

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	<i>DPLUS144</i>
Project title	Protecting South Georgia's terrestrial communities from climate change-invasion synergies
Country(ies)/territory(ies)	South Georgia and the South Sandwich Islands; Falklands
Lead partner	Durham University
Partner(s)	Royal Botanic Gardens Kew, British Antarctic Survey, South Atlantic Environmental Research Institute
Project leader	<i>Wayne Dawson</i>
Report date and number (e.g. HYR1)	<i>HYR3 (31.10.2023)</i>
Project website/blog/social media	<i>@SG_bio_invasion</i> <i>http://www.conservationecology.org/sg_bio_invasion.html</i>

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.

The following activities from the implementation timetable have been achieved:

A research article manuscript on plant and invertebrate species found in deglaciated areas has been submitted for peer-reviewed publication at the journal; 'Ecology' manuscript for peer-reviewed publication (Activity 1.15)

A research report on the first record of a species of non-native ladybird from South Georgia has been published in the open access, peer-reviewed journal 'Ecology & Evolution.':
<https://onlinelibrary.wiley.com/doi/10.1002/ece3.10513>

The biomass from seedlings grown under the climate warming experiment (Output 2, activities 2.7, 2.10) has been harvested, dried and weighed.

Seeds have been sorted from samples obtained in the Jan-Mar field season, which will be used in a follow-up climate warming experiment (Output 2)

The invertebrate samples collected during the Jan-Mar field season have been sorted and identified, and preliminary analyses of these data and of invasive carabid beetle distribution surveys have been conducted (Output 3, activity 3.7)

For Output 4 (activities 4.1, 4.2, 4.3), we have planned the horizon scanning exercise, including methodological procedure, including the compilation on an initial list of 130 invertebrate and > 1000 plant species that require scanning. Methods for measuring climate niche overlap of these species' current distributions with South Georgia's current and future climate are currently being tested. This will allow quantification of establishment likelihood. Data on origins of boats and tourists visiting South Georgia have been located, which will allow quantification of arrival likelihood.

For Output 5:

July-August 2023: in cooperation with Conny Bartl and Annette Bombosh from the Polar Collective, Pierre Tichit developed material for the second season of the citizen-science scheme "BeetlesVsStones" including improved training material and observation sheets. Pierre Tichit also created forms on the platform and app *Epicollect5* to allow participants to record and upload observations directly from a smartphone. Unfortunately, after consultation with GSGSSI and IAATO and because of the increased risks associated with bird influenza on South Georgia, the scheme had to be paused for this season. Instead, a flyer was distributed to operators via the Polar Collective to encourage guests and guides to report opportunistic sightings of invertebrates on *iNaturalist*.

September 2023: Pierre Tichit and Peter Convey wrote a short outreach description of South Georgia's native invertebrates to contribute to a leaflet about invertebrates in the UKOT initiated by Vicky Wilkins from the Species Recovery Trust. Pierre and Vicky also discussed potentials to evaluate the threat level of some of SG's native invertebrates using the IUCN Red-listing guidelines. This may be carried out by Pierre Tichit in early 2024.

An abstract was submitted for a project presentation at the British Ecological Society's Annual meeting in December (Belfast). The presentation will be in poster-form.

For monitoring and evaluation, we had our 5th project group meeting (activity 3.9) in July 2023.

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 are two notable developments from the last six months. The project leader has been offered a job at a new institution (University of Liverpool), and will be starting this position on 1 January 2024. The project leader has discussed the matter with NIRAS (E Young), and has submitted a change request form detailing the situation. The project leader will continue in this role for the remainder of the project (until 30 June 2024), and NIRAS have been provided with the point of contact at Durham (the post-award staff in Durham's Research and Innovation Service). All project partners are aware of the situation, and recognise that impact on the project will be minimal.

The second notable development is that we were intending to carry out a re-run of the experiment for Output 2 (assessing germination of native and non-native plants under a current and future climate on South Georgia), using newly acquired climate growth chambers at Durham. Unfortunately this was not possible in the end due to technical complications. However, the project leader will be purchasing climate growth chambers for use at the University of Liverpool, which will allow this part of Output 2 to be completed in 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:	Yes
Formal Change Request submitted:	Yes
Received confirmation of change acceptance	No
Change request reference if known:	

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?

No other issues

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**