Dworshak Fisheries Complex
Monthly Activity Report

Volume 4, Issue 8
June 2015

June Highlights

Dworshak

SST BY15 1,666,600

SST BY15 683,793 fry

SCS BY14 2,447,201 fry

COS BY14 719,726

Kooskia

Chinook Salmon 965 adults removed from trap

Chinook parr - 677,843

Inside this issue:

U.S. Fish & Wildlife Service, Region 1

Managers Message

Steve Rodgers, Complex Manager

Steve Rodgers Dworshak Complex Manager

I'm sure you're all getting tired of this extremely hot weather. It's been north of 100°F many days this summer, and it's only early July! If you aren't in the river or reservoir swimming, it can be just plain miserable. When you're working outdoors, the heat can even be unsafe. We've discussed this frequently during our morning staff meetings, to make sure you all work safely in hot weather.

The heat is also a real challenge for salmon and steelhead. Although our production fish are in a controlled and comfortable water environment, that's not the case for fish out in the natural world. Smaller streams are experiencing unusually high water temperatures and very low flows, and it has already been lethal in some tributary streams. Not only are warmer water temperatures physiologically stressing for salmon and steelhead, their navigational system is negatively influenced by low flows as well, adding to the challenge of survival.

Larger river systems (the Snake and Columbia Rivers for example) are experiencing the same warming trend. Dworshak Reservoir water is intentionally added to the Snake River via the Clearwater River to help cool water temperatures for migrating salmon. Unfortunately, in low flow years with very high water temperatures, this may not be enough to ensure safe passage up and down the river.

This year, fires are rampant throughout the region, which will lead to increased sediment loading in watersheds, and further increase water temperatures.

Lastly, the Pacific Ocean is currently considered in "El-Niño" phase, where current flows have changed and ocean temperatures are higher. This results in significantly reduced food availability for growing salmon and steelhead. This condition will most likely continue for the next several years; leading to lower salmon returns. We may see warmer and drier weather patterns, reduced snowpack, shortened and earlier runoff periods, and increased fire. These conditions are a model of what life in the Pacific Northwest may look like under predicted climate change.

Even if all of these environmental influences don't directly lead to fish mortality, they certainly contribute. Fish have weakened immune systems due to the stress of a low-quality aquatic environment. As a result, they become more susceptible to pathogens. The pathogens themselves may actually thrive in this altered environment. Secondary pathogenic factors often lead to significant fish losses.

Please be safe while working for the salmon in this heat, and keep your fingers crossed that the fish you're rearing today (and those you've already released) will be successful in their journey to the ocean and back again in this tough physical environment.

Dworshak Hatchery Headlines - Izbicki, Sommer Asst. Managers

Credit: Jill Olson FWS

Marking trailer on System I Burrows Ponds at Dworshak NFH

Dworshak Stock- Spring Chinook Salmon (SCS)

Brood Year 2014 (BY14)

At the end of June there were 2,447,201 fry at 354.2 fpp. Mortality was 0.83%. Medium sized ponding screens are still set and flow is single pass at about 250 gpm. There are 10 distinctive PBT groups ponded: 6 for the density study (3 high density and 3 low density), one for general Dworshak production, one for Selway production, one for Nez Perce Tribal Hatchery (NPTH) additional Lower Snake River Comp. Program (LSRCP) production, and one excess fish production, which will be transferred to NPTH with the LSRCP fish.

Credit: Jill Olson FWS

Coho Salmon (COS)

Brood Year 2014 (BY 14)

At the end of May there were 719,726 fry at 362 fpp. Mortality was 0.27%. A total of 796 pounds Bio-Oregon's BioPro starter #0 and #1 crum feed was fed for the month. These fish will be moved to Burrow's Ponds prior to Chinook tagging.

Dworshak Stock Summer Steelhead (SST)

Brood Year 2015 (BY15)

Steelhead ponding from Nursery tanks to System I Burrows Ponds

At the end of June, there were 683,793 fry in the nursery from takes 8-10. There is no Take 6 for Dworshak. Take ten fry were ponded as swim up fry June 9. Fry averaged 649 fpp.

Takes 3-8 were marked and ponded into System 1 Burrow's ponds (BP's). These fish will be reared on reservoir water until they reach at least 60 fpp. Currently, there are 1,666,600 in System 1 averaging 89.0 fpp. Flow in the BP's is approximately 500gpm. Mortality averaged at 1%. Several BP's broke with Trichophyra. These ponds were treated with formalin. BP 47 was treated with florfenicol medicated feed at 10 mg/kg for 10 days to combat F. psychrophilum. Fish from takes 1 and 2 will be split into final rearing densities in July.

Credit: DNFH, FWS

Dworshak Hatchery Headlines - Izbicki, Sommer Asst. Managers

SUMMARY

Table 1. Total Production - Fish on Station (6/30/15).

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS BY14	14	Raceways A5-15; B23-30	2,447,201	6,909	354	2.1	53
COS BY14	14	Raceways A 2-3; B17-18	719,726	1,992	361	2	51
SST BY 15	15	Nursery	683,793	1,626	649	2.1	53
SST BY15	15	System I	1,666,600	22,840	73	1.8	46
Total Fish/Fry on Station @ End of Month			5,517,320	33,367			

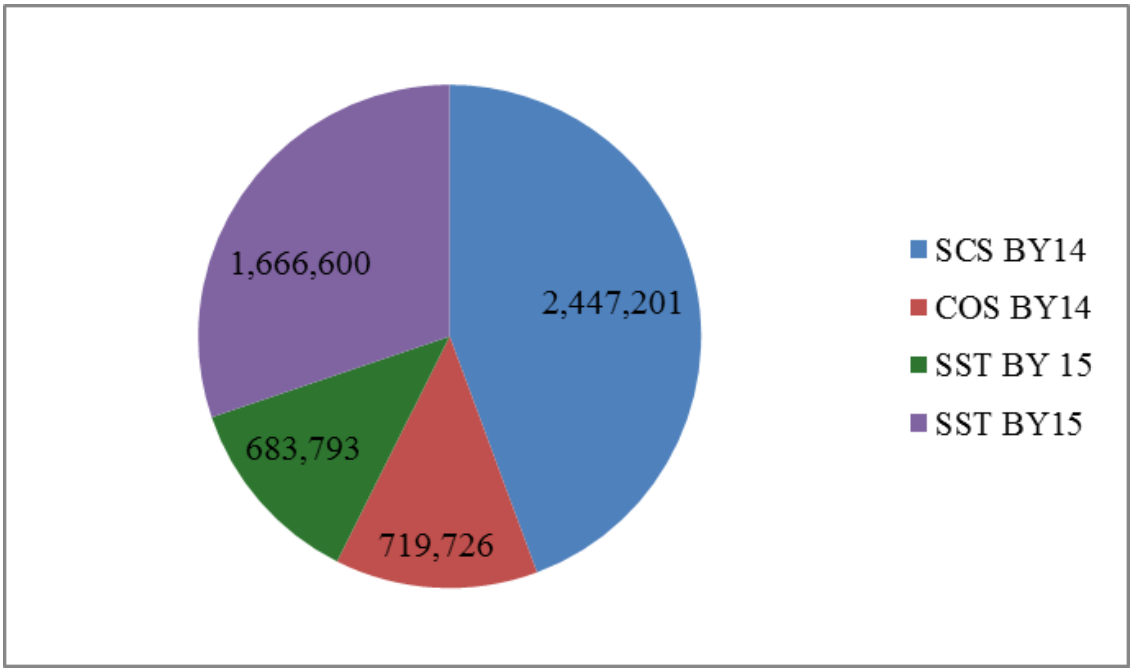


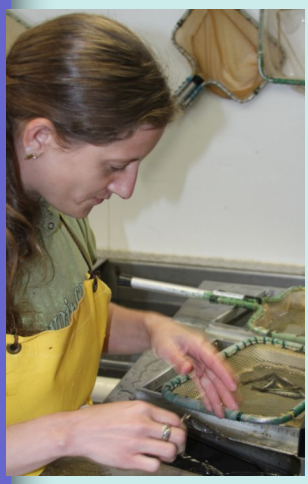
Figure 1. June 30, 2015: Total Fish on Station.

Credit: Jill Olson, FWS

John Hook taking length and weight measurements on steelhead coming from marking trailer.

Dworshak Production Monitoring and Evaluation - Peery

- We completed the LSCRP Statement of Work and Budget for the FRO.
- The FRO coordinated efforts with the Complex and Co-Managers to use Draxxin for injecting female Chinook this year.
- We completed the 2008 Chinook Broodyear Report and posted it to the FRO website for public access.
- We completed a historical review of ladder operations for collecting Chinook brood stock at Dworshak NFH and examined influence of flow on arrival time at the various dams. The paper is posted on the FRO website for public access.
- The FRO assisted Kooskia NFH in processing the last of the Chinook in the adult trap.
- The FRO set up a spreadsheet to record the daily Chinook count into the adult holding pond. Data on flows and water temperatures in the mainstem and North Fork Clearwater River are being recorded to correlate with daily adult counts.
- The FRO continues to collect length and weight information on each nursery tank of steelhead as they are processed for transfer to outside burrows ponds.



Credit: Jill Olson, FWS

Marking crews are clipping adipose fins from fry coming out of the Nursery.

Aquatic Conservation - Faler

- Participated in the monthly NWR Climate Change monitoring conference call, and provided an update for monitoring on Kootenai NWR.
- Participated in the region-wide ACT conference call, and provided a station update of recent activities.
- Downloaded hobo temperature loggers on Myrtle Creek for the aquatic climate change monitoring program on National Wildlife Refuges.
- Participated in the redband trout conservation meeting in Boise, and accepted a Co-Lead assignment for the Kootenai Basin GMU.
- Worked with Barry Shaw, RO, to complete an interagency agreement with the Idaho Panhandle National Forest for 2 fish passage projects. Visited the Shertz Creek culvert replacement site and reviewed the construction plans with Sean Stash, Forest Service.
- Worked with Connie Sauer, RO, to initiate a CESU Cooperative Agreement with University of Idaho to conduct a thermal tolerance study on early life stages of burbot.

Credit: Jill Olson, FWS

Ray Jones and John Hook prepare to record data from anesthetized steelhead.

Salmon Sub-Office - Brostrom

- Attended Bimonthly Aquatic Conservation Team (phone)
- Attended Fisheries Project Leader Call (phone)
- Attended Pacific Lamprey Regional Implementation Plan RMU Meeting (phone)
- Attended Redband Trout Conservation Planning Meeting
- Attended Lemhi Soil and Water Conservation District Spring Field Tour
- Attended The Nature Conservancy Partner BBQ
- Attended Quarterly Freshwater Mussel Working Group (phone)
- Finalized paperwork for the Youth in the Great Outdoors High School Intern
- Submitted for and received funding for a National Fish Passage Program funds for diversion rebuild on the Little Lost River
- Arranged project substitution for a National Fish Passage Project in the Bear River drainage, necessitated by landowner withdrawing support
- Prepared for July 2 Salmon River Days Fish Tent (storytelling and nature art for kids)

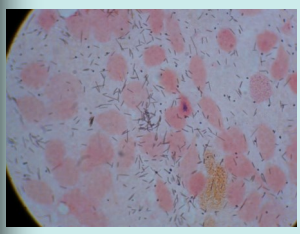
Snake River fall Chinook Salmon Research - Connor

During June 2015, the staff of the fall Chinook salmon research team accomplished the following.

- Fifteen permanent stations located along the Snake River from Hells Canyon Dam to the upper end of Lower Granite Reservoir were beached seine over a three-day period three weeks of month. Juvenile fall Chinook salmon were counted, measured, and PIT tagged. Catch declined to near zero the third week of June when temperatures reached 20^{o}C and beach seining was discontinued.
- Assistance was offered to the NPT's beach seining crew on the Clearwater River, but NPT had it handled and no assistance was required.
- Final comments on the fall Chinook salmon recovery were coordinated through the regional office and sent to NOAA Fisheries.
- Input data set for estimating the daily passage abundance of natural- and hatchery-origin fall Chinook salmon at Lower Granite Dam were compiled, checked, and finalized.
- Galley proofs were reviewed and sent back to Transactions of the American Fisheries Society for final publication.
- Progress was made on a manuscript titled "Use of a Small Unmanned Aircraft System for Chinook Salmon Redd Surveys."
- Management and administration of the two BPA-funded research projects continued.

Idaho Fish Health Center

June 2015



Credit: Idaho Fish Health Center

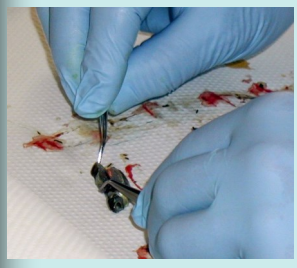
Coldwater Disease in brain tissue

Bacteriology: Laura received 17 diagnostic cases from several locations this month. Coldwater Disease (F.psychrophilum) and Pseudomonas fluorescens were confirmed in Tanks 1 & 2 at Hagerman NFH, also F.psychrophilum in Dworshak BPs 41, 45, 47 and 49, with some of those cases being in the brain only. A.salmonicida was confirmed in two samples received from NPT Lamprey program.

Virology: Corie ran a total of 67 samples representing 108 fish from Dworshak NFH, Nez Perce Tribal Hatchery, Kooskia NFH, Kootenai Tribe of Idaho, and the Nez Perce Tribal Hatchery Lamprey Program. Corie also ran 156 blind passes representing 282 fish from the Kooskia National Fish Hatchery, Nez Perce Tribal Hatchery, Dworshak National Fish Hatchery, and the Kootenai Tribe of Idaho.

PCR: Laura and Caleb extracted 200 viral pellets to screen for Nucleospora salmonis (NS). Laura confirmed 12 suspect F.psychrophilum samples as positive.

ELISA: No ELISA tests were run during the month of June. Caleb and Angela assisted in preparing negative tissue controls for future runs. Caleb also helped with compiling data from ELISA reports for several years.



Credit: Idaho Fish Health Center

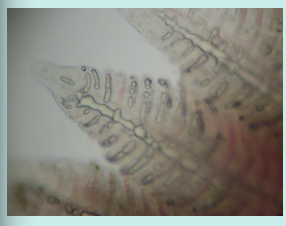
Close-up tissue sampling

FWS Hatcheries

Kooskia: Guppy visited Kooskia on 6/26 for routine monitoring exam. High levels of debris was seen on gills and recommendations were to change screens as planned to allow for better flushing of waste and to promote cleaner ponds. Guppy and Angela also traveled to Kooskia on 6/4 for river fresh sampling of the adult SCS at trapping.

Hagerman: Corie visited Hagerman on 6/6. Fish from two tanks in Hatchery 1 were exhibiting high mortality. Coagulated yolk was observed. Pseudomonas fluorescence was isolated. One week later tanks 1 and 2 were exhibiting high mortality. Fish shipped to the fish health center tested positive for F. psychrophilum. Fish were started on a florfenicol treatment. 6/19 fish were again shipped to the fish health center due to increased mortality in tank 50. The majority of these fish were exhibiting coagulated yolk.

Rainbow trout examined on 6/6 for their monthly monitoring looked good. Signs of N.salmonis that were observed the month prior were not notable.



Credit: Idaho Fish Health Center

Gas Bubble trauma in gill tissue

Dworshak: Corie performed the monthly monitoring for the steelhead in the nursery on 6/29. Tank 603 had slightly elevated mortality of 29. The majority of the morts in the tank were pinheads. The only moribund fish observed had coagulated yolk. All of the other fish looked normal.

Laura, Corie, Caleb and Guppy all performed diagnostic and monitoring exams (8) on System 1 during the month due to increased mortality. Severe Gas Bubble trauma, moderate levels of Trichophyra, as well as Flavobacterium psychrophilum the causative agent for Bacterial Cold Water Disease

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Idaho Fish Health Center

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(BCWD), were found to be the tissues. Treatment with formalin baths were recommended for all ponds in system one exhibiting flashing behavior and elevated mortality. Because of high water temps, excessive algae in the ponds and low DO issues, the first treatment was not 100% effective, so 2 ponds were re-treated after thorough cleaning and flows increased. BP 47 was fed medicated feed to treat for BCWD. Ponds 41 and 45 were not treated due to the fact that F. psychrophilum was only isolated from brain tissue, but not kidney or spleen.

Guppy conducted monitoring on juvenile SCS in A bank at Dworshak on 6/19 and again in B bank on 6/29. Swelling and heavy debris were seen on gills and ways to improve pond cleaning practices were discussed.

NEZ PERCE TRIBE:

Corie examined Coho from Raceway 3 on 6/19. No moribund fish were observed. Gills were slightly swollen and a moderate amount of debris was observed. It was recommended to return to 3 cleanings per week.

Laura assisted in lamprey injections 4 times during the month, with available personnel such as Corie, Angela, and Caleb. Laura helped Tod Sween, on the NPT lamprey project to develop a biosecurity plan for the lamprey building on the hatchery.

Guppy examined fish from NPTH Cedar Flats acclimation site due to increase in mortality just prior to release on 6/2.

Spleen and kidney tissues were received by Guppy from NPTH SCS adult with external lesion for laboratory testing on 6/15.

Kootenai Tribe: Ovarian fluid, eggs, and milt were sent from spawning white sturgeon adults at the Kootenai Tribe of Idaho hatchery for virology testing by cell culture.

Wild Fish Survey: Laura spoke with several partners, laying out field collection activities and needs through the coming months.

Laura attended several UAT conference calls this month and sat in on a small sub group tasked with developing a LIMS bid package.

Laura and Guppy participated on conference call hosted by Andy Goodwin to discuss pathogen distribution maps on 6/18.

Other:

Pathways intern Caleb Wilson began work at the Idaho Fish Health Center on 6/15.

Angela Feldmann, From Dworshak Production spent two weeks in the lab from 6/4 through 6/18. She shadowed Laura the week of 6/8-6/12.

Interviews were conducted by an all staff panel for term microbiologist position at the Idaho FHC by phone during the week of 6/15.

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Idaho Fish Health Center

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Credit: Jill Olson, FWS

Assisted in lamprey injections 4 times during the month at Cherry Lane Fish Hatchery.

Guppy attended a national fish health center conference call hosted by Joel Bader, National Aquatic Animal Health Coordinator on 6/8. Reports were given on activities for each FHC in Region One including the Idaho FHC. Guppy attended the RO Project Leader conference call also on 6/8. She participated on a Dworshak Complex management team meeting on 6/1 to discuss recommendations for Draxxin injections of SCS adults at Dworshak.

Corie and Laura attend the Western Fish Disease Conference in Steamboat Springs Colorado 6/2-6/4.

Corie attended administrative training 6/9-6/12.

Laura attended the 6th annual New Zealand Mudsnail Workshop in Seattle, June 15-17. Laura met with Jason Montgomery of Western Chemical while in Seattle to discuss new products for biosecurity systems.

Guppy attended the Snake Basin SCS coordination webinar/conference calls scheduled for every Tuesday morning, as available.

Guppy updated COE annual work plan and budget for 2016.

Guppy participated on a conference call consisting of all FHC project leaders nationally, to discuss changes needed to the FWS Aquatic Animal Health Policy on 6/25.

Credit: File photo DNFH, FWS

Dworshak Maintenance & Operations Activities - Koehler

Main aeration degassing project, phase 2 has been completed

- Main aeration degassing project, phase 2 has been completed by the contractor, all HECP clearances have been removed and all systems are go. We are currently operating
- 4 of the 6 pumps available.
- Rick King's redesign and changes to the system 3 clarifier pump discharge hoses is complete and seems to be working as planned. This should extend the life of the 8 inch discharge hoses.
- Joe Livesay and the electrical shop is working on upgrades to the 2 channel crowder controls. This is a big and complicated undertaking, but should make the crowders much more dependable when completed.
- Two of our four generators have had their annual maintenance completed and should be in good shape for the upcoming year.
- Two sets of steps into the raceways have been replaced and will be much safer.

Credit: File photo DNFH, FWS

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Dworshak Maintenance & Operations Activities

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- We've installed a flow switch on the incubation/spawning booster pump to protect it from running against a dead head.
- System three, 50 hp pump motor #1 was sent off for maintenance. This motor has been returned, re-installed and is up and running. Good for years to come!
- The 6 inch chilled water line in the spawning hallway has been insulated and this should stop the condensation from dripping on the floor and lockers in that area.
- Work in the housing area continues and all four house roof repairs have been completed.
- Most importantly, Preventive Maintenance work orders are being completed on schedule, and this is due to the self initiative and hard work of all the maintenance staff, including Mechanical, Landscaping, Custodial and Electrical. Thanks!

Information and Education

June Activities

Dworshak - Olson

Facebook Statistics: Reach - **1,127** Engagements – 292

Website Statistics: Unique Visits - **210** Page Loads - 256 First Time visitors - 182 Returning Visits - 28

Visitors: **254** people on self-guided tours; coming from 18 states, Australia, Austria, and the Philippines

Tours: **Six** tours were conducted reaching **88** K-12 students and **69** adults

Outreach: The Idaho Department of Parks and recreation celebrated their 50th anniversary on June 27 at Freeman Creek campground. Dworshak Complex joined the party and provided fishy games and prizes reaching **45** children and **22** adults.

Volunteer Hours: **3** volunteers contributed a total of 14 hours during the month of June.

Kooskia - Hills

Visitors: There were 241 visitors to the hatchery during this month; this figure is compiled by staff. Salmon fishermen are checking the trap. Valley Bible Church held a father's day picnic at the hatchery.

Kooskia Hatchery Headlines

Credit: NPT

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

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. Reports will include additional information about other species reared, processed and released in relation to KNFH operations.

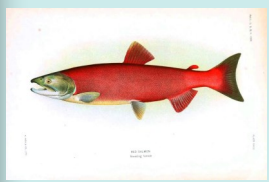
Kooskia Chinook Brood Year 2014

At the beginning of the month we had 849,362 fingerlings in vats on station. On Jun 5, 678,462 were pumped into the Burrows ponds for hatchery production. On June 10 and 11, we out planted 85,450 fingerlings each day into Clear Creek at the second bridge for a total of 170,900. Currently, we have 677,843 parr on station at 151.9 fish per pound, and 2.80 inches (71 mm). They are on chilled well water at a temperature of 50°F and a well water replacement flow of 260 gal/min. Total mortality for the month was 635. They consumed 1,930 pounds Bio Oregon feed that was a combination of number one and two crum. Idaho Fish Health Center evaluated the fish the end of the month and found two fish with heavy debris on the gills. We have more algae this year on the Burrows pond walls due to the light paint color. We are in the process of changing the pond screen to help in cleaning of the ponds.

Kooskia Adult Trap Operations:

A total of 965 adult Chinook Salmon were removed from the trap this month. They consisted of 61 wild males, 55 wild females and 1 wild jack were released 9 miles up Clear Creek for natural spawning. 61 hatchery males, 67 hatchery females and 4 hatchery jacks were transported to Dworshak for holding.

Eighty-six hatchery males, 94 hatchery females, and 9 hatchery jacks were taken to the Clearwater River and released at Pink House. 116 hatchery males, 116 hatchery females and 23 jacks were released at the Kamiah Boat Ramp on Clearwater River. Total of 39 hatchery males, 35 hatchery females and 2 hatchery jacks went to the Kamiah Food Bank. A total of 7 hatchery males and 15 hatchery females went to Nez Perce Tribal subsistence. 6 hatchery males, 8 hatchery females and 1 hatchery jack were trap mortalities. A total of 58 hatchery males, 100 hatchery females, and 1 hatchery jack were water outflow mortalities.



Maintenance & Operations:

Jun 01: One hundred and twelve Chinook salmon were taken from the trap, 45 were hatchery males, 52 were hatchery females, and 3 hatchery jacks; 4 wild males and 8 wild females. All hatchery fish were taken to Dworshak. Wild fish were taken 9 miles up Clear Creek for natural spawning.

Jun 03: Installed shade cloth on burrows ponds and turned water into the ponds in preparation to move BY14.

Jun 04: A total of 123 Spring Chinook were removed from the trap. A total of 16 hatchery males, 15 hatchery females and 1 hatchery jack were transported to

Kooskia Hatchery Headlines

(Continued from page 10)

Dworshak for holding. The remaining hatchery fish were moved to Pink House and released into the Clearwater River, including 43 males, 45 females and 3 jacks.

Jun 05: Removed 63 fish from the trap, a total of 3 hatchery males and 5 hatchery females went to the Kamiah Food Bank, a total of 22 went to tribal subsistence program and they were 7 hatchery males and 15 hatchery females and total of 33 wild fish 18 males and 15 females were transported 9 miles up Clear Creek and released for natural spawning. A total of 678,462 fish of BY14 were pumped to the burrows ponds from the outside rearing vats.

Jun 08: Removed 145 Spring Chinook salmon from the trap. A total of 43 hatchery males, 49 hatchery females, and 6 hatchery jacks were transported to Pink House and released into the Clearwater River. A total of 27 wild adults consisting of 14 males and 13 females were released for natural spawning 9 miles above the hatchery into Clear Creek. A total of 20 hatchery adults were given to the Kamiah Food Bank for distribution, 8 hatchery males and 12 hatchery females.

Jun 09: We removed 278 Spring Chinook salmon were taken from the trap,19 wild males and 14 wild females were released for natural spawning 9 miles above the hatchery into Clear Creek. A total of 93 hatchery males, 93 hatchery females and 11 hatchery jacks were taken to the Kamiah Boat Ramp and released into the Clearwater River. The Kamiah Food Bank received 28 hatchery males, 18 hatchery females and 2 hatchery jacks for subsistence.

Jun 10: 85,450 excess fish of BY14 were released 9 miles up Clear Creek. Kenny was injured when the lid on the fish truck fell on him. He was transported by Kent to the Kamiah Clinic where he required stitches to his nose, he will be off as injured for 10 days.

Jun 11: 85,450 more excess fish of BY14 were released into Clear Creek.

Jun 12: Kent and Gerry began sheet rocking the River residence.

Jun 15: Kent put a coat of primer on the shop.

Jun 16: Gerry made repairs to the Carrier chiller.

Jun 18: Removed 31 Spring Chinook salmon from the trap. Ten hatchery males, 12 hatchery females and 4 hatchery jacks were released at the Kamiah Boat Ramp and released into the Clearwater River. A total of 5 wild adults consisting of 3 wild males and 2 wild females were released 9 miles up Clear Creek to spawn.

Jun 22: Removed 35 Spring Chinook from the trap; 13 hatchery males,11 hatchery females and 8 hatchery jacks, all were released into the Clearwater River and released at the Kamiah Boat Ramp. Three wild fish including 1 male, 1 female and 1 jack were taken 9 miles up Clear Creek and released for natural spawning.

Jun 23: Staff began putting the shop back together after getting it insulated, sheet rocked and painted.

Jun 24: Shop project completed tools and machines put back.

Jun 29: Removed 178 Spring Chinook Salmon were from the trap, 2 wild males and 2 wild females were released for natural spawning 9 miles up Clear Creek. We had 6 males, 8 females and 1 jack were trap mortalities; 58 males, 100 females and 1 jack were water outflow mortalities. All mortalities were taken to the landfill.

Kooskia Training and conferences:

- Roy from Umatilla Hatchery met with Gerry concerning the chiller and reuse system for our incubation system.

Like us on facebook to keep up with what is happening at the Dworshak Fisheries Complex

https://www.facebook.com/pages/Dworshak-Fisheries-Complex/411264238917917#

We can also be found on the web @

http://www.fws.gov/dworshak/

Let's Go Outside!

Connecting People With Nature

http://www.fws.gov/letsgooutside/

Staff List

Complex Management:

Steve Rodgers, Complex Manager

Mark Drobish, Project Leader

Adam Izbicki-FWS & Jeremy Sommer-NPT (acting) Assistant Hatchery Managers

Mike Tuell, SRBA Coordinator

Dr. Marilyn "Guppy" Blair, Project Leader-Idaho Fish Health Center

Scott Koehler, Maintenance Supervisor

Vacant, Project Leader, Idaho Fishery Resource Office

Mike Faler, Aquatic Conservation Lead

Dr. William Conner , Fall Chinook Research Lead

Dr. Chris Peery, Fish Production M&E Lead

Kent Hills, Kooskia NFH Manager

Dworshak Production Staff : Angela Feldmann, Tom Tighe, Rob Bohn, Wayne Hamilton, Mike Bisbee, Tui Moliga, Lou Ann Lasswell, Steve Coomer, Carter Lopez, Casey Mitchell, Zach Broncheau, Jaden Hudson, Steve Jeffers, Jayson Thompson

Administration: Randy Bowen, Anna Ray (on Detail from Hagerman National Fish Hatchery), Administrative Officer– Vacant

Maintenance: Terry Weeks, Rick King, Rob Kellar, James Oatman, James Paddelty, Melissa Wright, Joe Livesay

Idaho Fish Health Center: Laura Sprague, Corie Samson

Idaho Fishery Resource Office: Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Jody Brostrom, Ken Bugler, John Hook, Brad Buechel

Information and Education: Jill Olson

Kooskia National Fish Hatchery: Art Broncheau, Kenny Simpson, Gerry Fogelman