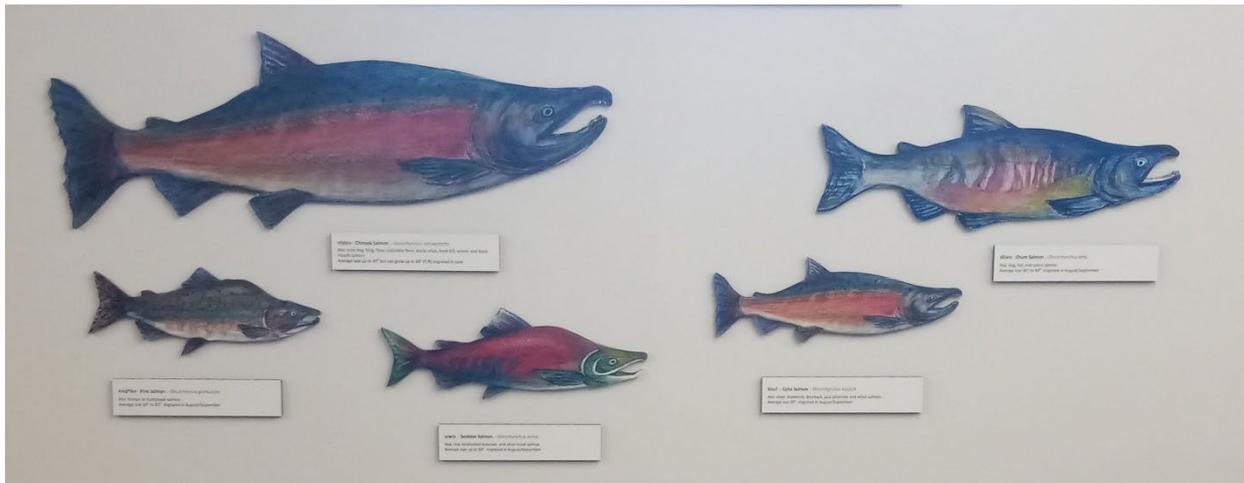


## A Time of Fishing

Displays in the Kettle Falls Historical Center Museum depict scenes from the seasons of the year as known to the Salish peoples who gathered at Kettle Falls for thousands of years. The word for “summer” is scafáq, “a time of fishing”. If you read accounts written by Hudson’s Bay Company employees who built a trading post, Fort Colville, just north of where the museum sits today in 1825, you see very little about fishing. You would gather that the location of the fort is mostly about farming and the fur trade. But if you talk to native people about Kettle Falls, it was all about fishing.

Fishing at Kettle Falls was mostly about salmon. Instructively, the museum now displays a large depiction on the wall of the kinds of salmon on the west coast.



The first thing that struck me was the size of the biggest fish, Chinook Salmon. These were the main food and reason for the spring gathering of peoples at Kettle Falls. Channels around the falls provided ideal places to fish depending on water levels. Big fish and a flooding river made for good fishing with J-baskets and spears on the biggest part of the falls. Kettle Falls, on the upper Columbia and Celilo Falls on the lower Columbia were prime locations for fishing and gathering. Also called June Hogs, Chinook at the time could weigh up to 100 lbs. After the salmon chief let enough salmon pass to sustain the stock, fishing began with up to 1700 fish being caught per day.

The Chinook run happens in June. A Salmon Ceremony near Kettle Falls this last Father’s Day asked the salmon to return. Imagine a long cold winter with this bounty of fish and the annual gathering of tribes taking place. It would have been a very exciting time. But fish runs happened in August and September for the Coho (also known as Silver and Blueback) and for some Sockeye. Around the same time, Red Band Trout (Also known as Steelhead) came up the river. They are not a true salmon but are a sea run trout. The Steelhead stay around and spawn in the spring. So, they were available for fishing all winter.

The wall display is a little deceptive. The Pink Salmon (lower left) and Chum (upper right) didn’t make it up this far. Red Band Trout are not shown. But there is a lot more that white people didn’t consider, and Indians knew all along.

The gravel bed where a salmon lays its eggs is called a redd. Male salmon fight for dominance using their hook nose. Then they follow a female up the stream and fertilize the eggs as soon as they are laid

down. A single female may produce several redds, some up to 10 feet across. The eggs stay there all winter for each variety of salmon. Cold water holds more oxygen than warm water. So finding cool waters to lay eggs in is essential to the health of the fish. Higher locations with shade and slow waters, closer to melting snow are better.

Baby fish, just out of the eggs, alevins, live off nutrients in the egg sack and stay hidden in the gravel. When the egg sack is consumed, they head for the surface to fill their swim bladders with oxygen and begin to feed and become fry. When they are larger and strong enough to swim to the ocean, they are known as smolts. Often, they will spend time in estuaries at a river's mouth feeding heavily and gaining strength for ocean life. Even years later, smolts remember the way back home.

Each of the main species has an adaptive strategy that takes advantage of their strengths. Chinook grow quickly and spend only 5 months in fresh water. But they spend as much as 8 years in the ocean growing to the large size that helps them swim upstream against strong spring runoff to secure cold high streams for spawning. Coho spend a whole year in fresh water but only 18 months in the ocean. Sockeye prefer to stay around in high lakes for 1 to 2 years before heading out to sea. They spend a couple of years in the ocean.

With these adaptations to different environments, salmon were abundant and along with other fish, mussels, and lampreys, provided 70% of the native diet. Aboriginal people knew them well and regulated their catch to ensure survival of the fish. Of course, bears, eagles and many others shared the bounty of the salmon. In a very real sense, native people, fish and other creatures were one living entity. This did not change immediately with the establishment of Hudson's Bay Fort Colvile in 1825. Fur Traders relied on natives to provide fish for everyone's winter supply, and being Scottish businessmen, kept detailed records.

But real and rapid change happened soon enough. Fish canneries began construction in 1866 on the lower Columbia and soon found a technology to increase their harvest exponentially, the fish wheel. The downstream rush of water powered the wheels which scooped up fish in wood and wire baskets after they were channeled into the wheel by weirs stretching across the river. The fish were funneled into holding tanks and taken to the canneries. In 1883, 39 canneries on the lower Columbia produced over 42 million pounds of fish.

This was devastating to the salmon populations, but it took until 1935 for referendums in both Oregon and Washington to put an end to it. Canneries then promoted fish hatcheries as a way to sustain the fish population. In many ways hatcheries caused more problems than they solved, spreading disease, bringing in genetics from populations unsuited to different river systems and covering up continued overfishing. With few beaver dams and more streamlined streams both flooding and silt made fish recovery nearly impossible. Cities, farms, and logged forests polluted and destroyed spawning streams. Grand Coulee Dam alone closed off access to 1100 miles of spawning grounds in Washington and British Columbia.

Ham-handed laws from politicians seeking to appease commercial, sport and indigenous fishing demands added to confusion, anger, and frustration on all sides. The best practices and real progress is being made by Indian-run hatcheries and stream restoration projects building log jams, side streams and shade. But this does not slow climate change. It brings warm air and warm water that are both bad for fish. Native fish and native people are still fighting their way upstream.