



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. You will be provided with guidelines for supervision once the project has been confirmed.

What's Next?

Please send your completed form to the MASTS Programme Coordinator, Dr Emma Defew (masts@st-andrews.ac.uk) before **16:00 on Monday 4th December 2017**.

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, discussions will take place to ensure the most suitable student is matched with your project. It is expected that students will be assigned to projects before the end of February, although 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: Scottish Natural Heritage
Name of the key contact in Organisation: Carol Hume
Contact e-mail and phone number: carol.hume@snh.gov.uk
Title of proposed project: Developing a framework for combining data on ecological preferences of wintering waterfowl with data on environmental characteristics and human activities to inform management measures within proposed marine protected sites in Scotland (SNH ref. P52).
Project outline and intended outcomes: Pilot study to develop approaches to combining information on the diet and foraging habits of selected protected bird species (divers, grebes, seaduck) with characteristics of a protected sites (e.g. depth, tidal flows, existing benthic habitat survey data) and activities within sites to inform development of management measures. Highly topical and relevant to both conservation management of (migratory) wintering birds and to wider marine planning. Includes opportunities to apply GIS tools.
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?): Preparation work to be carried out at the university. A relevant SNH staff advisor would help with the scope of the project, and ensure outcomes are relevant to our work as well as being beneficial to the university and student. <i>Please note that SNH will commit to providing basic funds for travel and fieldwork expenses. This is dependent on agreeing appropriate and relevant students and supervisors, and agreeing the level of financial support for the particular project and circumstances.</i>

Name and address of Organisation:

Scottish Natural Heritage

Name of the key contact in Organisation:

Carol Hume

Contact e-mail and phone number:

carol.hume@snh.gov.uk

Title of proposed project:

Correcting for tidal flow in vantage point surveys (SNH ref.P53)

Project outline and intended outcomes:

Vantage point surveys for seabirds and mammals are often undertaken to inform Environmental Impact Assessments (EIAs) for proposed marine developments, such as marine renewables projects. Counts of birds and mammals on the sea surface can, however, be strongly affected by the speed of tidal flow relative to the observer. This is, potentially, a significant concern where tidal flows are strongest i.e. in those areas best suited for tidal stream development. A desk and/or field based study that can demonstrate the influence of variable tidal flow on bird (or mammal) counts and how this can best be corrected would be invaluable.

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?):

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Name of the key contact in Organisation:

Carol Hume

Contact e-mail and phone number:

carol.hume@snh.gov.uk

Title of proposed project:

Understanding the role kelp beds have in seabird foraging to inform sustainable seaweed harvesting practices (SNH ref. P54)

Project outline and intended outcomes:

There is little information available on the role of kelp beds in seabird foraging. This makes it challenging to assess how seaweed harvesting may affect foraging seabirds. This has become relevant in proposals to harvest seaweed in the East Caithness Cliffs MPA which is designated for black guillemot. Black guillemot are thought to use kelp beds that will be targeted for seaweed harvesting for foraging but evidence to support this is lacking. A literature review of evidence related to seabird use of kelp beds would help address this knowledge gap, as would surveys of black guillemot (and other species) use of kelp beds. This could include an assessment of how often seabirds use kelp beds for foraging and monitoring the prey types caught during foraging in kelp beds. This project will inform assessments of the potential impacts of seaweed harvesting proposals on seabirds.

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?):

Preparation work to be carried out at the university. A relevant SNH staff advisor would help with the scope of the project, and ensure outcomes are relevant to our work as well as being beneficial to the university and student.

Please note that SNH will commit to providing basic funds for travel and fieldwork expenses. This is dependent on agreeing appropriate and relevant students and supervisors, and agreeing the level of financial support for the particular project and circumstances.

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Scottish Natural Heritage

Name of the key contact in Organisation:

Carol Hume

Contact e-mail and phone number:

carol.hume@snh.gov.uk

Title of proposed project:

Data review of animal responses to drones, with potential to establish guidance for development of a code of best practice (SNH ref. P56)

Project outline and intended outcomes:

Review what is known about the responses of animals to drones, and the development of guidance (and, if possible, threshold distances) to help in the development of a code of best practice. There is a growing body of evidence (mainly on birds, but also some work on seals and cetaceans) which shows varying levels of disturbance to these animals, although responses vary depending on species, gender, time of day, time of year, approach speed and direction, etc. It would be good to collate this information for species found in Scotland, as we are increasingly seeing incidents of disturbance caused by drones approaching too close to, for example, seal haulout sites.

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?):

Preparation work to be carried out at the university. A relevant SNH staff advisor would help with the scope of the project, and ensure outcomes are relevant to our work as well as being beneficial to the university and student.

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Titles of proposed projects:**Continue to build on / develop previous MSc projects for the following...**

Fair Isle Demonstration and Research MPA (SNH ref.P48)

Identifying whether visitor management is required to reduce disturbance to seals on Mousa SAC in Shetland (SNH ref.P23)

For any alternative interests you may have that are covered by SNH's marine and coastal interests (<https://www.snh.scot/about-snh>), please contact Carol Hume as above.

Project outline and intended outcomes:

Open for further discussion.

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?):

Re. Fair Isle projects - As any project on Fair Isle will require close work with their community, it is important that interested students consider this aspect carefully. SNH and university staff will help to assess which students are suited for this project. Students will also be likely to work with the Fair Isle community, the D& R MPA Advisory Group and stakeholders involved in this project. It is expected that some of the placement will be on Fair Isle. Note this is a remote small community (limited transport options and no 24 hour power) and we would expect any potential candidates to think carefully about whether they could cope with the remoteness/restrictions of island living and how they would fit into the community. Therefore there will be additional considerations in the selection process to ensure that the match is right for both the student and the Fair Isle Community.

For all projects - Preparation work to be carried out at the university. A relevant SNH staff advisor would help with the scope of the project, and ensure outcomes are relevant to our work as well as being beneficial to the university and student.

Please note that SNH will commit to providing basic funds for travel and fieldwork expenses. This is dependent on agreeing appropriate and relevant students and supervisors, and agreeing the level of financial support for the particular project and circumstances.