

A Case Study of Demonstration & Research Marine Protected Area development in Scotland



South light house in snow. Credit: Tommy H Hyndman

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1 Executive Summary

Scotland’s seas are home to a host of Marine Protected Areas (MPA), designated for a range of purposes. In July 2014, through the powers of new UK and Scottish legislation, 30 Nature Conservation MPAs and eight Historic MPAs were designated by the Scottish Government.

Within the Marine (Scotland) Act 2010, the provision for Demonstration and Research Marine Protected Areas (DR MPAs) was also introduced for Scotland’s territorial waters, providing a flexible and unique option for non-state parties in Scotland to put forward their own proposals for MPAs which would specifically test sustainable marine management approaches.

In 2011 the Fair Isle Marine Environment and Tourism Initiative (FIMETI), a small community-led body from Fair Isle, developed a proposal for the Fair Isle DR MPA. Five years later, after the production of a series of documents, clarifications, meetings, and assessments, the Fair Isle DR MPA was designated and legally brought into force on the 9th November 2016. It remains the only DR MPA in Scotland’s seas.

DR MPAs have the potential to be a powerful vehicle for community-led marine protection in Scotland. They are a relatively untested form of marine management, and thus there is a vast, as yet untapped, potential in their application and impact. Understanding the process of, and the lessons learned from, Scotland’s only DR MPA is therefore of vital importance.

Through providing detail on the background and rationale behind the Fair Isle DR MPA, FIMETI’s key steps towards designation, the challenges the proposal came up against, and the solutions formed along the way, it is hoped that this paper can help others who might be considering developing a DR MPA proposal.



Fair Isle. Credit: Tommy Hyndman

2 Demonstration & Research MPAs: Background

Designating MPAs within Scottish waters is not a new concept, with over 200 sites designated since the National Parks and Access to the Countryside Act of 1949¹, which first introduced Special Sites of Scientific Interest (SSSI), followed by a host of European “Natura” sites² in subsequent decades. However, in 2014 the Scottish Government designated a new suite of MPAs to protect features of particular importance within Scotland’s seas , through new legislation under both the Marine and Coastal Access Act 2009³ and the Marine (Scotland) Act 2010⁴. At the time, this was seen as a significant step toward protecting Scotland’s marine habitats and species, geology and landforms from the activities which impact them the most through spatial management.

The three types of MPAs that the 2010 Act allowed for are 1) Nature Conservation MPAs (NC MPAs) for biodiversity and geodiversity features, 2) Historic MPAs for marine archaeology, and 3) Demonstration & Research MPAs (DR MPAs) for the trialling of sustainable management methods.

Subsequently 30 NC MPAs⁵ and 8 Historic MPAs were designated across Scotland’s waters in July 2014, 1 DR MPA was designated in November 2016 around Fair Isle. A further NC MPA was designated in May 2017 in Loch Carron, and 1 deep sea marine reserve (the West of Scotland MPA) – bringing the total number of MPAs in Scotland in 2020 to 248⁶.

DR MPAs are unique to Scotland and “can be developed for the purpose of demonstrating, or carrying out research on sustainable methods of marine management or exploitation in territorial waters”⁷. Their application is not restricted to nature conservation - instead the emphasis for qualification is around demonstrating novelty of concept, strong stakeholder buy-in, and applicability, amongst other criteria⁸ (see Appendix 1 for full criterion).

DR MPAs have the potential to be a powerful vehicle for community-led marine protection in Scotland – given their basis in being third-party (non-state) proposals, their strong emphasis on stakeholder development and their flexibility around objectives. They are also a relatively untested form of marine management in Scotland, and thus there is vast, and as yet untapped, potential in their application and impact.

DR MPAs may overlap with other (existing or new) MPAs or be spatially distinct. They are typically time limited and will not automatically form a component of the MPA network, only where they are considered to contribute conservation value, and then only for the duration of the designation. However the approaches being trialled within the DR MPA may be implemented on a longer-term basis in that area or replicated elsewhere.

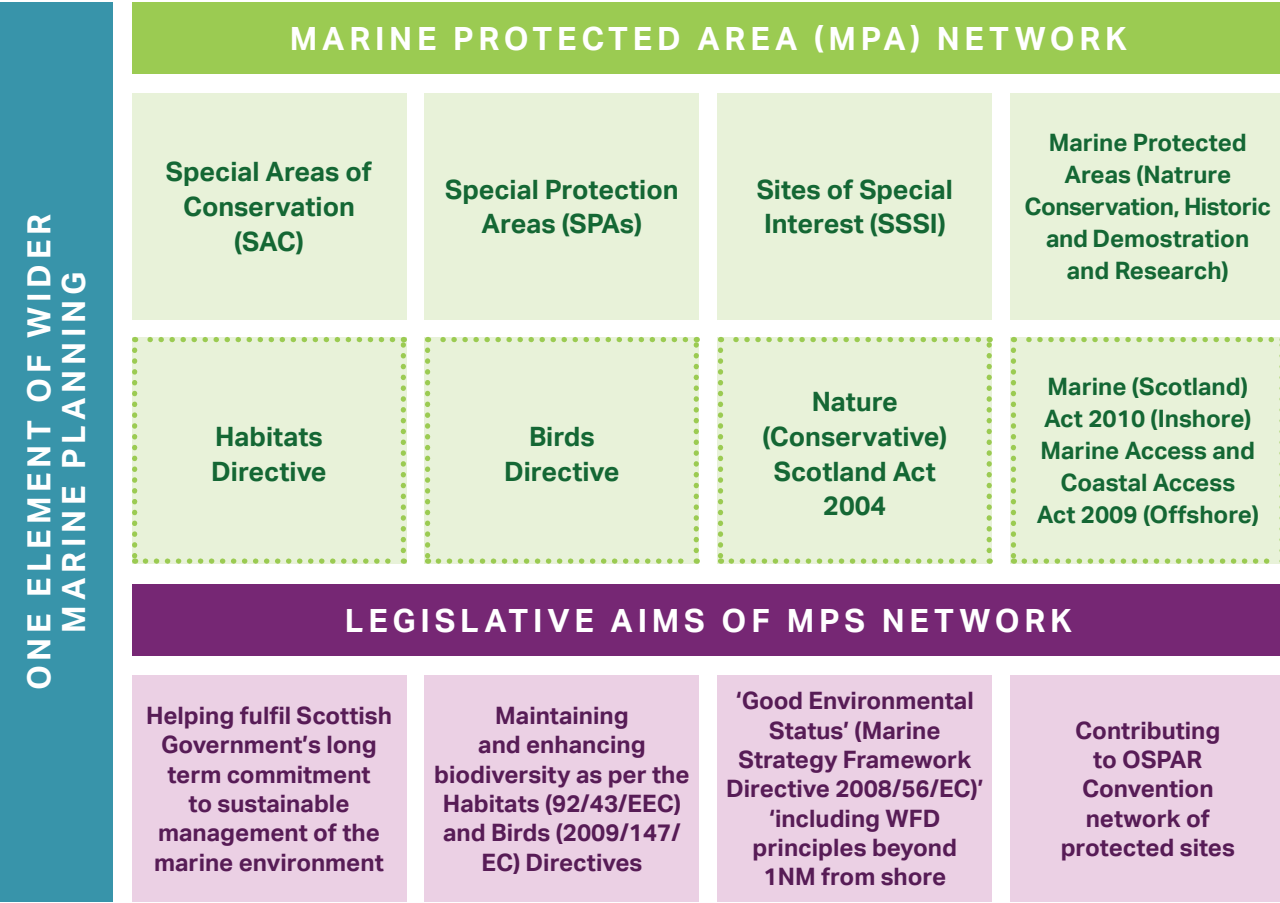
DR MPAs will not necessarily introduce formal restrictions on existing activities (for example, if they can be considered sustainable) however they may be introduced if they are necessary to support the demonstration or the research objectives of the site. Guidelines recommend that all DR MPA proposals should consider if the objectives can be achieved through arrangements such as voluntary agreements and stakeholder agreements.

1. <https://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97/contents>
2. See <https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/international-designations/natura-sites>
3. https://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf
4. <https://www.legislation.gov.uk/asp/2010/5/contents>
5. 17 MPAs under the Marine (Scotland) Act 2010 in Scottish territorial waters and 13 MPAs under the Marine and Coastal Access Act 2009
6. <https://www.gov.scot/policies/marine-environment/marine-protected-areas/> and <https://www.gov.scot/news/safeguarding-scotlands-marine-environment/>
7. Marine Protected Areas in Scotland’s Seas - Guidelines on the selection of MPAs and development of the MPA Network. <https://www2.gov.scot/Resource/0051/00515466.pdf> (page 28).
8. Marine Scotland’s guidelines for DR MPA proposals indicate six criteria for developing DR MPAs which include such things as ensuring the sites aims and objectives are feasible and appropriate; that research is scientifically sound; that there is good stakeholder support; and that there is high value in improving our knowledge and understanding of the marine environment



North Cliffs of Fair Isle. Credit: Tommy H. Hyndman

Figure 1: Policy Context of the Demonstration & Research MPAs in Scotland’s MPA network in 2020 (edited from original).⁹



9. Marine Scotland (2019) Sustainability Appraisal of proposed Marine Protected Areas Sustainability Appraisal. Accessed via <https://consult.gov.scot/marine-scotland/four-new-marine-protected-areas/>. (Edited to highlight DR MPA in context).

3 Fair Isle Demonstration & Research MPA: History and Case for Protection

Fair Isle is a small island (768 hectares) within the Shetland Isles. It is roughly equidistant between Shetland and Orkney and around 40km from any neighbouring land. It hosts a small population of circa 60 persons, which has remained stable since 1954, when ownership of the island passed to the National Trust for Scotland.

The Fair Isle DR MPA was designated in November 2016 under the Marine (Scotland) Act 2010, and is the only current DR MPA in Scotland. The site is a third-party proposal, which was submitted by the community group the Fair Isle Marine Environment and Tourism Initiative (FIMETI)¹⁰ in 2011, having been developed by FIMETI and the Fair Isle community, alongside a range of partners. The Fair Isle DR MPA was, in many ways, the culmination of many years of effort from FIMETI to establish some means¹¹ of recourse or local intervention into the management of the islands adjacent marine resources.

Decades of declining natural resources – primarily seabird and inshore fish populations – prompted initial concern from the local community in the late 1980s, who felt a continuing sense of powerlessness in implementing their own decisions around how to maintain their local marine resource. Of particular concern to islanders was the steep decline in their (traditionally abundant) visiting seabirds. Seventeen species breed on Fair Isle and, in the 1980s and 1990s, around 250,000 birds would be present in summer. By 2010, this had declined to a little over 100,000. This was, and remains, of high concern to islanders due to the high footfall in tourism that the presence of this wildlife encourages. Without the attraction of rich and diverse wildlife, the economy of the island is highly threatened.

Fair Isle hosts a number of protected areas, at land and at sea. In 1994 Fair Isle’s land mass was classified as being a Special Protected Area (SPA), with a further marine extension classified during 2009 - the seaward extension extends approximately 2km into the marine environment to include the seabed, water column and surface. The boundary of the Fair Isle SPA is also underpinned on land by the Fair Isle Special Site of Scientific Interest (SSSI). Though designated for a range of protected features, none of these sites have management plans, however, and there has been no means, within their respective frameworks, for the community to steer and shape any potential management.

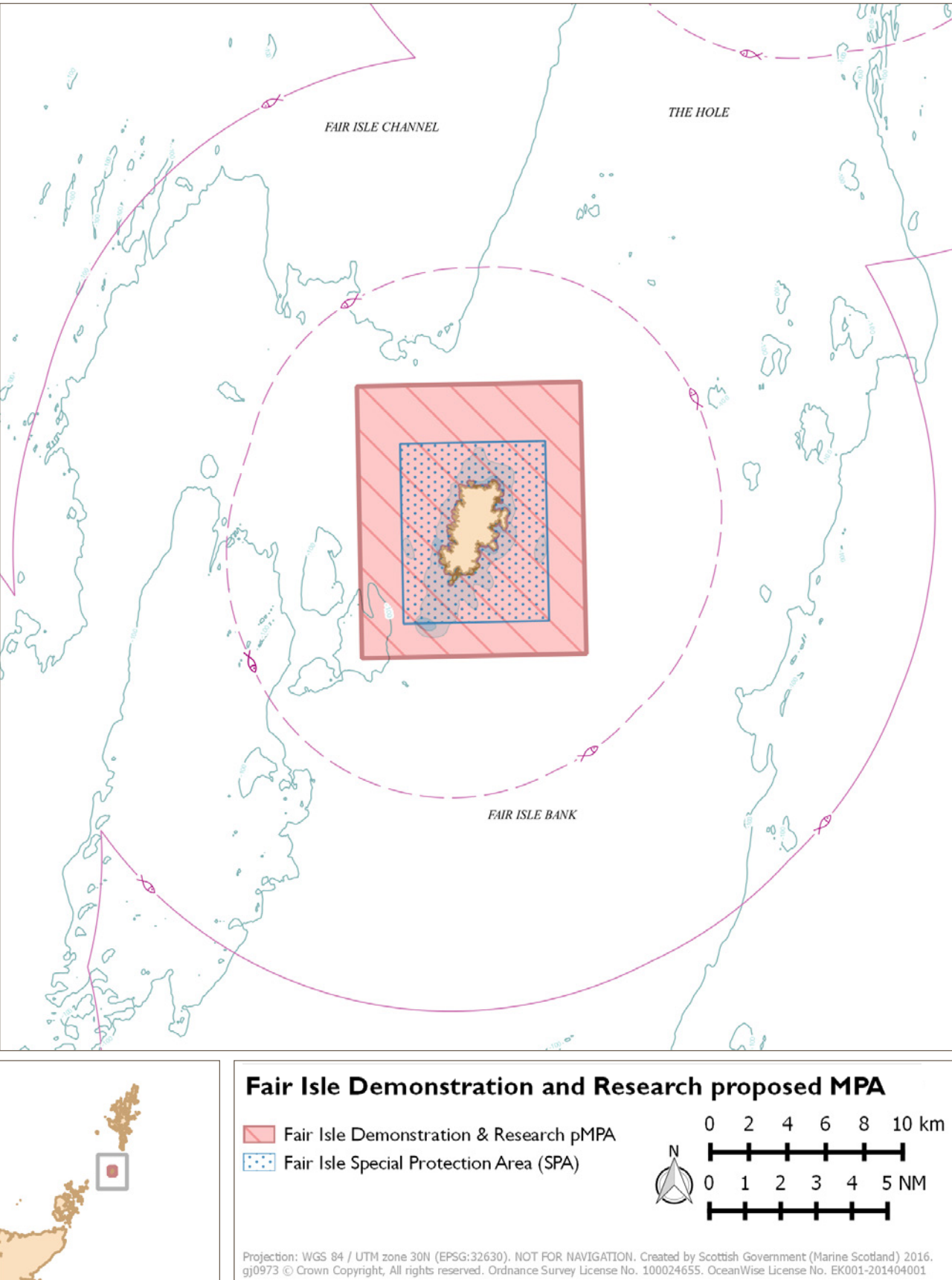
The Fair Isle DR MPA seeks to demonstrate, through research and dissemination of learning, the effectiveness of a *community-led* partnership approach in achieving a long-term programme of sustainable management of Fair Isle’s waters. The site reaches out to sea 5km from the islands coastline (157km²), and has been established to primarily research the relationship between healthy seas and the maintenance of a local island community.

10. FIMETI is a community group established within the Fair Isle Community Association, which came into existence in the late 1980’s, see www.fimeti.org.

11. See:
 – Riddiford, N.J. (1992) Fair Isle’s Marine Environment, a fragile ecosystem; assessment and recommendations to safeguard it.
 – Riddiford, N.J. (1998) Safeguarding Our Heritage – the Fair Isle marine resource: a community proposal for its sustainable management.
 – Riddiford, N.J. and Thompson, G. (1997) Managing the sea for birds - Fair Isle and adjacent waters.

12. <https://www2.gov.scot/Resource/0049/00494112.png>

Map 1: Fair Isle DR MPA¹².



4 Key Steps Towards Designation

Being the first MPA of its kind, and with DR MPAs not being prescriptive, the Fair Isle DR MPA was subject to a highly iterative process. Though the original proposal was submitted to the Scottish Government in December 2011, it was not until the 9th November 2016 when the designation was legally approved.

THE PROPOSAL

The original DR MPA proposal¹³ was submitted to the Scottish Government in December 2011 and was led by resident Fair Isle ecologist Nick Riddiford and his wife Elizabeth Riddiford. It included a detailed portfolio on the island's environmental and community characteristics, and covered the background on why a DR MPA was chosen, details on certain research aspects that would be investigated, and an outline work programme covering the kinds of activities that would be taken forward within a DR MPA.

It stated that the DR MPA would have three key purposes:

1. *"To trial a series of management measures, supplemented by interpretation and dissemination, which demonstrate the role of MPAs in delivering fully sustainable marine management;*
2. *To demonstrate the relationship between a fully functioning marine environment and the socio-economic stability of coastal communities;*
3. *To meet a requirement of the Council of Europe in the form of a condition on the renewal of the Council of Europe Diploma for Fair Isle."*

Though it was an extensive document, feedback from Marine Scotland indicated that there was information missing particularly within areas relating to governance and implementation.

Around the same time that FIMETI submitted the DR MPA proposal, it also participated in stakeholder workshops organised by Marine Scotland to identify Nature Conservation MPAs. There was the anticipation initially from FIMETI that Fair Isle's waters could also or instead be designated as an NC MPA – however FIMETI accepted that the criteria Marine Scotland, and its nature conservation advisors NatureScot (formerly Scottish Natural Heritage), applied to NC MPAs were too limiting for Fair Isle to receive this kind of designation.¹⁴



Fair Isle resident Nick Riddiford. Credit: Tommy H Hyndman

13. Riddiford, N.J. & Riddiford, E.A. (eds.). 2011. Proposal for a Marine Protected Area for the Waters around Fair Isle. FICA, FIBOT & NTS. FIMETI Fair Isle.

14. <https://www2.gov.scot/resource/doc/295194/0114024.pdf>

CONSULTATION PROCESSES

Between submitting the proposal in December 2011 and the Fair Isle DR MPA designation in November 2016 there were two key, formal consultation processes:

- **An independent assessment which ran from October 2014 – June 2015**

- **A public consultation which ran from March 2016 – May 2016**

In the knowledge that the DR MPA was the most viable route¹⁵ towards achieving MPA status, FIMETI continued to engage in dialogue with Marine Scotland during 2012 – 2014, keen to ensure that the proposal was met with success. Marine Scotland asked further questions on the DR MPA, largely around refining the Fair Isle DR MPA's vision and objectives. However it was conveyed to FIMETI that NC MPAs would be a priority focus for Marine Scotland and DR MPAs would not be fully considered until 2014. During this time FIMETI also reached out to relevant fisheries organisations to arrange meetings to discuss the proposal, which started to come to fruition in March 2014.

In the time between the original proposal being submitted (in December 2011), to the independent assessment of the site (October 2014), FIMETI produced further documents (see Appendix 3) for NatureScot and Marine Scotland, who also continued to engage in ongoing dialogue around the Fair Isle site at relevant stakeholder meetings. These "pre-assessment" documents included tables which covered the goals and objectives of the site, how it met the DR MPA criteria, and outlines of research questions and monitoring plans.

Despite submitting further information on multiple occasions, FIMETI did not feel as though they were seeing any real progress with their proposal. Aware of the continued representation and additional information that would be required of the community, to undertake the next steps for progressing the proposal, FIMETI reached out to its conservation partners, and an alliance was formed with Fauna & Flora International (FFI) in July 2014, who had recently recruited a Marine Community Support Officer with the remit of helping communities to develop marine conservation projects in Scotland. Working closely together, FIMETI and FFI moved through a process of developing and refining key documents, and engaging with all partners of the proposed site.

INDEPENDENT ASSESSMENT (OCTOBER 2014 – JUNE 2015):

As is required in all MPA proposals in Scotland, an independent assessor, ABP Marine Environmental Research Ltd, ("ABPmer") was contracted by the Scottish Government to undertake an assessment of the Fair Isle DR MP proposal against the MPA Selection Guidelines. During this first stage of assessment, ABPmer asked FIMETI to answer a large number of questions (Appendix 4) related to the proposed DR MPAs objectives. The first stage of the assessment produced an initial report (in January 2015), which highlighted a number of additional necessary steps in order for the proposal to proceed. Within this initial assessment ABPmer requested FIMETI to develop answers to a further series of questions, after which the final assessment and decision would be made.

Meetings between FIMETI, its partners and ABPmer during March 2015 in Lerwick clarified that the three areas of the proposal requiring strengthening were DR MPA benefits, stakeholder buy-in and funding. Discussions also took place around the need for an agreement between stakeholders on the 'control zone', the MPA boundaries, and the potential termination date of the MPA. It was agreed at this time that an implementation plan for the longer term (10+ years) would be developed.

15. Around the same time that FIMETI submitted the DR MPA proposal, it also participated in stakeholder workshops organised by Marine Scotland to identify Nature Conservation MPAs. There was the anticipation initially from FIMETI that Fair Isle's waters could also or instead be designated as an NC MPA – however it was deemed by Marine Scotland, and its nature conservation advisors NatureScot (formerly Scottish Natural Heritage), as not meeting the necessary criteria for this kind of MPA: <https://www2.gov.scot/resource/doc/295194/0114024.pdf>

16. ABPmer (January 2015) Assessment of the Fair Isle Third Party Demonstration and Research MPA Proposal – Criteria and Socio-economic report.

The March 2015 meetings also included fisheries representatives the Shetland Shellfish Management Organisation, the Scottish Fishermen's Federation, the Shetland Fishermen's Federation, and the NAFC Marine Centre (formerly the North Atlantic Fisheries College). And the discussions centred on developing a shared vision for how to implement the DR MPA, which was largely achieved - see [Negotiation and Collective Vision](#).

After these meetings, FIMETI and FFI reviewed comments and suggestions from all stakeholders involved, and produced a final document for Marine Scotland and APBmer, which was submitted in June 2015. Linked to this, the decision to form a DR MPA Steering Committee was made, and thus a 'Draft Steering Committee Protocol' (see Appendix 2) was also established by stakeholders.

Subsequent to the stakeholder meetings and as per ABPmer's request, FIMETI produced a "clarification document" (FIMETI, 2015) which set out to:

- ✓ Define the governance arrangements and terms of reference for the Steering Committee;
- ✓ Clarify the proposed management measures for the DR MPA the process by which management measures will be agreed with stakeholders prior to their implementation;
- ✓ Consider the mechanisms by which possible management measures might be implemented;
- ✓ Define an implementation programme for taking forward actions for the DR MPA;
- ✓ Clarify the monitoring proposals for DR MPA
- ✓ Clarify how findings will be disseminated.

In June 2015 ABPmer published the final version¹⁷ of the FIMETI DR MPA Assessment Report, having accepted the further information, and FIMETI was informed by Marine Scotland that they had successfully passed ABPmer's independent assessment (June 2015) - a crucial requirement for any designation to then be formally considered by Scottish Ministers.

With a decision pending on the MPA, Marine Scotland organised presentations and discussions for all stakeholders to attend in Shetland during October 2015, where a continued sense of good will from all stakeholders around the proposal was evident.

PUBLIC CONSULTATION (MARCH – MAY 2016):

In March 2016 the Fair Isle DR MPA public consultation launched¹⁸ and ran between 1st March and 26th May 2016 to allow stakeholders and members of the public to comment on whether or not the site should be designated. The consultation asked five questions including whether or not people agreed with the dual aims of the site, and how long the designation should be in place for.

During this time FIMETI worked closely with FFI to produce, alongside the public consultation, resources such as a Q&A sheet on the proposal, a 'Help Sheet' for local residents to support them in responding to the consultation questions, and press releases for local papers. The National Trust for Scotland also commissioned a local film maker¹⁹ to produce a short promotional film on the importance of the DR MPA.

In May 2016 Marine Scotland held public engagement events in Lerwick, Kirkwall and Fair Isle, and Marine Scotland reported to FIMETI that the public feedback from these events was overwhelmingly positive. The final consultation response rate was relatively high, totalling over 150, with 97% in favour and just four individuals against²⁰.

See Appendix 3 for more information regarding the [timeline](#) of the consultation process.

17. ABPmer (June 2015) Assessment of the Fair Isle Third Party Demonstration and Research MPA Proposal - Criteria and Socio-economic Report.

18. https://consult.gov.scot/marine-conservation/fair-isle-demonstration-and-research/supporting_documents/417554_FairIsle_Final_v3.pdf

19. <https://vimeo.com/157135778>

20. Marine Scotland (2016), Fair Isle Demonstration and Research Marine Protected Area Proposal Consultation Analysis Report. Accessed via <https://www2.gov.scot/Resource/0050/00508670.pdf>

NEGOTIATION AND DEVELOPING A COLLECTIVE VISION

Throughout the development of the Fair Isle DR MPA proposal, FIMETI was consistently clear about its desire for a collaborative approach. In 2015, the independent assessment confirmed, too, the strong emphasis that the DR MPA model puts on stakeholder engagement.

FIMETI was initially in a position where they faced opposition from local fisheries interests to the proposal. In 2012 fisheries interests objected²¹ to the proposal on the basis of it not appearing to have a sufficiently defined purpose, and its potential for restricting fisheries activity in the area. In March 2014, a stakeholder meeting between the Fair Isle community and fisheries representatives took place at the Fair Isle Bird Observatory, organised by FIMETI. This was attended by a representative from the Shetland Fishermen's Association (SFA), the Scottish Fishermen's Federation (SFF) and the NAFC Marine Centre, plus a representative from all households on the island was also present. Collectively, the fisheries representatives suggested more specificity around aims and objectives in the proposal, though particular worry was also expressed around the inclusion of a No-Take Zone.

During 2014 and 2015 dialogue continued between FIMETI and the DR MPA stakeholders, and in March 2015 meetings were organised by FIMETI (with close support from NatureScot and FFI) and all those who were now being proposed to be included within a potential Steering Committee for the site, if designated. The key items discussed during these meetings included why the designation was valuable in achieving the aims of the Fair Isle community, how the proposal fits the guidelines, the sites key objectives, the proposed governance structure including Steering Committee membership and implementation, research priorities, and timelines.

At this stage, concerns were still felt around funding needs and the lack of detail in the research proposals. There was also discussion around the need to balance the various interests of the Steering Committee, if decisions would be made around further research and management, post-designation. However, all stakeholders were supportive of the proposed three-tiered governance structure (see [Plans for Governance and Implementation](#)), including the fisheries stakeholders.²²

There was a clear path forward for the community to lead the site and, over the preceding months, two principle objectives were defined and agreed upon by the proposed Steering Committee:

- To conduct robust research on population decline of seabirds; and
- To demonstrate the social and economic value of a healthy marine environment to the Fair Isle community and others.



Seal Pup North Haven Beach. Credit: Tommy H Hyndman

21. www.parliament.scot/S4_PublicPetitionsCommittee/General%20Documents/PE1431_A_Sheland_Fishermens_Association_02.07.12.pdf

22. <https://www.sff.co.uk/scottish-fishermens-federation-throws-its-support-behind-fair-isle-marine-protected-area-proposal/>

REFINING THE RESEARCH FOCUS

Fair Isle's biogeographical location – between the North Sea and the Atlantic - make it an ideal site for measuring the impact of climate change. Fair Isle has access to long runs of weather data, including surface sea temperatures, salinity and plankton levels, and as such FIMETI contended that any site management ought to sit within a wider context of universal climate change monitoring and mitigation. The community's interest regarding research priorities is, thus, wide-ranging and FIMETI's overview of this has always sought to include seabirds, marine mammals, climate, and socio-economic research.²³

However, it was always strongly contended by FIMETI, and the wider Fair Isle community, that the MPA's priority focus, at least initially, should be on investigating seabird decline, which was one of the most stark wildlife declines being witnessed on the island. Several of Fair Isle's seabirds have experienced dramatic population declines since the 1990s.²⁴ Worst hit have been kittiwake, shag, arctic skua, puffin, razorbill, guillemot and arctic tern, with a large number of birds increasingly having to forage as far as the mainland Scottish coast to find food for their chicks. Between 1990 - 2010 there was a particular scarcity of sand eels around Fair Isle, partly at least a product of overfishing, as well as broader changes, such as those linked to climate change. The consequences were seabirds returning to their nests with smaller beak loads of fish of poorer nutrient value, which in turn resulted in lowered breeding success.

FIMETI's rationale was that seabirds play a critically important role as indicators of the wider health of the marine environment and, as such, the DR MPA's research ought to investigate their declines within a wider, ecosystem-based, framework, so that the full environmental picture could be analysed. Thus management measures for the DR MPA, though seabird focussed, would need to take a holistic and integrated approach, including additional, inter-related, research into such areas as local fish stocks (fin-fish and shellfish) and mobile species.

23. 'Fair Isle DR MPA Outline', FIMETI, October 2014. Can be shared via request.

24. Fair Isle is one of four key sites in the UK forming part of a long-term intensive seabird monitoring programme established by the Joint Nature Conservation Committee in 1986. Besides monitoring plots, where counts of occupied nest sites or territories are made, breeding success and diet are also assessed annually on the island.



Orcas visiting Fair Isle waters. Credit: Sam Hood

PLANS FOR GOVERNANCE AND IMPLEMENTATION

The 2015 independent assessment generated a set of recommendations for FIMETI that focused on ensuring stakeholder involvement and realising their plans for collaborative governance and management.

During 2015, a three-tiered governance approach was developed that included: 1) an executive level, i.e. Steering Committee; 2) a project management level, i.e. a project officer support team; and 3) an implementation level, i.e. a project officer whose remit would include coordinating a partnership approach to achieve the objectives outlined in the proposal. The executive level would be a partnership between all key stakeholders already identified through the initial proposal stages, and any others who emerged in due course (see Appendix 6).

The need for a dedicated role to enable the effective implementation and management of the Fair Isle MPA was identified by all stakeholders during the MPA proposal process. However a key hurdle to implementing the Fair Isle MPA has been the cost of operationalising it. As a third party proposal, there are no direct funding streams in place from government to resource the MPA – and, as a community-developed proposal, the intention has always been for the community to lead on future management and implementation.

During the latter part of 2016, FIMETI made the decision to dissolve as an organisation to allow for the transition and formation of a new community-led body, a partnership with the Fair Isle Bird Observatory and the Fair Isle Community Association. This was led by the aforementioned organisations on the isle, with support from FFI, and was motivated by the need to establish a charitable body that could lead on the recruitment of an MPA Project Officer, identified as being fundamental for the implementation of the MPA.

5 Designation

On 9th November 2016, the Fair Isle Demonstration & Research MPA was designated.

As with any MPA in Scotland, it is legally implemented via a designation order. The Fair Isle DR MPA Designation Order²⁵ states that:

"Method or methods of marine management or exploitation to be demonstrated and researched

5.—(1) The methods of marine management and exploitation to be demonstrated and researched within The Fair Isle (Demonstration and Research Marine Protected Area) are the use of an ecosystem approach(a), which includes the following —

- (a) The environmental monitoring of seabirds and of other mobile marine species;*
- (b) The environmental monitoring of the factors which influence the populations of seabirds and of other mobile species;*
- (c) the development and implementation of a local sustainable shellfish fishery;*
- (d) the development of a research programme into local fisheries which includes research on species composition, size, distribution and temporal and spatial changes in fish stocks;*
- (e) based upon the research undertaken under sub-paragraph (d), the development of a sustainable-use management programme for local fisheries.*

(2) The methods of marine management and exploitation to be demonstrated and researched into as referred to in paragraph (1) include demonstration of, and research into, the effects of such methods of marine management and exploitation on Fair Isle, including any socio-economic effects.

(3) In paragraph (1)(a) and (b) "mobile marine species" includes cetaceans and other marine mammals."

25. <https://www2.gov.scot/Resource/0050/00508669.pdf>

Despite the guidance on DR MPAs stating that they are a time-bound designation, there is in fact no restriction written into the Designation Order on the lifetime of the Fair Isle DR MPA designation.

Four-stage suggested phasing was proposed by FIMETI²⁶ during the proposal process following: i) Initiation and Gap Analysis (1 – 3 years); ii) Demonstration and Trialling of Relevant Identified Actions (4 – 10 years); iii) Evaluation (end of year 10); and iv) Enhancement (year 11 onwards). See Appendix 4 for the DR MPA's detailed suggested phasing.

6 The Fair Isle DR MPA Today (post-designation)

GOVERNANCE & IMPLEMENTATION

Throughout 2017 and 2018 FIMETI dissolved and a new community organisation, the Fair Isle Marine Research Organisation (FIMRO), was formed in Fair Isle, with the ambition for FIMRO to lead on the recruitment and management of an MPA project officer.

After the designation FIMRO was successful in bringing together all stakeholders into the Steering Committee, the first meeting of which took place in Lerwick in March 2017, confirmed the groups' Terms of Reference, and decided that a science sub-group would be established to define initial research priorities.

In June 2017 Marine Scotland supported FIMRO with a small one-off grant of £5,000 to support with community development costs, which enabled a Fair Isle-based consultant to support FIMRO in obtaining charitable status, and to develop small projects, for example, developing attitude surveys for residents and delivering MPA outreach activities with school children.

26. <https://www2.gov.scot/Resource/0049/00494122.pdf>

Due to a number of competing restraints on the community, including a fire on the island in March 2019 that devastated the Fair Isle Bird Observatory (the islands' economic and environmental hub), it was not viable for FIMRO to lead entirely on the project as intended. Thus in 2020, a new agreement was developed between FIMRO and its core partners, NatureScot and FFI, which enabled the recruitment (for twelve months) of a DR MPA Project Officer by NatureScot, funded via a grant secured by FFI for FIMRO. This new officer will now lead on the implementation of the sites' objectives and support the continued capacity building of FIMRO with the anticipation that FIMRO will be in a better position to take over the role of employer from NatureScot.

In 2020, the Fair Isle DR MPA seeks to significantly improve its capacity to contribute to both the collation of information on the biodiversity and use of Fair Isle's waters, and to develop a collaborative management approach. This progress will serve to inform future research and the future testing of different management measures within the MPA, underpinning effective long-term management. The intention is now to move out of the initial development phase and to move into implementation through significant scaling of research activities and the production of a formal co-management MPA plan.

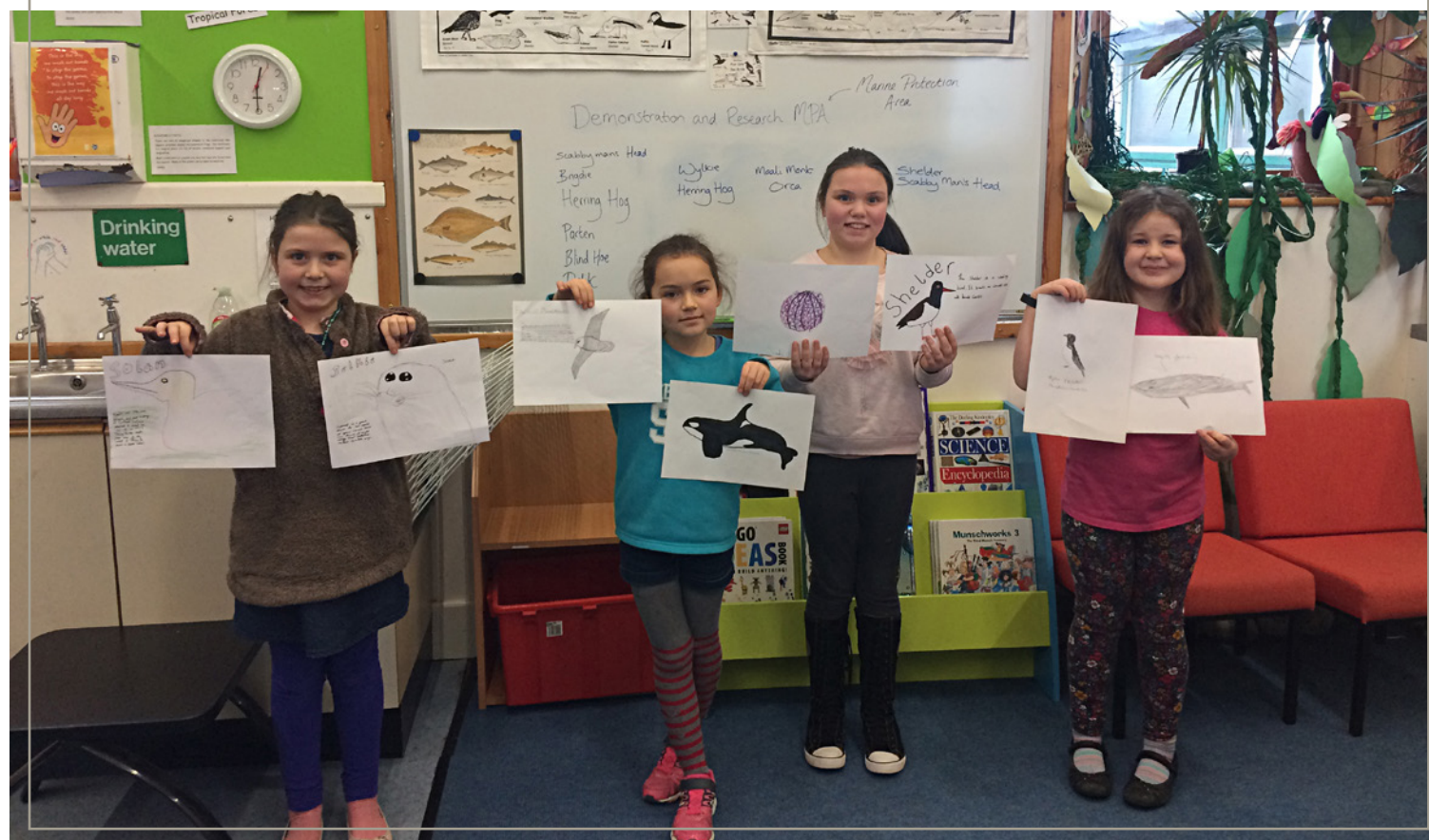
The DR MPA Project Officer's remit includes such responsibilities as:

- Building strong relationships with members of the Fair Isle DR MPA Steering Committee;
- Coordinating the DR MPA Steering Committee;
- Developing a forward plan for the DR MPA and the Project Officer role - including ongoing project-level fundraising and work-planning;
- Supporting FIMRO in building their long-term capacity and organisational development - enabling it to develop its skills and resources in leading, more directly, on the DR MPA;
- Coordinating extant and new research;
- Identifying knowledge gaps;
- Supporting the development and maintenance of a Fair Isle dataset, which links together the disparate research initiatives and datasets associated to Fair Isle.

RESEARCH TO DATE

Research to date within the Fair Isle DR MPA has not been extensive, but it includes:

- MSc research into the abundance and distribution of breeding habitats of storm petrels and predation risks.
- Preliminary investigations into the type, number and biological importance of sea caves.
- Setting up a WDC Shore watch site on Fair Isle: this is a location where regular short sea watches are undertaken to record cetaceans thus building up effort based data which is poor throughout Shetland. This will also feed into the Shetland marine spatial plan and will involve also securing a C-POD (acoustic receiver which picks up porpoise and dolphin clicks).
- Preparatory work to include Fair Isle within any research planned for shellfisheries in Shetland e.g. lobster tag and release, brown crab measurements.



7 Challenges & Solutions within the Fair Isle DR MPA

Challenge: Being the first DR MPA

- > This is not a challenge that any future DR MPA proposal will face, however DR MPAs are still a largely untested mechanism with much learning still to be done. Being the first proposed DR MPA meant that it was an iterative and at times arduous process for the Fair Isle community and FIMETI, with significant learning for all involved.
- > FIMETI produced extensive literature to justify its case for the DR MPA, however initially faced hurdles in gaining substantive input from Marine Scotland, who explained that their focus would remain primarily on NC MPAs until after these were designated.

Fair Isle Solutions:

- > FIMETI had an incredibly strong local mandate, as the entire local community was demonstrably in support, with which to push the site forward.
- > FIMETI reached out to multiple other key partners for support and successfully forged close working relationships with both NGOs and government departments.
- > FIMETI put a great deal of effort into making their case known far and wide, for example, alongside the MPA proposal process, FIMETI filed a case with the Petitions Committee in 2011 as an additional way to ensure their case was being considered by the Scottish Government.

Challenge: Ensuring governance arrangements are clear.

- > Governance arrangements should be embedded into the DR MPA proposal from the beginning, however there was no guidance around this until the 2015 independent assessment, and it was not an area within which FIMETI had a large amount of experience.
- > It was not clear what key organisations (such as Marine Scotland's), roles would be in such governance arrangements.

Fair Isle Solution:

- > FIMETI designed a simple governance arrangement with stakeholders - the "three-tiered approach".
- > FIMETI drafted a Steering Committee Protocol, based on an existing protocol from Marine Scotland.

Challenge: Balancing full stakeholder buy-in with meaningful management outcomes.

- > Initially FIMETI wanted to propose both the larger 'technical measures zone' (the 5km boundary around the island which became the DR MPA boundary) and a small No-Take Zone (on the west side of the isle) to monitor recovery rates of fish populations and to offer a refuge area for shellfish. FIMETI also originally proposed fish capture restrictions to prevent removal of fish prior to them reaching commercial size.
- > During the designation process the fisheries interest groups were keen to express that there was already a large amount of work ongoing with fisheries management measures (through wider MPA processes), and that they did not want to duplicate or re-invent management, or contradict other fisheries measures.

Fair Isle Solution:

- > One of the compromises agreed with the commercial fishers was that a No-Take Zone would not be written into the Designation Order itself, but explored through research and decided between all stakeholders post-designation. FIMETI's intentions for a No-Take Zone were therefore captured in the final proposal document²⁷ but will be fully explored within the ongoing decision-making of the DR MPA.

Challenge: Remaining open and collaborative whilst having specific goals.

- > During the 2015 discussions, some stakeholders raised concern around the first three years of the DR MPA being focused on 'development', and around the lack of specific research details, with some enquiring as to why the site wouldn't be 'ready to go'. FIMETI explained that some elements could be started immediately, such as the continuation of seabird monitoring, but others will need further work with partners.
- > FIMETI felt at this stage that the proposal was receiving conflicting advice regarding the level of detail and clarity required.

Fair Isle Solution:

- > As there were a lot of different areas of work highlighted in the proposal – some needing decades to achieve – it was agreed that FIMETI should identify one or two aims and utilise them to demonstrate how the DR MPA process works in the short term.
- > This worked well at the designation stage as there are clear and specific requirements written into the MPA Designation Order, including the requirement for the site to develop and implement a local sustainable shellfish fishery; to develop a research programme into local fisheries which includes research on species composition, size, distribution and temporal and spatial changes in fish stocks; and to develop a sustainable-use management programme for local fisheries.

Challenge: Implementing tangible management.

- > During the Fair Isle proposal process, all stakeholders expressed a belief that voluntary management mechanisms can work for the benefit of both fisheries and nature. However there are varying degrees of evidence that voluntary means of management can effect change.
- > Currently, the management mechanisms established for the Fair Isle DR MPA are voluntary, and this lack of statutory power (beyond the Designation Order itself), coupled with the untested nature of these voluntary tools, has potentially cultivated some uncertainty over the MPA's ability to intervene in management.²⁸
- > As the DR MPA encourages voluntary management techniques, before any further statutory tools are implemented, the balance of any steering group, and its involvement in decision-making, will be key to defining and achieving conservation goals.

Fair Isle Solution:

- > The Fair Isle DR MPA Steering Committee is led by FIMRO - with close support from its 'project management level' team (FFI and NatureScot) and a wider set of balanced interests. To-date, no specific management has yet been proposed, however with the community leading the site, with a good level of buy-in from all stakeholders, and with the in-built flexibility of the DR MPA model - a solid foundation is in place which could lead to successful co-management flourishing.

27. After developing and undertaking adequate research and monitoring programmes it would be the aspiration of FIMETI to establish relevant zoning and spatial management, lest adequate demonstration will not be achieved. FIMETI envisages a simple zoning scheme; easily understood, implemented and monitored but does appreciate that zoning does not need to be initiated from the offset and recognises other forms of zoned management which could be instrumental in providing more locally responsive management. The design and trial of any measures would require consensus from the Steering Committee.* FIMETI believes that the most suitable management measure for investigating this objective is a closed replenishment zone which will allow the testing of stock recovery. A replenishment zone could act to safeguard small fish availability to seabirds and provide a control site for the study whilst also supporting the continuation of the sand-eel fishing moratorium." <https://www2.gov.scot/Resource/0049/00494122.pdf>

28. Gillies, K. (2020) Fair Isle Demonstration and Research Marine Protected Area: A Case Study on Stakeholder Perspectives of Governance in a New Community-Based Marine Protected Area, University of Aberdeen.



Stewart Thomson, Kern Whiteside and Nick Ridgford travel to DRMPA meetings. Credit: Tommy H. Hyndman

Challenge: Responsibility for funding.

- ⊕ A key hurdle to progressing and implementing the Fair Isle MPA has been the cost of operationalising it. As a third party, community-developed proposal, there are no direct funding streams in place from government to resource the MPA and the intention has always been for the community to fund implementation.

✓ Fair Isle Solution:

- > After the designation of the Fair Isle DR MPA, FIMETI identified that its structure was not compatible with the future needs of the community in managing the MPA. Thus, FIMETI dissolved, having met its ambitions, and supported the formation of a new group – the Fair Isle Marine Research Organisation (FIMRO).
- > FIMETI worked closely with conservation partners to support funding needs – for example FIMETI secured initial funding from Blue Marine to write the original 2011 proposal.
- > NatureScot was also able to commit funding to Fair Isle environmental survey work (focused on sea caves).
- > The Fair Isle Community Association received a small grant of £5,000 from Marine Scotland to support the establishment of the new charity, FIMRO.
- > During 2016, FIMETI worked with its partner FFI to secure a larger grant of \$50,000 from Arcadia, a charitable fund, via FFI's Marine Programme, to support MPA implementation via the anticipated recruitment of a dedicated Project Officer.

Challenge: Unforeseen events/circumstances.

- ⊕ Unforeseen events can have a significant impact on MPA plans, particularly when led by the community. In Fair Isle's case the fire that destroyed the Fair Isle Bird Observatory in March 2019 forced a temporary halt on much of the DR MPA progress.

✓ Fair Isle Solution:

- > Tapping into the inherent resilience within the community on the island was critical in prioritising essential tasks that required continuing during these extraordinary circumstances.
- > Partners were asked to be honest and realistic in identifying those priorities, and their support was sought where necessary.

8 Check-list for Others Interested in Developing a DR MPA

PRE-PROPOSAL

- ✓ Identify exactly *who* and *how* you will take this forward – do you have an appropriate organisation in place? Do you need to set a new one up?
- ✓ Undertake local consultation and ensure there is strong community backing.
- ✓ Identify the strengths and capacity of those/the organisation who will develop the proposal and the gaps that might exist.
- ✓ Identify where, when, and who you might need help from and forge the necessary relationships.

PROPOSAL DOCUMENT

- ✓ Reach out to all stakeholders before starting to draft the proposal.
- ✓ Distil down the information and keep the proposal focused on 2-3 core objectives.
- ✓ Include exactly how the governance will operate.
- ✓ Include the most current science as is possible and be clear about existing data gaps.

CONSULTATION PROCESSES

- ✓ Document everything as best as possible – save and file all correspondence.
- ✓ Reach out beyond the formal process – e.g. file a petition with the Petitions Committee.
- ✓ Create tool-kits to support the wider local community to respond to the public consultation regarding the MPA.
- ✓ Develop engaging media on the DR MPA, such as short films.

NEGOTIATION AND COLLECTIVE VISION

- ✓ Recognise the multitude of relevant interests and voices and listen to them all.
- ✓ Balance stakeholder buy-in with real management outcomes - compromises will be inevitable however it's necessary to weigh up the risks from the beginning.
- ✓ Think creatively about how the MPA can help to develop relationships and a shared vision, rather than creating added polarisation, strain or pressure.

REFINING THE RESEARCH FOCUS

- ✓ Ensure there is the clarity of both a broad, long-term vision and some specific, short-term goals.
- ✓ Pin the research on definable needs.
- ✓ Start small and be realistic - be true to your capacity and scope.

GOVERNANCE AND IMPLEMENTATION

- ✓ Ensure governance arrangements are clear from the beginning – including detail on steering group decision-making levels and protocols.
- ✓ Consider whether voluntary mechanisms are enough to effect change - management mechanisms within DR MPAs are weighted towards voluntary methods, but this is a key question proposers will need to ask themselves.
- ✓ Consider all forms of decision making within any steering group, e.g. consensus, majority – and define and agree the one which is most appropriate.
- ✓ As the DR MPA encourages voluntary means before any further statutory tools are implemented, the balance of the steering group and its involvement in decision-making is key to effecting change.
- ✓ Embed a management plan into the proposal from the beginning - DR MPAs could be an extremely valuable tool in the context of “co-management” (collaborative management²⁹). Consider how a formal co-management plan could be embedded within the proposal or through a statutory instrument e.g. a “management scheme”.
- ✓ In any DR MPA there could be a case made for the potential use of “management schemes”³⁰ which could be implemented in addition to the DR MPA Designation Order.

29. Under various mechanisms, Scotland has several MPAs with shared governance arrangements which could be categorised as co-management. This ranges from sites which were first set up via local community initiatives and under the Inshore Fishing (Scotland) Act 1984, to sites which have a legal underpinning as established under the Marine (Scotland) Act 2010.

30. If a “management scheme” was sought then it would be introduced through a Marine Conservation Order (MCO) – see Harrison, James, Saving Our Seas Through Law Briefings (Briefing 4) – Legal Tools for the Management of Marine Protected Areas in Scotland, 2019.



Appendix 1: Criterion and Sub-Criterion for Demonstration and Research MPAs in Scotland

Guidelines on the selection of MPAs – Supplementary Guidelines for Demonstration and Research MPAs

Scotland designated the first Demonstration and Research MPA for Fair Isle in 2016, following a public consultation. A number of process and criteria queries were raised both prior to and during consultation and this supplementary guidance is designed to address these questions for future D&R MPA proposals.

This serves as an update to Table 7, “Assessment guidelines for Marine Scotland or third party proposals for Demonstration & Research MPAs”, of the full [MPA Selection Guidelines](#)ⁱ published in 2012. It should be read in conjunction with table 6 in the original guidelines.

	Original Guideline	Original description of assessment	Supplementary Guidelines	Assessment criteria
1	The aims and objectives proposed for the MPA are feasible.	To include assessment of whether the size and location of the proposed MPA are appropriate for achievement of the proposed aims and objectives.	The aims and objectives proposed for the MPA are scientifically based These aims and objectives must be clear, feasible, and state whether the purpose is demonstration or research, or both. The proposal states the method or methods of marine management or exploitation to be demonstrated or researched, or both	The following should be clearly described in the proposal: <ul style="list-style-type: none">• The purpose being for demonstration or research or both.• The stated primary aims and objectives The following should be clearly described and appropriate for achievement of the proposed aims and objectives: <ul style="list-style-type: none">• The size and location of the proposed MPA.• The proposed duration of the MPA, and relevant milestones and review periods.• Methods are clearly stated and measurable.• The methods should also state where they relate to demonstration or research or both.• An description of what statutory and/ or voluntary management measures are anticipated to achieve the aims and objectives.
2	The proposed MPA is the best means of carrying out the proposed demonstration.	Assessment to include consideration of the application of research and the potential for any proposed management measures to be successfully implemented.	The proposed MPA is the best means of carrying out the proposed demonstration or research.	The following should be clearly described: <ul style="list-style-type: none">• Explanation of what alternative approaches were considered and provide a critical evaluation as to why a D&R MPA was concluded to be the most appropriate approach.• Consideration of the potential for any proposed management measures to be successfully implemented.

	Original Guideline	Original description of assessment	Supplementary Guidelines	Assessment criteria
3	Research proposed is scientifically sound.	Assessment of scientific rigour undertaken by Marine Scotland Science or statutory advisors.	Research or demonstration proposed is scientifically sound.	<ul style="list-style-type: none">• Assessment will be undertaken of scientific rigour of proposal, in particular proposed methods, therefore the following criteria are expected:<ul style="list-style-type: none">– Literature review / background information, such as relevant previous work that may inform proposal– Rationale – specific question(s) to answer– Method and Design – how data will be collected, controlled, and analysed.– Hypothesis/Conclusions – overview of how the process you have followed is scientifically valid.– References• Assessment to be undertaken by Marine Scotland Science or statutory advisors or an independent expert.
4	There is a good level of support from stakeholders.	Support would be expected from those most directly involved/ affected by the proposal.	<p>There has been fair, open and reasonable engagement with stakeholders.</p> <p>There is a good level of support from stakeholders.</p> <p>An assessment of the potential socio-economic cost and benefits has been undertaken, if applicable</p>	<p>Clear evidence of the following must be provided:</p> <ul style="list-style-type: none">• The proposer has identified relevant stakeholders and engaged them in the development process.• The views of those who may be affected by proposal have been taken into account.• Alternative solutions suggested by stakeholders have been appropriately documented and assessed under guideline 2.• A socio-economic assessment of the cost and benefits.
5	The proposed demonstration is feasible and fits with in the wider set of government priorities at the national level.	This could include contributing to achieving one or more of Scotland’s National Marine Objectives. The proposal should be able to demonstrate a good fit with the wider set of government priorities at the national level.	<p>The proposal provides benefits in line with <u>National Outcomes</u>ⁱⁱ or other government priorities.</p> <p>Funding and resources required to deliver the proposals are the responsibility of the proposer.</p>	<p>Clear evidence of the following must be provided:</p> <ul style="list-style-type: none">• The contribution to achieving one or more of Scotland’s National Marine Objectives.• The contribution to wider national government priorities.• The proposal should show what benefits it can potentially offer.<ul style="list-style-type: none">– The scale of benefits may be from the local to the national, or academic. And benefits may be felt directly as a result of research or demonstration, or may be indirect through helping another process that supports sustainability or conservation.• There is adequate resource available to achieve its aims and objectives.

	Original Guideline	Original description of assessment	Supplementary Guidelines	Assessment criteria
6	The proposed demonstration has a high value in terms of helping to improve our knowledge and understanding.	This may be in terms of the interaction between new technology and marine features or the trialling of novel approaches to management.	The proposed demonstration or research has a high value in terms of helping to improve our knowledge and understanding.	<p>Clear evidence of the following may be provided (this list is not exhaustive):</p> <ul style="list-style-type: none">• the interaction between new technology and marine habitats and species.• Trialling of novel approaches to management.• Trialling of approaches used elsewhere in Scotland.• Trialling of approaches in test locations that could have wider applicability.• Empowering local regional or sectoral communities in marine stewardship.

i. <http://www.gov.scot/Topics/marine/marine-environment/mpanetwork/mpaguidelines>
ii. <http://www.gov.scot/About/Performance/scotPerforms/outcome>

Source: https://www.webarchive.org.uk/wayback/archive/20190323123154mp_/https://www2.gov.scot/Resource/0051/00515465.pdf

Appendix 2: Fair Isle DR MPA Steering Committee Participation and Involvement Protocol

PURPOSE OF THE STEERING COMMITTEE

- To involve members in the development of the proposed DR MPA from an early stage
- To keep members informed and up-to-date on all developments
- To obtain members views (both agreement and disagreement) on:
 - the objectives of the MPA
 - the activities of the Project officer;
 - the attainment of funding for the delivery of MPA objectives;
 - data and data sources for use in MPA research;
 - the appropriateness (or otherwise) of MPA research methods;
 - the appropriateness (or otherwise) of MPA demonstration methods

PRINCIPLES OF ENGAGEMENT

The Steering Committee is a representation of industry, environmental organisations, researchers, public bodies, local government, central government and the Fair Isle community association (including FIMRO (formerly FIMETI)). The principles of engagement set out below apply to all representatives. Success of the Steering Committee is based on trust between its members.

It is important that:

- Everybody contributes fully, tabling all their views or reservations;
- Comments are not attributed to individuals;
- Everyone participates fully in the activities;
- It is a 'no blame' culture;
- All are given the chance to speak without interruption.

ALL MEMBERS CAN/SHOULD:

- Participate in the Steering Committee to help to steer the demonstration and research work;
- Contribute to the identification and collection of relevant data and information to inform the MPA research objectives;
- Assist with the quality assurance of the research (e.g. through identifying reliable data sources, providing views on methods etc.);
- Provide views on methods, interpretation and risks;
- All be given the opportunity to input on any external facing material or releases;
- Not make use of the Steering Committee or its outputs for political gain or to further an agenda at the cost of another member (this applies to funding sources too);
- Treat draft reports "in confidence" and respect that these should not be disseminated outwith the group membership. Representatives of organisations may make draft reports available to their members, as they see fit.

DISPUTES/DISAGREEMENTS

- All final decisions must be reached through consensus.

Failure to adhere to the terms of the protocol may result in you not being invited to participate in future meetings.

Appendix 3: Timeline of the Fair Isle DR MPA

FEBRUARY 2011	Guidelines for selecting & developing MPAs are published by Marine Scotland.
DECEMBER 2011	FIMETI produce (with funding from the Blue Marine Foundation) a proposal for a Marine Protected Area for Fair Isle Waters.
MAY 2012	FIMETI submit petition PE1431 ³¹ to Petitions Committee "Calling on the Scottish Parliament to urge the Scottish Government to implement a condition of the Council of Europe Diploma to Fair Isle by designating Fair Isle waters as a Marine Protected Area."
JULY 2012	Shetland Fishermen's Association rejects the Fair Isle DR MPA proposal in a letter to the Scottish Government.
SEPTEMBER 2012	As per request from Marine Scotland FIMETI produces 'Goals and Objectives' document.
SEPTEMBER 2013	FIMETI produces 'Fair Isle Dossier: A Baseline for Developing MPA Management' ³² which brings together up-to-date data charts e.g. seabird population changes and breeding successes.
MARCH 2014	Stakeholder meeting between the Fair Isle community and fisheries organisations is hosted at the Fair Isle Bird Observatory.
JULY 2014	Partnership between Fauna & Flora International and FIMETI is created to offer support (via newly appointed Marine Community Support Officer) to FIMETI in developing the DR MPA proposal and future processes.
OCTOBER 2014	APBmer, a marine environmental consultancy, are contracted by Marine Scotland to conduct an external assessment of the Fair Isle DR MPA proposal against the MPA Selection Guidelines - assessing the DR MPA's socioeconomic and environmental impacts.
OCTOBER 2014	NatureScot produces a document which highlights how the Fair Isle Demonstration & Research MPA proposal meets the DR MPA Selection Guidelines ³³ .
OCTOBER 2014	FIMETI produces answers to extensive set of questions (see Appendix 5) from independent assessors.
NOVEMBER 2014	The Petitions Committee agree to defer further consideration of the Fair Isle MPA petition until early next year and to await the outcome of the assessment of Fair Isle's Demonstration and Research proposal.
JANUARY 2015	Independent Assessors ABPmer publish a Fair Isle DR MPA Assessment report ³⁴ and request FIMETI develop answers to a further series of questions.
JANUARY – JUNE 2015	FIMETI & all stakeholders develop a shared document as a response to independent assessor's recommendations.
MARCH 2015	DR MPA stakeholder meetings take place in Lerwick.
JUNE 2015	FIMETI produces final clarification document, along with a 'Draft Steering Committee Protocol' and submit to Marine Scotland in early June.
JUNE 2015	FIMETI's Fair Isle DR MPA proposal successfully passes ABPmer's independent assessment (mid-June). ³⁵
SEPTEMBER/ OCTOBER 2015	With a decision pending, Marine Scotland organise presentations and discussions for all stakeholders to attend on Shetland and Fair Isle. National Trust Scotland start to produce of a short promotional film on the importance of the DR MPA.
26 JANUARY 2016	The Petitions Committee agree to close the petition on the basis that the proposal meets the criteria for the marine protected area selection guidelines and the Scottish Government is likely to consult on the proposal in 2016.

MARCH 2016	The Fair Isle DR MP public consultation is launched ³⁶ and runs between 01 March and 26 May 2016. FIMETI & FFI produce resources such as a Q&A sheet on the proposal, a 'Help Sheet' for local residents to help them with responding to the consultation questions, press releases for local papers.
MARCH 2016	NTS film is launched, produced by film maker Liz Muzzer: https://vimeo.com/157135778 .
NOVEMBER 2016	On the 9th November 2016 the Fair Isle DR MPA is designated. ³⁷
NOVEMBER 2016	Having achieved its goals, FIMETI dissolves and community members transition into setting up a new community body, in partnership with the Fair Isle Bird Observatory and the Fair Isle Community Association, motivated by the need to establish a charitable body which could lead on the recruitment of an MPA Project Officer, identified as being fundamental for the implementation of the MPA.
MARCH 2017	The first DR MPA Steering Committee meeting is held in Lerwick on March 15th – main points of discussion include ratifying the Steering Committee's Terms of Reference, setting up a Science & Research sub-group, identifying critical first tasks and relevant programmes of (mostly survey) work.
MAY 2017	An internal NatureScot funding proposal for ecological surveys across 2017-2019 is secured, enabling initial work on data compilation and identifying data gaps as well as identifying small, targeted projects (e.g. sub-surface marine data).
AUGUST 2017	August 25th Fair Isle hosts the second Steering Committee meeting which all Steering Committee members attend, it's followed by a celebration party for the MPA.
SEPTEMBER 2017	NatureScot coordinates MSc research into the foraging areas important to breeding seabirds in the northern North Sea and their interaction with commercial fisheries.
SEPTEMBER 2017	Marine Scotland grant £5,000 to the Fair Isle Community Association to help build on-isle capacity.
MARCH 2018	A new Scottish Charitable Incorporated Organisation (SCIO) – the Fair Isle Marine Research Organisation (FIMRO) – is established and three new directors are appointed (Susannah Parnaby, Fiona Mitchell and Neil Thomson). A third steering group meeting takes place in the NatureScot offices in Lerwick.
AUGUST 2018	The fourth Steering Group meeting takes place in Fair Isle, research and development work is slow with capacity constrained.
SEPTEMBER 2018	FIMRO & FFI work to prepare for the recruitment of a proposed Project Officer position, developing fundraising and recruitment resources.
SEPTEMBER 2018	NatureScot coordinates research into the effect of disturbance on nesting pattern of great skua and great skua responses to Fair Isle aircraft.
SEPTEMBER 2018	An undergraduate research project from Aberdeen University commences (completed in 2020) which investigates the attitudes of multiple stakeholder groups, including industry representatives, environmental NGOs, statutory bodies and the local community, using a mix of qualitative data gathered through interviews, open qualitative surveys and field notes.
MARCH 2019	Fair Isle Bird Observatory building destroyed by fire, FIMRO already limited capacity becomes entirely constrained – a pause is placed on all MPA efforts except for some research strands, which NatureScot supervises.
MARCH 2020	A new agreement is developed between FIMRO and its core partners, FFI & NatureScot which sees funds being held by FFI for the community being delivered to NatureScot to enable the recruitment of a temporary part-time DR MPA project officer.
MAY 2020	Steering Committee meetings resume after the pause, the fourth one taking place virtually in May 2020.

JUNE 2020	A formal sub grant agreement between FFI and NatureScot is developed granting £33k for the aforementioned role. A community retainer fund of £5k is kept for FIMRO.
SEPTEMBER 2020	Recruitment for a DR MPA Project Officer is launched by NatureScot, the role of which is to lead on the implementation of the sites objectives and to support the continued capacity building of FIMRO.
NOVEMBER 2020	DR MPA Project Officer PO in place, the intention is now to move out of the initial development phase and to move into implementation through the production of a formal co-management MPA plan. Meetings resume for DR MPA Steering Committee.

Source: FIMETI archives and email communication.

Appendix 4: List of ABPmer Questions Put To FIMETI During Independent Review (2015)

- Has there been any development of the proposal since 2011?
- Have there been any developments in the MPA proposal area that might require changes in the proposal, for example, changes in the state of the marine environment or human activity pressures?
- Does FIMETI have more recent information on seabird numbers, breeding success, prey availability, or commercial fisheries activity in the MPA proposal area?
- Can FIMETI clarify the nature and spatial application of the following proposed management measures:
 - Sea fisheries technical measures?
 - Selective fishing of shellfish?
- Does FIMETI have any further evidence on the potential benefits to fish stocks in Fair Isle that would result from sea fisheries technical measures?
- Can FIMETI clarify proposed governance arrangements for the D&R MPA?
- To what extent does FIMETI consider that the D&R MPA will improve knowledge of the relationship between seabirds and prey availability compared to previous research in relation to SE Scotland sandeel closures?
- What are FIMETI's views on alternative methods for achieving conservation objectives e.g. the use of sectoral measures for commercial fisheries or shipping?
- Does FIMETI have any information on compliance with the voluntary ATBA?
- How does FIMETI envisage compliance/enforcement issues would be handled for fisheries management measures or shipping measures?
- Could the proposal be modified to increase benefits/reduce costs while still meeting its aims and objectives?
- What are the research hypotheses that are being tested?
- What baseline information is available on fish/shellfish stocks and levels of fishing activity to inform the assessment of management measures in relation to sea fisheries technical measures, selective fishing of shellfish and SPA measures?



Fair Isle's George Watson Memorial Centre and Museum. Credit: Ken Wilkie.

- What baseline information is available on the current condition of seabed habitats in the MPA proposal area?
- To what extent is current information on the presence and distribution of priority habitats and species within the MPA proposal area comprehensive?
- What methods are proposed for the monitoring of seals, cetaceans and basking sharks, physical/chemical sea conditions and plankton?
- Has there been any discussion with Chamber of Shipping or the Maritime Coastguard Agency concerning the proposed management measures for shipping?
- How does FIMETI see the MPA proposal fitting with wider Government priorities, for example the High Level Marine Objectives?
- Is FIMETI aware of any additional research evidence on the benefits of sea fisheries technical measures for fish stocks within MPAs in temperate waters?
- Does FIMETI have additional data on levels and value of commercial fishing activity within the MPA proposal area?

Source: email communication between ABPmer and FIMETI 2014. Copies, including copies with answers available upon request.

Appendix 5: Detailed Proposed Implementation Plan from FIMETI

PHASE ONE – INITIATION AND GAP ANALYSIS:

1. Seek consensus on the research programme and identify research elements relevant to D&R MPA aims and objectives.
2. Continue existing research; expanding/amending it as necessary to better fit MPA aims.
3. Establish working groups.
4. Appoint project officer.
5. Begin data review - carry out audit of current research activities including those where Fair Isle waters form part of a wider study.
6. Conduct gap analysis.
7. Assess feasibility of maintaining/enhancing current study and new lines of research.
8. Develop protocols to fill gaps.
9. Identify funding streams, current and required, to fully implement the D&R MPA programme.
10. Incorporate all elements into a cross-sectoral programme.

PHASE TWO – DEMONSTRATION AND TRIALLING OF RELEVANT IDENTIFIED ACTIONS:

1. Application of integrated programme.
2. Continued input from stakeholders through Steering Committee and various working groups.
3. Annual assessment of progress and results.
4. Use assessment as a basis for enhancing and/or adjusting the programme.
5. Enact dissemination process.

PHASE THREE – EVALUATION:

1. Full evaluation of the extent to which the project is achieving its objectives.
2. Address shortfalls and failures.
3. Incorporate findings into a streamlined programme for Phase 4.

PHASE FOUR – ENHANCEMENT:

1. Maintain and enhance the programme.
2. Enact sustainable conservation management measures based on the findings of the research.
3. Submit review findings and recommendations to Marine Scotland

Source: www.webarchive.org.uk/wayback/archive/20160407191655mp_/http://www.gov.scot/Resource/0049/00494122.pdf

Appendix 6: Fair Isle DR MPA Steering Committee

The Fair Isle DR MPA Steering Committee is currently comprised of:

Fair Isle Marine Research Organisation (formerly FIMETI)

Fair Isle Bird Observatory Trust

Fair Isle Community Association

Fauna & Flora International

Marine Scotland

NAFC Marine Centre

National Trust for Scotland

Orkney Fisheries Association

Royal Society for the Preservation of Birds (RSPB)

Scottish Fishermen’s Federation

NatureScot (formerly Scottish Natural Heritage)

Shetland Fishermen’s Association

Shetland Fish Producers Organisation

Shetland Islands Council (Coastal Zone Management Service)

Shetland Shellfish Management Organisation

Source: www.webarchive.org.uk/wayback/archive/20160407191655mp_/http://www.gov.scot/Resource/0049/00494122.pdf

References and further reading

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