

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	DPLUS145
Project title	Assessing the mobile fish biodiversity of Bermuda's deep seas
Country(ies)/territory(ies)	Bermuda
Lead partner	Bermuda Institute of Ocean Sciences
Partner(s)	Beneath the Waves, University of Rhode Island, Government of Bermuda, Waitt Institute
Project leader	Tim Noyes / Austin Gallagher
Report date and number (e.g. HYR1)	HYR2
Project website/blog/social media	https://www.darwininitiative.org.uk/project/DPLUS145/ http://www.bios.edu/currents/bios-receives-u.k.-grant-to-study-deep-sea-marine-life/

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).

1.1 All equipment was ordered and assembled in Year 1 of the project.

1.2 The eDNA laboratory consumables, software licenses and electric reel for Niskin retrieval were ordered in Year of the project.

1.3 High value surveys as identified by the Bermuda Ocean Prosperity Programme (BOPP) Marine Spatial Planning (MSP) committee have been identified and were provided the project team in Year 1. In Year 2, the final boundaries for MPA creation were communicated by Bermuda Government to project team.

1.4 No fisheries wardens have participated to date, partially due to pandemic, then primary wor commitments.

1.5 GIS layers on historic initiatives (e.g., previous mesophotic BRUVs deployments) have been acquired.

1.6 Two field trips were completed from April – September, resulting in a total of n = 6 MCE BRUVs deployments.

1.7 Two field trips were completed from April – September, one in June 2022 (n = 12 deployments) and the other in August 2022 (n = 15 deployments) resulting in a total of n = 27 successful deep water BRUVs deployments.

1.8 Analysis of camera footage has resulted in 16 videos analysed for relative abundance and biodiversity metrics.

1.9 A total of 12 seawater samples (8L) have been collected from previous MCE and deepwater BRUV sites.

1.10 A total of 18 seawater samples have been filtered and extracted. The DNA amplification and using the MiFish primers and PCR is more cost effectively to conduct with a greater number of samples.

1.11 Project team decided to wait until all samples were collected prior to sending amplified samples off for sequencing and DNA metabarcoding.

1.12 N/A

1.13 N/A

1.14 N/A

2.1 N/A

2.2 This analysis has not yet commenced.

2.3 This will be done once all field work and analysis have been completed.

3.1-3.2 This will be done once all field work and analysis have been completed.

4.1. N/A

4.2 N/A

4.3-4.4 N/A

5.1 Selected video clips from all Year 2 field work have been edited and prepared for inclusion in outreach video. Outreach video production has commenced, with project team interviews and footage recorded in August 2022.

5.2-5.4 N/A

6.1-6.2 This will be done once all field work and analysis have been completed.

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 were no major unexpected developments or challenges in Year 2 encountered by the project. Year 2 saw the Project Team accelerating into two highly productive field trips, as evidenced by the large volume of successful BRUV deployments obtained, spanning multiple targeted field sites around Bermuda. The previously-accepted reallocation of funds from Year 1 to Year 2 allowed the continued success of the project. Repeated travel for field work was difficult for non-Bermuda based key personnel, but alternative individuals from the same project partners were sourced, thus ensuring the completion of activities.

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 NA

Received confirmation of change acceptance Yes/No NA

Change request reference if known: NA

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?

No

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 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**