

## 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	DPLUS129
Project title	Understanding Ramsar wetland dynamics for marine conservation and environmental resilience
Country(ies)/territory(ies)	Turks and Caicos
Lead partner	Environment Systems Limited
Partner(s)	Turks and Caicos Government Department of Environment and Coastal Resources, JNCC - Joint Nature Conservation Committee, MCS - Marine Conservation Society, University of Exeter, Wavehill
Project leader	Katie Medcalf
Report date and number (e.g. HYR1)	HYR3
Project website/blog/social media	https://www.envsys.co.uk/ramsar-wetlands/

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).

## **Output 1: Documentation, maps, and methods**

Activities for this third year of the project include the continual acquisition and processing of Sentinel-1 and Sentinel-2 satellite imagery.

The models to describe the current functions, and opportunities, of the wetlands have been drafted and the processes/outputs reviewed through a technical expert symposium. These are being fine-tuned based on the feedback. High resolution terrestrial elevation data was sourced to replace the unprocessed lidar data, and integrated into the models.

The ecological envelopes of the priority species have been identified, and are being processed across the TCI region.

## **Output 2: Monitoring**

Short term indicators of land clearance, fire damage, and drought stress have been developed.

Long term indicators of suspended sediment data have been developed, with coastal change indicators in progress.

Extensive attempts to utilise the existing TCI data portal to push the monitoring data into have not been successful, as there is no-one available to set-up an account. This issue is described in more detail in Section 2.

## **Output 3: Capacity building**

The activity for Workshop 2 was amended from "Defining the monitoring options" which has been defined through DECR meetings, to a technical symposium that brought together ecologists and climate scientist from 15 organisations across the world, who work in TCI. The symposium offered a controlled (virtual) space for scientists to share details of their work as well as appreciate and network other local projects. The event also allowed this project to present on the methodology and outputs of the project for peer review and feedback, which has been fed into the model rulesets and development.

Monthly, online drop-in GIS surgeries are continuing to take place, led by ESL. This has taken the form of drop-in surgeries following self-taught GIS training modules.

The North Caicos DECR team have selected their GIS-based case studies/mini-projects ((a) shark nursery and (b) migratory shore birds modelling)), and will be working on these until the project end with help from ESL.

The Wetland Ecologist has actively engaged with 8 separate organisations, fulfilling roles as an educator (for local schools), local guide (for NGOs), ground field surveyor and drone pilot (for NGO's, international governments, and other Darwin Plus projects).

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 lessons learned from the experience of land-based expeditions to/through East Caicos, where temperatures had fluctuated from 40°C to 55°C over the course of one day shift. There is limited shade, and the vegetation is often thorn/barb/vines/rigid trunks which frequently tear clothing, scratch body parts, and lodge barbed seeds into the team's skin. The terrain is precarious, jagged, and brittle limestone; which adds to the difficulty and effort of navigation. As such, expedition teams have suffered from extensive sun exposure, heat exhaustion, and adverse reactions to the vegetation scratches. These experiences underscore the priority of health and safety. Teams should have protocols in place to manage sun exposure, heat exhaustion, and injuries. Access to shade, regular hydration, and protective clothing are vital. Having team members trained in basic first aid and wilderness medicine can mitigate the effects of adverse reactions and injuries.

This also highlights the need for a road vehicle for the DECR North Caicos Team, which has still not been resolved (no timeframe has been given).

AR2 described that the project aims to use an existing Turks and Caicos government data portal created by another Darwin Plus project, but the project needs to find the on-island admin who has the knowledge to operate the system. The individual was identified, but does not have the technical expertise to add the project as an organisation. Two alternatives have been proposed:

- 1. Create, maintain, and host an external dashboard with public access.
  - This would allow direct access to the project data and models, but as an external site, may not be known to individuals or organisations, and reduce its impact.
- 2. Push data from a server direct to selected individuals, which can then be uploaded to the TCI data portal

This would allow the public and interested parties access to the data, and on the existing site. The individual would have to download the data when received and upload them directly. DECR are still in the process of recruiting a Data Manager (no timeframe has been given), who would be the ideal candidate.

Currently, Option 2 is the preference, as it would mean that all data for TCI is held and managed by TCI, and easily accessible to interested parties within an already known data portal. There should not be any additional costs or time associated with these options for the project.		
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/No		
Formal Change Request submitted: Yes/No		
Received confirmation of change acceptance Yes/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: £		
<b>4c. If yes, then you need to consider your project budget needs carefully.</b> 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?		
Annual Report 2 Review Response		
"It was suggested by DECR that the project uses an existing Turks and Caicos government data portal created by another Darwin Plus project, but the project needs to find the on-island individual who has the knowledge to use the system. If this proves problematic, it is not clear what the project's contingency plan is."		
This issue has been addressed in Section 2, which describes the contingency plans:		
1. Create, maintain, and host an external dashboard with public access. Or		
2. Push data from a server direct to selected individuals, which can then be uploaded to the TCI data portal		

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

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