RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM AYRSHIRE RIVERS TRUST

Our response to the invitation from the Rural Economy and Connectivity (REC) Committee's invitation to submit evidence for its salmon farming enquiry.

Ayrshire Rivers Trust welcomes the review of aquaculture and the opportunity to contribute to the REC Committee with our views.

It is worth noting that while Ayrshire is not within the area typically considered the 'Aquaculture Zone', ART is of the opinion that the industry does potentially impact wild salmon populations in Ayrshire's rivers. While we have no scientific evidence to corroborate this opinion, this does indicate a need for research on many fronts associated with wild fish interactions and aquaculture.

It is also worth noting that within 20 miles of the Ayrshire coastline operates an aquaculture facility on the east coast of the Island of Arran, another to the west of this island and more to the north in sea lochs linked to the Firth of Clyde. Any or all of these could impact in some way on the fish populations in Ayrshire rivers. The planned expansion of aquaculture on the west coast inevitably means a drive to establish new sites and Ayrshire has already been the focus for development within this industry which we oppose and will continue to do so until such times as the industry is able prove it has no detrimental impact on environment or species.

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

In both freshwater and marine habitats where this industry is active, there has long been evidence that its failure to adequately control sea lice and waste emissions, has detrimental impacts on other species and the environment. Pharmaceutical, chemical and organic wastes from aquaculture facilities have been allowed to pollute the sea-bed and freshwater lochs where these facilities exist and are believed to be having catastrophic impacts on the survival of other species and the quality of localised habitat.

Little or no effort is made to contain any wastes within these sites and virtually no monitoring of benthic habitats or species is possible within the current regulatory system. Therefore, their full impact is currently unknown but evidence gathered by many independent scientific and charitable organisations suggests that under the Precautionary Principle, aquaculture in its current form with a poor performance record, should be subjected to stricter regulation of their waste and chemical outputs, reduced capacity, seasonal restrictions and not withstanding any of these issues, should be required to improve their performance and reduce their impacts on the wider environment and ecology. This is a matter of urgency and while the industry procrastinates about the validity of evidence used to form these opinions, our salmon, sea trout (including brown trout in freshwater systems) and benthic

invertebrates continue to suffer declines. This is not sustainable even in the short-term. There is a crisis in wild salmon stocks presently and this industry contributes nothing to their prospects of future survival however, we acknowledge that there are also wider climate related issues involved.

Containment and escapes have dogged this industry for decades yet it fails to acknowledge, fully report or address these issues. The impact of introgression in wild salmon as a result of escaped farmed salmon migrating and breeding with wild fish is a very real threat to wild salmon stocks, particularly on the west coast of Scotland and Ireland. Frequent reports and evidence reaches us of escaped farmed salmon entering Ayrshire rivers, despite being on the edge of what is considered the 'Aquaculture Zone'. These escaped salmon frequently go unreported by both industry and unrecognised by anglers and it is unknown to what extent they breed with wild stocks. With farmed salmon being distant relatives (at best) to Norwegian Salmon, any introgression is likely to be extremely damaging to the future survival of our native fish. Indeed, the declines that are underway in Scotland may in many cases be connected to these escaped salmon. Further and extensive research is required to assess introgression in wild stocks to identify the extent of the existing problem.

Additionally, the product of Scottish Farmed Salmon carries the 'Scottish Brand' and relies heavily on this as a positive marketing strategy. It is therefore potentially damaging to the reputation of many high quality, fine Scottish products from other sectors when it is regularly revealed in the media that this industry suffers mass mortalities through failures in its operation and production systems from parasites and disease as is routinely reported. Such high mortalities pre-market are a failure of this industry and damaging to Scotland's reputation as a high quality food producer. Animal welfare should be a consideration for any producer yet this industry's poor track record illustrates complete failure in this respect.

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?

Close containment is an obvious route that is developing elsewhere that should reduce the impact on both environment and the wild species affected by this industry. The current modus operandi of this industry is not sustainable on many fronts and the massive planned expansion cannot be allowed unless a radical change in practice is also implemented that reduces the impact on the environment.

While close containment may not be the only option, previous failures of sea cages and stock containment indicate that any deep-water/offshore alternative may also be subject to similar failures in what is a harsh and unpredictable environment. Therefore, deep-water cages while mitigating some of the issues associated with wild salmon migration routes, may be less than satisfactory at achieving all of their planned and necessary outcomes and could be considered a high risk venture by both the regulators and the industry.

The status quo cannot be considered as acceptable to those across Scotland, charged with managing and conserving wild salmon stocks. The Scottish Government should not ignore the concerns of the wild fisheries sector when deliberating the future planned expansion of an industry with so many obvious failures.

Close contained land based operation must be considered as perhaps the most sustainable route although there will be difficulties in delivering this too. Land based hatcheries and rearing facilities linked to this industry have been trialled and utilised for several decades however they may also be responsible for trophic changes (enrichment) in ologotrophic lochs where they discharged poorly treated (or untreated effluent). Developing adequate waste treatment facilities that operate hand in hand with close contained salmon farms will be challenging but essential. This will require creative and new approaches but the industry to date has been highly profitable and should invest heavily in making their future environmentally sustainable if they wish to increase (or maintain) current productivity.

Developing and constructing new land based facilities to improve its environmental performance will inevitably require significant investment however, there will be additional benefits to rural economies and other sectors and industries. This will inevitably bring long term and much need sustainable benefits to Scotland's environment and rural economy and with it, new jobs.

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?

Poor reporting of sea lice failures,

Recent publicity highlighting advances in lice control using wrasse and other species is neither new nor particularly effective parasite control yet this is now promoted as sustainable management of sea lice. It does however distract and deflect attention from the failure of chemical control of these parasites.

However, using wrasse or any other species to control lice levels creates another environmental problem elsewhere. Harvesting wrasse from the wild has already depleted stocks of these fish in their natural environments with little or no regard for the impact. This can't continue unchecked or the industry will extend the reach of its impacts far beyond the Scottish coastline and the native salmon and trout species it currently affects.

Simlarly, with such poor growth achieved from fish meal pellets (the staple diet of farmed salmon), the oceans are being harvested and other species depleted in order to meet demand with little or no consideration for the wider implications. This issue is long overdue consideration.

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

It is complete unrealistic to expect that planned visits by the Fish Health Inspectorate are adequate to identify the many problems and failures that exist within the industry. Unannounced visits are essential. This would drive improvements across the sector as it attempts to meet regulatory requirements 365 days a year rather than just on a handful of planned visits.

Ayrshire has been excluded from any of the aquaculture monitoring that takes place on the west coast. ART has highlighted this previously and offered to undertake sampling in line with other organisations within the aquaculture zone however this has never been required. Ayrshire may not fall within the 'zone' yet we have aquaculture facilities within close proximity to our river mouths and our migratory species are likely to be impacted in some ways. This should at least be researched fully.

Reporting of sea lice levels must be transparent and timeous. Individual farms should publish their own results and these data should be verified through the regulator. Similarly, the under reporting or non-reporting of escaped salmon from cages must be addressed. When these fish do turn up in our rivers, they should be identified using genetic sampling to trace their source. MSS should offer this facility to DSFB's and Fishery/Rivers Trusts around Scotland. The self-certifying/regulating approach that seems to prevail hasn't worked effectively and this must be addressed.

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

Regulators have a remit to protect our environment and current investment and funding is inadequate to allow adequate assessment and protection measures to be undertaken and enforced. Instead of being reactionary, SEPA, MSS and FHI must be tasked and able to perform their duties as and when required and not only when budgetary constraints allow.

The industry's track record on disease and parasite control is nothing to be proud of and when one considers animal welfare, no other animal producers operating on this scale could (or should) ever hope to escape the backlash of animal rights movement in the way that the aquaculture industry has. Fish are reared out of sight and therefore escape much of the scrutiny that other animal producers face… this can't and shouldn't persist. The FHI must be able to intervene to prevent the current animal welfare failures that exist.

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

The industry will have to maintain its reputation for quality products if it wishes to succeed following Brexit. Currently, the very public failures that have been reported widely in the media threaten to cause this industry to collapse should our European neighbours ever hear of truck loads of diseased and dead salmon being disposed of before even reaching the markets.

Ayrshire Rivers Trust
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