



Scottish Environment LINK

Position statement on Scottish aquaculture

Background

Scottish aquaculture consists predominantly of Atlantic salmon, alongside rainbow trout, brown trout (predominantly for angling restocking), Atlantic halibut, lumpsucker and several wrasse species, both of which are used as cleaner fish in the salmon farming industry.

The predominant shellfish species farmed in Scotland is the blue mussel (11,843 tonnes in 2021), mainly in Shetland; Pacific oyster (388 tonnes), dominated by production in the Strathclyde region; native oyster (<1 tonne) and king (3 tonnes) and queen scallop (<1 tonne)¹.

Atlantic salmon

Scottish aquaculture makes a substantial contribution to the UK food supply, and Atlantic salmon production is the biggest UK food export. It is therefore considered to be a major contributor to the UK economy, however the significance of this is disputed as no Cost Benefit Analysis of the Scottish salmon farming industry has been conducted to date.

Salmon farming started in Scotland in the 1970's, it rapidly expanded in the 1990's and increased production from 32,391 tonnes in 1990 to 205,393 tonnes in 2021, a 534% increase. There are 12 companies producing Atlantic salmon in 223 active sites².

Salmon farming takes place off the west coast of Scotland and around Shetland, Orkney and the Western Isles, all known for their stunning visual landscape. These areas are also rich in marine life, including maerl, fan mussel, grey seal, common seal and harbour porpoise, all of which are Priority Marine Features (PMFs) due to their importance to our seas. LINK recognises that Scottish salmon farming has the potential to have significant impacts on the marine environment.

Key impacts of Scottish salmon production:

- Sea lice transfer between farmed and wild fish, and the continued reliance on wild caught cleaner fish, that due to poor management risk being locally overfished and depleted;
- Discharge of chemical treatments for sea lice, and their impacts on local habitats and species;
- Disease outbreaks on farmed fish, their treatment i.e. with chemicals and the mortality rate;
- The impact of multiple farms in a shared water body, the cumulative effect;
- Escapes of farmed salmon and resulting interbreeding with wild salmon, leading to vulnerable fish less able to survive;
- Ongoing need to achieve sustainable feed sources.

¹ Source: Marine Scotland Science Scottish Shellfish Farm Production Survey 2021

² Marine Scotland Science. 2022. Scottish Fish Farm Production Survey 2021.

<https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2022/10/scottish-fish-farm-production-survey-2021/documents/scottish-fish-farm-production-survey-2021/scottish-fish-farm-production-survey-2021/govscot%3Adocument/scottish-fish-farm-production-survey-2021.pdf> Accessed 02/11/22



Despite these concerns, the Scottish aquaculture industry has been encouraged to grow to double its size, as recorded in 2017, by 2030³. This would mean an estimated production of 350,000 tonnes, achieved by a 5% growth every year. We believe this growth to be irresponsible while there are still improvements to be made and conflicts with the precautionary approach.

LINK is asking Scottish Government and Regulators for:

Finfish Aquaculture

- To ensure that all issues of environmental concern, as identified by the reports arising from the Scottish Parliament Information Centre (SPICe) report⁴ and subsequent Environment Climate Change and Land Reform (ECCLR)⁵, Rural Economy and Connectivity (REC) committee reports⁶ and Professor Griggs Regulatory Review⁷ are demonstrably addressed as quickly as possible, and that the precautionary approach is applied before further industry growth.
- To define environmental limits for aquaculture, and ensure an enhanced emphasis on environmental protection, as per the Bute House agreement⁸.
- To ensure that all aquaculture planning and licensing, including but not limited to salmon farming, is integrated into regional marine planning; that no new fish farm licences are issued for the use of existing open net pen technology, where proposed in or adjacent to Marine Protected Areas (MPAs) and Highly Protected Marine Areas (HPMAs) due to concerns for impacts on the designated feature and surrounding area on which they are dependant. This moratorium should also include fish farms that are likely to impact upon Priority Marine Features (PMFs), the recovery of which is a key priority⁹ in accordance with General Policy 9(b) of the National Marine Plan; and should not have a negative visual impact on protected landscapes or otherwise relatively wild land.
- Further research is carried out to assess the direct and indirect impacts existing salmon farming have on all Scottish PMFs, both inside and outside MPAs, and to identify those features most at risk.
- To ensure that all poorly sited salmon farms deemed unsuitable for production, are relocated, and the sites is either allocated to shellfish/seaweed aquaculture or designated aquaculture free-zones. Relocation should take into account: wild salmonids interactions and impacts, SEPA Sea Lice Risk Assessment Framework mapping and water body level cumulative impacts.
- To ensure that all salmon farms are managed under the SEPA Finfish Aquaculture Sector Plan.

³ HIE & SAIC. 2017. Scottish Aquaculture: a view to 2030. Available online at: <https://aquaculture.scot/>. Accessed 01/12/2020

⁴ The Scottish Parliament. 2018. The environmental impacts of salmon farming in Scotland. Available online at:

<https://digitalpublications.parliament.scot/ResearchBriefings/Report/2018/2/13/Salmon-Farming-in-Scotland> . Accessed 01/12/2020

⁵ The Environment, Climate Change and Land Reform Committee. 2018. Report on the Environmental Impacts of Salmon Farming. Available online at: <https://www.parliament.scot/parliamentarybusiness/CurrentCommittees/107588.aspx>. Accessed 01/12/2020

⁶ Rural Economy and Connectivity Committee. 2018 Salmon farming in Scotland. Available online at: <https://www.parliament.scot/parliamentarybusiness/CurrentCommittees/107585.aspx>. Accessed 01/12/2020

⁷ Scottish Government. 2022. Aquaculture regulatory process – A review. Available online at: <https://www.gov.scot/publications/review-aquaculture-regulatory-process-scotland/> . Accessed 09/09/2022

⁸ Scottish Government. 2021. Scottish Government and Scottish Green Party: draft shared policy programme. Available online: <https://www.gov.scot/publications/scottish-government-and-scottish-green-party-shared-policy-programme/pages/our-natural-environment/#Aquaculture> Accessed 12/08/2022.

⁹ Scottish Government 2015. National Marine Plan: General Policies. <https://www.gov.scot/publications/scotlands-national-marine-plan/pages/5/>



- To carry out a review on the cumulative chemical and medicinal use of salmon treatments and their impact on the marine environment in Scotland.
- To ensure that collaborative working ensures regulations applying to the salmon farming sector are transparent, precautionary, comprehensive, address all environmental aspects of production and are robustly monitored and enforced.
- To ensure data relating to the performance of the industry is made publicly available via a public facing database. This should include data of a wide range of environmental parameters displayed to farm level, the reporting of which should be a statutory requirement. This level of transparency will enable all user groups, including those at a community level to access accurate performance data.

Shellfish Aquaculture

- To ensure that shellfish aquaculture is included within the upcoming Vision for Sustainable Aquaculture, delivering a national strategy for its development.
- To encourage the development of the shellfish aquaculture sector for the purposes of habitat restoration for species such as the native oyster.
- To evaluate the potential of the shellfish aquaculture sector for the purposes of carbon sequestration and contribution to achieving the net-zero emissions target.

Seaweed Aquaculture

- To ensure that a national strategy for seaweed aquaculture is included within the upcoming Vision for Sustainable Aquaculture;
- To ensure that seaweed specific regulation is developed which includes: a prohibition on farming non-native species; clear site selection guidelines underpinned by Environmental Impact Assessments, measures to minimise environmental impacts of production and harvesting; and clear rules on monitoring and enforcement;
- To encourage community level development of the seaweed sector, through targeted support for infrastructure, market development and shared enterprises.

This position statement is supported by the following LINK member organisations:

Fidra; Marine Conservation Society; National Trust for Scotland; Scottish Wildlife Trust; Soil Association Scotland; Whale and Dolphin Conservation

Scottish Environment LINK is the forum for Scotland's voluntary environment community, with over 35 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

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