

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

Half Year Report

It is expected that this report will be a **maximum of 2-3 pages** in length.

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 2024

Please note all projects that were active before 1 October 2024 are required to complete a Half Year Report.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Project reference	This should be the project reference provided in your offer paperwork and not your application number DPLUS188
Project title	Hungry humpbacks: measuring seasonal foraging intensity at South Georgia
Country(ies)/territory(ies)	South Georgia
Lead Organisation	British Antarctic Survey
Partner(s)	Government of South Georgia and the South Sandwich Islands (GSGSSI), Aarhus University, University of California Santa Cruz (UCSC), Federal University of Rio de Janeiro (UFRJ), and South Georgia Heritage Trust / Friends of South Georgia Island
Project leader	Dr. Jennifer Jackson
Report date and number (e.g. HYR1)	October 2024 HYR2
Project website/blog/social media	https://www.bas.ac.uk/project/hungry-humpbacks/, X (Twitter):@wildwaterwhales, Instagram:@hungryhumpbacks

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

The following progress was made against the implementation timetable between April and September 2024:

Progress on biological samples collected during the South Georgia field season:

- 1.3.4-All biological samples were sent to the UK on the Sir David Attenborough (SDA) and arrived in the UK in June 2024.
- 1.4.4-The South Georgia field team report was finalized and shared on the BAS website here.
- 1.5.1-Ph.D. student Henry Slesser completed the Genetic identification of whale sex from the fieldwork conducted in 2024. The results were 5 male and 5 female humpback whales, one male and one female southern right whale (the latter with a calf), and one male blue whale.

- 1.5.2-Dr. Joanna Kershaw and PhD student Henry Slesser completed hormone assay work at the University of Aberdeen. Of the five female humpback whales, only one was identified as pregnant based on progesterone levels. Testosterone levels were also measured and were higher for males than for females.
- 1.5.3-Whale ages have not yet been measured using epigenetic methods for the biopsy samples as some additional laboratory optimisation is required. Results are anticipated by June 2025.
- 1.5.4 The whale image dataset was subdivided into eight datasets based on the biopsy samples and is now undergoing analysis.

Progress update for the Cabo Frio, Brazil field season:

- 1.4.1 and 1.4.2-Field work preparations, including arranging travel, accommodation, and boat hire, were completed in April.
- 1.4.3- In June, PhD Fellow Maria Glarou (Project Partner Dr. Fredrick Christiansen's Fellow) worked with Project Partner Rodrigo Tardin from 4 June to 7 July 2024 in Cabo Frio, Brazil. They conducted 14 boat surveys in good weather (sea state Beaufort <3) with 108.6 hours of survey effort. Humpback whales were seen on all 14 days, with killer whales and bottlenose dolphins seen on two days and a southern right whale on one day. A total of 69 UAV flights for 774 minutes were flown, and 98 humpback whales were measured. Group sizes ranged from 2-6 individual whales. Of the whales sighted, 86.3% were adults, and 13.7% were potentially juveniles. No mother-calf pairs groups were sampled but one mother-yearling was sampled by the UAV. Three potential pregnant females were sampled, both with the UAV and biopsies and two others with only the UAV. Biopsy samples of 20 humpback whales were collected. Eight of these samples are useable for stable isotope analysis; 20 samples will be used for genetic analysis, 16 samples for hormone analysis, and four for transcriptomics. The field report is available for download from the BAS website here.

Other project activities:

- -5.1.3 The project webpage is up to date with field and meeting reports and images https://www.bas.ac.uk/project/hungry-humpbacks/.
- -The project's Instagram account has been updated with UAV videos from the end of the South Georgia season and the Cabo Frio Brazil season. The account has ~500 followers and posted a total of 50 reels, with >5,000 views and >1,000 views on average in the last three months.
- -5.3.1 The partner and stakeholder virtual meeting was held on 11 October due to scheduling conflicts in June. Project updates were given by Steph Martin, Rodrigo Tardin, Fredrik Christiansen, Henry Slesser, Jo Kershaw and Amy Kennedy. Twenty-seven people attended the Zoom meeting. A recording was also circulated to stakeholders, as well as a summary PDF of the updates. This meeting can be viewed on Youtube here.
- 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.

There was a delay in delivery of the epigenetic analysis of whale age (1.5.3) due to delays in optimising the laboratory protocol while Project Partner Emma Carroll is on maternity leave. This work is now anticipated to complete by June 2025.

The South Georgia field season in Jan-March 2024 was not able to deliver all of our planned outputs due to poor weather conditions for part of the season. We have now secured additional matched funding from Friends of South Georgia Island/ South Georgia Heritage Trust, an additional £66,300 which enables us to conduct a second field season at South Georgia in January-March 2025.

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:	Yes		
Received confirmation of change acceptance:	No		
Change Request reference if known: If you submitted a financial Chareference in the email from NIRAS confirming the outcome	nge Request, you can find the		
4a. Please confirm your actual spend in this financial year to 30 September 2024)	o date (i.e. from 1 April 2024 –		
Actual spend:			
4b. Do you currently expect to have any significant (e.g. moin your budget for this financial year (ending 31 March 2029)			
Yes No X			
4c. If you expect and underspend, then you should 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 justif project, please submit a re-budget Change Request as soo guarantee that Defra will agree a re-budget so please ensur make appropriate changes to your project if necessary. Please email as your report.	n as possible. There is no e you have enough time to		
NB: if you expect an underspend, do not claim anything more that financial year.	n you expect to spend this		
5. Are there any other issues you wish to raise relating to the management, monitoring, or financial procedures?	ne project or to BCF		
No			
6. Please use this section to respond to any feedback provided from your most recent annual report. If your provided any changes to international human rights risks, and to address outlined in your offer letters. Please provide the comment and the already provided a response, please confirm when.	roject was subject to an use this space to comment on any additional mitigations		
All project feedback given at the one year Annual report is requ All field reports have now been uploaded to the project website https://www.bas.ac.uk/project/hungry-humpbacks/			
Checklist for submission			
For New Projects (i.e. starting after 1 st April 2024)			
Have you responded to any additional feedback (other than cavear letter you received to say your application was successful which required HYR (including safeguarding points)? You should respond in section	ested response at		

For Existing Projects (i.e. started before 1 st April 2024)		
Have you responded to feedback from your latest Annual Report Review? You should respond in section 6, annexes other requested materials as appropriate.	X	
For All Projects		
Include your project reference in the subject line of submission email.	Х	
Submit to BCFs-Report@niras.com.	Х	
Have you reported against the most up to date information for your project?	Х	
Please ensure claim forms and other communications for your project are not included with this report.	Х	