The Baltic Coast Dialog

Transnational Objectives and Joint Recommendations to ban Bottom Trawling Activities in Natura2000 areas of the Baltic Sea

Throughout the project, and especially during the workshop dedicated to this topic "Fisheries management in Marine Protected Areas: Impacts and Regulation of bottom trawling"[1] (implemented 29th November 2024 in Berlin), as well as during the final project conference [2], the most recent developments and scientific findings were presented and discussed by experts and a wider audience.

The most important current publications and scientific findings on this topic are summarized below:

- two reports from environmental organisations quantifying the real costs of bottom trawling to environment and economy for Europe and the Baltic Sea,
- one legal evaluation and one informative paper regarding the legal, control and monitoring gaps contained in the existing normative frameworks within the EU and Germany and
- the results of 25 years of work of the Leibniz institute for Baltic Sea Research Warnemünde (IOW) on identifying, evaluating and quantifying effects of bottom trawling in the Baltic Sea, with emphasis on its comparison to protected and non-protected areas.

[1] https://www.baltic-coast-dialog.org/events/workshop-mpas/
[2] https://www.baltic-coast-dialog.org/events/conference-baltic-coast-dialog/

The latest report published by Seas at Risk, the Marine Conservation Society and Oceana (2024)[3] , which quantified bottom trawling in marine Natura 2000 protected sites in several EU countries, including the Baltic Sea region, highlight that bottom trawling occurs in 90 % of the Natura 2000 sites, designated under the Habitats Directive and aimed to protect sensitive areas in the seven analyzed countries (Denmark, Germany, Ireland, Netherlands, Portugal, Spain and Sweden) between 2015 and 2023. A total of 4.4 million hours of towed-gear fishing were recorded inside those marine Natura 2000 sites over that period. The report also evidences that Dutch (~45-50%, i.e. > 2 million hours) and German (~17% i.e. 730,245 hours) fleets accounted for the largest share of this activity, with trawling overlapping significantly with sandbanks, reefs and other seabed habitats of conservation concern. Finally, despite prohibition, this type of fisheries still takes place in sites designated under the Habitats Directive and thus undermining the well-being of these ecologically crucial and theoretically protected ecosystems. Major criticism is drawn to the lack of effective restrictions despite legal protection in Natura 2000 sites. Specifically for the Baltic Sea, this activity takes place under pelagic fisheries, and trawls are reported as an auxiliary gear type. In the Baltic Sea surveyed areas like Adler Ground (in Germany and Poland), Eastern Toenne Bank (Germany) and the Pomeranian Bay (in Germany) with Odra Bank (in Poland) evidenced high bottom trawling pressure, according to the study by the Leibniz Institute for Baltic Sea Research Warnemünde (IOW[4]).

In addition, WWF's report on bottom trawling in the Baltic (2020) [5] clearly indicates the costs of this fishing method not only from an environmental but also from a socioeconomical perspective. Losses and challenges for coastal fisheries and for the livelihoods of those depending on this, evidence that catches are mainly obtained by the industrial fisheries and in the praxis not allocated to the different sectors. In general, as the bottom trawling is regulated under the fisheries legislation (Common Fisheries Policy) rather than under the EU Habitats Directives (i.e. Natura 2000), control and monitoring measures are ineffective, resulting in poor conservation status. It is therefore important that measures at transnational level proposed by Denmark, Germany and Sweden for the restriction of fisheries in these sensitive areas are consequently implemented and adopted. In addition, the urge to do develop similar initiatives in other Baltic Sea countries is needed.

A legal evaluation (2023) [6] and an informative document (2023) [7] providing a legal opinion on the restriction of bottom trawl fishing in the coastal waters of the German Baltic Sea

[3] Seas at Risk, Marine Conservation Society and Oceana (2024). A quantification of bottom towed fishing activity in marine Natura 2000 sites. Brüssels.
[4] https://www.io-warnemuende.de/dammgf-ostsee-start.html
[5] WWF 2020. A sea under pressure: Bottom trawling impacts in the Baltic.
[6] DUH 2023 Rechtsgutachten über die Beschränkung von Grundschleppnetzfischerei im Küstenmeer der deutschen Ostsee zum Schutz des Ostseedorschs
[7] DUH 2023a Schutz des Ostseedorschs im Küstenmeer Rechtsgutachten zeigt notwendige Schritte auf

and for the protection of the eastern Baltic cod indicate that under the EU Habitats Directive (Articles 6(3)–6(4)), bottom trawling in Marine Protected Areas (MPAs) cannot be allowed unless it has been shown *not to adversely affect* the protected conservation objectives. If such proof is lacking — as is the case — permits are unlawful. To this day, required environmental impact assessments that indicate that bottom trawling doesn't adversely affect these areas of special protection, have not been conducted for any area of the Baltic Sea. Thus, actions should be focused on demanding the existence of such assessments; Its absence would legally justify a ban of bottom trawling in marine protected areas to enable populations of cod, other species as well as entire the ecosystems to recover.

One of the major messages presented by scientists during the second workshop and further discussed at the final conference was that there is limited available data and baseline information on the quantification of damage done by bottom trawling in general, including protected areas. Since 2000, the IOW [8], has conducted studies to better understand which are the effects of bottom trawling on the benthic seabed sediments and benthic communities**.** The studies demonstrate that bottom trawling occurs at comparable levels in Marine Protected Areas (MPAs) and reference sites in the German Baltic Sea, with reference areas showing just 1.7% higher activity. [9] The major effects of this fishery are the damage in the bottom sediments, concomitant CO_2 releases, resuspension of inorganic and organic nutrients, and shift in the biogeochemistry of the water column. As the bottom sediments and biota dependent on these ecosystems have very limited short-term recovery potential, long-term effects can be expected. Scientists highlighted that the urgent need to further evaluate these effects is to develop baselines that will bring light into the real effects of bottom trawling so that further management will support conservation, biodiversity protection, and provision of ecosystem services at least in MPAs. Furthermore, such information will also support MPAs' effectiveness.

Furthermore, the workshop discussions on this topic were extensive and organized around two main themes: the regulatory and policy landscape, and scientific insights and challenges. Based on these discussions, specific recommendations were developed and agreed upon to strengthen the protection and management of MPAs and Special Areas of Conservation (SACs).

Recommendations Based on Regulatory and Policy Landscape

Enhance enforcement of existing legislation (such as the Habitats Directive) by strengthening political commitment and allocating adequate resources to ensure the performance of environmental impact assessments of bottom trawling in the respective

[8] https://www.io-warnemuende.de/dammgf-ostsee-start.html
[9] https://doi.org/10.1016/j.scitotenv.2023.167551

areas, as well as effective monitoring, control, and potential prosecution of illegal bottom trawling within protected areas. Bridging the gap between legislation and implementation requires improved inter-agency coordination and investment in enforcement capacity.

A. **Streamline EU Decision-Making and Cross-Border Cooperation** by reviewing and simplifying the procedures within the Common Fisheries Policy and the joint recommendations process to enable timely and effective management decisions. Also increase cooperation and data sharing among Member States, both essential to address transboundary fishing activities and avoid "tragedy of the commons" outcomes in shared MPAs.

B. **Prioritize the development and implementation of MPA management plans** by accelerating the creation and enforcement of robust, science-based management plans for all designated MPAs. These plans should include measurable conservation objectives, ecological monitoring protocols, and clear enforcement mechanisms to ensure that MPAs function as genuine protection tools rather than "paper parks."

Recommendations Based on Scientific Insights and Emerging Challenges

C. **Address data gaps and expand research** on seafloor impacts by investing in targeted research to better understand the ecological impacts of bottom trawling on less-studied habitats such as sandy and muddy seabeds. Prioritize the development of robust baseline datasets and standardized monitoring protocols to facilitate meaningful comparisons with undisturbed control areas. Improved scientific understanding is essential for evidence-based management decisions.

D. **Integrate carbon considerations into fisheries management** by incorporating the carbon release effects of bottom trawling into fisheries assessments and policy frameworks. Given that up to 40% of the Baltic seafloor, and up to 100% in parts of the southern Baltic, is disturbed by maritime activities, management must adopt a holistic approach that aligns biodiversity conservation with climate mitigation objectives.

E. **Advance ecosystem-based stock assessment models** by modernizing traditional stock assessment methodologies by including environmental drivers, habitat quality, and the cumulative effects of all fishing activities. This approach will support a more accurate quota setting and promote long-term sustainability. Defining and adopting ecosystem indicators to measure seabed disturbance should be a central objective.

F. **Promote socioeconomic transition toward sustainable fisheries** by strengthening engagement with fishing communities to co-develop solutions that

reconcile conservation goals with economic realities. Support initiatives that create alternative income streams, promote sustainable fishing technologies, and encourage stewardship through education and “ocean citizenship.” Consider restricting bottom trawling in coastal waters to support small-scale fisheries and enhance local productivity.

Please see here workshop results and presentations.