

Title:	Case Study: Sound of Arisaig candidate Special Area of Conservation - UK Marine SACs Project
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Workgroup:	N/A
MESH action:	Action 5.1: Member State workshops on habitat mapping and spatial planning. Action 5.2: Case histories on the applications of habitat mapping
Version:	1.1
Date published:	Source document - 21/12/2006
File name:	6.1 – Case study 1 Arisaig cSAC.doc
Language:	English
Number of pages:	4
Summary:	The Case Study describes work to support the development of a management strategy for the Sound of Arisaig candidate Special Area of Conservation (cSAC). A key source of information was the extent and distribution of the sandbank habitat (including maerl beds) for which the site was being designated. The habitat maps were presented to stakeholders and considered alongside other information such as on scallop dredging. This revealed a potential conflict and possibilities for zoning such activities in order that they might continue without damaging the maerl beds, eg no scallop dredging in <20m of water with a further 5m depth of water acting as a buffer zone.
Reference/citation:	Taken from Gubbay,S., Earll, R., Gilliland, P.M. & Ashworth J. 2006. Mapping European Seabed Habitats (MESH). Workshop report and additional case studies. Report to Natural England.
Keywords:	Maerl, scalloping, SAC, zoning
Bookmarks:	Workshop report and additional case studies: Report to Natural England.
Related	Workshop report and additional case studies: Report to

information:

Natural England;
Sound of Arisaig Marine Special Area of Conservation
Management Strategy.

1. Introduction

This project contributed to the development of management strategy for the Sound of Arisaig candidate Special Area of Conservation (cSAC) as one of twelve demonstration projects in the EC LIFE programme

The Sound of Arisaig was a cSAC at the time of the project. The site was selected because of the presence of 'sandbanks which are slightly covered by seawater all of the time'. In the Sound of Arisaig these are partly made up of maerl. A management forum and topic groups were established to draw up the management scheme. Seabed habitat maps were one of the sources of information on which the management scheme was based.

The UK Marine SAC project ran over a four year period from 1996 – 2001.

2. Aims and objectives

To establish a management scheme for the Sound of Arisaig candidate SAC.

3. Main application/ use

Policy & objectives – improving understanding of the ecology and the habitats which require specific conservation management within the Sound of Arisaig SAC

Planning – identifying the extent of the habitats for which the site was being designated as an SAC and using these maps to develop a zoning scheme.

Monitoring – the seabed habitat maps can be used to inform the development of a spatial sampling strategy to report on the status of the sandbank habitat in the future

Audit & review – the use of the habitat maps for monitoring as above will feed into EU reporting on the state of sandbank features not just at this location but as part of a UK wide assessment.

4. Technical outline

A study of Scottish sea lochs between 1988-92 for the Marine Nature Conservation Review reported the presence of extensive, rich and diverse beds of maerl in Loch Ailort, Loch Moidart and Loch Ceann Traigh in the Sound of Arisaig. This information resulted in the area becoming a cSAC for its maerl beds as a type of sandbank habitat. A more detailed survey was carried out in 1995 to determine the extent of the habitats and marine communities within in the cSAC to suggest possible boundaries (Figure 1). Data were collected using acoustic survey techniques backed up with biological sampling. A key source of information for the management scheme was the extent and distribution of the sandbank habitat (including maerl beds) for which the site was being designated

This information was presented to stakeholders to inform the development of the scheme of management. When considered alongside other considerations the end result has been the prohibition of scallop dredging in less than 20m of water with a further 5m depth of water acting as a buffer zone to avoid damage to the sensitive maerl beds which lie in this zone.

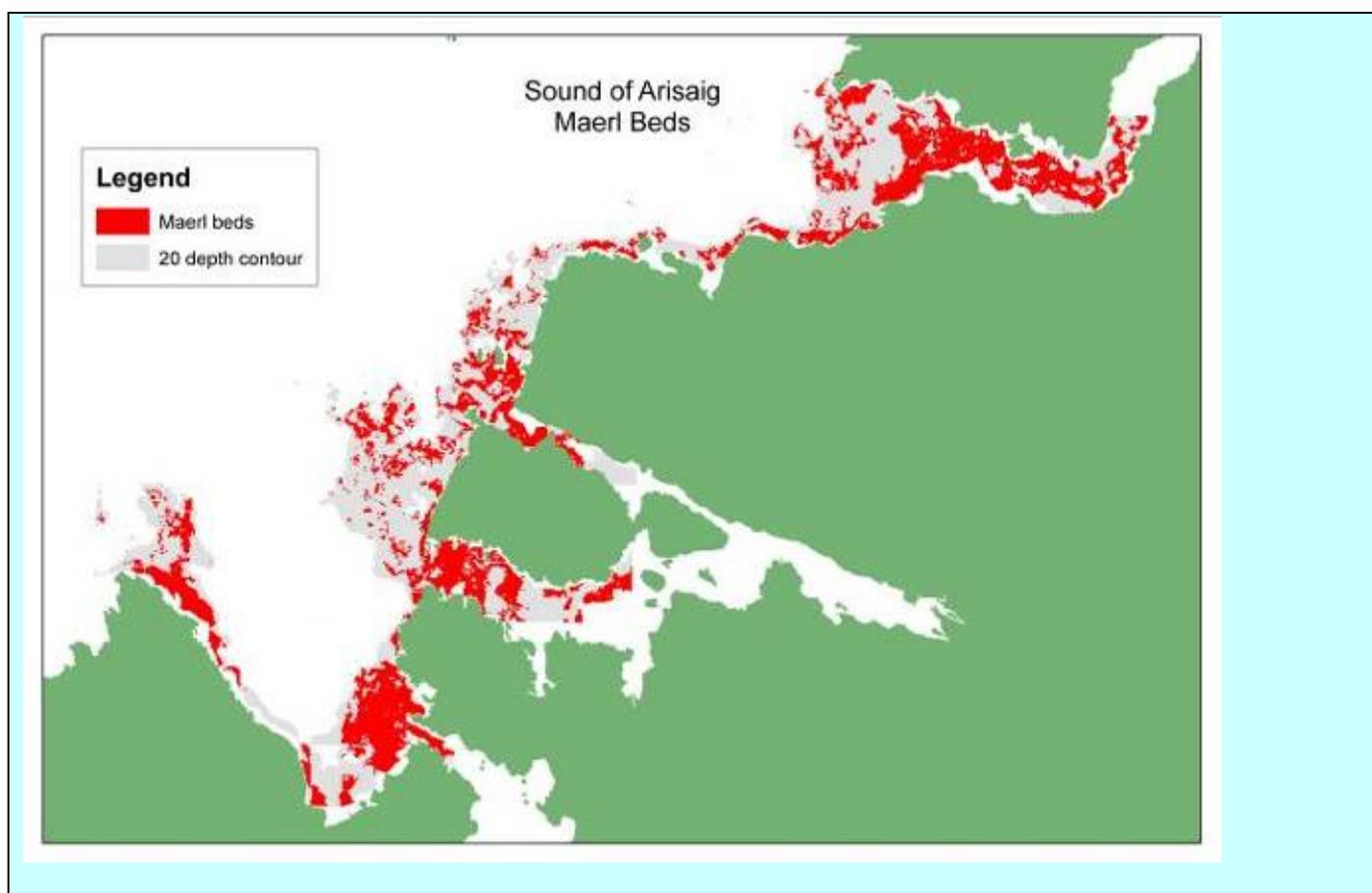


Figure 1. Distribution of maerl beds and sand banks in the Sound of Arisaig cSAC. From Marine SACs LIFE project SNH/HRC

5. Did mapping help meet the objectives and if so how?

The seabed habitat maps were intended to support the development of the management scheme and they did so in a number of ways;

Mapping the extent of the key habitats revealed the potential conflict with existing scallop dredging activities and the possibilities for zoning such activities in order that they might continue without damaging the maerl bed/sand bank habitat.

By providing a baseline record of the extent of the maerl/sandbank habitat the maps will be an important reference when considering whether any future plans and projects might conflict with conservation of this habitat within the SAC.

6. Key lessons

Seabed habitat mapping can be used to inform and support the development of management schemes. One element of this (demonstrated by this project) is addressing potential conflicts through zoning, based on good quality data.

Mapping can also help stakeholders visualise the importance of the area by showing the extent of habitats of particular conservation interest.

7. Conclusions

7.1. *Outcomes – strengths*

The seabed habitat maps helped to visualise the implications of different management arrangements (zoning) within the marine SAC

They were also very helpful in reducing any scepticism about the importance of the area by demonstrating through objective research/maps the extent of the habitat.

7.2. *Outcomes – weaknesses*

The mapping was not designed to answer detailed questions and therefore may not be a suitable reference in all circumstances e.g. a very small scale project. However a balance needs to be struck between the required resolution, level of detail and cost. These must be sufficient to address the task in hand although it may also be useful for other tasks.

7.3. *What would you have liked MESH to provide?*

Having seabed mapping information at the start of the project would have enabled more time to be spent on developing the scheme of management rather than on the gathering of essential baseline information.

7.4. *How might this work help the MESH project?*

There will always be a dilemma in deciding the level of detailed required as this depends on the objective of the mapping. In the case of MESH it may be that a higher level of detail could be sought for areas which are more complex but stable, compared to more dynamic habitats which will probably need to be revisited at the time a specific question needs to be answered.

Seabed habitat maps could be used to pick up any changes in the extent of particular seabed habitats but will not answer questions as to why such changes might have occurred. As a future development, MESH should consider whether some basic link to human activities might be incorporated into the habitat mapping work.

8. Further information

Sound of Arisaig Marine Special Area of Conservation Management Strategy.

9. Acknowledgements

Thanks to Sandy MacLennan (Scottish Natural Heritage) who reviewed the case study text in the MESH UK Workshop.