RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM OCEAN BREEZE MARINE SERVICES LLP, ISLE OF ARRAN

Current State of the Salmon Industry – A General View
It is my opinion that salmon aquaculture in Scotland (as in many other countries) is being allowed free rein to operate and expand without due consideration of the marine environment. The introduction of toxic chemicals, medicines such as antibiotics (the overuse of which is causing concern globally) and large quantities of salmon faeces without the most stringent safeguards and checks is an example of the utmost disregard for our seas. The use of acoustic deterrents in an attempt to drive away seals and cetaceans from their natural area regardless of the effects on the balance of the ecosystem demonstrates a lack of concern for anything other than financial profit; being granted permission to kill seals by shooting puts the industry and Scotland's government in a very poor light at home and abroad.

Development of the Salmon Industry
There should be an immediate cessation of plans to increase the number and size of open-cage sites in Scottish waters; all permits/licences granted by Crown Estate Scotland should be reviewed and amended to a maximum of a five-year lease. The industry, if it must be permitted to continue in Scotland, should be required to adopt the Recirculating Aquaculture Systems it is currently developing around the world; ideally on-shore rather than at sea – the terrestrial option being easier to manage and monitor.

Fish Welfare and Environmental Concerns
Any food industry that experiences approximately 20% mortality of its livestock while still claiming to be profitable cannot be overly concerned with the costs of inadequate response to disease and infestation. Culling diseased fish and referring to such as “early harvesting” displays only cynicism.

As mentioned above, the substances put in the water column by the salmon industry will have detrimental effects on other marine life; the chemicals used to remove sea lice (emamectin benzoate etc.) have been shown to soften the shells of crustaceans and molluscs. The vast amount of salmon sewage dropping from cages smothers large areas of seabed – wider than the physical footprint of the sites – while leaving excess nutrients suspended in the water which can be the source of toxic algal blooms harmful to other fisheries.

Using “cleaner fish” to minimise sea lice infestation may at first sight appear to be “environmentally friendly”; but most of the wrasse and lumpsuckers are supplied by an unregulated fishery. The removal of large numbers of these fish from the ecosystem will have an affect on the local environment. Independent research must be carried out to assess the level of change being forced onto Scotland's coasts by this permanent extraction; “permanent” because the cleaner fish are destroyed at the end of the production cycle.
The transport of waste dead salmon ("morts") killed by disease, infestation or mishandling, by public road to a landfill site or incineration plant is to be condemned as bad handling of a biohazard.

I have already mentioned the treatment of native marine mammals, most of which have some level of protection under Scottish, UK, European and international law; the practice of killing and deliberate disturbance must cease immediately.

**Data Collection and Distribution**

Information regarding fish health and treatments, the state of the waters around each site and also reports of incidents resulting in harm or potential harm to non-industry fauna and flora, the marine ecosystem generally and public health, has up to now been piecemeal at best; at worst such information has been concealed or subject to attempts of concealment. In other words, the data collection and distribution has been wholly inadequate. Such information should be recorded and sent to the relevant government agencies on a weekly basis. This should be a mandatory requirement; failure to comply resulting in meaningful penalties: large fines, suspension of operation or permanent closure of the site. The information should be placed on public record within one week of receipt by the agencies.

**Regulation of the Salmon Industry**

As mentioned at the start, the industry has so far enjoyed “light touch” regulation from most government agencies; ministerial influence together with restricted budgets are seen as being responsible for this inertia. It is time for the industry and the government to apply the “precautionary principle” to its utmost degree; if there is any doubt as to the outcomes of actions by the industry they must be halted immediately.

The recording, monitoring and distribution of data collated by government agencies should in future be subject to review at a senior level; any cause for concern should be reported at once to Ministers.

**Departure from the European Union**

One can only speculate as to the outcomes of any “Brexit” agreement; but with the possible introduction of trade tariffs and stricter (slower) customs controls it may be that trade with the remaining EU states falls away as the price of salmon is increased and doubts as to its freshness arise.

**The Report by the Scottish Parliament's Environment, Climate Change & Land Reform Committee on the Environmental Impacts of the Salmon Industry**

This Committee will be well aware of the ECCLR Committee’s report; I would urge your Committee to endorse the latter’s findings and persuade the salmon industry to change its ways for the benefit of all. As the final sentence of the penultimate paragraph (354) in the report has it:

“The status quo is not an option.”

Ocean Breeze Marine Services LLP
April 2018