FISH TRANSPORT SYSTEM

Fisheries staff worked with a fish transport system known as "Whooshh" at Mosquito Park during the first two weeks in August. The system pressurizes a flexible tube which forms a seal around the fish and moves it quickly from the transport barge to the hatchery truck. Fish are moving at about 20 feet per second, which is approximately 14 miles an hour.

From early July to late August, staff captured summer Chinook salmon at the mouth of the Okanogan River on the Dream Catcher fishing boat, and using the Whooshh system made their jobs a lot easier.

"Using the system helped to quickly move 10 to 25 pound live fish to shore in a tanker barge where the fish then have to be offloaded to a hatchery truck and transported to CJH," said Casey Baldwin, CTFW senior research scientist. "Without this system, staff had to put the fish in a modified inner tube and run them up the hill to the hatchery truck."

"We moved approximately 300 fish with the system in six days in early August, supplying the hatchery with about 25 percent of the brood fish that were needed for the year," said Baldwin. "Initial estimates of survival were very good for the fish transported with the new system."

Whooshh transport systems have been used and tested on several species in many locations and there are no known negative side effects, as long as entry into the tube and exit into the hatchery truck go smoothly. "It's an innovative approach that moves the fish more quickly than the conventional method and it reduces strain and injury risk for staff," said Baldwin.

For more information go to: www.cct-fww.com/salmon-hatchery/

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.

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Dream Catcher

CHIEF JOSEPH HATCHERY UPDATE

The Dream Catcher (a 25-foot fishing boat), CJH fish ladder, and a fish weir set up near Malott, Wash. were used successfully this season to collect salmon for the CJH program. The fishing crew collected 573 wild and 543 hatchery summer Chinook for the hatchery program. The surplus hatchery fish collected from the boat, fish ladder, or weir were distributed to the tribal membership.

"We removed surplus summer chinook out of the fish ladder for distribution and we also removed a small handful of sockeye," said Taylor Scott, CJH assistant manager. "We trapped a total of 1,099 spring Chinook, most of which were retained for brood, some recycled back to the river for angler opportunity, and we removed 94 spring Chinook out of the ladder for distribution. It's great that the hatchery is now providing fresh salmon early in the season."

For the past few months, fisheries staff have also been spawning, marking, and tagging salmon. Staff marked the 2016 spring Chinook yearlings and summer Chinook yearlings. Fish tagging is almost complete, as two million juvenile spring and summer Chinook were clipped and tagged. A total of 266 spring Chinook pairs were spawned providing 1.01 million eggs.

Staff will soon complete all marking activities and will prepare for summer Chinook spawning and will transfer the integrated (wild parents) summer Chinook to the acclimation sites along the Okanogan River.

CJH first summer Chinook returns

LAMPREY FISH RELEASE

Colville Tribes' Fish and Wildlife (CTFW) released 178 lampreys on August 16, (128 just below the mouth of the Okanogan, and 50 at Coyote Falls), Similkameen River.

- In a combined effort between CTFW, Yakama Nation, and Douglas and Grant PUDs, all of the lampreys were trapped and PIT tagged at Priest Rapids Dam prior to transport and release. PIT tagging will help monitor their movements in the Columbia River and tributaries above Wells Dam, including those in the Okanogan River Basin.
- CTFW Monitor and Evaluation staff will monitor their movements through PTAGIS, an online monitoring database.
- The run of lamprey passing Wells Dam has decreased considerably in recent years, with an average of only six fish counted in the fish ladders from 2009-2016. This prompted fish managers to take action by transplanting fish captured at Priest Rapids Dam to locations upstream of Wells Dam. The relocation was an opportunity to assist in improving the abundance of adult lamprey above Wells Dam, assess migration characteristics and re-establish lamprey in the Okanogan Basin, and improve lamprey pheromone signature in the areas above Wells Dam in an attempt to improve passage past Wells Dam.
- The habitat in both the Okanogan and the Similkameen is suitable for lamprey, and the hope is they will successfully spawn and rear in the Okanogan River Basin.
- Adult Pacific lamprey migrations are negatively affected by dams; however, substantial effort is being invested to study and improve passage at the main stem Columbia River Dams.

- Pacific lampreys are an anadromous parasitic fish that are native to the Columbia River. Adult lampreys spawn in rivers and then die. The young larvae spend several years in rivers, where they live burrowed in fine sediment, filter feeding on microorganisms. They undergo metamorphosis and migrate to the ocean where they rear to adulthood before returning to freshwater to spawn.

FISH WEIR

CTFW staff set up a fish weir and began trapping adult salmon on August 21 for Chief Joseph Hatchery (CJH). During this time, staff used a fish transport system to assist with moving live fish from the trap to a truck without harming the fish.

"Our program met its goal as we collected 84 natural-origin Chinook for brood this season," said Andrea Pearl, CJH fisheries biologist. "This is the first time the program met 100 percent of their goal for collecting broodstock at the weir. We also trapped and removed 90 hatchery-origin Chinook at the weir and distributed these fish to the membership."

At the weir site, staff observed fish behavior, took biological and water samples, monitored fish activity around the weir and downstream to Chiliwist Creek. The fish weir is an important tool as it not only helps to collect adult salmon for the hatchery but is used by fisheries managers to trap and collect hatchery-origin Chinook before they can reach the spawning grounds. Reducing the number of hatchery fish on the spawning grounds helps to reduce competition with wild salmon spawners. Work at the site was completed on September 21.

BEARS, BEARS AND MORE BEARS

Once again bears have kept our wildlife staff busy as they received 70 complaints so far this year. 19 bears have been live-captured and relocated and 17 were collared with GPS collars before they were released. The goal for Colville Tribes' Fish and Wildlife (CTFW) is to collar 30 bears.

"The collars will help us to observe their travel patterns, hibernation locations, and if they become problem bears once they are relocated," said Corey Peone, wildlife biologist. "We started collaring them around June and will continue until all 30 collars are on possibly finishing this fall but most likely next spring."

Wildlife biologists believe the biggest problem with bears on the Colville Indian Reservation seems to lie in the San Poil Valley. They are attracted to creek bottoms where the cooler water temperatures are and where other foods like berries are located. Bears are also attracted to fruit orchards and fish farms as several complaints are called in every year from these industries.

"Some bears are trap smart meaning they have been trapped in the past and will not be trapped again. One bear had to be put down after being relocated 50 plus miles because it returned back to Nespelem and was seen several times by the school," said Peone. "As of now five bears have returned to the same area where they were caught, and only one has continued to cause problems. It's almost like they learned their lesson."

Bears continue to get into garbage cans at campsites and near homes. The department has been working on preventive methods, such as educating others to make food harder for bears to get, causing them to move on to other food sources. For instance, wildlife staff began working with the Chewelah School District to make garbage protectors. "In exchange for the school to receive a plasma cutter for their classroom, students built 35 bear proof garbage protectors that fit over 50 gallon drum garbage cans," said Peone.

"Hopefully with ongoing improvements to garbage disposal facilities at campgrounds and popular fishing areas, some of the conflicts between humans and bears can be reduced," said Eric Krausz, wildlife biologist. "It may not happen overnight, but we are putting our best foot forward in an effort to make our coexistence a little easier in the future."

Here are some helpful tips to avoid bear interaction: Keep yards clean, pick fruit from trees as it ripens, don't leave fruit on the ground, don't leave pet food outside, keep outdoor grills clean, store grills inside when not in use, never store food or garbage outdoors for long periods of time, and PLEASE DO NOT FEED THE BEARS!

(LtoR) Interns Cameron Mason, Kenny Lelone, Amaya Simpson, Garrett Seylor with Rick Desautel, Game Management Specialist