

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM SALMON AND TROUT CONSERVATION SCOTLAND

Salmon and Trout Conservation Scotland (S&TCS) would like to thank the Petitions, ECCLR and REC Committees for the attention they have all given to the problems of salmon farming in Scotland, specifically those created by open cage farming for wild salmon and sea trout populations.

1. Do you have any general views on the current state of the farmed salmon industry in Scotland?

It is clear from the evidence already heard by the ECCLR and REC Committees that disease and parasite problems in much of the industry are out of control and there is little or no sign of the situation improving significantly. Mortalities due to disease and parasites and treatment procedures are now running at roughly 25% of production.

The levels of mortality are indicative of poor husbandry and/or the failure of available treatments. While that may not necessarily be of direct concern to wild fish populations, outside the open cages, it is highly likely that the proliferation of sea lice and of viral, bacterial and amoebic diseases within the cages, given the many hundreds of thousands of farmed fish in a relatively confined space, will be having negative effects outside the cages on populations of wild Atlantic salmon and sea trout. That is indeed what the evidence is suggesting.

The Committee is referred to the Post-evidence Note from S&TCS¹.

Climate change, bringing warming seas, will inevitably exacerbate the industry's current disease and parasite problems, but unless radical steps are taken to change the way that the industry operates, it is increasingly likely that the industry will be unable to farm economically in open cages, quite irrespective of the impact on wild salmonids.

2. There have been several recent reports which suggest how the farmed salmon industry might be developed. Do you have any views on action that might be taken to help the sector grow in the future?

The ECCLR Committee's report concluded that "*further development and expansion must be on the basis of a precautionary approach and must be based on resolving the environmental problems. **The status quo is not an option***". The ECCLR Committee has concluded that open-net salmon farming has caused very significant environmental damage and any increase in open-net salmon farming will only exacerbate these problems.

The industry has had many years of trying to address each concern of open cage farming in turn, as it has arisen, but there is a pattern of each new remedy turning out to be something of a false dawn and not to be as efficient a solution as it was

¹ http://www.parliament.scot/S5_Rural/Inquiries/Post-evidence_note_from_Salmon_and_Trout_Conservation_Scotland.pdf

initially trumpeted to be. The facts are that on-farm sea lice numbers remain stubbornly high, mortalities are running at the highest level they have ever been and escapes too are up on previous years and have not been eliminated.

S&TCS' view is that, until the current failings in the regulation of the salmon farming industry and the environmental problems the industry causes, as identified by the ECCLR Committee, are resolved, there must be an immediate moratorium on any new marine open cage fish farms or any expansion of existing fish farm sites, including any increases in farmed fish biomass at existing sites, as any expansion of the industry now will be unsustainable and may cause irrecoverable damage to the environment.

Further, if there is to be any long-term growth in salmon farming in Scotland, it must be in closed containment, either on land or in tanks in the sea.

As closed containment means a complete biological separation between the farmed fish and the wild fish, this will eliminate transfer of disease and parasites between farmed fish and wild fish. It will also assist in reducing, if not eliminating, escapes, both large scale and 'drip drip' escapes of farmed fish. Closed containment tanks in the sea can also bring specific benefits, for example, enabling the drawing up from depth of cooler water, thus easing problems with rising surface water temperatures.

Importantly, closed containment would allow the industry to have a sustainable future in Scotland, utilising the existing skills in the west Highlands and Islands. It would also give a major boost to the Scottish engineering and manufacturing sectors. The Scottish Government and the industry should therefore now commit to phasing out all open-net salmon farming within a specified time period (by the mid-2020s). The incentives put in place to drive that transition must be both rapid and significant.

If Scotland fails to embrace closed containment, then it runs the risk of being left behind as other countries, Norway and North America, forge ahead. The development of three major closed containment facilities have been announced in the US in the last three months alone². So far, the home of 'at sea' closed containment is Norway. It is not Scotland. That needs to change.

3. The farmed salmon industry is currently managing a range of fish health and environmental challenges. Do you have any views on how these might be addressed?

Closed containment salmon farming provides the only medium-term to long-term solution. Given rising sea temperatures, open-net farming's issues with disease and parasites are only likely to increase. It is no coincidence that the salmon farming industry on the west coast of Ireland, further south and thus faced with higher water temperatures than the industry in Scotland, has recently shown little appetite for expansion.

If, as is likely, the industry requires a transition period to allow it to move to closed containment, any continuation of the current open cage farming needs to be very

² See for example <https://www.undercurrentnews.com/2018/03/22/maine-town-begins-zoning-process-to-allow-for-nordic-aquafarms-ras-site/>

much more strictly regulated, both to control the impacts on wild fish, and the wider environment, in a way that all parties now recognise has not occurred, but also to incentivise that move to closed containment.

The ECCLR Committee concluded that *“the current consenting and regulatory framework, including the approach to sanctions and enforcement, is inadequate to address the environmental issues. The Committee is not convinced that the sector is being regulated sufficiently, or regulated sufficiently effectively. This needs to be addressed urgently, because further expansion must be on an environmentally sustainable basis.”*

This must now mean closure of very poorly sited farms and rapid reductions in farmed fish biomass where disease and parasites run out of control and where unacceptable out-of-farm impacts occur. In short, the transition period needs much more aggressive adaptive management of open cage farms, with a very strict precautionary ‘floor’, below which the performance of individual farms or groups of farms cannot ever be allowed to drop. Regulators need to take a tough line and draw a line under the ‘softly softly’ approach adopted hereto.

In relation specifically to the impact on wild salmonids, S&TCS lodged a formal Petition with the Scottish Parliament in 2016, to urge the Scottish Government to strengthen Scottish legislative and regulatory control of marine fish farms to protect wild salmonids of domestic and international conservation importance. The ECCLR Committee then recognised what S&TCS raised in its Petition *“that there appears to be no locus in the agencies for the protection and health of wild fish. ... The Committee is firmly of the view there should be a competent regulatory body charged with the protection and health of wild salmon and trout.”*

“The Committee considers the current regulatory process does not give sufficient consideration to the impact of salmon farming on wild salmonids. There should be a formal requirement for pre-application and post-consent monitoring of wild fish.”

“The Committee considers that an agency should be charged with the health and welfare of wild salmon and trout.”

As S&TCS said in its Oral Evidence to this Committee, there are a number of ways that this could be achieved in Scotland. This could be done by bringing forward a new Bill, looking at the complete consenting, permitting and regulation package as it relates to the industry. Alternatively, given that this is a transition phase only, MSPs could seek to amend the Marine (Scotland) Act 2010, to give some part of Marine Scotland the ‘wild fish function’, to plug the gap while the industry moves to closed containment. Similarly, that ‘wild fish function’ could be given to the Fish Health Inspectorate, simply by amending the Aquaculture and Fisheries (Scotland) Act 2007 to make it clear on the face of that Act that the FHI needs to regulate farms not simply in the context of the health and welfare of the farmed fish, but also to protect and conserve wild salmonids. Another alternative would be to place the wild fish function with SEPA, by making new Regulations under the Water Environment and Water Services (Scotland) Act 2003. Note that, prior to the 2007 Act, SEPA did

appear to accept, per its Fish Farm Manual, that it had some role in protecting wild salmonids from the negative effects of fish farming³.

Depending on which agency is considered the most appropriate to take this function, S&TCS would be more than willing to work with MSPs and /or the Scottish Government to plug the gap as quickly as possible, to improve markedly the protection of wild fish while the transition to closed containment proceeds.

4. Do you feel that the current national collection of data on salmon operations and fish health and related matters is adequate?

No. There needs to be real-time publication of farm by farm sea lice numbers, all disease issues, treatments (both chemical and other) and mortalities. At present, data collection is almost entirely reliant on a system of self-reporting by the farms themselves. This needs to be replaced or at least augmented by extensive unannounced independent inspections and monitoring.

Further, the time for voluntary disclosure of sea lice and other data, as once supported by Marine Scotland in the run up to the Aquaculture and Fisheries (Scotland) Act 2013, has now passed. S&TCS has proposed that full publication of farm-specific sea lice numbers, treatment and other data can be achieved easily by amending The Fish Farming Businesses (Record Keeping) (Scotland) Order 2008 to require the full publication of some or all of the records which are already required to be kept under this 2008 Order.

5. Do you have any views on whether the regulatory regime which applies to the farmed salmon industry is sufficiently robust?

The industry is very poorly regulated (as the ECCLR Committee's report makes crystal clear). This has long been the case. There is insufficient protection for the environment in general and no protection given to wild salmon and sea trout from the negative impacts of salmon farms, for example, when sea lice numbers on farmed fish escalate. This is the gap in the law to which S&TCS has referred on many occasions. S&TCS would repeat the suggestions above as to how the current regime may be made more robust while industry transitions to closed containment.

Regulation and enforcement in other countries is far more robust including mandatory culls on farms when sea lice numbers are not adequately controlled.

6. Do you have any comments on how the UK's departure from the European Union might impact on the farmed salmon sector?

While S&TCS takes no formal position on the UK's departure from the EU, in relation to the 'domestication' of EU law that will follow Brexit, S&TCS has recently submitted

³ SEPA's Fish Farm Manual (2005) stated variously that "in order to better protect wild salmonid stocks however, SEPA has adopted a Limiting Factor approach to consenting marine caged fish farms. SEPA may, in determining biomass limits for sites where proximity to important wild stocks is considered as a significant issue, impose a biomass limit equivalent to that biomass which can be effectively treated for sea lice infestations using an authorised sea lice medicine" and that, when setting consent limits, "in certain instances to protect important wild salmonid stocks, SEPA will limit the biomass to that which can be treated at the site using an authorised sea lice medicine."

written evidence to the ECCLR focussed on the importance of maintaining the EU Environmental principles in the process of bringing EU law into Scottish law.

In relation to salmon farming, the ECCLR Committee's Report into the Environmental Impacts of Salmon Farming made very many references to the importance of the precautionary principle in guiding the future of the industry, for example:

“There appears to have been too little focus on the application of the precautionary principle in the development and expansion of the sector”.

“Scotland’s public bodies have a duty to protect biodiversity and this must be to the fore when considering the expansion of the sector. We need to progress on the basis of the precautionary principle and agencies need to work together more effectively.”

“The Committee is supportive of aquaculture, but further development and expansion must be on the basis of a precautionary approach....”

This shows just how important the precautionary principle is to protecting the wider Scottish environment.

Similarly, the EU law-derived polluter pays principle is of very great relevance to salmon farming. As the REC Committee has recently heard⁴, Scottish salmon farming has benefited massively from being almost unique for a large industry, that by not having to internalise the external environmental costs of what it does – e.g. the impact of sea lice on wild fish, benthic pollution under cages, genetic introgression of wild stocks by escapee farmed fish, negative interactions with sea birds, marine mammals and cetaceans, landscape impacts caused by the siting of farms in highly scenic, often protected locations, and problems with over-harvesting of wild feed source species. The ECCLR Report has recognised that the industry is now at a stage where those costs must be internalised, stating that *“the industry needs to take full responsibility for all environmental costs of production. This would not be acceptable in any other sector and the Committee questions why this has been allowed to happen in the development and expansion of the salmon farming industry”.*

Overall, S&TCS hopes that both the precautionary principle and polluter pays principle will strongly influence the thinking of the REC Committee over the next few weeks and months and that these principles will be reflected, to the benefit of the conservation of nature in Scotland and the sustainable management of the Scottish environment as a whole, in the Report the REC is due to publish at the conclusion of its Inquiry into Salmon Farming in Scotland.

It is therefore vital that those principles are not lost nor diluted as a result of Brexit.

Salmon and Trout Conservation Scotland
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⁴ See Oral Evidence to REC Committee 14th March 2018.