Finlay Carson
Convenor of Rural Affairs & Islands Committee
Scottish Parliament
EH99 1SP
cc Emma Johnston, Clerk for the Committee

Follow up inquiry on salmon farming – clarification of evidence

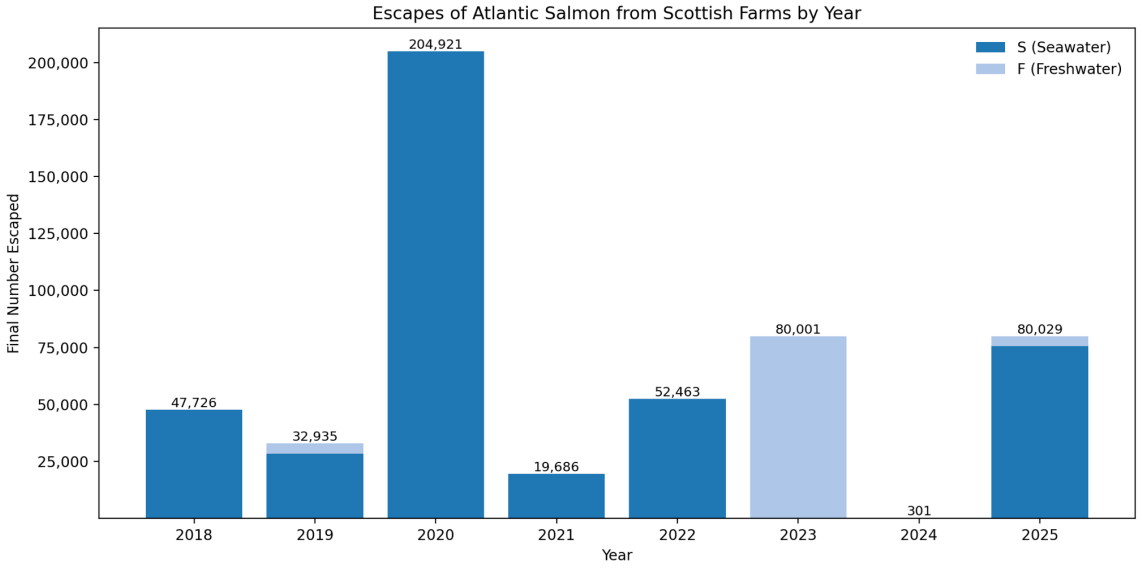
Dear Convener and Committee Members,

WildFish is encouraged by the Committee's continued scrutiny of salmon farming and for the opportunity to observe the evidence session held on 25th February 2026.

We recognise the importance of robust, evidence-based policymaking. In that spirit, and to assist the Committee in assessing the reliability of the evidence provided by industry and regulatory witnesses, we wish to highlight a number of statements made during the session which were either incomplete, opinion-based, potentially misleading, or false. Further to our evidence submission to the Committee on 14th February, we are concerned by the way that Salmon Scotland are representing the performance of the salmon farm sector and, as we detail below, we believe that the Committee should treat some evidence given by the representative of Salmon Scotland with a degree of scepticism.

"*Yes, we had an escape last year, but the level of escapes is at the lowest point for decades, as is that of sea lice, so the risk is minimal*." Ben Hadfield, pg 30

This statement is misleading. The level of escapes is not demonstrably at the lowest point for decades, and neither is that of sea lice. The number of escapes reported last year (80,029) is over double the annual average (39,134) for the past decade (2016-2025).



More significantly, there is no escape data to record the routine leakage of much smaller juvenile salmon, where millions of small farmed salmon spill out of the numerous freshwater facilities around Scotland. It is therefore impossible to reliably claim that the level of escapes is at the lowest point for decades.

The claim that sea lice levels are also at their "*lowest point for decades*" is also simply not borne out by the evidence. Recent analysis of annual sea lice figures[1] shows that: 1,274 weekly lice counts exceeded the industry's own Code of Good Practice (CoGP) lice guidelines in 2025. That compares to 1294 (2022), 1155 (2023) and 934 (2024). 2025 also saw a major escalation in lice levels in the second half of the year, with averages significantly higher than in previous years (0.50 in 2022, 0.48 in 2023, 0.42 in 2024 and 0.57 in 2025).

"*It* [salmon farming] *is now the most transparent of all animal production systems in the UK.*" Ben Hadfield, page 3

This statement is subjective and not based on any recognised benchmarking framework. The UK does not operate a comparative transparency index for 'animal production' sectors. Efforts to deliver transparency across farming sectors result from a range of regulatory reporting systems (for example animal health surveillance, slaughterhouse data, environmental monitoring and welfare inspections), which differ significantly between industries and are not designed to allow cross-sector comparison. The evidence session itself highlighted many areas where salmon farm data remain incomplete or fragmented. For example, farmed salmon mortality figures are generally published only when farms exceed reporting thresholds rather than as routine baseline data; mortality of cleaner fish used in farmed salmon production is simply not reported at all; escape events associated with transport or wellboats are not reported within the Scottish Government's aquaculture database; and mortality across the full production lifecycle (including freshwater and transfer stages) is not routinely presented as a single reconciled dataset. These significant gaps in transparency make it very difficult to support a general claim that the sector is uniquely transparent relative to other forms of "animal production" in the UK.

"*The Government said that that would represent significant burden for producers and regulators.*" The Convener, page 5

The question of what constitutes a "significant burden" was not directly addressed in the responses to the Convenor's question during the session. Mortality data are already recorded routinely at farm level as part of day-to-day farm management and regulatory compliance. It therefore remains unclear how publishing data that is already routinely collected presents a "significant burden".

[1] https://animalequality.org.uk/news/2026/02/09/scottish-salmon-industry-admits-to-exceeding-lice-limits-over-1000-times-last-year/

"*It* [the mortality rate] *is not as low as it is in Norway or in the Faroes, but that is because of environment, temperature and sea conditions*." Ben Hadfield, page 11

This explanation attributes Scotland's higher mortality of farmed salmon primarily to environmental conditions. However, the environmental conditions of Scotland's west coast are broadly comparable to those of Norway and the Faroe Islands. Typical coastal temperatures in Scotland fall within the same range as those in major Norwegian salmon farming regions, albeit they are often warmer than those of the Faroes. The claim that mortality differences are mainly explained by temperature or sea conditions is therefore not supported by the basic oceanographic comparison between these regions. Differences in mortality outcomes are more commonly linked to production intensity, farm density, disease pressure and treatment regimes. If environmental conditions were indeed the dominant factor, it would imply structural limits on the viability of intensive salmon farming in Scottish waters - conditions that industry mitigation measures cannot realistically change.

"*It is vanishingly rare that we have to take further action*." Amy Jennings, page 13

This statement was made in the context of APHA's oversight of fish welfare. However, the rarity of formal intervention does not necessarily demonstrate that welfare issues requiring intervention are themselves rare. The same evidence session clarified that APHA does not regulate aquaculture using defined mortality thresholds and instead assesses compliance through the broader concept of "reasonable stockmanship". In addition, the discussion highlighted that much regulatory engagement occurs through informal advice or correspondence rather than formal enforcement. In that context, a low number of formal interventions may equally reflect the structure of the regulatory system, including reliance on operator self-reporting, limited routine inspection of sea-cage operations, and the absence of clear quantitative welfare triggers for action. The fact that intervention is "vanishingly rare" should therefore not be interpreted as evidence that welfare problems are themselves rare. It doesn't address the fact that appalling incidents have occurred. APHA's stance amounts to the denial of responsibility of an effective regulator.

"*The global spend on activism against salmon farming was more than $250 million*." Ben Hadfield, page 22

No source or evidence was provided during the session to support this figure, and no published report was cited from which it could be independently verified. In the absence of a referenced source or methodology, the claim cannot be substantiated. More broadly, the statement characterises expenditure by civil society organisations as "activism" without acknowledging that many of the organisations engaged in this work are established charities, research institutions and philanthropic foundations whose funding is directed toward environmental protection, public accountability and scientific research. The resources available to such organisations are

miniscule in comparison to the marketing, lobbying and public relations expenditure of the global salmon aquaculture industry, which operates in a market valued at approximately $20–25 billion annually and whose largest companies individually report hundreds of millions of euros in annual sales and marketing expenditure. The existence of philanthropic funding directed toward scrutiny of salmon farming may therefore be more accurately understood as a reflection of the significant environmental and regulatory concerns associated with the industry, rather than evidence of disproportionate external influence.

"Vaccine development has been strong, too. We have a vaccine against a bacterium called rickettsia that is being deployed this year, which will hopefully take the level of antibiotic use in Scottish aquaculture, which is already incredibly low, down to zero."
Ben Hadfield, page 17

Vaccination can reduce disease-related mortality in farmed fish and may reduce the need for antibiotic treatments. However, the use of vaccines does not remove the ecological risks associated with open-net salmon farming. Vaccinated fish can still become infected and carry pathogens. In some cases vaccination suppresses visible symptoms of disease without eliminating infection, meaning that pathogens can continue circulating within farm populations while the presence of disease is less apparent. In epidemiological terms this can result in subclinical infection, where infected fish show few outward signs but can still harbour and shed pathogens. In open-net cage systems, where farmed fish are in direct contact with the surrounding marine environment, pathogens present within farm populations can therefore still be released into surrounding waters and interact with migrating wild salmon and sea trout. Vaccination may improve survival and productivity within farms, but it does not remove the underlying risk of pathogen amplification and transmission that arises when large numbers of farmed fish are held in open-net cages in coastal waters used by wild salmonids.

"Ballan wrasse are very effective, and you can separate them quite easily to maintain welfare through treatment." … "Survival is increasing a lot, but mortality is still high."
Ben Hadfield, p26

There is no published data to substantiate this statement.

"From a tax perspective, it ticks the box, because salmon farms pay additionals to the Crown Estate. The discussion with communities about what companies can bring in terms of community benefit is very clear now, and I am pleased to play a part in that."
Ben Hadfield p 50

An Independent economic assessment ; Skye and Lochalsh as a case study[2]. concluded that the industry benefits from public support and tax exemptions (including a long-standing

[2] https://wildfish.org/latest-news/independent-analysis-shows-salmon-farming-is-failing-to-pay-its-way-in-scotland/

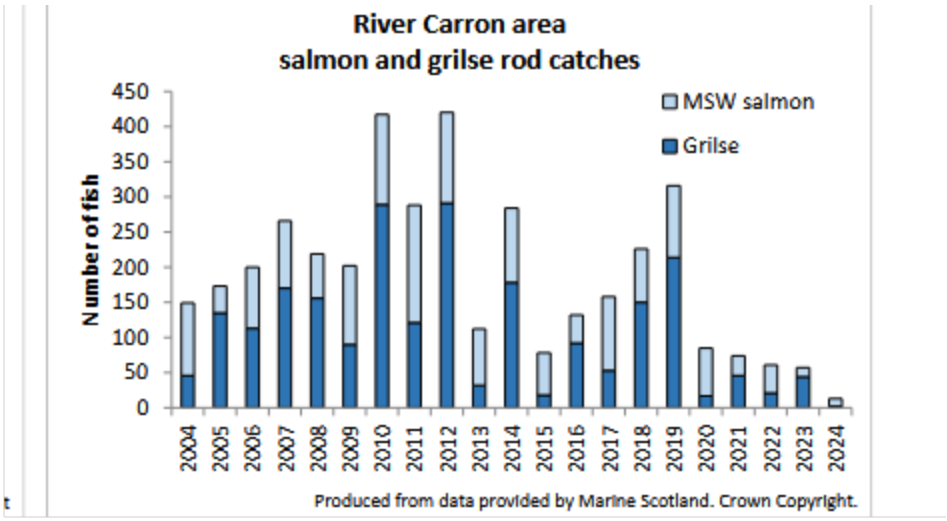
business rates exemption), while many costs (environmental, spatial, reputational and enforcement burdens) are carried by the public and by other marine users. The authors state that "*it should also be noted that taxes paid by Scottish salmon farming businesses flow to either London and/or Edinburgh where decisions on budget allocations are taken centrally ... Consequently, communities where tax revenues are generated from salmon farming have no direct say in how those revenues are used and there is no guarantee that any expenditure benefits areas with salmon farms.*"

***"The majority of people on the west coast and in the Highlands and Islands want salmon farming because of all the economic benefits that it brings as an intrinsic part of the community",* Ben Hadfield, p51**

No evidence was cited during the session to support the claim that a majority of people in the Highlands and Islands support salmon farming. Available polling suggests that opinion in the region is much more mixed than this statement implies. A poll commissioned in February 2026 by WildFish and conducted by Survation (reported in *The Herald)* found that a significantly higher proportion of residents of the Highlands and Islands thought salmon farms were bad for the environment (41%) compared to respondents elsewhere, eg in Central Scotland (25%). In addition, organised economic interests in coastal communities have increasingly voiced opposition to aspects of the industry with the Shetland Fishermen's Association, recently objecting to proposals for new salmon farms on the grounds that they pose risks to fishing grounds and marine ecosystems. There is no evidence to suggest that there is "majority" support for salmon farming in the Highlands & islands.

"*The rod catch on the River Carron has gone to its highest level in recent years*." Ben Hadfield, page 55

This statement is false. The sequence of total salmon catches from 2020 to 2024 is 85, 74, 61, 57 and 13. The catch for 2025 has not been published yet but we understand that it is similar to 2024. The river was recently downgraded to Category 3 ("poor") by the Marine Directorate. Salmon smolts departing the river have no alternative but to run the gauntlet of high sea lice numbers emanating from the salmon farm in Lochcarron. The proposition that the River Carron is an example of where salmon numbers are demonstrably rebounding is false. See table below:



The strength of parliamentary scrutiny depends on the completeness and accuracy of the evidential base.

We would welcome the opportunity to provide further data or clarification on any of the points raised above.

Yours sincerely,

Nick Underdown

10th March 2026
Scotland Director
WildFish