

EFFOP response for the Scottish consultation on the Scottish Government's proposal to close fishing for sandeel in all Scottish waters

Online consultation.

CONSULTATION QUESTIONS

Question 1: Do you support the preferred option to close fishing for sandeel in all Scottish waters?

Comments:

No

Question 2: If your answer is no to question 1. do you have any views on alternative or complementary measures that could be considered in the longer-term for the protection of sandeel in Scottish waters (please see the SEA Environmental Report for alternatives)?

Comments:

European Fishmeal and Fish Oil Producers (EFFOP) urges the Scottish government to rigorously heed the scientific recommendations put forth by the International Council for the Exploration of the Sea (ICES). Implementing a complete ban on sandeel fishing across all Scottish waters would result in adverse economic consequences. Moreover, this proposition diverges from the established scientific counsel provided by ICES.

EFFOP holds the view that the Scottish proposals appear contradictory to achieving the Marine Scotland Blue Economy Outcomes. These proposals are expected to have wide-ranging consequences, affecting both the economic and ecological aspects that impact European and Scottish salmon producers. Sandeel is a short-lived species that is not directly consumed by humans, but it contains vital proteins and fats essential as feed ingredients in aqua feed production. By producing fishmeal and fish oil from sandeels, we are supporting the aquaculture production, thereby helping to address the food requirements of the world's growing population.

The closure of Scottish waters for sandeel fishing would only be necessary if the current management system fails to implement adequate precautionary measures and address the needs of the ecosystem. The present fishery is managed following the scientific fisheries advice from ICES and it is based on a precautionary approach, which already includes ecosystem impacts on foraging predators (see below). Following on, the scientific evidence from ICES supports the assertion that the present management of the sandeel fishery is indeed precautionary and aligned with ecosystem requirements (ICES (2022): Greater North Sea ecoregion – fisheries overview. ICES Advice: Fisheries Overviews. Report. <https://doi.org/10.17895/ices.advice.21641360.v1>). Overall, this conclusion is based on comprehensive assessments from two peer reviewed and independent sources: the MSC (Marine Stewardship Council) certification process and the ICES advice.

In the ICES advice, there is a specific requirement for evidence that demonstrates adherence to ICES recommendations and the conservative setting of catch quotas to protect and ensure food availability for predator species, as indicated in "Ecosystem Impacts". The advice provided by ICES is widely recognized as scientifically sound and considered the authoritative source for EU fisheries which sets quotas based on a robust management strategy evaluation that incorporates ICES precautionary measures. The precautionary measures include factors such as fish population abundance, status, and the overall impact of fishing on the ecosystem. The sandeel fishery management prioritizes the preservation of sandeel populations consumed by predators, aligning with the needs of the ecosystem. To ensure food availability

for all sandeel predators, the sandeel natural mortality is predicted and set at a sufficiently high level, in line with ecosystem-based advice. The ICES advice recommends reducing fishing pressure when the sandeel stock falls below safe biological limits, such as the MSY trigger for long-lived stocks and Bescapement for short-lived stocks. For sandeel, the ICES MSY strategy, known as the Bescapement strategy, aims to maintain a specific amount of fish (Bescapement) in the sea for the subsequent spawning season, rather than applying a constant fishing mortality rate. By avoiding excessive fishing pressure on large biomass and leaving smaller biomass unfished, this management strategy minimizes density-dependent declines in sandeel recruitment and mitigates potential impacts on other species. The Bescapement level ensures less than a 5% risk of negatively affecting recruitment in the following year. Furthermore, the biomass is predicted while considering the consumption of sandeel by fish, seabirds, and marine mammals, ensuring that natural predator mortality takes precedence over fisheries mortality. If achieving Bescapement becomes unattainable in a particular year, the closure of the fishery is recommended. Additionally, in years of exceptionally high recruitment, fishing mortality is capped to reduce pressure on large year classes. This management strategy aims to minimize density-dependent declines in sandeel recruitment, as well as the potential impact on other species, by avoiding excessive fishing pressure on large biomass and leaving smaller biomass unfished.

Question 3: Is there any further evidence that should be considered in terms of the potential benefits or value of the preferred option that could be considered?

Comments:

EFFOP appeals the Scottish government to adhere to the available scientific evidence, which demonstrates that there is no clear evidence of negative or positive effects resulting from the closure of forage fisheries. Moreover, EFFOP recommends that the Scottish Government carefully evaluate the stringent certification procedures established by third parties such as the Marine Stewardship Council (MSC) when assessing the sandeel fishery's commitment to minimising its impact on the ecosystem.

The scientific evidence provided in the Scottish consultations report is inconclusive, as exemplified by the quote: 'Therefore, predicting the effect of further fishery closures on sandeel abundance and their availability to marine top-predators is difficult, as the effect of the closure could be concealed by other sources of mortality. This could be reflected in the data following 2000, as other factors such as environmental forcing or high natural mortality rates may influence sandeel abundances irrespective of anthropogenic pressures' (Poloczanska et al., 2004)". These limitations in the available scientific evidence underscore the challenge of fully understanding the effects of fisheries closures on predator demography. For species like guillemots, razorbills, and puffins, Serale et al. (2023) demonstrated there is actually no clear evidence of negative or positive effects resulting from forage fisheries or their closures.

The MSC certification process thoroughly evaluates the sandeel fishery's adherence to ecosystem impacts under Principle 2, which emphasizes the management of fishing operations to sustain the ecosystem's structure, productivity, function, and diversity. The sandeel fishery received a positive evaluation during the MSC certification, surpassing the required threshold of 80 with a score of 82.3. This indicates that the fishery's impact on the ecosystem is minimal. Detailed scientific justifications for the positive evaluation of sandeel and Norway pout, in terms of their ecosystem impacts, can be found in the MSC certification report titled "MSC Final Report and Determination for DFPO and DPPO North Sea, Skagerrak and Kattegat Sandeel, Norway Pout, and Sprat fisheries" (MSC, 2017).

The combination of the rigorous MSC certification process and adherence to the scientifically grounded ICES advice provides compelling evidence to support the claim that the current management of the

sandeel fishery is both precautionary and in harmony with the ecosystem's needs. It is worth noting that ICES is currently working on establishing a benchmark for the sandeel advice with the goal of completing it next year. In light of this ongoing process, we highly recommend maintaining the status quo and refraining from making any alterations to the current EU management strategy until the updated ICES advice has been released. This approach ensures that any decisions regarding the management of the sandeel fishery are based on the most up-to-date and comprehensive scientific assessments and recommendations provided by ICES. Ultimately, the decision should be based on a thorough assessment of the scientific evidence (ICES), stakeholder consultation, and the pursuit of sustainable management strategies that strike a balance between environmental conservation and the socio-economic needs of the affected communities.

Question 4: Is there any further evidence that should be considered to demonstrate any impact on island communities?

Comments:

EFFOP appeals the Scottish government to thoroughly consider the dual ramifications, encompassing both economic and ecological aspects, that will impact the island communities.

There is a limited or negligible likelihood of any direct positive outcomes or improvements in the ecosystem or other aspects resulting from the full closure of industrial sandeel fishing in Scottish waters within the North Sea. This is primarily due to the fact that the existing management practices already adhere to the ICES ecosystem-based advice, which takes into account the ecosystem's needs and ensures sustainable fishing practices. Therefore, implementing a complete closure would not yield any additional benefits beyond what is already being achieved through the current management approach. We refer to your own quote from the consultations evidence "Therefore, predicting the effect of further fishery closures on Sandeel abundance and their availability to marine top-predators is difficult, as the effect of the closure could be concealed by other sources of mortality".

Question 5: Do you have any comments on the assumptions made in the partial Business and Regulatory Impact Assessments (BRIA) concerning the costs and benefits of the option?

Comments:

The European Market Observatory for Fisheries and Aquaculture Products (EUMOFA) has recently unveiled its 2023 analysis regarding the production of fishmeal and fish oil. Notably, this study highlights the UK's continued presence as one of the foremost importers of fishmeal and fish oil produced within the EU. Consequently, any decline in European fishmeal and fish oil production carries significant implications for both the UK and Scotland, underlining the interconnected nature of this industry and its potential impact on these regions.

European sandeel fishing has historically been pivotal for the global fishmeal market, supporting industries reliant on fish-based products. An abrupt cessation of this practice could disrupt supply chains, impact jobs, and set off a chain reaction affecting local economies - including in Scotland. To provide clear context of its expected impact, a landing of 100,000 tons sandeel contributes to production of 120,000 tons of farmed fish every year.

The production of fishmeal and fish oil has been significant, forming a cornerstone of the global fishmeal market and supporting various industries. The potential loss of this vital fishmeal production source is highly concerning, particularly due to its unprecedented impact on food security, especially concerning farmed salmon production which has a huge role in the growing demand for sustainable protein.

Fishmeal and fish oil are vital components in aquaculture feeds, Fishmeal and fish oil are essential sources of limited nutrients like methionine and the omega-3 fatty acids, EPA, and DHA. The decline in fishmeal and fish oil availability across Europe because of the closures of Scottish waters to the Sandeel fishery is expected to disrupt the supply chain for farmed salmon, posing a challenge to European and Scottish food security.

Question 6: Do you have any comments on the SEA Environmental Report

Comments:

EFFOP recommends that the Scottish Government carefully assess the potential detrimental effects on the ecosystem resulting from the proposal to shutter the sandeel fishery in Scottish waters. This matter warrants thorough consideration due to its potential ecological consequences.

Shutting down sandeel fishing may shift fishing efforts to other species. Such imbalances in the ecosystem can have far-reaching consequences, disrupting the delicate interplay of species and causing biodiversity loss. The latter because birds feed mainly on 0-group sandeels and density dependent factors often reduce sandeel recruitment and makes 0-group sandeels less abundant in unfished sandeel populations.

The proposal must consider the potential ecological consequences, particularly regarding seabird populations and the broader ecosystem.

A holistic approach to fisheries management is crucial, one that takes into account the complex interactions within the marine ecosystem and ensures the long-term sustainability of both the sandeel population and the species that depend on them, including seabirds. It is important to strike a balance that safeguards the interests of all stakeholders while preserving the integrity of the marine environment.

The proposed changes by the Scottish Government regarding the sandeel fishery, which deviate from the established management approach aligned with ICES bescapement advice for short-lived species, would also have a detrimental impact on international earnings derived from this commercially significant resource. These “proposed measures overlook the crucial importance of maintaining sustainable practices and optimizing economic benefits associated with the sandeel fishery”. It is essential to recognize the interconnectedness between ecological considerations and the financial viability of this resource, thus avoiding any actions that may jeopardize international earnings generated by the sandeel industry. Furthermore, it is important to emphasize that sandeels play a vital role in feeding the world's population. As a key ingredient in feed production, sandeels enter the food chain and contribute to the development of healthy food products. Scottish salmon production, for instance, relies on access to quality raw materials for feed, and the availability of sandeels plays a significant role in meeting this demand. While direct consumption of sandeels for human consumption has faced challenges, their indirect use in farming contributes to providing nutritious food not only for the UK population but also for the global community. In the face of the climate and biodiversity crisis, it is imperative to reduce pressure on terrestrial environments and focus on CO2-friendly food sources. Harvesting marine renewable resources provides a sustainable and precautionary alternative to land-based production. Sandeel, as a renewable resource, offers the opportunity to harvest protein and omega-3 fatty acids without the need for freshwater, fertilizers, land space, and with minimal CO2 emissions. Removing this fishery would only shift the burden of sustainably sourcing protein onto other less environmentally friendly alternatives.

EFFOP are open to discussing potential improvements to the present management practices, we believe that the closure of Scottish waters for sandeel fishing is disproportionate to the limited, if any, gains it

would bring to the marine ecosystem and biodiversity. Instead, it is more effective to focus on refining and enhancing the existing management approach to ensure the long-term sustainability of the sandeel fishery while minimizing environmental impacts.