COLVILLE TRIBES
FISH & WILDLIFE NEWS

December, 2021 | Volume 43

CHIEF JOSEPH HATCHERY



In the months of October and November, staff were spawning summer chinook twice a week in addition to shocking (the force on eggs that occurs during handling) and picking spring chinook eggs. They will continue this work in December. Staff also released thousands of salmon fry in rearing raceways where they will grow to fingerling size. Chinook salmon are raised from eggs, to fry to small fingerlings and released in the spring at both the hatchery and rearing ponds. The goal is to produce up to 2.9 million smolts annually.

"The females that are ready to be spawned are tagged with a unique number before being stripped of their eggs directly into a zip-lock bag," said Matt McDaniel, CJH manager. "Oxygen is added to each numbered bag and placed in a cooler for fertilization after all females and males have been spawned."

After all females are sorted through, the males are checked for ripeness. Ready males are milked of their milt directly into a zip-lock bag. Oxygen is added to each bag and placed in coolers. Once all males and females have been spawned, the coolers are transported to the fertilization room.

"The eggs will be mixed with the milt, and then water to activate the sperm in the milt to initiate fertilization," said McDaniel. "The fertilized eggs are left to sit for one minute, then drained in colanders and rinsed lightly. Those eggs are then laid down in an iodine solution in an incubation tray to let sit for 45-60 minutes before water is turned on, which completes the spawning process."

- Spring Chinook spawned – 305 females, 201 males and 6 jacks
- Segregated Summer Chinook spawned – 267 females, 217 males and 2 jacks
- Integrated Summer Chinook spawned – 234 females and 205 males

Number of fish eggs in incubation:

- CJH Spring Chinook – 942,970 eyed eggs
- MetComp Spring Chinook – 246,557 eyed eggs
- Segregated Summer Chinook – 528,000 green eggs, 467,554 eyed eggs
- Integrated Summer Chinook – 732,150 green eggs, 240,783 eyed eggs

Number of fish fry transported out to the ponds:

- Similkameen Pond: 391,407 integrated summer chinook were transported on Oct. 25 by Chelan County PUD staff.
- Brooks Tract Pond: 223,841 integrated summer chinook were transported on Nov. 3 and 4 by CJH staff.
- Riverside Pond: 232,839 MetComp spring chinook were transported on Nov. 8 and 9 by CJH staff.

SPECIAL THANKS TO THE PROJECT PARTNERS

The Confederated Tribes of the Colville Reservation 1872
Bonneville Power Administration
Northwest Power and Conservation Council
US Army Corps of Engineers
P.U.D. Chelan County Power
Grant County Public Utility District
Douglas County P.U.D.

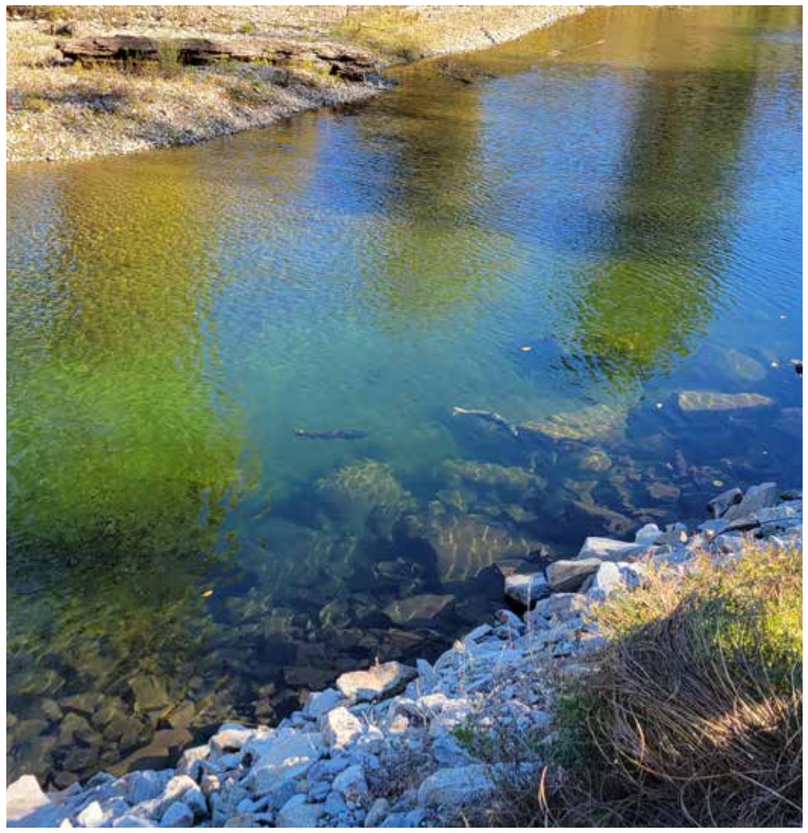
For Additional Information Contact:

CONFEDERATED TRIBES OF THE COLVILLE RESERVATION

Michelle Campobasso,
Public Relations Specialist
1 Colville Street PO Box 150
Nespelem, WA 99155
michelle.campobasso@colvilletribes.com

For more information go to https://www.cct-fnw.com or our Facebook page @ CCT F&W

SALMON REDDS SHOW PROMISE IN THE UPPER COLUMBIA RIVER



For the second year in a row, chinook salmon have spawned successfully in the upper reaches of the Columbia River, above Chief Joseph and Grand Coulee dams.

Casey Baldwin, research scientist for the Colville Confederated Tribes (CCT), and a team of biologists observed chinook salmon spawning and counted redds for several weeks. They counted 73 redds by late October in about a 10-mile stretch of the Sanpoil River.

"The spawning ground surveys demonstrated that we had another successful year of salmon spawning in the Sanpoil River," said Baldwin. "We increased the number released and put some of the fish in a different location than last year, and they did well in both areas."

In August 2021, the tribe held several cultural releases, 178 adult chinook were released in the Sanpoil River, 57 in Lake Roosevelt and 107 in Lake Rufus Woods. All of the adult salmon were PIT tagged. The releases gave traction to study the spawning activity of the salmon but there are ecological benefits as well.

Baldwin noted that they observed bald eagles feeding on the carcasses of the salmon after the fish had spawned and died. "The spawning salmon improve the health of the river in several ways, many animals such as bears, otters, birds, juvenile fish and invertebrates will feed directly on the carcasses. The carcasses also provide nutrients to the stream which benefits aquatic productivity and riparian vegetation," he said.

The salmon used in the releases were surplus hatchery summer chinook from the Wells Fish Hatchery. Baldwin says that Douglas PUD's cooperation on this project is key to its success.

The adult chinook were trapped at the Wells fish hatchery ladder and were tagged and tissue sampled for genetics and disease testing by the Washington Department of Fish and Wildlife (WDFW).

"WDFW has assisted with disease testing by processing samples in their Olympia Labs and subsidizing the cost of the sample processing to reduce costs to the tribes and streamline the ability to move fish into the blocked area," said Chris Donley, regional fish program manager for WDFW.

The CCT have been working closely with the Upper Columbia United Tribes (UCUT) and the WDFW to

Continues on page 2

INSIDE THIS ISSUE

Starts on page 1

pursue a phased approach to reintroducing salmon in the blocked areas, upstream of Chief Joseph and Grand Coulee dams. They completed Phase 1, science and feasibility evaluations and recently completed an implementation plan for Phase 2. The second phase will include multiple studies to test feasibility and determine the most appropriate path forward for reintroducing salmon into the blocked areas. The CCT, UCUT, the Spokane Tribe of Indians, the Coeur d' Alene Tribe and the state of Washington have funded the salmon reintroduction efforts thus far, but more funding is needed for Phase 2.

"WDFW fully supports salmon and steelhead reintroduction efforts into the Blocked Area of the Columbia River and we are eager to assist where needed with staff expertise and funding, when available," said Donley. "We embrace the value of reintroduction both ecologically and culturally and continue to look for ways to be helpful to the Colville Tribe and our UCUT partners."

"There are economic, ecological, and spiritual benefits," said UCUT Executive Director DR Michel. "Reintroducing salmon in the blocked areas doesn't just benefit the tribes, it benefits all people up and down the Columbia River."

The CCT's juvenile trout monitoring program counted over 1,450 salmon smolts from June 2021 until October 2021. The trap only captured a portion of the fish that were produced in the Sanpoil River. These fish were produced by the 100 adult salmon the tribe released in the Sanpoil in 2020. Next spring, fisheries staff will again be able to document out-migrating salmon smolts and tag them in order to document their journey to the ocean and back.

"We were excited to document that the salmon successfully produced offspring in this tributary where the dams have excluded them for over 80 years," said Baldwin. "If the project can be ramped up to levels envisioned in the phased approach, there will be benefits throughout the Columbia River and the ocean. The upper Columbia summer chinook contribute to the ocean ecosystem and are harvested all along the Columbia and in the ocean as far away as the Gulf of Alaska."

TRIBE WORKS WITH GROUP LEADERS TO RELOCATE LYNX FROM CANADA

In the past few weeks, several lynx (wápupxn) have been captured in Canada and relocated to the Colville Indian Reservation in Washington state in hopes that a resilient population will be established there.

Project biologists, trappers and veterinarians are working together to ensure that the safest techniques are being used during processing and transportation of these animals.

Richard Whitney, wildlife manager for Colville Tribes' Fish and Wildlife (CTFW) discusses what it takes to capture and process these native, forest carnivores.

"The lynx are live trapped using box style traps that are baited with an assortment of attractants," says Whitney. "We are working in partnership with existing trappers on established trap lines. In fact, they do the trapping for us and we are able to take the cats out live without them harvesting the lynx for pelts. We pay them a set rate for the cats, so that they don't lose money for each lynx that they don't sell to the fur market. They have been great partners in this project. We currently have two trap lines that are being monitored."

In Canada, the lynx are not a listed species so it is legal to trap them. But in Washington state, Canada lynx are listed as a federally threatened species so multiple permits were required to handle and transport these animals, including species that are protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora or (CITES) treaty, which ensures that international trade in plants and animals does not threaten their survival in the wild.

"If we catch a lynx, we chemically immobilize it and then we take all the predetermined measurements, samples, vital signs, body condition, and apply a GPS collar," said Whitney. "Once they are processed, we put the lynx in the transport container and administer the reversal drugs to wake the lynx up and we continue to monitor their health. We have a B.C. veterinarian inspect the lynx, feed them for the night, and leave the area until the following morning when the lynx is then transported to the border." He said, "At the border, the lynx are transferred to the U.S. lynx release team and are transported to the release location on the reservation. The lynx are usually released just over 24 hours from removal from the trap."

The Colville Tribes, in critical partnerships with Conservation Northwest, Upper Columbia United Tribes (UCUT), and others, are leading the restoration efforts for Canada lynx in the Kettle Mountain Range.

"It is our goal to establish a healthy, self-sustaining population of lynx that can help to restore balance to a landscape that has not seen a robust population in decades. This has been a large team effort of tribal wildlife staff led by Rose Piccinini, Conservation Northwest, UCUT, the B.C. trappers and numerous others, including volunteers from other state agencies that helped along the way," Whitney said.

Piccinini, wildlife biologist for CTFW said, "In the last 10 years, there have been detections of lynx in Kettle that suggest they are present but likely not part of a resident breeding population. By reestablishing a breeding population in the Kettle Range, we would be connecting lynx populations from the Cascades to the Canadian Rockies."

CTFW has received support and funding from the Bureau of Indian Affairs' Endangered Species Program, the U.S. Fish and Wildlife Service's Tribal Wildlife Grant, Conservation Northwest, and others.

"We have a long history with lynx conservation in Washington," said Dave Werntz, science and conservation director for Conservation Northwest. "And given the extensive habitat loss from fire in the Okanogan region, we began to look toward restoring lynx to the Kettle Range for regional benefits. We commissioned a scientific analysis which showed the Kettle Range has excellent habitat that would support lynx, and shared it with the Tribes' Fish and Wildlife staff and other partners. When the lynx translocation project was launched, we looked for ways to help as much as possible including with lynx capture, trapper coordination, and other operations in British Columbia."

The goal of the project is to relocate at least 50 Canada lynx to the reservation which could take up to five years to complete.