Written submission from the Salmon & Trout Association

S&TA Petition PE1336

The S&TA welcomes the opportunity to submit Written Evidence to the RACCE Committee and would welcome the opportunity to give Oral Evidence as the Committee sees fit.

In 2010, the S&TA submitted its aquaculture-related Petition to the Petition Committee [PE1336] which the Petitions Committee considered “a very worthwhile petition” and on 6th September 2011, unanimously referred it to the RACCE Committee for its further consideration, pending the publication of the Aquaculture and Fisheries (Scotland) Bill.

Since the submission of the S&TA Petition, the S&TA has published a number of reports into the environmental performance of the fish-farming industry, based on information obtained from statutory bodies and regulators, and dealing with:

- sea-lice numbers on fish-farms\(^1\);
- resistance to or tolerance to sea-lice treatments;
- sea-lice treatment residues in benthic samples\(^2\); and
- organic pollution of the sea-bed under fish-farms\(^3\).

In June 2011, the Rivers and Fisheries Trusts of Scotland (RAFTS), the Association of Salmon Fishery Boards (ASFB), the S&TA and Fish Legal published research that confirmed a marked decline in Scottish wild Atlantic salmon stocks in salmon farming areas of the West Highlands and Islands as compared to non-salmon farming areas\(^4\).

This mirrored earlier research published by fisheries scientists, including from Marine Scotland Science\(^5\).

Sea-lice impacts and the publication of farm-specific sea-lice data

Significant numbers of fish-farms exceed the industry’s own sea-lice thresholds and there appears to be a growing lack of efficacy of and tolerance to available sea-lice treatments\(^6\). Most recent analysis by the S&TA of Fish Health Inspectorate reports, covering the first half of 2012, shows that of 93 farms inspected, almost a quarter were recording sea-lice levels above the industry threshold during the period for which records were inspected.

\(^4\) Marked decline in Scottish wild Atlantic salmon stocks confirmed in salmon farming areas. Press Release 24th June 2011 from RAFTS, ASFB, S&TA and Fish Legal
Sea-lice treatment chemical residues on the seabed of Scottish sea lochs are have been found in excess of Environmental Quality Standards at 61 different fish-farm sites and there is evidence of a reduction in audit monitoring of fish-farms by SEPA inspectors\(^7\).

Regrettably, FHI reports do not enable the reader to ascertain by how much, for how long and on how many occasions, a particular fish-farm has had sea-lice numbers above industry thresholds. This has inevitably constrained the utility of the information obtained from FHI.

The S&TA has pointed out that the section 1 of the Aquaculture and Fisheries (Scotland) Act 2007 already enables Scottish Ministers to collect and require publication of on-farm sea-lice data as a routine requirement on salmon farmers. However that power has not been used, despite the S&TA calling for the publication of farm-specific sea lice data and the publication of such data being generally supported by all public and statutory bodies\(^8\).

The S&TA believes that that power available under the 2007 Act should now be amended in the current Bill to a duty on Scottish Ministers to ensure the timely publication of weekly farm-specific sea-lice data.

**Reducing fish-farm biomass or revocation of licences to control organic pollution and the impact on wild fish**

Of 311 reports of seabed monitoring of organic pollution provided by fish-farmers to SEPA between 2009 and 2011, 137 (44%), were deemed by SEPA to show unsatisfactory pollution of the seabed in the vicinity of the fish-farms “beyond the assimilative capacity of the local environment” and a further 64 reports (21%) were considered borderline, “close to having an unsustainable impact”\(^9\).

Subsequent to the publication of the S&TA report into organic pollution, further requests for information show that, over the same period, at only 8 fish-farms has any reduction in permitted biomass been required by SEPA due to unsatisfactory benthic reports, amounting to a total reduction of just over 2000 tonnes production across the entire industry. This is patently an unsatisfactory response to the damage being caused, given the large number of ‘unsatisfactory’ reports.

Quite apart from the prevention of unacceptable organic pollution, there remains a lacuna in the law in that a reduction in biomass (or, de facto, a revocation by reduction of biomass to zero if necessary) cannot currently be required by SEPA, any other regulator - or indeed by Scottish Ministers - in the face of evidence that sea-lice numbers emanating from fish-farm or groups of farms is harming wild salmonids.

Nor can the FHI currently order sea-lice treatments at fish farms in order solely to protect wild fish, their powers under the 2007 Act being limited to the protection of the farmed fish.

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Despite earlier recommendations and the inclusion in the pre-Bill consultation of such a power for Scottish Ministers, the Bill does not now contain a power for Scottish Ministers to order a reduction in permitted biomass at salmon farms, or indeed a de facto revocation (if required) of relevant licences and consents where damage is occurring to wild salmonids.

The S&TA believes that Scottish Ministers should be given at least a power, if not a duty to order a reduction in the permitted biomass of particular fish-farms (to zero if necessary) where evidence suggests that an unacceptable impact on wild salmonids is occurring due to parasites and or disease emanating from the farms concerned.

General issues with salmon aquaculture

Recent analysis of the impact of sea-louse and other parasites on wild salmon recruitment in the north-east Atlantic Ocean carried out by extremely eminent scientists, has concluded that sea-louse cause a 39% loss in salmon abundance\(^\text{10}\)\(^\text{10}\). The study also suggests that the impact on wild smolts, as opposed to the studied hatchery smolts, would probably be greater with an even higher mortality. The authors warn that because natural mortality rates are high in Atlantic salmon, even a proportionally small additive mortality from sea-louse parasites can amount to a large loss in salmon recruitment.

This contrasts dramatically with the July 2012 statement of the last Scottish Minister responsible for the aquaculture industry, that “the evidence of impact of sea-louse on fish stocks in Scotland is not proven”.

The Scottish Government has committed itself to “using sound science responsibly...ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the Precautionary Principle)...”\(^\text{11}\)\(^\text{11}\).

The S&TA believes that the Scottish Government’s policy towards controlling the impact of sea lice from fish-farms on wild fish requires urgent revision.

The Bill, as currently drafted, must be significantly strengthened in the face of the overwhelming evidence building of the damaging impact of the salmon farming industry on wild salmonid populations and is particularly recommends that:

- a duty is placed upon Scottish Ministers to require the collection and publication of weekly farm-specific sea lice data; and
- Scottish Ministers are given the power envisaged in the consultation to order the reduction in farmed biomass at fish-farms, to include where there is reasonable scientific evidence of an unacceptable impact on wild salmonids from those farms.


Finally, although we are necessarily limited here by the maximum length of written evidence requested by the Committee, the S&TA would encourage the Committee, throughout its deliberations on the Bill, to examine and consider:

- the negative economic and employment impact of the harm being caused to wild salmonid fish in the zones of aquaculture production on the west coast and in the islands; and

- the legal and practical methods by which those fish-farms currently sited near wild salmonid rivers might be relocated to less damaging sites.

The S&TA concurs with the views expressed by the ASFB in relation to those clauses in the Bill dealing with the fisheries management role and functions of DSFBs.