

Application for a Band 1 Marine Licence

Project description

Project name

Maerl bed deep core survey

Please provide a brief description of the proposed project, including location.

This project is part of the Nature Networks programme, a new Welsh Government multi-year funded programme focusing on improving the condition of protected sites across Wales. It provides an important opportunity to help tackle the nature and climate emergencies, scaling up investment in nature recovery through the design and delivery of a multi-year programme. The programme aims to deliver increased resilience of protected sites and the terrestrial, freshwater and marine networks in which they sit. The integrated nature of the programme ensures that the land and water in Wales is managed sustainably and in an integrated way.

Maerl forms part of the Pembrokeshire Marine SAC 'Large Shallow Inlets & Bays' and 'Estuaries' features which are currently in unfavourable condition (Pembrokeshire Marine SAC Indicative site level feature condition assessment 2018). In addition to this, the Milford Haven Maerl bed is the only known live Maerl bed in Welsh waters. There is evidence to show that it has been present within the Haven for thousands of years but monitoring over the last 15-20 years has indicated a significant decline in abundance and extent of live Maerl. The cause of the decline is unknown, but it is known that Maerl is highly sensitive to smothering through sediment deposition (Wilson et al 20041). The work proposed seeks to gain an understanding of the extent and structure of the bed as well as gain insight into past sediment regimes that allowed a healthy maerl bed to form. The conservation objectives for the Pembrokeshire Marine SAC (Reg. 37) state that 'the Milford Haven waterway complex would benefit from restorative action...' and the data gained from this survey would be used to inform the feasibility of restoration initiatives

Benefits of the proposed work:

- Understand depth and extent of bed in the past
- Understand past conditions (in terms of sediment regime) that supported a thriving maerl bed.
- Understand role of physical disturbance on decline of maerl bed.
- Store material for potential further analyses – for example contaminant analysis, ancient DNA (aDNA).

This work would be an important step in examining the cause of decline and enable us to look for management measures or guidance that could improve the resilience of the maerl bed and promote recovery and help us understand baseline conditions needed for successful restoration.

The survey would consist of a total of 6 sites, with 3 x 2m cores to be taken per site. Sites have been chosen areas that will give us an idea of historic maerl bed depth and extent and how conditions in deeper and shallower areas have changed over time. In addition, sites have been chosen based on having little (less than 1%, live maerl) to minimise impact to the reef.

Applicant details

To whom the licence will be issued. This must be a legal entity such as an individual, registered company/ charity or public body.

Title	Dr
Full name	Frances Ratcliffe
Company or trading name	Natural Resources Wales
Company Registration Number (if applicable)	Natural Resources Wales
Name of contact or individual (if different)	Frances Ratcliffe
Position in company	Specialist (Senior Marine Environmental Assessment Officer)
Address (provide registered company address if applicable)	Maes Newydd Britannic Way Llandarcy, Neath
Postcode	SA10 6JQ
Telephone number	0300 065 3976
Email address	frances.ratcliffe@cyfoethnaturiolcymru.gov.uk

Details of agent, contractor, vehicles and/or vessels used to carry out works

Does the applicant wish to be included in all correspondence?

Yes

Will the works require the use of vessels?

Yes

Will the works require the use of any vehicles?

No

Proposed project details

Licensable period

Determination of applications will be based on the works taking place during these dates. Please ensure you have included an adequate contingency period. If works are not completed by the requested licence expiry date you may be required to submit a new application. Including a contingency period within your original application does not impact on the licence fee.

Start date (DD/MM/YYYY) 10/10/2023

Requested licence expiry date (DD/MM/YYYY) 10/10/2024

Please detail the location of the proposed project.

This should be either Ordnance Survey National Grid Reference (i.e. SN 12345 67890) or Latitude and Longitude in decimal degrees to 4 decimal places (i.e. Lat 52.1234 Long -4.1234), defining the extent of the project. Please specify which coordinate system has been used and if using GIS co-ordinates, specify which projection has been used.

Survey sites (within maerl bed area). Coordinate system: WGS84

Longitude Latitude

-5.09829 51.7069

-5.09547 51.7033

-5.07555 51.7049

-5.08165 51.7047

-5.08329 51.702

-5.07448 51.7011

Method statement

Are the works within a sensitive area or one of the following activities: boreholes, replacement piles or beach management?

Yes

Band 1 method statement template

You can upload your method statement here or fill in the questions below.

- File: Marine Licence application cores.docx - [Download](#)

Materials of the project

Description of materials to be deposited seaward of Mean High Water Springs (MHWS) (Please tick all that apply)

Other (please provide a description of materials):
NA

Delivery method of materials to site

If sea delivery, details of vessels to be used with a chart of proposed route and transshipment area is required. If delivery is by vehicle, the details about the proposed access route are required. Please indicate if you are providing details in a separate file.

No materials are to be deposited on site. The survey will take place from a vessel "Sea Leopard" a Lochin 33 survey vessel.

Will the works involve removals seaward of MHWS?

Yes

Description of materials to be removed seaward of MHWS (Please tick all that apply)

Silt

Gravel

Sand

Description of objects/materials to be removed seaward of MHWS, including quantities to be removed.

The materials that will be removed are seabed sediment. This may consist of silt, gravel, clay, sand. These removals are for scientific investigation purposes only.

Each core will measure 2m in length and 7cm in diameter. Each core has a volume of 7696.90cm³. The survey will take a total of 18 cores. The total volume to be extracted is therefore 138,544.2cm³ (0.1385442m³).

Additional information

Please provide the following:

You must include a suitably scaled extract of an Ordnance Survey Map or Admiralty Chart with location of project complete with north arrow and scale

Please upload these below

- File: maearl deep core sites.pdf - [Download](#)

Please list below all supporting documents that have been submitted with this application.
Map showing locations of 6 proposed sampling sites.

Statutory powers

Does the applicant have statutory powers to consent any aspect of the project? e.g. coast protection authority, dredging powers, statutory undertakers

No

If yes, please give details and state the relevant legislation that gives these powers.

This is an NRW survey. Please let me know if I should provide more details or change my response above

Public register

Is there any information contained within or provided in support of this application that you consider should NOT be included on the Public Register on the grounds that its disclosure:

	Yes	No
Would be contrary to the interest of National Security?		X
Would prejudice to an unreasonable degree you, or some other person's commercial interest or those of a third party?		X

Application fee

Please provide the method of payment

Reference number (not BACS remittance no.)

This is an NRW application

Declaration

I declare that to the best of my knowledge and belief that the information given in this application form and supporting documentation is true.

WARNING: It is an offence under the Marine and Coastal Access Act 2009, under which this application is made, to fail to disclose information or to provide false or misleading information. This could invalidate any licence granted.

Name Frances Ratcliffe

Date 02/10/2023

Position in company Specialist (Senior Marine Environmental Assessment Officer)

If you would like a copy of your completed form, please add your preferred email address below:

frances.ratcliffe@cyfoethnaturiolcymru.gov.uk