

## Press Update – 29 August 2012

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### “Virus Trackers”/“Compensation Culture”/“Say No to 9 New Salmon Farms”

Please find enclosed a press update (web-links are embedded in the headlines and the articles in full are enclosed below) including:

“[Salmon Are Sacred](#)” (Lademoen/Art Nomads, 1 September)

“[Human health impacts of open pen salmon feedlots practices](#)” (Legacy, September)

“[Will wildlife have to pay the price for salmon farming?](#)” (Scottish Wildlife Trust/Rob Edwards, August)

“[Scare darts for use on seals](#)” (The Mercury, 29 August)

“[Salmon farm feed with affect Sounds](#)” (The Marlborough Express, 29 August)

“[Inquiry should ‘heed experts’](#)” (The Marlborough Express, 29 August)

“[Submitter raises waste fears over salmon expansion](#)” (Radio New Zealand, 28 August)

“[New Zealand King Salmon pushes forward with expansion efforts](#)” (FIS, 28 August)

“[B.C. farmed salmon on menu at U.S. Open](#)” (The Vancouver Sun, 28 August)

“[AgriMarine to Supply Fresh Salmon to Ito-Yokado Retail Chain in the People’s Republic of China](#)” (AgriMarine, 27 August)

“[Residents of tiny island to fight plan for salmon farm](#)” (The Herald, 27 August)

“[Save Bantry Bay campaign seeks public support](#)” (West Cork Times, 27 August)

“[Police block seal spraying](#)” (The Mercury, 26 August)

“[Fish farms must protect wild salmon stocks](#)” (Nanaimo Daily News, 25 August)

“[CFIA continuing with salmon disease control](#)” (Nanaimo Daily News, 25 August)

“[Claims about salmon viruses simply incorrect](#)” (Nanaimo Daily News, 24 August)

“[Salmon farms reel in conflict](#)” (The Marlborough Express, 24 August)

“[Minister gets earful from fish farm foes](#)” (The Chronicle Herald, 23 August)

“[Mainstream Norway depopulates one site in Finnmark due to PD](#)” (Cermaq, 23 August)

“[Mainstream cuts corners on fish health](#)” (Friends of Clayoquot Sound, 23 August)

[“Virus trackers”](#) (Alexandra Morton, 22 August)

[“Protesters crash fisheries minister's salmon farm tour”](#) (CBC News, 22 August)

[“'Depopulation' unfortunate key word in some farm sites”](#) (The Courier-Islander, 22 August)

[“Government testing of salmon a flawed process”](#) (Nanaimo Daily News, 21 August)

[“Much has changed in aquaculture in the past decades”](#) (Nanaimo Daily News, 21 August)

[“Coastal Management Program Critical to Keeping Out Fish Farms”](#) (Sit News, 20 August)

[“Mainsteam's Millar Channel salmon farm is now empty”](#) (FIS, 20 August)

[“No one is listening/Pollution not acceptable”](#) (The Chronicle Herald, 19 August)

[“Rise in Aquaculture Production Discussed in New Report”](#) (The Fish Site, 17 August)

[“Salmon mortality level rises in H1”](#) (FIS, 17 August)

[“CFIA committed to disease control process”](#) (Nanaimo Daily News, 16 August)

[“SalMar Group's results show salmon disease impact”](#) (FIS, 16 August)

[“Fish farm deaths a mystery to owner”](#) (Nelson Mail, 16 August)

[“Column claims about fish farming questioned”](#) (Nanaimo Daily News, 15 August)

[“Aquaculture alarmism”](#) (The Chronicle Herald, 15 August)

[“Algae may cost salmon farmer over \\$1m”](#) (Radio New Zealand, 15 August)

[“NZKS farm receives clearance”](#) (Nelson Mail, 15 August)

[“Fish farm flap”](#) (Parksville Qualicum News, 14 August)

[“Will your tax dollars subsidize BC's unsustainable fish farms?”](#) (West Coast Environmental Law, 14 August)

[“Recalculating the costs and consequences of fish farms in B.C.”](#) (Business In Vancouver, 14 August)

[“The \\$64,000 Question: Morton's group gets cash boost to continue salmon monitoring”](#) (The Valley Voice, 14 August)

[“Nanaimo-based conservation group campaigns for enclosed-container farms”](#) (Nanaimo Daily News, 14 August)

[“Salmon farm cleared of known disease”](#) (Voxy/New Zealand King Salmon, 14 August)

[“Teen lobbies against NZKS plans: research for yourself the effects of salmon farms”](#) (The Marlborough Express, 13 August)

[“Protecting wild fish must be made a priority”](#) (Nanaimo Daily News, 13 August)

[“Unacceptable threat/Protecting wild salmon/Greater concerns than view”](#) (The Chronicle Herald, 13 August)

[“FDA roadblock over modified salmon could sink company”](#) (U-T San Diego, 13 August)

[“Call for closed-containment salmon farms: David Suzuki Foundation believes current open-net caged system is harming the environment”](#) (News 1130, 12 August)

[“Salmon farmers efficient in use of resources”](#) (The Times Colonist, 12 August)

[“Salmon culls because of virus could cost fish farms millions”](#)/[“Cull to curb virus could cost West coast salmon farmers millions”](#) (The Times Colonist/The Province, 10 August)

[“The Sounds Need You: Say No to 9 New Salmon Farms”](#) (Save Our Sounds, 10 August)

[“Fish farm starts emptying IHN fish”](#) (Alberni Valley Times, 10 August)

[“Agency orders cull of Atlantic salmon at two farms”](#) (The Vancouver Sun, 10 August)

[“First Nation resorts to Supreme Court to protect wild salmon”](#) (FIS, 10 August)

[“Fish farm fight goes to top court”](#) (CBC News, 9 August)

[“Bid to close fish farms could go to Supreme Court”](#) (The Times Colonist, 9 August)

[“Not responsible strategy”](#) (The Chronicle Herald, 9 August)

[“Virus confirmed, two B.C. salmon farms to cull fish”](#) (The Vancouver Sun, 9 August)

[“B.C. company to kill 300,000 Atlantic salmon after virus outbreak”](#) (The Province/The Canadian Press, 9 August)

[“Compensation culture”](#)/[“Salmon Farms Seek Compensation for Disease Outbreak Losses”](#) (Superheroes 4 Salmon/Pacific Free Press, 9 August)

[“Mainstream rids farm of fish due to virus”](#) (The Westerly News, 9 August)

[“IHN outbreaks confirmed”](#) (Fish News EU, 9 August)

[“Area of Sounds up for debate”](#) (The Marlborough Express, 9 August)

[“Request dropped”](#) (The Marlborough Express, 9 August)

[“IHN virus confirmed at two salmon farms”](#) (FIS, 9 August)

[“Geographical Distribution of Salmonid Alphavirus Subtypes in Marine Farmed Atlantic Salmon, \*Salmo salar\* L. , in Scotland and Ireland”](#) (Journal of Fish Diseases, 8 August)

[“Salmon Aquaculture and Antimicrobial Resistance in the Marine Environment”](#) (PLoS ONE, 8 August)

[“Public Update \(5\): IHN and BC Salmon Farms”](#) (BC Salmon Farmers Association, 8 August)

[“Grieg confirms IHN virus at Canada site”](#) (Intrafish, 8 August)

[“Canadian officials confirm IHN at Grieg site”](#) (Seafood Source, 8 August)

[“Virus confirmed, company begins to empty site”](#) (Mainstream Canada, 8 August)

[“First Nation bid to close fish farms may reach Canadian Supreme Court”](#) (The Vancouver Sun/Global News, 8 August)

[“B.C. First Nation taking fight against fish farms to Supreme Court of Canada”](#) (CTV News/The Canadian Press, 8 August)

[“No choice but to go forward to the Supreme Court of Canada to protect wild salmon”](#) (Union of BC Indian Chiefs/ECO, 8 August)

[“Warning to submitters”](#) (The Marlborough Express, 8 August)

[“Inland fish farm may signal new wave: Site may answer aquaculture critics’ concerns about ocean operations”](#) (The Chronicle Herald, 8 August)

[“Location is everything”](#) (The Chronicle Herald, 7 August)

[“Gray Aqua moving forward despite ISA case”](#) (The Coaster, 7 August)

[“Scottish Sea Farms Opens Remote Salmon Farm in Eday”](#) (The Fish Site, 7 August)

[“The interaction of infectious salmon anaemia virus \(ISAV\) with the blue mussel, \*Mytilus edulis\*”](#) (Aquaculture Research, 6 August)

[“The Rigamarole of 'Public' Environmental Hearings in BC: A Cameraman's Perspective - The Cohen Inquiry into Disappearing Fraser Sockeye”](#) (The Common Sense Canadian, 5 August)

From Alexandra Morton writing in [The Nanaimo Daily News](#) (21 August):

“There is something wrong when the virus is easily found in farmed salmon in supermarkets, but there is no government followup to track it to source, nor any testing of the Norwegian industry fish at all, and the only government admission that fish pathogens may have been introduced to B.C. is culling wild salmon.”

From Elena Edwards writing in [The Nanaimo Daily News](#) (25 August):

“Mr. Warkentin, if you and your colleagues truly cared about wild salmon you would put your efforts to getting those farms away from wild salmon stocks which you should do regardless since you're so convinced that wild salmon are spreading IHN to your farmed salmon.”

From the [Scottish Wildlife Trust](#) (August):

“The salmon farming industry must acknowledge that it's the unique quality of Scotland's natural environment that's the brand that's so successful worldwide. To operate in a way that damages Scotland's wildlife not only puts itself at risk, but the future of hugely important livelihoods, like tourism and fisheries.”

From [The Herald](#) (27 August) in Scotland:

“Plans for a controversial salmon farm off one of the lesser-known Hebrides have split nearby communities amid claims the venture will damage tourism and make island life more dangerous.”

From [The Mercury](#) (29 August) in Australia:

“The use of a scare dart to deter protected fur seals from approaching fish farms and their workers has been approved by the State Government. Environment Parks and Heritage Minister Brian Wightman has allowed the use of the darts, pepper spray, the firing of bean bags and firecrackers.”

From the [West Cork Times](#) (27 August) in Ireland:

“A campaign opposed to the expansion of the Marine Harvest salmon farm at Shot Head in Bantry Bay is seeking support from local people in Bantry and Beara. More than 7,000 homes will be receiving leaflets, distributed by An Post, from the Save Bantry Bay Committee (SBB) calling on all those living and working on the shores of Bantry Bay to oppose any new salmon farm.”

From Robert Ross writing in [The Chronicle Herald](#) (19 August) in Eastern Canada:

“Fish farms do not pay taxes; they pay paltry annual lease fees. They generate a few jobs, yet they receive huge financial compensation from the province when their stock dies of disease. Remember the \$21 million paid to the Shelburne fish farm? The anger, resentment and controversy over the aquaculture industry are damaging the rural social fabric of our communities.”

From Fred Giffin:

“Just as the NDP government and Cooke Aquaculture have done, Mr. Grant attempts to create the positive image that pen fin-fish farming is a viable method of aquaculture. It could better be termed “aquapoison” or “aquadumps.”

From [The Times Colonist](#) (10 August) on Norwegian-owned Cermaq & Grieg demanding compensation in Canada:

“Both companies say they are looking at their insurance coverage and will explore with CFIA whether any government assistance programs are available. “Compensation has been paid to other farming sectors, due to issues such as avian flu and BSE, so this may be available to our farming sector as well,” Hawthorn said.”

From Bob Tritschler writing in the [Parksville Qualicum News](#) (14 August):

“To approach the government for compensation is beyond belief. It is like building your home under a slide area or on a flood plain next to a roaring river and then applying to the government for loss of property due to ones own ignorance..... There are only three alternatives for these feed lots, put the facilities on the beach and out of reach of IHN, pay exorbitant rates for loss insurance, or pack your bags and go home. To ask us for compensation to continue to foul the oceans is not very palatable.”

From [West Coast Environmental Law](#) (14 August):

“But a bailout for these losses would mean that they don’t even have to pay for losses that come with open net salmon farming, and as such represents a direct subsidy to what many, including West Coast Environmental Law, believe to be an unsustainable industry. These are very large companies, with private insurers. They can afford to pay for the costs of their own choices”

From Walter Cordery writing in [The Nanaimo Daily News](#) (13 August):

“Open-net fish pens are the problem. Huge numbers of fish in an enclosed environment is a recipe for disease that will spread. Unfortunately the viruses mentioned above don't just affect the predominately-Norwegian-owned Atlantic salmon fish farms. They are picked up by wild salmon swimming by as they leave or return to their originating rivers along the coast.”

From [The Vancouver Sun](#) (10 August) on IHN in British Columbia:

“The public needs to be concerned that this isn't just an issue about salmon farms but it's about the health of wild stocks as well,” said Craig Orr, executive director of the Watershed Watch Salmon Society. He said mutation of viruses into more virulent strains is more common on fish farms than in the wild. “The nearshore marine environment is getting to be a much more hostile environment for wild fish, I can tell you that. And a lot of the problems are attributed to salmon farms.”

“Marty said the outbreaks could have been prevented. A vaccine is available...But it's expensive, which may be why more farms don't administer it.....A spokeswoman for Mainstream said the company planned to vaccinate all of its Atlantic salmon stock in 2013.”

From [The Marlborough Express](#) (13 August) on the fight against plans for nine new salmon farms:

“A 17-year-old girl from a remote area of the Marlborough Sounds made her second trip to the unfamiliar surrounds of Wellington on Saturday to protest plans to develop nine more salmon farms in the region. Leona Plaisier handed out pamphlets at the Michael Fowler Centre where Masterchef 2011 winner Nadia Lim was giving a demonstration sponsored by NZ King Salmon, the Nelson-based company that has applied for consent to develop the farms....She and supporters handed out 600 information cards on Saturday afternoon and displayed photographs and film of marine wildlife in the Sounds, as well as damage they claim the company's existing farms have done to the seabed.”



Sign a petition opposing King Salmon’s expansion plans [online here](#)

From [The Vancouver Sun](#) (8 August) on legal action to protect wild salmon from fish farms:

“A B.C. First Nation revealed yesterday morning at a press conference that it seeks to re-launch a class-action lawsuit against the B.C. and federal governments to ultimately force the closure of commercial open net-pen fish farms in Broughton Archipelago “I am so disappointed in Canada,” said Chief Bob Chamberlin. “I’m disappointed in the province of B.C. They’ve lost sight of the importance of healthy, abundant wild salmon stocks and what an economic engine it represents for British Columbia.”

From CBC News (9 August) on the “[Fish farm fight goes to top court](#)”:

“Can First Nations be considered a "class" with a common claim for rights such as protection of salmon stocks? The B.C. Court of Appeal says no. Bob Chamberlain, chief of the Kwicksutaineuk/Ah-Kwa-Mish First Nation, talks about plans to appeal that ruling to the Supreme Court of Canada.”

Listen to Chief Bob Chamberlin speaking on CBC News [online here](#)



From [The Times Colonist](#) (9 August):

“The Kwicksutaineuk/Ah-Kwa-Mish First Nation initially launched the lawsuit based on claims of damage to wild salmon from sea lice from fish farms, but issues of deadly viruses and diseases from fish farms are now much wider, said Chief Bob Chamberlin. “Our First Nation, that holds title, simply doesn't want this industry in our territory,” he said.”

From the [Union of BC Indian Chiefs](#) (8 August):

Bob Chamberlin, KAFN Chief and representative plaintiff in the case, observed, “The appeal of our certification win by both the Canadian and BC governments, and supported by the aquaculture industry, hinged on technicalities and missed the importance of government’s obligation to regulate the open net salmon farming industry in a way that protects wild salmon. This decision cannot remain unchallenged.”

From Peter Ladner writing in [Business in Vancouver](#) (14 August):

“Morton says the Department of Fisheries and Oceans (DFO) has been hiding ISA-positive results from Fraser River sockeye stock and in salmon farms in Clayoquot Sound. DFO scientist Kristi Miller, otherwise forbidden to speak to the media, told the Cohen commission she was prohibited from testing further for ISA, even though she had found it in two Clayoquot Sound salmon farms.”

Listen to the Cohen Commission’s PR flak Carla Shore trying to prevent Damien Gillis reporting on the salmon inquiry – online via [The Common Sense Canadian](#) (5 August)



From Raymond Plourde of the Ecology Action Centre in [The Chronicle Herald](#) (12 August):

“It is also a proven fact that wild salmon and sea-trout populations plummet wherever open-net pen salmon feedlots are placed near their natal rivers or along their migratory routes. Nova Scotians will not stand idly by while our remaining wild salmon heritage is put in danger. We will continue to vigorously defend our wild salmon and trout from companies and politicians that would do them harm, either deliberately or through ignorance.”

From Dave Maynard writing in [The Chronicle Herald](#) (9 August):

“I, like many who live in coastal communities, am very much opposed to the open net-pen form of fin-fish aquaculture because of its proven damage to the marine environment, and the threat it poses to jobs that currently exist in our communities. (The Herald online survey should have read: “Do you support open-pen salmon farms?” not “Do you support aquaculture?”)”

From [The Chronicle Herald](#) (8 August):

“The only way is to separate them from the wild fish population,” explains Matthew Abbott, marine co-ordinator for the Conservation Council of New Brunswick. Technically, that is already happening in Nova Scotia, which has 22 land-based closed-containment fish farming sites. But half of those are hatcheries, where salmon and trout smolts mature until they are ready for sea cages. Though there are a few on-land Atlantic salmon pilot farm projects scattered throughout Canada, not a single one is in Nova Scotia.”

From [The Coaster](#) (7 August) reporting on ISA in Eastern Canada at Gray Aqua:

“There are different strains of ISA and some have more virulence than others. While we won’t be able to say anything definitively about this strain until after all the testing is completed at some later date, it didn’t show it had the ability to kill fish or to move from cage to cage.”

From [Fish News EU](#) (9 August):

“Suspected outbreaks of IHN (Infectious Haematopoietic Necrosis) have now been confirmed at two salmon farming sites in British Columbia. The sites in question are Mainstream Canada’s Millar Channel farm north of Tofino and Grieg Seafood’s Culloden Point farm site in Jervis Inlet, Sunshine Coast. Mainstream Canada and Grieg Seafood have both received official orders from the Canadian Food Inspection Agency (CFIA) to remove all fish from these sites. The CFIA will have to approve all stages of the depopulation process including transportation, offloading and rendering.”

From [Mainstream Canada](#) (8 August) on IHN in British Columbia:

“As quarantine measures are in place, traffic around the farms will be restricted. This is crucial to helping prevent the spread of virus to any other farm sites in the area. Migrating wild salmon are natural carriers of the IHN virus, and are most likely the source of the virus infection at both farms”

From [The Westerly News](#) (9 August):

"Mainstream believes that wild fish are infecting their farmed salmon," says Friends of Clayoquot Sound executive director Dan Lewis. "Many British Columbians are concerned that farmed salmon are transmitting deadly diseases to wild salmon. One simple solution to both these concerns is to move the farms out of the ocean into closed-containment systems."

From [Grieg Seafood](#) (8 August) in a disclosure to the Norwegian Stock Exchange:

“The final financial impact of the likely depopulation order will depend on the potential compensation from Grieg Seafood's insurance and/or Canadian authorities as a consequence of a potential depopulation order. This information is subject of the disclosure requirements acc. to §5-12 vphl (Norwegian Securities Trading Act)”

From [New Zealand King Salmon](#) (14 August) following a mass die-off of farmed salmon:

“The New Zealand King Salmon farm at Waihinou has been given the all-clear after comprehensive testing revealed no known pathogens nor evidence of any unknown diseases. NZ King Salmon CEO Grant Rosewarne says company vets believe the farm was the subject of some extraordinary natural event or combination of factors.... We have extremely stringent bio-security procedures to protect our international market-leading position and the environment within which we operate."

From [The Nelson Mail](#) (15 August):

“NZ King Salmon spent around \$20,000 on testing in New Zealand, Canada and Norway, and faced a considerable loss in terms of revenue and stock, Mr Rosewarne said. Sustain our Sounds chairman Danny Boulton said the group still had concerns about sustainable management of the farm. "We are also very sceptical as fish do not die from nothing and it is not a natural occurrence for fish to have lesions," Mr Boulton said. "The question remains, are the Marlborough Sounds the right environment for concentrated fish feeding farms?"

From King Salmon CEO Grant Rosewarne in [The Nelson Mail](#) (16 August):

“Salmon farming is such an environmentally benign and robust activity it is almost impossible for us to cause an environmental problem that would affect our fish.”

From the [BC Salmon Farmers Association](#) (8 August):

“The first priority for these companies is to work with CFIA to ensure that any depopulation is done quickly and safely,” said Mary Ellen Walling, Executive Director of the BCSFA. IHN is a natural virus of the Pacific Ocean, which can be carried regularly by wild fish who have a natural resistance to it, studies show. They can carry the virus their whole lives without any negative impacts on their health. The health of Atlantic salmon, however, can be affected by IHN as they have not developed immunity to it.”

From [The Alberni Valley Times](#) (10 August):

“Jensen said the company suspects wild salmon propagated the IHN virus at both farms. “We know that wild salmon carries it,” she said. “We just don’t know which salmon species brought the virus.”

From the [Nanaimo Daily News](#) (14 August):

“What we’d like to see is for farms to be out of the open water and in closed containers, then there would be no chance of transfer of diseases or pathogens,” said Ruby Berry, Georgia Strait Alliance aquaculture campaign program manager. She said when IHN strikes salmon in open-net pens, disease is concentrated and it creates a reservoir of germs that can spread through wild stocks, just as colds and flu are concentrated among children in kindergarten.”

From Alexandra Morton writing in her blog ‘[Virus Trackers](#)’ (22 August):

“I am out the door now to continue this work - thank you all for your help. I feel certain salmon farms are spilling lethal salmon viruses into BC waters and that these viruses are killing BC wild salmon. But I am not just talking about this, I am doing the work to map this out so anyone who wants wild salmon to survive can make up their own minds whether salmon farms must get out of the ocean. If we want wild salmon it is up to us.”

Support Alexandra Morton’s testing for salmon diseases – please [donate online here now!](#)

# Salmon Disease Testing Fund

Raised: \$28,235.00      Goal: \$100,000.00

Created by  
**Alexandra Morton**  
3021 Friends  
Contact Embed

*Last fall we began testing salmon in BC for European viruses spreading worldwide in Atlantic salmon farms, which import millions of eggs into places like BC an... more*

<http://www.gofundme.com/SalmonDiseaseTesti>

Like 385      Email

**DONATE!**

Sign a petition calling on supermarkets to stop selling disease-ridden farmed salmon – [sign online here!](#)



## COSTCO, Safeway & Loblaws: Please stop selling diseased farm salmon!

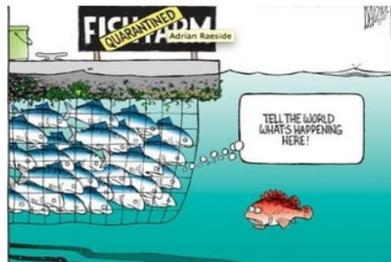
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I'd rather reach out to my email contacts instead

Your Friend  
has not yet signed this petition



Signatures  
**12,522** out of 15,000

Petitioning  
CEO - Safeway (+ 2 others)

Created By  
Alexandra Morton  
Sointula, Canada

Best fishes,

Don

Remember - News updates are now archived and available in full – [online here!](#)

Lademoen/Art Nomads, 1 September



### Heather Passmore (Canada) – *Salmon are sacred*

Heather Passmore (b. 1979 in Canada) often uses themes of social justice and criticality as

her point of departure. At Lademoen a yarn frieze of salmon, sea lice and salmon viruses on a huge scale illustrates how the local and the global are interwoven in the debate on fish farming and its consequences. The virus that exists in Norwegian salmon farms has been found in the wild salmon of the Pacific Ocean, e.g. in Chile and Vancouver. The salmon farms produce Atlantic salmon in factory farming conditions that create enormous quantities of lice, viruses, parasites, escaped salmon and chemical pollution. For the Cowichan, who are one of the indigenous people of British Columbia, the contamination has had grave consequences on their health and culture – which the wild salmon are such a strong part of. The symbolism of the fish has altered fundamentally: Whereas it used to be regarded as holy and life sustaining, it has now diametrically different connotations – the infected fish is inedible, often dead before it returns to the river, and an active source of infection moving over vast areas. Passmore sets the debate in motion by placing the Norwegian fish industry discussion in an ethical perspective that illustrates how local problems may have unexpected global consequences, and that economical profit is dominant to environmental issues. The work emphasizes the fact that through development of new technologies like salmon farming one gets an increase in global migration also on a micro-organic level.

A knitted Cowichan jumper (with a popularity that matches that of the Norwegian Marius jumper) will be exhibited at Babel, and also the documentary “Farmed Salmon Exposed: The Global Reach of the Norwegian Salmon Farming Industry” by the Canadian filmmaker Damien Gillis.



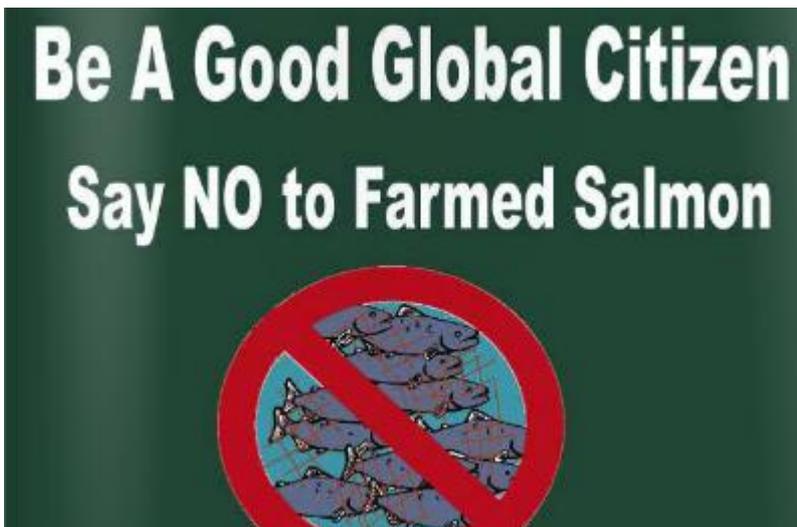
For more information: <http://heatherpassmore.com/>

<http://www.lkv.no/eng/projects-heather-passmore.html>

Legacy, September 2012

**Feature: Human Health Impacts of Open Pen Salmon Feedlot Practices** 7

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Read in full online here: <http://issuu.com/steelhead-salmon-society/docs/legacy912>

Scottish Wildlife Trust/Rob Edwards, August 2012

Will wildlife have to pay the price for salmon farming?

from [Scottish Wildlife Trust](#) magazine, August 2012



Nearly every day in the summer, David Ainsley takes tourists on his boat, Porpoise II, to look for wildlife amidst the unassuming beauty of water, rock and hill that characterises the west

coast of Scotland. If they are lucky, they get to see eagles, goats, seals, dolphins, porpoises and minke whales, as well as the famed [Corryvreckan whirlpool](#).

For more than 20 years, Ainsley has been running a successful [wildlife-watching business](#) from his home on the island of Seil, eight miles south of Oban. But now he is worried that the wildlife - and with it his livelihood - could be blighted by the burgeoning billion-pound fish farming industry.

A Polish-owned company, the [Meridian Salmon Group](#), has [applied for planning permission](#) to double the production of a nearby salmon farm in the Sound of Seil off Ardmaddy, and move it 900 metres south. This means more shooting and scaring of seals, more pollution and more dangers for the area's priceless natural heritage, Ainsley fears.

“Salmon farming is an important industry but some farms unnecessarily kill wildlife and affect wildlife tourism,” he says. “The salmon farm at Ardmaddy is a classic example of an inappropriately located farm.”

In their anxiety to prevent seals from eating salmon, fish farmers sometimes shoot them, or try to frighten them with loud underwater blasts of noise. But according to Ainsley, this can interfere with the echo-sounding vital for dolphin and porpoise navigation. “It's like blinding them,” he argues.

Pollution from the existing salmon farm was declared “unsatisfactory” in 2010 by the government's green watchdog, the [Scottish Environment Protection Agency \(Sepa\)](#). The conservation agency, [Scottish Natural Heritage](#), has also expressed concern that chemicals used to treat the fish could spread to the nearby [Firth of Lorn Special Area of Conservation](#), protected under law because of the rarity of its reefs.

Meridian's expansion plans for Ardmaddy have prompted [more than 800 objections](#), and are still to be assessed by Argyll and Bute Council. The company insists that it is “totally committed to ensuring best practice” and describes claims of damage to wildlife as “unsubstantiated”. Said managing director, Mark Warrington: “If there was conclusive data on this, we would look to change our operations.”

The arguments over Ardmaddy are being replicated across Scotland, as the salmon farming industry seeks to keep on expanding. Recently, there have been [conflicts over fish farms](#) proposed near the islands of Eigg, Canna and Colonsay - and there will be many more.

[Production of Atlantic salmon](#) has risen nearly fivefold from 32,350 tonnes in 1990 to around 157,400 tonnes in 2011, and now involves 30 companies at about 250 sites along the west coast and on the islands. Farmed salmon is Scotland's single largest food export, with a worldwide retail value of over £1 billion and major sales in the US, China and France.

Scotland is the world's third largest producer of farmed salmon, after Norway and Chile. But for the industry, backed by the Scottish government, this is not enough. It wants to grow even bigger, and is [aiming to boost](#) the production of all farmed finfish 50% by 2020.

The industry has brought jobs and income to remote communities, but this has come at a price. “There's no doubt that salmon farming has given a boost to rural communities in the

highlands and islands, but this has to be balanced against environmental costs,” says the [Scottish Wildlife Trust's](#) ‘living seas’ policy officer, Alex Kinninmonth.

“The salmon farming industry must acknowledge that it’s the unique quality of Scotland’s natural environment that’s the brand that’s so successful worldwide. To operate in a way that damages Scotland’s wildlife not only puts itself at risk, but the future of hugely important livelihoods, like tourism and fisheries.”

The problems are manifold. As well as the fish wastes that smother the seabed under the cages, farmers have to regularly use pesticides to try and kill off the sea lice that eat the salmon alive. Surveys by Sepa in 2008 and 2009 found [pesticide contamination](#) in the sediments of all nine sea lochs tested on the north west coast.

Research by the [Salmon and Trout Association](#) suggests that pesticide residues in some places are above safety levels set to protect wildlife. The danger, points out the association’s lawyer, Guy Lindley-Adams, is that lobsters, crabs and prawns could be killed. The solution, he says, is to introduce “closed containment units” for fish farming to prevent pollution from leaking out.

Meanwhile, there’s mounting evidence that sea lice are growing increasingly resistant to the pesticides, and can spread to wild fish, damaging their populations. Farmed salmon also escape when nets are ripped by storms, and dilute the genetic integrity of wild salmon by interbreeding.

The risks to wild fish in some areas are “significant”, according to Dr Alan Wells, the policy director of the [Association of Salmon Fishery Boards](#). Along with the Scottish Wildlife Trust, he is looking to [new aquaculture legislation](#) promised by Scottish ministers to help tackle some of the problems.

Both organisations are calling for stronger controls on the management of fish farms, and for new powers to limit the amount of salmon allowed to be farmed. Such moves, though, are strongly opposed by the salmon farming industry, which is resisting further regulation.

“There appears to be little sensible rationale for bringing forward a bill which consists of regulation and bureaucracy serving no purpose other than to tie salmon farmers to computers instead of allowing them to rear fish,” says the chief executive of the [Scottish Salmon Producers’ Organisation](#), Scott Landsburgh.

The clash between the companies and the conservationists is not going to lessen, or be easily resolved. But many would argue that Scottish ministers must be careful not to sacrifice the long term value of the natural environment for the short term demands of businesses. There is much at stake.

<http://www.robedwards.com/2012/08/will-wildlife-have-to-pay-the-price-for-salmon-farming.html>

The Mercury, 29 August 2012

Scare darts for use on seals

Nick Clark



A protected Australian fur seal / File pic

THE use of a scare dart to deter protected fur seals from approaching fish farms and their workers has been approved by the State Government.

Environment Parks and Heritage Minister Brian Wightman has allowed the use of the darts, pepper spray, the firing of bean bags and firecrackers.

The darts are used in North America to scare away bears.

DPIPWE Wildlife Management Section manager Will Joscelyne said the scare dart was discharged from a tranquiliser gun and was made of pre-stressed plastic with a percussive cap.

"The plastic dart is pre-stressed so that it breaks apart on impact," he said. "According to the protocol, the type of tranquiliser gun model allowed and the distance for use are restricted, such that the darts would cause no harm to the seal.

"The darts do not penetrate the animal but result in a loud bang and a flash to encourage the animal to retreat.

"A dart gun is classified as a firearm and the employee would require a firearms licence."

The scare dart approval comes as a standoff between Tasmania Police and the department looks set to stymie the use of pepper spray by fish farm employees.

Police, who are concerned about the super-strength pepper spray being misused, must issue an exemption under the Police Offences Act if fish farm staff are to use it.

An audit by Tasmania Police found a number of fish farm staff with a criminal record including matters of violence.

But it is not known if Tasmania Police will provide the exemption for the scare darts.

Mr Wightman said DPIPWE, Tasmania Police, and Workplace Standards Tasmania were reviewing the steps required for farm workers to access deterrents, with a view to providing industry with clearer instructions on how to manage the issue into the future.

Mr Wightman said the new measures followed a request from the salmonid industry.

He told State Parliament the approval depended on a working group being established in DPIPWE to monitor the operation and effectiveness of the management options.

In 2011-12, DPIPWE issued 252 seal deterrent permits to individual farm workers.

Of these, 49 authorised the use of bean bags and 203 authorised the use of crackers.

Greens member for Braddon Paul O'Halloran called on Mr Wightman to explain what methods had been tested on fur seals as a deterrent.

[http://www.themercury.com.au/article/2012/08/29/356871\\_tasmania-news.html](http://www.themercury.com.au/article/2012/08/29/356871_tasmania-news.html)

The Marlborough Express, 29 August 2012

Salmon farm feed will affect Sounds

Penny Wardle



Judge Gordon Whiting at centre

The more data the merrier, was the response by Cawthron expert Ben Knight to cross-examination by Department of Conservation and Sustain Our Sounds lawyers on day two of an Environmental Protection Authority hearing in Blenheim yesterday.

An authority board of inquiry chaired by Judge Gordon Whiting will decide whether to grant King Salmon the plan change and consents needed to develop nine new salmon farms in the Marlborough Sounds. Other board members are Helen Beaumont, Edward Ellison, Mark Farnsworth and Michael Briggs.

Mr Knight has used computer programs to model the likely effects of the salmon farms on the water column from the surface to the seabed. On Monday night he and other experts agreed thresholds for acceptable effects on the environment should be set before fish were added to the farms.

In its application, King Salmon says three years of monitoring would be done before these limits were set.

Mr Knight agreed when questioned by Department of Conservation lawyer Shona Bradley that environmental thresholds would ideally be set as part of the consent process.

This was the only time he had been involved with an application where data for setting thresholds was to be collected after consents were granted, which was not to say it had not happened, Mr Knight said. His modelling used initial fish feed volumes, which were half the maximum King Salmon had applied for.

Mr Knight admitted that using his model, even at minimum feed rates, nitrogen and phytoplankton levels at the proposed Papatua Farm in Port Gore were at the top of the scale. If feed was lifted to the maximum applied for, levels would soar off the scale.

This was only a model, but likely to be accurate for nitrogen where predicted levels were similar to King Salmon's existing Otanerau farm in Queen Charlotte Sound, he said. However, the model probably exaggerated phytoplankton levels. A suggested condition of consent for the farm would require King Salmon to compare the condition of environments where fish were farmed with "baseline" conditions at unfarmed sites.

Mr Knight said six to nine months of monitoring would be long enough to take seasonal variation into account, but agreed with Ms Bradley that more monitoring would be better. He also agreed it would be difficult to find unaffected sites for comparison because aquaculture was so widespread in the Sounds.

Questioned by Sustain Our Sounds lawyer Warwick Heal, Mr Knight agreed King Salmon was a major client of Cawthron but said there had been no pressure from the company to produce research that supported their application.

## **NITROGEN EFFECTS**

Proposed NZ King Salmon farms would introduce the equivalent nitrogen of:

70,740 people for Queen Charlotte Sound

135,585 people for Pelorus Sound

35,370 for Port Gore

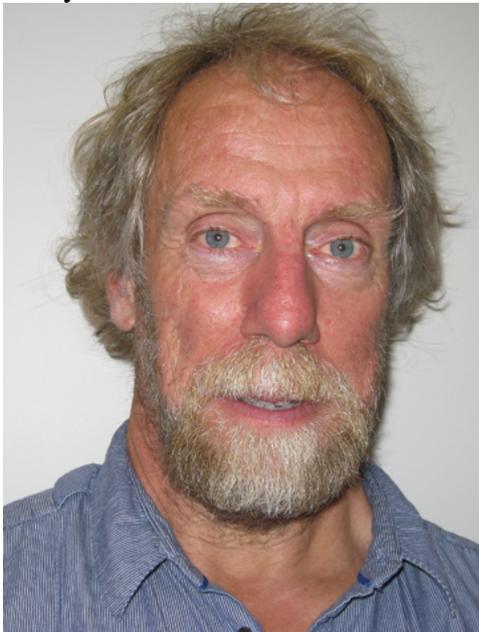
Source: Ben Knight, Cawthron

<http://www.stuff.co.nz/marlborough-express/news/7569369/Salmon-farm-feed-will-affect-Sounds>

The Marlborough Express, 29 August 2012

Inquiry should 'heed experts'

Penny Wardle



Sustain Our Sounds expert Rob Schuckard

The board of inquiry should give less weight to lay witness opinion than expert evidence during the hearing to decide whether New Zealand King Salmon can develop more fish farms in the Marlborough Sounds, one of the company's lawyers said yesterday.

Lawyer James Gardner-Hopkins was opening legal submissions at an Environmental Protection Authority hearing considering an application by King Salmon for a plan change and resource consents that would enable it to develop nine new farms in the Marlborough Sounds.

It was the second day of hearings in Blenheim at the FloorPride Marlborough Civic Theatre.

Most of the nearly 1300 submissions lodged on the application opposed the new salmon farms.

Mr Gardner-Hopkins said the number of submissions was not relevant, but their quality and legal relevance was.

People opposing the King Salmon application had indiscriminately quoted evidence on harmful blooms, Mr Gardner-Hopkins said.

This included Sustain Our Sounds experts Rob Schuckard and Helmut Janssen, who had "uncritically downloaded information on algal blooms from the web and pasted it into their documents without any evaluation of its significance for salmon farming in the Sounds".

Scientific uncertainty and caution were not reasons to decline a proposal and the Resource Management Act did not require a no-risk approach, Mr Gardner-Hopkins said.

King Salmon advocated adaptive management where effects were uncertain. This was learning by doing, monitoring effects, then making decisions.

Resource consents should include conditions with an ability to "remove all or some of a development if monitoring showed unacceptable effects on the seabed below farms or seawater further away".

Mr Gardener-Hopkins quoted evidence from King Salmon expert James Fairgray that the company would spend \$40 million developing its proposed new farms including \$29m in Marlborough and Nelson. An estimated \$880m contribution to the Top of the South economy included a processing factory in Picton, which might or might not be built.

Evidence from Professor Tim Hazeldine for the Marlborough District Council estimated benefits at \$9m a year.

Because of the difference between the two amounts, King Salmon commissioned a third report that estimated benefits at \$594 million.

<http://www.stuff.co.nz/marlborough-express/news/7569326/Inquiry-should-heed-experts>

Radio New Zealand, 28 August 2012

Submitter raises waste fears over salmon expansion

Some environmentalists liken the waste that would be created by the proposed expansion of New Zealand King Salmon's farms in the Marlborough Sounds to that made by people in a large city.

The salmon company wants to add nine more farms to the five it already has and is presenting its plan to the Environmental Protection Authority.

It says the proposed expansion would mean it would be farming a total of 14ha. The surface area of the Sounds is 150,000ha.

The application has attracted 1400 submissions, of which 800 oppose the development and 400 support it.

Counsel for environmental group Sustain our Sounds, Warwick Heal, says the effects on the water would be "catastrophic", like that made in a city of 400,000 people or 250,000 cows.

New Zealand King Salmon says this analogy is grand-standing and untrue.

Chief executive Grant Rosewarne says the analogy is false.

The other main opponent is Marlborough District Council.

King Salmon has spent \$9 million on the application. It is seeking to create more than \$200 million of additional value.

Mr Rosewarne says the company needs to expand to meet demand and it would have to consider expanding to Chile or the United States if the application is not successful.

The hearing continues on Tuesday.

<http://www.radionz.co.nz/news/rural/114282/submitter-raises-waste-fears-over-salmon-expansion>

Fisheries Information Service, 28 August 2012



A salmon farming centre belonging to New Zealand King Salmon. (Photo: Antoinette Bruno, The NZ King Salmon Company)

New Zealand King Salmon pushes forward with expansion efforts

 **NEW ZEALAND**  
Tuesday, August 28, 2012, 23:40 (GMT + 9)

[New Zealand King Salmon](#) (NZKS) could increase its output from about 8,750 tonnes a year to 22,000 if its application to develop nine new fish farms in the Marlborough Sounds is approved, announced aquaculture general manager Mark Preece.

This week, an Environmental Protection Authority hearing opened to consider an application by the company for a required plan change and resource consents.

King Salmon's move to expand came as a result of the climbing demand for farmed salmon and the firm's inability to supply it, said operations and contracts manager Mark Gillard, who managed the project.

The project entails obtaining new farms in Queen Charlotte and Pelorus Sounds and Port Gore in the outer Sounds, where the Marlborough District Council had decided to ban fish farming, *The Marlborough Express* reports.

When the company looked into turning its mussel farms into salmon farms in 1998, it found that of the 500 farms, only one might have met key criteria.

Gillard stated the board that the proposed sites were mostly:

- Deep because there was more space to farm fish;
- Cool so fish efficiently converted feed to flesh and stayed healthy;
- Fast-flowing to wash away waste and prevent it from settling;
- Sheltered so cages were not damaged by swells;
- Distant from significant landscapes, homes and beaches;
- Unlikely to clash with other water activities like boating, fishing and tourism.

To help NZKS farms assimilate with the landscape, camouflage colours would be used for nets and the barges where staff lived and fish feed was kept, Preece said.

Further, barges would be smaller than originally planned.

New Zealand King Salmon is thereby opening the way for the iwi to be allocated marine farming space, lawyer Derek Nolan said.

"For every hectare of space approved . . . for NZKS, an equivalent of 20 per cent of that space will be made available to iwi elsewhere," Nolan said.

Meanwhile, opponents of the expansion argue that an estimated almost NZD 900 million (USD 729.1 million) benefit to the Marlborough Sounds from extra salmon farm developments could cost New Zealand its international reputation, *Radio New Zealand* reports.

"There is a huge, overwhelming body globally who buy our products and do not see salmon farming as not being an environmentally friendly practice. And you compare the carbon footprint of producing their fish - it is probably one of the highest footprints that you'll find in an industry," said Danny Boulton, chair of environmental group Sustain our Sounds.

Boffa Miskell Ltd Director Sarah Dawson provided details of the plan change needed for NZKS to build its new farms and the conditions the company would have to meet.

The hearing is anticipated to last for 10 weeks.

**Related article:**

**[- New Zealand King Salmon faces efforts to halt its expansion](#)**

*By Natalia Real*  
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[www.fis.com](http://www.fis.com)

<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=28&id=54940&l=e&special=&ndb=1%20target=>

The Vancouver Sun, 28 August 2012

B.C. farmed salmon on menu at U.S. Open

Skuna Bay says deal with high-profile event an endorsement of local product

Tracey Sherlock



Food Network chef filleting his first Skuna Bay Salmon.

Vancouver Island's Skuna Bay Seafood will be providing its farmed B.C. salmon for the dining rooms at the U.S. Open Tennis Championship in New York this week.

Stewart Hawthorn, managing director and head farmer with Skuna Bay, said the company is thrilled to have its fish being served at the prestigious event. He declined to say what the

exclusive deal is worth, but said Skuna Bay would be shipping about 800 fish (about 8,000 pounds) to New York for the championship.

“For us, this isn’t really about the money. We are making a profit on these fish, but what’s really exciting is that this is farm-raised salmon from B.C. being eaten at one of the top sporting events in the world,” Hawthorn said. “They saw what we are doing and they wanted to be part of it. This is a real endorsement.”

Skuna Bay salmon — farmed in the ocean near Nootka Sound on Vancouver Island and just off the Sunshine Coast — has been on the market for less than a year, and the company has sold 153,000 pounds of farmed B.C. salmon in its first eight months of operation, the company said in a news release this week.

The deal with the U.S. Open came about when Ed Brown, a food consultant to the U.S. Tennis Association, became aware of Skuna Bay’s salmon, and made room for the fish on his menus.

“The U.S. Open tennis tournament is synonymous with ‘best in class,’ and we only select the highest-quality food to go with the world’s greatest tennis experience,” Brown said. “Skuna Bay provides consistently high standards for great salmon, and after visiting the farms personally and observing how their salmon are craft-raised with every detail considered before being sent to us in New York, I can see why they are able to achieve such consistently great quality.”



Chef from Disneyland weighing a salmon on a visit to a salmon farm.

Hawthorn said the company has changed everything from the way the fish is farmed to the way it gets to the customer.

“It’s B.C. salmon, which is the best salmon in the world. It’s hand-processed and hand-packed, and we’ve got 14 different criteria that every fish has to pass before being selected as a Skuna Bay salmon,” Hawthorn said.

The company packs and transports its salmon in a made-in-Canada recyclable cardboard box, which is sealed and signed by the specialist on Quadra Island who personally prepared the fish, Hawthorn said.

Skuna Bay’s salmon is “craft-raised,” which Hawthorn said means that the farmers are craftsmen.

“Our farmers live on the farm, so they really get in tune with the fish. They make decisions on how to look after the fish, not based on numbers, but based on their judgment, their knowledge and their experience,” Hawthorn said.

Farmed salmon is controversial in B.C., both because of ecological and health concerns.

Diseases can spread from farmed salmon to wild salmon, and because farmed salmon are held in such proximity the diseases can amplify, said Karen Wristen, executive director at Living Oceans Society, a non-profit organization that tries to protect Canada’s oceans.

There is also a risk to juvenile wild salmon from sea lice, and to stellar sea lions and seals, which can become caught in the nets and drown, said Wristen’s co-worker Kelly Roebuck, sustainable seafood campaign manager at Living Oceans Society.

The fish farmed by Skuna Bay is Atlantic salmon, which Hawthorn said are the best fish to farm in B.C. from an environmental perspective because they take less resources to raise. They cannot survive in the Pacific Northwest, so will not interbreed if they escape. Diseases are less likely to spread between the two groups, he said.

Last month, two B.C. fish farms — including one owned by Grieg Seafood, which farms for Skuna Bay — culled hundreds of thousands of their Atlantic salmon stock after testing confirmed a small percentage carried an infectious virus.

The virus can be deadly to Atlantic salmon, B.C. Agriculture Ministry fish pathologist Gary Marty told The Vancouver Sun earlier this month. He said the virus poses less risk for wild fish species native to the Pacific, which have a natural resistance.

Skuna Bay salmon is served at more than 400 restaurants in the United States, but Hawthorn declined to say if it is available in Vancouver.

The U.S. Open runs through Sept. 9.

[tsherlock@vancouver.sun.com](mailto:tsherlock@vancouver.sun.com)

<http://www.vancouver.sun.com/life/farmed+salmon+menu+Open/7158100/story.html#ixzz24v13NffX>

AgriMarine, 27 August 2012

AgriMarine to Supply Fresh Salmon to Ito-Yokado Retail Chain in the People's Republic of China

AgriMarine's China raised Fresh Chinook Salmon Enters Retail Stores in Beijing

AgriMarine Holdings Inc. (the "Company" or "AgriMarine") the leader in clean aquaculture technology, is pleased to announce that it has entered into an agreement with the Ito-Yokado grocery retail chain for the supply of locally produced fresh Chinook salmon from AgriMarine's closed containment freshwater farm in Benxi, China.

Previous harvests of Steelhead trout were sold through distributors to 5-star hotels and restaurants however the agreement with Ito-Yokado marks the Company's debut into the retail market. On August 28th, AgriMarine's salmon will be available initially at Ya Yun Cun Beijing Huatang Ito-Yokado with in-store promotions and marketing programs developed in cooperation with AgriMarine's Beijing sales staff. These programs will involve the branding of the product as Chinese produced in pristine waters of the northeast regions. The Company plans to ramp up deliveries to supply all 15 Ito-Yokado retail stores in the near future.

AgriMarine is the only company that raises salmon in China with floating closed containment technology. Operational advantages inherent with the AgriMarine System™, including the ability to moderate seasonal temperature extremes, allow for the production of high quality salmon from reservoirs that can be sold fresh, within 24 hours of harvest. This is a major consumer advantage over the imported Atlantic salmon that is currently available in that country.

AgriMarine's CEO Richard Buchanan said, "Ito-Yokado sees the opportunity to offer a salmon product with improved freshness over imports, to their customers in Beijing and they are launching our product in one of their largest stores in a high income community". He added, "Securing this supply contract is a significant step for the Company. It provides protection against price fluctuations, brings significant sales and cash flow, and demonstrates our ability to deliver quality Pacific salmon at competitive prices."

#### **About Ito-Yokado**

Ito-Yokado is a Japanese retailer, part of Seven & I Holdings Co. with 174 Ito-Yokado stores operating in Japan. The group has quickly expanded in China since 1997, where the company now operates 10 stores in Beijing, 5 stores in Chengdu, Seven-Eleven, Seven & I Restaurants, and plans for further expansion throughout China.

<http://agrimarine.com/news/agrimarine-to-supply-fresh-salmon-to-ito-yokado-retail-chain-in-the-peoples-republic-of-china>

The Herald, 27 August 2012

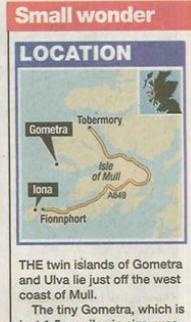
# Residents of tiny island to fight plan for salmon farm

Fears project would harm tourism and endanger lives

## EXCLUSIVE

DAVID ROSS  
HIGHLAND CORRESPONDENT

PLANS for a controversial salmon farm off one of the lesser-known Hebrides have split nearby communities amid claims the venture will damage tourism and make island life more dangerous.



Plans for a controversial salmon farm off one of the lesser-known Hebrides have split nearby communities amid claims the venture will damage tourism and make island life more dangerous



ISLANDERS: Gometra residents are unhappy.

David Ross Highland Correspondent

The divide emerged after campaigners pledged to fight proposals by the Scottish Salmon Company to establish the site just off Gometra, less than three miles from world-famous tourist destination Fingal's Cave on Staffa and nine miles from Iona.

Only five adults, and their children during the summer holidays, live on the island. They are all opposed to the plan.

However, there are others on Mull and Ulva who would welcome the jobs on offer from this scheme, along with another planned by the same company at nearby Loch Scridain. Seven jobs would be created between the two sites, in an area where employment opportunities are precious.

But Gometra islanders say the scale of the development is inappropriate, claiming the cages would stretch to the equivalent of five Wembley stadium football pitches, and the whole site equivalent to 42 Wembleys.

Crucially, the islanders fear the fish farm would make travelling to and from the island by boat more dangerous, forcing them out from the shelter of the island's north coast into more exposed water in Loch Tuath.

Gometra is connected by a bridge to the neighbouring island of Ulva but neither have proper roads. It takes about 50 minutes by quad bike and about one-and-a-quarter hours in a 4x4 vehicle to drive across rough hill tracks to get to the ferry to Mull at the east end of Ulva. By boat it is just 20 minutes, but the cages would be situated on that route.

Residents are also convinced the fish farm would damage the marine environment and kill the green tourism that brings people to see dolphins, porpoises, seal, basking sharks and minke whales. It is fear they would be repelled by the anti-seal sonar equipment the farm would use.

Gometra and Ulva are part of the Loch na Keal National Scenic Area (NSA), one of 40 such areas protected due to their outstanding scenery. Scottish Natural Heritage has told Argyll and Bute Council, which is due to consider the application next month, it opposes the application.

Mull Community Council said of the two sites: "We are frankly aghast that something of this scale is even being considered."

Iona Community Council also objects, not least because it would present "a direct conflict of interest with wildlife/eco tourism, which Mull and Iona are increasingly famous for and is now the basis of the local economy."

Roc Sandford bought the island 20 years ago when it was deserted and had one habitable house. He said: "This proposal would devastate the experience of living on the island or of visiting the Staffa Archipelago. If there is one place in Scotland not to site a salmon farm, this is it."

But there have been expressions of support from businesses on Mull and local residents.

Ulva resident Rebecca Munro, who lives close to where the fish farm would be located, reportedly said she was backing the development. She said: "There are a lot of people in favour but who don't speak up."

Stewart McLelland, chief executive of The Scottish Salmon Company said: "We have been overwhelmed by the local support for our plans to expand our operations in Mull."

A spokeswoman said it consulted with the Northern Lighthouse Board, Mull Aquaculture and Fishermen's Association, West Highland Anchorage and Mooring Association and the Royal Yachting Association, and none had raised concerns about navigating around the site.

<http://www.heraldscotland.com/news/home-news/residents-of-tiny-island-to-fight-plan-for-salmon-farm.18687755>

West Cork Times, 27 August 2012

Save Bantry Bay campaign seeks public support



Marine Harvest says the expansion will create jobs in Bantry Bay.

A CAMPAIGN opposed to the expansion of the Marine Harvest salmon farm at Shot Head in Bantry Bay is seeking support from local people in Bantry and Beara.

More than 7,000 homes will be receiving leaflets, distributed by An Post, from the Save Bantry Bay Committee (SBB) calling on all those living and working on the shores of Bantry Bay to oppose any new salmon farm.

“We need to make the people who live and work in Bantry Bay aware of what Marine Harvest plans to do and what effect this will have on the environment, both above and below the water in the bay,” said Alec O’Donovan of SBB.

Marine Harvest Ireland already farms 14 salmon cages at Roancarrig.

The cages, housing up to 40,000 salmon each, are overseen by 40 employees.

These comprise of office workers in Castletownbere and operatives who work in the bay maintaining the cages and harvesting the salmon.

Marine Harvest plans to invest €3.5 million in the project, which includes the creation of six full-time jobs during the farm set-up. When the farm is fully operational, it will provide a total of two full-time jobs.



The proposed location of the salmon farm. Pic: Google

The company has applied to fisheries Minister Simon Coveney and the Department of the Marine for a licence to add a further 14 cages at Shot Head.

The new site will cover almost 43 hectares of seabed and 1.5 hectares of water surface area.

This new development will enable Marine Harvest to move fish from one site to another, allowing a 'fallow' period in one location while the other continues to produce fish.

The SBB leaflet, which will be arriving in the post to households this week, claims that the waste from the fish farm is equivalent to the sewage of a town ten times the size of Bantry.

The development of the fish farm has proved to be a divisive issue around the bay with many local people also supporting the development.

Local fisherman and chairman of the SBB Kieran McCarthy is concerned for his own future fishing in Bantry Bay.

"My family has fished around Shot Head, the location of the proposed new farm, for three generations.

"This new salmon farm threatens local fishermen's livelihoods through the loss of trawling grounds to a non-Irish corporation.

"We are not against salmon farming but we feel that the way forward is to develop contained fish farms on land where all outputs can be controlled and disposed of in a method that is environmentally sound.

"We are urging residents to lobby their TDs, Senators, and Minister Simon Coveney, to read more, talk to others, and to get involved. The future of Bantry Bay is at stake," he concluded.

<http://westcorktimes.com/home/?p=11243>

The Mercury, 26 August 2012

Police block seal spraying

Nick Clark

TASMANIA Police concerns about misuse of capsicum spray by fish farm staff has stalled the industry's desire to use the spray against protected Australian fur seals.

The fish farming industry has been seeking approval from government agencies since 2010 to use OC spray as a deterrent because of a perceived occupational health and safety threat to farm workers from aggressive male seals.

However, Tasmania Police has so far refused to provide exemptions to the Police Offences Act that would allow the carriage of a dangerous article in a public place by workers.

It means that OC spray has not been used except in trials by farm workers to deter seals, despite then Environment, Parks and Heritage minister David O'Byrne approving the use of capsicum spray against seals in 2010.

Last year, the Department of Primary Industry, Parks, Wildlife and Environment issued 42 permits to staff of Tassal Operations and Huon Aquaculture.

In documents obtained under the Right To Information Act, Commissioner Darren Hine said Tasmania Police would be reluctant to issue the exemptions without criminal history checks of users. Mr Hine also told DPIPWE that an audit of 53 fish farm employees who had done an OC spray seal deterrent training course found one with an arrest warrant, two with a history of family violence, one with an outstanding drugs charge, and two with convictions for assault.

"The Department of Police and Emergency Management remains concerned at the potential for misuse or mismanagement of this potentially lethal substance," Mr Hine wrote to Department Secretary Kim Evans last year.

The spray to be used against seals would be 35 per cent cayenne pepper compared with the 5 per cent spray used by the police.

Mr Hine said police also had concerns the spray had not been used as a seal deterrent elsewhere in Australia and there had been no research published on the primary or secondary effects of the 35 per cent OC spray on humans.

"It is understood that the marine farm workplace has a transient employee population working in often harsh conditions which does not attract people who are always of good repute," a briefing note for Commissioner Hine said.

DPIPWE manager of wildlife management Will Joscelyne said the marine farming industry was still seeking approval to use OC spray.

In its annual report last week Tassal said seal interactions were increasing each year.

"Seals are attracted to salmon farms because of food availability and commonly directly interact with our farms by chewing through nets, jumping over handrails and entering the sea pens," it said.

Other seal control measures include explosive devices and beanbags shot from a 12-gauge shotgun.

Tassal killed eight seals last year and relocated 183.

[http://www.themercury.com.au/article/2012/08/26/356451\\_most-popular-stories.html](http://www.themercury.com.au/article/2012/08/26/356451_most-popular-stories.html)

Nanaimo Daily News, 25 August 2012

Fish farms must protect wild salmon stocks

Re: 'Column claims about fish farming questioned' (Daily News, Aug. 13)

It is no surprise that Grant Warkentin, spokesperson for Mainstream Canada, continues to defend the industry that employs him. It is no surprise that he trumpets the same selective science that clumsily attempts to blame the IHN outbreak on wild salmon.

It is no surprise Warkentin and others choose to ignore the phenomenal amount of research and documented evidence showing there is no way to farm salmon in wild salmon habitat without doing significant damage.

So I guess we should not be surprised when Warkentin and others make statements such as: "Many people in my company, including myself, love sport fishing and don't want to see any harm come to wild salmon."

Reading such comments from those who participate in an industry that poses a devastating threat to wild salmon is like a slap in the face. They may believe that what they are doing is for the greater good of the economy but no amount of jobs can make up for negative impacts to wild salmon stocks.

Warkentin and others in the industry repeatedly claim their goal is to keep their fish healthy, as though that goal somehow makes the actual practice OK. In spite of that goal, there have been enough outbreaks of parasites and viruses in the history of salmon farming in B.C. that indicate an inability to meet whatever high standards they claim to have for keeping their fish "healthy to harvest."

Perhaps Warkentin can explain why under "A Proposed Regulatory Regime to Manage the Release of Aquaculture Substances" on the DFO website it states that: "Under some circumstances, under the Health of Animals Act, the Canadian Food Inspection Agency may need to treat wild fish populations to control fish pathogens that may have been introduced into Canadian waters."

In spite of numerous attempts to get answers about this from DFO staff, there has been no response as to why on earth wild salmon should need to be treated for an introduced pathogen, and it's pretty safe to say it's not Mr. Smith's cold that introduced the pathogen.

Mr. Warkentin, if you and your colleagues truly cared about wild salmon you would put your efforts to getting those farms away from wild salmon stocks which you should do regardless since you're so convinced that wild salmon are spreading IHN to your farmed salmon.

*Elena Edwards, Quadra Island*

<http://www2.canada.com/nanaimodailynews/news/upfront/story.html?id=bdaf0f12-9d3c-4d39-8107-1b46a563471e>

Nanaimo Daily News, 25 August 2012

CFIA continuing with salmon disease control

Re: 'Government testing of salmon a flawed process' (Daily News, Aug. 21)

Alexandra Morton's assertion that farmed salmon are not being monitored for infectious salmon anaemia is untrue.

Monitoring farmed salmon for infectious salmon anaemia is an established provincial and industry practice. These monitoring activities are guided by internationally accepted science. Furthermore, the surveillance initiative announced by the Canadian Food Inspection Agency earlier this year supplements the existing farmed salmon testing by focussing on wild fish off the B.C. coast.

Results from wild fish will be combined with those from farmed fish to provide a comprehensive picture of salmon health on Canada's West Coast.

Based on a scientific assessment of these results, the Canadian Food Inspection Agency will determine if additional testing is required. Any detection of infectious salmon anaemia in farmed salmon will be managed with science-based disease control measures, which may include quarantine and humane destruction and disposal.

We remain committed to keeping Canadians informed of our disease control measures and surveillance results.

Dr. Ian Alexander, executive director, Animal Health Directorate Canadian Food Inspection Agency

<http://www2.canada.com/nanaimodailynews/news/upfront/story.html?id=88f40cdc-7d4e-41c6-8c47-6552ff2bbcb3>

Nanaimo Daily News, 24 August 2012

Claims about salmon viruses simply incorrect

Re: 'Government testing of salmon a flawed process' (Your Letters, Aug. 21)

As the fish pathologist for the B.C. Ministry of Agriculture, I am disappointed to see Alexandra Morton continue to mislead readers with inaccurate statements about salmon diseases in British Columbia.

She says that the farmed Atlantic salmon virus "infectious salmon anemia virus (ISAV) is one of these farm animal influenzas and it has spread everywhere large numbers of Atlantic salmon are raised in ocean pens." This statement has two errors.

First, ISAV is not an influenza virus; instead, it is an isavirus. And second, B.C. has millions of Atlantic salmon raised in ocean pens but no confirmed evidence of ISAV. This conclusion is supported by thousands of tests, including all results reported by Alexandra Morton.

Morton said that "I found (ISAV) in B.C."

This is not correct. It has now been 10 months since Morton first reported positive PCR test results for ISAV in fish that had no evidence of the disease ISA, but her test results have not confirmed either the ISA virus or the ISA disease.

Unconfirmed PCR test results that are not related to disease are usually false positives. False positive test results are not a threat to either wild or farm salmon.

Morton also said that "during the (Cohen) inquiry we learned DFO found 100% of the Cultus Lake sockeye . . . had tested positive for this virus."

This is not correct. Researcher Molly Kibenge sequenced her PCR product and reported that "The sockeye clones do not resemble any ISAV isolate" and, they "show homology to short sequences of human, mouse, rat and zebrafish clones" (Cohen Commission Exhibit 2140).

These results are called "nonspecific amplification." It means that the test did not work properly and needs to be redone. Tests that do not work properly are not a threat to wild or farm salmon.

Finally, Morton says that "CFIA will not be testing the millions of farm salmon being raised among the wild salmon" and, "The status of these viruses in salmon farms will be left to the industry to report." The first statement is misleading; the second is not correct.

DFO's website "Fish Health Management in the Pacific Region" clearly describes their extensive fish health program that tests for ISAV in fish that die on the farms. CFIA sees these results, and the B.C. Ministry of Agriculture runs these tests for DFO. So far this year, ISAV test results on all 341 farm salmon analysed as part of this program have been negative - no virus.

For early detection of disease, I estimate that testing fish that die on the farms is 400 times more sensitive than random testing of live fish or harvested fish. This means that this year, DFO has tested the equivalent of 136,400 of the supermarket fish tested by Morton.

Alexandra Morton is a great story teller, but much of what she says is just that: a story.

For the best information about salmon diseases and their control, I depend on CFIA, DFO, and the fish farm veterinarians.

*Gary Marty B.C. Ministry of Agriculture*

<http://www2.canada.com/nanaimodailynews/news/upfront/story.html?id=48b60ebb-b141-48a1-9821-7f38bcb428a5>

The Marlborough Express, 24 August 2012

Salmon farms reel in conflict

Penny Wardle



The economic benefits of nine new salmon farms will be weighed against their impact on the Marlborough Sounds and the effects on people who live, work and holiday there, in a hearing that opens in Blenheim on Monday.

The Environmental Protection Authority board of inquiry, which is expected to sit for up to 10 weeks, will hear arguments for and against a proposal that has polarised the Marlborough community.

King Salmon and its experts will work to convince the board that nine new fish farms would create jobs, income and export earnings. Their evidence will suggest the development is compatible with what company advertising describes as the "pristine waters" of the Marlborough Sounds.

Conspicuous by his absence from the list of King Salmon witnesses is chief executive Grant Rosewarne, who has been the company frontman leading up to hearing. Other company managers will be among those opening the case for the company with a nuts-and-bolts description of salmon farming in the Sounds.

Roughly two-thirds of the nearly 1300 submissions to the authority on the expansion plans opposed the proposal. This opposition, especially from the Marlborough District Council, has taken King Salmon managers by surprise. Early this year the company released a survey suggesting 68.5 per cent of Marlborough people knew about its expansion plans and 53.5 per cent supported the plans.

The council says King Salmon has challenged its Marlborough Sounds Resource Management Plan - which is based on 35 years of community input - with its plan to farm in an area where aquaculture is prohibited. The council's evidence will suggest the application overstates economic benefits and understates the environmental effects of the fish farms.

A key topic will be the effects on the water column, from the seabed to the sea-surface. Experts on both sides will use computer models to predict where waste from the farms could spread.

The Department of Conservation will argue that King Salmon has not given a full picture, ignoring combined effects of existing and new farms and underestimating increases in algal blooms.

Other topics will include seabed effects, marine mammals, seabirds, recreation and tourism, landscape, economics and navigation.

Iwi evidence will possibly be heard at Waikawa Marae, in Picton, and the hearing might also shift to Portage Resort Hotel in the Sounds for a day.

The Government backs the aquaculture industry's goal of increasing annual sales to \$1 billion by 2025, through the Primary Industries Ministry aquaculture strategy. In October last year

its Aquaculture Legislation Amendment Act cleared the way for King Salmon to apply for a plan change to move into new areas.

The Environmental Protection Authority works to tight timeframes and there is no right of appeal, except on points of law. This is seen by some people as the Government pushing through a development it supports because it will earn foreign exchange.

King Salmon released the proposed location of its farms in October last year and publicly notified its proposal in April. Under this process, the public had 20 working days to digest thousands of pages of information and make submissions.

A diverse range of people and organisations, including protest group Sustain Our Sounds, college students, Sounds property owners, boating organisations, fishing clubs, iwi, businesses and the Environmental Defence Society of resource management professionals will give evidence at the hearing, as well as King Salmon experts.

Some submitters are worried the board will pay more attention to witnesses with academic qualifications than people with hands-on experience of the Sounds.

They say their home and business life suffers as they devote so much time, energy and money to the case. Meanwhile, Mr Rosewarne says King Salmon is spending \$8 million on a hearings process he sees as over-rigorous.

## **THE BOARD**

The Environmental Protection Authority board of inquiry, which will decide whether New Zealand King Salmon can develop new farms in the Marlborough Sounds, comprises:

**Judge Gordon Whiting, chairman.** Has overseen resource management cases, including an Environment Court hearing which gave TrustPower consent to build a hydroelectric power scheme along the Wairau River in 2010.

**Commissioner Helen Beaumont.** Assistant Parliamentary Commissioner for the Environment in 2000-07. She sat with Judge Whiting on the Environment Court panel for the TrustPower hearing in 2010. She is qualified in chemistry and interested in connections between the quality of the environment and human wellbeing.

**Michael Briggs.** An accredited hearings commissioner for the Marlborough District Council, responsible for sign-off on non-notified resource consent hearings. In 1980-2001 he was an elected member of the Marlborough county and district councils.

**Edward Ellison.** A hearings commissioner for the Marlborough District Council, Environment Canterbury and other South Island councils. He has been a member of government advisory boards on biosecurity, the Emissions Trading Scheme, cultural matters and water management. He chairs Te Runanga o Otakou (Otago Peninsula), environmental consultancy Kai Tahu ki Otago Ltd and Te Runanga o Ngai Tahu's hazardous substances and new organisms committee.

**Mark Farnsworth.** A hearings commissioner who has been a member of a government aquaculture technical advisory group and a ministerial advisory panel on aquaculture. Was

chairman of the Northland Regional Council for nine years and a member of an Environment Ministry advisory board for its "making good decisions" programme. He has chaired and written decisions on a range of resource consent applications.

<http://www.stuff.co.nz/marlborough-express/news/7539693/Salmon-farms-reel-in-conflict>

The Chronicle Herald, 23 August 2012

Minister gets earful from fish farm foes

[By PAT LEE Staff Reporter](#)

Environment Minister Sterling Belliveau received an earful from those opposed to open-pen salmon farming on the Eastern Shore when he toured Murphy Cove on Wednesday.

The owner of a campground and kayaking operation who is concerned about the impact on his business invited Belliveau to tour the scenic Halifax County area.

Wayne Mundle, an Association for the Preservation of the Eastern Shore member, said about 18 boats gathered around when the minister was taken on the cove tour. Some protesters took the opportunity to declare their displeasure with Belliveau either face to face or via banners.

“We just don’t see it as a healthy industry,” Mundle, who was at the protest, said later from his Mushaboom home.

“We don’t want to see this spread until they resolve the type of issues that (aquaculture farms) have been facing.”

He said he supports enclosed, land-based fish farms.

The Dexter government has financially and philosophically supported open-pen salmon farming in Nova Scotia.

Earlier this year, the province announced that it was lending \$25 million to Cooke Aquaculture to expand its operations in Shelburne, Digby and Truro.

In the spring, Cooke had to kill hundreds of thousands of salmon because of an outbreak of infectious salmon anemia in pens outside Shelburne Harbour.

Belliveau told protesters that the industry is providing much-needed jobs in rural areas.

Several groups have asked for a moratorium until a full environmental assessment can be done on open-pen farming to determine its impact on wild salmon, the lobster fishery and residents and visitors.

Snow Island Salmon Inc., a subsidiary of Loch Duart of Scotland, wants to develop salmon farms in Spry Harbour, Shoal Bay and Beaver Harbour, all on the Eastern Shore.

[\(plee@herald.ca\)](mailto:plee@herald.ca)

<http://thechronicleherald.ca/novascotia/129149-minister-gets-earful-from-fish-farm-foes>

Cermaq, 23 August 2012

Cermaq ASA : Mainstream Norway depopulates one site in Finnmark due to PD

Mainstream Norway has confirmed PD (Pancreas Disease) at the farming site Ytre Kloven in Langfjorden in Finnmark, Norway.

Mainstream alerted the Food Authority yesterday about suspected PD at the site, but the company's own tests results which were completed this evening confirmed PD. The site contains 740,000 fish of average weight 0.7 kg.

Depopulated of the site will be started immediately, not awaiting the Food Authority's testing or possible requirements from the Food Authority.

The current book value of the biomass is approximately NOK 20 mill.  
The site was planned harvested in second half of 2013 delivering approximately 3.7 thousand tonnes gutted weight.

PD was last seen in Finnmark in 2008. As a part of Mainstream preventive fish health practice fish in Ytre Kloven were screened (by RT-PCR) for PD in July and found negative.

Mainstream has two other sites in Langfjorden area. New testing on PD will be initiated on these sites as a part of the monitoring of the situation.

This information is subject of the disclosure requirements pursuant to section 5-12 of the Norwegian Securities Trading Act.

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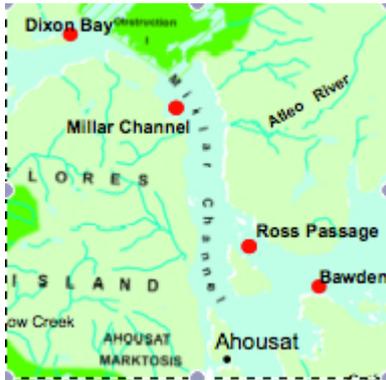
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Friends of Clayoquot Sound, 23 August 2012

## Mainstream cuts corners on fish health



There was a second outbreak of the IHN virus in July at Mainstream Canada's Millar Channel salmon feedlot here in the Clayoquot Sound UNESCO Biosphere Reserve.

The salmon farming industry claims that they are very concerned about fish health. A video produced by the BC Salmon Farmers Association states that "we vaccinate the fish to ensure that the endemic diseases which are prevalent in the open ocean do not affect our stocks".

[Watch video.](#)

However, according to Gary Marty, a veterinarian and fish pathologist for BC's Ministry of Agriculture, Mainstream Canada did not vaccinate fish at their Clayoquot Sound farms. [Read story.](#)

Mary Ellen Walling, executive director of the BC Salmon Farmers Association stated in the Times Colonist newspaper that some companies have been reluctant to use the vaccine as it has not yet been proven in real-life settings and because it is extremely expensive. This seems to contradict the "fact" in the industry video. [Read story.](#)

Mainstream Canada is currently applying for a new open net-cage salmon farm at Plover Point, on the shore of Meares Island, just 12 kilometres northeast of Tofino. The environmental assessment has been completed by Department of Transport. On pages 38 and 39 of their report we find this: "In the proponent's HMP [Health Management Plan], there will be specific measures to mitigate risks of transfer of disease...which include the following...vaccination to protect against infectious disease agents that the fish will be exposed to in the environment...".

Clearly IHN virus is one of the infectious disease agents Mainstream's fish may be exposed to at their proposed Plover Point feedlot. They state in their application that they would vaccinate against such 'agents'. Yet they clearly didn't vaccinate against IHN virus at Dixon Bay and Bawden Point.

It is time to end this madness. The solution is simple: get these salmon feedlots out of the ocean and into closed containment on land.

In the meantime, Plover Point must not be approved. Please sign our petition asking Christy Clark to not approve the seabed lease for Plover Point. [Sign petition here.](#)

*by Dan Lewis, Executive Director, Friends of Clayoquot Sound*

<http://focs.ca/2012/08/mainstream-cuts-corners-on-fish-health/>

Alexandra Morton, 22 August 2012

### Virus trackers

This summer I have been traveling throughout BC with a small dedicated group sampling salmon and other fish to map out where the European farm salmon viruses are showing up. First Nation, sport and commercial fishermen have been extremely patient, allowing us to measure, weigh, photograph and sample their fish as they work to preserve their catches. We have been invited into some of the most exclusive and private fishing grounds in BC, places owned by generations of First Nation families. The heat has been blistering and the walks into these places down steep slopes or along very active train tracks, but always we are given generous assistance.

I have spoken with many experts about the salmon.



In addition to taking samples, we examine all the organs and note what we see, in hopes of putting together a field guide people can use themselves. Is the fish yellow, does it have red speckles, are the fins bright red at the base, does the spleen have crisp sharp edges or is it swollen and enlarged. Each fish has a story and it is fascinating learning the language staring at the organs arranged for a picture.



I have learn first hand of the danger of fishing in the Fraser River, people value salmon so highly they are willing to suffer the risks.



When a TV news program aired footage of dying herring, pilchard and mackerel a team went there. Jody and Farlyn caught this footage of dying mackerel, spinning and drifting up on the beach.

[China Beach Mackerel Dying](#) from [Alexandra Morton](#) on [Vimeo](#).

The reason I do this is to protect my home. Blackfish Sound, August 20, 2012.

You can [email](#) me if you have concerns about the fish near you. I am getting emails weekly about white milky balls in the flesh of the fish, and other things that concern people. We can't reach everyone, but if you could photograph your fish with the date and location on a small piece of paper in the photo, we can begin to track many things and build teams to respond to the various issues.

We will send you a kit and data sheets if you are in a place we cannot reach.

I have written to DFO about the farm salmon culled near the mouth of the Fraser River for the IHN virus - noted as deadly to juvenile sockeye by scientists during the Cohen Commission into the decline of the Fraser sockeye (Technical Report #1). While they promised an answer by the week of the 13th, there has been none. I have also asked the salmon farmers who "owned" the fish, Norwegian Grieg Seafoods, what strain of IHN virus it was. They blame the wild salmon so this should not be a problem for them to reveal, but they will not say. If I knew I could track it.

I am out the door now to continue this work - thank you all for your help. I feel certain salmon farms are spilling lethal salmon viruses into BC waters and that these viruses are killing BC wild salmon. But I am not just talking about this, I am doing the work to map this out so anyone who wants wild salmon to survive can make up their own minds whether salmon farms must get out of the ocean.

If we want wild salmon it is up to us.

Read in full with photos online via:

[http://alexandramorton.typepad.com/alexandra\\_morton/2012/08/virus-trackers.html](http://alexandramorton.typepad.com/alexandra_morton/2012/08/virus-trackers.html)

CBC News, 22 August 2012

Protesters crash fisheries minister's salmon farm tour

Paul Withers



A flotilla of protest boats met Sterling Belliveau as he toured the proposed site of a new fish farm. (Fernande Devost/CBC)

Opponents of salmon farms pursued Nova Scotia Fisheries Minister Sterling Belliveau on land and sea Wednesday.

Belliveau was touring the proposed site of a salmon farm at Shoal Bay on the province's Eastern Shore. It's one of three locations in the area where the Scottish aquaculture company Loch Duart Ltd. wants to grow 500,000 salmon.

When the minister arrived at the site on a tour boat he was met by about a dozen boats draped with placards protesting the project.

The encounter was largely respectful but the minister was taunted with threats that the NDP will lose votes for its policy of promoting aquaculture.



*Sterling Belliveau speaks to protesters during a aquaculture protest on the Eastern Shore. (Fernande Devost/CBC)*

On a gently bobbing sea, Belliveau defended aquaculture saying it poses no threat to traditional fisheries. He also said current sites occupy a tiny fraction of coastline.

The minister did not persuade the protestors, who fear chemicals and feces from the fish farm will pollute local lobster grounds.

After the encounter both sides separated and returned to shore but the protestors were not finished. They briefly blocked the minister and his vehicle from leaving a local campground.

<http://www.cbc.ca/news/canada/nova-scotia/story/2012/08/22/ns-salmon-flotilla-minister.html>

The Courier-Islander, 22 August 2012

'Depopulation' unfortunate key word in some farm sites

Dan MacLennan

The IHN virus continues to play havoc with BC Fish Farms, making 'depopulation' a key word in 2012 aquaculture industry reports.

Last week Mainstream Canada announced it was killing all the fish at its Millar Channel farm, northwest of Tofino, following a positive infectious haematopoetic necrosis virus test. The Canadian Food Inspection Agency (CFIA) ordered Mainstream to depopulate roughly 400 tons of fish at the site.

The fish had been in the water about six months. On Thursday, Mainstream announced the last of the fish had been killed and taken to a rendering facility. The company said it was focusing on developing a plan for cleaning and disinfecting the farm site as required by CFIA.

"This is an unfortunate incident, but we are pleased with how smoothly the depopulation procedure went considering the situation," said Fernando Villarroel, Mainstream Canada's managing director.

"We are pleased with how the CFIA acted quickly to confirm the virus. Early detection of infectious diseases and swift and decisive actions help the long term sustainability of our business as responsible farmers."

For Mainstream, this marks the second depopulation of a farm this year due to the IHN virus. Mainstream killed off roughly 570,000 Atlantic salmon, about 1.2 million pounds of fish, at its Dixon Bay farm after an IHN outbreak in May. Mainstream Canada is one of the largest salmon farming companies in BC, with 27 farm sites, four land-based hatcheries, one processing plant and over 260 employees.

Meanwhile Grieg Seafood BC confirmed last week it had completed depopulation of its Culloden Point fish farm in Jervis Inlet on the Sunshine Coast, following a positive IHN test result.

"There were 316,000 fish on the farm with an average weight of about 500 grams," Grieg's managing director Stewart Hawthorn told the Courier-Islander. "That made a total biomass of approximately 150MT (metric tonnes). By way of comparison, we harvest approximately 75 to 100MT of fish every day."

Hawthorn said the fish had spent just over a year in a freshwater nursery and had been at the sea farm for eight months.

"This IHN challenge was the first time that Grieg Seafoods BC Ltd. has ever been affected by any virus health issue at any of our farms in more than 12 years of growing fish here in BC," Hawthorn said. "It was very disappointing and the whole team was saddened by what we needed to do." He said the company acted quickly and in a responsible manner

"The positive result was confirmed on August 7 - all of the fish were removed by August 9. Such early and swift detection and action is evidence of the effectiveness of our fish health monitoring system and our responsible approach to fish farm management. These health challenges are an infrequent but normal part of farming natural food.

"While almost all of the fish at this farm were in good health we know that fish at farms with any confirmed incidence of IHN virus have a poor prognosis. The right and responsible response was to quickly and humanely remove the fish before their health might be compromised and, of course, to prevent the virus from spreading to other farms."

Earlier news reports stated Mainstream had harvested its Bawden Point farm fish after a weak positive IHN test, but the company said fish were not harvested as a result of the test results, because additional testing found no IHN.

"Bawden was not positive for IHN," said Mainstream's Laurie Jensen. "As the fish are now harvest size, a scheduled harvest continued as planned but not because of any tests."

<http://www.canada.com/Depopulation+unfortunate+word+some+farm+sites/7126800/story.html>

Nanaimo Daily News, 21 August 2012

Government testing of salmon a flawed process

Re: 'CFIA committed to disease control process' (Your Letters, Aug. 16)

While I appreciate the concept that the CFIA is committed to the health of wild salmon, I cannot understand how they can fulfill this role if they refuse to examine Atlantic salmon.

When Dr. Ian Alexander, executive director of the Animal Health Directorate Canadian Food Inspection Agency, says he is working to "determine the status of three diseases in B.C. - infectious haematopoietic necrosis, infectious pancreatic necrosis and infectious salmon anaemia" he fails to say CFIA will not be testing the millions of farm salmon being raised among the wild salmon.

The status of these viruses in salmon farms will be left to the industry to report.

Influenza viruses in farm animals are well-known, that is why wild birds, deer and Bison are strictly kept out of contact with feedlot chickens, pigs, cattle, etc.

Infectious salmon anemia virus is one of these farm animal influenzas and it has spread everywhere large numbers of Atlantic salmon are raised in ocean pens. Viruses are not at all contained in salmon farms, government scientists report 650 billion viral particles can flow out of an infected salmon farm per hour.

This virus is internationally reportable and the Inquiry into the decline of the Fraser sockeye re-opened last winter when my colleagues and I found it in B.C., despite assurances from government and industry that is not here. Dr. Kim Klotins of the CFIA testified that if ISA virus is confirmed in B.C., some countries might refuse to buy B.C. farm salmon. B.C.'s Minister of Agriculture, Don McRae told the Legislature that following the positive tests for this virus, U.S. and Asian lawmakers were pushing to close their borders to B.C. farm salmon.

Also during the inquiry we learned DFO found 100% of the Cultus Lake sockeye (the most endangered Fraser sockeye stock) had tested positive for this virus and they never revealed this information to the inquiry nor the Stó:l Nation.

The international response to salmon influenza is to kill the infected fish. If the CFIA is going to test wild salmon, they must also test farmed salmon otherwise we could find ourselves in a situation where the wild salmon are being culled to protect the farm salmon. In fact there is a DFO website suggesting this: "Under some circumstances, under the Health of Animals Act, the Canadian Food Inspection Agency may need to treat wild fish populations to control fish pathogens that may have been introduced into Canadian waters."

There is no "treatment," other than culling.

There is something wrong when the virus is easily found in farmed salmon in supermarkets, but there is no government followup to track it to source, nor any testing of the Norwegian industry fish at all, and the only government admission that fish pathogens may have been introduced to B.C. is culling wild salmon.

Alexandra Morton Echo Bay

<http://www.canada.com/Government+testing+salmon+flawed+process/7122838/story.html>

The Nanaimo Daily News, 21 August 2012

Much has changed in aquaculture in the past decades

Ian Roberts

Back in 1988, there were 5.1 billion reasons why I chose aquaculture as a career. Today, there are more than seven billion reasons.

In the 1980s I knew that aquaculture would become an increasingly important solution to feeding a growing world population.

Today, it has done exactly that, by surpassing the global catch of wild fish and reducing fishing pressure on many wild stocks traditionally targeted to feed more than 7.061 billion people on the Earth.

So many things have changed since I began farming salmon 25 years ago. For example:

- . Underwater cameras now monitor feeding to ensure little is wasted;
- . Effective vaccines continue to improve fish health;
- . Land-based recirculating aquaculture systems continue to advance and now provide much larger smolts ready for saltwater;
- . Improved feed diets ensure a healthy, nutritious fish and efficient use of our planet's resources;
- . Science-based ocean bottom monitoring ensures that the farm site can continue to operate, sustainably, with little impact on the surrounding environment.

What I didn't know when I first started a career in aquaculture is that it would become a controversial subject here in British Columbia. Some concerns are well-founded - we need to take care of our oceans and life within them. But others are less genuine - perhaps more market driven or ideological based. Regardless of motive, these concerns have spawned a change in my career path - still a fish farmer - I've just traded in my feed scoop for a career in communications.

When we began perfecting the art of growing fish, we neglected to tell our neighbours how we do it and how we strive to do it better. We did a poor job communicating our business. Today that has changed. Not only do we commit to improving operations, we invest much effort in providing British Columbians with important information about our farm practices.

So much so, that this transparency exceeds any other agriculture sector. We're proud of this. But an column that appeared in the Nanaimo Daily News on Aug. 14 (Protecting wild fish must be made a priority") illustrates that communication efforts need to continue or even increase.

The opinion piece contained numerous incorrect statements about fish viruses and farming impacts - just the kind of persistent untruths that are so frustrating to the committed workers on B.C. salmon farms.

I'm sure that by now there has been a letter to the editor correcting those falsehoods in the opinion piece, but just in case you missed it, here are the highlights:

- . A single drop of sea water contains about a billion viruses and a few of these viruses, some harmful, most not, may be found naturally in both wild fish and also farm-raised fish. None that may affect our fish are a concern to human health;
- . Regular scientific testing shows that exotic viruses or diseases are not being introduced into Pacific waters and fish;
- . Much scientific study and recent strong returns of wild salmon indicate that both wild fish and farm-raised fish can co-exist in B.C. waters.

Regardless of whether you're a proponent or opponent of fish farming, we all have a same motivation. That is, to take care of our oceans. For salmon farmers, we want to care for the oceans not only because it's important to our coastal home, but because it's critical to our success. This care is also imbedded in the strict regulations we operate under. These

regulations help ensure that an aquaculture site is being farmed in a sustainable manner that can continue to provide food for future generations.

Jacques Cousteau once said "We must plant the sea and herd its animals using the sea as farmers instead of hunters."

His point is a critical one. The world is no longer talking about whether aquaculture should happen but how to make sure it's done well.

I agree and feel British Columbia will benefit from a conversation free of misinformation.

Ian Roberts is a graduate of Sir Sandford Fleming's aquaculture technician program and is Marine Harvest's manager of communications.

<http://www.canada.com/Much+changed+aquaculture+past+decades/7122840/story.html>

Sit News, 20 August 2012

### Coastal Management Program Critical to Keeping Out Fish Farms

(SitNews) - A state law banning finfish farming will be rendered useless in offshore waters if Alaska does not restore its coastal management program. Representative Paul Seaton (R-Homer), a long-time advocate for Alaska's commercial fishing industry, says if voters do not approve the coastal management initiative, the state would be powerless to stop development of fish farms in federal waters. "We've outlawed fish farms in Alaska waters," Rep. Seaton said. "The last thing we want to do is open the door to fish farms offshore. That would be devastating to our fishing industry."

The federal Offshore Aquaculture Act would enable establishment of fish farms in the 3- to 200- mile zone of federal waters. "Since that federal law specifically does not supersede the Coastal Zone Management Act," Seaton said, "the best way to keep fish farms – which are banned in Alaska – from developing off our shores is to reinstate the coastal management program to the Jay Hammond form."

An August 2010 Congressional Research Service report on the Open Ocean Aquaculture Act makes clear states with approved coastal management plans have the upper hand in permitting offshore fish farms. "Without a coastal management program," Rep. Seaton said, "we risk all our good work in protecting our wild fisheries."

According to that report, "For aquaculture projects in offshore federal waters, the lead federal permitting agency must assure consistency with approved programs in adjacent states under the Coastal Zone Management Act (16 U.S.C. §§1451, et seq.). In addition, state waters would be traversed both to operate open ocean aquaculture sites and to bring harvested fish ashore for processing. States with approved Coastal Zone Management plans may veto federal permits for activities that are inconsistent with the state's federally approved plan. This oversight ensures that operations in federal waters will neither harm the state's interests nor be inconsistent with state policies."

Without a coastal management program in place, the fate of offshore finfish farm development is in the hands of the federal government, multinational corporations, and

lawyers, not Alaskans. “Our only chance to take back control for Alaskans,” Rep. Seaton said, “is to pass Ballot Measure 2 and let the Legislature fine-tune it when they reconvene.”

“Alaskans should vote YES on the coastal management issue to preserve the significant local voice on coastal projects in their region, Seaton said. “Without the local coastal plan to address the physical differences between the regions, big government agencies make all the decisions on the one-size-fits-all basis of either nationwide or statewide standards, which by definition, does not deal with the regional differences.”

The coastal management initiative is sponsored by the Alaska Sea Party, a group of municipal officials, local leaders, and interested voters committed to restoring Alaska’s voice in coastal development decisions. Top contributors are the North Slope Borough, Bristol Bay Native Corporation, and the Alaska Conference of Mayors. More than 33,000 Alaska citizens signed a petition to place the issue before voters statewide. Ballot Measure 2 reestablishes the policy board and the coastal districts of the original Hammond-era program, which received federal and state approval.

The top contributors to the Alaska Sea Party are: North Slope Borough (Barrow, Alaska); Bristol Bay Native Corporation (Anchorage, Alaska); and the Alaska Conference of Mayors (Juneau, Alaska).

Voters will decide on Ballot Measure No. 2 at the Alaska Primary Election on August 28, 2012.

[http://www.sitnews.us/0812News/082012/082012\\_coastal\\_management.html](http://www.sitnews.us/0812News/082012/082012_coastal_management.html)

Fisheries Information Service, 20 August 2012



Offloading fish at Millar Channel farm. (Photo: Mainstream)

Mainsteam's Millar Channel salmon farm is now empty



**CANADA**

**Monday, August 20, 2012, 23:10 (GMT + 9)**

The remaining fish from Millar Channel farm have been removed and taken to a rendering facility, and thus, the site is now empty.

[Mainstream Canada](#) is now focused on developing a plan for cleaning and disinfecting the farm site, as per the requirements of the [Canadian Food Inspection Agency](#) (CFIA).

"This is an unfortunate incident, but we are pleased about how smoothly the depopulation procedure went considering the situation," said Fernando Villarroel, Mainstream Canada's managing director. "We are pleased about how the CFIA acted quickly to confirm the virus. Early detection of infectious diseases and swift and decisive actions help the long term sustainability of our business as responsible farmers."

On Friday, 27 July, the infectious haematopoietic necrosis (IHN) virus was detected after routine monitoring at one of Mainstream Canada's Tofino-area smolt farms. The detection was reported to the CFIA, which quarantined the site.

On Tuesday 7 August, CFIA reported that the presence of the virus had been confirmed, and issued an order to depopulate the site.

The initial tests done to detect the IHN virus also included screening for the presence of the ISA and VHS viruses and the bacteria which causes BKD. Both screening and confirmatory tests were only positive for IHN.

The IHN virus is a high risk to farmed salmon, but low risk to wild salmon, which carry it naturally with no health effects. IHN is no risk to humans.

Mainstream Canada is one of the largest salmon farming companies in British Columbia with 27 farm sites, four land-based hatcheries, one processing plant and over 260+ employees.

#### **Related articles:**

- [\*\*IHN virus confirmed at two salmon farms\*\*](#)
- [\*\*IHN detected at another Mainstream Canada farm\*\*](#)
- [\*\*IHN outbreak may be spreading\*\*](#)

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The Chronicle Herald, 19 August 2012

No one is listening

Dalhousie professor Jon Grant characterizes coastal communities that oppose open-pen fish farms as being alarmist. These residents see, smell, hear and live with aquaculture's negative effects. Real damage is occurring and no one seems to want to admit it.

Dr. Grant speaks of the promising sustainable features of aquaculture, but as with the provincial government, I question whether he understands the true environmental, economic and social intent of sustainability. It is my view that the aquaculture industry is failing miserably with all three of these sustainable values:

Fish farm sites are selected by industry proponents in areas that are not always subject to daily tidal flushing. As a result, sites typically end up being polluted in a very short time.

Fish farms do not pay taxes; they pay paltry annual lease fees. They generate a few jobs, yet they receive huge financial compensation from the province when their stock dies of disease. Remember the \$21 million paid to the Shelburne fish farm?

The anger, resentment and controversy over the aquaculture industry are damaging the rural social fabric of our communities. The province is not assuming a leadership role and mending these sentiments; rather, its bias toward aquaculture is fuelling the fires of discontent.

There is a better way for rural communities, but no one seems to be listening.

Robert Ross, Port Mouton

Pollution not acceptable

There are as many holes in Jon Grant's argument as there are in a fish cage. As a concerned citizen and scientist, I do not have an "agenda," other than environmental protection, and that is true of every group opposed to the pollution from pen fin-fish farms.

Just as the NDP government and Cooke Aquaculture have done, Mr. Grant attempts to create the positive image that pen fin-fish farming is a viable method of aquaculture. It could better be termed "aquapoison" or "aquadumps."

The revelation that Cooke is contributing to research for better methods of aquaculture is laughable. How much of the \$25 million of taxpayers' money is going toward research and when can we expect appropriate waste-screening processes to be in place? While we wait, the pollution continues, and is increased with the help of Nova Scotia tax dollars so generously contributed by Premier Dexter and the NDP.

Mr. Grant, put on some scuba gear and take a swim under a fish cage. Read everything you can find by Alexandra Morton, a renowned biologist who has been studying the damaging results of fin-fish farms for years. Check out the Friends of Port Mouton Bay website. View the videos by Professor Tom Sherman. Pollution is not acceptable just because a government is looking for votes, and a company is making money and a token contribution to research.

Fred Giffin, Liverpool

Selective about science?

So, the premier was glad to be in attendance with the German chancellor during a science tour at Dalhousie on Thursday. I wish that he would give as much credence and respect to the great scientific research of that same institution connected with Dal that has been proving the damage and destruction caused in Nova Scotia water by open-pen fish farms, including some new discoveries of serious copper pollution.

Beverley Burlock, Port Mouton

<http://thechronicleherald.ca/letters/127973-voice-of-the-people-august-19>

The Fish Site, 17 August 2012

Rise in Aquaculture Production Discussed in New Report

GLOBAL - Total global fish production, including both wild capture fish and aquaculture, reached an all-time high of 154 million tons in 2011, and aquaculture is set to top 60 per cent of production by 2020, according to new research conducted by the Worldwatch Institute for its Vital Signs Online service.

Wild capture was 90.4 million tons in 2011, up two per cent from 2010. Aquaculture, in contrast, has been expanding steadily for the last 25 years and saw a rise of 6.2 per cent in 2011, write report authors Danielle Nierenberg and Katie Spoden.

“Growth in fish farming can be a double-edged sword,” said Ms Nierenberg, co-author of the report and Director of Worldwatch’s Nourishing the Planet project. “Despite its potential to affordably feed an ever-growing global population, it can also contribute to problems of habitat destruction, waste disposal, invasions of exotic species and pathogens, and depletion of wild fish stock.”

Humans ate 130.8 million tons of fish in 2011. The remaining 23.2 million tons of fish went to non-food uses such as fishmeal, fish oil, culture, bait, and pharmaceuticals. The human consumption figure has increased 14.4 per cent over the last five years. And consumption of farmed fish has risen tenfold since 1970, at an annual average of 6.6 per cent per year. Asia consumes two thirds of the fish caught or grown for consumption.

The fish sector is a source of income and sustenance for millions of people worldwide. According to the UN Food and Agriculture Organization, for every one job in the fish sector, three to four additional jobs are produced in secondary activities, such as fish processing, marketing, maintenance of fishing equipment, and other related industries. And on average each person working in the fish sector is financially responsible for three dependents. In combination, then, jobs in the primary and secondary fish sectors support the livelihoods of 660 million to 820 million people—10–12 per cent of global population.

Although Africa is only the fourth largest producer of fish in the world, its water resources are highly sought after by larger, more-competitive fishing trawlers. Extreme overfishing occurs when foreign trawlers buy fishing licenses from African countries for

marine water use. In West African waters, foreign trawlers pose a threat because factory ships from the United Kingdom, other countries within the European Union, Russia, and Saudi Arabia can outcompete the technologies used by local fishers. In Senegal, for example, a local fisher can catch a few tons of fish each day in the typical 30-foot pirogue. In contrast, factory ships from industrial countries catch hundreds of tons daily in their 10,000-ton factory ships.

Wild fish stocks are at a dangerously unsustainable level. As of 2009 (the most recent year with data), 57.4 per cent of fisheries were estimated to be fully exploited—meaning current catches were at or close to their maximum sustainable yield, with no room for further expansion. Of the remaining fisheries in jeopardy, around 30 per cent were deemed overexploited, while a little less than 13 per cent were considered to be not fully exploited.

A number of government initiatives give some hope to a future of sustainable fishing. In the United States, the Magnuson-Stevens Act mandated that overfished stocks be restored; as of 2012, two-thirds of US stocks are fished sustainably and only 17 per cent are fished at overexploited levels. In New Zealand, 69 percent of stocks are above management targets, but Australia only reports 12 per cent of stocks at overexploitation levels due to increased government fishery standards.

To maintain the current level of fish consumption in the world, aquaculture will need to provide an additional 23 million tons of farmed fish by 2020. To produce this additional amount, fish farming will also have to provide the necessary feed to grow the omnivorous and carnivorous fish that people want. Aquaculture is being pressured to provide both food and feed because of the oceans' overexploited fisheries.

Continually increasing fish production, from both aquaculture and fisheries, raises many environmental concerns. If aquaculture continues to grow without constraints, it could lead to degradation of land and marine habitats, chemical pollution from fertilizers and antibiotics, the negative impacts of invasive species, and a lessened fish resistance to disease due to close proximity and intensive farming practices. To prevent these problems, policymakers, fishers, and consumers need to find alternative sources for fish feed, combat illegal fishing, encourage more-sustainable practices in aquaculture, acknowledge the potential effects of climate change on the oceans, and think critically about what and how much fish to consume.

Further highlights from the report:

- In 2011, inland aquaculture increased 6.2 percent to reach 44.3 million tons, while marine aquaculture increased 6.6 percent, to 19.3 million tons.
- Fish production rose 6.4 percent in Asia in 2010 (the latest year with regional data), amounting to 121.3 million tons. In 2010, Europe, a distant second, produced 9.7 percent (16.4 million tons) of the global fish supply.
- In 2010, some 54.8 million people were directly engaged full-time or part-time in capture fisheries or aquaculture.



## Further Reading

You can view the full report by [clicking here](#).

<http://www.thefishsite.com/fishnews/17987/rise-in-aquaculture-production-discussed-in-new-report>

Fisheries Information Service, 17 August 2012



According to Sernapesca, salmon mortality rates are 'within the expected maximum levels for the season.' (Photo: Sernapesca)

Salmon mortality level rises in H1



**CHILE**

**Friday, August 17, 2012, 23:50 (GMT + 9)**

Between January and June 2012, there was an increase in salmon mortality level over the same six month period of 2011, according to the [National Fisheries Service](#) (Sernapesca) indicated in a technical report.

For example, in April it reached a peak of 1.67 per cent, doubling the figure for the same month last year, which had been 0.81 per cent.

And in June it reached 0.98 per cent while in the same month of 2011 a level of 0.57 per cent had been reached.

Nevertheless, the official document stresses that the values are "within the maximum levels expected for the season."

With respect to Atlantic salmon, the lowest mortality level was observed in June, when it reached 0.65 per cent. However, this level is double that recorded in the sixth month of 2011, which had been 0.32 per cent, *Diario Financiero* reported.

The highest figure was in May, when it reached 1.11 per cent. The 28.7 per cent of Atlantic salmon mortality level was classified as 'secondary' and 83.2 per cent of that level was attributed to Salmon Rickettsial Syndrome (SRS).

Sernapesca noted that every month mortality is "within the safety zone, except for May [danger zone], depending on the endemic corridor."

Furthermore, Pacific salmon mortality level reached 0.72 per cent in June 2012 -- the lowest one of the year --, while the maximum level was recorded in April, with 1.96 per cent. Both percentages are higher than those in the same months of 2011, which had been 0.54 per cent and 0.63 per cent, respectively.

About 50.6 per cent of the mortality level was classified as 'secondary' with 96 per cent of which was attributed to the SRS.

Sernapesca emphasized that the figures "do not exceed 2 per cent per month, except for the rainbow trout, which in the months of March, April and May presents the highest increase."

In this case, 9.6 per cent of the mortality level was classified as 'secondary', and 47.77 per cent was attributed to SRS.

Because of the "high prevalence" of Salmon Rickettsial Syndrome, Sernapesca will strengthen control actions.

On the other hand, a diagnosis was carried out for the detection of Piscine reovirus (PRV) agent, which causes the inflammation of the fish's heart and skeletal muscle.

During control measures, the Service detected the agent in Atlantic salmon farming centres. Therefore, it anticipated that the [Undersecretariat of Fisheries](#) will be recommended to include the species in the List 3 of high-risk diseases.

"The trend of these indicators offers us a warning light and due to this fact we must intensify Sernapesca preventive and control measures," said the National Service Director, José Luis Ansoleaga.

While Germán Iglesias, Aquaculture deputy director, stressed: "Rather than worry [about mortality due to SRS], attention and dedication is generated and we are urged to resolutely move towards an official SRS Control and Surveillance, which will be implemented this second semester," informed *Fundación Terram*.

"There are other issues we're trying to solve, since not all the centres and companies show a similar behaviour. In that sense, in the groups most at risk, we will conduct active research in those centres having higher mortality levels," Iglesias concluded.

**Related article:**

**- Salmon high mortality rate concerns Subpesca**

*By Analia Murias*

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<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=17&id=54692&l=e&special=&ndb=1%20target=>

Nanaimo Daily News, 16 August 2012

CFIA committed to disease control process

Re: 'Protecting wild fish must be made a priority' (Daily News, Aug. 13)

I would like to address comments about protecting wild fish off the coast of British Columbia. The Canadian Food Inspection Agency is committed to protecting the health of both wild and farmed fish.

We take reports of diseases such as infectious haematopoietic necrosis very seriously.

In Canada, infectious haematopoietic necrosis is a federally reportable disease. This means that all suspected or confirmed cases must be immediately reported to the Canadian Food Inspection Agency.

The recent findings of infectious haematopoietic necrosis at three aquaculture premises in British Columbia have been responsibly managed following international and federal disease control guidelines.

In all instances, the Canadian Food Inspection Agency was immediately notified and moved quickly to implement disease control measures.

In addition, this spring we initiated comprehensive surveillance that includes collecting and testing 5,000 wild fish annually for a minimum of two years. Many organizations support the agency in this initiative, including Fisheries and Oceans Canada, the Province of British Columbia, First Nations groups, and the aquaculture industry.

This work will determine the status of three diseases in B.C. - infectious haematopoietic necrosis, infectious pancreatic necrosis and infectious salmon anaemia.

Any confirmed disease cases will be reported on a monthly basis through the Canadian Food Inspection Agency's website as is done for all terrestrial and aquatic reportable diseases. This surveillance initiative is evidence-based, transparent and rigorous. Similarly, science will guide our response to the survey's findings which will be publicly reported.

We remain committed to keeping Canadians informed of our disease control measures and surveillance results.

Dr. Ian Alexander, executive director, Animal Health Directorate Canadian Food Inspection Agency

<http://www2.canada.com/nanaimodailynews/news/upfront/story.html?id=7142aa25-981b-4887-9090-48c602841b9a>

Fisheries Information Service, 16 August 2012



Salmon producing line. (Photo: SalMar)

SalMar Group's results show salmon disease impact



**NORWAY**

**Thursday, August 16, 2012, 03:10 (GMT + 9)**

The issues related to the appearance of pancreas disease (PD) virus had a negative impact in the results [SalMar Group](#) obtained in the second quarter of this year.

The group recorded an operational EBIT of NOK 59.9 million (EUR 8.2 million) in the second quarter 2012 compared with NOK 112.0 million (EUR 15.3 million) a year before. The firm generated gross operating revenues of NOK 836.7 million (EUR 114.3 million) in the second quarter 2012, compared with NOK 681.7 million (EUR 93.2 million) in the same quarter in 2011.

SalMar Central Norway's lower performance was affected by PD, as PD-related harvesting has bred higher costs for fish farming operations and affected InnovaMar's efficiency. The fish may not be destroyed, however, as the Norwegian Food Safety Authority (NFSA) has now changed its practice with respect to the handling of PD in Sør-Trøndelag.

Moreover, about half the volume was harvested in June, when salmon prices were lower than in April and May.

InnovaMar and the sales division showed higher earnings during Q2 and increased activity

provides a higher contribution from this part of the business.

SalMar Northern Norway boosted both its volumes and margins compared with the first quarter. Some of the harvested volume had quality problems, which has affected the price.

The Rauma segment also increased its margins compared with Q1. Results in Q2 were affected by the destruction of broodstock due to the presence of infectious salmon anemia (ISA).

SalMar owns 50 per cent of [Norskott Havbruk AS](#), which operates fish farms in mainland Scotland, the Orkneys and Shetland. Norskott made gross operating revenues of NOK 216.8 million (EUR 29.6 million) in Q2.

SalMar now owns 25.2 per cent of [P/F Bakkafrost](#), a Faroe Islands fish farming company which made an operational EBIT of NOK 78.9 million (EUR 10.8 million) in the second quarter. SalMar's share of the profit after tax and fair value adjustment came to NOK 23.1 million (EUR 3.2 million).

SalMar has also entered into TRS agreements for additional 4.66 per cent of the shares in P / F Bakkafrost.

"It is particularly gratifying to note that InnovaMar is performing well in an operationally challenging quarter," CEO Ynge Myhre said. "There is still room for improvement, and moving forward our attention will be focused on operational efficiency."

SalMar considers the long-term outlook as a whole to be good, even though short-term fluctuations must be expected as a result of temporary imbalances between supply and demand in the market. The increase in the supply of Atlantic salmon in the second half of the year is expected to be far lower than in the first six months.

#### **Related article:**

- [SalMar wants a better way to deal with PD virus on its farms](#)

*By Natalia Real*  
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<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=16&id=54638&l=e&special=&ndb=1%20target=>

Read also details of the causative agent of Pancreas Disease (Salmon Alphavirus) found in farmed steelhead in British Columbia:

[http://alexandramorton.typepad.com/alexandra\\_morton/2012/06/first-detection-of-salmon-alphavirus-in-bc-farmed-steelhead-1.html](http://alexandramorton.typepad.com/alexandra_morton/2012/06/first-detection-of-salmon-alphavirus-in-bc-farmed-steelhead-1.html)

Nelson Mail, 16 August 2012

Fish farm deaths a mystery to owner

Penny Wardle

New Zealand King Salmon does not know what killed large numbers of fish at its Waihinau farm in Pelorus Sound this year.

King Salmon chief executive Grant Rosewarne said the company had spent \$20,000 on laboratory testing and its own research since March. The Primary Industries Ministry says its testing eliminated 16 viruses, bacteria and pathogens.

Mr Rosewarne said research by King Salmon also ruled out any problem with the Waihinau site.

The most likely cause of the deaths was a natural event, most likely a toxic algal bloom, he said. Other possibilities could be spawning of poisonous hydroids from the jellyfish family or high numbers of crab larvae.

The loss of production could cost King Salmon more than \$1 million, although budgets did allow for fish deaths, Mr Rosewarne said.

Staff at the farm noticed in mid-March that fish were dying, and they contacted the ministry a week later about an abnormally high number of deaths.

King Salmon aquaculture manager Mark Preece said only farmed fish died in Waihinau Bay. However, this did not rule out "transient" events like an algal bloom because wild fish could swim away.

Some toxic algae were invisible to the naked eye or were toxic in low concentrations, Mr Preece said. Blooms could come and go without being noticed.

A scientific study in Tory Channel had found large numbers of larvae with a potential impact on salmon, Mr Preece said.

"Some are toxic, some are irritants and some could be ingested and cause internal issues," he said.

The fish died after the farm had been shifted from Forsyth Bay to Waihinau Bay late last year.

A Nelson-based research company, Cawthron, report says the Forsyth site was at "maximum environmental limits" in November 2011. Regular monitoring picked up a strong sulphide smell, high levels of copper and zinc, and virtually no life in some sediment samples.

Mr Preece said the company had not used copper antifouling since November and would water-blast nets to keep them clean.

Mr Rosewarne said dead zones were common under salmon farms in other parts of the world.

"Salmon farming is such an environmentally benign and robust activity it is almost impossible for us to cause an environmental problem that would affect our fish," he said.

The Primary Industries Ministry says it had not imposed movement controls or other biosecurity restrictions on the Waihinau farm because no infections had been found. It would investigate whether there was a biosecurity problem if more fish died.

Mr Rosewarne said King Salmon was researching disease prevention including studying changes young fish went through and testing water more frequently.

<http://www.stuff.co.nz/nelson-mail/news/7490634/Fish-farm-deaths-a-mystery-to-owner>

Nanaimo Daily News, 15 August 2012

Column claims about fish farming questioned

Re: 'Protecting wild fish must be a priority' (Daily News, Aug. 13)

Columnist and reporter Walter Cordery makes errors and assumptions in his column about salmon farming in Clayoquot Sound that need to be corrected.

First, he assumes the IHN virus was brought to the area by salmon farms. This is wrong. It is a scientific fact that IHN occurs naturally in the Pacific Ocean, and that it is carried naturally by wild fish.

The most likely explanation for the infections at our Dixon Bay and Millar Channel farms is that our farmed fish caught the virus from passing wild fish.

Our farmed fish are highly susceptible to the virus, since they are a different species than Pacific salmon and have not evolved alongside the virus, developing resistance like their Pacific cousins.

Thankfully we rarely ever experience any problems because of this virus. The last case was nearly 10 years ago.

Second, he assumes salmon farms are breeding grounds for disease and parasites. Contrary to his assumption, our goal is to keep our fish healthy to harvest. We do this through good animal husbandry, good feed and careful farming practices. We rarely ever need to use antibiotics or sea lice treatments. We keep our fish healthy, and they pose little risk to passing wild fish.

Third, he makes the rather offensive suggestion that people who work in aquaculture will say anything to defend their jobs, even if they know it harms wild fish. This is untrue.

Many people in my company, including myself, love sport fishing and don't want to see any harm come to wild salmon. We have many practices and precautions in place to make sure we are farming fish responsibly in a way that does not threaten wild fish. Fourth, he suggests that fish farm companies make political donations to gain favours. This is untrue. Mainstream Canada follows an explicit policy to never make political donations.

Finally, it's disappointing that despite spending two weeks in Clayoquot Sound, Cordery did not stop in at our Tofino office to see for himself what we do. He is welcome to contact us anytime in the future, we would be happy to answer his questions and arrange for a farm tour, if possible.

Grant Warkentin, Mainstream Canada

<http://www2.canada.com/nanaimodailynews/news/opinion/story.html?id=594ef946-e7cb-4a1d-b131-80d1539a89c0>

The Chronicle Herald, 15 August 2012

Aquaculture alarmism

As a long-time aquaculture researcher, I have followed the seemingly endless discussion on salmon farming. I am disconcerted by the amount of misinformation, some propagated by opposition groups hoping to promote their own agenda. Anyone who declares that the scientific arguments against aquaculture are “clear” and “obvious” is misleading the public. Objective scientific studies do not make pronouncements for and against aquaculture. They study specific potential impacts to determine whether they can be detected in an ocean characterized by huge natural variation.

Many recent arguments seem to have been directed toward a dichotomy between sea-cage farming and closed containment on land. The discussion should be focused on how ocean-based farming can be made even more sustainable. This is an active area of research and development involving governments, universities, aquaculture associations and the aquaculture industry. For example, co-culture of seaweeds and shellfish with salmon provides a means of recycling waste into other culture products. A national effort on this topic includes Cooke Aquaculture as a full partner, with experimental culture sites established to test these ideas ([cimtan.ca](http://cimtan.ca)).

There is much progress to be made with respect to sustainable ocean-based fish culture, and the public should not give in to alarmism by groups willing to discard the benefits of aquaculture to coastal economies.

Jon Grant, oceanography professor,

Dalhousie University

<http://thechronicleherald.ca/letters/126799-voice-of-the-people-august-15-2012>

Radio New Zealand, 15 August 2012

Algae may cost salmon farmer over \$1m

New Zealand's biggest salmon farmer is blaming a toxic algal bloom as the most likely cause of a large number of fish deaths at one of its five sites in the Marlborough Sounds.

Ministry for Primary Industries staff have been alerted by the New Zealand King Salmon company to the heavier-than-normal losses at its Waihinau farm in Pelorus Sound.

The company first noticed something was wrong in February, and began comprehensive testing.

But New Zealand King Salmon chief executive Grant Rosewarne says the tests identified no evidence of diseases behind the deaths and the company concluded there is some other natural cause.

Mr Rosewarne says the firm lost about \$1 million worth of fish in an algal bloom outbreak at another of its farms in Queen Charlotte Sound about two years ago.

He estimates the latest losses at the Waihinau site may be even higher.

[http://www.radionz.co.nz/news/rural/113299/algae-may-cost-salmon-farmer-over-\\$1m](http://www.radionz.co.nz/news/rural/113299/algae-may-cost-salmon-farmer-over-$1m)

Nelson Mail, 15 August 2012

NZKS farm receives clearance

Bill Moore

The controversial New Zealand King Salmon farm at Waihinau Bay in Pelorus Sound has been given the all-clear after comprehensive testing, the company has announced.

NZ King Salmon chief executive Grant Rosewarne said no known pathogens or evidence of unknown diseases showed up, there were no environmental problems, and company vets believed the farm was the subject of some extraordinary natural event or a combination of factors.

“Our experts believe the farm may have suffered from an extraordinary event that directly killed the fish by interfering with them physiologically. Whatever it was, it also put other fish off their feed.”

The deaths of a much higher percentage than usual of fish at the Waihinau farm has been the focus of attention from groups opposing the company's application to expand in the Sounds.

The Ministry of Primary Industries has confirmed on its website that its Waihinau investigations had ruled out a number of exotic and endemic disease threats, and found no cause for the increased salmon deaths at the farm.

Because no infectious agents were found it had not imposed movement controls or any other form of biosecurity restriction on the farm, the ministry said.

Mr Rosewarne said more than a dozen specific pathogens were tested for and ruled out. Microscopic examination of thin tissue samples was also used to try to detect unknown diseases. Electron microscopy was used to look for the presence of any viral particles but both techniques turned up nothing.

NZ King Salmon staff at the Pelorus Sound farm first noticed an unusual feed pattern in mid-February and quickly implemented biosecurity measures, he said.

With the all-clear confirmed, NZKS was implementing several new procedures. "We are boosting our preventative research programme including closer examination of the physiological changes young fish go through. We are also increasing the frequency of our water sampling programme so we can more quickly react to the natural elements."

Salmon farming was complex, Mr Rosewarne said.

"I can understand how people can be concerned about fish mortalities. But sometimes commentators who have no comprehension of the intricacies of our business can colour opinion out of proportion to the issues.

"We are completely transparent about our operations and anyone with any concerns at any time is invited to contact us to discuss their worries."

NZ King Salmon spent around \$20,000 on testing in New Zealand, Canada and Norway, and faced a considerable loss in terms of revenue and stock, Mr Rosewarne said.

Sustain our Sounds chairman Danny Boulton said the group still had concerns about sustainable management of the farm.

"We are also very sceptical as fish do not die from nothing and it is not a natural occurrence for fish to have lesions," Mr Boulton said.

"The question remains, are the Marlborough Sounds the right environment for concentrated fish feeding farms?"

An Environmental Protection Authority board of inquiry will begin hearing the company's application in Blenheim on August 27, and has drawn up a tentative 10-week timetable.

The company has five salmon farms in the Sounds and is seeking approval for nine more.

Although only a small fraction of the world salmon industry, it is the biggest farmer of the premium king salmon variety with 55 per cent of the global market, and earns around NZ\$60 million a year in foreign exchange.

<http://www.stuff.co.nz/nelson-mail/news/7481651/NZKS-farm-receives-clearance>

Parkville Qualicum News, 14 August 2012

Fish farm flap

It appears that another chapter in the book of stupidity is about to open.

Mainstream and other open pen salmon farms in the waiting line, appear to be preparing to put their hand out to gather up insurance dollars and — wait for it — government dollars to compensate for their loss due to IHN.

All the affected companies knew of the dangers of open pen salmon farming due to IHN from wild stock and maybe have insurance to offset this loss. All well and good if some company will insure this liability.

However, to approach the government for compensation is beyond belief. It is like building your home under a slide area or on a flood plain next to a roaring river and then applying to the government for loss of property due to ones own ignorance.

All open pen farms should be on dry land and the fish farm companies know this, yet they fight it so as not to set a precedent for other open pen salmon farms around the world.

Now, for them to ask our government for our dollars to bail out their foreign international companies is beyond any stretch of the imagination.

There are only three alternatives for these feed lots, put the facilities on the beach and out of reach of IHN, pay exorbitant rates for loss insurance, or pack your bags and go home.

To ask us for compensation to continue to foul the oceans is not very palatable.

Bob Tritschler

*Parksville*

<http://www.pqbnews.com/opinion/letters/166048566.html>

West Coast Environmental Law, 14 August 2012

Will your tax dollars subsidize BC's unsustainable fish farms?

How's this for a business model: You bring together thousands of fish, stick them in an open net in the ocean, despite warnings that the conditions invite infectious disease, and then, when they all get sick, you receive compensation from the Canadian taxpayer.

You may have seen the media reports about the virus outbreaks, the quarantines and the destruction of fish currently occurring at several fish farms around BC. But as yet, there has been little coverage of the fact that under Canadian law these large and often foreign-owned fish farms could receive compensation from the federal government, and many of them are asking for compensation.



As [Superheroes for Salmon has written](#), both Grieg Seafood and Cermaq (which owns Mainstream Canada) have now filed statements about their respective outbreaks with the Norwegian Stock Exchange expressing their hope that the Canadian taxpayer will bail them out. [Grieg's statement reads](#), in part:

**... Canadian authorities are expected to issue a depopulation order of the concerning site within short term.** ... The Culloden Point site holds in excess of 300,000 atlantic salmon, with an average weight of in excess of 0.5 kg and a book value of NOK 9m. The final financial impact of the likely depopulation order **will depend on the potential compensation from Grieg Seafood's insurance and/or Canadian authorities** as a consequence of a potential depopulation order. [Emphasis added]

Similarly, [Cermaq says](#): "The financial impact depends on any compensation from the company's insurance or the Canadian Authorities that has required the depopulation." One might be inclined to think that this talk of a taxpayer bail-out was just positive spin by the companies for their shareholders, but it turns out that there's a recent precedent. This past April the federal government [compensated an East-coast fish farm](#) for the fish destroyed as a result of a disease outbreak:

The federal government will compensate Cooke Aquaculture for the hundreds of thousands of salmon ordered destroyed in Shelburne this week.

The Canadian Food and Inspection Agency order the New Brunswick-based salmon farming company to destroy all the remaining fish on a farm of cages just outside Shelburne Harbour after the CFIA confirmed "additional cases" of infectious salmon anaemia. ... CFIA spokesman Guy Gravelle says an assessment team has visited the site to begin the process of determining the amount of compensation.

Say what?

So why would fish farm companies be able to claim compensation for losses through disease?

Even if you [buy their line that these diseases were spread from wild fish](#) (the Friends of Clayoquot Sound have [data that suggests otherwise](#)), these companies, and not the Canadian taxpayer, made the choice to have Atlantic salmon in open net farms in waters infested by wild salmon with their yucky diseases, and apparently [made the choice not to vaccinate them against those diseases](#).

The legal basis for the claim for compensation is found in the *Health of Animals Act* ([section 51](#)), which reads, in part (and at the risk of oversimplifying):

The Minister may order compensation to be paid from the Consolidated Revenue Fund to the owner of an animal that is ... destroyed under this Act ... The amount of compensation shall be ... the market value, as determined by the Minister, that the animal would have had at the time of its evaluation by the Minister if it had not been required to be destroyed ... minus the value of its carcass...

The rules for calculating compensation, including maximum amounts, are [found in the regulations](#).

The good news is that this compensation is not automatic. The government can apparently consider the above factors and refuse compensation. However, if the Minister does refuse to award compensation, the fish farm companies can appeal that decision (under s. 56 of the Act) to a government “assessor,” and get a second kick at the can.

### **The economics of open net salmon farming**

Salmon farming has a controversial history in BC. Many would argue that fish farms have done as well as they have because they do not need to pay the costs of the damage that they cause to wild stocks, or even fair rent on the public waters that they use.

But a bailout for these losses would mean that they don't even have to pay for losses that come with open net salmon farming, and as such represents a direct subsidy to what many, including West Coast Environmental Law, believe to be an unsustainable industry.

These are very large companies, with private insurers. They can afford to pay for the costs of their own choices. As [other ENGOs have pointed out](#), these outbreaks represent an additional reason, and a financial incentive, to get open net fish farms out of BC's waters, and into closed containment facilities. But why would fish farm companies head that financial incentive if it's paid for by the taxpayers?

We understand the value in compensating small-scale farmers whose operations are, through no fault of their own, negatively impacted by diseases that must, for the good of the public, be controlled. However, similar issues are raised when these provisions are used to compensate large-scale losses for factory farms and other farm operations that rely on a density of animals that promotes the spread of disease, absent large-scale antibiotic use.

We believe that the law should ensure that fish farm companies are responsible for the real costs of their operations. Bailing out these companies would definitely be a step in the wrong direction.



By Andrew Gage, Staff Lawyer

<http://www.wcel.org/resources/environmental-law-alert/will-your-tax-dollars-subsidize-bc-unsustainable-fish-farms>

Business In Vancouver, 14 August 2012

Recalculating the costs and consequences of fish farms in B.C.

Publicly funded scientists have to be allowed to work to protect wild fish, not the fish farming industry

By Peter Ladner

I used to be keenly interested in fish farming. I toured fish farms, processing plants and hatcheries. I once spoke at the national meeting of the Canadian aquaculture industry in Ottawa to say that opposition to fish farms was overblown and misguided. I earned that trip through a series of columns in BIV defending the industry from ridiculous claims such as fears that escaped Atlantic salmon would outmuscle the native Pacific salmon and take over local streams. Today, I'm not so sure about the industry. I've followed anti-fish farm crusader Alexandra Morton's campaigns with interest, believing that "crusading scientist" is an oxymoron (notwithstanding Morton's honorary degree from SFU) and refusing to believe that all the problems of B.C.'s wild salmon fisheries could be pinned on lice, disease or antibiotics from fish farms. I've listened to my friends in the aquaculture industry insist that "90% of what she's saying is not true." According to one, who wouldn't speak for attribution, "They have never found a disease in [farmed] Atlantic salmon that is not already present in [wild] Pacific salmon."

Then I accepted an invitation to hear Morton speak July 16 at the Royal Vancouver Yacht Club. About 200 people were there on short notice to help her raise funds for disease testing at the Salmon Coast Field Station ([www.salmoncoast.org](http://www.salmoncoast.org), [www.deptwildsalmon.org](http://www.deptwildsalmon.org) and for her advocacy group, the Pacific Coast Wild Salmon Society. There was money in the room.

Introduced by SFU professor of statistics Rick Routledge as one of the most competent scientists he had ever worked with, Morton launched into an impassioned and highly persuasive diatribe against an industry-government coverup of the spread of harmful European viruses from farmed salmon to B.C.'s beleaguered wild salmon stocks.

"Salmon farms amplify disease to levels wild salmon are not equipped to survive," she concluded. Morton has taken it upon herself to finance tests of wild salmon to confirm her data showing that B.C. farm salmon are testing positive for European farm salmon diseases, among them the lethal infectious salmon anemia (ISA) virus that has devastated fish farms in other countries.

Morton says the Department of Fisheries and Oceans (DFO) has been hiding ISA-positive results from Fraser River sockeye stock and in salmon farms in Clayoquot Sound. DFO scientist Kristi Miller, otherwise forbidden to speak to the media, told the Cohen commission she was prohibited from testing further for ISA, even though she had found it in two Clayoquot Sound salmon farms.

"No ISA virus has ever been found on farmed fish in B.C.," declared Mary Ellen Walling, executive director of the BC Salmon Farmers Association (BCSFA). She says 7,000 fish have been tested by several government labs. "We would be very concerned if we found it on farmed fish."

With good reason.

B.C. Agriculture Minister Don McRae said in March that Asian and U.S. markets were threatening to close their borders if the ISA virus was confirmed here.

That threatens an industry that is B.C.'s biggest agriculture exporter, provides some 6,000 direct and indirect jobs and contributes \$800 million annually to the provincial economy, according to the BCSFA.

With all that at stake, it's not surprising that government would bend and sway to protect the industry. But it's inexcusable. That's a view shared by John Fraser, former MP and fisheries minister, as he used the SOB epithet three times in his fiery closing remarks at the dinner, concluding, "if we don't solve this [fish farm disease] problem, we're not going to have any fish."

For that to happen, publicly funded scientists have to be allowed to work to protect wild fish, not the fish farming industry.

<http://www.biv.com/article/20120814/BIV0319/308149943/-1/biv14/recalculating-the-costs-and-consequences-of-fish-farms-in-bc>

The Valley Voice, 14 August 2012

### Salmon News

#### The \$64,000 Question

Morton's group gets cash boost to continue salmon monitoring

**D**o you like using plastic? If so, you'll be helping our salmon.

Visa and VanCity have joined forces to create a special fund which gives back to BC communities for projects that support a range of environmental initiatives focused on creating a sustainable food system.

According to a release on Monday, Visa says that every year, a portion of their Vancity enviro™ Visa's profits are given back to communities through the Vancity enviroFund™.

"We would like to thank our cardholders for working with us to help grow and promote a viable and sustainable local food system and for supporting environmental initiatives we can all benefit from," says Jean-Marc Handfield, Vice President Payment Solutions and Member Services Centre. "We believe our enviro™ Visa card is an innovative product because as our members spend on the card, they are actually helping to bring local and organic food to their communities in a variety of ways."

"So far this year, \$250,000 has been distributed in grants to support 21 farmers' markets throughout British Columbia. The remaining \$750,000 will fund 12 organizations and a variety of projects that provide British Columbians with greater access to local and organic food."



One of those twelve groups is the Pacific Coast Wild Salmon Society (PCWSS), headed by world-renowned wild salmon activist and scientist Alexander Morton, who will be receiving a \$64,000 grant to help monitor the health of BC salmon.

The PCWSS is a Salmon Disease Awareness and Response Network for the Salish Sea, Fraser River who's focus is to ensure the viability of wild salmon as a food resource. Currently they are developing a program to link together the groups working to monitor salmon health and restore wild salmon populations, including First Nations, university departments and labs.

Morton told *the Voice* in an e-mail on Tuesday the VanCity funds will be used to test salmon throughout BC for European viruses associated with salmon farms.

"As we visit communities to do this testing we are teaching people how to take the samples themselves and in this way establish a network who are on the grounds in wild salmon habitat to monitor the health of the fish," says Morton.

"Everywhere we go we find experts on the local salmon, people who have watched the salmon carefully, sometimes for decades. These are the people who need to be listened to, they hold the keys to unlock the mysterious collapses and rises that have made salmon impossible to predict. Salmon are so widespread, but so are the people standing guard over diverse stocks."

In the past, Morton has had to sell tee shirts in order to make ends meet and she thanked VanCity for their help adding that "we are moving all over BC attending various First Nation, commercial and sport fisheries to take samples that will be sent to the best and extremely expensive labs for analysis."

For more information, visit [www.deptwildsalmon.org](http://www.deptwildsalmon.org)

<http://www.thevalleyvoice.ca/Voice%20Stories/August%202012/Chilliwack%20News%20-%20Alexandra%20Morton's%20Group%20Gets%20Major%20Funding%20-%20August%2014%202012.htm>

Nanaimo Daily News, 14 August 2012

Nanaimo-based conservation group campaigns for enclosed-container farms

Darrell Bellaart

The number of farmed salmon killed by a virus is in the thousands and a Nanaimo-based conservation group said the incident supports its position that all aquaculture should be moved to enclosed, land-based facilities.

Financial losses for two B.C. salmon farming companies could reach into the millions of dollars as fish are culled at sites where a potentially deadly virus was found.

Atlantic salmon from Grieg Seafood's Culloden Point fish farm in Jervis Inlet, on the Sunshine Coast, and Mainstream Canada's farm in Clayoquot Sound are being destroyed after the infectious haematopoietic necrosis virus, or IHN, was confirmed.

The virus, which is endemic to sockeye salmon but does not make them sick, can kill Atlantic salmon. The Canadian Food Inspection Agency ordered the cull to contain the disease.

IHN has no effect on human health.

Nanaimo-based Georgia Strait Alliance has campaigned for enclosed-container fish farms for 20 years and sees this as more evidence for that.

"What we'd like to see is for farms to be out of the open water and in closed containers, then there would be no chance of transfer of diseases or pathogens," said Ruby Berry, GSA aquaculture campaign program manager.

She said when IHN strikes salmon in open-net pens, disease is concentrated and it creates a reservoir of germs that can spread through wild stocks, just as colds and flu are concentrated among children in kindergarten.

Craig Stephen, founding director and president of the Centre for Coastal Health, which has expertise on the design and analysis of disease outbreak investigations and independently investigates disease problems, agrees with the kindergarten analogy. But Stephen said even enclosed, land-based facilities come with risks, and "what I've never seen done, in a way that people agree on, is the probability, frequency and magnitude of any exchange of pathogens between wild and farmed fish."

Grieg has destroyed about 316,000 fish. Costs of the losses are still being tallied.

<http://www2.canada.com/nanaimodailynews/news/story.html?id=4d2942ec-9a69-4f49-8923-3c4485e52ff8>

Voxy/New Zealand King Salmon, 14 August 2012

Salmon cleared of known disease

The New Zealand King Salmon farm at Waihinau has been given the all-clear after comprehensive testing revealed no known pathogens nor evidence of any unknown diseases.

NZ King Salmon CEO Grant Rosewarne says company vets believe the farm was the subject of some extraordinary natural event or combination of factors.

"There are no environmental problems at the farm and testing has ruled out the presence of any known disease-producing agents," Mr Rosewarne says.

"Our experts believe the farm may have suffered from an extraordinary event that directly killed the fish by interfering with them physiologically. Whatever it was, it also put other fish off their feed.

"From time to time nature throws curve balls at farmers everywhere- two years ago a massive snow storm killed almost a million lambs in Southland. Major events can occur in the marine environment and go undetected because they are underwater."

The Ministry of Primary Industries confirms on its website that it is not always possible to determine a cause for a mortality event.

[1: <http://www.fish.govt.nz/en-nz/Aquaculture/Mortality+Investigation/default.htm?WBCMODE=PresentationUnpublished>]

It says its Waihinu investigations "focused on ensuring that the event was not caused by infectious agents. The investigation has ruled out a number of exotic and endemic disease threats. No cause for the excess mortality has been identified".

[2: See the relevant policy document on MPI's role at this link: <http://www.biosecurity.govt.nz/files/biosec/policy-laws/response-policy-risk-organisms.pdf>]

The MPI says because no infectious agents were found it "has not imposed movement controls or any other form of biosecurity restriction on the Waihinu Bay farm".

NZ King salmon says more than a dozen specific pathogens were tested for and ruled out.

Microscopic examination of thin tissue samples was also used to try to detect any tell-tale evidence of unknown diseases. Furthermore, electron microscopy (up to 100,000 times magnification) was used to look for the presence of any viral particles but both techniques turned up nothing.

NZ King Salmon staff at the Pelorus Sound farm first noticed an unusual feed pattern in mid-February and quickly implemented bio-security measures, Mr Rosewarne says.

"We have extremely stringent bio-security procedures to protect our international market-leading position and the environment within which we operate. It was a regimental process of rolling out our policies to isolate the farm until we determined it was given the all-clear. That is now confirmed."

As a result of the experience NZ King Salmon is implementing several new procedures.

"We are boosting our preventative research programme including closer examination of the physiological changes young fish go through. We are also increasing the frequency of our water sampling programme so we can more quickly react to the natural elements.

"In these situations our research helps us to better understand the science. Aquaculture is advancing marine science all the time - and operations such as ours improve the learning for the entire industry."

Mr Rosewarne says salmon farming - especially King salmon farming - is a complex business.

"I can understand how people can be concerned about fish mortalities. But sometimes commentators who have no comprehension of the intricacies of our business can colour opinion out of proportion to the issues.

"We are completely transparent about our operations and anyone with any concerns at any time is invited to contact us to discuss their worries."

The total cost to the company has been considerable in terms of sales revenue and lost stock. Mr Rosewarne says NZ King Salmon is grateful to the Ministry of Primary Industries for its comprehensive support and diligent work on the issue.

NZ King Salmon has spent around \$20,000 on testing in New Zealand, Canada and Norway.

#### About New Zealand King Salmon

New Zealand King Salmon (NZKS) sustainably farms King salmon from five sea farms in the cool, deep waters of the South Island's Marlborough Sounds. NZKS invests heavily in research and development and is recognised worldwide for its best in class King salmon farming practises. It is firmly committed to the sustainability and viability of a renewable resource with its success centred on maintaining the purity of the waters in which the salmon are farmed. King salmon has the highest natural content of healthy long-chain Omega-3 oils important for life and good health and which can help to maintain a healthy heart.

NZ King Salmon:

- Is NZ's largest fin fish aquaculture producer employing more than 455 skilled workers in New Zealand and a further 10 in Australia, the US and Japan.
- Currently produces 8,500 metric tonnes of King salmon annually accounting for 70 per cent of New Zealand's salmon production.
- Is the world's biggest farmer and supplier of the King salmon variety with 55 per cent of the global market and earns around NZ\$60 million a year in foreign exchange.
- Has clear market advantages including great tasting salmon from a sustainable, disease-free, clean growing environment, fresh-to-market distribution, vertical integration and supply chain product traceability.

NZKS brands Regal and Southern Ocean are available nationwide from supermarkets (NZ only), fish suppliers and good delicatessens. For recipes and serving suggestions visit [www.regalsalmon.co.nz](http://www.regalsalmon.co.nz). For more information about NZ King Salmon visit [www.kingsalmonco.nz](http://www.kingsalmonco.nz).

<http://www.voxy.co.nz/business/salmon-farm-cleared-known-disease/5/131707> and <http://business.scoop.co.nz/2012/08/14/salmon-farm-cleared-of-known-diseases/>

The Marlborough Express, 13 August 2012

Teen lobbies against NZKS plans

Research for yourself the effects of salmon farms

Penny Wardle



Leona Plaisier, left, of Pelorus Sound, protests in Wellington on Saturday with Mariska Noordik, of Rai Valley, Alison Parr, of Wairau Valley, Anna Thompson, of Wellington, and Otago University student Laura Honey, who is making a film about NZ King Salmon plans to expand in the Marlborough Sounds.

A 17-year-old girl from a remote area of the Marlborough Sounds made her second trip to the unfamiliar surrounds of Wellington on Saturday to protest plans to develop nine more salmon farms in the region.

Leona Plaisier handed out pamphlets at the Michael Fowler Centre where Masterchef 2011 winner Nadia Lim was giving a demonstration sponsored by NZ King Salmon, the Nelson-based company that has applied for consent to develop the farms.

Miss Plaisier has spent her life on Tui Nature Reserve in the outer Pelorus Sound where her family works to restore native plants and animals and host tourists.

She and supporters handed out 600 information cards on Saturday afternoon and displayed photographs and film of marine wildlife in the Sounds, as well as damage they claim the company's existing farms have done to the seabed.

The protest was timed to coincide with the Wellington On a Plate event.

"I want Nadia and others to research for themselves the effects of salmon farms and what it would mean if nine more were added," she said.

Many people came straight from the cooking class to her stand, Miss Plaisier said. They told people in the class had asked questions about feeding salmon on protein including chicken feathers and fat.

Her motivation for the trip to Wellington was realising few people had the time or energy to make a submissions on the NZ King Salmon application. She had put her study aside while she worked almost fulltime on the cause, but she realised others did not have this opportunity. She was learning a lot about New Zealand legal processes, marine and social sciences and social media as a publicity tool.

"I feel the application process disincentivises people to have an input," Miss Plaisier said. "It is unfair to people without considerable time and resources and is not local-friendly."

To encourage especially young people who had not made a submission to mark their opposition to the salmon farms, she has started a [petition](#) at sharamor.co.nz, which had collected 300 signatures.

The Environmental Protection Authority board of inquiry convened to consider the application by NZ King Salmon to develop the new farms will open it hearing in Blenheim on Monday, August 27, and is set down for up to 10 weeks.

<http://www.stuff.co.nz/marlborough-express/news/7469735/Teen-lobbies-against-NZKS-plans>

The Nanaimo Daily News, 13 August 2012

Protecting wild fish must be made a priority

Walter Cordery

I spent some time during the past two weeks on the West Coast of the Island.

During that time, I decided to check out the Clayoquot Sound UNESCO Biosphere Reserve, established in 2000 to celebrate the unique ecosystems of the area. I hadn't been in the Clayoquot since the "war in the woods."

In 1990, during the height of that dispute with MacMillan Bloedel, I saw the passion of people who wanted to see the Clayoquot preserved, including Nanaimo's Order of Canada-winning environmentalist Merv Wilkinson. Wilkinson was one of many who refused to let M&B employees log the sound. And he was one of many arrested for this protest.

Last week, I wondered what Wilkinson, who died in 2011 at the age of 97, would think if he knew that a salmon farm had brought a deadly disease to the area.

Mainstream Canada's farm at Millar Channel in Clayoquot Sound has been ordered to cull hundreds of thousands Atlantic salmon in the sound after the virus, infectious haematopoietic necrosis, or IHN, was discovered in the net pens holding the fish, said B.C. Agriculture Ministry fish pathologist Gary Marty.

Another Mainstream operation, the Dixon Bay Farm in Clayoquot Sound, had to carry out a similar cull earlier this year when IHN was found there in May.

Muzzled DFO scientist Dr. Kristi Miller, head of the molecular genetics section at Nanaimo's Pacific Biological Station, found the infectious salmon anemia virus on two Creative Salmon farms in Clayoquot Sound last year. Neither DFO or the Canadian Food Inspection Agency have responded to the detection of these deadly viruses with follow-up testing.

These viruses are highly contagious and can be fatal in both wild and farmed salmon.

The threat to wild salmon is just one of the reasons why expansion of fish farms in the Clayoquot Sound Biosphere Reserve is opposed by a number of groups.

Open-net fish pens are the problem. Huge numbers of fish in an enclosed environment is a recipe for disease that will spread. Unfortunately the viruses mentioned above don't just affect the predominately-Norwegian-owned Atlantic salmon fish farms. They are picked up by wild salmon swimming by as they leave or return to their originating rivers along the coast. As can sea lice which have been found in numbers of wild salmon in the Broughton Archipelago. These issues force me to wonder why consecutive federal and the provincial governments continue to allow more open net fish farms on the coast.

These decisions are putting wild salmon at risk and that's unacceptable.

The problem is governments see fish farms as creating jobs, which means more income tax dollars for themselves. They are willing to put the environment and B.C.'s iconic wild salmon at risk in order to create a few thousand jobs.

I've no doubt that those who work for the aquaculture industry will defend the industry; just as I've no doubt that people who work in the tobacco industry defend that industry.

Governments have broad responsibilities and of course fostering economic growth is among them.

But at what cost?

Report after report after report demonstrate that fish farms do threaten wild salmon but governments refuse to accept the findings of peer-reviewed science by people like Alexandra Morton.

What they don't refuse to accept are donations from the large fish farm companies to their political campaigns, which in my mind puts them in a conflict of interest.

The West Coast of Vancouver Island is too precious to be put at risk by economic interests. It's time the governments insist that fish farmers move towards closed-net, onshore pens that remove the risk of spreading infections.

Fisheries and Oceans Canada, formerly the Department of Fisheries and Oceans must return to its original mandate and that is the protection of wild fish stocks in Canada.

<http://www2.canada.com/nanaimodailynews/news/story.html?id=cd035c2d-7815-4aba-80c7-817be085dead>

The Chronicle Herald, 12 August 2012

Voice of the People:

Protecting wild salmon

Re: “Wave of controversy greets fish farms (Aug. 7). I appreciated John DeMont’s examination of some of the issues surrounding the expansion of open-net pen salmon aquaculture in Nova Scotia. Unfortunately, there was an error in need of correction.

The article states “*Salmo salar* (wild Atlantic salmon) is almost gone from Nova Scotia rivers these days.” This suggests we have no wild stocks left to protect from the diseases, sea lice, escapees, etc., that are inevitable byproducts of industrial-scale salmon feedlots. Nova Scotia has very healthy runs of wild Atlantic salmon — mostly in the Cape Breton Highlands and our fall-run mainland rivers along the Northumberland Strait. Although wild salmon numbers have declined along the Atlantic Coast, mostly due to acid rain, they are far from gone and continue to persist in rivers like the Musquodoboit, Medway and St. Mary’s.

It is also a proven fact that wild salmon and sea-trout populations plummet wherever open-net pen salmon feedlots are placed near their natal rivers or along their migratory routes. Nova Scotians will not stand idly by while our remaining wild salmon heritage is put in danger. We will continue to vigorously defend our wild salmon and trout from companies and politicians that would do them harm, either deliberately or through ignorance.

Raymond Plourde, Wilderness Co-ordinator, Ecology Action Centre

Greater concerns than view

I read with great concern John DeMont’s Aug. 8 and 9 pieces on aquaculture. My family (from rural Digby County) were finfish and lobster fishers. I have walked the shore adjacent to Cooke’s salmon pens off Brier Island, where the stench is unbearable, the beach is fouled, and broken pen parts litter the coasts of Long and Brier islands. The concerns greatly exceed the view.

I was at the August 2010 public meeting in Sandy Cove where the proposed open-net cages for St. Mary’s Bay were discussed. The spokeswoman for Cooke’s confidently stated there was an almost exact match between what the penned salmon were fed and their growth, that really their salmon didn’t poop. Later, the same spokesperson stated they only treated sick salmon — hard to imagine how they do this.

It was noted in one piece that \$60,000 is being allocated for the evaluation of closed-pen aquaculture. Typically, industries allow four to five per cent of any budget for research,

development and evaluation: \$60,000 of \$25 million represents 0.24 per cent. As a clinician and researcher, I find this absolutely appalling.

I am not opposed to aquaculture, just open-net aquaculture which I feel gravely threatens our environment and economy.

Richard MacLachlan, MD, Freeport

Unacceptable threat

The Herald's informative series on fish farming notes that inland aquaculture is much less profitable than ocean operations. One can argue that inland aquaculture does a far better job than the ocean type of incorporating principles of sustainability, and minimizing harm to the environment.

Our provincial sustainable prosperity legislation calls on all sectors of our economy to adopt methods and practices which minimize global warming and damage to ecosystems. Notwithstanding the growing efficiency of ocean fish-farm operations, they still constitute an unacceptable threat to marine ecosystems, the lobster fishery and wild salmon stocks in particular.

The provincial government's lavish and uncritical support of ocean fish farming is a quick and dirty way to generate jobs in rural Nova Scotia that will translate into an NDP victory in the next election. Future generations of Nova Scotians risk being left with degraded marine ecosystems that will no longer support sustainable fisheries.

Scott Burbidge, Port Williams

<http://thechronicleherald.ca/letters/125917-voice-of-the-people-august-12>

Union-Tribune San Diego, 13 August 2012

FDA roadblock over modified salmon could sink company

“Frankenfish” is not a joke that makes Henry Clifford laugh. People fighting to survive rarely find humor in name calling.

Clifford is an aquaculture scientist and vice president of AquaBounty Technologies, a biotech company with research headquarters off Miramar Road in San Diego. The achievement, but also the bane, of his company is that it has bioengineered and patented a way to increase the weight of farm-raised salmon with dramatic acceleration. However, the fact that it is done by a genetic modification is what spooks some people and gives rise to the “frankenfish” accusation.

Clifford, who lives in North County — he is leery of saying which city — says the company is on the verge of Food and Drug Administration approval, but drawn-out delays in the process have driven AquaBounty close to the financial wall, forcing it to repeatedly scramble for operating funds. And after 20 years of research and \$60 million already invested, the

money bucket drops a long way to the bottom of their well. Translation: jobs are close behind cash in going out the door.

On an issue like this, I bring my “C” in biology to the table, so I have to dumb things down to understand them. Fortunately, dumbing down can lead to boiling down, and that’s what I’ll try to do with this.

Clifford explains that what AquaBounty has done, reduced to simplest terms, is to take the growth hormone gene from Pacific Chinook salmon, implant it in farm-raised Atlantic salmon and thus speed up the growth rate of the Atlantic salmon by two to five times, depending on the size of the fish. They don’t grow bigger, just faster.

According to Clifford, the company has about 300 egg-laying salmon in Canada. These brood fish are isolated in land-based, tightly secured, monitored tanks. When eggs are laid (millions of them), they are fertilized with the milt (sperm) of genetically modified fish. The eggs are then converted to all female (don’t ask me how) and then made sterile, meaning the eggs are destined to grow fast into spinster fish.

Because of the uniqueness of the undertaking, Clifford’s company spent 17 years working closely with the FDA. Many of the studies they completed (more than 10,000 pages, he says) were almost as complex as a new drug application.

Finally, in 2010, the company’s application completed the FDA’s difficult obstacle course almost to final approval.

Let’s get back to the “frankenfish” argument. Opponents say they fear that modified fish might not be safe to eat, could escape into the ocean and corrupt their wild cousins, and, well, they argue, who knows where this meddling with mother nature could lead?

Clifford groans wearily at those arguments and replies that if and when AquaBounty gains final approval, the eggs will be sold to inland hatcheries, and only to those practicing the same level of security as in the company’s facilities. Those hatcheries would also have to be inspected and approved by the FDA.

Unwilling to engage in scientific debate and thus look ridiculous, I fall back on FDA documents that reviewed the AquaBounty application. I see two questions as vital: One, is the modified fish safe to eat? Two, is there a contamination threat to wild fish?

The FDA 2010 finding on the food safety aspect says: “We conclude that food from the [AquaBounty] salmon is as safe as food from conventional salmon ...”

The FDA finding also says the likelihood “is extremely small” that AquaBounty fish could escape into the wild. And if they did, the report continued, “It is concluded that the likelihood is extremely small that [AquaBounty salmon] will establish and reproduce ...” In other words, the fish would not wiggle free, but if they did, they would have nowhere to go.

By the sound of that, final approval was just around the corner, right? Not so fast. An outraged Clifford is convinced that an alliance (unholy to some, unusual to all) of environmental action groups and the fishing industry has used insider political muscle to delay final government blessing for nearly two years, and for which it has given no reason.

Groups that have joined arms against AquaBounty include Consumers Union, Sierra Club, Center for Food Safety and Food & Water Watch.

Meanwhile, the company twists in the wind. As the clock ticks, the bank account drains.

Clifford cites repeated efforts by the Alaska congressional delegation to scuttle the AquaBounty science and deny it final FDA approval. It's clear, he says, the fishing industry fears competition from a new quarter. And no one doubts the clout of the Alaska fishing industry over that state's politicians. However, every attempt to destroy AquaBounty by politics has, thus far, been rebuffed by Congress.

That the fishing industries would try to undercut scientific inquiry with politics should not shock anyone. Are we surprised that these guys play rough? But if it's true, for the environmental movement to do the same is beneath its calling and our expectations. What gives power to special interests is the lack of public knowledge and debate. This is an example of a public issue being fought out in the shadows where the infighters excel.

A scowl crosses Clifford's face when he says, "What is happening to us is in many ways a parable for the demise of our country as a world leader in innovation. A small, vocal minority with an extreme agenda has been able to hijack the process and the dialogue, and prevent the development of needed new products."

Genetically modified, plant-based foods such as corn and soybeans, by the thousands, have had an easier time gaining acceptance with the public. There is no doubt, however, that the idea of messing with animal genes spooks some people. We have science fiction and B movies to thank for much of that. But because we might have a way to make salmon grow faster does not mean the fish will also have two heads or grow huge and gobble us.

Apart from getting into the bowels of the science where I do not belong, if the FDA finding is accurate, it would be a happy thing if faster maturing fish would put cheaper, more plentiful seafood in the meat counter display case.

To people who say we should eat costly wild salmon rather than farm-raised, let me fall back on clichés and say there aren't that many fish in the sea, and that ship has sailed.

The influence of modern science on the food we eat is inevitable, and if managed sanely, highly desirable. Population growth is going to inexorably outstrip food production. So the question is, does the U.S. lead or follow in meeting that need?

"China already has more than a dozen applications for genetically modified animals. And in the end, those products will find their way into our markets, and so what will the activists have actually achieved other than putting the U.S. at a competitive disadvantage?" Clifford argues.

Come to think of it, if the Chinese develop and market these fish first, then maybe we can steal an invention from them for a change. Mildly amusing thought, perhaps, but we want to succeed the old American way — by beating them.

Fred Dickey of Cardiff is a novelist and award-winning magazine writer who believes every life is an adventure. He welcomes column ideas and other suggestions; contact him at [freddickey@roadrunner.com](mailto:freddickey@roadrunner.com)

<http://www.utsandiego.com/news/2012/aug/13/tp-fda-roadblock-over-modified-salmon-could-sink/>

Also of interest

- [Engineered salmon still a distant reality](#)
- [FDA to consider approval of modified salmon](#)
- [Fish or frankenfish? FDA weighs altered salmon](#)
- [FDA considering whether to label engineered fish](#)
- [Consumer groups push for label for modified salmon](#)

News 1130, 12 August 2012

Call for closed-containment salmon farms

David Suzuki Foundation believes current open-net caged system is harming the environment

Brock Hunter

VANCOUVER (NEWS1130) - The **David Suzuki Foundation** is calling for changes to salmon farming after the recent virus outbreak at a fish farm on the Sunshine Coast .

The Foundation's Jay Ritchlin says fish need to be farmed in a way that won't damage the environment. He believes the current open-net caged system allows disease, parasites, waste and diseased fish to enter the wild environment freely.

"It says to us just how impossible it is to completely control diseases and parasites going in and out of open-net caged salmon farms," Ritchlin notes. "For us, it's another indication that for the good of the industry and the good of the environment, we need to move to closed-containment systems to grow these kinds of fish."

"Closed-containment allows the farmer to be the one to pay for taking care of [the salmon] instead of the environment paying to do that," he adds.

Last week tests confirmed an outbreak of the IHN virus at Grieg Seafoods Culloden Point fish farm in Jervis Inlet.

IHN has no effect on human health.

<http://www.news1130.com/news/local/article/391275--call-for-closed-containment-salmon-farms>

The Times Colonist, 12 August 2012

## Salmon farmers efficient in use of resources



B.C. salmon farmers have made efficient use of fishmeal and fish oil resources, a letter-writer says.

Photograph by: Bill Keay, Vancouver Sun , Times Colonist

Re: "Salmon aquaculture not worth the risks," Aug. 8.

The use of fishmeal and fish oil in salmon feed is certainly one of the most important sustainability questions to consider when discussing salmon aquaculture. Unfortunately, the information shared by our critics is significantly out of date by B.C. standards.

Salmon farmers have made efficient use of fishmeal and fish oil resources a top priority for many years. Our members have led the way in the most efficient use of these resources, drastically reducing the amount of fishmeal and oil in their feed in the past decade, replacing them with other ingredients while still providing farm-raised salmon with the nutrients they need to be a healthy and nutritious protein source.

Thanks to these improvements, today it only takes about 1.2 kilograms of these small fish to grow one kilogram of farmed salmon, which are very efficient feed converters compared to other farm-raised animals that have to consume more feed to give them energy to heat their bodies and to stand.

The fish meal that is used in salmon feed is sourced from sustainable fisheries - and according to the United Nations Food and Agriculture Organization, the vast majority of it would never provide food to humans.

We take the responsibility of our operations and our role on the coast very seriously. The work done in this area is a good example of that proactive work.

Mary Ellen Walling Executive director,

B.C. Salmon Farmers Association Campbell River

<http://www.timescolonist.com/news/Salmon+farmers+efficient+resources/7078710/story.html>

The Times Colonist/The Province, 10 August 2012

Salmon culls because of virus could cost fish farms millions

Judith Lavoie



Undated handout photo of Atlantic salmon on a fish farm in British Columbia, Canada.

Photograph by: Handout , Marine Harvest Canada

Two B.C. salmon farming companies are looking at losses amounting to millions of dollars as fish are culled from sites where a potentially deadly virus was found.

Atlantic salmon from Grieg Seafood's Culloden Point fish farm in Jervis Inlet, on the Sunshine Coast, and from Mainstream Canada's farm at Millar Channel in Clayoquot Sound are being culled after confirmation of the infectious haematopoietic necrosis virus, or IHN.

The virus, which is endemic in Pacific salmon but does not make them sick, can kill Atlantic salmon. The cull was ordered by the Canadian Food Inspection Agency to prevent the spread of IHN to other farm sites.

IHN has no effect on human health.

All of the salmon have now been removed from Culloden Point. The operation is ongoing at the Millar Channel farm.

“The fish were 400 grams and there were about 400 tonnes. Financial losses are expected to be in the millions,” said Mainstream spokeswoman Laurie Jensen.

Grieg has destroyed about 316,000 fish, said Grieg managing director Stewart Hawthorn. Financial losses have not yet been evaluated.

“Our focus this week has been on farming responsibly — humanely treating our animals, by removing them before they became sick, and eliminating the risk of us transferring the virus to other farms, by removing the fish before most of them became infected by the IHN virus,” Hawthorn said.

“These salmon are our passion and our livelihood, but doing the right thing has been our priority and this has involved some tough choices.”

Both companies say they are looking at their insurance coverage and will explore with CFIA whether any government assistance programs are available.

“Compensation has been paid to other farming sectors, due to issues such as avian flu and BSE, so this may be available to our farming sector as well,” Hawthorn said.

Both farms will be cleaned and disinfected. The CFIA quarantine will then remain in place for another two weeks.

However, the industry voluntarily keeps affected sites empty for another three months, Hawthorn said.

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<http://www.vancouversun.com/life/Virus+confirmed+salmon+farms+cull+fish/7074308/story.html> and

<http://www.theprovince.com/life/Cull+curb+virus+could+cost+West+coast+salmon+farms+millions/7074409/story.html>

More on This Story

- [Virus confirmed, two B.C. salmon farms to cull fish](#)
- [Third B.C. fish farm quarantined after deadly virus detected](#)
- [Salmon farm on B.C.'s Sunshine Coast quarantined over fears of virus](#)
- [Fish farm won't wait for CFIA, will go ahead and cull 500,000 fish](#)

Save Our Sounds, 10 August 2012

The SOUNDS needs YOU: [Say No to 9 new Salmon Farms](#)

## Sign the Petition

King Salmon's application is proposing to build nine new salmon farms, on top of their existing eight farms. Eight of their new farms are inside Marine Farm Prohibited Zones. All that while King Salmon still can't explain why thousands of salmon died this year and had to be trucked away on a barge.

The Marlborough Sounds is a beautiful place and there are many parts of it that remain unspoilt. The Maori and Pakeha heritage goes way back, and today thousands of visitors come to this area to experience the beauty and endemic wildlife. We need to preserve this.

This is the 'clean-green' country we love and are willing to fight for - **say NO to 9 new salmon farms** that deplete the natural resources and cordon off public water space for a private profit, and there is no cost to the company to occupy the water.

### **Join the fight.**

**We need the numbers, we need your names... [click here to sign this petition and make a difference!](#)**

Why is this Petition so important?

I am a seventeen-year-old who lives in the Marlborough Sounds and have done so all my life. I am working on an award-winning environmental project my family has spent the last 20 years building from the ground up.

I am calling on fellow New Zealanders and also international visitors to sign this petition and help create a worthy message. We DON'T want nine new salmon farms in the Marlborough Sounds.

There are already eight salmon farms here, and they have had major issues earlier this year with one of their farms.

Leona Plaisier

Leona will deliver the petition to the Environmental Protection Authority Board of Inquiry

More details online via: <http://www.saveoursounds.co.nz/>

The Alburni Valley Times, 10 August 2012

Fish farm starts emptying IHN fish

Julie Bertrand

Mainstream Canada started emptying its Millar Channel farm, northwest of Tofino, of all salmon this week as the Canadian Food Inspection Agency confirmed the presence of the infectious hematopoietic necrosis virus at the site.

Four hundred tonnes of salmon will be sent to a rendering facility to be destroyed. CFIA first detected the IHN virus at the end of July.

This the second time in less than three months that the virus has been detected at a Mainstream salmon farm on the West Coast. In May, the Dixon Bay farm was completely emptied as a result of an IHN outbreak. The dead salmon were sent to an Alberni Valley composting facility.



CREDIT:

Mainstream Canada has begun emptying its Millar Channel farm.

In both cases, the virus was detected while in its early stages of infection. "The good side of the outbreaks is they show that our monitoring systems and our detection program are working," said Laurie Jensen, Mainstream Canada communications and corporate sustainability manager. "Our managers are doing a great job. It makes us proud."

IHN is a naturally occurring salmon virus first detected and identified in a Washington State hatchery in 1953.

It made its way to B.C. in 1969. It is now present in all parts of the world where salmon can be found, excluding Norway. Infected fish show numerous signs, including abdominal distension, bulging eyes, darkened skin, abnormal behaviour, fading of the gills, anemia and frequent hemorrhages all over its body. The disease ultimately kills the fish.

Jensen said the company suspects wild salmon propagated the IHN virus at both farms.

"We know that wild salmon carries it," she said. "We just don't know which salmon species brought the virus."

According to a Mainstream press release, research has shown that up to 86.2% of wild salmon could be infected with the virus. The province has been testing wild salmon since 1987.

During the present IHN outbreak, CFIA acted quickly and was able to get test results within days, when it normally takes weeks to get them.

The fish at Millar Farm are small, approximately weighing 400 grams on average. A Mainstream salmon farm can normally produce up to 3,000 tons of salmon. During the IHN outbreak, there was no increased salmon mortality at the Millar Channel farm.

Jensen said the company is concerned about having two IHN outbreaks in less than three months. "This is always concerning when something happens to our salmon," she said. "We take a lot of pride in our fish."

Quarantine measures are still in place at the Millar Channel farm, which means that traffic around the farm continues to be restricted. The company wants to prevent the spread of the

virus to any other farm sites in the area. The Dixon Bay farm is located 6.5 kilometres away from Millar Channel.

<http://www2.canada.com/westerly/story.html?id=e63a383f-65db-4d1c-9b01-610594f3a3fb>

The Vancouver Sun, 10 August 2012

Agency orders cull of Atlantic salmon at two farms

Virus detected in small number of fish

Christopher Reynolds

Two B.C. fish farms are culling hundreds of thousands of their Atlantic salmon stock after testing confirmed a small percentage carried an infectious virus.

The virus, infectious haematopoietic necrosis, or IHN, can be deadly to Atlantic salmon, said B.C. Agriculture Ministry fish pathologist Gary Marty.

"These Atlantic salmon are highly susceptible to this virus," he said, adding if there is a lot of the virus around, one or two more farms could be hit this year.

He said testing at the two affected farms confirmed about two per cent were infected. "Because it's such an infectious disease, eventually all the fish would get it and die," he said.

Marty said the virus poses less risk for wild fish species native to the Pacific, which have a natural resistance.

Brian Riddell, CEO of the Pacific Salmon Foundation, said: "IHN is not exotic, it's native to the West Coast. So in that sense it's not as critical as some viruses that you hear people concerned about."

Others say the potential detriment to wild fish stocks posed by the virus, and fish farms in general, is much higher.

"The public needs to be concerned that this isn't just an issue about salmon farms but it's about the health of wild stocks as well," said Craig Orr, executive director of the Watershed Watch Salmon Society.

He said mutation of viruses into more virulent strains is more common on fish farms than in the wild.

"The nearshore marine environment is getting to be a much more hostile environment for wild fish, I can tell you that. And a lot of the problems are attributed to salmon farms."

He also said transmission of sea lice can occur more easily in the crowded farm pens and pointed to the risk of disease posed by imported fish like Atlantic salmon.

The Canadian Food Inspection Agency has issued an official order to the two affected farms to remove all fish.

They are Mainstream Canada's farm at Millar Channel in Clayoquot Sound and Grieg Seafood's farm at Culloden Point on Jervis Inlet along the Sunshine Coast.

Another Mainstream operation, the Dixon Bay Farm in Clayoquot Sound, had to carry out a similar cull earlier this year when IHN was found there in May.

Mainstream will likely carry out a dry-land disposal, which involves transporting and incinerating tonnes of fish carcasses, said spokeswoman Laurie Jensen.

"The boats to take the fish out, the labour to do the removal, et cetera, it's expensive," Jensen said.

"This has happened before to the industry, and they come back."

Jensen claimed there was even an upside to the outbreak.

"We know our disease screening is working, we know our bio-security is working, we know our protocols are working. So while it's unfortunate we got it, at least we know we're on the right track."

But Marty said the outbreaks could have been prevented. A vaccine is available and used by many fish farms in the Fraser River where sockeye salmon runs are more common. But it's expensive, which may be why more farms don't administer it.

"If the vaccine is effective, then we won't see any more cases in future years," Marty said.

Outbreaks of IHN have occurred periodically through-out the history of fish farming in B.C., Marty said. "Every four to eight years or so there will be a different outbreak."

A spokeswoman for Main-stream said the company planned to vaccinate all of its Atlantic salmon stock in 2013.

An IHN outbreak in Atlantic salmon farms on the West Coast between 2001 and 2003 devastated the industry, resulting in the culling or early harvest of 12 million fish, according to a 2006 report in the Diseases of Aquatic Organisms journal.

The virus has no effect on human health.

First identified in sockeye salmon in a Washington state hatchery in 1953, the IHN virus has likely been present in the Pacific for centuries.

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<http://www.vancouversun.com/health/Agency+orders+cull+Atlantic+salmon+farms/7069340/story.html>



Kwicksutaineuk/Ah-Kwa-Mish First Nation (KAFN) Chief Bob Chamberlin stated wild salmon are integral to their well-being.  
(Photo: YouTube/CommonSenseCanadian)

First Nation resorts to Supreme Court to protect wild salmon



**Friday, August 10, 2012, 00:10 (GMT + 9)**

The Kwicksutaineuk/Ah-Kwa-Mish First Nation (KAFN) of the Broughton Archipelago are resorting to the Supreme Court of Canada to protect the wild salmon in their territory. The KAFN announced that they have applied for leave to appeal the 3 May 2012 decision of the British Columbia Court of Appeal (BCCA) regarding the environmental impacts of open net-pen salmon farms on wild salmon.

The recent BCCA decision overturned the earlier legal victory where the KAFN successfully advanced the first class-action lawsuit in Canada focusing on Aboriginal fishing rights. Justice Slade's 1 December 2010 decision was appealed jointly by the BC and Canadian governments on several grounds, most notably that "aboriginal collectives" should not be allowed to join together in a class action.

When the class-action was launched in February 2009, 29 salmon farm sites were authorized by the BC Government to operate in the Broughton Archipelago. The KAFN maintain that these operations have contributed to a drastic decline in salmon stocks within the region due to sea lice and are hoping the government will ultimately force the closure of commercial open net-pen fish farms in the Broughton Archipelago.

"The appeal of our certification won by both the Canadian and BC governments, and supported by the aquaculture industry, hinged on technicalities and missed the importance of government's obligation to regulate the open net salmon farming industry in a way that protects wild salmon. This decision cannot remain unchallenged," asserted Bob Chamberlin, KAFN Chief and representative plaintiff in the case.

He noted the increased importance and urgency of this case due to the government's recent

gutting of the Fisheries Act and erosion of the environmental assessment process plus its attempt to “paralyze” ENGOs.

A successful application for Leave to Appeal would mean the Supreme Court of Canada would consider whether aboriginal collectives should be able to join together and use the powerful class-action laws to protect their rights.

“Wild salmon are integral to the social, cultural, and ecological well-being of the KAFN and they have sustained us for over 5,000 years. Despite this, our first-hand knowledge of the impacts of open net-pen salmon farms in KAFN Territories has not been respected,” Chief Chamberlin stated.

He said the KAFN resorted to the courts only as a last option.

“We would much rather cooperate and use the resources expended on litigation to remediate the environmental damage that has been done and improve the regulatory system for aquaculture. However, from the actions of the BC and Harper governments to date, I can only conclude that we cannot trust them to protect Canada’s environment and our fish without being ordered to do so by the courts,” he added.

*By Natalia Real*  
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<http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=8-2012&day=10&id=54488&l=e&country=0&special=aquaculture&ndb=1&df=0>

CBC News, 9 August 2012

Fish farm fight goes to top court

Can First Nations be considered a "class" with a common claim for rights such as protection of salmon stocks? The B.C. Court of Appeal says no. Bob Chamberlain, chief of the Kwiksutaineuk/Ah-Kwa-Mish First Nation, talks about plans to appeal that ruling to the Supreme Court of Canada.

Listen online via: <http://www.cbc.ca/ontheisland/2012/08/09/fish-farm-fight-goes-to-top-court/>

The Times Colonist, 9 August 2012

Bid to close fish farms could go to Supreme Court

BY JUDITH LAVOIE

A Vancouver Island First Nation is applying for permission to appeal to the Supreme Court of Canada in an effort to close down open net-pen fish farms in Broughton Archipelago.

The Kwicksutaineuk/Ah-Kwa-Mish First Nation initially launched the lawsuit based on claims of damage to wild salmon from sea lice from fish farms, but issues of deadly viruses and diseases from fish farms are now much wider, said Chief Bob Chamberlin.

"Our First Nation, that holds title, simply doesn't want this industry in our territory," he said.

However, before arguing the salmon case, the First Nation has to be granted permission to act legally as a group.

The Supreme Court of B.C. in 2010 set aside a bar on aboriginal groups or collectives joining together for a class-action suit. But the provincial and federal governments challenged the ruling, and in May it was overturned by the B.C. Court of Appeal.

The First Nation has applied to the Supreme Court of Canada for leave to appeal that decision. If leave is granted, the Supreme Court will consider whether the First Nation -- and other aboriginal collectives -- will be allowed to file class-action proceedings.

"It's like saying a class action is for everyone except First Nations people," Chamberlin said of the B.C. Court of Appeal's decision.

Lawyer Reidar Mogerman, who is representing the First Nation, said a ruling on aboriginal class-action suits must be made before the rest of the case can proceed and that decision is likely to be at least a year away.

The implications could be felt across Canada, said Grand Chief Stewart Phillip, president of the Union of B.C. Indian Chiefs. "Our First Nations across the country will be watching this case very, very closely."

However, threats to the wild salmon remain at the heart of the case, Phillip said.

"The bottom line is the wild salmon fishery is an integral part of First Nations culture and it has been for thousands of years. We will do everything in our power to ensure that legacy is left intact and we're able to pass it on to our grandchildren and grandchildren's grandchildren," he said.

Despite lack of housing and poverty issues among band members, there is agreement that this lawsuit is a priority, Chamberlin said.

"What's at risk here is the lifeblood of our people -- salmon. So no cost is too great. We are talking about food for our people for generations," he said.

Mogerman said the group wants a declaration on the legal nature of rights and titles, damages and rebuilding of the fishery by those who destroyed it.

<http://www.timescolonist.com/news/close+fish+farms+could+Supreme+Court/7063679/story.html>

The Chronicle Herald, 9 August 2012

Voice of the People: Not responsible strategy

John Demont's report on "aquaculture" missed a very important point. Most Nova Scotians do support aquaculture and the jobs it could bring to rural communities. Our ventures into shellfish aquaculture and closed containment fin-fish aquaculture are world-class. However, I, like many who live in coastal communities, am very much opposed to the open net-pen form of fin-fish aquaculture because of its proven damage to the marine environment, and the threat it poses to jobs that currently exist in our communities. (The Herald online survey should have read: "Do you support open-pen salmon farms?" not "Do you support aquaculture?")

Premier Darrell Dexter and Fisheries Minister Sterling Belliveau have both made it very clear that open-pen salmon farms, in their current form, will be imposed on coastal communities, whether they want them or not. They will not even consider a temporary moratorium on further expansion (until present problems are addressed by the industry). Nor will they require the industry to put into place effective pollution containment and removal systems. This is not a responsible aquaculture strategy.

Dave Maynard, Spry Bay

<http://thechronicleherald.ca/letters/125090-voice-of-the-people-august-9>

The Vancouver Sun, 9 August 2012

Virus confirmed, two B.C. salmon farms to cull fish

BY JUDITH LAVOIE

Two B.C. fish farms will cull their fish this week after receiving confirmation of a virus that can be deadly to Atlantic salmon.

The Canadian Food Inspection Agency has confirmed that infectious haematopoietic necrosis, or IHN, has been found in salmon at Grieg Seafood's farm at Culloden Point on Jervis Inlet and Mainstream Canada's farm at Millar Channel in Clayoquot Sound.

Both farms have been in quarantine since preliminary positive tests showed up last week during routine monitoring.

The confirmation was not unexpected, said Stewart Hawthorn, Grieg's managing director.

"These health challenges are an infrequent but normal part of farming natural food," he said.

CFIA has said it would issue a disposal notice for the 316,000 fish at the farm and the company is coming up with a plan for the agency's approval, Hawthorn said.

"We appreciate the agency's swift and efficient handling of this situation and welcome the opportunity to resolve this quickly and thoroughly," he said.

In Clayoquot Sound, CFIA has issued an official order for Mainstream to remove all fish

from the Millar Channel site, said spokeswoman Laurie Jensen.

“All fish will be removed from the farm and sent to a rendering facility,” Jensen said.

“Strict biosecurity measures will be followed at all stages of depopulation, transportation, offloading and rendering.”

Earlier this year, 570,000 Atlantic salmon from Mainstream’s Dixon Bay Farm in Clayoquot Sound were destroyed after the virus was confirmed.

IHN is carried by Pacific salmon, but does not make them sick. However, in Atlantic salmon, which have no immunity to the virus, it can lead to rotting flesh and organ failure.

The virus has no effect on human health.

Fish farm opponents say the heavy viral load from farmed salmon, which live in tight quarters, could affect young sockeye and point to IHN as another argument in favour of closed containment systems for the farms.

However, salmon farmers say the virus has been spread from wild salmon.

“Migrating wild salmon are natural carriers of the IHN virus and are most likely the source of the virus infection at both farms,” Jensen said.

<http://www.vancouversun.com/life/Virus+confirmed+salmon+farms+cull+fish/7063701/story.html>

The Province/The Canadian Press, 9<sup>th</sup> August 2012

B.C. company to kill 300,000 Atlantic salmon after virus outbreak

A B.C.-based salmon farming company is expecting to receive an order very soon, forcing it to kill the more than 300,000 Atlantic salmon at a fish farm north of Vancouver.

Grieg Seafood says the Canadian Food Inspection Agency has confirmed an outbreak of the IHN virus as the company's Culloden Point fish farm in Jervis Inlet on the Sunshine Coast.

A release from Grieg says while it awaits the order to destroy the fish, it is further isolating the farm and getting ready to depopulate the pens.

The farm was quarantined earlier this month after preliminary positive tests for the virus, which is not believed to be harmful to humans or Pacific salmon, but can be deadly to Atlantic salmon.

In May, all the fish at a Mainstream Canada salmon farm on Vancouver Island were destroyed after the virus was confirmed in pens in the Tofino area.

Precautionary quarantines were also imposed in May on two other farms, including a Grieg operation on the Sunshine Coast, but final tests showed IHN was not present at those

facilities.

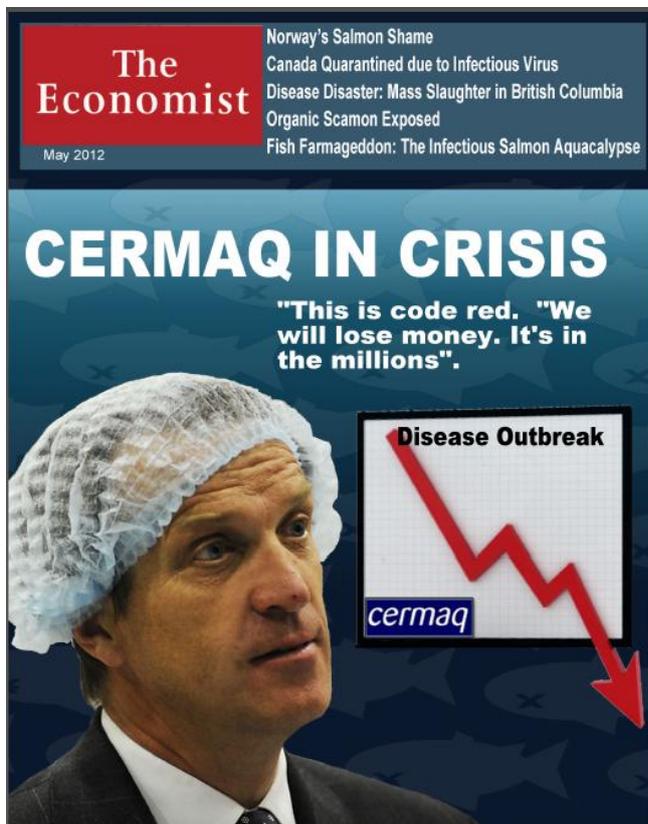
<http://www.theprovince.com/health/company+kill+Atlantic+salmon+after+virus+outbreak/7064123/story.html>

Superheroes 4 Salmon, 9 August 2012

## Compensation Culture

Compensation culture is spreading through Canada like infectious diseases through a salmon feedlot. Just yesterday (8 August), the presence of Infectious Haematopoietic Necrosis (IHN) virus was confirmed at two salmon farms in the Clayoquot Sound UNESCO Biosphere Reserve and on the Sunshine Coast in British Columbia (read more via '[IHN outbreaks confirmed](#)').

Since IHN reared its ugly head again back in [May](#), five sites have been affected: [three](#) in Clayoquot Sound ([Millar Channel](#), [Dixon Bay](#) and [Bawden Point](#)); and two on the Sunshine Coast ([Culloden Point](#) and [Ahlstrom Point](#)). The two Norwegian companies involved have desperately tried to deflect the blame away from their disease-ridden salmon feedlots and onto wild salmon. [Cermaq](#) (the Norwegian Government-owned parent company of [Mainstream Canada](#)) and [Grieg Seafood](#) (controlled by [Grieg Holdings](#) in Norway) are now demanding millions of dollars of compensation from the Canadian Government and their insurance companies.



Shamefully, the BC Salmon Farmers Association admitted in [The Times Colonist](#) (4 August) that some companies have not even used a vaccine against IHN because it was “extremely

expensive”. “It seems to be more about cutting costs, crossing fingers and rolling the dice,” [wrote](#) Will Soltau of Living Oceans (7 August). “And when things don't pan out, just blame it on the wild salmon.”

“Why should Canadian taxpayers bear the burden of Mainstream’s questionable business practices?” said [Friends of Clayoquot Sound](#) (1 August). “Mainstream could have vaccinated those fish against this known disease. They didn’t, and now they want a bail-out from Canadian taxpayers?”

Yesterday (8 August), Grieg Seafood [notified](#) the Oslo Stock Exchange that IHN virus had been confirmed at their Culloden Point farm on the Sunshine Coast. The claim for compensation is likely to be in the region of \$1.5 million since Grieg reported the “book value” of the over 300,000 farmed Atlantic salmon at their Culloden Point site to be worth NOK 9 million (\$1.5 million). “The final financial impact of the likely depopulation order will depend on the potential compensation from Grieg Seafood’s insurance and/or Canadian authorities as a consequence of a potential depopulation order,” [reported](#) Grieg.



Whilst this information was reported to the Norwegian financial authorities (it is Norwegian law via the Norwegian Securities Trading Act) it is not available on Grieg Seafood BC’s [web-site](#) or even Grieg Seafood’s [news section](#). To find the information the public have to go to the ‘[Investor](#)’ section of Grieg’s web-site and then click on ‘[Stock Exchange Filings](#)’.

Similarly, when Cermaq yesterday publicised the confirmation of IHN at their Millar Channell farm in the Clayoquot Sound UNESCO Biosphere Reserve they first notified investors and the Norwegian Stock Exchange via a ‘[Stock Exchange Notice](#)’. There’s not even a press release available on Cermaq’s [web-site](#). However, unlike Grieg Seafood, at least

Mainstream Canada chose to issue a [press release](#) – but only after the notification to the Oslo Stock Exchange.

“The current book value of the biomass is approximately CAD 4.5 mill,” stated Cermaq’s [stock exchange notice](#) (8 August). “The financial impact depends on any compensation from the company's insurance or the Canadian Authorities that has required the depopulation. Following the depopulation, Mainstream Canada will have no other populated sites in this area. This information is subject of the disclosure requirements pursuant to section 5-12 of the Norwegian Securities Trading Act.”

“As quarantine measures are in place, traffic around the farms will be restricted,” reported Mainstream Canada (8 August) via a [press release](#). “This is crucial to helping prevent the spread of virus to any other farm sites in the area. Migrating wild salmon are natural carriers of the IHN virus, and are most likely the source of the virus infection at both farms.”

Last month, Cermaq reported via another [stock exchange notice](#) (11 July): “Total expenses in relation to depopulation and clean-up are calculated to NOK 27 million. Mainstream Canada is currently looking into the possibility to obtain compensation either from the federal government or its insurance provider. It has however not yet been possible to obtain an agreement with the insurance company responsible for the biomass insurance. In accordance with the IFRS requirement that a compensation must be virtually certain to be recognized in the profit and loss statement, Cermaq will therefore book a one time charge of NOK 27 million in the Group’s 2nd quarter 2012 report, to be published 20 July 2012.”



Norwegian-owned salmon farming companies are playing a dangerous blame game. “Mainstream believes that wild fish are infecting their farmed salmon,” says Friends of Clayoquot Sound executive director Dan Lewis in today’s [The Westerly News](#) (9 August). “Many British Columbians are concerned that farmed salmon are transmitting deadly diseases to wild salmon.”

Read in full online via: <http://www.superheroes4salmon.org/blog/compensation-culture>

Also online via '[Salmon Farms Seek Compensation for Disease Outbreak Losses](#)'

The Westerly News, 9 August 2012

Mainstream rids farm of fish due to virus

Andrew Bailey

Mainstream announced Tuesday that the Infectious Haematopoietic Necrosis virus (IHN) is confirmed at its Millar Channel farm and the Canadian Food Inspection Agency (CFIA) has ordered all fish be removed from the site.

Mainstream will depopulate the farm and transport the fish to a rendering facility, according to the company's media release.

The IHN virus was detected at Millar on July 27 by the provincial animal health lab. Millar is located northwest of Tofino.

Millar is home to approximately 400 tonnes of young fish that weigh in at only about 400 grams each, according to Mainstream's Laurie Jensen.

This is the second time Mainstream has been ordered to depopulate a farm this summer after an IHN outbreak at its Dixon Bay location in May led to the culling of over 500,000 fish.

Dixon is located about 6.5 kilometres from Millar.

With quarantine measures in place traffic will be restricted around Millar to prevent the spread of the virus to other farm sites in the area, according to the company's release.

Mainstream is pointing at migrating wild salmon as the most likely spreader of the virus to its Millar population.

"Mainstream believes that wild fish are infecting their farmed salmon," says Friends of Clayoquot Sound executive director Dan Lewis. "Many British Columbians are concerned that farmed salmon are transmitting deadly diseases to wild salmon. One simple solution to both these concerns is to move the farms out of the ocean into closed-containment systems."

[reporter@westerlynews.ca](mailto:reporter@westerlynews.ca)

<http://www2.canada.com/westerly/news/story.html?id=4e573ea2-dbd8-407a-8f0d-1d014ff3713c>

Fish News EU, 9 August 2012

IHN outbreaks confirmed

SUSPECTED outbreaks of IHN (Infectious Haematopoietic Necrosis) have now been confirmed at two salmon farming sites in British Columbia.

The sites in question are Mainstream Canada's Millar Channel farm north of Tofino and Grieg Seafood's Culloden Point farm site in Jervis Inlet, Sunshine Coast.

Mainstream Canada and Grieg Seafood have both received official orders from the Canadian Food Inspection Agency (CFIA) to remove all fish from these sites. The CFIA will have to approve all stages of the depopulation process including transportation, offloading and rendering.

"The first priority for these companies is to work with CFIA to ensure that any depopulation is done quickly and safely," said Mary Ellen Walling, Executive Director of the BC Salmon Farmers Association.

IHN is a natural virus of the Pacific Ocean, which can be carried regularly by wild fish who have a natural resistance to it, studies show. They can carry the virus their whole lives without any negative impacts on their health. The health of Atlantic salmon, however, can be affected by IHN as they have not developed immunity to it. The virus has no effect on human health.

Both companies found preliminary positives on these sites in the past 10 days during their routine fish health sampling programmes and follow-up testing by independent laboratories confirmed the findings. A management committee made up of representatives from the BCSFA has been meeting regularly since the first preliminary findings. Increased biosecurity measures and testing are underway at all farms in BC.

In May this year, a farm in the north Tofino-area was diagnosed with IHN. Those fish were culled and composted and increased monitoring was put in place at other farms across British Columbia. These findings are the first of their kind in British Columbia in nearly 10 years.

[http://www.fishnewseu.com/index.php?option=com\\_content&view=article&id=8733:ihn-outbreaks-confirmed&catid=46:world&Itemid=56](http://www.fishnewseu.com/index.php?option=com_content&view=article&id=8733:ihn-outbreaks-confirmed&catid=46:world&Itemid=56)

The Marlborough Express, 9 August 2012

Area of Sounds up for debate

Penny Wardle



Go figure: There are competing views on how big the Marlborough Sounds are in preparation for a hearing on marine farm expansion by King Salmon.

How big is the Marlborough Sounds?

The Marlborough Express has been asking this question for a month or so but getting no clear answers.

NZ King Salmon chief executive Mr Rosewarne has repeatedly quoted the total area of the Marlborough Sounds as 150,000 hectares. Sustain Our Sounds has used a figure of 75,000 hectares, which chairman Danny Boulton says he took from research organisation Cawthron.

The two are either side of a hearing to allow more marine farming in the region.

Cawthron marine biophysical scientist Ben Knight told the Express the water area of the Sounds depended on what was included, which could be debated.

In its evidence, Cawthron said the water area of Queen Charlotte Sound, inner Queen Charlotte Sound and Pelorus Sound is 75,800ha. This included Kenepuru Sound, Mr Knight said.

Port Gore, Guards Bay and Waitui Bay would add about 15,800ha, he said. Croisilles Harbour was another large region with marine farms which could arguably be added along with Admiralty Bay and Port Underwood.

Mr Rosewarne said he got his 150,000ha figure from the Marlborough Marine Farming Association.

Association executive officer Graeme Coates said this was a rough estimate of water suitable for marine farming inside a line drawn from headland to headland throughout the Sounds.

"It's a grab that looks about right," Mr Coates said.

The line started at Cape Soucis at the entrance to Croisilles Harbour on the west side of the Sounds and ended at Port Underwood in the east, Mr Coates said.

On its website, the Marlborough District Council gives the the Marlborough Sounds water area as 506,700ha, extending 22km offshore. Its publication, Ecologically Significant Marine Sites in Marlborough, says Pelorus Sound is 38,477ha and Queen Charlotte Sound including Tory Channel is 22,557ha, including the offshore area.

The Express search was prompted by the difference between figures quoted by Mr Rosewarne and Mr Boulton.

Mr Rosewarne has repeatedly said proposed new salmon farms would occupy 17 hectares or 0.01 per cent of the 150,000 hectare Marlborough Sounds.

Mr Boulton rounds down the Cawthron figure in its water column report to argue if its new farms went ahead, King Salmon would expand from occupying 77ha of the 75,000ha Sounds to 266ha, or 0.35 per cent. This included the area covered by seabed anchoring, not just surface hectares.

Add the area of sea-floor affected by pollution and that became 0.53 per cent, Mr Boulton claims.

The Department of Conservation said they record only land areas of the Sounds.

NZ King Salmon has applied to develop nine new salmon farms in the Marlborough Sounds and Sustain Our Sounds is opposing the application.

<http://www.stuff.co.nz/marlborough-express/news/7444087/Area-of-Sounds-up-for-debate>

The Marlborough Express, 9 August 2012

Request dropped

Penny Wardle

New Zealand King Salmon has pulled back its request for one of two private plan changes it applied for as part of its application to develop nine new salmon farms in the Marlborough Sounds.

On Friday King Salmon told the Environmental Protection Authority board, which will hear its application to develop the farms, that this was done in response to concerns from the Conservation Department and Marlborough District Council.

The proposed plan change removed any reference to aquaculture management areas (AMAs), where marine farming was allowed under previous legislation.

The Marlborough Express understands that this plan change was redundant, because AMAs were removed and replaced by a first-past-the-post system, when aquaculture legislation reforms came into effect last October.

In its evidence to the Environmental Protection Authority board of inquiry, DOC said the proposed plan change was ambiguous, unclear, incorrect and possibly not appropriate or necessary.

<http://www.stuff.co.nz/marlborough-express/news/salmon-farms/7444081/Request-dropped>

Fisheries Information Service, 9 August 2012



Salmon sampling to conduct laboratory tests. (Photo: [www.agf.gov.bc.ca](http://www.agf.gov.bc.ca))

IHN virus confirmed at two salmon farms



**CANADA**

**Thursday, August 09, 2012, 23:30 (GMT + 9)**

The infectious haematopoietic necrosis (IHN) virus has now been confirmed at [Mainstream Canada](#)'s Millar Channel farm north of Tofino and [Grieg Seafood](#)'s Culloden Point farm site in Jervis Inlet, Sunshine Coast.

Mainstream Canada and Grieg Seafood have both received official orders from the [Canadian Food Inspection Agency](#) (CFIA) to remove all fish from these sites. The CFIA will have to approve all stages of the depopulation process including transportation, offloading and rendering.

“The first priority for these companies is to work with CFIA to ensure that any depopulation is done quickly and safely,” said Mary Ellen Walling, executive director of the [BC Salmon](#)

[Farmers Association](#) (BCSFA).

IHN is a natural virus of the Pacific Ocean, which can be carried regularly by wild fish who have a natural resistance to it, studies show. They can carry the virus their whole lives without any negative impacts on their health. The health of Atlantic salmon, however, can be affected by IHN as they have not developed immunity to it.

IHN has no effect on human health.

Both companies found preliminary positives on these sites in the past 10 days during their routine fish health sampling programmes and follow-up testing by independent laboratories confirmed the findings. A management committee made up of representatives from the BCSFA has been meeting regularly since the first preliminary findings. Increased biosecurity measures and testing are underway at all farms in BC.

In May this year, a farm in the north Tofino-area was diagnosed with IHN. Those fish were culled and composted and increased monitoring was put in place at other farms across British Columbia. These findings are the first of their kind in BC in nearly 10 years.

The BCSFA will continue to update the public regularly.

#### **Related articles:**

- [IHN detected at another Mainstream Canada farm](#)
- [IHN outbreak may be spreading](#)
- [Mainstream starts depopulating farm after detecting IHNV](#)

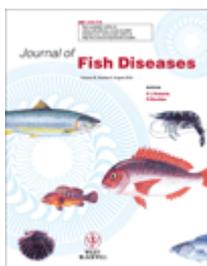
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Journal of Fish Diseases, 8 August 2012

Geographical Distribution of Salmonid Alphavirus Subtypes in Marine Farmed Atlantic Salmon, *Salmo salar* L. , in Scotland and Ireland



*Journal of Fish Diseases*

D A Graham, E Fringuelli, H M Rowley, D Cockerill, D I Cox, T Turnbull, H Rodger, D Morris, and M F Mc Loughlin

“Sequence data from salmonid alphavirus (SAV) strains obtained from farmed marine Atlantic salmon, *Salmo salar* L. , over a 20-year period between 1991 and 2011 was reviewed to examine the geographical distribution of the genetically defined SAV subtypes in twelve regions across Ireland and Scotland. Of 160 different Atlantic salmon SAV strains examined, 62 belonged to subtype 1, 28 to subtype 2, 34 to subtype 4, 35 to subtype 5 and 1 to subtype 6. SAV subtypes 1, 4 and 6 were found in Ireland, while subtypes 1, 2, 4 and 5 were found in Scotland. In the majority of regions, there was a clear clustering of subtypes, with SAV subtype 1 being the dominant subtype in Ireland overall, as well as in Argyll and Bute in Scotland. SAV subtype 2 predominated in the Shetland and Orkney Islands. The emergence in Atlantic salmon of subtype 2 strains typically associated with sleeping disease in rainbow trout in Argyll and Bute, strongly suggesting transmission of infection between these species, was noted for the first time. SAV subtype 4 was the most common subtype found in the southern Western Isles, while SAV subtype 5 predominated in the northern Western Isles and north-west mainland Scotland. No single strain was dominant on sites in the western Highlands, with a number of sites in this region in particular having more than one subtype detected in different submissions. The significance of these results in relation to aspects of the epidemiology of infection, including transmission, biosecurity and wildlife reservoirs are discussed and knowledge gaps identified.”

<http://gisandscience.com/2012/08/08/geographical-distribution-of-salmonid-alphavirus-subtypes-in-marine-farmed-atlantic-salmon-salmo-salar-l-in-scotland-and-ireland/>

PLoS ONE, 8 August 2012

Salmon Aquaculture and Antimicrobial Resistance in the Marine Environment

**Citation:** Buschmann AH, Tomova A, López A, Maldonado MA, Henríquez LA, et al. (2012) Salmon Aquaculture and Antimicrobial Resistance in the Marine Environment. PLoS ONE 7(8): e42724. doi:10.1371/journal.pone.0042724

Abstract:

Antimicrobials used in salmon aquaculture pass into the marine environment. This could have negative impacts on marine environmental biodiversity, and on terrestrial animal and human health as a result of selection for bacteria containing antimicrobial resistance genes. We therefore measured the numbers of culturable bacteria and antimicrobial-resistant bacteria in marine sediments in the Calbuco Archipelago, Chile, over 12-month period at a salmon aquaculture site approximately 20 m from a salmon farm and at a control site 8 km distant without observable aquaculture activities. Three antimicrobials extensively used in Chilean salmon aquaculture (oxytetracycline, oxolinic acid, and florfenicol) were studied. Although none of these antimicrobials was detected in sediments from either site, traces of flumequine, a fluoroquinolone antimicrobial also widely used in Chile, were present in sediments from both sites during this period. There were significant increases in bacterial numbers and antimicrobial-resistant fractions to oxytetracycline, oxolinic acid, and florfenicol in sediments from the aquaculture site compared to those from the control site. Interestingly, there were similar numbers of presumably plasmid-mediated resistance genes for oxytetracycline, oxolinic acid and florfenicol in unselected marine bacteria isolated from both aquaculture and control sites. These preliminary findings in one location may suggest that the current use of

large amounts of antimicrobials in Chilean aquaculture has the potential to select for antimicrobial-resistant bacteria in marine sediments.

Read in full via: <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0042724>

BC Salmon Farmers Association, 8 August 2012

Public Update (5) : IHN and BC Salmon Farms

The IHN (Infectious Haematopoietic Necrosis) virus has now been confirmed at Mainstream Canada's Millar Channel farm north of Tofino and Grieg Seafood's Culloden Point farm site in Jervis Inlet, Sunshine Coast.

Mainstream Canada and Grieg Seafood have both received official orders from the Canadian Food Inspection Agency (CFIA) to remove all fish from these sites. The CFIA will have to approve all stages of the depopulation process including transportation, offloading and rendering.

"The first priority for these companies is to work with CFIA to ensure that any depopulation is done quickly and safely," said Mary Ellen Walling, Executive Director of the BCSFA.

IHN is a natural virus of the Pacific Ocean, which can be carried regularly by wild fish who have a natural resistance to it, studies show. They can carry the virus their whole lives without any negative impacts on their health. The health of Atlantic salmon, however, can be affected by IHN as they have not developed immunity to it.

IHN has no effect on human health.

Both companies found preliminary positives on these sites in the past 10 days during their routine fish health sampling programs and follow-up testing by independent laboratories confirmed the findings. A management committee made up of representatives from the BCSFA has been meeting regularly since the first preliminary findings. Increased biosecurity measures and testing are underway at all farms in BC.

In May this year, a farm in the north Tofino-area was diagnosed with IHN. Those fish were culled and composted and increased monitoring was put in place at other farms across British Columbia. These findings are the first of their kind in British Columbia in nearly 10 years.

The BCSFA will continue to update the public regularly.

-30-

To see the BCSFA's backgrounder on IHN, click [here](#).

To see Mainstream Canada's most recent update, click [here](#).

To see the CFIA's information about IHN, click [here](#).

For more information:  
Mary Ellen Walling  
Executive Director, BCSFA  
(250) 286-1636 x223

<http://www.salmonfarmers.org/public-update-5-ihn-and-bc-salmon-farms>

Intrafish, 8 August 2012



## Grieg confirms IHN virus at Canada site

Canadian Food Inspection Agency's confirmation of IHN follows an earlier preliminary positive result.

 IntraFish Media

**Published:** 08 August 2012 04:48 AM

**Updated:** 08 August 2012 04:48 AM

Canadian Food Inspection Agency (CFIA) has confirmed the presence of IHN virus at Grieg Seafood's Culloden Point salmon farm in British Columbia.

This follows the company's earlier announcement of a preliminary positive result, which was followed by a precautionary quarantine.

CFIA have also indicated that they will issue a disposal notice for all of the stock at this farm.

"We appreciate the agency's swift and efficient handling of this situation and welcome the opportunity to resolve this quickly and thoroughly," said Stewart Hawthorn, Grieg's managing director.

The company is developing a plan to expedite the removal of these fish, which requires the approval of CFIA before implementation.

Over the last two months, the company has checked fish health at its other farms; more than 1,500 fish have been individually assessed and there have been no other incidents of IHN.

### Associated Articles

- Grieg detects salmon virus at Canada site
- Skuna Bay gets exclusive purveyor deal

<http://www.intrafish.com/global/news/article1353944.ece>

Subscribe to Intrafish via: <http://www.intrafish.com/subscription/>

Seafood Source, 8 August 2012

Canadian officials confirm IHN at Grieg site



The Canadian Food Inspection Agency (CFIA) has confirmed the presence of IHN (infectious hematopoietic necrosis) virus at Grieg Seafood's Culloden Point salmon farm in British Columbia.

This follows Grieg's 2 August announcement of a preliminary positive test result and precautionary quarantine.

CFIA has also indicated it will issue a disposal notice for all of the stock at the farm.

"We appreciate the agency's swift and efficient handling of this situation and welcome the opportunity to resolve this quickly and thoroughly," said Stewart Hawthorn, Grieg managing director. "Our focus is to develop the plan to expedite to fish farm management. This plan requires the approval of the CFIA before implementation."

Hawthorn said IHN has not been detected at any of Grieg's other farms.

<http://www.seafoodsource.com/newsarticledetail.aspx?id=17308>

Read Grieg's disclosure to the Oslo Stock Exchange via:

[http://www.griegseafood.no/financial\\_english.aspx?pageId=26](http://www.griegseafood.no/financial_english.aspx?pageId=26)

Mainstream Canada, 8 August 2012

Virus confirmed, company begins to empty site

The IHN virus has been confirmed at Mainstream Canada's Millar Channel farm, and the company has received an official order from CFIA to remove all fish from the site.

All fish will be removed from the farm and sent to a rendering facility. Strict biosecurity measures will be followed at all stages of depopulation, transportation, offloading, and rendering.

Millar Channel farm, located northwest of Tofino, was quarantined last week by the Canadian Food Inspection Agency (CFIA) after it tested positive for the IHN (Infectious Haematopoetic Necrosis) virus July 27.

There are currently no other active farms nearby.

The CFIA acted quickly to confirm the presence of the IHN virus. Normally, confirmatory tests can take weeks to get results. However, CFIA made this case a top priority and was able to get results within days.

The IHN virus was first detected in May at another farm north of Millar Channel. In both cases, the virus was detected while in its early stages of infection. Early detection of the virus shows the effectiveness of our monitoring systems and allows us to take swift and decisive actions to prevent the virus from spreading to other farms. This is solid evidence of our responsible approach to fish farm management.

As part of this approach, farms are routinely tested for common fish viruses and diseases. Since the IHN virus was first detected, Mainstream Canada has been doing additional sampling at all farms and sending them a third-party lab for testing.

As quarantine measures are in place, traffic around the farms will be restricted. This is crucial to helping prevent the spread of virus to any other farm sites in the area.

Migrating wild salmon are natural carriers of the IHN virus, and are most likely the source of the virus infection at both farms.

For more information about IHN, please [see our previous press releases](#) on our website, including our [fact sheet](#).

Media contact: Laurie Jensen, Communications and Corporate Sustainability Manager  
250-286-0022 (office) [laurie.jensen@mainstreamcanada.com](mailto:laurie.jensen@mainstreamcanada.com)

<http://www.mainstreamcanada.com/virus-confirmed-company-begins-empty-site>

The Vancouver Sun/Global News, 8 August 2012

First Nation bid to close fish farms may reach Canadian Supreme Court

By MICHAEL V'INKIN LEE

The Kwicksutaineuk/Ah-Kwa-Mish First Nation (KAFN) announced its plan to push ahead with renewed legal action to protect its territorial wild salmon stocks from sea lice allegedly caused by nearby salmon farms. A prior attempt at a class action proceeding was stymied by a legal loophole.



Photograph by: Handout , Marine Harvest Canada

A B.C. First Nation revealed yesterday morning at a press conference that it seeks to re-launch a class-action lawsuit against the B.C. and federal governments to ultimately force the closure of commercial open net-pen fish farms in Broughton Archipelago.

The Kwicksutaineuk/Ah-Kwa-Mish First Nation (KAFN) announced its plan to push ahead with renewed legal action to protect its territorial wild salmon stocks from sea lice allegedly caused by nearby salmon farms after a prior attempt at a class action proceeding was stymied by a legal loophole. KAFN Chief Robert Chamberlin condemned the provincial and federal governments for jeopardizing the wild salmon population in B.C. and expressed disappointment in Victoria and Ottawa for continuing to support the aquaculture industry in spite of the environmental impacts.

“I am so disappointed in Canada. I’m disappointed in the province of B.C.,” Chamberlin said. “They’ve lost sight of the importance of healthy, abundant wild salmon stocks and what an economic engine it represents for British Columbia.”

A class action proceeding is a form of lawsuit where a group or groups of people collectively submit a claim to court.

The KAFN seeks three outcomes, according to the group’s counsel, Reidar Mogerman. The KAFN wants a declaration on the exact legal nature of the rights and titles asserted by the nations, damages for those whose rights were infringed, and the fishery’s rebuilding by those who destroyed it, Mogerman explained.

“There’s nothing more central to the territories of our people than wild salmon,” said Chamberlin. “We have built an incredible culture based on feasting, based on extracting resources from our waters to provide for our peoples. And the governments have decided to take a course of action that completely puts wild salmon at risk.”

But before any of that can happen the KAFN must again overcome a legal hurdle that bars aboriginal groups or “collectives” from joining together in a class proceeding. An earlier ruling in Dec. 2010 by the Supreme Court of British Columbia seemingly cleared the path for action, but the decision was subsequently overturned in May 2012 by the British Columbia Court of Appeal after the provincial and federal governments appealed the first judgment.

The KAFN revealed at the conference that it has now applied to the Supreme Court of Canada for leave to appeal the 2012 decision. If leave is granted, the Supreme Court will consider if the KAFN — and all subsequent aboriginal “collectives” — will be allowed to file class action proceedings. The final ruling will take at least a year to reach, Mogerma said. The whole process could take, at the minimum, two years to conclude, he added.

Chamberlin said the initial focus was just on the wild salmon issue, but the wording used by the Court of Appeal decision in May demanded the KAFN take a broader approach on the issue of First Nations rights.

“We looked [at the BC Court of Appeal ruling] and realized that the courts have taken a backward step [on First Nations rights] and that’s not consistent with what the governments say,” he said.

He also suggested that other social, political, and economic issues faced by First Nations across Canada - like the legacies left by residential schools - would benefit greatly from being able to file class actions as a more effective means to pursue legal remedies.

Assembly of First Nations national chief Shawn A-in-chut Atleo praised Chamberlin and the KAFN for asserting their rights and agreed that expanding the number of legal options available to First Nations claimants to include class proceedings would be a move in the right direction.

“While First Nations can pursue claims of aboriginal rights and titles in the courts, class actions would be far more expedient than requiring each and every [First Nations person] to file their own individual claim,” said Atleo in a statement.

Although open net-pen fish farms remain the KAFN’s focal point in the coming legal struggles, Mogerma insisted that giving Canada’s indigenous nations access to the same legal tools available to other Canadians is an important step to correct a historical issue of institutionalized inequality that early governments created and are still taking advantage of. Greater clarity on the precise legal status of First Nations is required before the problem can be corrected, he added.

“The First Nations of this country were historically put in a vague box and stripped of their rights,” said Mogerma. “It’s time to put some legal clarity around the nature of the First Nations so that they can enjoy the same rights everybody else has.”

[mvinkinlee@vancouver.sun.com](mailto:mvinkinlee@vancouver.sun.com)

<http://www.vancouversun.com/news/First+Nation+close+fish+farms+reach+Canadian+Supreme+Court/7060492/story.html> and  
<http://www.globaltvbc.com/first+nation+bid+to+close+fish+farms+may+reach+canadian+supreme+court/6442694036/story.html>

For more background watch “[GAME ON: First Nations' historic lawsuit for wild salmon moves to next phase](#)”

CTV News/The Canadian Press, 8 August 2012

B.C. First Nation taking fight against fish farms to Supreme Court of Canada



VANCOUVER - A B.C. First Nation is taking its fight against open-net fish farms to Canada's highest court.

The Kwicksutaineuk/Ah-Kwa-Mish First Nation was ecstatic two years ago when a B.C. Supreme Court certified their class-action lawsuit against the province and Ottawa for failing to protect wild salmon stocks in the Broughton Archipelago.

The band contends that fish farms allowed to operate net pens in the open ocean off the northeastern tip of Vancouver Island caused an outbreak of sea lice in their traditional fishing grounds, and sought financial compensation for depleted wild salmon stocks.

But the government appealed, and a B.C. Appeal Court overturned the lower court decision in May, saying that the judge erred in certifying the class-action.

Chief Bob Chamberlin says the justice system is the last stand to stop the environmental damage being done by the fish farms, so his band is seeking leave to appeal to the Supreme Court of Canada.

It remains to be seen whether the court will hear the appeal.

<http://www.ctvnews.ca/canada/b-c-first-nation-taking-fight-against-fish-farms-to-supreme-court-of-canada-1.907784>

Union of BC Indian Chiefs/ECO, 8 August 2012

No choice but to go forward to the Supreme Court of Canada to protect wild salmon

Government attack on environment increases the urgency of First Nations' access to Class Action Proceedings

### **Media Release**

**(VANCOUVER, BC, August 8, 2012)** The Supreme Court of Canada is where the Kwicksutaineuk/Ah-Kwa-Mish First Nation (KAFN) of the Broughton Archipelago expect to continue their quest to protect the wild salmon in their Territory. The KAFN announced this morning that they applied to the Supreme Court of Canada for Leave to Appeal the May 3, 2012 decision of the British Columbia Court of Appeal (BCCA) regarding the environmental impacts of open net-pen salmon farms on the wild salmon that the KAFN have depended upon for thousands of years.

The recent BCCA decision overturned an earlier legal victory, where the KAFN made history by successfully advancing the first class-action lawsuit in Canada that focused on Aboriginal fishing rights. The case was successfully certified by the Honourable Justice Slade on December 1st, 2010.

Justice Slade's decision was appealed jointly by the BC and Canadian governments on several grounds, but most notably that, unlike other Canadians, "aboriginal collectives" should not be allowed to join together in a class action. This argument was accepted by the Court of Appeal.

Bob Chamberlin, KAFN Chief and representative plaintiff in the case, observed, "The appeal of our certification win by both the Canadian and BC governments, and supported by the aquaculture industry, hinged on technicalities and missed the importance of government's obligation to regulate the open net salmon farming industry in a way that protects wild salmon. This decision cannot remain unchallenged."

"The urgency and importance of this case has only increased since it was filed in February 2009. The Harper government's recent gutting of the Fisheries Act, hollowing out of the environmental assessment process, silencing of science, and attempting to paralyze ENGOS highlights the importance of the rights of First Nations. Their access to the justice system can serve as the last stand to prevent the environmental carnage that will result from the pursuit of economic development at all costs. With this assault on the environment in favour of the rapid exploitation of natural resources, what is left to hold industry accountable? We must remove this barrier to First Nations being able to protect natural resources such as the wild salmon of the Broughton that all Canadians hold dear."

Legal Counsel, Reidar Mogerman of the Vancouver-based law firm Camp Fiorante Matthews Mogerman, confirmed that the Leave to Appeal application had been filed earlier in Ottawa.

A successful application for Leave to Appeal would mean the Supreme Court of Canada would consider whether aboriginal collectives should be able to join together and use the powerful class-action laws to protect their rights. The details are contained in the *Applicant's Memorandum of Argument*. This 21-page document was circulated to media conference attendees.

Chief Chamberlin, flanked by his legal counsel Reidar Mogerman and Grand Chief Stewart Phillip, President of the Union of BC Indian Chiefs (UBCIC), made the announcement to a crowded room in the offices of the UBCIC. In attendance were regional First Nations leaders, scientists, and wild salmon advocates.

Chief Chamberlin went on to say, "Our experience is inconsistent with Canada's international obligations as a supporter of the UN Declaration on the Rights of Indigenous Peoples that promises shared decision making at both the Federal and Provincial levels that is clearly not happening."

He observed, "Wild salmon are integral to the social, cultural, and ecological well-being of the KAFN and they have sustained us for over 5,000 years. Despite this, our firsthand knowledge of the impacts of open net-pen salmon farms in KAFN Territories has not been respected. We are dealing with governments who, rather than respecting First Nations and working together towards solutions and sustainable economic development opportunities, prefer to invest in litigation costs."

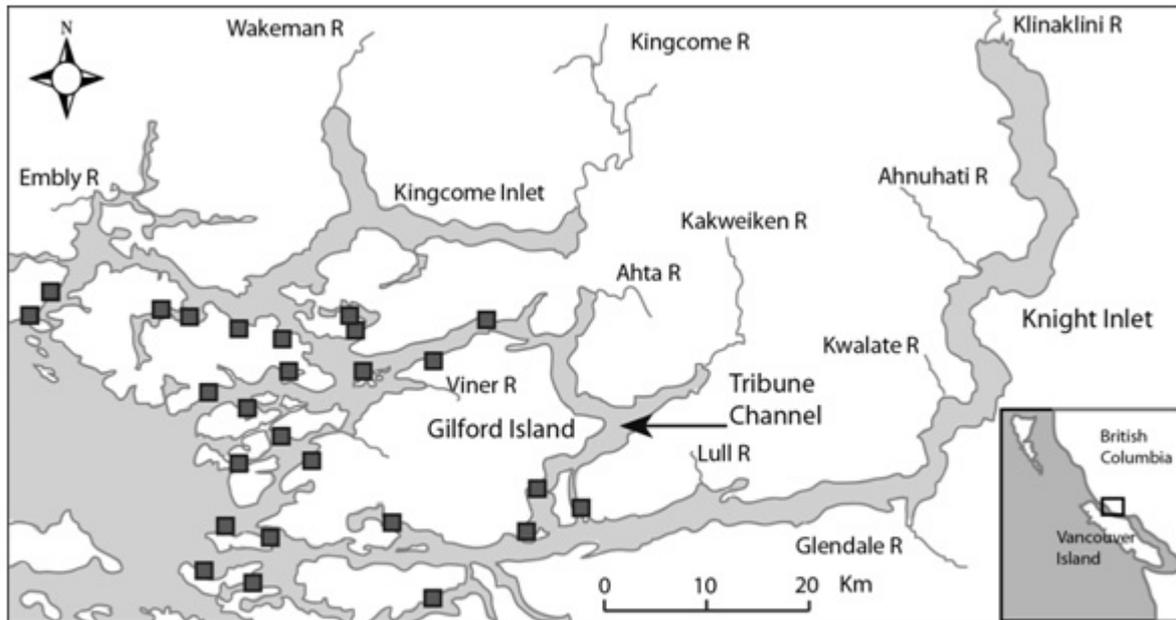
"We were forced into the courts. It is not our preferred approach. We would much rather cooperate and use the resources expended on litigation to remediate the environmental damage that has been done and improve the regulatory system for aquaculture. However, from the actions of the BC and Harper governments to date, I can only conclude that we cannot trust them to protect Canada's environment and our fish without being ordered to do so by the courts," stated Chief Chamberlin.

-30-

**To schedule interviews with Chief Chamberlin and Legal Counsel or to secure the Applicant's Memorandum of Argument, contact:**

Don Huff, Penasi Communications/Environmental Communication Options,  
at 416-972-7404, on-site in Vancouver (Cell) 416-805-7720 or [huffd@ecostrategy.ca](mailto:huffd@ecostrategy.ca)

*The Kwicksutaineuk-ah-kwa-mish First Nation is a First Nations band government, in the Queen Charlotte Strait region of British Columbia. The territory of the Kwicksutaineuk-ah-kwa-mish First Nation spans the southern Broughton Archipelago and the Gilford Island area just north of the mouth of Knight Inlet.*



■ **Salmon farm locations**

Source: Broughton Archipelago Monitoring Plan (BAMP)

## **Background**

In February 2009, utilizing the Class Proceedings Act of British Columbia, the KAFN sought remedies from the court requiring the defendant, the B.C. Government (represented by the B.C. Minister of Agriculture and Lands) to address the decline in wild salmon in their traditional territory.

To view the original KAFN Statement of Claim go to:

[http://huffstrategy.com/MediaManager/Media/Text/1233780246\\_Microsoft+Word+-+0052+Pleading+Statement+of+Claim+Chamberlin\\_2.pdf](http://huffstrategy.com/MediaManager/Media/Text/1233780246_Microsoft+Word+-+0052+Pleading+Statement+of+Claim+Chamberlin_2.pdf)

This was the first class-action lawsuit advanced by a First Nation in Canada to protect Aboriginal fishing rights.

The Broughton Archipelago is the area of bays, islands and mainland coast adjacent to the northeast side of Vancouver Island. The KAFN claims a constitutionally protected Aboriginal right to fish for wild salmon for food, social and ceremonial purposes within the Broughton Archipelago.

When the class-action was launched, 29 salmon aquaculture sites were authorized by the B.C. Government to operate in the Broughton Archipelago. It is the KAFN's position that these operations have contributed to a drastic decline in salmon stocks within the region.

The class-action was certified in December 2010 by Justice Slade of the Supreme Court of British Columbia.

To view the December 1, 2010 Decision by the Honourable Mr. Justice Slade, go to:

<http://www.courts.gov.bc.ca/jdb-txt/SC/10/16/2010BCSC1699cor1.htm>

An Appeal advanced by the Province of British Columbia and the Government of Canada (who was later joined as a Defendant) overturned Justice Slade's decision in May 2012.

To view the May 3, 2012 Decision by Madame Justice Garson of the British Columbia Court of Appeal, go to: <http://www.courts.gov.bc.ca/jdb-txt/CA/12/01/2012BCCA0193.htm>



<http://www.huffstrategy.com/MediaManager/release/KAFN/8-8-12/No-choice-but-to-go-forward-to-the-Supreme-Court-of-Canada-to-pro/2549.html> and [http://www.ubcic.bc.ca/News\\_Releases/UBCICNews08081202.html#axzz22ysqcZgR](http://www.ubcic.bc.ca/News_Releases/UBCICNews08081202.html#axzz22ysqcZgR)

The Marlborough Express, 8 August 2012

### Warning to submitters

Bad language and threats are unacceptable from people making submissions on New Zealand King Salmon plans to develop new fish farms in the Marlborough Sounds, Environmental Protection Authority board of inquiry chairman Judge Gordon Whiting says.

Judge Whiting and commissioners Helen Beaumont, Edward Ellison, Mark Farnsworth and Michael Briggs were in Blenheim yesterday to work through hearing matters with the applicant, submitters and their lawyers.

Judge Whiting said he understood people had passionate views on the King Salmon application. However, he would not tolerate intemperate language and threats against board or Environmental Protection Authority members or anyone else involved with the hearing.

The board had already handed on a threatening message to EPA chief executive Rob Forlong, who might refer it on to another authority, Judge Whiting said.

An EPA spokeswoman said later that two submitters had sent the board an offensive email.

<http://www.stuff.co.nz/marlborough-express/news/salmon-farms/7435261/Warning-to-submitters>

The Chronicle Herald, 8 August 2012

### Inland fish farm may signal new wave

[By JOHN DeMONT Business Reporter | SPECIAL REPORT](#)

Site may answer aquaculture critics' concerns about ocean operations



David Roberts of Sustainable Blue feeds the sea bream at the company's fish farm in Centre Burlington. (RYAN TAPLIN / Staff)

***EDITOR'S NOTE: Today is Part 2 of our special report on the aquaculture industry in Nova Scotia.***

CENTRE BURLINGTON — To glimpse what could be the future of aquaculture in this province, you need, paradoxically, to head inland, away from the ocean.

Then, as the tang of manure hangs in the air, you drive past hayfields, apple trees and barns.

**MORE COVERAGE:** [Read more about Nova Scotia's aquaculture industry](#)

Eventually, a dirt road stops before a curved, white aluminum building. Inside, some 60,000 sea bream weave through disease-free water that is forever recirculated.

At Hants County-based Sustainable Blue, every bit of fish waste is gathered for composting. Since the water is an unwavering 22 C, bream juveniles reach market size in about a year, roughly half as long as it takes in the Caribbean sea-cages where the fish are grown en masse for the European and export markets.

Furthermore, the company says that what the United Kingdom-Nova Scotia pilot project does with bream, as well as Arctic char and European sea bass, is doable with other fish species.

“There’s no doubt in our minds that we can grow premium Atlantic salmon here at a price which is extremely attractive to our target market in large volumes,” Sustainable Blue CEO Kirk Havercroft said recently.

If so, this is big news. It's not really the fish they have a problem with, salmon aquaculture's critics say. It's the ocean farms.

Inside those cages, in their view, lurk hundreds of thousands of fish that are guilty of everything from helping to deplete the world's wild fisheries to poisoning the ecosystem and spreading disease.

There's one straightforward solution to making salmon aquaculture sustainable, the industry's opponents say.

"The only way is to separate them from the wild fish population," explains Matthew Abbott, marine co-ordinator for the Conservation Council of New Brunswick.

Technically, that is already happening in Nova Scotia, which has 22 land-based closed-containment fish farming sites. But half of those are hatcheries, where salmon and trout smolts mature until they are ready for sea cages.

Though there are a few on-land Atlantic salmon pilot farm projects scattered throughout Canada, not a single one is in Nova Scotia.

Now, perhaps because of the industry's higher profile in Nova Scotia, the province at least wants to consider the idea.

As part of the Nova Scotia government's newly released approach to bolstering fish farming, \$60,000 is being put aside to study the feasibility of making "closed containment" a bigger part of the province's aquaculture industry.

The only trouble is that, for now at least, the big players in the industry are dubious.

"On a large scale, it is not possible at this point in time," said Cooke Aquaculture owner Glenn Cooke in an interview.

Like many other sea-based salmon farmers, he said putting farms on land means using more energy to pump and purify water and to build facilities. The industry, therefore, increases its environmental footprint.

Nova Scotia, furthermore, loses its innate geographical advantage when farms go on-land and don't need to be close to ocean water.

"The industry and the jobs and investment associated with it will move to where it makes the most economic sense to do it — close to the marketplace," says Bruce Hancock, executive director of the Aquaculture Association of Nova Scotia.

But the truth is that the big players like Cooke say they would be willing to look at land-based farms if the economics made sense. Right now, in their view, they do not.

A look at the numbers explains why. Insiders say that, depending upon a farmer's efficiency, it costs about \$4.50 to produce a kilogram of Atlantic salmon in a ocean cage. The same kilogram nets them around \$6.70 from a New York City broker.

Farmers say those profit margins would quickly evaporate if they faced the higher production costs that come from installing closed-containment systems with expensive pipes, filters and flushing systems to remove waste and restore oxygen levels.

Putting things into context is a 2010 Fisheries and Oceans Canada study into using closed-containment systems in British Columbia. It put farmers' return on investment at 54 per cent for sea pens. Closed-containment systems, on the other hand, gave owners a return on investment of just two per cent.

"The technology is there to raise fish on land," said Hancock. "It's a question of making it work economically."

Sustainable Blue thinks that moment has arrived. In its West Hants facility, it recirculates 100 per cent of the salt water piped in from an estuary about a kilometre away. That sort of efficiency ensures no infirmities enter the system and that the water never wavers from its 22 C temperature.

"We've created an environment that allows for significantly faster growth rates," says David Roberts, the project manager and an investor in Sustainable Blue.

Using a disease-free, closed-containment system means the company can also get a price premium for its bream and sea bass, both of which retail for about twice as much as Atlantic salmon.

The end result: an economically viable operation that they are dying to try on other species. Like salmon.

[jdemont@herald.ca](mailto:jdemont@herald.ca)

<http://thechronicleherald.ca/novascotia/124757-inland-fish-farm-may-signal-new-wave>

The Chronicle Herald, 7 August 2012

Location is everything

In his July 29 letter, Fisheries and Aquaculture Minister Sterling Belliveau states marine-based farms occupy an area of about 1.4 square kilometres along Nova Scotia's 13,000-kilometre coastline. My concern is that clusters of existing and proposed open-pen salmon farms are, and will be, located close to the many wild Atlantic salmon rivers and related restoration projects; this may prove fatal to our native fish populations and should not be allowed.

Ken Farmer, Dartmouth

<http://thechronicleherald.ca/letters/124420-voice-of-the-people-august-7-2012>

The Coaster, 7 August 2012

Gray Aqua moving forward despite ISA case

[Clayton Hunt](#)

Moving ahead not backwards

Despite the recent ISA case at its farm site in Butter Cove that resulted in the loss of 450,000 salmon, Gray Aquaculture is planning to move forward with its operations in Newfoundland and Labrador.

Clyde Collier, Gray's top official in the province, said that the company would continue building its processing facility at Hermitage-Sandyville that should see some processing activity later this year.

Collier said, "The only big difference at Hermitage will be the volume of activity going on there this fall due to the ISA outbreak. However, we have fish as our site in Pass My Can (name on charts) that will be ready for processing by this fall.

"The ISA case doesn't really change our plans in any way at all actually. We're still on the same path, and we plan on moving forward with our operations on the south coast."

Collier said that the removal of the fish at Butter Cove was about half way completed as of July 30.

"There are different strains of ISA and some have more virulence than others. While we won't be able to say anything definitively about this strain until after all the testing is completed at some later date, it didn't show it had the ability to kill fish or to move from cage to cage."

Collier said that the ISA outbreak only affected fish in three cages right up to the removal process even though all the cages at the site were in a line with one almost touching the other.

Apparently, too, during the outbreak, mortality rates at the site were less than normal in being down to .01 per cent a day. The average number of mortalities at a farm site is about .05 per cent a day.

A recent article in the Telegram said that Gray Aquaculture could receive as much as \$13 million in compensation for the lost fish.

Collier said that this report looked at the extreme end of any possible compensation package based on the maximum of \$30 per fish.

"We're working at certain things right now with regards to possible compensation, but I don't think we're going to be anywhere near that \$13 million mark noted in the telegram," Collier said.

"As of Monday July 30, a spokesperson for the Canadian Food Inspection Agency (CFIA) said that compensation amounts had not been decided for the company, but discussions were ongoing.

The amounts of any compensation are intended to reflect the reasonable market value that an owner could expect to receive for the fish up to a maximum of \$30 as set out in the Compensation for Destroyed Animals Regulations.

Evaluators determine market value based on factors such as age and size. In addition, compensation may include costs related to the destruction and disposal of the fish.

Collier said that the ISA outbreak means that, in some ways, it will never be business as usual for the aquaculture companies in the Coast of Bays.

He said, "This has certainly brought the issue of diseases in aquaculture such as ISA to the forefront. All companies will be intensifying their moves toward such protocols as bay management now."

<http://www.thecoaster.ca/News/2012-08-07/article-3047228/Gray-Aqua-moving-forward-despite-ISA-case/1>

The Fish Site, 7 August 2012



### Scottish Sea Farms Opens Remote Salmon Farm in Eday

SCOTLAND, UK - Scottish Sea Farms, a leading aquaculture company, has opened a new salmon farm in Eday, north of Orkney, following a £1.3 million investment, writes Lucy Towers, TheFishSite Editor.

The new farm will consist of cages for on growing only, with the fish being sent elsewhere for processing.

The new farm is the company's most remote.

Local Area Manager, Richard Darbyshire of Scottish Sea Farms, said: "The waters around Eday are renowned for their fast flowing currents and high water quality. This environment is ideal for growing strong muscular fish of premium quality. To farm in such an environment has required a high level of investment in the latest 'state of the art' mooring systems and circular cages."

The new farm has also benefitted the small local community through the creation of six

jobs.

Built as a response to more demand for salmon, the farm will be expected to produce around 1,200 tonnes of salmon over the next 18 months, for sale in the UK market

If the new farm proves successful, Scottish Sea Farms may plan similar farm developments close by.

Scottish Sea Farms' Orkney region currently produces approximately 4,000 tonnes of salmon per year for some of the UK's top restaurants and retailers, as well as for key export markets globally.

<http://www.thefishsite.com/fishnews/17902/scottish-sea-farms-opens-remote-salmon-farm-in-eday>

Aquaculture Research, 6 August 2012

The interaction of infectious salmon anaemia virus (ISAV) with the blue mussel, *Mytilus edulis*

Abstract

Integrated multi-trophic aquaculture (IMTA) is an alternative approach to mono-culture aquaculture that reduces environmental impacts of commercial aquaculture systems by combining the cultivation of fed species with extractive species. Shellfish play a critical role in IMTA systems by filter-feeding particulate-bound organic nutrients. They may also increase or decrease disease risk on farms by serving as reservoirs or barriers for important finfish pathogens such as infectious salmon anaemia virus (ISAV). This study aimed to optimize culture and molecular assays in shellfish tissues and to determine the fate of ISAV in mussels, *Mytilus edulis*. To determine detection limits, qRT-PCR and culture assays in both CHSE- and ASK cells were optimized in ISAV-inoculated mussel tissue homogenates. Both qRT-PCR and culture assays performed in ASK cells had comparable detection limits of  $10^{2.8}$  TCID<sub>50</sub> mL<sup>-1</sup>. The ISAV RNA genome was consistently detected in digestive gland tissue of ISAV-exposed mussels. Viable ISAV was not detected in mussel tissues by culture analysis in CHSE- and ASK cells. The fact that qRT-PCR analysis resulted in positive cycle threshold (CT) values that corresponded to the detectable range of ISAV in ASK culture assays suggests that little to no viable ISAV particles are present in the mussel tissues.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2109.2012.03254.x/abstract;jsessionid=E422BE1360739DA6C6CC2347D058D533.d03t01>

Read more via:

[“INTERACTION OF A BACTERIAL FISH PATHOGENS \*Vibrio anguillarum\* 02 AND \*Francisella noatunensis\* WITH MUSSELS \*Mytilus edulis\*”](#)

[“POTENTIAL DISEASE RISKS AND BENEFITS ON AN INTEGRATED MUSSEL \*Mytilus edulis\* AND MARINE FIN FISH FARM”](#)

The Common Sense Canadian, 5 August 2012

The Rigamarole of 'Public' Environmental Hearings in BC: A Cameraman's Perspective

Including:

The Cohen Inquiry into Disappearing Fraser Sockeye

At the Cohen Commission last year, I, along with all other media, was forbidden from bringing a camera into the proceedings. On some days, there was one camera permitted to a gentleman working on a documentary - that being connected to a video feed in a separate media room. I was initially granted access to this room by the the Inquiry's media liaison, Carla Shore, but told I couldn't patch into the video feed because the 30-year old beta deck had been rented by the CBC and I did not have their permission to use it. I gladly offered to: A. pay for my use of the machine; B. provide my own machine; C. contact the CBC and obtain permission from them to use their equipment. None of these was acceptable to her.

Fed up with this runaround, I plugged a video recorder into the deck, thus unleashing the fury of Ms. Shore. Little did she know, the recorder for the livestream audio feed, due to technical issues, had been placed directly in front of a small speaker inside the media room which was playing the audio from the hearings. That meant the microphone would pick up any noise in the room and stream it live on the Commission's website, along with the testimony inside.

I was later told by a number of people who were listening to the livestream that they figured a riot had broken out right in the midst of the Cohen Inquiry.

***Listen to Damien's run-in with media liaison Carla Shore at the Cohen Commission last September: [online here](#)***

Having later discovered the whole thing had been inadvertently captured, Ms. Shore sheepishly apologized to me for the incident and revoked the ban she had since instated on my use of the media room.

In the end, it emerged through our conversations that the reason she was so obstructive towards me was that she'd read [my editorial earlier that morning](#) and deemed me to be too opinionated, thus disqualifying me as a journalist.

I reminded her that my publication had produced a significant amount of well-read [coverage on the Cohen Inquiry](#), that my colleague Rafe Mair was in the Canadian Association of Broadcasters' Hall of Fame and had won every major journalistic award in the country, and that together we had likely done more to document the salmon farming industry and salmon issues in general than any media team in BC over the past decade...and yet, somehow, this one woman's arbitrary opinion as to the worthiness of my credentials impeded my ability to report on a "public" Judicial Inquiry of enormous import.

<http://thecanadian.org/item/1641-rigamarole-public-environmental-meeting-bc-enbridge-jrp-bella-bella-heiltsuk-damien-gillis>

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