FREE REPORT
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Saving B.C.'s Wild Salmon

Where did they go?

In 2009, Fraser River sockeye salmon declined 90% below expected numbers. The population is now just one percent of what it was around 100 years ago, plummeting from 100 million to just over 1 million.

Wild Pacific salmon – sockeye, coho, chum, chinook and pink – have always been at the heart of life and culture on the coast of British Columbia. But now, as wild salmon numbers decline steeply, the very existence of our once mighty salmon runs is at stake.

Though Canada's wild Pacific salmon spend most of their lives ranging the sea – either far out in the open Pacific Ocean or plying the waters of BC's inland inlets and sheltered bays – they eventually return to their home rivers and streams to spawn. Some salmon may need to swim only a short distance inland to their spawning grounds, while others travel all the way to the Rocky Mountains, an amazing journey of thousands of kilometres.

Not all wild salmon live to see their ancestral spawning grounds. That's because wild salmon are mighty tasty! They are a vital food source for orca whales, grizzly bears, bald eagles and other wildlife. Wild salmon even feed the big trees: bears and wolves sometimes drag salmon carcasses into the forest providing fish fertilizer for the trees. By feeding wildlife and trees, salmon support wildlife watching and wilderness tourism.

Wild salmon also nourish people. First Nations and coastal communities rely on salmon as a healthy and delicious traditional staple food. Salmon are also sought after by commercial and sports fishers, providing employment and recreation.

However, in recent years many runs of wild salmon have been on a steep decline. Coho salmon have all but disappeared from the Thompson River system, a major tributary of the Fraser, and many other rivers and streams where they were formerly abundant.

Particularly shocking is the recent decline of sockeye salmon numbers in the Fraser River, the largest sockeye-producing river in the world. Up to 13 million sockeye were expected to return to the Fraser River and its tributaries in 2009, but only 1.3 million made the journey, a decrease of 90%! This is shocking when you consider that as recently as the 1800's as many as 100 million sockeye could be expected to make the annual journey up the Fraser.

So, what has happened? Decades of ocean based over-fishing, global climate change, stream damage caused by logging, agriculture, mining, oil and gas development, urban development, and industrial salmon farms (plus the diseases and infestations they spread) all are pushing wild salmon to the very brink.

Of these threats, perhaps the easiest to tackle immediately are salmon farms. It's time to stand up for wild salmon. Thousands of people throughout British Columbia are already taking action to save the salmon. **Read on to learn how you can join in.**

Photos clockwise – Sockeye salmon by Chris Cheadle; "Salmon day of the dead" protest in Vancouver, Wilderness Committee files; Grizzly bear by John E. Marriott; Bald eagle by Jared Hobbs.

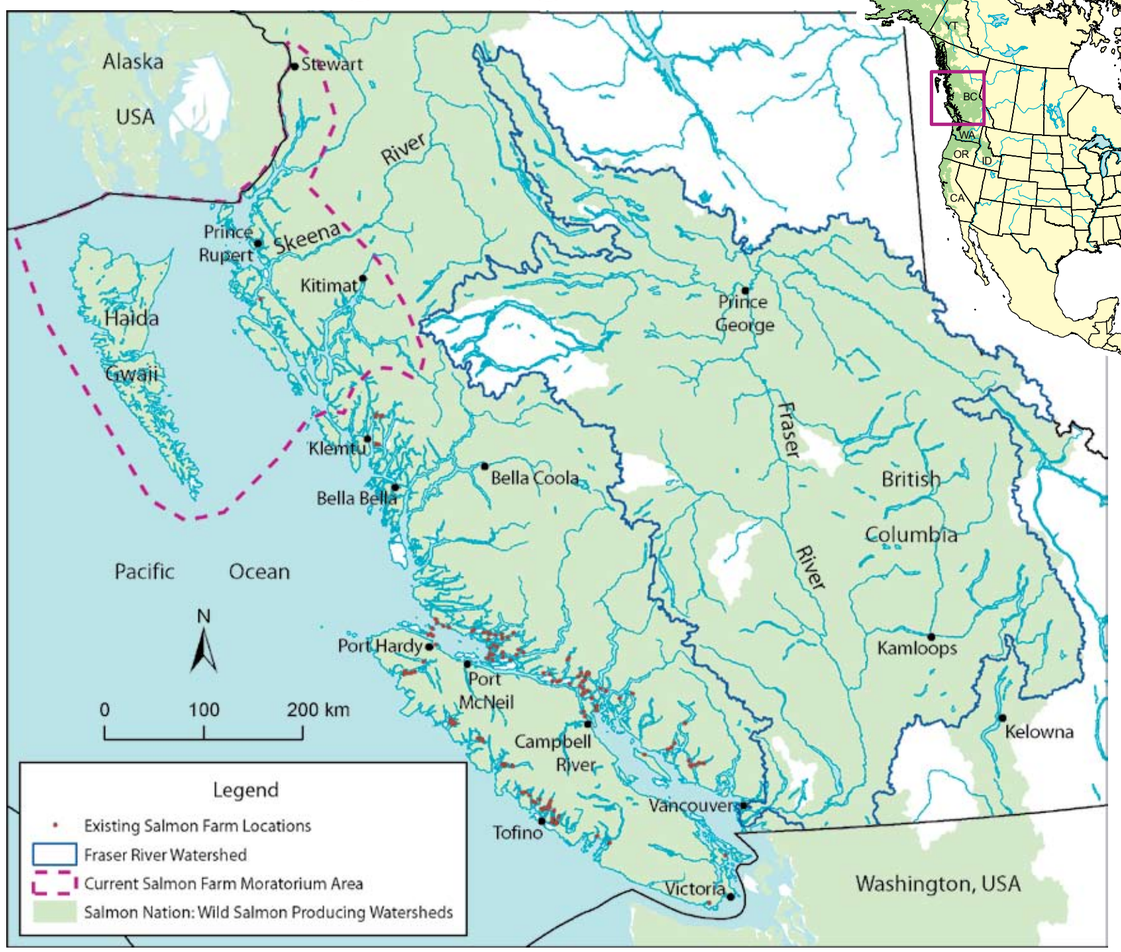
Salmon Farming is an undeniable threat to wild salmon...

Industrial salmon farms threaten migrating salmon

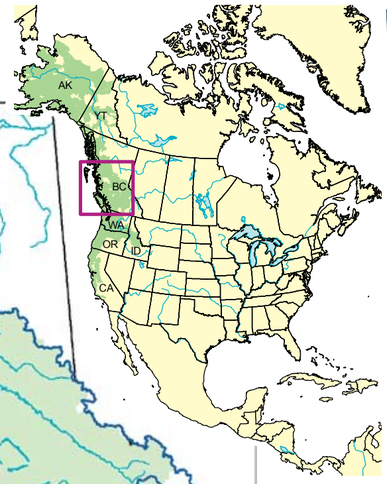
Sea Lice – Peer-reviewed independent science shows that industrial salmon farms, which raise hundreds of thousands of fish in open-net pens, breed sea lice that infect and kill juvenile wild salmon as they migrate out to sea. These industrial salmon feedlots are along the coastline, many near stream mouths and along wild salmon migration corridors. Everywhere in the world where there are industrial salmon farms, local wild salmon and sea trout populations have been decimated.[1] In BC, studies have shown that up to 95% of juvenile pink salmon deaths in the Broughton Archipelago correlate to sea lice infestations[2] and if trends continue pink salmon may become extinct there within 8 years[3]. A recent study shows that Fraser sockeye are also being infected with sea lice[4], which may be contributing to the recent Fraser sockeye crash.

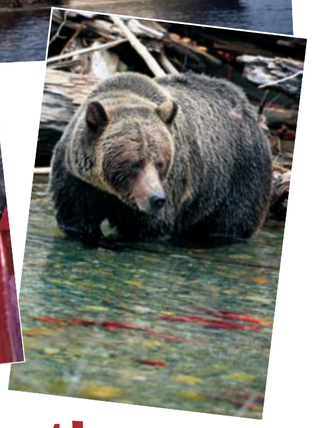
Fraser sockeye runs that passed dozens of industrial salmon farms on their migration north through northern Georgia Strait, Discovery Passage and Johnstone Strait collapsed by over 90% of expected returns. However, salmon stocks that travelled south, through areas with no fish farms, did well in summer 2009, returning at over twice the expected numbers.

Escaped Farmed Salmon – In BC thousands, sometimes hundreds of thousands, of farmed salmon escape from broken feedlot nets every year. Exact recent figures are difficult to find, but over 1.4 million farmed Atlantic salmon escaped into BC waters between 1987 and 2002, as reported by Fisheries and Oceans Canada Atlantic Salmon Watch Program. The escaped farmed salmon threaten wild stocks by spreading disease to wild salmon, competing for food and even competing for spawning habitat.[5] Most BC salmon farms raise the Atlantic salmon that have been found in dozens of BC rivers[6] and could be spawning to become an invasive species. Some fish farms raise Pacific salmon species, such as chinook, that can interbreed with wild stocks if they escape. The farmed Pacific salmon have a less genetically diverse make up, being bred in captivity from fewer and more limited breeding stock. The interbreeding of farmed salmon with wild ones dilutes the genetics of wild populations, which in turn can make these populations weaker and threaten their survival over the long term.



British Columbia has some of the world's best salmon habitat. The proliferation of industrial salmon farms is bringing not only these runs to the brink of extinction, but also the complex ecosystems that depend on them.





Herring fishery by M. Bouris; Grizzly bear fishing for salmon by John E. Marriott; Sockeye salmon run by Art Wolfe.

Strip-mining the world's oceans: loss of protein in the South Pacific

Salmon are carnivores. To make feed pellets for farmed salmon, smaller wild fish are ground to make fish meal and oil. It takes two to five kilograms of wild fish protein to produce just one kilogram of protein of farmed salmon.[16] Many of the world's oceans are being overfished simply to provide industrial salmon farms with feed. This is food fish needed by local people and ecosystems. In Peru, where coastal waters are being heavily over-fished to provide food for industrial salmon farms, 25% of infants are malnourished[17]. Overfishing also disrupts food webs imperilling wildlife, such as penguins, that depend on wild fish.[18][7]

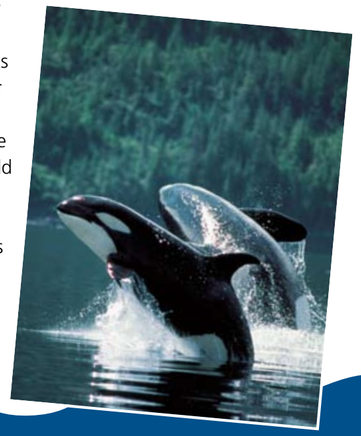
It is unethical, unsustainable and illogical to raise carnivorous salmon since it is contributing to a net loss of protein worldwide.

Sea lions at Norris Rocks by M. Bouris; Sea lice infects baby salmon by Jeremy Sean Williams.

BC wildlife depend on wild salmon

Wild salmon support other iconic wildlife species on the BC coast and interior, including our world famous orca whales, grizzly bears, black bears and Kermode "Spirit" bears, bald eagles and a host of other species. If wild salmon disappear, many other species' populations would collapse, disrupting ecosystems and dramatically changing our coast for the worse. Evidence of starving orcas and bears are already appearing as many wild salmon runs dwindle. In the Kimsquit Valley on the north coast, 50 per cent fewer bears than average and 65 per cent fewer cubs were observed in 2009[7].

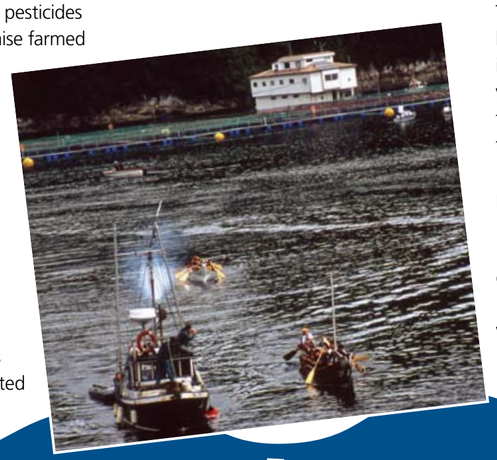
Other iconic marine wildlife, such as seals and sea lions, are routinely shot and killed by salmon farmers when these magnificent animals get too close to the net-pens, attracted by the tasty treats inside. Many of the seals and sea lions, if not shot, may become entangled in salmon farm nets and die.



Industrial salmon farms emit toxic waste

Globally, salmon farms discharge the sewage waste equivalent of tens of millions of people[8], smothering and contaminating nearby marine life. This raw sewage also contains toxic chemicals from pesticides and drugs used to raise farmed salmon.

Many of these toxins are also found in the farmed fish themselves. Studies have found up to ten times more toxins in farmed salmon as compared to wild salmon.[9] Toxins include polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs), fire retardants, dioxins, pesticide residues from delousing agents, such as SLICE, and antibiotics – all pose a risk to the health of humans and marine life.



Diseases and farmed salmon

Bacteria and viruses breed in the tightly packed open-net industrial salmon farms, where the overcrowded fish are stressed and their immune systems weakened. These diseases, such as bacterial kidney disease (BKD) and infectious hematopoietic necrosis virus (IHNV), are then transferred to wild salmon that swim near these farms.[10, 11] Epidemics of IHNV have broken out in BC and periodically infect wild salmon.

But a much deadlier virus, infectious salmon anaemia (ISA), a disease that has never been found in BC waters could be introduced via imported eggs and devastate wild salmon populations.[12, 13] ISA was recently introduced in Chile and has been devastating to industrial salmon farms.[14] The virus has reduced production at Marine Harvest farms, the world's largest salmon farming corporation, by 65%.[15] Thousands of workers lost their jobs, illustrating the risk of depending on unsustainable industries such as salmon farming. This virus is not native to BC, and if introduced through egg imports to industrial salmon farms it could prove to be a deadly blow to wild salmon populations.

Photos this page, clockwise – Industrial salmon farm in Chile by Sam Beebe; Alert Bay fishery by Jeremy Sean Williams; Orca whales by John Ford/Ursus photography.

...that can be dealt with immediately!

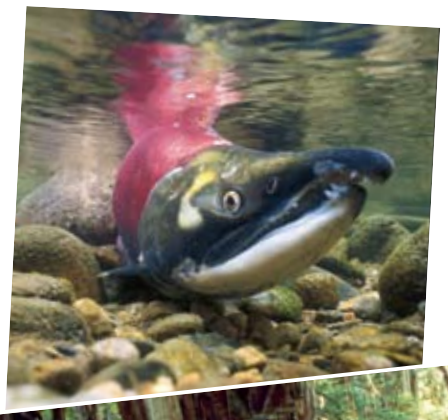
Solutions

Both the federal and provincial

governments need to immediately shutdown industrial salmon farms completely to protect both our wild salmon populations and wild fish stocks in the world's oceans, including the south Pacific.

Other essential steps to protect wild salmon include:

- Protecting wild salmon habitat from resource extraction, urban sprawl, and freeway developments.
- Moving the wild salmon harvest from the open ocean into the rivers so that selective fishing of only healthy stocks is possible.
- Quickly reducing the carbon pollution which causes climate change.



Judicial Inquiry

Opportunity for Change?

In November 2009, the federal government announced a Judicial Inquiry whose purpose is "to identify the reasons for the decline and the long term prospects for Fraser River sockeye salmon stocks and to determine whether changes need to be made to fisheries management policies."

The inquiry has been directed to produce a report by May 2011. This is a big opportunity for wild salmon if British Columbians speak up about the need to shut down industrial fish farms. To be effective, the inquiry needs to recommend shutting down all open-net cage industrial salmon farms, moving fishing closer to the rivers to allow selective harvesting and reduce over-fishing, and providing real protection for salmon habitat. Otherwise it will just be another delaying tactic by government while our salmon slip towards extinction.

Photos – Sockeye salmon by Wayne Lynch; Stream in Clayoquot Sound, Wilderness Committee files; Salmon Valentine's and Santa Salmon protests by Wilderness Committee staff and supporters.

Take Action

to Save BC's Wild Salmon

The federal government is currently taking over jurisdiction of the management of salmon farming from the BC provincial government. The federal government is also initiating a judicial inquiry into the collapse of Fraser sockeye and the management of wild salmon fisheries.

Please write Prime Minister Stephen Harper to tell the federal government how you feel about closing industrial salmon farms now and about taking action to protect wild salmon. In the wake of the collapse of the majority of sockeye populations of the Fraser River system, the world's largest sockeye producing river, our wild salmon need action. Don't let wild salmon go the way of the Atlantic cod.

Stephen Harper
Prime Minister

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Yes! I want to help save our wild salmon

Enclosed is: ☐ $25 ☐ $50 ☐ $100 ☐ Other $ _____

Fed. reg. charity #11929-3009-RR0001

I want to become a member! Enclosed is my annual fee for a:

☐ $35 Individual Membership ☐ $52 Family Membership

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The Wilderness Committee is Canada's largest membership-based wilderness preservation organization.

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And return to the:
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call

(604) 683-8220 in the Lower Mainland
1-800-661-9453 toll-free elsewhere in Canada

Citations

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