Staff constructing Weir

FISH WEIR IN THE OKANOGAN

Chief Joseph Hatchery (CJH) staff were busy this summer constructing and testing its temporary fish weir in the Okanogan River. The weir is located near Malott, Wash. In its second year of operation, staff monitored fish, collected broodstock (testing for survival rates) and made improvements to the weir as needed. The Okanogan fish weir is a valuable research and collection site for the CJH program.

"Project test results are essential for continued improvements to the weir, trap and other components," said Keith Wolf, CJH Science Project Manager. "The project aids in the recovery of Chinook salmon and the protection and conservation of sockeye, steelhead and other species."

For the past two years, research, monitoring and evaluation activities led to changes in the design and placement of the weir. This year, staff trapped adult sockeye and Chinook, tested weir effectiveness and developed adult fish management plans. Staff also monitored impacts to non-targeted species. The weir consists of seventy-five panels, a large fish trap, cameras above and below water, a new walkway, an observation tower, PIT tag detection and a new access area.

"The hatchery and wild fish entering the weir trap are captured or released to meet upstream spawning population and hatchery versus wild composition," said Wolf. "The hatchery-origin fish are captured and used for tribal subsistence and ceremonial purposes. Select fish are live-captured for use as broodstock for the Hatchery. Natural-origin summer and fall Chinook are released, unharmed, to spawn upstream."

"This effort is an important component of managing the CJH Program for the future and provides additional opportunity for harvest," said Kirk Truscott, Anadromous Program manager. "I'm very pleased with the progression of this project and the extended effort provided by our staff."

The CJH Science Program manages the engineering, development and deployment of the weir and conducts research, monitoring and evaluation throughout the summer and fall fish migration periods. The hatchery production and Selective Harvest staff manage trap operations during evening hours. The temporary fish weir is being funded by Grant County Public Utility District and Bonneville Power Administration.

SPECIAL THANKS TO THE PROJECT PARTNERS

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Fish Culturist Lincoln Fedderson mixes milt with salmon eggs

CJH staff place trays of eggs in incubation area

CHIEF JOSEPH HATCHERY UPDATE

In its first year of operation (2013), the Chief Joseph Hatchery (CJH) will be running at 60 percent production capacity. The staff has been working through operational issues and spending much of their time with spawning activities.

In the third week of August, staff began to fill trays full of salmon eggs. They separate the males and females and all females that are spawned, are then numbered. The salmon are brought up from the adult salmon raceways and staff processes them. Males are brought to one side of the spawning building and milt is extracted out of each male into bags. The females are brought to the other side and their eggs are carefully removed. Their numbers are attached to the bags and the bags of eggs and milt are put into coolers and brought to the hatchery building.

"Numbering the females is a very important step in the process," said Joy Evered, U.S. Fish and Wildlife veterinarian. "We collect kidney tissue from each female and number it and test for bacterium that can be transmitted from the female to the eggs. Any eggs at high risk of developing Bacterial Kidney Disease are discarded." She continued, "Since the hatchery uses river water, it is important to know what fish returning to the river might have brought back from the ocean or encountered in the river. To find this out, we test a subset of the population for viruses using ovarian fluid from females and kidney and spleen tissues from males."

At the hatchery building, the fish culturists combine the milt with the eggs, place the fertilized eggs into trays and rinse any excess fluid from them. These trays are gently placed in the incubation room where water temperatures are at a cool 54 degrees.

"We have roughly 715,000 spring Chinook eggs in incubation," said Pat Phillips, CJH manager. "We will have two more weeks of spawning, then a short break before we get into summer Chinook spawning. The hatchery staff have been manning the weir to evaluate how effectively they can trap and transport brood from the weir to the hatchery. This is the first year that CJH staff will be using the fish weir to collect brood," he said.

The hatchery will rear and release a healthy group of smolts back to the river in about a year and a half that will survive well in the river and ocean and return in one to three years as adults.

CJH staff along with USFWS Joy Evered take samples

Selective Harvest Crew, A day on the Purse Seine

SELECTIVE HARVEST EFFORTS FOR 2013

The Selective Harvest crew fished from the purse seine boat from July 8 to August 21, collecting salmon for distribution and brookstock for the hatchery. There was a crew of eight that would fish early in the morning till about ten and then unload. The crew would layout their large net and wrangle the fish and do about four sets a day. Once the boat and barges docked, they would load the fish onto trucks. Natural-origin salmon were transferred from the purse seine to a broodstock collection barge and delivered to the hatchery. The harvested sockeye salmon and hatchery-origin Chinook salmon were delivered to the tribes' locker for processing or distributed to tribal members on the same day they were caught. The Colville Tribes' Chinook salmon harvest allocation was 4,200 for the year.

"The Chinook salmon broodstock that were taken was based on a 60 percent production rate at CJH," said Michael Rayton, CTFW Selective Harvest biologist. "Our crew had weekly collection quotas for natural-origin and hatchery-origin Chinook broodstock. We also harvested and distributed about 1,200 hatchery-origin Chinook salmon and 4,000 sockeye salmon to the membership or to the ceremonial locker."

The 2013 summer Chinook preseason forecast was approximately 73,500 bound for the upper Columbia River. Even though catch numbers weren't what the fishermen hoped for, they still managed to distribute a lot of fish to tribal members and were able to share some of the harvest with the UCUT (Coeur d'Alene, Kalispel, Spokane,

Interim F&W Director, Randall Friedlander demonstrates how to fillet salmon

Kootenai Tribe of Idaho and Okanagan Nation Alliance (ONA) Tribes. Each tribe was given about 100 Chinook salmon. Fish were distributed to the Colville Tribes' Senior Meal sites, Convalescent Centers, and Corrections.

The Selective Harvest crew worked at the Okanogan fish weir and collected brood for CJH. They will use beach seines and tangle nets in the Similkameen River after September 15th, as a final effort to reduce the proportion of hatchery fish in the spawning grounds.

Tribal fishermen are encouraged to submit their harvest totals to their local Fish and Wildlife office as soon as possible.

Tribune Editor Justus Caudell jumps in to assist carrying fish from Purse Seine to trucks

Bryce Bessette

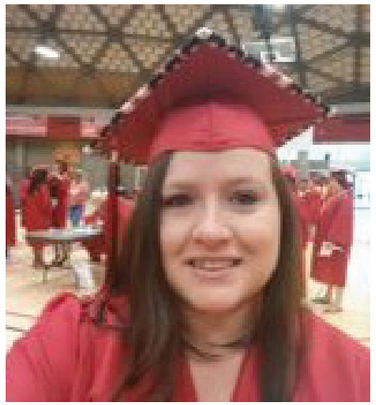
FISH & WILDLIFE EMPLOYEES

KIRK TRUSCOTT is the new Anadromous Program manager for the Colville Tribe's Fish and Wildlife (CTFW) Dept. Prior to taking on his new position, he worked as the department's hatchery sub-division manager where he oversaw all Anadromous Programs within the Hatchery/ Hydro Subdivision in support of tribal goals - to provide subsistence and ceremonial fisheries for tribal members. In his current position, Truscott will provide oversight to over 40 professional and technical staff and a $17 million annual budget. He will manage fishery programs such as habitat assessments, restoration, research, monitoring and evaluation activities as well as hydro, hatchery and harvest management. Truscott has worked for the Tribe's Fish and Wildlife Department for 18 years. He has worked for the Washington State Department of Fish and Wildlife for eight years as a Fish and Wildlife biologist. Truscott worked in artificial production programs and anadromous fish management and evaluation activities in the mid and upper Columbia River Basin.

Kirk Truscott

BRYCE BESSETTE works as a civil engineer in training for the Fish and Wildlife Dept. He graduated from Washington State University (WSU) last May and earned a Bachelor of Science degree in Civil Engineering with an emphasis in Water Resources. Prior to working as a full-time employee for the department, he interned with CTFW and for Forsgren Associates Inc. In order for Bessette to earn his Professional Engineer (PE) Certification, he must work with a certified professional engineer for four years and pass the PE exam. In his current position, he provides engineering support in the planning, design, and permitting processes, and provides oversight on a variety of Fish and Wildlife projects. He analyzes hydro systems and does site planning work related to bridges, culverts, weirs, and other stream restoration projects. He evaluates fish passage design alternatives, assess costs and material needs. This past year, Bessette worked on several culvert replacement projects to increase fish passage and eliminate flooding potential to adjacent properties. He's also been involved with several small irrigation dam removal projects to allow fish passage, and several cold water side channel projects to enhance fish habitat. "All these projects require field time which I enjoy because I get out of the office," said Bessette. "The dam removals and culvert replacements give me good experience using computer design programs and modeling. Sometimes manipulating the design and modeling programs to do what I want them to do can be challenging."

AMBER CATE, a recent graduate from Mt. Hood Community College began her position at Chief Joseph Hatchery (CJH) as a fish culturist. While she attended college earning her AAS Degree in Fisheries Technology, she interned at two fish hatcheries (the Wells Hatchery and Bonneville Hatchery) before beginning her full-time job with the tribe. "I've gained some good work experience and I have been looking forward to doing this job and getting settled in," said Cate. "When I was going to school my goal was to stick to the program, get good grades and apply what I've learned." As a fish culturist, Cate will be responsible for the collection and care of brood fish, eggs and all phases of fish rearing and distribution. She will monitor fish health, inventory live fish and ensure proper fish conditions for optimum growth and development. CJH fish culturists are also involved with fin marking, PIT tagging, data collection and operating and maintaining hatchery equipment. "I'm excited to be working at the hatchery and I've been collecting broodstock and transferring them to the adult holding pond and have been working with the staff to get the hatchery ready for spawning," she said.



Amber Cate