

Dr. Stéphane Gauthier of the Institute of Ocean Sciences has acquired 3 new Acoustic Zooplankton and Fish Profilers to study juvenile salmon migration in Johnstone Strait and the Discovery Islands area.

Earlier this year, Dr. Gauthier took delivery of three (3) multiple frequency (70, 125, 200 and 455 kHz) battery-powered scientific echosounders (AZFP) built by ASL Environmental Sciences. Dr. Gauthier is part of a team that is studying the residency of juvenile salmon within the Strait of Georgia and the timing and duration of their migration through Discovery Islands/Johnstone Strait. Continuous acoustic recordings using the AZFP will assist Dr. Gauthier and his team in assessing changes in water column usage and migration dynamics of juvenile salmon in response to local conditions (e.g. tidal cycles, temperature, and plankton productivity). These data will be used to improve our understanding of factors that influence juvenile salmon survival in near shore waters.

The AZFP will be deployed in Johnstone Strait and the Discovery Islands area for three to five month periods corresponding to the time when juvenile salmon are leaving the Strait of Georgia. The instruments will be deployed just off the bottom and ping every 3 seconds or so for the entire duration. Corroboration of the acoustic data will be achieved by shipboard imaging sonar observations, plankton tows and the collection of juvenile salmon by research purse and beach seining which will be conducted at the sites of instrument deployment.

Dr. Stéphane Gauthier is a research scientist with Fisheries and Oceans Canada. His main research focus is using acoustics (the transmission and interpretation of signals from scientific echosounders) to gain insight into ecosystem processes.

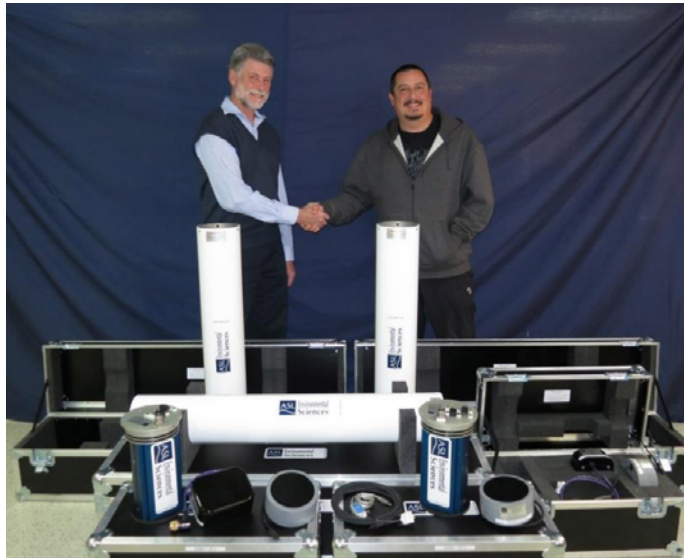


Figure 1: Dr. Stéphane Gauthier of the Institute of Ocean Sciences has acquired 3 new Acoustic Zooplankton and Fish Profilers.