

Nuu-chah-nulth Food & Ceremonial fishing to collect stock information on suuhaa

By Irine Polyzogopoulos
Communications and Development Coordinator, Uu-a-thluk

The Department of Fisheries and Oceans Canada (DFO) is seeking Nuu-chah-nulth Nations' assistance to improve the overall understanding of suuhaa (Chinook salmon) stocks in the West Coast Vancouver Island (WCVI) area.

In an effort to better comprehend the populations or stocks of adult suuhaa salmon migrating through and to WCVI, particularly Fraser River and WCVI wild suuhaa, DFO has asked Nuu-chah-nulth Nations to partner with them to develop a catch monitoring and biological sampling plan for Food and Ceremonial (F&C) suuhaa fisheries.

In a letter to the Nations dated March 22, DFO states that, "To improve the collective understanding of stocks of concern, in terms of their migration routes, timing and fisheries impacts, First Nations are encouraged to collaborate with the Department on shaping a catch monitoring and biological sampling plan for fisheries, particularly between April 1 and July 15, to provide stock composition information for Chinook."

The April 1 to July 15 time period is critical as First Nations F&C fisheries are the only active fisheries capable of catch monitoring and biosampling during that time. Since 2014, DFO has relied on WCVI recreational fishers and fishing guides for the procurement of samples, however, current conservation restrictions are limiting recreational fishers from harvesting suuhaa before July 15, which is creating a gap in data collection.

DFO and Uu-a-thluk biologists have agreed that while sampling throughout the April 1 – July 15 stretch is vital, the collection of samples all the way through to the fall is also important.

Uu-a-thluk biologists support this opportunity to collect valuable information. According to Jim Lane, an Uu-a-thluk senior biologist and Deputy Program Manager, this monitoring and biosampling project will help the Nations and DFO better develop fishing plans, "...To either exploit abundant populations or avoid ones of conservation concern like upper Fraser Chinook and WCVI wild Chinook."

Data collected will contribute towards what are known as [fish] 'run reconstructions.' Run reconstructions use the genetic and age data from fisheries along with catch and escapement data to better understand the number and proportion of fish stocks in an area, and to create estimates of total stock abundance.

Ideally, WCVI suuhaa catch information is collected on a sound by sound basis (i.e. Barkley Sound, Clayoquot Sound, Nootka Sound) all the way up the Island's west coast to Alaska, and then combined to develop an estimate for the total abundance of WCVI suuhaa.



Nuu-chah-nulth fishers can contribute to improved WCVI suuhaa stock data sets by scale sampling from spring through to fall.

But according to Wilf Luedke, DFO South Coast Stock Assessment Section Head, "... There are gaps in those run reconstructions, and some of those gaps are the F&C catch."

The Department is asking Nuu-chah-nulth fishers who wish to participate to provide detailed reports on their F&C catch effort (fishing locations, date and the time of day fished – i.e. 6:00 a.m. to 10:30 a.m.), both inshore and offshore, and to collect biological data from their catch via fish scale sampling. Scale samples provide the age and DNA information used in the run reconstructions.

Biosampling has been made easy with a sample collection envelope that also serves as a data sheet, meaning fishers only have to handle one document per sample. Where possible, fishers are also encouraged to submit fish heads/snouts from clipped fish for the study, for Coded-Wire Tag sampling.

Sample kits have been distributed to a number of Nuu-chah-nulth Nations already, and any Nations interested in participating in the study who do not yet have kits can request them by contacting Karin Mathias, WCVI Salmon Stock Assessment Biologist with DFO, at karin.mathias@dfo-mpo.gc.ca.

Nations fisheries managers can also reach out to their Uu-a-thluk regional biologists who are ready to provide support to interested Nations, including developing a plan for sample collection and shipment extending into the fall.

Data collected throughout the study will be stored in DFO's South Coast Bio-database. The Department is planning future consultations with the Nations to determine the best method to share sampling results with fishers, and to ensure the protection of personal information throughout the process.

Karin Mathias, DFO biologist, invites Nuu-chah-nulth-aht to collect suuhaa stock data while Food and Ceremonial fishing at an online meeting of the Uu-a-thluk-DFO Joint Technical Working Group in late April.

