Biodiversity Challenge Funds Projects
Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus
Half Year Report

Note: If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.

Submission Deadline: 31st October 2023

Project reference	DPLUS185
Project title	Safeguarding Antarctic krill stocks for baleen whales
Country(ies)/territory(ies)	British Antarctic Territory
Lead partner	University of Southampton
Partner(s)	British Antarctic Survey, Scottish Association for Marine Sciences, University of California Santa Cruz
Project leader	Ryan Reisinger
Report date and number (e.g. HYR1)	HYR1 30 October 2023
Project website/blog/social media	https://www.bas.ac.uk/project/safeguarding-antarctic-krill-stocks-for-baleen-whales/

Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to end September).

Although we are not looking for specific reporting against your indicators, please use this opportunity to consider the appropriateness of your M&E systems (are your indicators still relevant, can you report against any Standard Indicators, do your assumptions still hold true?). The guidance can be found on the resources page of the relevant fund website.

Overview

Project activities in the last 6 months have focussed on development of the ImpYak autonomous prey mapping platform and logistical arrangements for fieldwork (prey surveys and whale tagging) scheduled for March 2024 in the British Antarctic Territory (BAT). **We project that we are on-track according to our SMART indicators and Means of Verification.**

Outputs 1, 3 and 4

Whale tagging

Preparations for whale tagging have focussed on finding a suitable vessel from which to conduct prey surveys and whale tagging—now identified as the Hans Hansson—and discussions with non-project colleagues about their experiences attempting to tag fin whales in previous field seasons. In principle we have agreed to collaborate with a team led by Helena Herr (Hamburg University) to maximise information across any baleen whale projects being conducted in the Western Antarctic Peninsula region, including BAT. We are in discussion with the BBC, who will provide in-kind support to extend our first field season since they wish to film fin whale aggregations in the BAT.

Whale habitat use and fishery analysis

A post description for the second postdoctoral researcher to join the project has been approved, and the post will be advertised before the end of the calendar year. This will allow the researcher to be in post shortly after this field season's data are collected, at the start of project year 2 as planned, to analyse the data towards outputs 1 and 4. However, preliminary

analyses on the spatial scale on interactions among baleen whales and the krill fishery have been conducted by an undergraduate researcher at the University of Southampton, and this work is being prepared for publication. This includes collation of initial fishing effort data from CCAMLR and Global Fishing Watch. A new request for fishing effort data from CCAMLR will be initiated.

Output 2
Project postdoctoral researcher Tracey Dornan is in-post at British Antarctic Survey (0.5 FTE).

ImpYak system
Field trials of the ImpYak were scheduled for 14th-18th August at Scottish Association for Marine Science (SAMS) but were delayed due to COVID. British Antarctic Survey (BAS) have provided a 200kHz echosounder for fitting to the ImpYak. There have been ongoing discussions between BAS and SAMS on remote operation of the echosounder and capabilities, which are now complete. Trials are now underway at SAMS with Phil Anderson and Kay Ihle (who will be piloting the ImpYak during fieldwork). Additional trials on deployment procedures will occur in Port Stanley, Falkland Islands, in March 2024 prior to sailing.

Acoustic surveys
The team met with the owners of the Hans Hansson (charter vessel) to discuss aims and objectives of the project, and requirements for deployment of a pole mounted echosounder, the ImpYak and an additional net sampling system to ground truth the acoustic data with krill length frequency measurements. Details of acoustic system mounting requirements have been sent to the Hans Hansson, and instalment is pending a signed cruise contract. In preparation for fieldwork, batteries to power the ImpYak have been consigned via BAS logistics/RRS Sir David Attenborough to the BAS Stanley (Falkland Islands). Battery storage in Stanley has also been arranged. In addition, a $1m^2$ net sampling system has been consigned and is currently in storage in Stanley, alongside fishing rods required for acoustic instrument calibration. The acoustic team is planning to arrive in Stanley prior to fieldwork, starting to set up acoustic systems on board Hans Hansson and running through deployment and recovery procedures for ImpYak and net systems. This will make the best use of all vessel charter time as this will not be included in the charter fee.

Output 5
Initial development of methods for classifying whale and fishing behaviour has been conducted by an undergraduate researcher at the University of Southampton, but most of the work towards this output will take place in project years 2 and 3, once the project's second postdoctoral researcher is in post.

Communication
A project webpage has been set up, hosted by BAS (https://www.bas.ac.uk/project/safeguarding-antarctic-krill-stocks-for-baleen-whales/). Project members Ryan Reisinger and Phil Trathan presented at a workshop on baleen whale-krill fishery interactions held at the Oxford University Museum of Natural History, convened by Trathan and funded by Great Blue Ocean (comprising The Pew Trusts, the Blue Marine Foundation, the Zoological Society of London, Greenpeace UK, the Marine Conservation Society and the Royal Society for the Protection of Birds). This will initiate a scientific paper that could first be forwarded to CCAMLR's Working Group on Ecosystem Monitoring and Management and then to CCAMLR's Scientific Committee, before eventual submission for publication in a peer-reviewed journal.

2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

Securing an appropriate vessel charter to conduct fieldwork has proved challenging due to the availability and cost of suitable vessels. However, we have now secured an appropriate charter and we expect fieldwork to be conducted on time and on cost. Illness of project members (COVID) has had a minor impact on the timing of ImpYak trials in Scotland, but we expect the system to be fully operational before our first field season in March 2024.
3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?
Discussed with NIRAS: No
Formal Change Request submitted: No
Received confirmation of change acceptance NA
Change request reference if known: NA

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2023 – 30 September 2023) **Actual spend:** ■ **4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2024)?** **Yes** ☐ **No** ☒ Estimated underspend: £--
4c. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year. **If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes if necessary. Please DO NOT send these in the same email as your report.** **NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.**
5. Are there any other issues you wish to raise relating to the project or to BCF management, monitoring, or financial procedures?
None.

If you are a new project and you received feedback comments that requested a response, or if your Annual Report Review asked you to provide a response with your next half year report, please attach your response to this document.

All new projects (excluding Darwin Plus Fellowships and IWT Challenge Fund Evidence projects) should submit their Risk Register with this report if they have not already done so.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but should also be raised with NIRAS through a Change Request. Please DO NOT send these in the same email.

Please send your **completed report by email** to BCF-Reports@niras.com. The report should be between 2-3 pages maximum. **Please state your project reference number, followed by the specific fund in the header of your email message e.g. Subject: 29-001 Darwin Initiative Half Year Report**