

## 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: 31<sup>st</sup> October 2023**

<b>Project reference</b>	<b>DPLUS114</b>
<b>Project title</b>	Tropical Important Plant Areas and Important Plant Species of TCI
<b>Country(ies)/territory(ies)</b>	Turks and Caicos Islands (TCI)
<b>Lead partner</b>	Royal Botanic Gardens Kew
<b>Partner(s)</b>	Department of Environment and Coastal Resources (DECR), Government of TCI
<b>Project leader</b>	Dr Stuart Cable
<b>Report date and number (e.g. HYR1)</b>	31 October 2023; HYR2
<b>Project website/blog/social media</b>	Twitter: @KewUKOTs #KewTCI  <a href="#">Turks and Caicos Islands Important Plant Areas   Kew</a>  <a href="#">Tropical Important Plant Areas of the Turks and Caicos (arcgis.com)</a>

The first 6 months of Year2 have been productive and the project implementation plan is on track. A team of 5 from Kew and 3 from DECR undertook 3 weeks of fieldwork during May/June, including botanical inventory and drone mapping. During the last week several team members got covid and isolated. The team managed two days on uninhabited East Caicos, but covid and the costs of fuel and boat hire prevented more days. The emphasis was on filling gaps in our knowledge about the distribution of priority species, which mainly include the local or regional endemics. This has enabled good progress on IUCN Red Listing.

### **Output 1: Tropical Important Plant Areas (TIPAs) Geographic Information System (GIS) established:**

**1.1: Compile existing TCI data into project GIS:** the project GIS was established in Year 1. The work continued in Year 2 with Spatial intern, Elloise Budd, working with Tim Wilkenson of Kew's Spatial Analysis Team to reconcile remote sensing data and the 12m resolution terrain and habitat map from JNCC. The vegetation types were re-evaluated and simplified for the purposes of this project. They also undertook drone surveys of areas believed to be of conservation importance and to resolve the vegetation map.

**1.2: Incorporate field data into project GIS:** all data collected and compiled to date have been databased and incorporated into the project GIS. In July we held a workshop at Kew, with Dodly Prosper in attendance, to analyse gaps in our knowledge for both species and geographical coverage. We identified two main areas on North and Middle Islands to inventory during the next field work period. East Caicos remains a priority but is logistically difficult (the DECR boat costs \$2400 for fuel for one trip, and smaller more local boats vary between \$400-700 per day but have other issues such as reliability. We plan for a DECR botanist to join in with RSPB surveys on East Caicos when possible.

## **Output 2: Capacity building to enable DECR to identify TIPAs:**

**2.1 & 2.2: Training of DECR staff in TIPAs methodology, field data collection and survey techniques delivered by Kew specialists:** Dodly Prosper visited Kew and received training in all aspects of the project. Visits for Bryan Naqqi and Flash Blaise are being planned for Year2/3. Training during field work is on going, but the DECR team are fully capable of undertaking field surveys to fill gaps in data.

## **Output 3: Data and sample collection to inform species threat assessments and phylogenomics:**

**3.1: Field surveys to gather species and habitat data and samples:** over 300 occurrence data points and some herbarium vouchers were collected for target species during the joint May/June fieldtrip at sites on the islands of North Caicos, Middle Caicos, East Caicos and South Caicos. DNA collections were made from target *Agave* and *Encyclia* species for phylogenomic studies in year 2-3. Joint planning undertaken for a November/December fieldtrip to TCI by a 2-person Kew team.

**3.2: Collate available species occurrence data and digitise new records:** all new records were collected digitally on smartphones using an ArcGIS Field Maps App developed for the project. This proved to be more useful than the previous ArcGIS Survey 123 app, and we anticipate that the new app will be used across the Kew UKOTs programme in the future. DECR staff were given ArcGIS accounts so that they could use the app. Another 500 botanical records were collected using iNaturalist, a citizen science app, to help map the flora more generally, including a rapid inventory of the relatively unknown East Caicos.

**3.3: Undertake species threat assessments:** Red Listing continued with all priority species assessments drafted. The November/December field work will complete the data.

## **Output 4: A network of Tropical Important Plant Areas (TIPAs) identified for TCI**

**4.1 & 4.2: Network of TIPAs identified and published by YR3 Q4:** held progress and gap analysis workshop at Kew (DECR Dodly Prosper attending in person) and online in July. Identified three key areas with missing data: East Caicos (largest uninhabited island in the Caribbean) and inland/southern areas of North and Middle Caicos islands.

## **Output 5: Important Plants and Tropical Important Plant Areas of the TCI guide and interpretation produced for local use**

**5.1: TCI TIPAs Guide:** preliminary discussions at July workshop over content and authors, including chapters and images, with BVI TIPAs Guide as a model (with modifications).

## **Output 6: Monitoring and Evaluation and project reporting**

**6.1 Produce Monitoring and Evaluation Plan:** M&E Plan being used to monitor project progress, updated and discussed at 6 monthly Steering Group meeting.

**6.2: Produce quarterly progress reports:** Monthly project team meetings monitoring progress with minutes and action points. Quarterly Progress reports (Y2Q1, Y2Q2) completed and to be reviewed by Steering Group.

**6.3: Produce half-year and annual reports:** Y1HYR1 produced (this document)

**6.4: Undertake Steering Group meetings and produce minutes:** H1 Steering Group meeting delayed due to absences/travel, planned for early December.

**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 low value of the pound against the US\$ together with increasing prices on TCI for accommodation, food and fuel, as well as high airfares, have put pressure on the budget. We continue to closely monitor the situation, and still aim to complete all planned activities within the original budget. We are planning a less ambitious second field trip in the second half of the year. The high cost of boat fuel reduced our efforts to inventory East Caicos. The DECR support boat costs \$ to fill a tank, for a day-trip, and even smaller local boats cost hundreds of dollars. We managed two day-trips to the island on small boats with a full team.

The start of El Niño concerned us as this may have affected the start of the rainy season, so we delayed making a decision on the second field trip. However, the rains arrived in due course. Our first Kew-DECR field trip was affected by covid, with several team members isolating for the final week of the trip. We are also changing our approach to field work as El Niño has brought excessive temperatures with potential health risks. Work starts and finishes earlier in the day, and the team has regularly timed water breaks.

**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: No

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

**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](mailto: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**