



The Salmon Interactions Working Group proposals to protect wild salmon and sea trout will not work

But don't just take our word for it

The Salmon Interactions Working Group (SIWG), which includes Fisheries Management Scotland (FMS), has proposed a system of adaptive management, through the sampling of sea trout in sea lochs by netting, **“to monitor lice levels in the environment and assess impacts on wild salmonids”**. In the event that such monitoring shows elevated numbers of sea lice, then possible changes to the management of lice levels on the local salmon farms would be discussed.

1) Such adaptive management cannot be a realistic substitute for proper regulation including a strict and universally applied ceiling on farm sea lice numbers (an absolute upper limit to the permitted average number of adult female sea lice per farm fish). **But don't just take our word for it.**

In a letter to Highland Council in February 2018, the Chairman of the Wester Ross Area Salmon Fishery Board (also a Board member of Fisheries Management Scotland and an employee of Atlantic Salmon Trust) said:

"If sea trout or wild salmon were to completely disappear at monitoring locations (as may happen), there would be no way to demonstrate cause and effect.....Monitoring of wild fish to inform the management of salmon farms for the benefit of wild fish populations in nearby waters is no substitute for appropriate regulation of open cage farms to safeguard wild fish."

2) The monitoring of lice levels on sea trout by netting to inform the management of salmon farms is indeed fraught with difficulties. **But don't just take our word for it.**

FMS, which represents Boards and Trusts, published a paper in January 2018 on sea trout post smolt monitoring. It concluded:

“Attempting to link sea lice levels on wild sea trout to the nearest fish farm may not be appropriate, as prevailing wind direction and sea currents may transport fish farm derived sea lice away from salmonid rivers (Adams et al. 2012), and sea trout in the marine environment are mobile and can interact with more than one fish farm” and “.....in order to better manage the interactions....will require a greater understanding of the lice populations, their build up within the cages and wider environment and the impacts on the wild salmonids. Until these issues are better understood local management will remain difficult”. See <http://fms.scot/wp-content/uploads/2018/05/180222-Aqua-Sweep-Netting-Report-2017.pdf>

3) Under the SIWG proposals, in a rejection of the standard precautionary approach, it is envisaged that the burden of proof that there is damage being caused to wild fish by salmon farms (before there is any possibility of remedial action in terms of fish farm performance) is the sole responsibility

of wild fish interests. This is contrary to the basic principles of natural justice. **But don't just take our word for it.**

In a letter dated December 2018 to Highland Council, regarding a proposed increase in biomass at the Loch Hourn salmon farm, the Wester Ross Area Salmon Fishery Board had the burden of proof the right way around...

"We therefore request that the applicant is able to demonstrate, contrary to the information presented above, that the previous increase in on-farm biomass in 2016 was not associated with further declines in wild fish stocks in the area, and that, contrary to the information presented above, that the high sea lice figures reported in SSPO fish health reports for 2016 and 2017 were not associated with high emissions of larval lice into surrounding waters...The applicant should demonstrate that the reported declines in catches of wild sea trout and salmon in the area from 2016 to 2017 were not associated with sea lice infestation associated with the Loch Hourn salmon farm".

4) Under adaptive management, establishing a pattern or trend in sea lice numbers through wild fish monitoring is not an exact science, nor can it be achieved quickly. It will take several years and, in the meantime, without a strict sea lice ceiling applied to all fish farms from the outset, wild fish would have no more protection from farm-origin sea lice infestation than is currently the case. Indeed, as a consequence of significant ongoing industry expansion, the sea lice burden and challenge for wild fish continues to rise and will inevitably rise still further in the first decade under an adaptive management regime. **But don't just take our word for it.**

In a video conference call in July 2020 a senior executive from the Crown Estate Scotland (responsible for awarding and managing leases for fish farms) did not disagree that it would probably take intense monitoring of wild fish for at least three farm production cycles (up to six years) for any pattern of damage to wild fish caused by fish farms to be discernible.

Even then the results are likely be challenged (including the use of the courts) by the fish farmers. See what is happening in Norway:

<https://salmonbusiness.com/salmon-farmers-assemble-crack-force-team-of-lawyers-to-file-giant-lawsuit-against-state/>

There are considerable doubts regarding the extent to which monitoring of wild sea trout is relevant to wild salmon. Even if there were abundant smolts of both species to sample, it would require tens of thousands of samples to be taken nationally, over many years and in many conditions, in order to produce a statistically robust dataset.

Previous studies in Loch Shieldaig by Marine Scotland Science, which sampled over 3,000 smolts (in sentinel cages) relating to just one system and salmon farm area, showed strong correlation with salmon farm lice numbers but crucially still did not meet a sufficient threshold of evidence to ensure control of sea lice on salmon farms. But it is now suggested that sampling less fish of another species by non-research professionals will go to produce enough evidence. What has changed?

https://www.researchgate.net/publication/263776267_Using_sentinel_cages_to_estimate_infestation_pressure_on_salmonids_from_sea_lice_in_Loch_Shieldaig_Scotland

5) We have serious concerns that local fishery interests (who will be contracted and paid by the salmon farmers to monitor sea lice on wild fish) will be reluctant to argue robustly for changes to local salmon farming practices when wild fish monitoring shows high levels of sea lice – he who pays the piper calls the tune.

Before the SIWG process Fisheries Management Scotland's (FMS) position was that adaptive management on its own would not provide the basis for effective regulation, and that a robust sea lice ceiling should be applied to all farms. Through the SIWG process, which required recommendations which were agreed by the Industry, FMS has aligned themselves with recommendations which do not achieve this. There may well be elements of the recommendations (particularly financial ones) which are beneficial for FMS and the Trusts. However, the compromise in relation to regulation will mean that it is not effective.

We believe that it is imperative that any new regulatory regime includes a strict adult female sea lice ceiling, to be applied to all fish farms. Sea lice must be independently monitored and where levels rise there must be rigorous and very prompt enforcement to drive lice levels back down. , This ceiling should be set at 0.5 adult female lice per farmed fish, dropping to 0.1 during the period of wild smolt emigration, below which ceiling any adaptive management, based on wild fish monitoring, is then applied. This position is based on best available science and in line with recommendations already made by SNH, the industry's own Code of Good Practice and the Aquaculture Stewardship Council amongst others. <https://www.salmon-trout.org/2020/06/24/why-a-strict-ceiling-on-sea-lice-must-be-applied-to-all-scotlands-salmon-farms/>

Salmon and Trout Conservation Scotland

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