

Little red fish flock to our creeks

If you go down to some of our local creeks, streams and rivers, you may experience an exciting event, the Salmon Run. The unique Kokanee Salmon return to their birthplace every year from September to December to complete their life cycle. The Kokanee Salmon run attracts visitors from all over, including bears and eagles.

Native to the Pacific Northwest, Kokanee Salmon (*Oncorhynchus nerka*) are the only Pacific salmon that mature in freshwater. Kokanee evolved from land-locked Sockeye Salmon, which are born in freshwater streams and mature in the Pacific Ocean. There are many ways, including landslides and the construction of dams that could have blocked the Sockeye's journey to the ocean from their inland birthing grounds and forced them to develop into strictly freshwater fish. Today, just like the Sockeye, most Kokanee migrate from open waters to rivers, creeks and streams to spawn.

Most Kokanee live in large lakes, where there is an abundance of plankton to feed on. They group together in large schools to feed, just like their ocean-going ancestors, but because freshwater is not as productive as salt water, Kokanee tend to be much smaller than Sockeye. Sockeye grow to lengths of about 60cm and Kokanee usually average about 22cm. Despite the size difference, Kokanee generally look pretty similar to Sockeye, even in their dramatic physical changes in preparation for spawning.

Kokanee sport brilliant silver, streamlined bodies with no distinct spots or markings, until they reach sexual maturity. At about four years of age, Kokanee are ready to reproduce. The males turn bright red and develop a humpback and hooked jaw, while the females turn a dark purple-red and swell with eggs. When this process starts, the Kokanee begin their migration to their hatching grounds. Some travel great distances up small tributary streams, some need go no further than the shore of the very lake in which they live. It is then that the miraculous event of spawning takes place.

Females find a suitable location to lay their eggs and use their tails to swish out a nest in the sand and gravel. They lay about 400-1200 eggs, which a single male fertilizes. The female then uses her tail to cover the eggs with sand and gravel. After all the eggs have been laid, the spawning adult salmon die. Their bodies provide great amounts of nutrients to the aquatic ecosystem, which ensures that there is enough food for their offspring when they emerge from their nests.

The eggs remain in the streambed while developing into Kokanee fry (minnows), which emerge from March to May. Kokanee fry ride downstream currents until they reach a lake in which to mature and begin the cycle again.

Many species depend on the completion of this cycle annually. Bears rely on the salmon run to pack on enough pounds and calories to last them through their winter hibernation. Many aquatic ecosystems would not be able to support life without the nutrient input from the Kokanee that have completed their life cycle. Because of this, it is important to ensure that the salmon are allowed to spawn without disturbance. To spot the magnificent red colour of the run of the Kokanee head down to Windermere, Abel or Holland Creeks. But be careful not to disrupt this essential process.

For more information, contact the Lake Windermere Project at 341-6898. You can also visit the Project office located in the old District of Invermere office beside the Invermere Community Centre. The Lake Windermere Project is a long-term comprehensive stewardship program dedicated to safeguarding the health of our lake. The Lake Windermere Project is made possible by generous support from Wildsight, Environment Canada, Columbia Basin Trust and the Real Estate Foundation of B.C.