



Government-mandated monitoring and treatments have reduced the effects of sea lice on salmon.

SOTA Responds to Science Article On Sea Lice

Summary:

The presence of sea lice on wild pink salmon is not caused by aquaculture alone, for other hosts also attract the parasites. Water temperature, salinity, and sea currents impact sea lice infestations, as well. Wild salmon populations exhibit significant natural fluctuations. Government-required sea lice monitoring and mandatory levels at which farmed salmon receive treatments successfully reduce the effects of sea lice.

Salmon of the Americas Inc.

5805 Blue Lagoon Drive, Suite 395
Miami, Florida 33126 USA
info@salmonoftheamericas.com

The farmed salmon industry in Canada and other countries has focused its efforts toward achieving harmony between aquaculture and the sustainability of the regions impacted. The Department of Fisheries and Oceans (DFO) in Canada and its scientists have pioneered many areas of research and been recognized for significant findings in fish health and marine ecosystems interactions, especially involving wild salmon.

Considering the chronic negative and at times negligent media campaigns launched with the apparent intention to mislead consumers away from ocean-farmed salmon, Salmon of the Americas is obligated to clarify some of the issues recently raised regarding sea lice and their implications for wild salmon.

A recent study by the University of Alberta published in the journal *Science*, for example, which suggested sea lice from salmon farms are threatening pink salmon populations and leading to their "collapse," is questionable.

Common Parasite

The term "sea lice" refers to several species of naturally occurring parasitic copepods that are commonly found on most fish. They can be

found on the skin, fins, and, less frequently, gills of their hosts. Sea lice cannot survive in freshwater for more than three weeks.

Juvenile farmed salmon are free from sea lice when first introduced into the marine environment from freshwater. At some point after entering the growout phase, they become hosts to sea lice.

Multiple Hosts

Salmon farms are typically located in waters that are also commonly used by wild salmon during migration. Sea lice are attracted to these areas because of other potential hosts, as well, including the stickleback and other finfish common to the Broughton Archipelago area.

Therefore, many scientists agree it is too simplistic to say that salmon farms are "the" cause for sea lice infestations because there are multiple other hosts besides salmon. Additionally, water temperature, salinity, and sea currents can also impact the level of sea lice infestations at any given time on wild salmon.

Canada's DFO has spent 20 years monitoring the pink salmon populations in the Broughton Archipelago area and documented that the returns of pink salmon there fluctuate in odd and even years. In 2001, the pink salmon returns were the highest in over 20 years, while in 2005, the returns were higher than expected, higher in historical averages,

and even higher than the recorded returns of 1987, before salmon farms were operational in the area.

Study Misleading

Salmon of the Americas' recent response to the study published in *Science* noted that the study was misleading by not including the DFO findings that the wild pink salmon stocks in the Broughton Archipelago region have been strong despite the claims that they are not.

While 2006 returns of adult pink salmon were low, this was the case all along the Pacific coast – including Alaska, where no aquaculture exists – and therefore not limited to the Broughton Archipelago.

Treatments Effective

Government-required sea lice monitoring and mandatory levels at which farmed salmon populations must be treated to reduce sea lice have been implemented successfully to help reduce the effects on the ecosystem. As the monitoring data shows, the number of lice found on salmon farms has been low with few treatments required.

Differences in scientific perspective can cause confusion to the public as new developments unfold. It is important to note that the salmon-farming industry will continue its proactive plan for sustainable aquaculture to ensure the reproduction of adult wild salmon.

Editor's note: Salmon of the Americas Inc. is a U.S.-based nonprofit association of U.S., Chilean, and Canadian salmon-farming companies whose mission is to promote the health benefits of eating salmon. More information on this topic as related to Canada is available on the website of the SOTA colleagues in British Columbia: www.salmonfarmers.org.