

The Royal Society of Edinburgh

Developing Proposals for Coastal and Marine National Parks

The Royal Society of Edinburgh (RSE) is pleased to comment on proposals for coastal and marine national parks. These comments have been compiled with the assistance of members of the RSE 2004 committee of inquiry into the Future of the Scottish Fishing Industry, under the direction of the General Secretary, Professor Gavin McCrone.

The development of proposals for coastal and marine National Parks in Scotland is to be welcomed and it would be the first such action in the UK (and possibly in Europe). Insufficient attention has been paid in the past to the integrated management of marine areas which provide a wide range of goods and services for the benefit of both local and non-local populations. Recent policy statements relating both to the protection of the coastal and marine environment and to the management of marine resources have expressed an aspiration for integrated management. However, their practical impact has been weakened by the lack of any clear means of implementation. The Scottish Executive's announcement of its intention to create Scotland's first coastal and marine National Park by 2008 provides the means to achieve a degree of integrated management on a regional scale. It comes at a time of intense interest and speculation concerning marine spatial planning throughout the UK.

The proposal could also be the first large scale example of marine spatial planning to be developed in UK waters. Lessons can be learned from a variety of sources, including previous experience with the designation and management of marine conservation sites in Scottish waters, the ongoing pilot project for marine spatial planning in the Irish Sea commissioned by Defra, as well as from overseas examples of marine national parks. As a pioneering move in the UK, however, proposals for coastal and marine National Parks will raise several important issues which cannot be resolved simply by reference to examples from around the world. They must be considered in the particular context of Scotland's marine environment and in relation to the specific aims and objectives of the relevant Scottish legislation, including not only the *National Parks (Scotland) Act 2000* but also the proposed Marine Bill which is expected to be presented to the Scottish Parliament in the near future. It is important that certain of these issues be examined in advance of any specific proposals for National Park designation.

The challenges of marine National Parks

Marine National Parks in Scotland will to a significant degree comprise working landscapes, fashioned over time by the activity of local populations, and will include living communities in which a significant minority of employed persons will be in jobs related directly or indirectly to the exploitation of natural resources, including fishing.

The main challenge for the National Park Authority will be to balance the potentially conflicting demands for action to manage three interrelated sets of resources:

- the conservation of the marine environment, including its habitats and ecosystems;
- maintaining access to basic natural resources such as fisheries;
- enhancing public enjoyment of the core resources of the tourism and recreation sectors, which include marine biodiversity (ecotourism), high quality marine and coastal landscapes and uncongested space.

The issue of public access and amenity raises some particular problems. Public access to coastlines is a major issue; public access to the seas is not an issue compared with public access to land. This could weaken one strand justifying marine National Parks. There may be particular problems with the promotion of, and provision for, the public's enjoyment of the National Park's assets through tourism and outdoor recreation. The 'successful' promotion of a marine National Park (measured in terms of increasing visitor numbers) brings with it the risk of eroding the very resources on which the attractions of the National Park are based. Moreover, the spillover effects from visitor pressure may also impact on sensitive marine ecosystems and disrupt fishing

activities. Assessing the 'carrying capacity' of the marine environment and managing visitor pressure may prove difficult especially where conventional control measures (eg the provision and withdrawal of public access, the diversion of visitors to more robust alternative locations through the provision of tourist facilities) are inappropriate. An advantage which some potential Scottish marine National Parks may enjoy is that their comparative remoteness from major centres of population will act as a natural filter for visitor numbers, especially in the case of day visitors.

Until quite recently the level of provision for marine nature conservation in Scotland through the statutory designation of protected areas has been poor. There are no National Nature Reserves (NNRs) and the Sites of Special Scientific Interest (SSSIs) have been confined to intertidal areas and fringing habitats. The only designations referring specifically to sub-tidal areas are the 30 or so marine Special Areas of Conservation (SACs) established under the European Habitats Directive, 1992. Except for the Moray Firth (151,342 ha), Solway Firth (30,709 ha) and Berwickshire Coast SACs (10,169 ha) on the east coast, and the Firth of Lorn SAC (20,975 ha) on the west coast, marine SACs cover relatively small areas of the very extensive Scottish inshore waters. Prior to the *National Parks (Scotland) Act 2000*, there was no specific statutory provision for the protection of areas of high landscape value: the 40 or so National Scenic Areas identified by Scottish Natural Heritage (SNH) - of which roughly half include areas of coastline - have no statutory purpose. Where appropriate, it is intended that these National Scenic Areas should be incorporated into the National Park. SNH has also identified 29 non-statutory Marine Consultation Areas, covering around 112,000 ha, describing areas which merit special attention in respect of the quality and sensitivity of the marine environment and where SNH would expect to be consulted in respect of any significant development proposals.

There will undoubtedly be pressure for marine National Parks to be used to create marine reserves. Although, under the terms of the 2000 Act, marine National Parks are not specifically intended to plug the gaps in the provision of marine protected areas, they should be capable of creating a framework within which existing (and future) conservation designations can be managed in a more coordinated and integrated way. The establishment of a National Park will in no way alter the aims, objectives and legal requirements of any conservation designation included within the boundaries of the Park. However, the National Park plan can be expected to strengthen the level of protection afforded to such sites and to take account of the Scottish Biodiversity Strategy and the Biodiversity Action Plans developed for a number of marine habitats and species. Moreover, the plan will itself be subject to a Strategic Environmental Assessment, thus ensuring that due consideration is being given to environmental concerns.

Inclusion of marine areas within a National Park will also bring into focus a number of generic problems which do not appear to be properly catered for within the Articles and Schedules of the 2000 Act and for which there are no precedents within the UK. Among the more important are:

- **legal**, including the Crown ownership of the foreshore and sea bed, the nature and extent of public rights of access, the effects of common use rights in respect of fisheries; and the special legal provisions concerning crofting and udal land.
- **administrative**, especially in the light of the absence of local authorities and community councils with statutory competence to take action in sub-tidal areas.
- **contingent legislation**, especially in relation to sea fisheries and the provisions of the *Inshore Fishing (Scotland) Act 1984*, as amended.
- **the delineation of National Park boundaries**
- **approaches to the management of marine National Parks** and the development of marine spatial planning.

A management strategy for a marine National Park will also be required to embrace a number of maritime activities, namely:

- (i) fishing and fish farming;
- (ii) water based recreation, ranging from those with low level environmental impacts (sea bathing, canoeing, yachting) to those which may disturb marine wildlife (whale and dolphin watching) or breach the essential tranquillity of the National Park (power boating, water skiing etc);
- (iii) exploitation of seabed resources (aggregates; oil and gas);
- (iv) renewable energy (offshore wind farms; wave and tidal power generation);
- (v) commercial navigation (shipping lanes; ferry routes).

Some practical issues

The Marine Spatial Planning Consortium contracted by Defra to undertake a pilot study of marine spatial planning for the Irish Sea identified a number of separate issues facing the establishment of a marine spatial

planning system (MSPPC, 2005). Most of these have some relevance for the designation and management of marine National Parks. These issues can be distilled into perhaps five basic questions which SNH will need to address:

- (i) at what scale should a marine National Park be established and how should its boundaries be determined?
- (ii) how may stakeholders be most effectively involved in the selection and delineation of a marine National Park and subsequently in the development and implementation of the National Park plan?
- (iii) what approaches should be adopted and what planning tools are appropriate to the management of activities within the National Park plan?
- (iv) how should marine National Park planning policies be policed, monitored and evaluated?
- (v) how should the functions of the National Park authority be integrated with those already being discharged by other statutory and non-statutory bodies?

Some preliminary comments are provided in respect of Qs (i), (ii) and (iii).

Scale and boundary selection

There is no ideal size for a marine National Park. Because of the dynamic nature of the sea, a marine National Park should be created on a significantly larger scale than on land without necessarily increasing the burden of planning or raising the management and administrative costs by a significant amount. There is, however, no compelling prima facie reason why marine National Parks should be any larger or smaller than their land based counterparts. The principal criteria for deciding the geographical scale of a marine National Park should be the coherence of the designated area, ecologically, economically and in terms of local perception, and the ease with which the National Park aims can be fully realised through a single, well co-ordinated strategic management plan. It is, therefore, likely that marine National Parks in Scotland will vary quite markedly in size.

The more important consideration is the basis on which the boundaries of the marine National Park should be determined. Examples from around the world reveal a variation in the seaward extent from 3 nm to the outer limit of the 200 mile Exclusive Economic Zone. For practical considerations the choice of 6 or 12 nm territorial limits would avoid problems of overlapping jurisdictions in respect of fisheries. This inshore zone would contain the majority of areas suffering the highest levels of pressure on marine resources, most areas of high environmental sensitivity and much of the area liable to intensive competition for marine space. In Scotland, and particularly on the west coast, these territorial limits prove particularly generous as the baselines used to calculate the 6 and 12 mile limits already enclose sea lochs and firths. Thus, for example, the whole of the Minch lies within the baseline.

To landward the choice of appropriate boundary is perhaps more difficult, and marine areas of national importance may not always have coastal areas of similar importance alongside them. For the purpose of marine spatial planning in general, use of the mean low water spring (MLWS) mark might be considered the most appropriate as this marks the seaward limit of the statutory land use planning system in Scotland. However, for more effective management of marine ecosystems the mean high water springs (MHWS) would be more sensible as it would allow the incorporation of the extensive and important inter-tidal zone. A third possibility also commends itself in the light of the purpose of National Parks set out in Article 1 of the 2000 Act. The inclusion of a strip of coastal land (not less than 1 km or more than 5 km in width) would allow for the inclusion of (i) the essential features of the coastal landscape (cliffs, sand dunes, wetlands etc) which make up much of the visual appeal of a marine National Park and (ii) key elements of the basic service provision (roads, harbours, access points etc) crucial to the management of tourism and recreational activities and for the control of visitor pressure. This third alternative would seem to offer the most sensible solution for ensuring that the National Park authority has sufficient scope for managing the Park to the best possible effect.

Finally, in the absence of any existing statutory boundaries, the lateral boundaries of a marine National Park are best defined on the basis of ease of recognition. They are most likely, therefore, to take the form of straight lines connecting clearly identifiable landmarks on the coast. Although there will be a temptation to define national parks using this pragmatic approach it will have the disadvantage that it will not deal with highly dynamic and mobile features of the marine environment, such as rapid geographic shifts in the distribution of pelagic fish species.

Stakeholder involvement

Because the decision to establish a National Park and the subsequent actions arising from the National Park plan are likely to have important consequences for those who live and work within the National Park boundary, it is vital that local interests are fully informed and involved in the decision making process at all stages from the

initial choice of location through to the preparation and implementation of the plan, and eventually to the monitoring and review of local policies. The involvement of local communities and interest groups is a crucial means of ensuring the transparency and legitimacy of decision making and it may prove difficult to stimulate strong support for the National Park unless local community and stakeholder groups are involved from the earliest possible time and allowed to develop a sense of shared ownership of the proposal. In this context, financial resources might be put into the professional facilitation and management of consultations from initial proposals through to final implementation and beyond. A study by the Marine Protected Area (MPA) Centre of the National Oceanic and Atmospheric Administration (NOAA) found that this was critical in successful MPAs during a review of MPA experience in the USA.

The nature and form of the public engagement will vary with the different stages of the project. Prior to the designation of the Park it must seek both to inform and solicit the opinions of local interests through public meetings and focus groups and regular contacts with local stakeholder organisations. Post-designation, local community and stakeholder representation will presumably be incorporated formally through membership of the National Park Board and the relevant advisory committees but the need will remain for a wider dialogue with the local population.

There are, however, some particular problems concerning the representation of local interests both formally and informally in relation to marine National Parks. The most obvious of these is how does one define what is meant by 'local community', especially if the decision were taken to delimit the National Park by reference to either MLWS or MHWS. Again, because Local Authorities have limited functions and powers in respect of sub-tidal areas, their role in the designation, management and administration of a marine National Park is likely to be somewhat subdued. This calls into question whether the detailed provisions of Schedule 1 of the *National Parks (Scotland) Act 2000*, setting out the constitution of National Park authorities are wholly appropriate for the governance of marine National Parks (eg nomination of Board members by LAs, residence qualification etc). In part, these anomalies would be removed if the boundaries to the National Park were to include a significant area of coastal land and smaller coastal settlements.

While it may be comparatively easy to list the different sectoral interests which will need to be actively informed and consulted throughout the decision making process, it may prove more difficult to identify which organisations truly and fully represent those interests. Take the example of the fisheries sector. The 2000 Act (Article 31(3)) makes clear that in relation to a proposal to designate a marine National Park, consultations must include 'persons representative of the interests of those who carry on commercial fishing operations in the part of the area consisting of the sea'. Interest in the inshore waters may be shared between local and non-local boats and between potentially conflicting static and mobile gears, sometimes targeting the same species. Inshore fishing interests can be fiercely territorial in attitudes and behaviour and strong rivalries between groups of local fishermen may be reflected in adversarial relations between their representative organisations. Moreover, there is a dichotomy of representation between local associations, often reflecting small boat interests but usually quite weak in terms of membership and organisational ability, and the more substantial and organisationally robust regional associations which tend to have a higher level of membership of the more mobile, larger boats. This may lead to a perceptual problem in the representation of local fishing interests which may have some significance when it comes to appointments to the National Park Board or one of its Advisory Groups and in achieving a balanced opinion on local fishing matters. The National Park authority's first point of contact with the local fishing industry should be with the inshore management committees currently being established.

Management strategies for a marine National Park

Fisheries are of course a critical issue. National Parks should have some central core features regarding environmental protection that must be achieved, but be flexible about the means that are used to achieve them. Indeed learning by doing is likely to be a critical aspect of success. This suggests that flexibility and adaptability of the boundaries of marine National Parks, and of uses within them is important. This is an unusual challenge compared to terrestrial National Parks, where boundaries once set are difficult to change. Some aspects of marine environment are indeed relatively fixed, such as benthic habitats, shellfish, and fixed boundaries and rotational use (fallowing) may be useful concepts (though climate change causes complications in the longer term). Other species are highly mobile, and aspects such as spawning areas may also change, and protection measures may need to follow the shoals rather than be based on fixed areas. There is a counter argument that providing a large enough fixed area (not necessarily contiguous) is protected, this will be enough, and offers simplicity. Successfully considering the pros and cons of these will likely determine the success or otherwise of the application of the National Park concept to Scottish coastal and marine waters.

Offshore fisheries by larger boats may be more flexible in where they fish, allowing them to work around National Park boundaries, hopefully to their medium and long term benefit as National Parks enhance stocks. Short term damaging displacement of fishing effort, and short term economic impact of preventing this, is an important issue to be resolved. Inshore small scale fishing and protected areas are problematic where fishers

have established their marks and there is informal co-operation not to fish on each others marks. Protected areas are then very bad news for those whose marks fall inside protected areas, and good news for the rest. Zonation of areas and permitted use will be an important aspect of any successful implementation of National Parks, and it should not concentrate solely on (more to the point allow itself to be characterised as) no-take zones. The spatial separation of recreational activities and fishing could also prove difficult to implement and enforce and this issue could perhaps be more satisfactorily addressed through strict codes of conduct alongside the zonation of areas.

In general, inshore fishing interests should have little to fear from the establishment of a marine National Park. In terms of its coexistence with the requirements for marine conservation, static gear operators have a relatively benign impact on marine ecosystems except for comparatively minor problems arising from lost gear (ghost fishing) and damage to highly sensitive habitats (e.g. maerl beds) from abrasive contact with creels. Problems are more likely to occur with the use of towed gears and especially in relation to scallop dredging. However, with management schemes like that introduced in 2000 for the Sound of Arisaig SAC and developed through close consultation with stakeholders, the inshore sector has demonstrated its willingness and ability to negotiate effective voluntary agreements to protect threatened habitats.

While there are concerns from the fishing industry over indiscriminate permanent restrictions on access to important fishing areas, these have been worked through in the past and there are around 40 prohibitions presently in place under the *Inshore Fishing (Scotland) Act 1984*, many of which are seasonal, and there is an excellent example of the use of zoning to find a voluntary solution to conflicting gear use in the case of the Loch Torridon Management Plan which defines creel only, trawl only and mixed gear fishing zones for *Nephrops*. The management plan also includes a conservation code limiting effort in the creel only zone.

Selection of possible sites for marine National Parks in Scotland

In terms of the range of possible locations for the creation of marine National Parks, in Scotland there is a wealth of possibilities, including the Outer Hebrides, Orkney, Shetland and the Moray and Dornoch firths. The final selection will probably rest on a combination of prioritising the four basic aims of a National Park (Article 1) and the willingness of the local population to embrace the concept of a marine National Park on their doorstep, although there will need to be clarity as to whether or not a marine feature of outstanding national importance will be key to any designation.

There are several locations along the west coast of Scotland that offer great potential for the establishment of marine National Parks in terms of (i) the diversity of marine wildlife; (ii) outstanding coastal landscapes; (iii) a strong maritime culture; (iv) reasonable accessibility; (v) good levels of provision for tourism and outdoor recreation; and (vi) a coherent identity. If size were no obstacle, the essence of a Scottish marine National Park would be captured in the creation of a Minches National Park stretching from the Butt of Lewis and Cape Wrath in the north to Barra and Ardnamurchan Point in the south - a geographically coherent area of inshore waters fringed by some of the most spectacular coastal landscapes in Scotland. If a smaller and administratively less complex area were preferred, then several candidate marine National Parks, exhibiting broadly the same qualities, would readily identify themselves:

- (a) Northern Minch, incorporating the coastal parts of the North West Sutherland and Assynt NSAs and the adjacent seas;
- (b) Central Minch, including the coastal parts of the Wester Ross and Trotternish NSAs and adjacent seas;
- (c) an area to the south west of Skye, including the coastal parts of the Ardnamurchan and Knoydart NSAs, the Small Isles NSA and adjacent seas;
- (d) Firth of Lorn and the waters around the islands of Mull, Coll and Tiree; and
- (e) the waters surrounding Colonsay, Islay and Jura, including the coastal parts of the Knapdale NSA.

Although these regions on the west coast are arguably some of the parts of Scotland's coastline that are least in need of national park status, they may be some of the simplest in which to establish the *modus operandi* of marine national parks. Almost any permutation of areas along Scotland's west coast, including both the inner and outer Hebrides, would amply satisfy the stated criteria for designation.

Alternatively, marine national parks could be established in more challenging circumstances where they may achieve greatest value if they include regions in which there is a clear need for coordinated management from the coastal zone to the open sea and where some of the most difficult conflicts arise between industrial use, recreation and nature conservation value. This would suggest that the Firth of Clyde and the Firths of Forth and Tay could be appropriate candidates.

Conclusion

We welcome the initiative to develop marine National Parks but it will be important that the initiative should be seen within the context of the larger strategy for marine spatial planning at both the level of the UK and the devolved administrations, each of which could choose to take fundamentally different approaches to the issue. The National Parks should be contained within, and not be an alternative to, a broad planning strategy and need to be seen as a tool that will achieve better management of Scotland's marine assets as a whole. Therefore, marine National Parks should probably not be viewed as an end in themselves and it would not be advisable to introduce them without first understanding and defining the role they will have across the whole of marine environmental management. This is necessary because, unlike the terrestrial system where the concept of National Parks is well established, there is generally much greater large-scale ecological and economic connectivity across the marine system. An argument against marine National Parks is that they will erect false boundaries that will divert attention and resources into specific regions at the expense of others. If this were to happen, we must be clear about why marine national parks are necessary, what the consequences might be and whether there are alternative approaches that could deliver better long-term value.

Additional Information

In responding to this inquiry the Society would like to draw attention to the following Royal Society of Edinburgh responses which are of relevance to this subject: *National Parks (Scotland) Bill* (March 2000); *Conservation of Salmon and Sea Trout* (August 2000); *Sixth Environmental Action Programme* (May 2001); *The Nature of Scotland* (June 2001); *The Future of the Common Fisheries Policy* (June 2001); *The Environmental Effects of Marine Fisheries* (September 2002); *Strategic Framework for Aquaculture* (January 2003); *Nature Conservation (Scotland) Bill* (June 2003); *Towards a strategy for Scotland's biodiversity* (June 2003); *Inquiry into the Future of the Scottish Fishing Industry* (March 2004) and *Developing a Strategic Framework for Scotland's Marine Environment* (July 2004).

Copies of the above publications and further copies of this response are available from the Policy Officer, Dr Marc Rands (email: mrands@royalsoced.org.uk) and from the RSE web site (www.royalsoced.org.uk).

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