



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) 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:

Jen Graham

Contact e-mail and phone number:

Jen.graham@nature.scot

Title of proposed project:

Vessel disturbance to Inshore Wintering Waterfowl and non-breeding seabirds in Scotland.

Project outline and intended outcomes:

Vessel disturbance in Scotland is a significant issue affecting birds in our protected areas, however the magnitude of impact is poorly understood. Vessel disturbance is routinely assessed as part of the Habitats Regulations Appraisals and EIA for developments with potential for impacts on Special Protection Areas. We are seeking to develop a transparent and consistent approach to assessing the magnitude of the potential impacts to seabirds and waterbirds from vessel disturbance.

This project would seek to undertake a pilot study using data on wintering waterbirds in the Outer Firth of Forth and St Andrews Bay Complex SPA and overlaying this with AIS data of vessel movements within the Firth of Forth to assess changes to vessel movements and potential impacts over time. The project would seek to address whether there were adverse effects to marine birds from vessel disturbance since site selection.

An additional fieldwork element would look at focal studies within harbours during the wintering period, to determine if there is habituation to vessel disturbance or if there is potentially still significant disturbance from vessels in and out of harbours. We anticipate that AIS data could be used to identify locations that might be interesting to look at for focal studies.

This work will build on a recent research report which has looked at cumulative impacts to non-breeding birds in the Orkney SPAs (currently unpublished) and apply similar analyses to this novel data set.

NatureScot will also be concurrently developing a workshop with NatureScot staff (both operational staff as well as Marine ornithologists and potentially NNR staff) to

discuss the development of guidance for assessing vessel disturbance in future casework. Any student undertaking the above project could attend and help facilitate this workshop to give some insight into how policy decisions are made at NatureScot. The final outcome of this will be to create guidance for external stakeholders into how vessel disturbance should be considered in their impact assessments.

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?):

Some travel would be involved for any fieldwork element, likely to the Firth of Forth at various locations for focal studies, although this would be at the discretion of the student.

Methods are likely to be similar to or build on the methods used in the cumulative impacts project that was undertaken in Orkney SPAs, the reports of which are not currently published but would be shared.

Ornithology field skills are useful but could also be developed as part of this work. NatureScot staff would support the development of the survey planning.

GIS skills are required, although training may be available if the student does not have experience in this. The project may involve statistical analysis but will be determined through further scoping of the project.

We invite the student to visit a NatureScot office to meet with relevant colleagues as well as other MSc students carrying out projects within NatureScot.

We plan to host a MSc student seminar at the end of August 2027 at NatureScot's HQ in Inverness. We invite the student to present their research at this seminar and meet with relevant colleagues as well as other MSc students carrying out projects within NatureScot. We plan that travel and subsistence could be covered for this journey, although this will be confirmed nearer the time.