

Research shows sea lice can ‘jump ship’ and spread among wild salmon

Vancouver – A study just published in the peer-reviewed science journal *Biology Letters* has shown a new and troubling route for the transmission of sea lice among salmon.

The study, by Simon Fraser University Doctoral candidate Brendan Connors and researchers from the University of Alberta, showed that sea lice on small pink salmon also infected predatory cutthroat trout and coho salmon in approximately 70% of the trials in which these predators ate a parasitized pink salmon prey.

“Sea lice on pinks that are about to be eaten by a coho or cutthroat literally do a back flip off the fish they were on and land right between the eyes of the predator,” said Connors, a behavioural ecologist. “We were surprised by how often it happened,” Connors continued.

The experiments were carried out in ocean enclosures at a research station in the Broughton Archipelago—the most intensively farmed area in British Columbia. Previous research by Watershed Watch Salmon Society, a co-sponsor of the new SFU research, has shown that farmed salmon in this area annually produce billions of infectious lice larvae which pose a threat to wild salmon.

“The SFU study shows for the first time that farm-origin lice can be transmitted ‘up the food web’ from prey to predator,” said Dr. Craig Orr of Watershed Watch. “This certainly raises the ecological stakes in terms of dealing with sea lice impacts,” said Orr.

The study can be found at <http://sciencenow.sciencemag.org/cgi/content/full/2008/619/1>.

For more information, contact:

Dr. Craig Orr, Executive Director, Watershed Watch (604) 936-9474 (office); 809-2799 (cellular)

Brendan Connors, Simon Fraser University (250) 974-7177 or Bconnors@sfu.ca.