

Aquaculture & Fisheries (Scotland) Bill Written Evidence from the Scottish Wildlife Trust

The Scottish Wildlife Trust welcomes the opportunity to provide evidence on the Aquaculture & Fisheries (Scotland) Bill.

Summary

- We welcome new statutory measures to underpin the management of fish farming in Scotland. However, these must be complemented by timely Government action on those proposals consulted on but not addressed in the Bill.
- We welcome new powers that modernise and strengthen the management of salmon and sea trout fisheries in Scotland. In particular, the introduction of mandatory carcass tagging to reduce illegal and unreported catch.
- Full availability of data is required to fully assess strategies for the control of sea lice and disease and gain a broader understanding of the impacts on wild fish. The reporting of such data should be a statutory requirement.

Introduction

Wild Atlantic salmon are vulnerable to human pressures, with many stocks across the whole of its range in a depleted state. International efforts to reduce exploitation have been undertaken but many factors, including climate change, are thought to be contributing to declines. Given the status¹ and iconic standing of salmon, it is vital that those activities under our control are managed to improve the situation and that every effort is taken to regulate appropriately for its conservation.

The Scottish public has a strong connection to our native wildlife and habitats and there is clear support for their continued protection. When asked in a 2011 survey by Scottish Natural Heritage² about the importance of protecting the quality of places for future generations the results revealed that rivers and lochs are most highly valued, followed by coast and beaches. When asked about the importance of different aspects of the natural environment and its management, high water quality around the coast came out on top, with continuing to have wild salmon in Scotland's rivers, at number four. Both aquaculture and freshwater fisheries have a strong impact on these areas of importance.

Our response to the consultation³ outlined our general support for many of the proposals contained therein. While we can welcome the inclusion of several elements we firmly believe that this Bill must be complemented by proceeding with a number of the proposals set out in the consultation. We understand that a number of these proposals can be progressed through existing powers and request a firm commitment from Government that these be implemented without delay.

Part 1 – Aquaculture

The Scottish Wildlife Trust supports sustainable aquaculture and would like to see Scotland become a world leader in sustainable aquaculture production. The reputation of Scottish farmed fish products depends to a considerable degree on the ecological quality of Scotland's aquatic environment. Quite apart from the need to minimise impacts on ecological grounds, it makes every sense for the industry to also minimise impacts to mitigate reputational risk. If the salmon farming industry is perceived as damaging wild salmon stocks and the environment, consumers may simply reject its products.

1 - Fish farm management agreements and statements. We welcome the inclusion of a statutory requirement for farms to be party to a Farm Management Agreement (FMAg) or

¹ The Atlantic salmon (*Salmo salar*) is listed in annexes II and V of the European Union's Habitats Directive as a species of European importance

² What the Scottish public value about the natural heritage. Available at <http://www.snh.gov.uk/docs/B941737.pdf>

³ http://scottishwildlifetrust.org.uk/docs/002__057__publications__policies__Consultation_response___Aquaculture_and_Fisheries__1330709239.pdf

Statement (FMS) with sanctions for non-compliance. However, we believe the setting of management area boundaries should be subject to stronger scrutiny.

Area-based management that promotes coordination of production, fallowing and treatment has long been identified as an effective method of reducing the risk and spread of disease and parasites and reducing the use of chemical treatments.⁴ While agreements have operated under the voluntary Code of Good Practice (CoGP), the lack of a statutory system risks such agreements being undermined by non-participation. Additionally, in a spirit of openness and transparency we believe Farm Management Agreements should be publically available documents and would benefit from the participation of appropriate stakeholder groups with common interests in the health of farmed and wild salmonids, and the wider environment.

Under the Bill, operators would retain the primary responsibility for determining boundaries of farm management areas (FMAs) under the CoGP. The criteria under which boundaries are set are not clear and the Code simply states that “delineation of FMAs is subject to review, which takes account of changes in operation, production, ownership, etc.”⁵

We supported the consultation proposal to provide Scottish Ministers with a fall back power to determine management area boundaries and note the inclusion at section 1(6) of a power to modify the definition of the CoGP in relation to farm management areas. We understand that this provides a fall back power allowing Scottish Ministers to define farm management area under a separate mechanism if deemed necessary. We believe there should be commitment to a Government review of the current approach to the delineation of farm management area boundaries to ensure that it is appropriate in the context of environmental protection.

We firmly believe that boundaries for farm management areas must be determined primarily on ecological grounds, taking into account the best available evidence on sea-lice dispersal and connectivity/interactions between sites. Where there is limited information, a precautionary approach of selecting larger, rather than smaller boundaries, should be adopted. The proposed boundaries must be suitable to protect the local environmental and ecological features and account for the level of risk or sensitivity of a given area – for example its proximity to a river designated under the Habitats Directive for the protection of Atlantic salmon. They must also take account of the relevant cumulative and in-combination effects of connected activities, such as processing plants. The criteria by which a farm management area boundary has been decided should be publically available and involve the participation of appropriate stakeholder groups.

2 – Escapes, and obtaining samples, from fish farms. While we would advocate a goal of zero escapes we believe that it is essential that fish identified as escaped can be traced back to their farm of origin. We understand that genetic tools may now be available and we would support the use and application of such samples so that escapes can be identified and related to the farm or company of origin.

3 - Technical requirements for equipment used in fish farming. Escaped farmed salmon have the potential to disrupt ecosystems and alter the overall pool of genetic diversity through competition with wild fish and interbreeding with local wild stocks of the same population. It has been shown that interbreeding of farmed with wild salmon of the same species can result in reduced lifetime success, lowered individual fitness and decreases in production of wild salmon.⁶ Escaped farmed salmon must therefore be considered a severe threat to the long-term existence of wild Atlantic salmon.

⁴ http://www.nasco.int/pdf/aquaculture/wild_farmed_report.pdf

⁵ <http://www.thecodeofgoodpractice.co.uk/farm/farms-introduction>

⁶ Thorstad, E.B., Fleming, I.A., McGinnity, P., Soto, D., Wennevik, V. and Whoriskey, F. (2008) Incidence and impacts of escaped farmed Atlantic salmon *Salmo salar* in nature. NINA Special Report 36. 110 pp.

The most effective way to address these risks is to reduce the number of escapes of farmed salmon to zero. This is in line with the international goal of the North Atlantic Salmon Conservation Organisation (NASCO) that '100% farmed fish to be retained in all production facilities.'⁷

We fully support the inclusion of a power allowing Scottish Ministers to prescribe technical requirements for fish farm equipment. However, we believe that as a high proportion of escapes are caused by human error (30% of all salmon farm escape events in 2011⁸), enforceable technical regulations should extend to include training in the operation of equipment as well as its design, construction, manufacture, installation, maintenance or size.

Furthermore, predation resulting in a hole in the net has accounted for 36% of total escape events at saltwater salmon sites between Jan 2011 (when current classification of escape cause was introduced) and Oct 2012.⁹ Efforts to understand and reduce predator effects, specifically seals, on farm equipment must be prioritised in the development of a technical standard. Ultimately removing the need to kill seals, for example by requiring tensioned nets or other effective and benign deterrents, would benefit wildlife and improve the public and investor perception of salmon farming, which suffers greatly from the association with seal deaths.

In Norway, a technical standard, enforced through the NYTEK regulations¹⁰, was introduced in 2003 and specifies requirements for the design net cages and mooring systems necessary to cope with environmental conditions at fish farm sites. It also addresses the handling and use of equipment. The introduction of the standard appears to have resulted in a dramatic reduction in the number of major escape incidents in Norway, principally due to a sharp decline in large-scale escapes resulting from the failure of cages.¹¹

4 – 7 Wellboats It is of serious concern that wellboats are not sufficiently covered by controls to manage the risk of parasites, pathogens or diseases. We therefore welcome, the enabling legislation in the Bill and believe that it must be enacted as soon as possible. We understand that the control of discharges from wellboats at fish cage sites could be considered under existing Controlled Activities Regulation licence arrangements and we ask that Government take this forward urgently.

Part 2 – Salmon Fisheries

The management model for migratory salmonids in Scotland allows local decision-making by those with local knowledge of the catchment. While we appreciate this model, we support proposals allowing Ministers to intervene when the required standards of operation are not being fulfilled.

22 - Carcass tagging We fully support the introduction of statutory carcass tagging for all net caught salmon as described in the Bill. Such a system is essential to reduce the levels of illegal and unreported catch. We believe a regulation must be introduced for the season subsequent to the Bills enactment. The requirements of the regulation should mirror those in place in England & Wales since 2009, where each tag is individually numbered and the details of all fish caught are recorded in a log book.

Proposals not addressed in the Bill

Many proposals covered in the consultation have not been carried into the Bill. Although we understand that a number of these can be taken forward under existing powers we seek firm commitment and timelines for action.

⁷ <http://www.nasco.int/pdf/aquaculture/BMP%20Guidance.pdf>

⁸ <http://www.scotland.gov.uk/Resource/0038/00389735.pdf>

⁹ <http://www.scotland.gov.uk/Topics/marine/Fish-Shellfish/18364/18692/escapeStatistics>

¹⁰ http://www.regjeringen.no/upload/kilde/fkd/bro/2005/0013/ddd/pdfv/255320-technical_requirements.pdf

¹¹ http://preventescape.eu/wp-content/downloads/2010_aei_jensen_et_al.pdf

Publication of data – A significant barrier in assessing the impacts of fish farming is the lack of publically accessible farm-specific data. The consultation proposed requirements around the provision of sea-lice, fish mortality, movement, disease, treatment and production and we understand that existing powers are available to require such information provision.

Understanding lice levels on farms and how infestations in farmed salmon are linked to increased incidences in wild salmonids is key to ensuring the sustainability of the industry and would go some way to addressing the conflicts that arise when the two are located in the same vicinity. The impact of such a link remains contentious. However, a report to the Salmon Aquaculture Dialogue¹² concluded “it is not plausible to draw a single over-riding conclusion regarding the potential negative impacts of sea-lice on all wild fish stocks world-wide. Nevertheless we believe that the weight of evidence is that sea-lice of farm origin can present, in some locations and for some host species populations, a significant threat. Hence, a concerted precautionary approach both to sea-lice control throughout the aquaculture industry and to the management of farm interactions with wild salmonids is expedient.”¹³

In order to fully assess strategies for the control of sea lice and gain a broader understanding of the impacts on wild fish, the results of sea lice monitoring from individual farms should be made publically available in its raw form. While we note that the Government’s intention is to develop an improved voluntary system of reporting, in discussion with stakeholders, we would urge that existing powers be used to make such reporting a statutory requirement.

Marine Planning - While as stated in the consultation document it is not the intention for this Bill to consider issues related to location policy for fish farms it is important that the Committee consider this Bill within the wider marine policy and legislative context. In particular the Marine (Scotland) Act 2010 and the provisions concerning marine planning, which once established will provide a framework for the sustainable development of all industries and activities throughout Scotland’s seas. Marine planning is fundamental to pillar one (wider seas measures) of the Government’s three pillar approach to marine nature conservation. Marine planning can assess how multiple uses of the marine ecosystem can proceed whilst operating within the carrying capacity of the marine environment, which is of particular relevance to the aims of this Bill in managing interactions between wild and farmed fish.

Appropriate risk-based site selection for fish farms is a key factor in managing interactions between wild and farmed fish and can prevent many of the unintended and negative impacts of the industry. The use of science-based sensitivity mapping for example to identify suitable locations and guide decision-making will be an important future approach. Integration of fish farm area management with a strategic marine planning system will also enable full and proper consideration of cumulative and in-combination effects.

We are concerned therefore that targets for finfish aquaculture growth¹⁴ have seemingly been adopted by Government prior to formal consultation and adoption of a national marine plan. We do not believe that this target has considered the carrying capacity of Scotland’s environment for fish farms but is instead based on what the industry believes it can operationally achieve. Adoption of a national marine plan is now unlikely until 2014 with regional plans following in subsequent years. It is therefore vitally important that in the absence of a planning system, marine development occurs within the constraints of a robust regulatory regime that ensures environmental protection.

¹²http://assets.worldwildlife.org/publications/189/files/original/SalmonAquacultureDialogFAQJuly2012Website_SalmonVVV1.pdf?1344876257

¹³ Revie, C., L. Dill, B. Finstad, C. Todd (2009) Sea Lice Working Group Report – NINA Special Report 39. 117pp. Available at: <http://www.nina.no/archive/nina/PppBasePdf/temahefte/039.pdf>

¹⁴ By 2020: To increase the sustainable production of marine finfish at a rate of 4% per annum to achieve a 50% increase in current production