

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM ORKNEY FISHERIES ASSOCIATION

Orkney fisheries Association is a membership organisation representing the fishing industry in Orkney. It comprises active fishermen, skippers, processors and individual fishermen. There are currently 50 members. The catching sector in Orkney is dominated by the inshore crab and lobster fishery with a significant hand-dived King Scallop fishery.

'Fisheries are an important part of the local economy. The latest Orkney Islands Council Economic Review shows 354 full and part-time direct jobs in the industry employed among some 142 vessels. 102 of these vessels are under 10m and a further 32 between 10 and 15m. Gross annual fishing vessel income is around £14M. The local shellfish processing sector is also significant with the two co-operatively owned factories in Stromness and Westray employing over 130 full-time staff and turning over some £10M. As an island community Orkney is heavily dependent on marine resources for the future social and economic survival of its communities. Maximising the benefits from fisheries is of paramount importance to the local economy' (Orkney Sustainable Fisheries Ltd Inshore Management plan 2017)

Do you have any general views on the current state of the farmed salmon industry?

OFA recognise the place of fish farming in providing jobs and economic prosperity to remote communities. We note the transfer of ownership of fish farms in Orkney, from local cottage operators to large scale foreign-owned multi-national business interests (Canadian and Norwegian). This concerns us as control of the industry lies out-with the islands and corporate profit to remote shareholders is now the driver. This leaves the business model in terms of the local economic resilience picture, vulnerable to economic decisions taken elsewhere and driven by larger corporate interests. OFA perceive that the drive for greater profitability will result in reduction of man power and greater automation thereby affecting local jobs in the industry particularly for young partially skilled males. There is currently no expectation of economic links to the local community by externally owned fish farm companies. As such OFA perceive that haulage, harvesting and other activities that were once done locally are now being contracted to external operators. If this outflow continues local employment and local benefits will erode to the point that the islands will be hosts to the industry with minimal local economic links while shouldering all the environmental disbenefits which come as a downside to intensive salmon fish-farming.

OFA recognise that Orkney Islands Council decides on planning matters for fish farms in Orkney waters and their decision making is based on very narrow terrestrial planning procedure when the marine environment is in fact spatially multi-dimensional, and also multi-dimensional in terms of fluidity and pollution bearing. An over simplified approach to 3-dimensional space, disfavours the wild fishing industry's interests spatially. This overly simplistic planning process enables the hitherto unquantified and under-researched damage to commercial crustaceans from sea lice treatments to occur through licensed chemical inputs which fail to account for the effects on the developmental stages of commercial stocks.

We note that the SAMS report asserts that more fish farms will mean more sea lice and therefore more treatments and that the persistence of these treatments, ie emamectin benzoate, in the environment affects non-target crustaceans. We further note that SAMS states that water currents can spread pathogens between farms and that naturally occurring ISA within cages can be spread by secretions (which fall through the water column to the seabed). Further, sea-lice evolve resistance to chemotheraputants, so there is a continuing race to evolve new poisons and keep ahead of mutations.

Hydrogen peroxide is being used in increasing quantities as a preventative whereby the lice are knocked off the fish alive and drop away into the marine environment presumably in search of other hosts. In 2015 19.6 million liters of hydrogen peroxide were used in Scottish waters. (Source of data : Global alliance Against Industrial Aquaculture (GAAIA) FOI request)

Alternative novel methods of combating sea-lice have been suggested such as cleaner fish (Ballan wrasse). It is our understanding that lucrative extractions of Ballan Wrasse in some areas have led to the fishing out of that species and new supplies are sought from hitherto untargeted areas. Knowledge of Ballan wrasse is limited but from our research we have found that Ballan wrasse all become male after a certain point in development, are very slow growing fish, fulfil a function of cleaning maerl beds, are subject to swim bladder damage if brought to the surface quickly. There is currently no limit or licensing system in place for the fishing of Ballan wrasse, nor any knowledge on what extraction might mean for the species, (particularly if large amount of males are removed), their habitat and other species in the ecosystem. There is no mechanism to prevent 'used' and infected wrasse from fish farms re-entering the environment through informal transfer as bait to fishermen. We have further learned that domestic rearing of Ballan wrasse looks unlikely to be economical due in part to their slow growth and the high tonnages required by the fish farm industry and that their 'cleaner' instinct is lost with the learned behaviour of artificial feeding outwith the wild.

The natural way for salmon to get rid of lice is to go into fresh water – hence when they enter burns and rivers as wild fish, the lice are removed.

The sum of the above is that sea-lice are a persistent problem for the industry and while stocking densities remain at current levels, using artificial means of eradicating sea-lice will affect other non-target commercial species, potentially harming another marine industry.

All food industries are subject to buyer scrutiny and this will only increase. If the salmon industry is to progress it needs to acknowledge that it will come under heavy scrutiny at some point. It took only one TV programme (Hugh Fearngly- Whittingstall on fish discards) to change the entire modus operandi of the commercial whitefish industry in the entire EU.

Do you have any views on action that might be taken to help the sector grow in the future?

The industry needs to consider whether by ‘growth’ it means volume or quality. Increasing volume in marine sites means greater use of chemical pollutant inputs to combat sea-lice with risks to non-target commercial wild crustaceans. It needs to consider whether long term the ethical lobby will tolerate the use of land for the growth of vegetable oil for fish farm feed and how much the public will accept artificial inputs to compensate for lack of natural omega 3 and flesh colouring. Ethical lobbies are likely to apply similar focus to what is happening with farmed fish as they do to intensively reared chickens, cattle and pigs.

Marine cages are already an unnatural environment where non-benign inputs are largely unknown and uncontrollable. The industry should seek a better means of gaining full control over the harmful inputs to the marine environment: fish urine (ammonia) and faeces (eutrophication), additional lice burden to other wild species, transfer of ISA to other species, effects of emamectin benzoate on commercial crustacean stocks and uncontrolled removal of quantities of wrasse from the ecosystem.

The means to do this is by transferring production to enclosed land sites. This is being trialled in Norway where there tend to be higher environmental standards in force. The benefits of this is that seawater intake can be controlled, fish can be much more easily monitored, feed amounts can be controlled so less wastage, with excess removed along with faeces. Fresh water can be pumped in to a controlled system to remove lice in a more natural fashion, with no need for cleaner fish or chemicals and can be cleaned before re-circulating. There is improved safety for workers who do not need to work in inclement weather at sea. The unwanted outputs could be recycled to use as fertiliser on land instead of creating anoxified areas of marine environment. There are ethical gains to be had by thinking ahead and before a knee jerk is forced on the industry as occurred in the commercial whitefish fishery.

It is inevitable that if the sector continues to grow in the marine environment in its current fashion it will be to the detriment and expense of the wild commercial crustacean fishery that is securely linked economically within the disparate coastal communities not just within Orkney but throughout Scotland.

The farmed salmon industry is currently managing a range of fish health and environmental challenges. Do you have any views on how these might be addressed?

OFA have already addressed many of these challenges above and have concluded that the battle is unwinnable when free ranging fish are confined densely in unnatural spaces and where unnatural behaviours that damage welfare take over. This is evident more starkly in battery hen farms. When the means to combat intensively farmed disease results in damage to other species commercial and non-commercial this is where the 'battery hen' comparison ends. Disease within battery hen farms is largely confined to that footprint of land and the species contained within, which is not so within the marine environment. The continuation of the current method of combating fish health and environmental challenges is damaging non-target commercial crustacean stocks.

The precautionary principal should apply.

Do you feel that the current national collection of data on salmon operations and fish health and related matters is adequate?

OFA believe that the salmon fish farm industry should be monitored and inspected in a wholly transparent and independent way. We are unable to extend confidence to a system whereby Salmon companies undertake and contract their own environmental monitoring. Further, all environmental and health monitoring data whether collected in house or by external bodies should be publicly available. Such information is in the interests of the public who consume the product and this interest should over-ride any commercial confidentiality protections which may be sought by secondary chemical or feed production companies.

Do you have any views on whether the regulatory regime which applies to the farmed salmon industry is sufficiently robust?

It is the experience of OFA that all levels of the application, consenting, CAR licensing stages of the consenting process favour the salmon farming industry to a point where we have found that there is little point in objecting to any farm applications. The incremental expansion initially through additional farms but now by increasing the size of existing farms allows a 'just one more little bit' mentality. The incremental spatial loss to the Orkney fishery is significant as is the environmental compromise which is as yet unquantifiable on such aspect as juvenile scallop beds and the larval and developmental stages of crustaceans exposed to in-feed chemicals and bath treatments of anti-sea-lice treatments and preventatives.

We are concerned at the reduction in SEPA's monitoring of sites which has reduced despite the increase in sites locally.

Do you have any comments on how the UK's departure from the European Union might impact on the farmed salmon sector?

The two companies which operate in Orkney are Leroy Salmar (Scottish Seafarms) Norway and Cooke Aquaculture (Canada). Norway and Canada are not members of the EU so it will be in their interests to operate companies domiciled within an EU member state to gain easy access to European markets and EU brokered trad deals. When the UK is no longer an EU member state that may affect their position.

The UK will remain subject to international environmental legislation and through the EU Withdrawl Bill current EU regulation will transfer into UK law. As OFA feel that regulation under current EU law is not sufficient to protect commercial wild crustacean stocks, any diminution in protection post- Brexit would be of concern as would the lobbying power of large well-funded corporate interests which the fishing industry cannot match in terms of 'buying' the ear of the government of the day. Indeed, economic desperation to maximise national income in the face of loss of other industries may drive down regulation which could impact unfavourably on other interests, in particular our commercial crustacean industry. Different governments have very different attitudes towards the collective benefits of societal access to information, openness and transparency, and the need for collective responsibility with regard to environmental responsibility. Post Brexit all will be at the behest of the UK government colour of the day which will leave many in uncertain waters.

Orkney Fisheries Association
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Reference

<http://www.orkneysustainablefisheries.co.uk/wp-content/uploads/2017/06/Orkney-Sustainable-Fisheries-Ltd.-Management-Plan-2017.pdf>

Global alliance Against Indutrial Aquaculture (GAAIA) FOI request