

Report on:

**PROJECT: Sea Lice Research 06-22 (TC06-0877)**

**Allen Gottesfeld, Skeena Fisheries Commission**

The 2006 sea lice research project was a success. We managed to sample returning adult chinook salmon to ascertain the sea lice burden they carry by chartering a commercial troll boat to fish the western entrances to Chatham Sound. We collected juvenile pink salmon by dip net and OFL surface trawl in May, June and July and compared the rising sea lice levels on juvenile salmon with the increasing abundance of the natural source. Finally we collected plankton samples in the areas of high pink salmon abundance and examined them for nauplius and copepodid stages of the two species of sea lice that occur on salmon.

The project was successful because we had over the past three years developed an effective collaboration between First Nations, community groups and the Department of Fisheries and Oceans. Three years of collecting juvenile salmon had identified the appropriate gear and set up a good working relationship between the biologists from Oona River and crew members from Kitkatla and Oona River. The adult trolling portion of the project was successful because we chartered one of the most experienced commercial troll boat.

The project accomplished everything that we proposed. In addition we collected plankton samples to permit more detailed study of the sea lice transmission. The Skeena Fisheries Commission contributed an additional \$3,300 to cover the expense of analysis of these samples and about \$6200 in other expenses incurred in this project. We made public presentations of the outcome of this study at the Pacific Salmon Forum meeting in November 2006 and at the Department of Fisheries year-end roundup meeting in Prince Rupert in December 2006.

We expect to continue with research on the critical early marine phase of the salmon life history in 2007 and have received funding from the Pacific Salmon Forum for work that will shift the focus to juvenile sockeye salmon habitat.