

FISH-FARM SEA LICE CONFIRMED AS THREAT TO WILD SALMON¹

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Researchers have confirmed the devastating effect of sea lice from salmon farms on juvenile salmon, according to a report published November 9 in the Canadian Journal of Fisheries and Aquatic Sciences. The peer-reviewed report was written by Michael H. H. Price of the University of Victoria, Alexandra Morton of the Salmon Coast Field Station in Simoom Sound, and John D. Reynolds of Simon Fraser University. The researchers compared coastal areas with high and low exposure to fish-farming regions with a region (Bella Bella) with no fish farms. The abstract of the report said:

*Salmon farms are spatially concentrated reservoirs of fish host populations that can disrupt natural salmonid host–parasite dynamics. Sea lice frequently infect farm salmon and parasitize sympatric wild juvenile salmonids, with negative impacts on survival in Europe and Pacific Canada. We examined louse parasitism of wild juvenile chum salmon (*Oncorhynchus keta*) and pink salmon (*Oncorhynchus gorbuscha*) from three salmon farming regions in British Columbia (Finlayson, Broughton Archipelago, and Georgia Strait).*

We compared sites of low and high exposure to farms and included an area without farms (Bella Bella) to assess baseline infection levels. Louse prevalence and abundance were lowest and most similar to natural baseline levels at low-exposure sites and highest at high-exposure sites in all farm regions.

*A significantly greater proportion of the lice were *Lepeophtheirus salmonis* at high-exposure sites. Exposure to salmon farms was the only consistently significant factor to explain the variation in prevalence data, with a secondary role played by salinity.*

Our results support the hypothesis that salmon farms are a major source of sea lice on juvenile wild salmon in salmon farming regions and underscore the importance of using management techniques that mitigate threats to wild stocks.

Speaking with The Tyee from Sointula, Morton said the researchers looked at a large section of the B.C. coast, with her component being the Broughton Archipelago. “These feedlots cause pathogens to explode,” she said, citing a 1998 study that called fish farms “pathogen-cultivating facilities.” She said the Department of Fisheries and Oceans is now “seriously concerned with an emerging disease problem in sockeye,” a novel virus that is still unidentified.

Talking about her recent travels into the B.C. interior, and her paddle down the Fraser in October, Morton said the old environmentalist movement is being replaced. In addition to the indigenous First Nations, Morton said, she met a “neo-indigenous” community. “They live on the land and they want it to thrive,” she said. Both communities are coming together to fight for survival.

¹ The Hook, The Tyee, November 9, 2010

Speaking of the Cohen Commission, Morton said it was “a searchlight into very murky depths.” While she said she is very impressed with Justice Cohen, “The report won’t matter unless we make it matter.”