FISHERIES AND PROTECTED AREAS

POLICY BRIEF NO.15 - MAY 2022

OVERVIEW

- The purpose of Marine Protected Areas (MPAs) is to restore and protect marine habitats and species. The UK's network of MPAs covers over a third of its waters, although the level of management varies significantly between different sites.
- Although not widespread, examples exist of effective collaborative management of MPAs involving statutory bodies, non-governmental organisations (NGOs), academic institutions, and fishers.
- The identification and management of MPAs would be improved by the availability of robust and comprehensive data on marine environments across the UK.
- There is a need for greater inclusion of fishers in the MPA designation and management process, to capitalise on their knowledge and capabilities.

This briefing summarises the outputs from the APPG on Fisheries open Parliamentary webinar, 22 February 2022. The meeting brought together speakers from a range of organisations across the UK, to discuss how constructive relationships could be formed between the fishing industry and those establishing and enforcing protected areas. This document is a synthesis of the discussions that took place.

BACKGROUND

Over the last few decades, Marine Protected Areas (MPAs) have become a prominent and increasingly-used mechanism in policy efforts to ensure the sustainable management of the UK's seas. The UK's MPA network comprises the following designations, which are used to protect different habitats and species (1):

- European Marine Site (EMS) - Special Protection Area (SPA) or Special Area of Conservation (SAC)
- Marine Conservation Zone (MCZ)
- Site or Area of Special Scientific Interest (SSSI)
- Nature Conservation MPAs and national MPAs (Scotland only)
- Ramsar wetland sites

374 MPAs have been designated by England and the devolved administrations, together spanning 38% of the UK's waters (2). Designations are subject to public consultation.

The level of restrictions applied to each MPA can vary. For example, they may prohibit all fishing activities, or only the use of certain fishing gears. Management and monitoring of MPAs may be undertaken by statutory bodies in collaboration with NGOs, academic institutions, and other non-statutory bodies.

FISHER'S PERSPECTIVE

Ensuring constructive collaboration in MPA designation and management processes

There is concern in the fishing industry that previous MPA designations have not always been based on verifiable data on features or stocks, and that buy-in from fishers has not been sufficiently sought. A sense of unfairness has also been felt when certain areas have been closed to fishing while other activities have been permitted to continue. Finally, fishers feel there is a mistaken assumption that they do not care about sustainability, even though this is essential to the continuance of their livelihoods.

Buy-in from fishers could be achieved by:

- Implementing co-management approaches, which would enable fishers to experience the benefits of MPAs firsthand. This would also foster willingness to use technology such as vessel monitoring systems (VMS).
- Basing designations on justifiable and verifiable features of the marine environment and stocks within it.
- Assessing and accounting for other human and natural impacts on the area.
- Treating different users of the sea equitably, which could include zonal management.
- Re-evaluating MPAs whose designations may not have been based on robust data. (3)

REGIONAL CASE STUDY

The role of IFCAs in supporting fisheries policy and inclusive MPA management

The Inshore Fisheries and Conservation Authorities (IFCAs) are statutory regulators with duties established in the Marine and Coastal Access Act 2009 (IFCA guidance). Their purpose is to achieve sustainable inshore fisheries, and to protect the marine environment via conservation objectives. Their memberships comprise local community members including councillors, and those with marine knowledge, such as fishers, environmental groups, and marine researchers. 10 regional IFCAs manage the seas to 6 nautical miles around the English coast.

Between them, the IFCAs manage a total of 122 MCZs and EMSs (4). To ensure compliance with EU law, in 2012 the IFCAs engaged with fishers to conduct assessments of the impacts of all existing and potential commercial fishing activities on the habitats or species which the EMSs had been designated to protect (5, 6). Where risks were identified, more detailed assessments were carried out to determine the degree of protection required by each site in relation to fishing effort, and different fishing activities. As a result, the IFCAs introduced new byelaws to ensure direct protection for MPA features where needed. For example, 4,000 kilometres of inshore MPAs are now permanently closed to bottom-towed gear (4).

A CLOSER LOOK:
POOLE HARBOUR

Home to a clam and cockle fishery, and managed by Southern IFCA, Poole Harbour provides an example of effective and collaborative MPA management. Currently 45 permit holders are permitted to dredge for the shellfish, subject to spatial, temporal, and gear restrictions (7). A clear process exists for regular review of these restrictions, including consultations and a feedback mechanism for stakeholders.

An annual stock survey has shown improvements in the stock structure, while impact on habitats and species during sensitive periods has been reduced. As a result of this "effort limitation", fishers' catches have increased in value, from £2-3 per kilogram in 2014 to £5 per kilogram in 2018. Since March 2018, the fishery has been Marine Stewardship Council-certified (8).

Enforcement of byelaws involves the use of officers, boats, and drones, but Southern IFCA considers the effectiveness of the MPA restrictions to be grounded in the communication, participation, and facilitation that has been carried out with local fishers (5). Poole Harbour is also considered to be an unusual case in that a significant amount of illegal, unreported and unregulated (IUU) fishing previously occurred there, which incentivised legitimate fishers to support MPA restrictions. Since 2015, IUU fishing in Poole Harbour has declined by 95% (8).

NATIONAL CASE STUDY:

JNCC MPA Fisheries Management Toolkit

In April 2018, a two-year project was launched to develop the MPA Fisheries Management Toolkit (9, 10). Funded by the European Maritime and Fisheries Fund, it was led by the Joint Nature Conservation Committee (JNCC) in partnership with Natural England, the MMO, Bangor University, and the National Federation of Fishermen's Organisations (NFFO). The project arose following recognition of uncertainty surrounding the impacts of fishing in some offshore areas, and the need for stakeholder buy-in and inclusive decision-making in the management of MPAs.

The project sought to engage key stakeholders, namely active fishers, environmental non-governmental organisations (eNGOs), policy makers, advisors, and academics.

Three main outcomes were delivered:

1. Shared definitions for "input into decision making" and "participatory processes".

2. The MPA Fisheries Management Toolkit and associated resources, which is publicly available on the JNCC website (Tool). The Toolkit lays out the key elements to consider in establishing a participatory approach to implementing management in MPAs, provides a framework for effective stakeholder engagement and governance, and aims to support the building of capacity within the fishing industry to contribute to the management process (Tool). (9, 10)

3. Dissemination of the Relative Benthic Status (RBS) model and Benthic Impacts Tool developed by Bangor University, which takes into account the effects of fishing on the seabed to predict management outcomes.

Few UK offshore MPAs currently have developed management regimes (Mason), and while collaborative management is being used in many places, there are few examples of application of the approach set out in the Toolkit. When designating offshore MPAs in Scottish waters, the Scottish Government ran stakeholder workshops which included fishers and NGOs (Scot timeline), although co-management following designation was not an explicit aim. The JNCC wishes to see more adoption of co-management, while noting the obligation of regulators to meet their legal responsibilities which may need to be balanced against other stakeholders' needs (9, 10).

NGO CASE STUDY:

Blue Marine's work with low-impact inshore fisheries

The NGO Blue Marine Foundation (Blue Marine) works worldwide. Over the last 10 years, one of its UK-based projects has involved communicating the sustainability of the under-10 metre fleet, by using local "demonstrator sites" to show that low-impact fishing can co-exist with conservation. These demonstrator sites are the Lyme Bay Reserve, the Berwickshire MPAs, the Jersey Marine Park, and the Sussex Kelp Restoration Project (11).

Blue Marine has sought to involve fishers in the collaborative management of these protected areas, as well as to establish research partnerships and seafood market support for low-impact fisheries. This has involved:

- Identifying common goals for fisheries and conservation.
- Facilitating dialogue between fishers, marine management, science, and conservation groups.
- Establishing voluntary Codes of Conduct for low-impact fishing within sustainable limits.
- Inclusive development of management measures.

The research partnerships have focused on improving understanding of fish stocks and biology, with Blue Marine often paying fishers to carry out research. The NGO also ensures that it feeds back results of the research to the fishers.

Seafood market support has been provided in the form of funding ice boxes, chillers, lobster stores, and transport, and developing brands with which to market low-impact fish and obtain a premium for them. For example, the Reserve Seafood brand is used to market fish harvested from the Lyme Bay Reserve (12).

However, the NGO has found that challenges remain in encouraging UK consumers to purchase seafood caught in the UK, and in particular to pay a premium for seafood from low-impact fisheries. (11) Lessons learned from the projects will be included in Blue Marine's forthcoming publication, 'BLUEprint for Marine Protected Areas: a guide to establishing and managing marine protected areas', a global guide to establishing protected areas in collaboration with fishers.

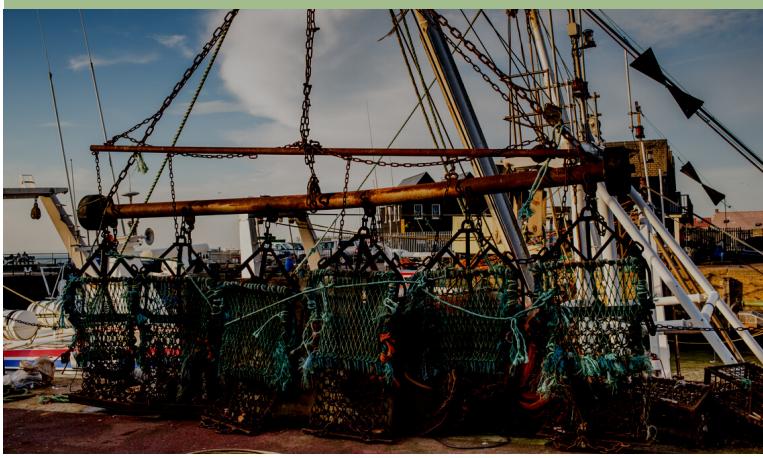
ACADEMIC CASE STUDIES:

Menai mussel and Ramsay Bay Marine Nature Reserve fisheries

The Menai mussel fishery is embedded within a Marine Nature Reserve in the Menai Strait, North Wales. It is a "territorial user right" fishery, which is rare in the UK, but common elsewhere (13, 14). One advantage of a fishery existing within an MPA is that conservation legislation requires sufficient data on the fishery's impacts on which to base management strategies and decisions (13). The Menai fishery is Marine Stewardship Council-certified (15), with the mussel beds enhancing the area's biodiversity by supporting substantially more birdlife than would otherwise exist there (16).

The scallop dredge fishery within the Ramsay Bay Marine Nature Reserve off the Isle of Man, which is separate to the UK, was once closed after the collapse of scallop stocks there (17). When it was reopened, fishers were granted licences with conditions attached that required them to participate in scientific surveys and set quotas each year. The fishers jointly set their own levels of fishing effort with scientists. GPS trackers are used to provide precise data on where fishing was occurring, and fishers systematically collate catch and effort data in logbooks. These data sources support the calculation of catch in relation to fishing effort, and provide estimates for scallop biomass (18). Further, the fishers' decision to limit their activities to a small geographical area means there has been very little impact on the marine environment, and the fleet's fuel consumption is six times lower than comparable fisheries. Overall, consistently sustainable harvests over recent years have given the fishers confidence that the management system is working, creating a positive feedback loop (17).

To the researchers involved in these fisheries, the success of their management measures demonstrates that comprehensive data about habitats and fish stocks can only be obtained in collaboration with fishers, although applying this approach to more UK fisheries depends on government investment (13). One action that could be taken would be to roll out Remote Electronic Monitoring (REM) technology widely. However, REM comes with caveats: it cannot be fitted on all vessels; there may be barriers to overcome with regards to accessing data; and without engagement with fishers, it could be perceived as principally a surveillance and enforcement tool. (13)



CONCLUSIONS

There is general recognition among stakeholders that processes for the designation and management of MPAs must include the fishing industry and facilitate genuine collaboration. However, the fishing industry's experience is that this has rarely been achieved in practice. There is also a perception among members of the industry that some designations made in the past were based on insufficient data on impacts, and as such may have been over-precautionary. Future designations should be required to be based on comprehensive and verifiable data, which in principle would enable a more effective balancing of social, economic, and environmental needs, and would garner buy-in from fishers.

MPAs do not necessarily need to exclude all fishing activities. Several case studies of small-scale fisheries operating within MPAs in the UK and the Isle of Man demonstrate that co-management involving fishers, NGOs, academics, and policy makers can be highly effective in delivering environmental, economic, and social gains. Essential to the success of these case studies has been the trust placed in the fishers to participate in data collection and management decisions.

Funding and economic conditions also strongly affect the capacity and willingness of fishers to support and participate in MPA co-management. Fishing fleets across the UK represent a rich source of vital data on marine environments and fish stocks, and this could be capitalised on with government investment. The government and industry could also encourage consumer demand for seafood sustainably harvested from MPAs through effective communication and marketing.

Widespread support exists for the role and importance of MPAs in supporting healthy and productive seas. Priorities now are to ensure that sufficient data are available for all UK marine environments where fishing is taking place, and that fishers are enabled to be meaningful co-partners in the management of MPAs.

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