2019 Kitwanga River Salmon Enumeration Facility Update #4

The Gitanyow Fisheries Authority (GFA) is pleased to announce that the Kitwanga River Adult Salmon Enumeration Facility (KSEF) is operational for 2019. Like in other years GFA will be providing weekly updates on salmon escapement to the Kitwanga River (middle Skeena index) from July through to October. This year marks the 17th consecutive year that GFA has implemented the program, which collects important in-season pacific salmon stock assessment and biological information. GFA would like to thank their 2019 funders and supporters, specifically the Gitanyow Chiefs (Gitanyow Huwilp Sustainability Fund), the Pacific Salmon Commission and Fisheries and Oceans Canada. GFA would also like to acknowledge and thank the Gitwangak Wilp Simadeeks for allowing GFA to continue to work within their traditional territory, as set out by our 2002 agreement.

As in other years, weekly updates will be distributed and posted on our website: www.gitanyowfisheries.com
GFA staff installed the in-river KSEF components from July 8-11, 2019 under normal water level conditions. The fence was operational (diverting fish through sample boxes) on the afternoon of July 11, which is within our usual starting time for the project.

The water level at the KSEF is currently at 0.62m, approximately 0.06m below the long-term average (using 2004-2017, see KSEF water stage graph below for more detail). Water temperatures in the Kitwanga River are slightly higher for this time of year when compared with 2004-2017 averages, and are currently fluctuating between 14-16°C. Total salmon counts to the end of **August 12, 2019** are as follows:

**Sockeye = 24  Chinook = 518  Pink = 15,522  Chum = 0  Coho = 10**

To date we have counted **24 sockeye** through the KSEF. This year’s sockeye escapement compares to a previous **maximum** observed to the day of 4,749 in 2010, which resulted in an overall escapement of 20,804 and the **minimum** observed to the day of 16 in 2016, which resulted in an overall escapement of 1,283. Based on average run timing for Kitwanga sockeye to the day (2003-2018) it is predicted that approximately **16%** of the run should have passed the KSEF. For more information on cumulative Kitwanga sockeye salmon abundance by day, refer to the sockeye salmon graph below.

To date we have counted **518 Chinook** through the KSEF. This year’s Chinook escapement compares to a **maximum** observed to the day of 2,564 in 2007, which resulted in an overall escapement of 3,225 and the **minimum** observed to the day of 35 in 2012, which resulted in an overall escapement of 848 for the year. Based on average run timing for Kitwanga Chinook to the day (2003-2018) it is predicted that approximately **57%** of the run should have passed the KSEF. For more information on cumulative Kitwanga Chinook salmon abundance by date, refer to the Chinook graph below.

For 2019, we once again have installed and have operational, a digital video camera recorder (DVR). The DVR camera box has been in place and operational since July 17, 2019 and has been passing Chinook successfully. As was the case last season, fish seem more comfortable moving through the camera box than through our regular sample box areas and to date approximately **80%** of the Chinook and over half of the pinks enumerated through the KSEF, have been counted through the DVR camera box. A second camera box has been added to the right bank side of our fence and is providing excellent viewing for counting fish. We will continue to tweak this setup in the coming weeks.

**View of Chinook and pink salmon through new camera box on right bank of KSEF**
To date we have counted **15,522 pink** salmon through the KSEF. This year’s odd year pink escapement compares to a **maximum** observed to the day of 68,174 in 2003, which resulted in an overall escapement of 336,375 and the **minimum** observed to the day of 2,112 in 2011, which resulted in overall escapements of 68,410. Based on average run timing for pink salmon to the day (2003-2017) it is predicted that approximately **12%** of the run should have passed the KSEF. For more information on cumulative Kitwanga odd year pink salmon abundance by date, refer to the pink salmon graph below.

To date we have counted **0 chum salmon** through the KSEF. Based on average run timing for chum salmon to the day (2003-2018) it is predicted that approximately **2%** of the run should now have passed the KSEF. For more information on cumulative Kitwanga chum salmon abundance by date, refer to the chum salmon graph below.

To date we have counted **10 coho salmon** through the KSEF. This year’s coho escapement compares to a **maximum** observed to the day of 101 in 2005, which resulted in an overall escapement of 7,933 and the **minimum** observed to the day of 0 in 2006, 2008 and 2018, which resulted in overall escapements of 2,572, 3,100 and 551 respectively for the year. Based on average run timing for coho salmon to the day (2003-2018) it is predicted that approximately **0.5%** of the run should now have passed the KSEF. For more information on cumulative Kitwanga coho salmon abundance by date, refer to the coho salmon graph below.
Cumulative Coho Salmon Abundance to the KSEF, 2003-2019

- 2009 Largest
- 2003-2018 Average
- 2018 Smallest
- 2019

Date
Abundance