BKD monitoring by ELISA.

Dworshak: Liz examined BP 60 on 1/2, BPs 1 & 3 on 1/18, BPs 10 & 28 on 1/17, and BP 61 on 1/24. Laura examined BP 3 on 1/3, BP 1 on 1/9, and System 1 on 1/10. Again Trichodina was found in the general population of fish. All burrows ponds were treated in System I, System II had another treatment, and one pond in System III was treated also.

IFHC staff took fish health samples on all steelhead spawning dates in Jan. (1/4, 1/17, 1/31). In addition, Liz took virus samples from 30 new steelhead adults from the river on 1/31. Guppy and Laura assisted with GnRH hormone evaluation at the first two spawning dates as required by its use under INAD.

SCS juveniles were examined on 1/3. Kidney samples were taken for BKD monitoring by ELISA.

NEZ PERCE TRIBE: Treatment for ICH plus lower water temps appeared to work in knocking back ICH. On exam on 1/5, Laura only found one ICH parasite on 12 fish from both S channels.

Corie collected 60 juvenile FCS at Lyons Ferry Hatchery on 1/10 for fish health inspection required for import permit for the FCAP program.

Corie examined juvenile COS at Dworshak on 1/13 and 1/31. GBD was observed on both dates. Bacteriology and virology are pending from the exam on 1/31.

Bacteriology: Coho were found positive for Cold Water Disease, confirmed by PCR. Steelhead spawning is under way, so far no reportable bacterial pathogens have been found.

Virology: Corie had 92 new samples for virus and also ran 105 blind passes.

PCR: Laura extracted and processed all 2011 R.sal confirmations, NS and EEDV samples. 200 samples from ovarian fluid and viral pellets from adult spawning COS, SCS, FCS from NPTH, DW, and KK. .

Other:

Veterinary student Christina Der received experience in fish health at the IFHC from 1/3 to 1/13.

Guppy was asked, and agreed, to be a science editor for the AFS Fisheries magazine for fish health related articles for one year.

Guppy met with Randy Bowen to discuss IFHC's 2012 IT spending plan on 1/5.

Corie and Guppy participated on all--FHC call on 1/10.

Guppy participated in conference call concerning the FWS National Aquatic Animal Health Policy on 1/11.

Liz and Guppy reviewed and edited "Coho Spawning Protocol" for Kooskia, completed on 1/23.

Guppy attended Pre-AOP meeting on 1/19.

With staff help, Guppy made all 2012 Clearwater AOP document edits for the IFHC, completed on 1/31.

Guppy traveled to Rocky Plains Pathologist's meeting 1/25-26 and gave presentations on Idaho FHC updates for 2011 and on the future of the VHSV ruling for APHIS.

Guppy completed GnRH hormone data reports as required by the INAD and submitted to AADAP on 1/23.

Guppy participated on conference call of committee reviewing requested changes to the sampling chapter of the FWS-AFS Bluebook Inspection Manual on 1/24.



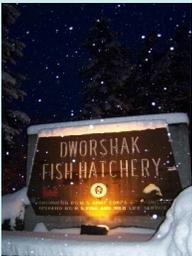
Intern Christina Der sampling juvenile Chinook salmon for bacterial and virologic testing

Credit: USFWS



Upwelling jars were retrofitted in January

Credit: USFWS



Heavy snow fell in January

Credit: Nate Wiese/USFWS



FRO staff collect SCS for condition assessment

Credit: Angela Feldmann/USFWS

Meetings....Training....Travel

Dworshak

- 1/9-13 Adam Izbicki attended FBMS training in Portland, OR
- 1/9-13 Angela Feldmann attended the Social Media and Digital Content Development course at NCTC
- 1/9 Larry Peltz, Mark Drobish, and Nate Wiese participated in a COE Rehab Team brainstorming session
- 1/19 Nate Wiese, Howard Burge, Marilyn Blair, Kent Hills, and Mark Drobish attended the Pre-Annual Operating Plan meeting for the Clearwater Basin held at the Clearwater State Fish Hatchery
- 1/20 Angela Feldmann participated in a Social Media development and strategy session with Region 1 Fisheries, External Affairs, and I&E personnel
- 1/23-27 Nate Wiese traveled to NCTC to develop curriculum for the Cold Water Fish Culture Course
- 1/24 Larry Peltz and Ed Larson attended a COE Rehab Team public hearing in Lewiston, ID
- 1/24 Boiler Training for the staff was conducted by Wes Ketcham, Infinium Engineering and the U.S. Army Corps of Engineers on January 24th. This provided staff with an overview of how the boilers would function in complimentary (team) fashion and also included set up and operation from the Personal Computer "touch screen"
- 1/26 Adam Izbicki, Terry Weeks, Ben Greene, Rob Kellar, Brent Goosen, Rick King, Jim Oatman and Mark Drobish attended phase I Lockout/Tagout training hosted and presented by Larry Deardorf of the Dworshak Project (U.S. Army Corps of Engineers)
- 1/31 Larry Peltz, Mark Drobish, Jack Christiansen, and Adam Izbicki attended a COE Rehab Team meeting in Walla Walla, WA. Critical criteria and measures to address various issues were discussed. The initiation of a quantitative rating system is now underway
- 1/31-2/1 Penny Hasenoerhl attended FBMS training in Boise, ID

Kooskia

- 1/5 IDFG was at the hatchery for a tour of the Obermeyer weir and the adult trap weir. Kent traveled with IDFG personnel to help evaluate their new Meadow Creek trapping site
- 1/23 Attended the Managers meeting at DNFH and then had a second meeting with the SRBA coordinator to work on KNFH budget information
- 1/26 Kent was on an interview team at DNFH for an electrician hire at DNFH. KNFH personnel did an online training on the proper use of government vehicles
- 1/30 Kenny traveled to a Fish Nutrition Workshop at the Oregon Hatchery Research Center and the Abernathy Fish Technology Center

Administrative Activities

Safety

Penny Hasenoerhl provided CPR/AED/Basic First Aid and Bloodborne Pathogen training on January 25th to fourteen Dworshak Complex staff members and USGS personnel.

Personnel Actions –

Clarice Holt resigned her position with the FWS here on the 20th and officially started her position as a Fisheries Technician II here at the Dworshak Hatchery as a Nez Perce Tribal employee on the 23rd.

Paul Eneas, Nez Perce Tribal employee finished up his assignment here at the Dworshak Hatchery as a fish culturist on the 20th of January. Paul started a new assignment with the Nez Perce Tribe working on the Steelhead Kelt project on the 23rd of January.

Steve Bradbury is transitioning into a three month temporary assignment taking over the duties of the Administrative Officer, currently held by Joan George. The objective of this assignment is to work with Joan and learn as much as possible prior to her retirement.

Team Member of the Month: John Vargas

This month John Vargas reached a major milestone in his career. On January 9th John was given his 30 year service certificate. John began his career with USFWS working as a winter seasonal at Dworshak NFH. His summers were spent with the USFS until 1985 when John was transferred to Little White Salmon NFH in Willard, WA. After this, John came back to Dworshak as a permanent animal caretaker, moving through the ranks to become the Animal Caretaker Work Supervisor. John has seen many things in his 30 years but the strangest thing he has had to deal with was adult fish jumping out of holding ponds prior to the fencing being put in.

John has really enjoyed working with and learn-

ing from so many fish biologists and aquaculturists over the years. He has appreciated being able to share knowledge and ideas with biologists and animal caretakers not only from FWS hatcheries but from Tribal and State as well.

John plans on doing a lot of traveling when he retires and to finally catch up on all those household projects he has had to put off over the years. He also wants to continue running competitively “into his 80’s.” I asked John what he sees as his perfect day. In true nature he thought of work and said “a perfect day is when everything goes as planned and nothing breaks, and when the weather is nice!”

Congratulations John!



Staff received CPR/AED training in January

Credit: USFWS



Mark Drobish presents John with a certificate of 30 years of Service.

Credit: Nate Wiese/USFWS

Staff Service Anniversaries and Birthdays

January Birthdays

- Ben Wright
- Thomas Trock
- Billy Conner
- Aaron Garcia
- Art Broncheau

Years of Service

- John Vargas– 30 years



Staff List

Complex Management

Larry Peltz, Complex Manager
Ed Larson, Nez Perce Tribe Co-Manager
Mark Drobish, Hatchery Manager
Nathan Wiese, Assistant Hatchery Manager
Jack Christiansen, Aquatic Engineer

Dworshak Production Staff

Thomas Trock, Mark Bright, Angela Feldmann, Jill Olson, John Vargas, Rick Allain, Rob Bohn, Wayne Hamilton, Ben Wright,

Nez Perce Tribe Production Program

Mike Bisbee, Tuianna Moliga, Lou Ann Lasswell, Steve Coomer, AJ Sisto, Clarice Holt

Administration

Joan George, Penny Hasenoehrl, Steve Bradbury

Maintenance

Adam Izbicki, Ben Greene, Terry Weeks, Rick King, Brent Goosen, Rob Kellar, Gerald "Scooter" Stretsbery

Idaho Fish Health Center

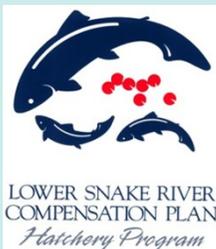
Dr. Marilyn Blair, Liz Steiner, Laura Sprague, Corie Samson

Idaho Fishery Resource Office

Howard Burge, Mike Faler, Dr. William Conner, Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Tom Biladeau, Dr. Chris Peery, Jody Brostrom, Randy Bowen,

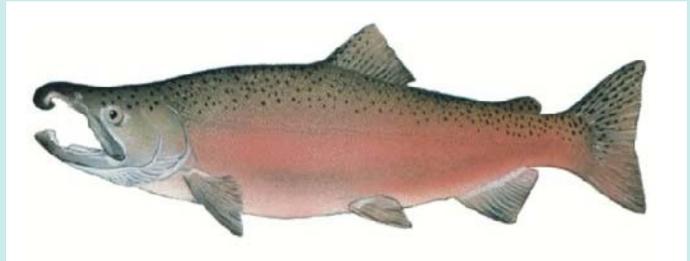
Kooskia National Fish Hatchery

Kent Hills, Art Broncheau, Kenny Simpson, Gerry Fogelman



Nez Perce Tribe and Dworshak NFH Production, Maintenance, and Administrative staff.

Credit: Angela Feldmann/USFWS



Anglers are beginning to flock to the North Fork Clearwater River to catch returning steelhead. Nate Wiese, Assistant Hatchery Manager, caught this B-run steelhead with his daughter, Harley.

Credit: Amber Wiese