

# Lice from farmed salmon imperil wild salmon, new study confirms

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(PhysOrg.com) -- A new study on the impacts of lice on wild salmon published today by an independent team of academic researchers in the *Proceedings of the National Academy of Sciences (PNAS)* confirmed what many previous and unbiased studies have also shown, namely, that lice on farmed salmon can multiply and spread to wild salmon and decrease their survival.

What's unique about this new *PNAS* sea [lice](#) study is that it exposes serious flaws in a December 13, 2010 study published in the same journal by lead author and provincially-employed fish pathologist, Dr. Gary Marty. That study concluded lice were not harming wild salmon, and that alarms over open net-cage salmon farm impacts and calls for better management were unjustified. The results reported today by the academic researchers used the same data analyzed by Gary Marty and colleagues, previously unavailable to non-industry scientists. The re-analysis however employed proper spatial and temporal methods to confirm a "direct link between survival and louse abundance on farms" for both coho and pink salmon.

"The study by Gary Marty and co-authors received wide media attention for supposedly 'exonerating' lice from farmed salmon in declines of wild fish," said Dr. Craig Orr, Executive Director of Watershed Watch Salmon Society. "Many questioned the conclusions and the media spin resulting from the December study," continued Orr. "Now we have solid evidence that debunks the suspect conclusions and spin."

Marty and his colleagues not only incorrectly concluded that "Sea lice from fish farms have no significant effect on wild salmon population productivity" - "a conclusion at obvious odds with the weight of previous evidence - "but also claimed, in a statement echoed by several industry spokespersons, that "The finding means environmentalists' demands that fish farms be moved away from the migratory routes of wild salmon are not justified" (Globe and Mail, December 10, 2010).

According to the lead author of the new *PNAS* paper, Dr. Martin Krkošek of the University of Otago, "The management and policy recommendations advanced in the Gary Marty et al. study and in media statements cannot be supported."

Today's study in *PNAS*, which was supported by Watershed Watch and the SOS Marine Conservation Foundation, directly supports the urgent need to move [fish](#) farms away from the migratory paths of vulnerable wild juvenile salmon, to improve monitoring of salmon farms for impacts of [sea lice](#) on wild salmon, and to transition the open net-cage salmon industry to closed containment.

Gary Marty will be appearing before the Cohen Commission investigating the decline of the Fraser River Sockeye. "We hope that the *PNAS* study released today and the focus on farm impacts at Cohen will set the record straight," said Orr. "Lice are difficult to control on farmed [salmon](#) and represent a very real threat to the health of [wild salmon](#) here and around the world."

**More information:** Krkošek, M., B.M. Connors, A. Morton, M.A. Lewis, L.M. Dill, and R. Hillborn. 2011. Effects of parasites from salmon farms on productivity of wild salmon. *Proceedings of the National Academy of Science* 108(34):  
[www.pnas.org/cgi/doi/10.1073/pnas.1101845108](http://www.pnas.org/cgi/doi/10.1073/pnas.1101845108)

Provided by Watershed Watch Salmon Society

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