

Environment, Climate Change and Land Reform Committee

Environmental impacts of salmon farming

Written submission from Philip Price

I am writing to beg you to clean up our Salmon farming industry. A pressure group have listed the reasons below more eloquently than I could so I have copied that in and included for your information. But I also want to add my own reasons here:

My job, my family of 3 children totally rely on a healthy ecosystem. Already in 10 years I now can not offer wild salmon watching trips on the west coast, this is a disgrace, only a decade ago I could.

Jobs is a big reason for aquaculture so the industry say, but in Norway they already have fully automated fish farms. Here when the first fish farms were installed they employed on average 25 people, they now employ on average 3-4 and this will keep going down to zero! Why support an industry that will eventually employ no locals, all profits go abroad to the international companies that run them (mainly Norway) and will pollute our seas and destroy our native salmon. This seems crazy to me. In Alaska they have no fish farms allowed at all and have a thriving wild salmon fishery, imagine that people could catch and eat wild salmon, that is currently impossible on the west coast as wild salmon numbers are so low they are about to go extinct.

Do you want to be the government that lets one of the most iconic scottish species go extinct. If this happens on your watch then that is truly shameful. History will judge you very poorly. Aquaculture has been scientifically proven (in many different countries) to cause massive reductions in wild populations.

I work in wildlife tourism in Ardfern in Argyll, I specialise in taking clients out to wild places. I now struggle to find wild places and most views in the local area have aquaculture structures in them. This may not seem that important but when you have an industry like tourism that provides many many more jobs than aquaculture why then are we sacrificing that amazing existing industry with one that will never be as big, it makes no sense.

I want to be able to swim in our sea here at loch craignish with my children, I want them to be able to forage seaweed and play in rock pools. We have 3 local fish farms, 2 of which have applied for massive expansions, the extent of the pollution from this is scary and will put me off letting my kids go swimming and we certainly will not be doing any foraging. This is just so wrong. No other industry in the country is allowed to pollute at such a level of untreated sewage straight into the sea.

I need healthy populations of seals, porpoises and dolphins for my business, me and many many many more businesses here totally rely on them. I was horrified to learn that fish farms are allowed to use acoustic deterrents and to shoot seals, this is bonkers when seals are a main stay of the tourism economy!

Millions of fish die each year from disease, this is highly unethical. If millions of sheep were dying each year there would be a national outcry. Eventually people will realise what is happening and the industry will lose all support.

If aquaculture is done in a closed system like most other industries then most of the above problems disappear.

General reasons why this needs to be done:

Sea lice and infectious diseases are out of control among farmed salmon, resulting in the deaths of over 10 million fish per year, the equivalent of 25% of total production. Find out more in the recent report commissioned by the Salmon and Trout Conservation Scotland: Sea lice are treated with toxic chemicals, such as emamectin benzoate.

This and other pesticides as well as antibiotics are released into the sea, where they harm other marine animals such as shrimps, prawns and lobsters. The Scottish Environment Protection Agency (SEPA) claims that the limits placed on the quantities of chemicals make them safe, but their use is soaring as sea lice, disease and resistance to these chemicals increase. The industry should not be allowed to expand until sea lice and disease are sufficiently controlled.

The use of so-called “cleaner fish”, such as wrasse to counteract lice, bring problems of their own. Recent reports show that they too suffer from and transmit disease.

Escaped farmed salmon pose an even greater threat to the survival of wild salmon and sea trout, which are in steep decline on the west coast, through the spread of disease and weakening of the gene pool of our indigenous salmon. An estimated 2.2 million farmed salmon escaped from Scottish farms between 2002 and 2017.

The use of Acoustic Deterrent Devices (ADDs) to deter predators from open net cages, causes illegal disturbance and can cause hearing damage to porpoise, dolphins and whales. When ADDs fail, salmon farm operators are allowed to shoot seals. More than 1,500 seals were unnecessarily shot in the last six years in Scotland. Farms could fit anti-predator nets as they do Canada where ADDs are banned, but bullets and ADDs are cheaper.

On land, polluting industries have to pay to clean up their mess. Uniquely this does not apply to salmon farms! According to the report commissioned by the Scottish Parliament, 200,000 tonnes of salmon produce organic waste equivalent to about half of Scotland’s human population of 5.3 million. By 2030, Scottish salmon farmers aim to produce 300,000 tonnes of farmed salmon, which will produce the equivalent of three quarters of all Scotland’s human sewage, which will be dumped untreated into our coastal waters and sea lochs.

As dissolved nutrients from salmon farms flow into the sea in ever greater quantities, they increase the risk of toxic algal blooms, which threaten our shellfish fisheries and pose severe health risks. When there is doubt about environmental harm, government and local authorities have an obligation to apply the precautionary principle, to safeguard the environment. This must apply to salmon farming.

The government must acknowledge that some marine areas are so sensitive and important to our ecosystem that they should be completely protected from salmon farming. More than a quarter of salmon farms are sited within or close to areas of importance for Biodiversity Action Plan habitats or species, and around 10% are within or close to Special Areas of Conservation / Special Protection Areas. Many more are inside Marine Protected Areas. The Scottish Government should urgently amend national marine planning guidance, so there is a presumption against any future salmon farming developments inside Marine Protected Areas.

The industry is now turning to a mixture of vegetable protein and 'processed animal protein' (the bits that no-one else wants to eat). Vegetable proteins are only sustainable if they are grown on land that was not rainforest, specially cleared for that purpose, or when they do not displace other, more sustainable users of the land.

Due to its environmental remit, the visual impact of salmon farms on the environment has not been considered in the Scottish Parliament-commissioned report. Scotland's tourism industry thrives first and foremost because of its unique, unspoiled beauty. Tourism earns 14 times more revenue for Scotland than aquaculture and employs at least 130 times more people than the 1,800 or so directly employed on fish farms. In a 2011 survey done on behalf of the aquaculture industry, about one third of people asked, thought that fish farms adversely affected the Scottish coastline. Approximately a quarter did not want to see any increase in their number and one third did not want to see them get any larger. This survey was based entirely on how they look. Imagine if the visitors surveyed had known what was happening underwater...

International treaties bind our government to use 'best environmental practice' and SARNS believes that salmon farming companies should pay a levy on their profits to ensure this happens. This could be spent on moving all salmon farms to closed containment, ideally on land, as isolating the fish from the sea would solve almost many problems in one go. Norway, Canada and the US face the same problems with sea lice and disease in open net salmon farms and are moving to closed containment. In fact, open net salmon farms have been banned in all but one state in the US. A Norwegian company recently invested \$72 million dollars in a closed containment fish farm in China. If it can be done there, it can be done here too.

The report commissioned by the Scottish Parliament shows that our government agencies have done much less research into the effects of salmon farming than the governments of Ireland and Norway, which share the same problems. SARNS encourages the Scottish Government to use this research and improve transparency in developing its own scientific advice and decision-making.