



## PROJECT PROPOSAL FORM

Making the Most of Masters aims to improve collaboration between employers and universities by providing opportunities for postgraduate students to undertake work based projects as an alternative to a traditional university dissertation. Projects should address a real need within the host organisation and be beneficial to both host and student.

The Marine Alliance for Science and Technology for Scotland (MASTS), pools the majority of Scotland's marine research capacity. MASTS members provide Masters courses in a range of marine related disciplines and many of their students are keen to undertake applied projects outside of academia.

### Notes on Topic Selection

A relevant academic will work with your organisation to refine your proposed topic and ensure it meets both your needs and the academic requirements of the student. Projects should typically be achievable within a 12–16 week timeframe (including writing the final report).

Your proposed project could be:

- A specific project title or topic for the student to deliver;
- A general idea of a business need which requires further development;
- A core research theme to be developed by the student into a bespoke project;
- An intended outcome for the organisation.

The level of detail you provide will determine the extent to which further discussion may be required with the relevant programme director to ensure suitability.

desk-based/data studies that will easily facilitate remote working and remote supervision are welcome, as well as in person and/or experimental based projects where appropriate.

### What's Next?

Please send your completed form to the MASTS Programme Coordinator & Deputy Dean of Grad School, Dr Emma Defew ([masts@st-andrews.ac.uk](mailto:masts@st-andrews.ac.uk)) before the deadline.

Following submission of the form, it will be channeled to the leaders of the various Masters programmes that operate within the MASTS community and a representative from the most relevant programme or department will get in touch to discuss the project scope, delivery and the selection of an appropriate student. If more than one student expresses an interest in your project, you will need to ensure discussions take place to enable the most suitable student to be matched with your project. The projects themselves usually won't start until May or June.



## MASTS - Making the Most of Masters – Project Proposal Form

**Name and address of Organisation:**

NatureScot  
Great Glen House, Leachkin Road, Inverness, IV3 8NW.

**Name of the key contact in Organisation:** Katie Cubbon (Fair Isle Demonstration and Research MPA research officer)

**Contact e-mail and phone number:** [katie.cubbon@nature.scot](mailto:katie.cubbon@nature.scot) +44 1463 667613

**Title of proposed project:** Fair Isle Demonstration and Research MPA: investigation of Passive Acoustic Monitoring methodologies for cetacean monitoring around Fair Isle

**Project outline and intended outcomes:**

Cetaceans are important indicators of the state of the marine environment and have a key role in maintaining the health of marine ecosystems. They provide a range of ecosystem services: preserving balance within marine and coastal food chains; reducing CO<sub>2</sub> within our atmosphere; and boosting global economy. Understanding cetacean populations and distribution will help us to determine what impacts they face and what measures can be established to maintain and enhance their populations.

Cetacean monitoring is a priority research area within the [Fair Isle Demonstration and Research MPA programme](#). Cetacean monitoring surveys aim to gather information on the species presence and distribution within and around the Fair Isle DR MPA using visual observations obtained through Shorewatch surveys and ad-hoc community observations. Passive Acoustic Monitoring (PAM) methodologies will also be used to collect vocalisations to assess presence and absence of species. This click data will be analysed alongside visual sightings data in the long-term monitoring of cetaceans around Fair Isle.

This student will work with the Fair Isle Marine Research Organisation (FIMRO) to develop a cetacean monitoring programme for Fair Isle. This will also include refining deployment methodologies for PAM devices and investigating mooring designs which are suitable to withstand the challenging environmental conditions around the isle.

**Any additional comments e.g. details of specific disciplines required, methods to be used, travel involved, where the work would take place (i.e. at the host site or at the University), whether you foresee any Intellectual Property or confidentiality issues (and if so, what form might these take?):**

The student should have a good understanding of marine ecosystems and an interest in cetacean monitoring. There may be opportunity for the student to travel to Fair Isle to gain an understanding of the marine environment and carry out visual cetacean surveys (Shorewatch training can be provided).

This MSc provides the student with an exciting opportunity to lead on idea and method development and make recommendations to support long-term cetacean monitoring within the Fair Isle DR MPA. The student will be supported by the Fair Isle DR MPA research officer and the Fair Isle Marine Research Organisation.

We invite the student to visit our main office in Inverness to meet with relevant colleagues as well as other MSc students carrying out projects within NatureScot. Travel and subsistence may be covered for this journey.