

The conservation of seabirds and nature at sea requires urgent and coherent action on forage fish protection and management

Following the UK Government's consultation on a sandeel fishing ban in English waters¹, BirdLife Europe calls on the EU and OSPAR Contracting Parties to adopt a precautionary and coherent ecosystem approach to the protection and management of forage fish in the wider region.

Seabird populations across the North-East Atlantic are struggling, confronted with cumulative impacts from a range of threats including climate change, bycatch in fisheries, predator invasive non-native species and pollution. In particular, the combined effects of climate change and fishing pressure have reduced the availability of key prey species and led to population declines² and widespread breeding failure³ in the Greater North Sea region.

The recent, unprecedented outbreak of Highly Pathogenic Avian Influenza (HPAI) has escalated the pressure on seabirds, killing tens of thousands of adults and chicks in the UK alone⁴ and causing mass mortality events in other parts of Europe, such as the Netherlands, Germany, and France⁵. In addition, the rapid and large-scale deployment of vital offshore renewables will put further pressure on seabirds and the marine environment.

Seabirds are excellent indicators of the overall health of the sea. Given their current poor status, and in the face of mounting threats, there is an urgent need to take immediate action on tractable pressures. Measures to protect the very food that seabirds and other marine predators depend on is an important and necessary step to help build the resilience of their populations and of wider marine ecosystems.

1. Consultation on spatial management measures for industrial sandeel fishing: <https://www.gov.uk/government/consultations/consultation-on-spatial-management-measures-for-industrial-sandeel-fishing>

2. Dierschke, V., Marra, S., Parsons, M., French, G., Fusi, M. 2022. Marine Bird Abundance. In: OSPAR, 2023: The 2023 Quality Status Report for the North-East Atlantic. OSPAR Commission, London. Available at: <https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/marine-bird-abundance>

3. Frederiksen, M., Dierschke, V., Marra, S., Parsons, M., French, G., Fusi, M. 2022. Marine Bird Breeding Productivity. In: OSPAR, 2023: The 2023 Quality Status Report for the Northeast Atlantic. OSPAR Commission, London. Available at: <https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/marine-bird-breeding-productivity/>

4. Jarvis, R. (2022) The UK's largest avian flu outbreak has left millions of birds dead – and scientists extremely concerned. Available at: <https://www.nationalgeographic.co.uk/environment-and-conservation/2022/09/the-uks-largest-avian-flu-outbreak-has-left-millions-of-birds-dead-and-scientists-extremely-concerned>

5. EFSA (European Food Safety Authority), ECDC (European Centre for Disease Prevention and Control), EURL (European Reference Laboratory for Avian Influenza), Adlhoch, C, Fusaro, A, Gonzales, JL, Kuiken, T, Marangon, S, Niqueux, É, Staubach, C, Terregino, C, Aznar, I, Muñoz Guajardo, I and Baldinelli, F, 2023. Scientific report: Avian influenza overview September–December 2022. EFSA Journal 2023; 21(1):7786, 63 pp. <https://doi.org/10.2903/j.efsa.2023.7786>

The imperative for improved protection and management of forage fish

Forage fish are low trophic level, small to medium-sized fish that contribute significantly to the diets of many marine species and to the health of marine ecosystems. Sandeels, in particular, are widely recognised as an integral component of North Sea marine food webs and are a crucial food source for top predators including seabirds, marine mammals and several commercial fish species^{6,7}, whilst other species such as herring and sprat also contribute to seabird diets in the region.

Seabirds are sensitive to the depletion of forage fish and the need for sufficient set-aside of prey biomass has been highlighted⁸. The unprecedented growth of renewable energy developments and increasing impacts on the marine environment from climate change, on top of existing pressures such as fishing, necessitate an expanded approach to addressing seabird prey availability across a wider sea area to build and maintain population resilience.

The EU must take a coherent approach to the protection and management of forage fish

In light of the imperative to act and given the precarious state of seabird populations in the North Sea, the European Commission and the EU Member States have a key role in supporting the recovery of seabirds in the region through the effective protection of forage fish. The EU has a responsibility to act independently and cooperatively to effectively protect forage fish through fisheries management, protected site development, marine spatial planning, and research.

In the context of the EU-UK cooperation, BirdLife Europe calls on the EU to:

- Engage constructively with the UK Fisheries Administrations and support measures proposed in UK waters to manage the industrial sandeel fishery in the interests of conservation of the North Atlantic and its marine resources.
- Cooperate in the framework of the UK-EU Trade and Co-operation Agreement (TCA) to minimise harmful impacts of fishing on the marine ecosystem and preserve marine biological diversity⁹ by implementing effective solutions that give greater emphasis to the need for a more precautionary approach to the management of sandeel across the Greater North Sea, and other forage fish populations, in light of the significant benefits for the health of marine ecosystems.
- As a priority, cooperate with the UK in the role of advice requestors to the International Council for the Exploration of the Sea (ICES) to ensure that scientific advice for the setting of Total Allowable Catches (TACs) for forage fish, particularly sandeels in the immediate term¹⁰, takes full account of:
 - the needs of seabirds and other marine predators.
 - zones where fishing is not permitted to prevent a concentration of fishing effort.
- In the absence of such advice from ICES, the EU and UK should take a more precautionary approach to setting catch limits for forage fish species and agree to set TACs below the headline advice.

6. Engelhard et al. (2014) Forage fish, their fishers and their predators: who drives whom? Available at: <https://doi.org/10.1093/icesjms/fst087>

7. Ransijn, J.M., Booth, C. & Smout, S.C. (2019). A calorific map of harbour porpoise prey in the North Sea. JNCC Report No. 633. Available at: <https://data.jncc.gov.uk/data/c12c1b45-73ba-4402-a8f5-ec0275a72cf1/JNCC-Report-633-FINAL-WEB.pdf>

8. Philippe M. Cury et al. „Global Seabird Response to Forage Fish Depletion—One-Third for the Birds. *Science* 334,1703-1706(2011). <https://doi.org/10.1126/science.1212928>

9. TCA, Article 294(2)(e), as well as the Birds, Habitats and Marine Strategy Directives and international requirements

10. Dunn, E. (2021) Revive our Seas: The case for stronger regulation of sandeel fisheries in UK waters. https://www.rspb.org.uk/globalassets/downloads/documents/campaigning-for-nature/rspb2021_the-case-for-stronger-regulation-of-sandeel-fisheries-in-uk-waters.pdf

In the framework of the implementation of the EU Common Fisheries Policy, the EU Biodiversity Strategy including its protected area targets, and the recently adopted Action Plan to protect and restore marine ecosystems for sustainable and resilient fisheries¹¹, BirdLife Europe calls on:

- EU Member States to identify and designate marine areas and habitats that are important for forage fish species (e.g., spawning, nursery, and aggregation areas) and important marine areas for seabirds¹² and other marine predators through the establishment of Marine Protected Areas (MPA), and to effectively protect these sites by restricting or excluding activities that may have negative impacts and ensure proper monitoring and enforcement.
- EU Member States to require specific monitoring and reporting (e.g., Remote Electronic Monitoring (REM) with cameras, onboard observers) for fisheries targeting forage fish species as part of wider measures to improve the transparency of all fisheries.
- EU Member States to ensure that marine planning policies and processes adequately protect spawning and nursery grounds (essential fish habitat) of key forage fish species and that data on these areas is fully accounted for in marine spatial planning/consenting decisions. This is especially important for species such as sandeels and herring which are particularly sensitive to marine developments due to their dependence on specific seabed substrates¹³.
- EU Member States to minimise threats to seabird foraging areas from renewable energy developments by carrying out robust assessments to inform marine spatial planning and ensure decisions on the siting of new developments result in the least harm.
- The EC in its role as an advice requestor to ICES to request that the scientific advice on forage fish fully accounts for their role in marine food webs by incorporating the needs of seabirds and other marine predators as well as the impacts of climate change and environmental variation .
- The EU to agree TACs for forage fish species that do not exceed the scientific advice. In lieu of updated ICES advice that fully accounts for the role of forage fish in marine ecosystems, a more precautionary approach to catch limits for forage fish should be adopted by setting TACs below the headline ICES advice.

The joint imperative to act for nature in the OSPAR area

The OSPAR Convention is committed to ‘protecting and conserving the North-East Atlantic and its resources’. It is particularly relevant to forage fish management and conservation because it provides an important mechanism for collaboration between the EU, UK and other Contracting Parties on human activities that might adversely affect the marine environment. While programmes or measures cannot be adopted under OSPAR in relation to fisheries, the Convention makes clear that OSPAR obligations have continuing relevance for fisheries management.

In light of the imperative to act, and given the precarious state of seabird populations across the OSPAR area, BirdLife Europe calls on OSPAR Contracting Parties to:

- Collaborate to urgently implement coherent measures to address fishing pressure on key forage fish species in the OSPAR area.
- Agree with other OSPAR Contracting Parties ambitious and coherent measures to protect key forage fish species and their habitats within the OSPAR area (e.g., including through the designation of additional OSPAR MPAs).
- Promote the inclusion of the above measures as priority actions in the OSPAR Marine Bird Recovery Action Plan currently being developed.

11. https://oceans-and-fisheries.ec.europa.eu/policy/common-fisheries-policy-cfp/action-plan-protecting-and-restoring-marine-ecosystems-sustainable-and-resilient-fisheries_en

12. Areas identified as marine Important Bird and Biodiversity Areas (IBAs). See: <http://datazone.birdlife.org/site/ibacriteria>

13. van der Kooij, J., Campanella, F., Rodríguez Climent, S., (2021). Pressures on forage fish in Welsh Waters. Cefas Project Report for RSPB, 35 pp. <https://waleslink.org/wp-content/uploads/2022/03/2.-Pressures-on-forage-fish-in-Welsh-Waters.-Cefas-Project-Report-for-RSPB.pdf>

Underpinning evidence

Given their importance to marine food webs, it is essential to understand the health, status and pressures on forage fish populations to ensure they can be minimised and remediated. This requires investment in scientific research, including studies to:

- Monitor seabird diets and foraging behaviour to improve understanding of the importance of different forage fish species and stocks for seabird populations where this knowledge is currently lacking.
- Understand the status, distribution, and dynamics of forage fish populations and their ecosystem role to inform improved management, including for data deficient stocks through fish surveys and expanded marine monitoring.
- Understand the impacts of climate change and environmental variation on forage fish populations and on marine food-web dynamics.



Black-legged Kittiwake (*Rissa tridactyla*) ©Rollin Verlinde