



PROJECT PROPOSAL FORM

Making the Most of Masters aims to improve collaboration between employers and universities by providing opportunities for masters 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) before **16:00 on Friday 27th October 2023**.

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:

National Museums Collection Centre (National Museums Scotland), 242 West Granton Road, Edinburgh, EH5 1JA

Name of the key contact in Organisation:

Fiona Ware, Curator of Marine Invertebrates

Contact e-mail and phone number:

f.ware@nms.ac.uk; 0131 247 4473 (contact by email is preferred)

Title of proposed project:

Establishment of baseline data for the meiofaunal community at 3 sites in the Firth of Forth prior to seagrass seeding as part of Restoration Forth.

Project outline and intended outcomes:

12 meiofauna samples were taken from each of 3 intertidal sites around the Firth of Forth in March 2023, immediately prior to seeding the sites with seagrass as part of Restoration Forth <https://www.wwf.org.uk/scotland/restoration-forth>. This project will process the meiofauna samples to extract the animals, sorting and quantifying them into major taxonomic groups. If time permits, there will be the opportunity to identify and quantify the harpacticoid copepod component of the fauna to the lowest possible taxonomic level. The outcomes will include a baseline for the meiofaunal community composition against which future changes can be measured as the seagrass establishes. The identified material will be incorporated into the National Museums Scotland Marine Invertebrates Collection of over 4 million specimens <https://www.nms.ac.uk/collections-research/collections-departments/natural-sciences/collections/invertebrates/marine-invertebrates-collection/> and made available to students and researchers all over the world through our digitisation and loans programmes.

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 work will take place within the Department of Natural Sciences at the National Museums Collection Centre in Edinburgh <https://www.nms.ac.uk/collections-research/accessing-the-collections/national-museums-collection-centre/>. The 36 samples are small-volume sediment cores preserved in 4% formaldehyde solution – the animals will be stained using rose Bengal, extracted by decantation and sorted manually in water into major taxonomic groups using a Leica MZ95 stereomicroscope and preserved in 74% Industrial Denatured Alcohol. Identification of the harpacticoid copepod component of the fauna will involve compound microscopy, dissection, and using taxonomic keys. A steady hand and attention to detail are essential.