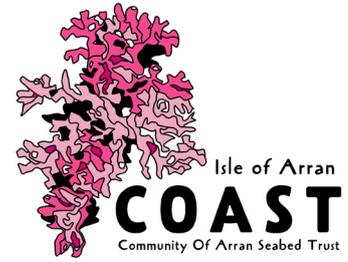


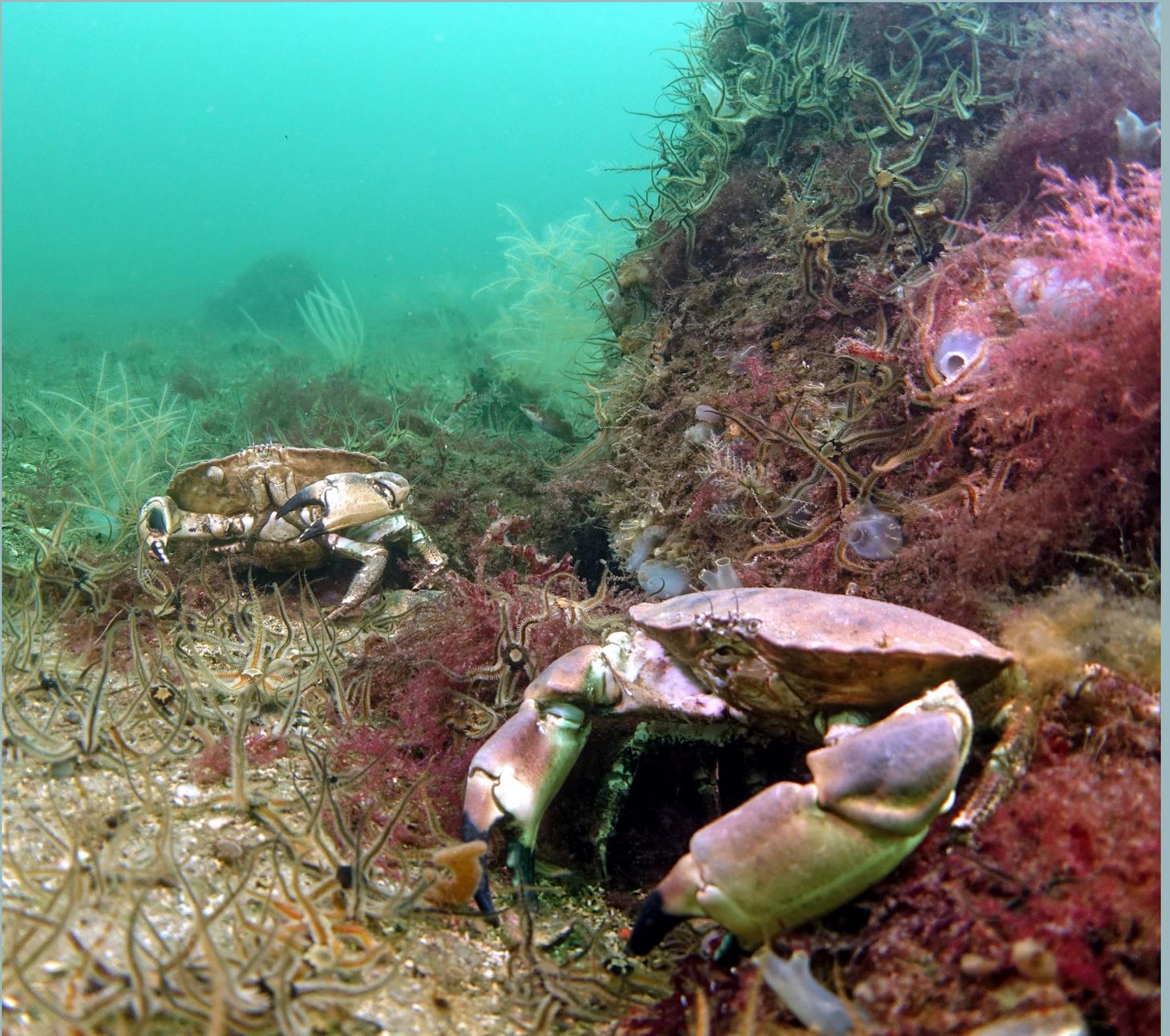


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Strictly Protected Marine Protected Areas: International Policy and National Practice

Saving our Seas through Law Policy Brief Series | Briefing No. 5



Strictly Protected Marine Protected Areas: International Policy and National Practice

The natural world is under unprecedented pressure from human activity. At the global level, the fifth Global Biodiversity Outlook published in August 2020 reported that existing patterns of activity are causing significant biodiversity loss and it recommended that ‘efforts to conserve and restore biodiversity need to be scaled up at all levels.’¹

Policy Recommendations

- The United Kingdom, with the support of the Scottish Government, should push for the inclusion of a target for the establishment of strictly protected areas as part of the Post-2020 Global Biodiversity Framework under the Convention on Biological Diversity.
- Early in the next Parliament, the Scottish Government should introduce legislation conferring new powers for the establishment of strictly protected Marine Protected Areas in Scottish waters, with a view to designating at least 10% of Scottish waters as strictly protected Marine Protected Areas.
- The process for designating strictly protected Marine Protected Areas should make use of existing best practice in terms of ecological site selection principles but also support stakeholder participation.
- Legislation must include proportionate sanctions for violations of strictly protected Marine Protected Areas and the enforcement capacity of Marine Scotland Compliance must be adequate to ensure that any new legislation for the protection of the marine environment can be appropriately enforced.

Whilst there are some success stories in Scotland, the 2020 marine assessment carried out by the Scottish Government revealed that many aspects of the marine environment remain under significant pressure from human activity, particularly extractive activities, such as oil and gas exploitation and fishing.² Significant areas of habitat loss have been recorded in the past decade around Scotland’s coasts³ with high levels of disturbance to seabed habitats predicted.⁴

These impacts have occurred despite the increased attention paid to the protection of the marine environment since the introduction of a new legislative framework for the territorial sea and inshore waters under the Marine (Scotland) Act 2010, which included powers

to designate nature conservation marine protected areas (MPAs).⁵ Twenty-three such MPAs have been designated to date⁶, alongside other MPAs aimed at protecting species and habitats listed under EU legislation. However, the protection offered by these MPAs is limited. Almost all MPAs in Scotland are multi-use MPAs, meaning that activities are allowed to continue provided that they do not affect the conservation status of the specific marine features which are protected by the designation.

Multi-use MPAs offer a weaker form of protection compared to other types of MPAs. The International Union for the Conservation of Nature (IUCN) has identified six categories of MPAs (see Annex), ranging from MPAs promoting the sustainable use of the oceans to

strict nature reserves and wilderness areas where all uses are limited in order to ensure protection for the site as a whole.⁷ The protection of entire ecosystems through these forms of strictly protected MPAs offers a distinct approach from the traditional focus on single species or habitat conservation and management.⁸ The purpose of this briefing is to consider the arguments for introducing strictly protected MPAs as a component of the Scottish MPA Network, as well as the means for doing so. It uses the terminology ‘strictly protected MPA’ to refer to an MPA which excludes all extractive, destructive and depositional use and only allows other activities at levels that would be non-damaging. Such areas can also be called fully protected MPAs, highly protected MPAs, or marine reserves.

What are the benefits of strictly protected Marine Protected Areas?

Strictly protected MPAs are known to provide an important refuge for marine species. According to the National Oceanic and Atmospheric Administration (NOAA), the United States government agency responsible for regulating marine activities, ‘biomass, the size and density of organisms and the richness or diversity of species all increase within marine reserves’⁹ and there is evidence that the benefits of strictly protected MPAs can spill-over to surrounding sea areas, particularly when stocks are depleted.¹⁰ Because all extractive activities are prohibited within a strictly protected MPA, biodiversity is likely to recover at a greater rate compared to other areas of the ocean. Furthermore, it has been noted that ‘there is an international body of evidence demonstrating that

those [MPAs] where extractive uses are excluded have benefits for fisheries in surrounding areas, and in many cases for communities, and for sustainable tourism, and other economic activities within and outside the [MPA].¹¹ Strictly protected MPAs also offer 'insurance against environmental or management uncertainty'¹², an important consideration given the significant pressures on our marine environment due to a range of factors, including climate change. Indeed, strictly protected MPAs can offer nature-based climate change mitigation solutions through the carbon capture and storage potential of marine habitats.¹³ Whilst the benefits of strictly protected MPAs increase with the size of the reserve, scientific evidence also supports the fact that 'even small reserves have positive effects.'¹⁴

There is evidence of the benefits of stricter protection for marine areas from one example within Scottish waters, namely the Lamlash Bay no-take zone off the Isle of Arran. All fishing in the Lamlash Bay no-take zone was first prohibited in 2008, with the objective of conserving biological diversity in the area. The no-take zone is now part of the South Arran Nature Conservation MPA.¹⁶ Research carried out by the University of York since 2010 shows that there is nearly twice the cover of living organisms within the no-take zone compared to a nearby area that is still open to fishing. Organisms within the no-take zone are also larger and more long lived. Specific studies on the scallop population have shown a 3.7 fold increase in scallop density in the no-take zone, with the scallops being older and producing more eggs. Surveys of European lobsters undertaken between 2012-2018 have also recorded significantly increased numbers. The lobsters in the no-take zone are also larger and, like the scallops, produce more eggs compared with the lobsters sampled outside the no-take zone.¹⁷ Globally, the Lamlash Bay no-take zone, proposed and campaigned for by the local community, is held up as a success story for community-led marine conservation.¹⁸

Current international guidance relating to strictly protected Marine Protected Areas

MPAs have become a key tool at the international level for promoting the protection of the marine environment. The 1992 Convention on Biological Diversity (CBD), to which the United Kingdom is a party, requires that states establish, as far as possible and appropriate, systems of protected areas.¹⁹ Whilst the legal obligation itself provides flexibility as to the types of measures

that must be taken, guidance adopted by the CBD Conference of the Parties (COP) encourages ambitious action to give effect to this duty. In particular, best practice endorsed by the COP suggests that networks of MPAs should include both multi-purpose MPAs and MPAs which exclude extractive uses and remove or minimise other human pressures.²⁰ To this end, Decision VII/5 of the CBD COP is explicit in calling for 'an appropriate balance' between MPAs where extractive uses are allowed and those where they are prohibited.²¹

Nor is it only the CBD COP that has called for states to establish strictly protected MPAs. According to IUCN:

'the best scientific information tells us that, to protect biodiversity and to manage resources, we must establish representative MPA networks across 20 to 30 per cent of our seas and oceans. These networks may have different uses or levels of protection within them, but all should include reserves or no-take areas...' (emphasis added)²²

To this end, the IUCN General Assembly, composed of both government and civil society representatives, has called for at least 30% of MPAs to have no extractive activities, as part of a broader encouragement for states to protect at least 30% of their seas through MPAs.²³

Whereas strictly protected MPAs do not expressly feature in the targets set by the CBD COP in its 2010-2020 Strategic Plan, on-going negotiations are addressing what measures are necessary in order to replace those targets and offer strengthened protection to biodiversity over the next decade. The zero draft of the Post-2020 Global Biodiversity Framework, produced in early 2020, suggested that states should seek to '[p]rotect sites of particular importance for biodiversity through protected areas and other effective area-based conservation measures, by 2030 covering ... at least [30%] of land and sea areas with at least [10%] under strict protection' (emphasis added).²⁴ The details of this target are still to be agreed and whilst many states expressly support a target relating to strictly protected areas²⁵, some states have suggested focussing the target on only 30% of coverage by protected areas and other effective area-based conservation measures.²⁶ The European Union is one of the actors encouraging a target of strict protection and it has already included a commitment in its latest Biodiversity Strategy to ensure that 'at least one third of protected areas – representing 10% of EU land and 10% of EU sea – should be strictly

protected.'²⁷ In the updated zero draft of the Post-2020 Global Biodiversity Framework released in the summer of 2020, however, the strict protection target had been removed.²⁸ All is still to play for in the run-up to the 15th COP, which is due to take place in 2021. The United Kingdom has the opportunity to play an important role in these negotiations and to support the adoption of a target for strict protection.

Recommendation:

The United Kingdom, with the support of the Scottish Government, should push for the inclusion of a target for the establishment of strictly protected areas as part of the Post-2020 Global Biodiversity Framework under the Convention on Biological Diversity.

Best Practice from other Jurisdictions

New Zealand was one of the first countries to promote strictly protected MPAs, with its well-established network of marine reserves that have been operating for a number of decades. Under the Marine Reserves Act 1971, the Governor-General may, following a public consultation, declare any area as a marine reserve, which shall then be 'preserved as far as possible in [its] natural state.'²⁹ A number of activities are directly prohibited by the legislation³⁰ and it is an offence to damage, injure, interfere with or disturb any marine life or any of the natural features in a marine reserve (emphasis added).³¹ The public may, however, continue to access marine reserves for educational purposes, subject to conditions, and marine reserves shall also be available for the purposes of scientific study.³² Whilst the legislation does not prescribe the size of marine reserves, the majority of the marine reserves designated to date are relatively small in size, with the majority being under 10 km². Nevertheless, they are held up as prime examples of marine nature conservation, delivering benefits to science and biological diversity.³³

No-take zones have also been increasingly employed by Australia. Within the Great Barrier Reef Marine Park, no-take zones (also referred to as Green zones) have increased from less than 5% of the total area of the Marine Park to more than 33%.³⁴ The process of increasing the coverage of no-take zones within the Marine Park involved a careful balance of scientific input and public consultation, supported by strong leadership on the part of the Great Barrier Reef Marine Park Authority.³⁵ Evidence would seem to suggest that this increase in strict protection has had a positive effect on marine biodiversity after only a decade.³⁶



Strictly Protected Marine Protected Areas in Scotland?

If Scotland is to truly 'raise the bar for global leadership' as it has indicated it wants to do in its December 2020 Statement of Intent on Biodiversity³⁷, the establishment of strictly protected MPAs in line with international policy and best practice is an important step to be taken.

It is likely that the introduction of strictly protected MPAs in Scotland would require new powers for the Scottish Ministers. Under existing legislation, Scottish Ministers may designate nature conservation MPAs for the purpose of 'conserving marine flora and fauna or conserving marine habitats ... or features of geological or geomorphological interest'³⁸, but the designation order must state the particular protected features.³⁹

Moreover, the protection offered by the legislation is premised upon the prevention of harm to specified features.⁴⁰ In contrast, strictly protected MPAs demand full protection for all aspects of the marine environment within the boundaries of the protected area, with most activities being prohibited, subject to limited exceptions. This distinct ethos requires a different legislative approach. Thus, it is suggested that a new power to establish strictly protected MPAs is introduced in legislation, either in a Bill dedicated to Strictly Protected MPAs, or as part of a broader legislative framework dealing with biodiversity protection. The legislation should set out the process of designating strictly protected MPAs, as well as the consequences of designation. Furthermore, in line with the EU Biodiversity Strategy, the Scottish Government should include a commitment in its next Biodiversity Strategy to designate at least 10% of Scottish waters as strictly protected MPAs within a reasonable period of time. The selection of areas for protection should be guided by existing best practice principles. While ecological requirements for site selection will need to play a prominent role in selection criteria, lack of perfect evidence should

not be used as a reason to delay the designation of strictly protected MPAs.

Recommendation:

Early in the next Parliament, the Scottish Government should introduce legislation conferring new powers for the establishment of strictly protected Marine Protected Areas in Scottish waters, with a view to designating at least 10% of Scottish waters as strictly protected Marine Protected Areas.

Research suggests that strictly protected MPAs work best when they are widely supported by relevant stakeholders.⁴¹ Selection of strictly protected MPAs will undoubtedly be met with mixed reactions from different stakeholder interests and it will be necessary to ensure an appropriate range of interests are taken into account. It is inevitable that the exclusion of activities from greater areas of Scottish seas will have impacts on coastal communities who are dependent on the use of marine resources and spaces for their livelihoods. However, research undertaken in relation to the Lamlash Bay no-take zone indicates that such areas can be viewed as a benefit to a local area, including local businesses⁴², and consequently have potential to provide improved community wealth-building opportunities. Procedural safeguards to ensure a transparent and inclusive consultation process should be built into the legislative framework for strictly protected MPAs. In doing so, the considerable body of evidence from Scotland about the social and economic benefits of recovered and well-managed marine ecosystems needs to figure prominently in guiding decision-making and the social and economic impact assessments of the proposals

Recommendation:

The process for designating strictly protected Marine Protected Areas should make use of existing best practice in terms of ecological site selection principles but also support stakeholder participation.

Any increase in marine protection must be accompanied by steps to ensure that Marine Scotland Compliance, as the relevant enforcement agency, has adequate equipment and powers to take appropriate enforcement action. In particular, legislation should make provision for proportionate sanctions, including both fines and possible confiscation of equipment used in any violation of the relevant rules. Moreover, the establishment of strictly protected MPAs may call for additional

investment in inshore capabilities on the part of Marine Scotland Compliance, together with prompt application of appropriate technology, such as remote electronic monitoring of vessels. The introduction of inshore protection patrols in 2019 was a welcome addition to the enforcement capacity of Marine Scotland Compliance, although the rigid-hulled inflatable boats used for this purpose are not exclusively deployed on enforcement tasks and there is arguably a need for an increase in such equipment in order to ensure better protection for all of Scotland's inshore waters on a year-round basis.

Recommendation:

Legislation must include proportionate sanctions for violations of strictly protected MPAs and the enforcement capacity of Marine Scotland Compliance must be adequate to ensure that any new legislation for the protection of the marine environment can be appropriately enforced.

Conclusion

The natural environment is one of Scotland's greatest assets. Scotland is renowned for its wild landscapes, particularly its lochs, moors and mountains, but its rugged coastline and expansive seas are also home to a rich variety of marine species and habitats. Wilderness at sea is not visible in the same way as on land, but by protecting key marine sites from human interference, we can take an important step towards recovering and conserving marine ecosystems for the benefit of future generations. The Scottish Government has itself recognised that in order to tackle the current biodiversity crisis, 'strong and bold actions' are needed in order to bring about 'transformative change'.⁴³ Strictly protected MPAs are one tool that have been demonstrated by scientific evidence to provide significant benefits for marine biological diversity and their establishment is directly supported by international best practice. Scotland should take steps to join the growing group of nations to employ this important tool.



Annex: IUCN MPA Management Categories⁴⁴

Category	Title	Objective
Ia	Strict nature reserve	Strictly protected for biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values
Ib	Wilderness area	Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition
II	National park	Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities
III	Natural monument or feature	Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove
IV	Habitat/species management area	Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category
V	Protected landscape or seascape	Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values
VI	Protected areas with sustainable use of natural resources	Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims

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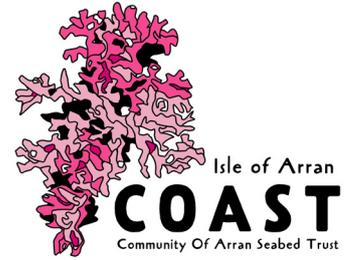
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This policy brief was written by Prof James Harrison.

The views expressed in the policy brief are those of the authors and they cannot be ascribed to any supporting organisations.

This policy brief was produced in collaboration with the Community of Arran Seabed Trust. It is part of a series which analyses the legal framework for the designation and management of marine protected areas. It focuses on the legal framework in Scotland, but draws upon broader obligations in international law with a view to recommending additional measures or reforms in order to strengthen the protection that is offered to rare and fragile marine ecosystems.

The Saving our Seas Through Law Policy Brief Series includes:

- Briefing 1: The Establishment and Expansion of the Scottish Marine Protected Area Network
- Briefing 2: The Enforcement of Fishing Restrictions in Marine Protected Areas
- Briefing 3: Using Marine Spatial Planning to Support Marine Protected Area Management
- Briefing 4: Legal Tools for the Management of Marine Protected Areas in Scotland
- Briefing 5: Strictly Protected Marine Protected Areas: International Policy and National Practice

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