

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 2022

Project reference	DPLUS149
Project title	Resolving ecosystem effects of the South Georgia winter krill fishery
Country(ies)/territory(ies)	South Georgia and the South Sandwich Islands
Lead partner	British Antarctic Survey
Partner(s)	Government of South Georgia and the South Sandwich Islands (GSGSSI) and Antarctic Research Trust (ART)
Project leader	Martin Collins
Report date and number (e.g. HYR1)	31 st October 2022, HYR1
Project website/blog/social media	https://www.bas.ac.uk/project/winter-krill-at-south-georgia/

1. 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).

Between April and September 2022 the following progress against the project implementation timetable has been made:

- The acoustic transducers were tested in Falklands and South Georgia waters prior to the first (2022) survey season.
- The first three acoustic surveys in Year 1 were successfully carried out in May (10/05/22-20/05/22), July (11/07/22-16/07/22) and September (19/09/22-24/09/22), corresponding to before, during and end of the krill fishing season.
- The Pharos SG echosounders were calibrated in Stromness Bay prior to the first survey and they were calibrated again either at the start or the end of each subsequent survey.
- GSGSSI staff (David Burton and Nestor Hernandez), Pharos SG crew and the KEP science team (Kate Owen and Meghan Goggins) were trained in operation and calibration of the echosounders on Pharos SG, and particularly in the methods of the Winter Krill project. Following training, Meghan and Kate were able to run the acoustics and calibration for the September survey independently, with support from David Burton.
- A manual was developed describing the methods for acoustics operation and calibration on Pharos SG, and for the other aspects of the project (plankton trawls, penguin tagging, cetacean observation, and seabirds at sea observation). These are maintained in a shared drive and are accessible to GSGSSI staff, Pharos crew and KEP science staff.
- At-sea observations of seabirds and marine mammals were undertaken on each survey alongside the acoustic and plankton trawls. During the July survey, 3 specialist cetacean researchers (Russell Leaper, Susannah Calderan and Paula Olson) joined the team, carrying out dedicated visual and passive acoustic surveys for marine mammals.

A dedicated seabird observer (Ryan Irvine) trained in JNCC Seabirds at Sea methods was on all three surveys, and provided continuity in observation methods.

- Reports for the May and July surveys that detail all the work carried out are available on the project website (<https://www.bas.ac.uk/project/winter-krill-at-south-georgia/#data>). These are currently under the 'Data' tab but the project team is working with the BAS IT team to implement a bespoke 'Reports' tab so that these are more easily accessible. The September survey was completed on 24th September 2022 and the report will be published on the project website shortly.
- Four gentoo penguins were fitted with Wildlife Computers SPOT-367A PTT satellite tags at Maiviken, and four at Bird Island in May 2022. Two more PTT tags were attached to gentoo penguins at both Maiviken and Bird Island in July 2022. This totals 12 PTT tags deployed in Year 1 of the project. As an addition to the original aim of the project, 8 GPS tags were also deployed on gentoo penguins at Bird Island, which download data to local base stations. Two of these malfunctioned but one has been redeployed so there is likely to be data from a total of 7 GPS tags for 2022.
- Data from the tracked penguins is relayed via the Argos satellite system and uploaded to the BAS project page for track visualisation. Currently the tracks can be found at the bottom of the 'About' tab (<https://www.bas.ac.uk/project/winter-krill-at-south-georgia/>) but we are working on implementing a bespoke tab for the tracking data. The data will also be archived on the GSGSSI Data Portal.
- A six-monthly update has been circulated to partners and stakeholders and published on the project website.

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.

The fit of the acoustic instruments was more expensive than was budgeted for but we are exploring other avenues to cover that cost to avoid any impact on the project.

The project had some staffing changes to deal with to cover a period of maternity leave, as covered by a change request. This will not affect the budget or the timetable of the project.

3. Have any of these issues been discussed with NIRAS-LTS International and if so, have changes been made to the original agreement?

Discussed with NIRAS-LTS: Yes/No

Formal Change Request submitted: Yes/No

Received confirmation of change acceptance Yes/No

Change request reference if known: not known but the CR attached was accepted by email on 2nd April 2022.

4a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

4b. 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.**

5. Are there any other issues you wish to raise relating to the project or to BCF management, monitoring, or financial procedures?

If you are a new project and you received feedback comments that requested a response (including the submission of your risk register), 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.

Please see Appendix 1.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with NIRAS-LTS International 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**