

Response ID ANON-JQHM-9ND1-C

Submitted to **Highly Protected Marine Areas - Call for Evidence**

Submitted on **2019-10-30 16:00:04**

Introduction

What is your name?

What is your name?:

Jackie Pearson (submitted on behalf of Dr Veerle Huvenne)

What is your email address?

Email:

jfpea@noc.ac.uk

1 Would you like your response to be confidential?

No

1a. If you answered Yes to this question please give your reason:

2 Are you responding to this call for evidence on behalf of an organisation or as an individual?

on behalf of an organisation

2a If responding on behalf of an organisation:

Which organisation(s) are you responding on behalf of? :

The National Oceanography Centre

What is the position you hold at the organisation(s)?:

Engagement and Partnerships Officer

2b If responding as an individual which of the following best describes your current employment status? Tick all that apply.

2c If employed or retired, briefly describe the main business activity of your company /organisation? If you are self-employed, or looking for work, please indicate what type of work you do?

If employed or retired, briefly describe the main business activity of your company /organisation? (If you are self-employed, please indicate what type of work you do)? :

3 How old are you? Please tick one of the boxes below.

Not Answered

4 What is your gender? Please tick one of the boxes below

Not Answered

5 Which region of the UK do you live in? Please tick one of the boxes below

Not Answered

6 Which of the following best describes where you live? Please tick one of the boxes below.

Not Answered

Part 1: HPMAs aims, opportunities and challenges

7 To what extent do you agree with the following reasons for introducing HPMAs?

To what extent do you agree with the following statements on HPMAs - to provide marine areas a chance to return to as natural a state as possible:

Slightly agree

To what extent do you agree with the following statements on HPMAs - to provide a reliable measure of what recovery could look like if all damaging human activities were removed:

Agree

To what extent do you agree with the following statements on HPMAs - to act as no take zones, allowing commercially fished species to recover and for these benefits to spill outside of the protected area:

Strongly agree

To what extent do you agree with the following statements on HPMAs - to better protect sensitive and/ or ecologically important species and habitats:

Agree

To what extent do you agree with the following statements on HPMAs - to look after our seas as part of our duty as stewards of the natural environment:

Neither agree nor disagree

To what extent do you agree with the following statements on HPMAs - to better prevent or lessen the effects of climate change, for example to protect habitats that can capture carbon or protect species that are vulnerable to a warming ocean:

Slightly disagree

To what extent do you agree with the following statements on HPMAs - to preserve and increase opportunities for nature-based tourism:

Disagree

To what extent do you agree with the following statements on HPMAs - to support or improve opportunities for cultural, spiritual, educational and/or recreational activities:

Disagree

other – please specify:

8 The UK already has a network of MPAs that includes Marine Conservation Zones (MCZs). How could HPMAs complement and enhance the current designations in English inshore and offshore waters and Northern Irish offshore waters?

The UK already has a network of MPAs that includes Marine Conservation Zones (MCZs). How could HPMAs complement and enhance the current designations in English inshore and offshore waters and Northern Irish offshore waters?:

9 Do you have any experience or examples relevant to the UK where you believe HPMA or similar have been effective or ineffective? Please provide any relevant evidence.

Please provide any relevant evidence:

No experience

10 Do you see any challenges to the introduction of HPMA? If so, how could these challenges be addressed? Please provide any relevant evidence.

Please provide any relevant evidence:

One of the big challenges with MPAs in general, and particularly MPAs that are further offshore, is policing. While there is evidence that fisheries closures are reasonably well respected, some violations still occur (see for example Huvenne et al., 2016). Particularly at the boundaries, some activity may stray into the HMPAs. Hence it will be important to make the HMPAs large enough, so there is enough buffer around the area that really needs protection. Even then, some activities could stray across the HMPA: a good mechanism for preventing these activities, for surveying the area, and for taking legal action against the perpetrators needs to be set in place.

11 What is your opinion of the evidence for HPMA? Where is more evidence required?

What is your opinion of the evidence for HPMA?:

The biggest unknown with HMPAs, and MPAs in general, is their long-term evolution, and how this compares to the long-term evolution of the seabed in general. This is particularly true for deep-sea and offshore areas, and for the benthic environment. Hence there is a need for long-term observational studies that follow the evolution of the ecosystems in both the MPAs and the adjacent, non-protected areas.

Part 2: HPMA site selection

12 What evidence and factors should be considered when selecting sites for HPMA and who should be engaged in the process?

What evidence and factors should be considered when selecting sites for HPMA and who should be engaged in the process?:

Factors that should be considered are the current status of a site, and the regeneration potential (if known). A whole-system approach should be taken; rather than focusing on the protection of specific species or habitats, the entire ecosystem, and its relationship with the surrounding region should be taken into consideration. With this in mind, it will be important to make HMPAs large enough, with a sufficiently wide buffer, to keep the direct 'edge effects' out of the core of the protected area.

In terms of engagement, a wide consultation with all stakeholders in the area should be undertaken, but most of all, the selection process should be based on sound scientific evidence. Thorough evidence gathering, and consultation with scientific experts on the region and the processes affecting the region, will be key.

13 Are there any locations where it would be particularly beneficial: (i) for a location to become an HPMA or (ii) an existing or part of an existing MPA to become an HPMA? Please could you state these in the box below and provide any relevant evidence.

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This would need a thorough evaluation of current MPAs and wider inshore and offshore areas.

Part 3: Future implementation and management of HPMAs

14 What would be the most appropriate way of managing and monitoring HPMAs? How do you think this could fit alongside existing marine management?

What would be the most appropriate way of managing and monitoring HPMAs? How do you think this could fit alongside existing marine management?:

Part 4: Your past experience of the Marine Protected Areas (MPA) identification, designation, and management process

15 Have you been involved in the identification, designation or management of MPAs in the UK previously?

Yes

15a If yes, we would like to learn from your experience of being involved in MPA identification, designation and management. Please could you provide information on:

The name of the MPA(s) and your role and involvement:

o Darwin Mounds: the Darwin Mounds were originally discovered by a team from the NOC in 1998-2000 (Bett, 2001; Masson et al., 2003). The evidence gathered in those days formed the basis for the closure of the area to all bottom contact fisheries, first as an emergency closure under the then new EU CFP in August 2003, later made permanent under the Habitats Directive in 2004 (Davies et al., 2007; De Santos & Jones, 2007). Since then, the NOC has re-visited the Darwin Mounds twice, to evaluate the status of the MPA, and study the recovery of the cold-water coral reefs. We re-visited in 2011 (see also Huvenne et al., 2016), while the most recent re-visit took place in September 2019. All this work has been carried out in close collaboration with JNCC.

o Greater Haig Fras MCZ: the NOC worked together with DEFRA, JNCC and CEFAS to provide evidence for the designation and monitoring of this MCZ, through surveys in 2012, 2015 and 2018. In addition, the Greater Haig Fras MCZ was a major case study area where NOC demonstrated the use of new robotic technologies for the monitoring of MPAs (Wynn et al., 2014). This collaboration resulted in a series of guidance documents on the use of robotic technologies (e.g. Remotely Operated Vehicles or ROVs and Autonomous Underwater Vehicles or AUVs) for marine survey and monitoring, co-edited by NOC. Further advice is provided by NOC colleagues on the processing and interpretation of novel datasets, including seafloor imagery (contributions to the JNCC Big Picture initiative).

o Canyons MCZ: Again, the NOC worked together with DEFRA, JNCC and CEFAS to collect necessary evidence for the development of the management plan for the Canyons MCZ, and for initial monitoring of the area through the CODEMAP expedition in 2015 and more recently also in 2018. Again, the use of novel technologies to survey and monitor complex deep sea environments, which are challenging to study with conventional, drop-down equipment, were demonstrated.

o North-west Rockall Bank SAC: In collaboration with JNCC, NOC gathered the crucial evidence to support an amendment to the boundaries of this SAC, which were initially based on the outline of a fisheries exclusion zone. The NOC evidence demonstrated the presence of Annex I habitats just outside the original boundaries, and as a result, the SAC was extended. However, the evidence also illustrated how vulnerable the habitats close to the MPA boundaries were. This provided an argument for the use of buffer regions.

o Finally, NOC has also worked with JNCC and government departments in general to provide evidence on MPAs in Overseas Territories, Commonwealth areas and the High Seas (e.g. Clarion Clipperton Zone).

What worked well?:

o Engagement with the government departments (e.g. DEFRA, JNCC, CEFAS) worked very well. Evidence collected by NOC was taken straight into the MPA processes. Advice concerning the use of new technologies was also taken up, although it does take longer to change current practices among the wider community.

What could be improved?:

o Even if the evidence was taken up immediately, the amount of evidence that could be collected with the current levels of funding was extremely minimal. Similarly, monitoring activities cannot be carried out to the standards that would provide a robust assessment of the MPAs, particularly in the deep sea and offshore area. The MPAs are vast (necessarily so), and deep-water surveys are time-consuming. The use of robotic technologies significantly increases the amount of data that can be collected, but even then the re-visit frequencies and sampling densities are still too low to provide a good understanding of the processes acting in the MPAs. In addition, to evaluate the real development of the MPAs, sufficient observations should also be carried out outside MPAs, to establish the level of the MPA effects.

16 How has stakeholder and local knowledge been included in previous processes to introduce MPAs (inshore or offshore)? Please can you comment on whether and how this knowledge can better be integrated in future processes associated with HPMAs?

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No comment.

Part 5: Any other comments

17 Are there any other comments you would like to make in regard to HPMAs?

Are there any other comments you would like to make in regard to HPMAs?:

HPMAs may be a good instrument to protect parts of our oceans from direct human impacts. However, indirect human impacts such as ocean acidification, global

warming, the spread of contaminants and even the distribution of micro- and macroplastics do not honour the boundaries drawn on the MPA maps. It is therefore near to impossible to develop areas that are completely 'natural' and free from anthropogenic influence. Taking away the direct impacts will still reduce the effects of combined impacts on ecosystems, hence designating complete no-take zones certainly has merit.

When designing the legislation around HMPAs, it will be important to keep in mind that they will need to be monitored, and that they will form unique scientific experiments into the natural evolution and/or recovery of marine environments. Hence special provision will need to be made to allow scientific observation (and where necessary, minimal amounts of sampling) to enable these studies.

Consultation Feedback on the Online Survey

18 Overall, how satisfied are you with our online consultation tool?

Very satisfied

Please give us any comments you have on the tool, including suggestions on how we could improve it. :

Very good...just one comment - there was a switch in question numbers between the PDF copy and the on-line version. Question 11 became question 8. No problem though ;-)