

06/21/2012

First detection of Salmon Alphavirus in BC - farmed steelhead

On March 25, 2012 we purchased 11 farmed steelhead and 3 Arctic Char heads from the Fairway Market in Victoria, BC and sent samples from them for testing for three European farm salmon viruses.

8 came back positive for the salmon heart virus (piscine reovirus)

7 came back positive for **Salmon Alphavirus**.

7 tested positive for both

This is the first-ever report of Salmon Alpha virus in BC although there is a single report by Dr. Michael Kent, of the disease it causes, Pancreas Disease, in Atlantic farm salmon being raised in BC in 1987. The reason I asked the lab to test for these European viruses is because Dr. Gary Marty, the BC farm salmon vet, reported lesions in farm salmon that caused him to include Salmon Alphavirus in his reports to Mainstream and Marine Harvest on at least 6 occasions from 2007-2009. He cites this [paper](#). One of these cases was in the Broughton Archipelago in 2009 at the Mainstream, site Maude Island. Salmon Alphavirus is not a "reportable disease," but it is killing salmon and trout in Norway, Scotland and Ireland. Chile has requested that it be listed as a reportable pathogen and has also requested permission from the World Trade Organization to block import of eggs from regions with Salmon Alphavirus. I don't know how this virus got into these steelhead raised in Lois Lake BC near Powell River. The eggs were reportedly from the [Trout Lodge](#). The Lois Lake facility reportedly rears imported Atlantic salmon eggs for Atlantic salmon operators in BC.



What is Salmon Alphavirus, SAV?

First recognized in Scotland in 1984, SAV was subsequently detected in Ireland and Norway. There are three closely related viruses in this viral family and they are recognized as serious pathogens of farmed Atlantic salmon and rainbow trout in Europe. SAV 1 is the causative agent of pancreas disease (PD). SAV2 is the causative agent of sleeping disease of rainbow trout. SAV 3 has only been detected in Norway (as of 2007) causing Pancreas Disease in Atlantic salmon and rainbow trout.

Pancreas Disease is spreading in salmon farms the length of Norway. Marine Harvest was recently instructed to slaughter an entire farm in Norway by June 20th (Intrafish June 8). There were 90 cases in 2011 and the virus has spread to 8 farms in northern Norway this year (Intrafish May 31, 2012). Salmon Alpha virus survives well outside the fish drifting through the water spreading the infection.

Chile became extremely alarmed when rumours of Salmon Alphavirus popped up there in 2008.