



A Backgrounder from

Atlantic Salmon Federation

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WILD ATLANTIC SALMON ARE THREATENED BY SALMON AQUACULTURE IN NEWFOUNDLAND

THREATENED POPULATION

The South Newfoundland Atlantic salmon population was assessed as Threatened by the Committee on the Status of Endangered Wildlife in 2010 and has continued to decline since. The Conne River, which is an index river for the area and in close proximity to salmon aquaculture, only had 398 adult salmon return in 2019, an 83 per cent decrease compared to average returns between 1992 and 2018.

WIDESPREAD INTERBREEDING

Although exact numbers are unavailable, Fisheries and Oceans Canada estimates that at least 750,000 Atlantic salmon have escaped into Newfoundland waters. Following a large escape in 2013 (>20,000 individuals), Dr. Ian Bradbury tested salmon in 18 south coast NL rivers and found evidence of interbreeding in 17 of them.

HYBRIDS DON'T DO WELL IN THE WILD

Aquaculture fish are aggressively bred for commercial traits and the hybrid offspring of wild and industrial salmon have lower survival rates in the wild as a result of a loss of specific adaptations. An Irish study found that the lifetime success of hybrids was only 27 to 89 per cent as high as wild salmon, a contributing factor to population collapse.

SEA LICE KILL WILD SMOLT

The parasitic salmon louse is a major fish health, animal welfare, and financial problem for the salmon aquaculture industry globally. Lice quickly develop resistance to pesticide treatment and accumulate in huge numbers around sea cages. Norwegian researchers have determined that as few as eight sea lice can kill a wild smolt. Along the south coast, which has 104 known wild salmon rivers, smolt can be attracted to sea cages by the presence of other species, and are often forced to pass in close proximity due to sea-cage site selection.

INFECTIOUS SALMON ANEMIA (ISA)

This virus was first detected in a Norwegian salmon hatchery in 1984 and has quickly become the greatest fish health problem affecting salmon aquaculture in Atlantic Canada. It can be transmitted to other animals, like wild Atlantic salmon and Atlantic herring. Countless aquaculture salmon have been harvested and destroyed as a result of ISA outbreaks. Newfoundland has suffered seven reported cases of virulent ISA since 2018, the latest in September 2019.

INFORMATION GAPS PERSIST

While Fisheries and Oceans Canada is responsible for protecting the marine environment and wild species, a 2018 report by Canada's Commissioner of the Environment found the department has not established national standards to prevent escapes, has not completed risk assessments for key diseases, and has not adequately enforced existing regulation, among other shortfalls.

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