

## Environment, Climate Change and Land Reform Committee

### Environmental impacts of salmon farming

#### Written submission from The Orkney Trout Fishing Association (OFTA)

The Orkney Trout Fishing Association (OFTA) is a voluntary organisation with over 500 members. Recreational fishing in Orkney operates as a commons freely available to all. In the absence of any fisheries board or trust, a major part of our remit is to protect this community resource for future generations. The OFTA has been actively involved in this debate for over 20 years. In general we welcome the SAMS report "Review of Environmental Impacts of Salmon Farming in Scotland". We have always sought to support our comments and actions with sound science and it is useful, for all parties, to have an up-to-date summary of the latest science. We would, however, like to make the following observations:

As an angling organisation our main concern is the impact of sea lice on wild salmonid populations.

1. **The SAMS report (section 2.1.1)** focuses on the impacts of sea lice on wild salmon populations. It should be emphasised that the impact is not only on wild salmon but also wild sea trout. It is our understanding that the impact is most severe on our wild sea trout population as these fish are exposed to infection for most of their life cycle. Sea trout populations generally spend their life in inshore coastal waters where they are continually exposed to the risk of sea lice infestation from salmon farms. Wild salmon are most exposed during their outward migration to open sea. The difference in impact on these species should be explicitly recognised.
2. **Evidence of impact.** The SAMS report notes that, in the context of sea lice impacts on wild salmon (and presumably wild sea trout), "*..... there were no studies relating specifically to effects in Scotland*". We feel this statement is too strong. Perhaps there is no conclusive evidence. However there is some evidence, for example the work of Butler and Walker at Wester Ross Fisheries Trust cannot be dismissed out of hand. All too often this lack of 'Scottish specific' or 'conclusive' evidence is used as justification for allowing development to proceed. There is nothing fundamentally different about Scottish salmonids and salmonids in Ireland or Norway; where these effects have been demonstrated. No evidence of harm is not evidence of no harm. Despite good scientific evidence, of harmful impact in other countries, the precautionary principle has been systematically ignored across Scotland.
3. **Sea Lice Management (section 2.1.2).** There is an important point to make about the trigger levels for lice treatment. These trigger levels are not linked to environmental impact. Trigger levels of 3.0 and 8.0 lice per fish represent levels on the farm, where various actions must be taken to avoid infection spiralling out of control. Similarly the Code of Good Practice (CoGP) levels of

0.5 and 1.0 are levels that the industry felt were attainable. All these levels relate specifically to on-farm husbandry. They are not, in any way, linked to impact on wild fish. They are not a safe level of on-farm infestation with regard to impact on wild fish. It is frequently implied that there will be no impact on wild fish if the CoGP is achieved. For example achieving CoGP targets is routinely proposed as impact mitigation in environmental statements accompanying planning applications. The actual risk to wild fish is determined by the exposure to infectious larvae i.e. the total number of infectious larvae in the water column. This in turn is a function of the total adult lice population which is linked to tonnage of farmed fish, not the rate of infection on its own. The SAMS report should be explicit about this.

4. **Science based decision making.** It is quite apparent that the issue of sea lice impacts on wild fish, one of the main environmental issues facing the industry, falls through gaps in the regulatory process. Neither SEPA, SNH, nor Marine Scotland will give clear advice to local planning authorities who are faced with making decisions. This places local planning officials (and local councillors) with limited scientific knowledge in an invidious position. Without “any evidence of harm” (see 2 above) planning committees will tend to allow developments to proceed. Wild fisheries stakeholders routinely try to introduce peer reviewed scientific evidence into the planning debate. (Indeed the OTFA has gone to the extent of undertaking electrofishing studies and tag and recapture studies in an attempt to get robust data that neither the authorities nor the industry appears willing to resource). However this information, supplied in good faith, will invariably be challenged by the industry as being biased, purely because it has been presented by a stakeholder with a specific interest.
5. **Sea lice dispersal.** The SAMS report fails to discuss sea lice dispersal in detail. To date attempts at mitigating sea lice impacts have focussed on chemical treatment (which is not working and has its own environmental issues) and trigger levels which are not related to wild fish impacts. It is clear that the siting of salmon farms should be the key tool at planner’s disposal when trying to minimise sea lice impact. A good understanding of sea lice dispersal and how exposure rates change with distance from source is critical and this science should have been thoroughly reviewed in the report.

The OTFA wishes to see that the best possible science informs this debate and that a precautionary approach is taken where clear scientific evidence is absent. Unfortunately to date this has not happened. There is a major imbalance of power between the industry and other resource users. And this has resulted in a dysfunctional regulatory and planning process. If we can help the inquiry in its deliberations in any way please do not hesitate to contact us.