Project Title:

Cumberland Sound Fishery-Independent Arctic Char Research 2026-27

Project Summary:

The Arctic Char is an abundant, accessible and predictable food source in Arctic environments. As such, it continues to ensure food security in Nunavut communities. The development of commercial fisheries for Arctic Char is considered key to poverty reduction and economic growth in several Nunavut communities. However, data paucity and a lack of management and physical infrastructures currently impede on effective conservation and optimization of Arctic Char resources in Nunavut. To combat this issue, long-term (minimum of 5 years) of site specific fishery-independent and dependent data collection is required in order to evaluate states of populations, perform stock assessments, and provide advice on sustainable harvesting levels.

The main purpose of this study is to continue to develop the Arctic Char research program and progress stock assessments in the Cumberland Sound region of Nunavut. Through the application of a multi-mesh gill-net survey, this research aims to add to the collection of Cumberland Sound Arctic Char data and perform site specific fishery-independent surveys required to complete stock assessments. To accomplish this, we will work with the community of Pangnirtung to obtain local knowledge on stocks and fishing practices, as well as to collect baseline biological data through collaborations with the Pangnirtung Hunters and Trapper's Organization (PHTO). For this project year (2026-27) we are looking at collecting the third year of baseline data from the unassessed commercially fished, Opingivik Lake (PG002), to ultimately contribute to a 5-year index of abundance and trends in biological characteristics used to assess the health of Arctic Char stocks.

Following the Exploratory Fisheries, and DFO Scientific Stock Assessment Data Collection protocols a goal of two hundred (200) Arctic Char will be sampled during their migration upstream (Late July – Mid September) using 5-panel, multi-mesh gillnets. The use of multi-mesh gillnets, typical of stock assessment surveys, will permit sampling of Arctic Char of all sizes and ages as well as provide a more accurate presentation of catch rates.

After collection of five years data, population demographic indices, and abundance estimates will be determined and presented to stakeholders. Collectively, all the components of this research along with the fishers' data collected from the local fish plant will feed directly into a stock assessment analysis which should provide managers knowledge on the current stock status. Since managers have been asked and will be asked to make decisions on these stocks in the near future, filling these knowledge gaps is important.

Project Authority:

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