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## My Appeal to David Suzuki

From: VIVIAN KRAUSE <[vivian.krause@me.com](mailto:vivian.krause@me.com)>  
To: Peter Robinson <[probinson@davidsuzuki.org](mailto:probinson@davidsuzuki.org)>, Jim Hoggan <[jchoggan@hoggan.com](mailto:jchoggan@hoggan.com)>  
Cc: Gary Mason <[GMason@globeandmail.com](mailto:GMason@globeandmail.com)>  
Date: 31 May 2011 2:50:25 PM  
[Let David Suzuki 31May2011.pdf \(389 KB\)](#), [Vivian, PCBs 16Feb2010.pdf \(2.3 MB\)](#),  
[Vivian, Sea Lice 12 March2....pdf \(475 KB\)](#), [Letter from David Suzuki.pdf \(2.1 MB\)](#)

Mr. Robinson & Mr. Hoggan,

I did not hear back from you last week so I have assumed that the 16 web-pages that I had tried to inquire about were, indeed, removed from your web-site last year, on the very same day that I sent an open letter to Dr. Suzuki.

Attached, please find an open letter and related attachments for Dr. Suzuki. I will post this at my blog.

As before, I can be reached at 604.618.8110.

Sincerely,  
Vivian Krause  
604.618.8110

Attachments:

- 1) Research on contaminants in farmed salmon: Science or Marketing?
- 2) Sea lice research: Science or Marketing?
- 3) Form letter from Dr. Suzuki, May 2002.

Begin forwarded message:

**From:** VIVIAN KRAUSE <[vivian.krause@me.com](mailto:vivian.krause@me.com)>  
**Date:** May 25, 2011 2:01:33 PM  
**To:** Peter Robinson <[probinson@davidsuzuki.org](mailto:probinson@davidsuzuki.org)>, Cecilia Fernandez <[cfernandez@davidsuzuki.org](mailto:cfernandez@davidsuzuki.org)>, Gary Mason <[GMason@globeandmail.com](mailto:GMason@globeandmail.com)>  
**Subject:** **16 press releases and web-pages apparently removed by the David Suzuki Foundation on Feb. 3 & 4, 2010**

Mr. Robinson,

According to my analysis of internet archives, the David Suzuki Foundation removed 16 web-pages and press releases on Feb. 3 and Feb. 4, 2010. Is this correct? I spoke with Cecilia Fernandez today just to make sure that you are in town and to let her know that I would be sending this e-mail to ask this question.

If I do not hear from you today, I will assume that you do not dispute my conclusion that these 16 web-pages and press releases were removed on Feb. 3 and Feb. 4, 2010.

Sincerely,  
Vivian Krause  
604.618.8110

P.S. Cecilia, I would appreciate it if you would kindly please confirm that you've received this e-mail. In advance, thank you.

## 16 Web-Pages & Press Releases Removed by the David Suzuki Foundation on February 3 & 4, 2010

On Feb. 3, 2010 I sent an [open letter](#) to David Suzuki and posted it [at my blog](#) (Fish Farm Fuss, my first blog). Internet archives, shown below, indicate that by the end of the same day, the David Suzuki Foundation had removed at least 14 web-pages and press releases. According to my analysis, most of these web-pages were last registered in the internet archives of the [Way Back Machine](#), at around 5 pm on Feb. 3, 2010. A few were last registered around 7 pm. Internet archives show that two more press releases were removed the following day, on Feb. 4, 2010. Thus, in total, it appears to me that the David Suzuki Foundation removed 16 press releases and web-pages on Feb. 3 and 4 of 2010.

**The brochure, *Why You Shouldn't Eat Farmed Salmon*:**

- 1) [http://www.davidsuzuki.org/files/PSF\\_Salmon\\_Brochure.pdf](http://www.davidsuzuki.org/files/PSF_Salmon_Brochure.pdf)

#### **About farmed salmon and human health:**

- 2) <http://www.davidsuzuki.org/latestnews/dsfnews12130702.asp>
- 3) [http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004\\_food/](http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004_food/)
- 4) [http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004\\_food/salmon.asp](http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004_food/salmon.asp)
- 5) [http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004\\_food/omega-3.asp](http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004_food/omega-3.asp)
- 6) [http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004\\_food/conclusion.asp](http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004_food/conclusion.asp)

#### **About salmon farming and the environment:**

- 7) <http://www.davidsuzuki.org/Oceans/Aquaculture/>
- 8) <http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/>
- 9) [http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Sea\\_Lice.asp](http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Sea_Lice.asp)
- 10) <http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Pollution.asp>
- 11) <http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Drugs.asp>
- 12) <http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Escapes.asp>
- 13) [http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Net\\_Loss.asp](http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Net_Loss.asp)
- 14) <http://www.davidsuzuki.org/Oceans/Aquaculture/Salmon/Solutions.asp>

#### **Last registered by Internet Archives on Feb. 4:**

- 15) [http://www.davidsuzuki.org/\\_pvw370829/campaigns\\_and\\_programs/salmon\\_aquaculture/news\\_releases/newsaquaculture01080101.asp](http://www.davidsuzuki.org/_pvw370829/campaigns_and_programs/salmon_aquaculture/news_releases/newsaquaculture01080101.asp)
- 16) [http://www.davidsuzuki.org/Campaigns\\_and\\_Programs/Salmon\\_Aquaculture/News\\_Releases/newsaquaculture02040201.asp](http://www.davidsuzuki.org/Campaigns_and_Programs/Salmon_Aquaculture/News_Releases/newsaquaculture02040201.asp)

#### **.PDF files:**

Below, here are .pdf files for 15 web-pages and press releases about salmon farming as they were last seen at the web-site of the David Suzuki Foundation, as of February 3, 2010.

- 1) [On-line brochure \(downloadable\) titled, Why You Shouldn't Eat Farmed Salmon](#)
- 2) [Web-page titled, Is it Safe? Introduction as of Feb. 3, 2010](#)
- 3) [Web-page titled, Is it Safe? The Skinny on Salmon as of Feb. 3, 2010](#)
- 4) [Web-page titled, Is it Safe? Fishing for Omega-3s as of Feb. 3, 2010](#)
- 5) [Web-page titled, Is it Safe? Mad Cows, Madder Consumers as of Feb. 3, 2010](#)
- 6) [Web-page titled, Is it safe? Conclusion as of Feb. 3, 2010](#)
- 7) [Web-page titled Aquaculture as of Feb. 3, 2010](#)
- 8) [Web-page titled Salmon Farming as of Feb. 3, 2010](#)
- 9) [Web-page titled Sea Lice as of Feb. 3, 2010](#)
- 10) [Web-page titled "Fish Farm Pollution" as of Feb. 3, 2010](#)
- 11) [Web-page titled "Drugs" as of Feb. 3, 2010](#)
- 12) [Web-page titled "Escapes" as of Feb. 3, 2010](#)
- 13) [Web-page about "Net Loss" as of Feb. 3, 2010](#)
- 14) [Web-page titled, "Salmon Aquaculture Solutions" as of Feb. 3, 2010](#)
- 15) [Press Release, "Health minister urged to assess risks of eating farmed salmon" Feb. 4, 2010](#)
- 16) [Web-page showing press release moved as of Feb. 4, 2010](#) For the text of this press release, click [here](#).

Below, here are excerpts of 16 web-pages and press releases about salmon farming as they are found in the

internet archives of the Way Back Machine.

News Release: Time running out for some of B.C.'s wild pink salmon 25/05/11 11:00 AM

INTERNET ARCHIVE <http://www.davidsuzuki.org/latestnews/dsfnews12130702.asp>  DEC FEB MAR Close  
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### Time running out for some of B.C.'s wild pink salmon

**Study finds sea lice from fish farms put stocks at risk of extinction**

December 13, 2007 VANCOUVER - The B.C. and federal governments must take immediate action to prevent the local extinction of wild pink salmon from British Columbia's Broughton Archipelago, according to the David Suzuki Foundation.

A study published in the December 14 edition of the prestigious peer-reviewed scientific journal *Science* concludes that sea lice from salmon farms have been driving a rapid decline in pink salmon populations in the Broughton Archipelago. The scientists expect that 99 per cent of the wild pink salmon will be gone in four years from today, or two generations, if sea-lice infestations continue.

The study was conducted by a team of six biologists, fisheries scientists, and mathematicians from Dalhousie University and the University of Alberta. The team analyzed Fisheries and Oceans Canada data on the number of pink salmon returning to rivers on the central coast of British Columbia from 1970 to 2006. They then organized the data into four groups according to whether or not the populations were exposed to salmon farms before and during the sea-lice infestations, and calculated population growth rates for each group. It is the first study to demonstrate the impact of sea-lice infestations on wild salmon populations and reveal their looming extinction.

"In light of these results, it is clear that governments must take immediate precautionary action to stop open net-cage salmon farming from harming wild salmon," said David Suzuki Foundation marine conservation specialist Jay Ritchlin. "The evidence continues to be published in the most respected scientific journals, and the B.C. legislature's own Special Committee on Sustainable Aquaculture has called for a transition to closed systems. It is time to act."

Sea lice are natural parasites that feed on salmon skin, muscle, and blood. In high numbers they cause stress, osmotic failure (disturbed salt-water balance), viral or bacterial infection, and ultimately death. Numerous studies have shown that where there are no fish farms, wild juvenile salmon have almost no lice. Fish farms, however, amplify the parasite on wild salmon migration routes. In the Broughton Archipelago, the wild juvenile salmon must run an 80-kilometre gauntlet of fish farms before they make it to the open ocean.

"Recent efforts to use chemical treatment are apparently not enough for the wild fish. In Europe and South America, lice have already shown the first signs of resistance to these chemicals. Widespread use of chemical treatments just isn't good environmental policy," Ritchlin noted. "The region needs to have the source of the lice infestations removed. We must get the open net-cage salmon farms out of the way of the juvenile salmon and ultimately into closed tanks."

The report notes that the impact of fish farms is far higher than that caused by commercial fisheries. Not only are the salmon and the ecosystem at risk, so too are the economies and cultures that depend on wild salmon.

The David Suzuki Foundation is a member of the Coastal Alliance for Aquaculture Reform, a nine-member coalition working to protect wild salmon, coastal ecosystems, coastal communities, and human health from destructive fish-farming practices.

- END -

For more information, contact:  
Jay Ritchlin, Marine Conservation Specialist, (604) 961-6940  
Ian Hattington, Communications Specialist, (604) 732-4228, ext. 238

**Broadcast media note:** Video footage, including interviews with lead author Martin Krkosek and co-author Alexandra Morton, as well as B-roll footage, is available through the David Suzuki Foundation.

For background on sea lice, go to:  
[www.davidsuzuki.org/Oceans/aquaculture/Salmon/Sea\\_Lice.asp](http://www.davidsuzuki.org/Oceans/aquaculture/Salmon/Sea_Lice.asp)  
For a summary of the report, go to: [www.davidsuzuki.org/publications](http://www.davidsuzuki.org/publications)

<http://web.archive.org/web/20100203180505/http://www.davidsuzuki.org/latestnews/dsfnews12130702.asp> Page 1 of 3

Nature Challenge Newsletter 25/05/11 9:55 AM

INTERNET ARCHIVE [http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004\\_food](http://www.davidsuzuki.org/NatureChallenge/newsletters/feb2004_food)  DEC FEB MAR Close  
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**Food** Is it safe to eat?

**Contents**

- Introduction
- The skinny on salmon
- Fishing for omega-3s
- Mad cows, madder consumers
- Conclusion

Fish is good for you. Fish will kill you! Beef is good for you. Beef will kill you!

What does a person have to do to eat right these days? What with toxic farmed salmon and mad cows in the news, it's enough to drive a person to be a vegetarian.

Actually, eating less meat is good idea - for people and the planet. The average Canadian eats 276 grams (almost 2/3 of a pound) of meat every day. That's more than three times what the World Cancer Research Fund recommends. And producing meat protein uses far more natural resources than producing vegetable protein.

Moderate consumption of dairy and meat products can be part of a healthy diet, but

eating them shouldn't mean sacrificing our health and our environment. So what's a concerned citizen to do?

We can make informed decisions. By knowing what is in our food and how it is produced, we can make the best choices for our health and for our planet.

Next Page > [The skinny on salmon](#)

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The Skinny on Salmon 25/05/11 9:56 AM

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### Food: Is it safe?


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- Introduction
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#### The Skinny on Salmon

If you are a little confused by recent farmed salmon stories, you aren't alone. Here's what essentially happened:

- Huge international study comes out that says farmed salmon contain far more toxins than wild salmon. Recommends people limit eating farmed salmon to one meal or less per month.
- Salmon farming industry freaks out, disputes findings, questions scientists, blames environmentalists (?) and considers new slogan: Farmed salmon – no, really, it's good for you!
- Media portrays the whole thing as he says, she says, so public gets confused.



Okay, here's the real scoop. Salmon is a healthy food choice, full of great stuff like omega-3 fatty acids that are good for our hearts. Unfortunately, as the recent study found, the tradeoff with farmed salmon is that it also contains much higher levels of contaminants like PCBs that are linked to increased rates of cancer and birth defects.

So wild salmon is a healthier choice. Wild salmon is a better environmental choice too. Salmon are voracious critters. Right now, the salmon farming industry is depleting other ocean fish stocks to feed their salmon. It takes two to four kilograms of wild fish to produce one kilogram of farmed salmon. Plus, salmon farms pollute coastal waters and can spread parasites and diseases to wild salmon populations.

**Best salmon choices:**  
 Wild Chum  
 Wild Pink  
 Wild Sockeye, Coho and Chinook

Canned salmon is usually wild pink or chum, but check the label.

Next> [Fishing for omega3s](#)

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http://web.archive.org/web/20100205205914/http://www.david-suzuki.org/NatureChallenge/newsletters/feb2004\_food/omega-3.asp 25/05/11 9:57 AM

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#### Fishing for omega-3s

Omega-3 sounds like a planet visited by Kirk and the gang from Star Trek, but Omega-3s are actually fatty acids that are great for our hearts. They are found in several different types of food, including fish, and many health experts recommend eating fish for this reason.

Unfortunately, industrial pollution in our oceans and lakes means that some fish are also high in toxins. So women of childbearing age and young children should avoid the more contaminated species, including shark, swordfish and farmed salmon.

Some species are also being overfished to near extinction levels. By avoiding these fish, we can help the stocks recover.


**Fish to avoid:**  
 Shark (overfished, high mercury contamination)  
 Swordfish (overfished, high mercury contamination)   
 Bluefin tuna (overfished)  
 Farmed salmon (PCB and dioxin contamination, pollutes coastal waters, depletes wild fish)  
 Chilean sea bass (overfished)  
 Orange roughy (overfished)

**Good fish choices:**  
 Wild salmon – including most canned (high omega-3s)  
 Sardines (high omega-3s)  
 Oysters (high omega-3s)  
 Freshwater trout (high omega-3s)  
 Farmed catfish  
 Black cod/haddock  
 Halibut  
 Clams and mussels 

Download a handy card with more good fish choices here.

**Vegetable sources of healthy omega-3s include:**

- Flaxseeds (crushed preferably) and flaxseed oil (can be taken in liquid or capsule form; it can be added in most of your cooking including salad dressings and sauces)
- Walnuts (a quarter cup (1 ounce) supplies about two grams plant based omega-



- 3 fatty acids, slightly more than found in 3 ounces of salmon)
  - Dark leafy green vegetables such as spinach, kale, and arugula
  - Canola oil, soybean oil
- To find out more about Omega-3 fatty acids visit:  
<http://www.omega-3info.com/home.htm>
- Next> Mad cows, madder consumers

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Mad cows, madder consumers

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Mad cows, madder consumers

Is it just me, or is it a really dumb idea to feed cows to cows? Or pigs to cows, or chickens to cows. Aren't cows supposed to eat grass?

Feeding cows to cows is believed to be how mad cow disease (BSE) originally spread in the U.K. This practice is now banned. (But you can still feed cows to pigs and then feed those pigs to cows. Somehow, this just doesn't seem very bright.)

Eating meat infected with BSE could cause the deadly variant Creutzfeldt-Jacob disease (vCJD) in humans, but most food safety experts say the risk is low. So far, only two animals in North America have tested positive for BSE.

Concerned consumers can reduce the risk of eating infected meat by avoiding the beef cuts most likely to be contaminated – the brain, spinal column and surrounding tissues. This means no more "mystery meat" found in processed meat products like hotdogs.

But this doesn't change the real problem, which is inherent in "factory farming." To meet a growing demand for cheap meat, livestock operations have changed substantially over the past few decades – both in terms of scale and organization. Chickens and pigs do not run around the farm yard and cattle are not all raised on the range – they are being "grown" in giant feedlot operations called factory farms.

Factory farms are large facilities where hundreds to thousands of animals (cows, pigs, chickens or turkeys) are confined and provided little or no access to sunlight, fresh air or room for movement. Animals are fed antibiotics – very similar to the ones used for humans – to stave off infections, as well as other growth stimulants.

Leaving aside whether this is a humane way to treat animals, factory farms create huge amounts of manure that must be stored and treated. Improperly managed manure can contaminate drinking water and nearby streams and lakes. This happens in our coastal waters too. Open netages where farmed salmon are raised are essentially factory farms in the ocean and cause similar problems.

Read Dr. Suzuki's take on [factory farming](#).

For a funny look at factory farms, visit [The Meatie](#).

and to learn about an alternative, see [http://www.coabeesf.ca/Coia\\_beef/](http://www.coabeesf.ca/Coia_beef/)

Best meat choices:

Find out where your meat comes from. Choose free-range, antibiotic-free chicken and pork, and grass and grain-fed beef from family farms. Organic meat is another healthy and environmentally sensible choice. Butchers at specialty stores and local meat stores can be quite informative about their products.

Next> Conclusion

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Conclusion:

Our food choices have a big impact on our world. Some food production processes deplete natural resources and pollute our air and water. Others work within natural systems to provide healthy food without damaging our environment.

A few tips:

- Choose at least one day a week to eat meat-free meals in your household. Given the wealth of fresh vegetables, grains, and dairy products in the marketplace, it is not difficult to make an interesting vegetarian meal. Buy local produce as much as possible. Organic is a good choice as well.
- Choose free-range, antibiotic-free chicken and pork, and grass and grain-fed beef from family farms. Organic meat is another healthy and environmentally sensible choice. Butchers at specialty stores and local meat stores can be quite informative about their products.
- Choose fish wisely. Buy wild salmon and choose other fish that are not over-exploited or heavily contaminated. These are your best choices for your health, for marine environments and for coastal communities.

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### Aquaculture

People have been practicing fish farming, or aquaculture, for centuries. In Canada, fish farms have been operating on both coasts since the 1970s.

If done sustainably, aquaculture can be a viable alternative to harvesting wild stocks. However, fish-farming practices on the B.C. coast are polluting the environment and threatening the integrity of wild stocks.

The David Suzuki Foundation's current work focuses on salmon farming and shellfish farming and their effects on marine environments. Aquaculture is an important and growing industry, and we are committed to finding sustainable solutions to the many environmental challenges facing the industry.

Join the Coastal Alliance for Aquaculture Reform (CAAR) and get involved in important action to promote sustainable aquaculture practices.



An open-net-cage salmon farm on the British Columbia coast

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### Open-net-cage fish farming

Open-net-cage fish farming was pioneered in Norway in the 1960s. Since then, the industry has expanded to Scotland, Ireland, Canada, the U.S., and Chile, but it is dominated by a handful of multinational corporations.

Open-net-cage fish farming is a controversial practice that has raised serious environmental concerns around the world.


Communities on the B.C. coast rely on a healthy marine environment to support industries such as tourism, sport fishing, and commercial fishing, all of which are affected by current commercial fish-farming practices.

Problems associated with open-net-cage salmon farming include:

- Sea lice and disease from farmed salmon threaten wild stocks.
- Pollution from farms contaminates surrounding waters.
- Drugs, including antibiotics, are required to keep farmed fish healthy.
- Escapes of farmed fish (alien species) threaten native wild fish.
- Nutrient: Farmed fish are fed pellets made from other fish, depleting other fish species on a global scale.

But there are solutions to these concerns.

In 2001, the Honourable Stuart Leggatt conducted an independent public inquiry into salmon farming in British Columbia. His report, *Clean Choices, Clear Waters*, is available on the Leggatt Inquiry website.



Current fish-farming process involve open-net cages like these that allow fish to escape and pollute to flow freely into the surrounding water.

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### Parasites & Disease

#### SEA LICE

Sea-lice infestations originating from salmon farms constitute one of the most pressing threats to B.C. wild salmon – and, indeed, to wild salmon around the world. This is one reason we advocate for salmon farming to be moved to closed systems that separate farmed and wild fish. Wild salmon face many threats, so where a threat exists that we can readily control, we have a responsibility to do so.

Years of studies published in highly respected peer-reviewed journals have built a strong weight of evidence that sea lice from fish farms are responsible for significant and preventable damage to wild pink and chum salmon in B.C.'s Broughton Archipelago. In B.C., sea-lice infestations are not restricted to the Broughton Archipelago but have also occurred in the Discovery Islands. Sea-lice infections in other salmon-farming regions – including Scotland, Ireland, and Norway – have also had negative effects on wild stocks. There is sufficient reason to be concerned that the problem for B.C.'s wild fish goes beyond the well-researched Broughton Archipelago. Precautionary action is needed and justified. We must separate the farmed and wild fish, and we need major retailers to become a positive force for changing salmon farming practices.

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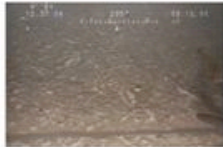
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### Open Netcage Fish Farm pollution

Farmed fish are grown in net cages that float in the ocean. Pollution from fish excrement and waste from excess food is discharged directly into the marine environment. This pollution can be divided into two classes, organic and chemical.

**Organic Pollution**

The main source of organic pollution from salmon farms is fish excrement and uneaten feed. The amount of feces produced by farmed salmon can vary depending on feed formulations. Studies show that 25 - 50 per cent of the dry feed consumed can end up as feces(1). Other contributions to organic waste are fish mortalities that sink to the seabed(1), and fish blood from farms that harvest and bleed fish on site(2).



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### Drugs used in the salmon farming industry

A variety of chemicals, including antibiotics, pesticides and fungicides are used on salmon farms to treat disease outbreaks. These drugs are often administered to the fish through their feed. Since salmon are mostly raised in open marine netcages, most of the drug, or its metabolic byproducts, end up in the marine environment through uneaten feed or the salmon's excrement(1). The distribution and environmental impact of these chemicals is a cause of great concern.

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### Escaping farmed salmon pose risks

When farmed salmon escape, they pose several problem to wild species:

- Escaped salmon can be carriers of disease and parasites, which pose a threat to wild salmon populations.
- When the species farmed is native to an area there may still be an impact from escaped farmed salmon breeding with populations of wild salmon that are genetically adapted to specific streams.
- In British Columbia there is a greater danger arising from the fact that most of the salmon farmed are Atlantic salmon. Evidence exists that escaped Atlantic salmon can breed in BC's wild streams. The potential negative consequences of this could be dramatic.

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### Net loss of wild fish to produce farmed salmon

A total of 2.7 to 3.5 tonnes of wild fish are used to make 1 tonne of farmed salmon

Salmon farming proponents often point out that, since the wild fisheries are collapsing, farming the oceans is necessary to feed a hungry world (1). They claim that their industry can supply food while taking pressure of ocean resources. But it isn't that straightforward. The impact of aquaculture (farming of a seafood species) varies, depending on what species is farmed and what method is used. With regard to taking pressure of ocean resources, a key factor is whether the species being farmed is carnivorous or not.

There are more than 220 different species of seafood currently farmed in the world and about 85 per cent of the total production is made up on non-carnivorous species (2). In British Columbia, however, the majority of aquaculture production consists of salmon, a carnivore. In order to try and mimic their natural diet, carnivorous species are given feed that is high in fishmeal and fish oil. These key ingredients are obtained from wild fish such as sardines, mackerel and anchovies, which are mainly supplied by South American fisheries.

The amount of fish meal and fish oil in dry feed can vary depending on the type of feed and it has also changed over the last few decades. For the 1990's a typical average composition for Atlantic salmon feed is 35% fish meal and 25% fish oil (3).

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Internet Archive **29 captures** 17 Jun 07 - 3 Feb 10

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 Use of Closed Tank Technologies for Salmon Farming

Closed tank technologies offer a major step forward in fish farming practices. They eliminate several of the most important negative impacts of salmon farming and help significantly reduce others. Closed tanks have been demonstrated as technically feasible ways to grow salmon and are currently being tested to demonstrate commercial viability.

Demonstration of closed tank commercial viability and confirmation of environmental benefits will offer a significant opportunity to move towards salmon farming that protects the marine environment, human health and coastal communities.



Proposed commercial scale Aquafarm floating closed tank system.

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**Health minister urged to assess risks of eating farmed salmon**

January 8, 2011 - VANCOUVER - Federal Health Minister Allan Rock must immediately order wide-scale testing of farmed salmon produced in Canada in order to determine contaminant levels and the safety of regular human consumption of the fish, the David Suzuki Foundation said today.

Additionally, Minister Rock must ensure that his department and the Bureau of Food Safety and Consumer Protection publish information about safe-level standards for the consumption of farmed salmon by adults, especially pregnant women and nursing mothers, and children, said Jim Fulton, the Foundation's executive director.

"I have spent hours speaking to Health Canada officials and people from Food Safety and Consumer Protection and I wasn't able to get any assurance that such safe-level standards even exist in Canada never mind being accessible to the public," Mr. Fulton said.

Concern about contaminant levels was raised last week when research from Canada and Britain suggested that potentially dangerous levels of toxic chemicals are contained in the feed given to farmed salmon. The Canadian research was conducted by Dr. Michael Easton for the David Suzuki Foundation and in Britain by Dr. Miriam Jacobs of the University of Surrey in conjunction with the U.S. Environmental Protection Agency.

The research was cited in a British Broadcasting Corporation television program aired Sunday. In the program, Dr. Nigel Harrison, a contaminants expert in Britain's Food Standards Agency, advised that adults should eat a maximum of one portion of farmed salmon a week because it may contain contaminants like Polychlorinated Biphenyls (PCBs).

"In Britain and Europe, consumers can find out about safe-level standards for contaminants in oily fish like salmon and be told just how much is safe to eat. We have no such information readily available," Mr. Fulton said.

"We are asking Canada's Health Minister to come clean with Canadians and advise us about potential health hazards of regularly eating farmed salmon," he added.

"The federal government has been the lead promoter of salmon farming in Canada since 1984. My concern is that federal agencies have not vigorously researched the health or ecological impacts of salmon farming because the government itself is the main promoter of the industry."

Mr. Fulton has written to Minister Rock asking him to address this issue immediately.

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 For more information, please call Jim Fulton or Jean Kavanagh at 604-732-4228, ext. 229.

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