

Donegan, Fergus (Alab)

From: Alab, Info
Sent: Wednesday 7 February 2024 11:05
To: [REDACTED]
Cc: Alab, Info
Subject: AP1-2019 Deenish Site Ref. T06/202

Dear Mr. Smyth,

I wish to acknowledge receipt of your submission received today.

It will be brought to the attention of the Board at the earliest opportunity.

Kind regards,

Majella



Majella Murphy

An Bord Achomhairc Um Cheadúnais Dobharshaothraithe

Aquaculture Licences Appeals Board

Cúirt Choill Mhinsí, Bóthar Bhaile Átha Cliath, Port Laoise, Contae Laoise, R32

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Galway Bay Against Salmon Cages



Aquaculture Licence Appeals
Board,
Kilminchy Court, Dublin Road,
Portlaoise, Co Laois.

6th February 2024

SUBMISSION from Galway Bay Against Salmon Cages Re: Appeal by MOWI iRELAND against the decision of the Minister for Agriculture, Food and the Marine, in respect of entitlement to continue Aquaculture Operations under the provisions of S19A(4) of the Act for the Culture of Salmon in cages at a site east of Deenish Island, Ballinskelligs Bay, Co Kerry, Ref: number T06/202 held by MOWI Ireland.

Dear ALAB Board members,

Galway Bay Against Salmon Cages (GBASC) are asking you to reject the MOWI appeal against the Minister's decision to revoke their Deenish Island salmon farm licence, Ref: T06/202 on the grounds that this licence was revoked by the former Minister for Agriculture, Food and the Marine Michael Creed in April 2019 for overstocking by 121%. If you overturn the Ministers decision to revoke the said licence then you will be saying that the former Minister and indeed the DAFM were wrong in revoking the Deenish site licence. You will also be setting a terrible precedent whereby MOWI and other salmon farm operators could not be sanctioned in the future for breaking the conditions of their licences, also it would be perceived by the public and rightly so, that MOWI were ignoring the authority of our state agencies that are tasked to regulate them. I refer you to correspondence from Minister Creed and your department to ALAB in relation to the appeal by MOWI regarding Minister Creeds revoking of the Deenish licence (letter dated 19th Dec.2019) titled, Observations Submitted by DAFM under Section 44(2) of the Fisheries (Amendment) Act 1997. It states on page 6;

"It is clearly in the public interest that the Department enforce licences issued to operators in order to uphold the integrity of the States regulatory regime in respect of food production from the Marine environment. It is not in the public interest that operators should be permitted to interpret the terms and conditions of their licences in a manner which is contrary to the natural and ordinary meaning of such terms and conditions in order to obtain a commercial advantage. A failure or perceived failure by the Department to properly enforce licence conditions would provide an incentive for further non-compliance by the Appellant (MOWI) and perhaps non-compliance by other operators within the sector. Failure by the Department to enforce licence conditions would be anti-competitive as it has the potential to afford a significant commercial advantage to the non-compliant operator. The maintenance and development of Ireland's food exports is dependent on an acceptance by the general public and authorities in other jurisdictions of the efficacy of Ireland's regulatory regime. For this reason, it cannot be said that for the Department to ignore a very significant breach of licence conditions is in the public interest."

It also states on page 2 of the same document that, "It is the Department's view that the breach is manifestly obvious, is supported by the applicable engineering reports, is acknowledged by the Appellant and is based on figures actually supplied by the Appellant."

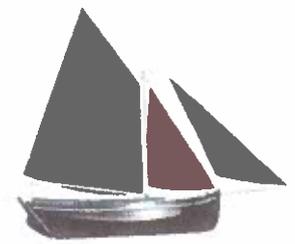
"Furthermore the breach represents an excess of 121% in the stock permitted to be harvested from the site."

Also on page 2 it states;

"It is the consistent view of the Department that the Minister's decision to treat as discontinued the statutory entitlement of Silver King Seafoods Ltd. to continue aquaculture operations under the provisions of Section 19A (4) of the 1997 Fisheries (Amendment) Act, is warranted by the undisputed facts of this case and is proportionate having regard to the very significant excess in the stock harvested (121%)."

ALAB Board members, those of you that have connections to the salmon farming industry should set aside your own personal views on salmon farming in favour of the former Minister Creeds and his Departments view that the Deenish licence should be discontinued.

Galway Bay Against Salmon Cages



GBASC hope that as a result of DAFMs experience in trying to revoke MOWI's Deenish licence for breaking the conditions of their licence, ALAB now realise that once a salmon farm licence is granted under the present regulations, it is almost impossible to revoke it, thus allowing salmon farms to continue operating. Disgraceful.

No amount of greenwashing of salmon farming by AQUAFAC and others should take away from the substantive issue of Minister Creed's decision to revoke the Deenish licence, this is the real issue and should not be sidetracked by documents that have no bearing on the case regarding whether Minister Creed had the legal right to revoke the licence or not.

Without prejudice to the above, GBASC want to make the following comments,

In the last number of years, so-called Irish organic salmon farms have been affected by various viral and bacterial diseases causing millions of mortalities and huge losses for the Irish salmon farming industry. It is widely accepted that these diseases are triggered by stress factors such as sea lice infestations, Jellyfish attacks, handling issues associated with pumping the salmon from the cages into wellboats and vice versa, pesticide treatments, and toxic algal blooms caused by the high nutrient rate emitting from the salmon farms. While algal blooms may be naturally occurring, they are fueled by the massive amounts of nutrients emanating from the salmon farms. All of the above biological issues are happening more frequently in Irish waters as a result of increasing sea temperatures around our coast, these sea temperatures it seems, will continue into the foreseeable future, making it extremely difficult to farm salmon in these conditions. Irish sea waters are now no longer suitable for open sea cage salmon farming, (not that they ever were), and this is borne out by the fact that MOWI, according to their preliminary Stock Market report for Quarter 4 of 2023 did not harvest any salmon for the period mentioned above and had zero profits as a result. (See copy attached). They also lost money in 2022 as a result of those "Biological Issues" mentioned above according to their Stock Market report for that year.

The re-emergence of Salmonid Rickettsial Septicaemia (SRS) on Irish salmon farms and the prevalence of Furunculosis in salmon farms and smolt hatcheries is very worrying that these bacterial diseases or indeed Gill and viral diseases such as Pancreas Disease, Piscine Reovirus, Cardiomyopathy Syndrome, Amoebic Gill Disease, etc. may be harmful to wild salmon, sea trout, other fish species and Shellfish stocks. These diseases are now endemic on Irish salmon farms and may be hazardous to endangered wild salmon stocks migrating through Irish waters so therefore, the EU Habitats Directive Precautionary Principles must be applied when determining the MOWI appeal.

GBASC have requested the 2023 farmed salmon mortalities on Irish salmon farms reports from the Marine Institute (MI) under AIE Regulations, as the information requested may not be supplied to us before the 9th February deadline, we ask that the MI mortality reports be included in our submission once they become available.

Ever since the reopening in 2010 of the Deenish open sea cage salmon farm in Kenmare Bay, the Lough Currane lake and Waterville river Fisheries have lost the majority of their wild salmon and sea trout stocks due to sea lice infestations and disease from nearby salmon farms resulting in a huge loss of tourism revenue to the surrounding areas. The total collapse of sea trout stocks in the Waterville area is proven by the fact that IFI had to introduce a catch & release bye-law in 2018 to try and conserve the remaining sea trout stocks in the Currane Fishery. One of the conditions attached to the Deenish licence states that: "This licence will remain subject to ongoing review in light of continued monitoring of, and research into, the two marine sites and neighbouring sea trout fisheries which may be undertaken by the Salmon Research Agency and/or the Fisheries Research Centre. In the event of proven contra-indications for sea trout stocks causatively linked to the fish farming operations permitted under this licence, the Minister may exercise his discretion to take any necessary protective measures ranging from reduction in permitted production levels to revocation of the licence and harvesting of all stock" I believe that IFI have proven that sea trout and salmon stocks have collapsed in Lough Currane and the Waterville fisheries when they had to introduce the bye-law mentioned above.

Since 2013 the Marine Institute, DAFM and the salmon farming industry have used the outdated and possibly flawed Jackson et al sea lice research paper to greenwash and prop up the Irish salmon farming industry. It is now time to scrap this research paper and accept the more up-to-date and much broader, overwhelming field of Irish and International peer reviewed

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research papers that contradict the findings in the Jackson et al paper. I have attached a copy of a 2023 study by the Norwegian Scientific Advisory Committee for Atlantic Salmon to prove my point that sea lice from salmon farms is the largest threat to sea trout and indeed wild salmon.

Farmed salmon are escaping from Irish salmon farms on a regular basis for years, mostly during severe storm conditions but as many of these storms occur during winter months when no angling takes place, it is very hard to produce the evidence that an escape had actually occurred as these escapes are not reported by the salmon farmers to either the MI or DAMF, we have to rely on whistleblowers in the salmon farming industry to inform us of escapes. Even when escapes do occur during the Spring/summer months when anglers are fishing and catch escapees, it is near impossible to identify what salmon farm they escaped from without them being micro-tagged. It is widely accepted that escaped farmed salmon have the potential to interbreed with our precious endangered wild salmon, weakening them genetically and reducing the survival rates of any offspring.

Because of the ludicrous situation whereby salmon farmers do not have to report any mortalities as a result of a non notifiable disease, we the public, consumers and indeed, some Government agencies will never know the true extent of the mortalities and terrible welfare issues on Ireland's so-called organic salmon farms which includes the Deenish site.

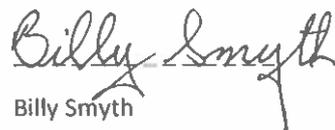
It has come to our notice that MOWI has voluntarily withdrawn their Deenish salmon farm and a number of their other salmon farms from the Aquaculture Stewardship Council certification process in 2022, (see copy attached) presumably because of the increasing amounts of antibiotics that have to be used to try and save their stocks from the ravages of SRS, Furunculosis and other bacterial diseases. GBASC are awaiting confirmation on whether or not the Deenish salmon farm is currently certified as organic. However, we request that this information be included in this submission once it becomes available.

As the Deenish salmon farm is operating in Kenmare River SAC (Site code: 002158) and Deenish Island and Scariff Island SPA, it is imperative that the use of toxic pesticides to treat sea lice infestations, antifouling agents and other toxic chemicals are taken into account when determining whether to grant the MOWI appeal or not. It is unwise to create jobs that POLLUTE TO PRODUCE. These jobs displace many more jobs in the sustainable angling tourism and Inshore fishing sectors. Open sea cage cages where the polluter does not pay means the operator gets the profits while we and the marine environment get the waste, diseases and escapees.

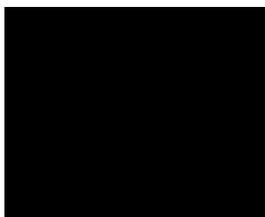
ALAB, We are in the middle of a climate and species extinction crisis and as you may know, the wild Atlantic salmon has recently been placed on the Red List of endangered species by the International Union for Conservation of Nature. It is now ALABs and the Government's duty to protect the last remaining iconic wild Atlantic salmon in Irish waters, the Precautionary Principles of the EU Habitats Directive must be applied and the MOWI appeal should be refused. END

Yours sincerely,

On behalf of Galway Bay Against Salmon Cages.


Billy Smyth

Chairman, GBASC,



Threats to sea trout in Norway



Photo: Eva B. Thorstad

Short summary

The Norwegian Scientific Advisory Committee for Atlantic Salmon has earlier shown that sea trout in many watersheds in Norway is in a poor state, except in Northern Norway, where sea trout is in a better state than the rest of the country. For the first time, we have now assessed the threats from human activities to sea trout. Salmon lice from aquaculture farms is the largest threat to sea trout. The impact of salmon lice is so large, and covers such large geographical area, that this threat alone has been and will be the determining factor for the future development of sea trout. To improve the situation, the salmon lice infestation pressure from fish farms must be considerably reduced. Climate change is the second largest threat. Culverts, channelisation, other habitat alterations, and agriculture are also threats to sea trout, but to a smaller extent than salmon lice and climate change. Hydropower production, water abstraction for other purposes than power production, and infectious diseases also have a significant negative impact on sea trout.

The full report is published in Norwegian: <https://brage.nina.no/nina-xmlui/handle/11250/3093719>

Norwegian Scientific Advisory Committee for Atlantic Salmon

The Norwegian Scientific Advisory Committee for Atlantic Salmon is appointed by the Norwegian Environment Agency to evaluate status of salmon and sea trout and importance of different threats, and to give science-based catch advice and advice on other issues related to management of wild salmonids.

Thirteen scientists from seven institutions serve on the committee: Torbjørn Forseth (leader), Sigurd Einum, Peder Fiske, Morten Falkegård, Øyvind A. Garmo, Åse Helen Garseth, Helge Skoglund, Monica F. Solberg, Eva B. Thorstad, Kjell Rong Utne, Asbjørn Vøllestad, Knut Wiik Vøllset and Vidar Wennevik. The committee is an independent body, and the members do not represent the institutions where they are employed when serving on the committee.

Contact: Torbjørn Forseth (torbjorn.forseth@nina.no), Eva B. Thorstad (eva.thorstad@nina.no), Peder Fiske (peder.fiske@nina.no), or any other member of the committee. www.vitenskapsradet.no

Extended summary

Background and methods

The Norwegian Scientific Advisory Committee for Atlantic Salmon has earlier shown that sea trout in many watersheds in Norway is in a poor state, except in Northern Norway, where sea trout is in a better state than the rest of the country. The committee has developed a classification system to rank the threats from human activities to Atlantic salmon (figure 1, Forseth et al. 2017). The assessment of threats to Atlantic salmon is updated annually. The same system is now for the first time used to assess the major threats to sea trout. For each human impact factor, the *effects* (figure 1) are assessed in terms of number of affected populations, reduction in production capacity in affected populations, number of critically endangered or lost populations, and implemented mitigation measures (table 1). In addition, the *development* (figure 1) is assessed in terms of likelihood that the human activity will result in further reductions in population size or loss of populations in the future (table 1).

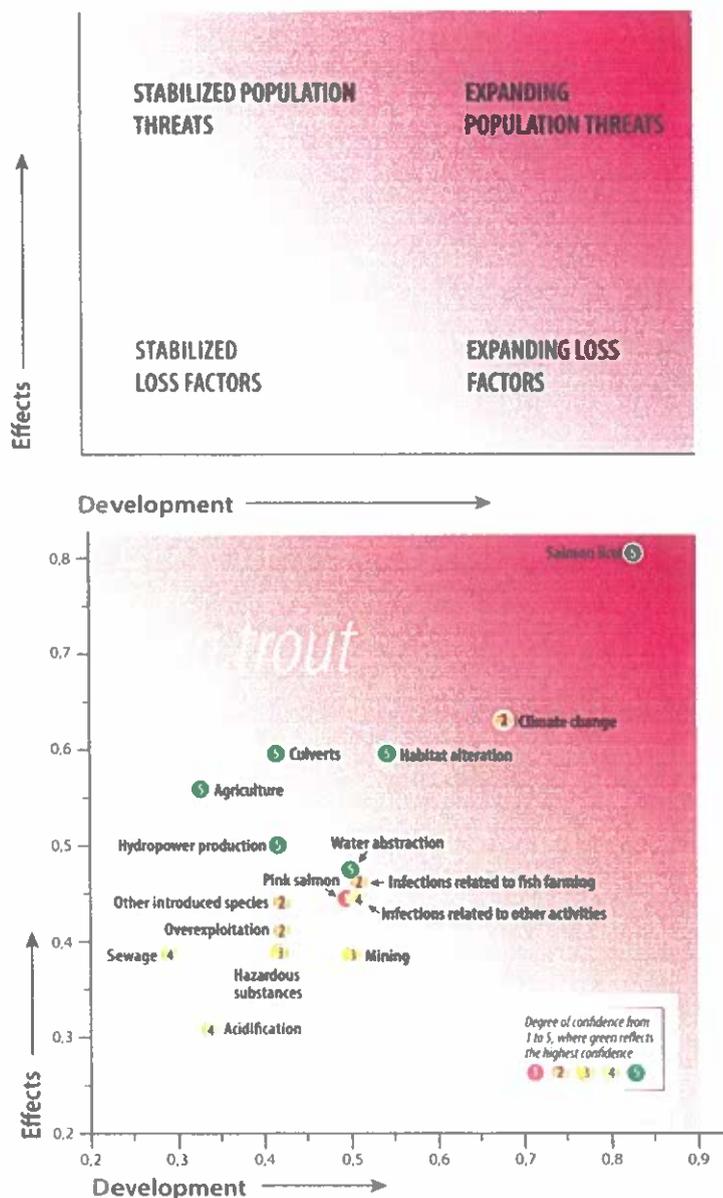


Figure 1.

Upper graph: The classification system developed to rank different anthropogenic impacts to Norwegian Atlantic salmon and sea trout populations along the effect and development axes. The four major impact categories are indicated, but the system is continuous. Dark background colour indicates the most severe impacts. The effect axis describes the effect of each impact factor on the populations, and ranges from factors that cause loss in adult returns, to factors that cause such a high loss that they threaten population viability and genetic integrity. The development axis describes the likelihood for further reductions in population size or loss of additional populations in the future.

Lower graph: Ranking of 16 impact factors considered in 2022, according to their effects on sea trout populations, and the likelihood of a further negative development. Confidence for the assessment of effect by each threat is indicated by the color of the markers, where green indicates the highest confidence level and red the lowest.

There are at least 1251 watersheds holding sea trout in Norway. The classification of state of sea trout from the previous assessment (Norwegian Scientific Advisory Committee for Atlantic Salmon 2022) provided data from these watersheds that could be used in the present assessment of threats. In addition, scoring was done based on relevant scientific articles, Norwegian reports, other public documents, and the expert judgment of members of the committee. Scoring for each impact factor is given in **table 1**. For the assessment, we define sea trout as trout moving into saltwater for parts of their life. This means that we consider a sea trout population as lost if the migration route to the sea is blocked, or if survival at sea is so low that the migratory part of the population is lost. A watershed with a lost sea trout population can still have resident trout, but anadromy has been lost.

Confidence in the assessment of effect for each human impact is given based on a scoring of how well the impact is documented, i.e., the knowledge level, and the level of agreement in the documentation. Both knowledge level and agreement are scored and combined into an overall confidence level, on a five-point scale from low to very high.

Major threats to sea trout – Results of the assessment

Salmon lice from aquaculture farms is by far the largest threat to sea trout (**figure 1**). Sea trout are severely affected by salmon lice infestations in many watersheds in large parts of the country (**figure 2**). High salmon lice levels also affect sea trout in parts of the country where sea trout until now have had a better state than in the rest of the country. The impact of sea trout is so large and covers such large geographical area that this threat alone has been and will be the determining factor for the development of sea trout. To improve the situation for sea trout, the salmon lice infestation pressure from fish farms must be considerably reduced. Current mitigation measures are insufficient to hinder expansion of negative impacts in the future.

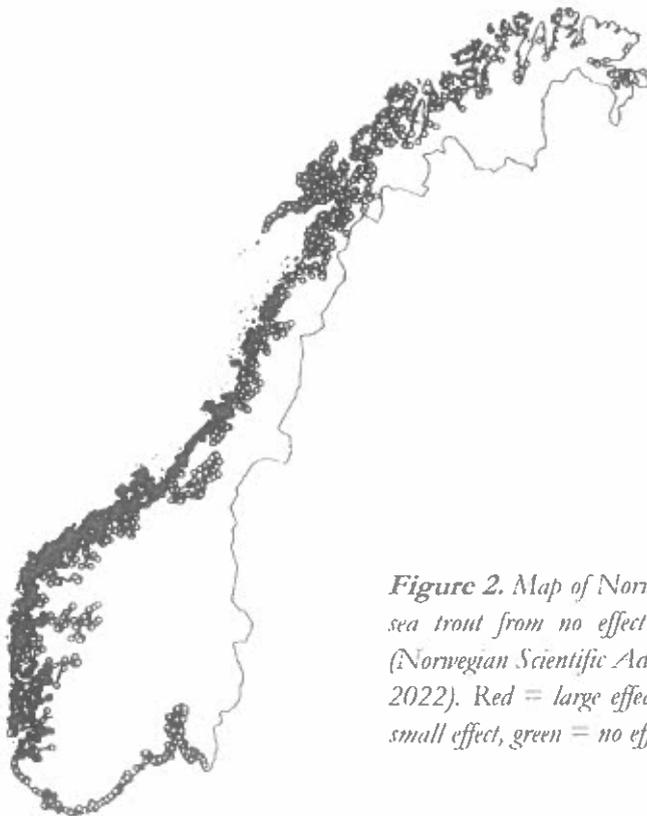


Figure 2. Map of Norway showing the effect of salmon lice on sea trout from no effect to large effect in 1222 watersheds (Norwegian Scientific Advisory Committee for Atlantic Salmon 2022). Red = large effect, orange = moderate effect, yellow = small effect, green = no effect.

Climate change is the second largest threat to sea trout. Climate change is assessed as a non-stabilised population threat, but to a smaller extent than salmon lice. Climate change is like salmon lice assessed as an expanding threat, which means sea trout is affected to the extent that populations may be critically endangered or lost in nature, and there is a high likelihood these threats will cause further reductions of sea trout in the future (**figure 1**). Culverts, channelisation, other habitat alterations, and agriculture are also threats to sea trout, but to a smaller extent than salmon lice and climate change (**figure 1**). The risk of further expansion of the negative effects of habitat alterations is relatively large, whereas the risk of a further expansion due to agriculture and culverts is smaller. Hydropower production, water abstraction for other purposes than power production, and infectious diseases also have a significant negative impact on sea trout. There is an underexploited potential for improving conditions for sea trout related to all these threats.

The knowledge of impacts of salmon lice, culverts, agriculture, hydropower development water abstraction and other habitat alterations is very good, hence the confidence of the assessment is very good (**figure 1**). Alien pink salmon is a new threat to sea trout and other salmonids, and the assessment is given with low confidence due to the lack of knowledge of effects. The impacts of overexploitation, infections related to fish farming, climate change and other alien species than pink salmon are also uncertain. Overexploitation is difficult to assess because of poor quality of the catch statistics in some fisheries, and because populations sizes are not estimated and compared with spawning targets for each of the watersheds.

References

- Forseth, T., Barlaup, B.T., Finstad, B., Fiske, P., Gjøsæter, H., Falkegård, M., Hindar, A., Mo, T.A., Rikardsen, A.H., Thorstad, E.B., Vollestad, A. & Wennevik, V. 2017. The major threats to Atlantic salmon in Norway. *ICES Journal of Marine Science* 74: 1496-1513.
- Norwegian Scientific Advisory Committee for Atlantic Salmon 2022. Classification of the state of sea trout in 1279 watersheds. Temarapport number 9, 170 pp. In Norwegian.
- Norwegian Scientific Advisory Committee for Atlantic Salmon 2022. Assessing the threats to sea trout. Temarapport number 12, 37 pp. In Norwegian

Table 1. Scores given for each human impact affecting sea trout along the effect and development axis. For each of the axes, sum of scores and compiled relative effect (proportion of maximum number of points possible) are given. Knowledge level for effects and level of agreement in the documentation are combined into an assessment of confidence for each of the human impacts, on a five-point scale from 1 = low to 5 = very high. **Figure 1** is a graphic illustration of the compiled relative effects and confidence of assessments.

Effect axis: Characteristics considered		POINTS AND CRITERIA														
1	Number of affected populations	1: <150, 2: 151-300, 3: 301-600, 4: > 600	2	1	1	3	2	2	4	2	4	3	2	2	3	
2	Effects on production	1: Small reduction < 10% Typical effect on a population in terms of reduced production capacity, smolt production or sea survival 2: Moderate reduction 10-29% 3: Large reduction 30-75% 4: Very large reduction > 75%	2	2	1	2	1	1	1.5	3	1	2	1	1	1.5	
3	Number of lost or critically endangered populations in nature	1: None, 2: 1-15, 3: 16-50, 4 > 50	2	2	1	2	1	1	1	2.5	1	1	1	1	2	
4	Implemented mitigation measures (i.e., measures that reduce effect on production or likelihood that populations will be critically endangered or lost)	1: Extensive, with large effects 2: Many, with good effects 3: Few, or measures with small effects 4: Very few or no, or measures without net effect	2	2.5	2	2	2	2	2	3	3	3	4	2.5	3	
	Sum (maximum 16)		8	7.5	5	9	6	6	6	6.5	12.5	7	8	10	9.5	
	Compiled relative effect (0-1)		0.50	0.47	0.31	0.56	0.38	0.38	0.38	0.41	0.78	0.44	0.50	0.63	0.59	
	Knowledge, agreement / combined confidence in the assessment		3.3/5	3.3/5	2.3/4	3.3/5	2.3/4	2.2/3	1.2/2	3.3/5	1.2/2	2.3/4	2.1/2	3.3/5	2.1/2	1.1/1

Table 1 continues

Development axis: Characteristics considered		POINTS AND CRITERIA											
1 Potential for effective measures (projection of present situation)	1: Extensive and very effective measures are planned	2	3	2	2	1,5	1	1	2	2,5	3	3	2,5
	2: Several and effective measures are planned	2	3	2	2	1,5	1	1	2	2,5	3	3	2,5
2 Likelihood of further production losses (projection of present situation)	3: Some effective measures, or measures with small effects are planned	2	3	2	2	1,5	1	1	2	2,5	3	3	2,5
	4: Few or no effective measures are planned	2	3	2	2	1,5	1	1	2	2,5	3	3	2,5
	1: Low	2	2	1	1	1	1	1	2	2,5	3	3	2,5
	2: Moderate	2	2	1	1	1	1	1	2	2,5	3	3	2,5
3 Likelihood of additional populations becoming critically endangered or lost (projection of present situation)	3: High	2	2	1	1	1	1	1	2	2,5	3	3	2,5
	4: Very high	2	2	1	1	1	1	1	2	2,5	3	3	2,5
	1: Low	1	1	1	1	1	1	1	1	1	1	1	1
	2: Moderate	1	1	1	1	1	1	1	1	1	1	1	1
Sum (maximum 12)		5	6	4	4	3,5	0,29	0,33	0,42	0,50	0,50	0,83	0,50
	Compiled development (0-1)	0,42	0,50	0,33	0,33	0,29	0,42	0,50	0,50	0,83	0,50	0,67	0,54



Harvest volumes Q4 2023 (1)

Farming Norway	81.0 thousand tonnes
Farming Scotland	10.5 thousand tonnes
Farming Chile	27.5 thousand tonnes
Farming Canada	4.0 thousand tonnes
Farming Ireland	- thousand tonnes
Farming Faroes	3.5 thousand tonnes
Farming Iceland (Arctic Fish)	2.5 thousand tonnes
Total	129.0 thousand tonnes

Full year harvest volumes were record-high 475 thousand tonnes in 2023 versus 464 thousand tonnes in 2022.

Note:

(1) The harvest volumes are provided in gutted weight equivalents (GWE).

Additional information

Operational EBIT for the Group was approximately EUR 203 million in Q4 2023 (NOK



ASC CERTIFICATE: [ASC01362](#)

Mowi Ireland

CAB CERTIFICATE ID: [ASC-SGS-F-004](#)

.....
FARM (UOC) Deenish Farm

.....
COUNTRY/TERRITORY Ireland

.....
SPECIES Salmo salar (Atlantic salmon)

.....
STATUS Cancelled

.....
READ MORE [→](#)

ASC CERTIFICATE: [ASC01178](#)

Mowi Ireland

Number of certified

sites : 2

CAB CERTIFICATE ID: ASC-SGS-F-068

.....
FARM (UOC) Inishfarnard Farm,
Deenish Farm

.....
COUNTRY/TERRITORY Ireland

.....
SPECIES Salmo salar (Atlantic
salmon)

.....
STATUS Cancelled

.....

READ MORE →

ASC CERTIFICATE: ASC01188

Mowi Ireland

CAB CERTIFICATE ID: ASC-SGS-F-069



BLUE EMPIRE — HOW YOUR SUPERMARKET SALMON IS IMPACTING COMMUNITIES IN WEST AFRICA

1st Feb 24

by Amelia Cookson

Our new report, [Blue Empire](#), exposes how the expansion of Norway's salmon farming industry is harming communities in the Global South.

It's been a big week for Feedback this week, with the launch of our [Blue Empire](#) report detailing the impact of Norway's enormous salmon farming industry on communities in the Global South.

The report is the fruit of months of careful research and collaboration with our partners to gain insights into the Norwegian salmon farming industry's global supply chain with a specific focus on its feed sourcing in West Africa.

miljøorganisasjon slakter norsk oppdrett: – Matkolonialisme.

So, what did we find out about this massive industry, second only in value terms to Norway's oil and gas sector?

Norway's Salmon Farming Industry

Norway is the world's biggest salmon farming country, supplying more than half of global production. Norwegian companies occupy eleven out of the top 20 slots in the list of global producers of farmed salmon. Norway is also home to the world's largest salmon farmer, MOWI, which had a turnover of nearly €5 billion in 2022, and supplies supermarkets across Europe.

Why is this an issue?

Salmon farming is often plugged as the 'sustainable solution' to relieving the burden on ocean life. However, this could not be further from the truth.

In fact, Norway's 'blue empire' has created a new type of food colonialism which fuels hunger and unemployment in regions such as West Africa and entrenches the existing power imbalance between rich and poor countries.

Farmed fish, such as salmon, consume millions of tonnes of wild-caught fish in their feed, in the form of fishmeal and fish oil (FMFO). In 2020, nearly 2 million tonnes of wild fish were required to produce the fish oil supplied to the Norwegian farmed salmon industry. This is equivalent to a staggering 2.5% of global marine fisheries catch. Just to supply fish oil to the Norwegian salmon farming industry!

On top of this, this system is inefficient. Norway's annual output of farmed salmon is one quarter (27%) lower than the volume of wild fish required to produce the fish oil used in Norwegian farmed salmon feed.

But where does this wild fish come from?

Much of this wild fish is sourced from Northwest Africa, threatening the livelihoods, health, food security and nutrition of coastal and inland communities, in direct contradiction with the Norwegian government's stated development goals, the overall objective of which is to "fight hunger and increase global food security" according to Anne Beathe Kristiansen Tvinnereim, Norway's Minister of International Development.

FEEDBACK

availability of fish for human consumption – in Senegal alone, fish consumption declined by 50% in the 10 years between 2009-2018 – and resulting in the migration of fishers between West African coastal states.

How does Norwegian salmon link to the UK?

Norwegian salmon is now available in most European markets and is sold as a premium product all around the world, including the UK where it can be found in Sainsburys, Tesco, Costco, Aldi and Lidl. Even restaurants in the UK, such as Wagamama, which sees itself as “support[ing] the planet, whilst spreading positivity... from bowl to soul”, source Norwegian farmed salmon.



“This Is Big Business Stripping Life From Our Oceans, And Depriving Our Fishing Communities Of Their Livelihoods. The Science Is Clear, It Will Soon Be Too Late. They Must Stop Now. These Industries Established In West Africa Use Fish To Produce Fish Meal And Fish Oil To Feed Animals In Europe And Asia While The African Population Needs This Fish To Feed Themselves.”, Dr Aliou Ba, Senior Oceans Campaign Manager For Greenpeace Africa

FEEDBACK

Cargill and BioMar supply almost all of the feed used in Norwegian salmon farming.



Norwegian farmed salmon is exported to the global market, including retailers across the UK, France and Netherlands

MQWI

Cargill



All of them source fish oil from North-West Africa (FAO 34)

This is a global issue which is being driven by companies seeking to create demand in high-income markets for farmed seafood such as salmon, seabass and prawns. Each year, around one-fifth of the world's annual marine catch (over 16 million tonnes in 2020) is used to produce FMFO, the bulk of which goes to producing feed for the aquaculture industry. Astonishingly, while salmonid production only accounts for 3.9% of farmed fish produced globally, it uses up 58% of fish oil and 14% of fish meal destined for aquaculture.

Is there a solution?

Luckily, the solutions are already on the table. Our modelling shows that an alternative aquaculture-fisheries model combining the direct consumption of wild-caught fish alongside salmon fed on fish oil and fishmeal exclusively made from trimmings (waste from processing), rather than whole fish, can deliver the same amounts of key micronutrients for the same number of people, whilst freeing up nearly 1 million

FEEDBACK

disconnect between the Norwegian government's industrial strategy – under which salmon farming is set to expand massively by 2050 – and its development goals. In light of our findings, we're calling on Norwegian decision-makers to stop further growth in salmon farming, mandate genuine transparency throughout the supply chain, and ensure that Norwegian companies' activities and feed sourcing practices do not run counter to its own development policy.

What can I do?

Sign our petition, in partnership with Eko and Wild Fish, calling for Wagamama to drop farmed salmon from its menu!

PART OF CAMPAIGNS

OUR FISH, NOTRE POISSON

Tackling industrial fishmeal and fish oil production in West Africa

[VIEW CAMPAIGN](#)

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