

# GUIDELINES FOR CONDUCTING A RESEARCH PROJECT WITH THE HEBRIDEAN WHALE AND DOLPHIN TRUST

#### **AIM**

Since 1990, the Hebridean Whale and Dolphin Trust, and its predecessor the Mull Cetacean Project, has been conducting research into whales, dolphins, porpoises and basking sharks found in Hebridean waters. A range of issues have been tackled including the biology, ecology and behaviour of cetaceans, ecotourism, conservation issues, and public perceptions. This research has been presented in reports, peer-reviewed publications and at conferences.

Over the past twenty-five years, HWDT have worked with many students providing career advice, volunteer placements and data for research projects, dissertations and theses. Each year, HWDT receive hundreds of requests for support, therefore students interested in using HWDT data to undertake a research project must follow the application process outlined in this document.

## **GENERAL INFORMATION**

Students will be under the supervision of one or more of the HWDT Science Team (Science and Policy Manager or Marine Biodiversity Officer). The Science Team will offer advice and guidance but will not direct the project.

Students are strongly encouraged to speak to HWDT's Science Team before applying to undertake a student project with HWDT.

HWDT can provide access to the research vessel Silurian for students to understand how data are collected as well as desk space in the Tobermory office if required.

It is recommended that students spend time on-board Silurian. If students are unable to do this then they must arrange alternative ways to familiarise themselves with HWDT, its research and the way in which data are collected.

#### **DATA AVAILABLE**

Since 2002, HWDT have been running scientific surveys from our dedicated research vessel, Silurian, surveying more than 120,000 km of Hebridean seas and recording 30,000 marine animals.



As well as sightings data for cetaceans, pinnipeds, elasmobranchs, otters and turtles, we also collect acoustic data, environmental data, counts of seabirds and other vessels, the locations of creels and marine litter, and our survey effort (GPS data and any changes to effort). We have recently released the first part of our Hebridean Marine Mammal Atlas series, which focuses on the visual sightings data but gives a good overview of all of the data available, and should be helpful for identifying knowledge gaps. You can read more about the Atlas and download a copy for free HERE. If you are interested in joining one of these surveys as part of your fieldwork, we still have berths available for this season, please see the available survey dates HERE.

HWDT have also been running a Community Sightings Network in the Hebrides since 2004, encouraging residents, wildlife operators, fishermen and visitors to the area to report their sightings of whales, dolphins and porpoises. Through this network, we collect effort-based sightings data as well as opportunistic sightings. In 2017, we launched a smartphone app to allow both types of data to be recorded quickly and easily. All of the data feeds into a web portal to allow anyone to view the data. If you are interested in our community sightings data, you can visit the Whale Track web PORTAL, or download the Whale Track app for free from GOOGLE PLAY or the APP STORE.

#### **APPLICATION PROCESS**

Students wishing to undertake a research project with the Hebridean Whale and Dolphin Trust are advised to follow the application process outlined here:

- 1. Research HWDT. Understand HWDT's aims and objectives, read some past publications, reports and other student projects.
- 2. Identify a gap in the research where your project could be beneficial to the Trust's work.
- 3. Write down some possible project ideas and research these within a UK and European context.
- 4. Speak to your project supervisor about your project ideas.
- 5. Contact HWDT's Science Team to discuss these ideas.
- 6. Depending on the success of the discussion, the Science Team may invite you to submit a project proposal.

Your proposal must contain the following:



- A CV with covering letter detailing why you want to undertake a project in conjunction with HWDT and what you hope to achieve. This must also include information about who your supervisor is.
- A project title. Don't worry if you haven't got a snappy title to begin with, that's normal, but you will need a general idea.
- Project description: introduce your idea.
- Project aim and objectives: identify the aim of the project and what objectives you will
  have to achieve to successfully complete the project.
- Project deliverables: provide a clear list of the outputs from the project.
- Resources required for the project: detail the resources that are essential to completing the project (including what you will require from HWDT).

Depending on the proposal, the Science Team will discuss the application with HWDT's Science Committee and together they will make recommendations and reach a decision. If successful, a data sharing agreement will be compiled by HWDT's Science Team. The data sharing agreement will outline the student's requirements and that of HWDT's. An example data sharing agreement can be issued on request. Only when all parties have signed the data sharing agreement will the student be able to obtain the required data. The student must provide HWDT with corrected versions of these data, including any predictor-type variable data used in analysis if appropriate.

## **OTHER THINGS TO CONSIDER**

- Data are stored in Access databases. Students should have a basic understanding of databases or a supervisor willing to help them.
- Data are collected under line-transect protocols, familiarity with this method and its analysis is recommended.
- Students wishing to analyse photo-identification data need to have a basic understanding
  of databases or a supervisor willing to help them and some experience in photoidentification analysis.
- Students wishing to analyse acoustic data need to have a good understanding of the hardware used, the methods of data collection and a thorough understanding of PAMGUARD or other appropriate acoustic software.



### **HWDT SCIENCE COMMITTEE**

HWDT is privileged to have an advisory board of professional scientists that are able to provide guidance on all of the Trust's science and policy work. The Science Committee is composed of researchers that have been involved in the Trust since the start, as well as past members of the science team. Between them they represent all major research institutions working on cetaceans in Scotland. The Science Committee provides HWDT with continuity in its research, as well as expert scientific advice, which is critical to the maintenance of the long-term Silurian monitoring programme and the credibility of HWDTs research. The chair of the Science Committee is Dr Jonathan Gordon (St. Andrews Sea Mammal Research Unit, Marine Ecological Research).

#### **CONTACT**

Please visit our website hwdt.org to find out more about HWDT and joining a research survey.

If you have any questions or wish to discuss any of the above information in further detail please do not hesitate to contact Dr. Lauren Hartny-Mills on science@hwdt.org.

The research season (April to October) is a busy time of year for the Science Team. Students should be advised that during this period the Science team have limited time in the office and are often without email access for long periods of time. Therefore, students requiring advice about their project or wishing to arrange a meeting with the Science Team will need to plan in advance.