

Environment, Climate Change and Land Reform Committee

Environmental impacts of salmon farming

Written submission from Anson C W MacAuslan

The environmental impacts of salmon farming are increasingly apparent across the world. Some countries have banned it altogether, others impose much stricter regulatory controls. In Scotland regulation is not fit for purpose and our country is well behind the curve. Why should this be so? If evidence is lacking then we must collect evidence surely?

All that is needed is a fair and level playing field where we make decisions and enforce regulatory powers based on facts. If we have regulation we must also enforce it. The 'facts' should be freely available to everyone without the need for FOI requests which are far from 'accessible' to all.

I watched the Committee's evidence session on 6th February with interest. I particularly welcome the announcement by David Sandison of SSPO that his members have agreed to publish weekly sea lice numbers, mortality numbers and disease issues on a farm by farm basis. Surely Scottish Government should now make such publication a statutory requirement; because not all salmon farmers are members of the SSPO.

Surely we need to go further and introduce a system of unannounced checks and counts of sea lice numbers (carried out by independent inspectors in order to give greater public confidence in the accuracy of published data). In this context it is worth noting that sea lice counts on salmon farms in the Faroes are all performed by independent inspectors.

There was reference in the evidence session to culls of farmed salmon in the Faroes when sea lice numbers exceed a certain level. David Sandison of SSPO refuted that point. I have now researched the situation in the Faroes.

In spring 2017 the Faroes submitted its Annual Progress Report to Nasco regarding actions taken in 2016:

http://www.nasco.int/pdf/2017%20papers/APRs/CNL_17_24_APR_Faroelands.pdf

The relevant sections are 3.3 and 4.1. The latter section is explicit:

"A new regulation no. 75/2016 on sea lice has been adopted with the following main changes:

- Sea lice must be counted every fortnight throughout the year. The counting is to distinguish between different life stages and sizes of lice

- The number of mature female lice per fish (threshold) must not exceed 1.5. If exceeded more than three times in a row, all the fish at the farm must be slaughtered within 2 months
- Farms with few lice problems may increase the number of smolts put to sea
- Farms with significant lice problems are obliged to decrease the number put to sea".

By contrast, in Scotland no enforcement action is taken until a level of 8.0 mature female lice per fish is reached; just what this enforcement action entails is to date unclear and there is certainly been no evidence of enforced slaughter, despite some farms recording sea lice levels in 2017 of 20 or more mature female lice per fish.

Having lived, worked and fished for migratory salmonids in the Highlands all of my life I can say that it is very clear from fishery records that the advent of the aquaculture industry closely correlates with the start of the decline in migratory salmonid stocks in West coast and Hebridean river systems. This is not empirical evidence of course but it is extremely strong anecdotal evidence which must be investigated closely and cannot be ignored. I think the tobacco industry managed to suppress similar (even stronger) evidence for decades but surely the Scottish Government does not want to preside over such a denial when it comes to the Aquaculture industry.

Lost wild fish populations and damage to wild fisheries cannot be replaced or mitigated by any means available to us. I know there are rivers where hatchery work and even smolt ranching has led to some recovery in catches to the point where a sustainable fishery from an angling perspective is possible; but this totally misses the point. The wild fish populations are perfectly capable of producing that outcome without any need for mitigation if man made impacts are controlled.

Some anglers would argue that catching a salmon is all that matters and provenance is unimportant. That's not a view I subscribe too personally. It will become increasingly apparent that the genetics of existing populations are extremely important and climate change will only place even more demands on the adaptive capacity of the species. That adaptive capacity is unlikely to be improved by the dilution of the gene pool with alien genetics from escaped farmed salmon. No one actually knows what effect this is already having on salmonid populations in Scotland and beyond but it may already be highly significant.

I sincerely hope that Scotland's aquaculture industry survives long into the future as it supports many jobs in fragile communities that would be very difficult to replace. It may well have effectively 'displaced' other jobs in the rural sector as salmon and sea trout stocks have declined to the point where angling is no longer viable. This has a huge knock on effect on the economy. We cannot allow the continuation and expansion of the industry 'at any cost' and presently the environmental damage is significant. SO significant that the industry risks bringing itself to its knees.

It seems to me that for the industry to have a viable future and prevent conflicts, the Scottish salmon farming industry needs to invest in and adopt closed containment systems – either in tanks in the sea or on land – thus almost eliminating exchanges of parasites, disease and waste with the environment outside those tanks.

As someone responsible for three extensive hill farms in Caithness & Sutherland I can say with certainty what the outcome would be if I was losing 25 to 40% of my stock to disease / parasite burdens. It wouldn't be an invitation from government to double my stock numbers that's for sure!