

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM SCOTTISH LAND & ESTATES

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

Scottish Land & Estates (SLE) recognises the economic importance of the aquaculture industry to Scotland, particularly for our coastal and island communities, where many depend on the employment and revenue it provides.

We support the shared vision for a sustainable, growing, diverse, market-led and profitable aquaculture industry, which promotes best practice and provides significant economic and social benefits. In realising this vision, it is our view that for the salmon farming industry to be sustainable both economically and environmentally, it needs to be operating in harmony with its surrounding aquatic environment – minimising risks to biodiversity. Indeed, if Scotland is to see the continued growth of salmon farming, it is paramount that the industry continues to strengthen the protection of the aquatic environment to ensure its long-term prosperity.

With the continued expansion of salmon farming in Scotland, in areas where the industry is most active there continue to be significant concerns about the impacts of the industry upon wild fish stocks, particularly with regards to i) the release of harmful chemicals; ii) disease impact on wild fish; iii) benthic impacts due to organic enrichment from waste food and faeces and iv) the negative effects of sea lice and escapes on wild salmonids. It is therefore important that the industry aspires to monitor and control the effects of these challenges to avoid upscaling potential problems when upscaling production.

There is a growing body of evidence that suggests the decline in local wild salmon and sea trout populations are suffering because of ongoing environmental problems. While it is acknowledged that declines in wild salmon and sea trout may have been influenced by a number of contributory factors (changes in sea temperature and subsequent contraction of feeding grounds) there is mounting evidence to suggest that the known environmental impacts of fish farming should be added to this list; certainly the ECCLR Committee was conclusive in its report regarding the detrimental impacts of salmon farming on the environment. Indeed, the SAMS report highlights additional pressures, such as increased lice burdens as not only being undesirable but as also having the potential to further erode the conservation status of vulnerable wild fish populations.

Discussions on salmon farming and its impact on wild fish and the environment have been highly contentious over the years and it is becoming increasingly clear that as the Scottish salmon farming industry continues to expand, these conflicts are only likely to increase. It is therefore pertinent that these challenges are addressed and a robust commitment by the industry to long-term sustainability

through high standards of fish health, husbandry and environmentally responsible production is made.

SLE fully supports the vision of Fisheries Management Scotland (FMS) regarding what a successful and sustainable salmon industry should look like:

- An industry that operates alongside wild salmon and sea trout populations and other species, without negatively impacting them.
- An industry that has negligible environmental impact through pollution, degradation of habitats or disease/parasite transfer.
- An industry that inspires confidence and loyalty by communicating openly and transparently with stakeholders and the public.

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?

There are serious concerns regarding the impact of large numbers of escapees on local fisheries ecology particularly in relation to the risks associated with smolt production in open freshwater cages.

It is generally accepted that, alongside the occasional and well-publicised large-scale escapes from smolt units in open water cage systems, there's an ongoing 'leakage' of small numbers of fish, amounting to large numbers over time. Losses of fish from captive culture can result in interbreeding and competition with wild salmon and can facilitate the spread of pathogens, thereby placing more pressure on depleting wild populations.

SLE believes there should be a phased withdrawal from smolt production in freshwater cages.

Recirculating Aquaculture Systems

SLE believes a shift from open net cages to Recirculating Aquaculture Systems (RAS), or closed containment will play a significant role in the future of the salmon farming industry in Scotland offering a cheaper and environmentally safer method of salmon farming in the future. Such installations would minimise escapes, prevent the transfer of parasites and the spread of disease and allow waste effluents to be collected and treated – avoiding pollution.

RAS systems are currently being developed by Norway and Canada. As the largest producer of farmed salmon in the EU and the third largest globally Scotland should be placing itself at the forefront in developing RAS technology. The Norwegian Government provides incentives for their salmon farming industry to develop RAS technology. SLE is of the strong view that similar investment should be made by the Scottish Government in partnership with the aquaculture industry to facilitate development of such technology in Scotland.

Adaptive Management

While we recognise that RAS technology is not currently available in Scotland adaptive management represents a pragmatic middle ground and is a key change we would wish to see made to the planning and regulatory regime in Scotland.

Adaptive management is another mitigation approach that is discussed in the report. It is recommended by the Food and Agriculture Organisation (FAO) as part of the Ecosystem Approach to Aquaculture and SLE is generally supportive of its principle. However, while we support the principle of adaptive management, we also recognise that the correct systems, support and development of best practice need to be in place to ensure its effectiveness.

The Aquaculture Stewardship Council (ASC) operates a 3-year certification cycle scheme which includes many good examples of adaptive management and open stakeholder engagement. The principles which sit within this scheme could feed in to a revised and more robust regulatory system. There is strong recognition by many that ASC standards represent a real opportunity for significant progress to be made between the salmon farming industry and wild fish interests.

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?

As per comments above (question 2).

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

There needs to be much greater transparency with full online public access, of farm-specific weekly data (sea lice, fish mortality) in a disaggregated form.

As the largest producer of farmed salmon in the EU, Scotland should be leading the way in sustainable aquaculture and best practice. Yet the regulatory system for the salmon farming industry is unusual in that there is no formal requirement for the industry to publish real-time data (sea lice and fish mortality) on a farm by farm basis. Such information would not only help inform evidence-based management (adaptive management) on fish farms, but it would also help greatly advance the science and solutions available to the industry – joining other countries such as Norway in leading the way on research and development in innovative technology

Following the recent inquiry led by the ECCLR Committee, SLE welcomes the announcement made by the Scottish Salmon Producers Organisation (SSPO) to release farm-specific sea lice and mortality data. Additionally, we fully support the request that all historic data on sea lice, mortalities, disease outbreaks and chemical usage should also be made available in the public domain to allow for analysis and help inform future management decisions.

Lastly, research gaps and gaps in publicly available data in Scotland have made it difficult to assess the efficacy of present management and regulatory regimes with suggestion that this has generated some public distrust in the industry and

regulator. SLE supports the proposal that there should be a statutory requirement to provide this data recognising the importance this plays in informing management plans and in promoting greater transparency and building trust within the industry.

SLE believes an independent monitoring authority should be established, with power to audit returns with real-time farm visits.

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

It is our view that the current system of planning and regulation of the fish farming industry needs amending so that it meets the needs of both wild fish and the industry. For example, in the case of sea lice, shared concerns relate not only to the direct physical and physiological impacts of the lice themselves but also to the role they play as disease vectors.

Our concerns relate to the way interaction issues are dealt with through the planning process, the powers contained within the Aquaculture and Fisheries (Scotland) Act 2007 and specifically the fact that powers of the Fish Health Inspectorate are limited to considering the health and welfare of fish within the cages, and not the potential impacts on wild fish. This is also the case in relation to the consideration that SEPA gives when considering applications to increase biomass at a site – the impact of increased levels of sea lice from that biomass on wild fish is not considered and represents a significant gap in Scotland's regulatory system.

We believe it is important that the regulatory system recognises that fish farming occurs within a shared space, and that the needs of wild fish are fully considered in decision making.

SLE believes the regulatory framework needs amending and a public authority needs to be charged with the authority to deal with the interaction between aquaculture and wild fisheries, particularly with regards to the release of larval sea lice.

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

With such a large amount of our exported produce going in the direction of the Continent, it is important to the continued success of salmon in the EU markets that this frictionless trade with European partners continues after we leave.

SLE shares the concerns of the SSPO regarding the UK's departure from the EU. Specific to the Scottish salmon sector further progress and detail is needed on the following; i) customs arrangements; ii) legal and regulatory certainty, iii) workforce and communities and iv) international trade policies.