

The 7th Annual Columbia Salmon Festival



Invermere BC Saturday Oct 14th 2017

JAMES CHABOT PARK (10AM - 12PM)

SHUSWAP INDIAN BAND PAVILLION (12PM - 10PM)



- Canoe Brigade and Horse Ceremony (James Chabot Park) at 10:00am
- Grand Entry & PowWow (1st round) at 12pm
- Salmon Feast 3:00pm to 5:00pm
- PowWow (2nd round) 5:30pm
- Closing Ceremony 10:00pm

Free Public Event

For more information and to learn more about the Columbia Salmon please visit

www.ccrifc.org/salmon-festival/

Find us on facebook

Call 250-489-2464

Festival Features: Traditional Dancing - Ktunaxa Storytelling - PowWow - Salmon Educational Displays - Salmon Feast and more



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Columbia Salmon Festival set for Saturday October 14th in Invermere

The Columbia Salmon Festival will be celebrating its 7th year on Saturday October 14th. The FREE Festival will consist of many activities, but this year will be highlighted by a single community celebration, taking place at James Chabot Park and Shuswap Indian Band's Pavillion between 10am-10pm.

Although the Salmon Festival is certainly a celebration, it is also meant to create awareness of the loss of anadromous (ocean-migrating) salmon in the Upper Columbia. The Columbia River should be full of salmon at this time of year. However, it has been so long since they were here, that younger generations have grown up with no salmon, and they don't realize what a tragedy the loss of salmon is to our region.

For Ktunaxa and Shuswap it was an important time of year, and they relied upon the salmon for food, trade and

tradition. First Nation Peoples have been robbed of that once the Grand Coulee Dam was completed in 1942. After 10,000 years the salmon just never came.

To tie in the importance of salmon to First Nation Peoples, there will also be a powwow and Salmon Feast at the Shuswap Indian Band. The powwow and feast are free, public events and will showcase traditional dancing and drumming, and provide an opportunity to celebrate salmon with the Ktunaxa and Shuswap.

All will be welcomed to watch, and there will also be an opportunity for everybody to participate during "inter-tribal" dances. The festival will also highlight the ongoing efforts to restore salmon to the Upper Columbia River by many groups including the Canadian Columbia River Inter-Tribal Fisheries Commission (CCRIFC), who are spearheading the event once again

this year.

The Salmon Festival is an opportunity to celebrate the history and future of salmon in the Columbia River. The goal of this event is to provide opportunities for all to learn about the past, present and future of Salmon in the Columbia River, and its importance to First Nations. All are welcomed to attend this FREE event, and join in making the 7th Annual Columbia Salmon Festival a great success.

Learn more, and see the full schedule at: <http://ccrifc.org/salmon-festival/>



The Pacific salmon lifecycle and their role in the ecosystem

The anadromous (ocean-migrating) salmon lifecycle begins eggs when a female's egg are fertilized during spawning. Eggs develop over a period of several months until they hatch into alevins. These alevins develop in the gravel of the river where they are protected, feeding on a yolk from their eggs.

Yolk nourishes alevins until they develop into fry, which swim up out of the gravel and begin feeding in the river or in lakes. They feed off of small insects or crustaceans in freshwater for several months to years, depending on the species or stock, before developing into smolts. Smolts travel downstream from the river to the ocean and undergo a series of physiological changes that adapts them to life in salt water.

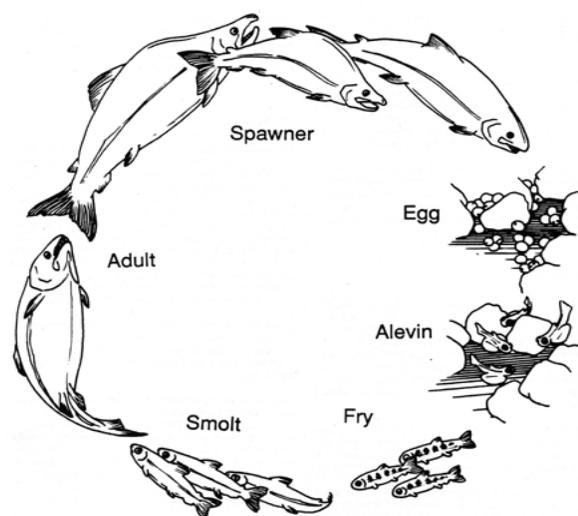
Once in the ocean, they spend up to five years feeding on the bounty of the sea before returning to freshwater to spawn. During their earlier developmental stages, salmon imprint on their natal habitat. This allows spawners to return to the exact location they were born in. The journey home is arduous, and many do not survive. After returning to where they were born, salmon spawn. Females are picky about

where they spawn and which males they spawn with. The female creates a redd (salmon nest), by digging a pit in the gravel, depositing her eggs at the same time she mates with a male, then covering the eggs with more gravel.

Redds provide a safe, stable environment that protects and nourishes the developing eggs with vital oxygen. After spawning, pacific salmon die and complete their lifecycle.

Such a large return of biomass is the result of feeding on abundant food sources in the ocean, and as carcasses decompose, they fertilize the river water with nutrients.

These nutrients are taken up by plants and algae in the stream, which are the base of the river food web. Insects and crustaceans that feed on algae are in turn eaten by fish and birds. With the loss of salmon, the ecosystem has lost this supply of marine nutrients that historically supplemented the food web. The ecosystem has also lost the abundant supply of juvenile salmon that also play an important role as both predator and prey during their stay in freshwater. Some salmon never go to the ocean, and live their entire lives in freshwater. The Columbia basin has abundant populations of kokanee, which are landlocked forms of sockeye salmon. Although kokanee play an important role in foodwebs now, they have not replaced the role that anadromous salmon once played, and cannot equal their biomass. The loss of anadromous salmon cuts the link that allows the abundance of the ocean to be carried upstream to the headwaters of the river.



Salmon are large animals and are a keystone species to the river ecosystems in which they return because they introduce a large amount of biomass to



Salmon recovery and obstacles

After the construction of Grand Coulee Dam in the US (circa 1940), the Columbia River was heavily developed upstream with more large dams built for the purposes of power generation and flood control. Because salmon were already extirpated, government and industry forgot that salmon were ever there, so dams were not built with fish passage facilities and salmon habitat was flooded or destroyed. Many of these dams are extremely tall and create long, slow moving reservoirs, which will make salmon migration and fish passage strategies difficult. In addition, the large reservoirs and operations of the dams have altered the natural flow, water temperature and river habitat features that salmon are adapted to spawn, migrate, and rear in as juveniles. The river is now a very different place than the environment salmon evolved in, and fish passage, coordinated habitat recovery as well as altered reservoir operations may be required to provide a suitable environment for salmon again.

Salmon are often referred to as having

“stocks.” A stock of salmon is a population that is uniquely adapted to spawn in a certain stream, at a certain time of the year. Because salmon return to their natal environments with key timing, this reduces interbreeding and allows each stock to be uniquely adapted to the environment that they were born in. The unique stocks that used various parts of the Upper Columbia River have been lost, but the habitats have changed as well. Finding suitable donor stocks that can survive in today’s altered habitat is a critical consideration for reintroduction efforts.

Salmon restoration is complicated and requires a lot of research and cooperation between the US and Canada to be successful over the long term. This can only be accomplished by taking a step-by-step approach and sharing some responsibility and cost between the two countries. This step-wise approach first assesses the feasibility of reintroduction and constraints to salmon completing their lifecycle, then comes up with scientific studies to determine what is

needed to be successful for reintroducing salmon. After this, a more permanent program of salmon restoration could be initiated including building fish passage facilities, hatcheries and designing long term monitoring and adaptive management programs. The Canadian Columbia River Inter-tribal Fisheries Commission is currently working to find the most suitable donor stocks and developing an experiment to reintroduce salmon to the Canadian portion of the Columbia River between Grand Coulee Dam and Hugh Keenleyside Dam, near Castlegar. This experiment will be designed to address key uncertainties that must be answered before any long-term restoration effort is attempted. Long-term restoration will take time, and will have to recover each stock one at a time, but it is possible and advanced technologies and strategies to pass salmon safely around dams are a reality today and will continue to improve in the future.



How you can help?

Salmon are resilient animals, and given the chance, they can come back in great numbers and safely pass dams. New technologies and scientific understanding of salmon have helped recover salmon stocks in areas that were on the brink of extinction, and salmon have been reintroduced to, and flourished in areas where they have been lost for decades. A success story is on the Okanagan system, where restoration efforts and dam passage improvements for sockeye salmon have helped in a population rebound over a hundred fold in recent years. If salmon were to be restored in the Upper Columbia River, they would use the same migration route as these sockeye, above nine currently-passable dams, and only have to pass an additional two dams to reach Canadian waters.

No restoration project has ever been attempted on a habitat as large or as altered as the Upper Columbia River, and this is a process that will require time and the hard work, devotion and passion of many people. The Columbia Basin produces roughly half of the electricity generated in British Columbia because of its big dams, and even more electricity is generated in the US on dams that block salmon passage. Most of the key dams are federally (US Army Corps of Engineers and Bureau of Reclamation) or provincially (BC Hydro or Columbia

Power Corporation, BC crown corporations) owned. None of the profits from the electricity generated at these dams are directed towards recovering salmon above these dams and the US and Canadian governments are currently not cooperating on this issue at the state, provincial or federal level.

It is possible to have both salmon and a clean, renewable source of power that comes from our rivers. Restoration of salmon would have clear economic, cultural and spiritual benefits for indigenous and non-indigenous peoples, both within and outside of the basin. You can help return salmon to these waters. Contribute to a local water stewardship group devoted to restoring habitat in the Columbia Basin so that salmon will have a healthy home when they return. Be vocal about your wish to see salmon back in the Upper Columbia River. Contact your local MP, MLA and local government representatives, and spread the word to your family and friends.

Be sure to visit <http://ccrffc.org/salmon-festival/> for more information on how you can contact your local political representatives on this matter.

Did you know???

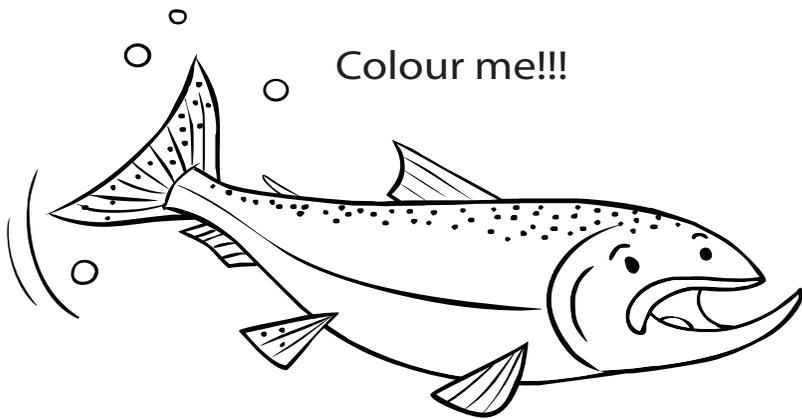
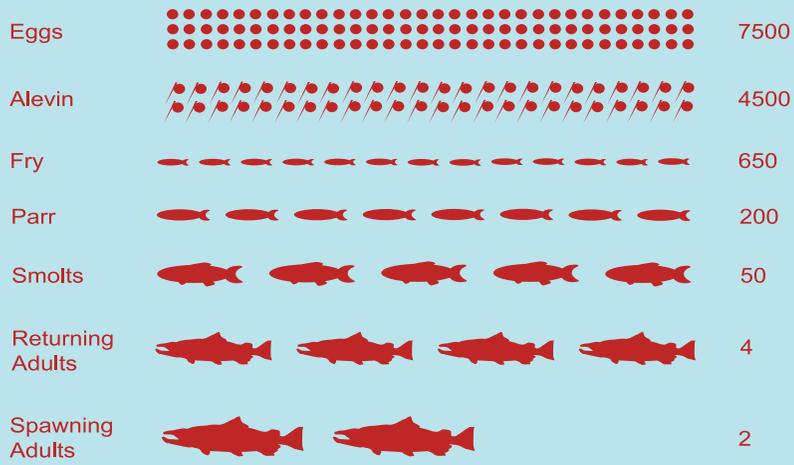
There are 6 species of Salmon in the Pacific Northwest.

The Largest, the Chinook can reach lengths of over 6 feet, and weigh over 100 lbs!

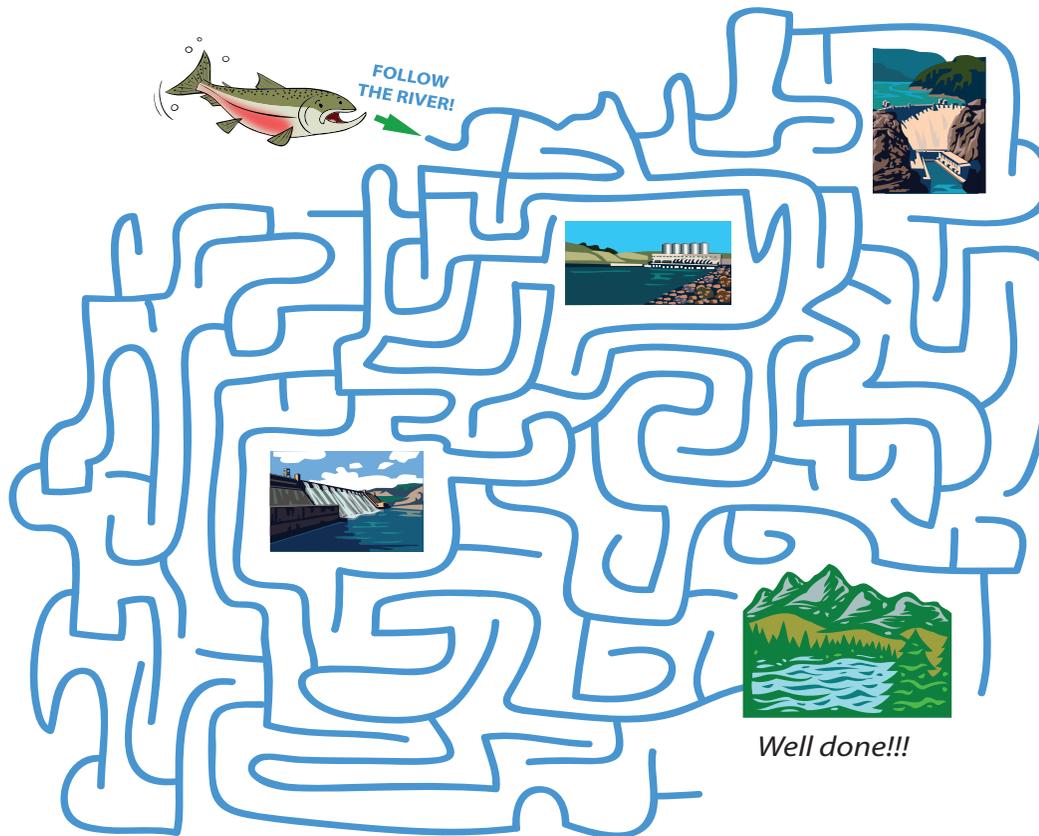


What are the odds?

For every 7500 eggs, only 2 salmon return to spawn.



Help the salmon find its way upstream to the spawning grounds!



Take the Salmon Quiz!!!



1. What river lost the largest run of salmon in the world?
2. What dam finally stopped the salmon?
3. What is the largest salmon species called?
4. What role did salmon have with First Nations?
5. Where do salmon go to spawn?

Answers: 1. Columbia River, 2. Grand Coulee Dam, 3. Chinook, 4. Food, trade and spiritual connection, 5. Back to their place of birth
Matching: e & g

<http://ccrffc.org/salmon-festival/>

Spot the two salmon that are the same!

