

Sound of Barra pSAC Consultation: Response of the Scottish Association for Marine Science¹

1. Overview and summary

This document summarises the considered view of SAMS regarding the proposal to create a Special Area of Conservation (SAC) in the Sound of Barra under the European Habitats Directive (92/43/EEC). Over its 126 years as an independent institution, SAMS has conducted several studies in and around the region, including recent work with the local community, and considers itself fully competent to express an opinion. While the site may comply with the criteria specified in the letter of the legislation we express concerns on whether or not the process and management arrangements follow the spirit of the Habitats Directive and the UK's commitment to following ecosystem-based management as expressed in the Malawi Principles on the Convention for Biological Diversity. Adherence to these Principles would require a much clearer statement on community consultation and engagement, and evidence of a more transparent designation process. We see an opportunity for an exemplar co-management regime that would help achieve the SAC in spirit and letter and ensure that local concerns are addressed to the benefit of the entire social-ecological system.

2. Our interpretation of the legislation

The Habitats Directive (the Directive) is currently the only effective instrument available in the UK to ensure the protection of key habitats and species and thus to contribute to the creation of a global network of marine protected areas by 2012 as envisioned in the 2002 Johannesburg Declaration and endorsed by bodies such as OSPAR. Compliance with the Directive is an obligation, not an option. The Directive has been designed to give primacy to the protection of key features on land and sea. In practice, interpretation and implementation has steered away from an 'ecosystem approach' that considers humans as a part of the system. Article II(3) of the Directive states that 'measures taken shall take account of economic, social and cultural requirements and regional and local characteristics'. Given that the current designation process is based solely upon the significance of the features, effort usually focusses on gathering evidence and benchmarking it against other sites and potential sites and this is assumed to be a technical task conducted by experts using scientific methods. Although we acknowledge that management planning is not a requirement under the Directive, and we are aware of the existence of ECJ case law to the effect that only the scientific case should be considered for designation of sites, effective biodiversity conservation nevertheless requires management planning and this involves the engagement of local people. This step is often

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left until the technical process is completed. Unless local people are involved in evidence gathering and fact-finding from the outset, they may already feel alienated to the proposal and suspicious and hostile towards it, undermining any conservation gains established by protection.

We believe that the spirit of the Directive is about pragmatic end-to-end planning and sustainability which recognises humans as an integral part of the ecosystem rather than a linear approach that has led to huge conflicts in some places and an overall failure to achieve the desired goal. Our interpretation of the spirit of the Directive is based on the following:

- The Directive is underpinned by the Convention on Biological Diversity (CBD) which, since the Malawi workshop in 1998, has been interpreted with an understanding of the interconnection of humans and nature in an ecosystem: “Ecosystems are complex, non-linear and the outcomes of processes often show time-lags. Further properties of ecosystems are discontinuities, thresholds, resilience and interconnectedness of which humans are part. Since ecosystems are dynamic, they contain elements of surprise and uncertainty. Management needs to be adaptive to allow for testing of management policies and emphasizes learning by doing” (Malawi workshop 1998, 5).
- The introductory text of the Habitats Directive itself that states the aim is ‘to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements, and [this Directive] makes a contribution to the general objective of sustainable development’.
- Sustaining Life on Earth (2000), an attempt to translate the CBD into more reader-friendly text, recognises that “in each ecosystem, living creatures, including humans, form a community, interacting with one another and with the air, water and soil around them” (p2). Also: “Our cultural identity is deeply rooted in our biological environment. Plants and animals are symbols of our world...” (p6).
- The ecosystem approach, embodied in the umbrella Marine Strategy Framework Directive, acknowledges this shift in thinking and should be part of any consideration.

The Sound of Barra process is a classical linear approach. The consultation document includes carefully researched arguments about the value of the site but it pays little regard to future management strategies and stakeholder interests and the situation in the region has, unfortunately, already become highly polarised. Such polarisation has the potential to undermine the very conservation objectives that the legislation is trying to pursue.

3. SAMS' Competence in the consultation

SAMS has accumulated considerable knowledge and expertise in the region but systematic studies in the Sound of Barra have been limited. SAMS holds intertidal survey data on Barra from the 1930s, 1950s and 1970s and has conducted survey work on physical aspects of the rocky coasts around Barra over the past decade (though the recent work is not in the Sound itself). Studies on the bottlenose dolphin (*Tursiops truncatus*) community in the Sound of Barra have been carried out by SAMS staff since 1995. This has given us key information on the population based upon an annual census in the summers of 1995, 1998, 2006-2011. Detailed work on diet, seasonal movements and

the range of this group outside of the Sound/South Uist coast has not yet been conducted. SAMS have collaborated with the University of St. Andrews to assess the genetic status of this group of dolphins and from 2010 to 2013 SAMS-SMRU Ltd are running a PhD study on these and the other west-coast bottlenose dolphins including seasonal monitoring of presence in the Sound of Barra using acoustic recorders. Regarding our human social science knowledge, recent work has been carried out with the local community on Barra to explore the social aspects of the SAC designation process and we believe this work to be unique in the region.

4. The scientific case for designation

We have reviewed the site selection justification supplied by SNH. The document makes a strong case for designation although the data presented are limited and the references sparse. The presence of a large area of maerl is particularly significant as this is an important habitat for a number of species, some of which are commercially exploited. Maerl is very slow growing and even when dead is an excellent habitat. It is quite fragile however and loses its functionality if compacted. Scallop dredging in particular, is incompatible with maerl conservation (and with sea grasses of course). This is not the only area of maerl worthy of consideration: the Sound of Harris is another excellent site and no doubt local people would wish to see a comparative study of the pros and cons of the two sites.

An important factor could be the dolphin population, providing there is clear empirical evidence that this part of their range must be protected in order to alleviate significant threats. Though the population is small, their persistence over at least 15 years and presence of calves (and the survival of some to sub-adults) suggests that it is viable. As for harbour seals, protection of the haul out sites is entirely appropriate but the argument that this justifies protection of the entire area is relatively weak compared with a focus on managing direct threats.

A key factor in site designation could be how the different elements of the system interact to form a functional and resilient ecosystem. The (not unreasonable) assumption is that the presence of key features of the system are indicators of its functionality and representativity. There is a very limited understanding of the role of local people in this system; levels of harvesting, implications for the ecosystem etc. People are part of the system, potentially in a similar manner to crofters in the machair but with the key difference that its habitats are largely invisible to them and that technological development has the potential to damage habitats in some cases. Large multi-dredge scallopers from the outside are particularly destructive to sensitive habitats for example and may undermine legitimate local economic interests. A more sophisticated understanding of the social and economic drivers is needed, particularly the spatial and geographical intensity of activities and drivers that impact the protected features.

5. The key social issues: management and trust

While the letter of the Directive may be complied with by designating the relevant features in the Sound of Barra, unless the area is effectively managed with the support of the local community, then there is a real risk that the ecosystem approach (managing the ecosystem with humans as an

integral part of that ecosystem) will not be achieved. A concrete example of this is the case of the bottlenose dolphin population in the Moray Firth, which led to the Moray Firth being put forward as a candidate SAC in 1996. The designation of the SAC encouraged local fishermen to turn to dolphin tourism as people became increasingly aware of the existence of the animals. Competition between the tour operators became so intense that relationships broke down to the extent that restraining orders had to be taken out between certain operators. In addition, after the SAC boundaries were drawn, the known areas used by the dolphins shifted to include a far wider area, reducing the relevance of the spatial designation and the degree of protection the dolphins as a population received from the SAC. These changes in dolphin distribution took over a decade to develop and could not have been predicted when the protected area was proposed (Wilson 2008). Thus, compliance with the letter of the Directive in fact led to a situation where the spirit of the legislation, was not achieved.

Conflicts such as the one described above have the potential to arise where humans (in particular local communities) are not considered as part of an ecosystem, and are dealt with in a static and linear approach which ranks humans after natural species and features and which is at odds with the dynamic nature of an ecosystem. Current research on coastal bottlenose dolphins illustrates the dynamic nature of the ecosystem, recognising that while coastal populations may appear resident in the short term, they may be temporally and spatially dynamic at decadal and centennial scales (Wilson 2008).

The polarisation of the situation in the Sound of Barra reflects two very different understandings of the meaning of 'conservation'. The intention of conservation bodies to protect the Sound of Barra, and the process which has been carried out in administering the requirements of the Directive in the Sound of Barra sends a 'hands-off' and 'keep-out' message to the local community. In contrast, the local sense of conservation is one of 'live with' and 'use/develop wisely', which is underpinned by a sense of thrift and ingenuity essential to human survival in a remote coastal community. It is hardly surprising that the process of designation of the Sound of Barra should have engendered the hostile response it has received from the community when it is clearly stated by SNH that regulating authorities are responsible for managing SACs in consultation with SNH. This serves to increase the sense of foreboding amongst the local community that a 'hands-off' conservation model will prevail. This fear cannot be resolved by reassurances emanating from the regulating authorities or government advisors as the 'consultation' process for the Sound of Barra has served to increase the sense of suspicion and distrust around the designation process. This suspicion and distrust is exacerbated by the lack of transparency around this process.

The overall vision of the Directive would stand a better chance of being achieved through harnessing the independent spirit and sense of ingenuity that is inherent in the local community in Barra to find ways of identifying threats to important features in the coastal environment and devising ways of managing such threats in partnership with the regulating authorities. This however can only be done effectively if there is a recognition by the community of the statutory commitment (via the Directive) to deliver conservation outcomes and if there is agreement by the local community to assume responsibility for helping to deliver this commitment. The Directive has introduced a thread from the international policy environment which needs to be incorporated into the local environment in a way which sits comfortably with the dynamic nature of that environment and the needs of the local community. Delivery of this statutory commitment needs to be clearly visible in the UK and EU policy

context, not just to the local community, even though they have an inherent understanding of, and interest in, their coastal environment. This means that calls from the local community for policy makers to trust them to manage their coastal environment wisely and sustainably must be mirrored by a willingness on the part of the community to engage with the prevailing policy context which now forms a part of the local environment. Community-led initiatives to co-manage a local SAC need to be documented as responsibilities which are seen to be complied with, thus making the thread of delivery of the statutory commitment visible in the policy world. Given the polarised situation at present, getting to this point will require investment by the local community, government advisors and regulating bodies in an active process of conflict resolution (eg through mediation) in order to arrive at a point where all parties can clearly identify, hear and understand their respective needs.

6. Potential ways forward

Two elements of the Directive underpin our response and illuminate ways forward:

Introductory text of the Directive:

'Whereas, the main aim of this Directive being to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements, this Directive makes a contribution to the general objective of sustainable development; whereas the maintenance of such biodiversity may in certain cases require the maintenance, or indeed the encouragement, of human activities.'

Article II(3) of the Directive:

'Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics.'

SAMS recognises that SACs play an important role in delivering conservation objectives at the Scottish, UK and EU scale and that in the case of the Sound of Barra SAC there is a case for protection of designated features, although the data presented are limited and the references sparse. The Directive acknowledges that economic, social, cultural and regional requirements should be taken into account. We believe that, in the case of peripheral island communities reliant on coastal resources, a move towards co-management is critical for achieving conservation outcomes and for delivering an ecosystem approach as envisaged under the Malawi Principles on the Convention for Biological Diversity.