



**BIODIVERSITY
CHALLENGE FUNDS**



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 2025

Please note all projects that were active before 1st October 2025 are required to complete a Half Year Report.

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

Project reference	<i>DPL00127</i>
Project title	Navigating conservation: promoting capacity for acoustic telemetry in the TCI
Country(ies)/territory(ies)	Turks and Caicos Islands
Lead Organisation	Caicos Holdings Ltd.
Partner(s)	South Atlantic Environmental Research Institute Dept. of Environment & Coastal Resources, TCI Government
Project Leader	<i>Dr Ed Butler</i>
Report date and number (e.g. HYR1)	<i>NA – Special report December 2025</i>
Project website/blog/social media	

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 project has been active for 4 months, after beginning in September 2025. To date, several project activities have been completed successfully and the project is making good progress against the agreed project implementation timeline.

All project equipment was purchased and arrived on island in September and October, which allowed the project implementation to move ahead successfully (**Activity 1**). A newspaper article was drafted for publication in October, and was later published in December (**Activity 2; Figure 1; available [online](#), pg. 16**), following the identification and consultation of key stakeholders (**Activity 3**).

TCAT network launched to bolster research and conservation

A new marine conservation project was recently launched, with a goal to improve our understanding and protection of the marine species that make our waters so special.

Scientists and local partners have begun installing a shared acoustic telemetry array—a network of underwater listening stations that track the movements of important marine animals.

Funded through the Darwin Pin Local Grant scheme, the Turks and Caicos Acoustic Telemetry (TCAT) network project is led by emergent marine conservation non-profit, the Parrot Cay Sustainability Foundation, in partnership with a collaborative group of local stakeholders including the Department of Environment and Coastal Resources. The initiative will build on incredible acoustic telemetry work, which has been done by both local and international groups over the past five years. Together, the aim now is to continue to collect vital information that will help guide sustainable fisheries and marine management across the islands.

Project leader Dr Ed Butler explained, “Acoustic telemetry works a bit like an underwater version of GPS. Selected fish and rays are fitted with small sound-emitting tags that send out pinging signals. These pings are detected by underwater receivers anchored to the seafloor, which record when tagged animals pass nearby. Over time, these detections reveal where animals go, how often and when they visit certain areas, and how they move between islands or marine parks. By expanding receiver coverage within the



Researchers implant tagging transmitters into various marine species, including southern stingrays



An acoustic receiver is serviced under water

islands, we are broadening the area over which marine animals can be monitored.”

This information helps scientists and decision-makers identify important habitats, protect spawning grounds, and maintain healthy fish populations. It also

supports sustainable tourism and fisheries—ensuring that the marine life visitors come to see and fishers rely on remains part of the islands’ natural heritage.

COMMUNITY SUPPORT NEEDED

According to Dr Butler, “The receivers are small, cylindrical devices marked by concrete moorings, steel pins or rope floats. If you see one while diving, snorkelling, or boating, please do not damage or move it. Each receiver plays a crucial role in collecting valuable data that benefits the whole community.”

He added that by “Working together and sharing knowledge, the Turks and Caicos Islands can continue to protect the rich marine life that sustains our environment, culture, and economy”.

Figure 1: Article published in the Turks and Caicos Weekly News

Through support from project partners, the DECR, a comprehensive list of key stakeholders were identified and several meetings were arranged to discuss the development of the Turks and Caicos Acoustic Telemetry (TCAT) Network. This included five separate meetings with both research groups working with telemetry in the TCI to discuss the establishment of the TCAT Network and the terms of membership, allowing researchers to access shared data. Government agencies including the DECR and the Dept. of Fisheries and Marine Resource Management (DFMRM) were consulted directly and invited to participate as key stakeholders in the development of the TCAT Network. Based on these discussions, a Terms of Reference was drafted to guide the development of the TCAT Network. The document has been reviewed and endorsed by the DECR, and was shared with all parties in December. It is envisaged that all member parties will formally agree to the terms in early 2026. This document will act as the primary agreement governing collaboration between all TCAT Network Members and TCI Government, while DECR or DFMRM scientific research permits (SRPs) will remain the primary agreement governing the research performed by individual member organisations (**Activity 4**).

A project webpage and social media account (Facebook & Instagram) have been created, but not launched (**Activity 5**). The delay is a result of delays to the registration of the project lead organisation – the Parrot Cay Sustainability Foundation (currently administered by Caicos Holdings Ltd.). This will be completed in early 2026. This issue was previously communicated prior to the project start.

Initial range tests were completed in September (**Activity 7**) and guided the design, construction and deployment of 20 receiver stations in October (**Activity 8; Figure 2**). Animal tagging began in September and has progressed well. A total of 17 animals have been successfully tagged to date with continued tagging planned in December and January (**Activity 9; Figure 3**).

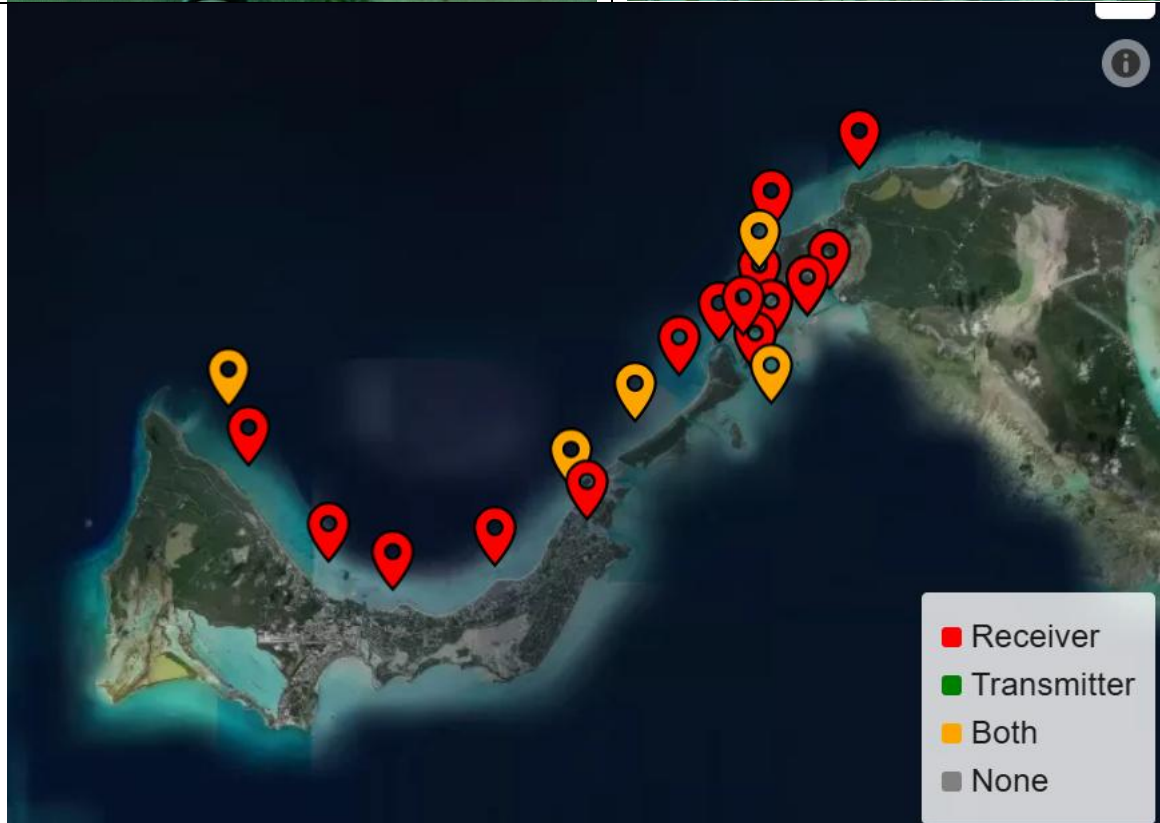
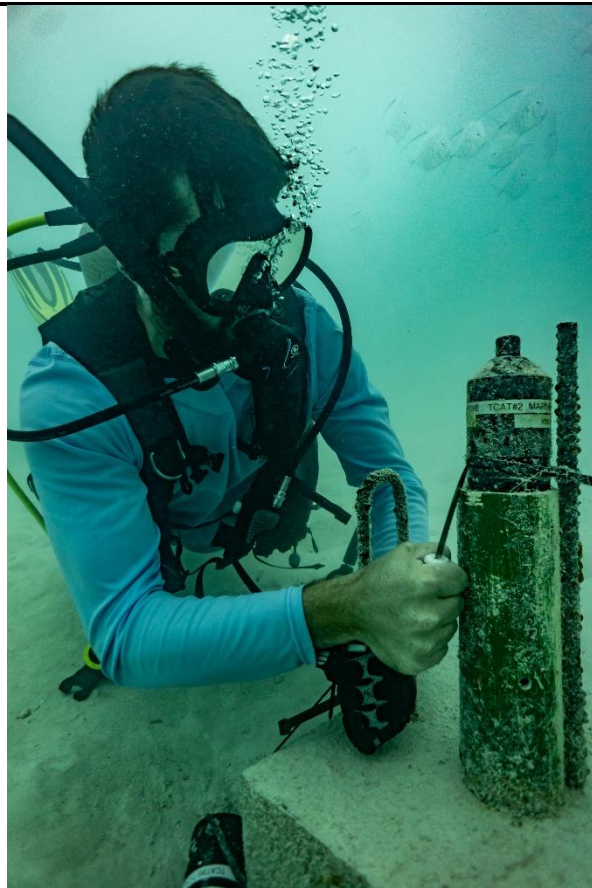


Figure 2: Top left: an acoustic receiver being deployed in a concrete mooring over hard ground. Top right: a receiver moored on a sand pin over soft sediment. Below: Receiver map of all project deployed receivers.



Figure 3: A whitespotted eagle ray being tagged (top) and successfully released (bottom) with a 10-year transmitter.

Initial data repositories were established using Google Drive. This includes separate components for different data – including tagging data, receiver deployment data and detection data (**Activity 9**). Data formatting has been aligned with internationally recognised templates and the TCAT Network ToR will commit member organisations to using the same format to ensure compatibility. The DECR have committed to housing shared datasets comprising all tagging and deployment data from all member organisations.

Tag ID

A69-1604-47847

A69-1604-47844

A69-1604-47845

A69-1604-47846

A69-1604-47838

A69-1604-47839

A69-1604-47820

Nickname

Species

Mutton snapper

Mutton snapper

Mutton snapper

Mutton snapper

Southern stingray

Mutton snapper

Mutton snapper

Release date ↑

2025-09-07

2025-09-09

2025-09-11

2025-09-12

2025-09-15

2025-09-17

2025-09-24

Detections

39

6,015

1,164

75

In studies

TCAT Array

TCAT Array

TCAT Array

TCAT Array

TCAT Array

TCAT Array

TCAT Array

OCEAN

TRACKING NETWORK

INSTRUMENT METADATA DATA SHEET

PLEASE SUBMIT THIS DATA SHEET TO YOUR PROJECT REPOSITORY
OR VIA EMAIL TO THE OTN DATA CENTRE: otndc@Dal.ca
Please fill out as many columns as possible. The GREEN SHADED columns are mandatory. See Data Dictionary sheet for a detailed description of each column.

OTN_ARRAY	STATION_NO	DEPLOY_DATE_TIME (YYYY-MM-DDTHH:MM:SS)	DEPLOY_LAT	DEPLOY_LONG	BOTTOM_DEPTH	WATER_DEPTH	INSTRUMENT_LENGTH	INSTRUMENT_NO	INSTRUMENT_SERIAL_NO	CODE_SET	TRANSMITTER	TRANSMITTER_MODEL	INSTRUMENT_SERIAL_NO	INSTRUMENT_SERIAL_NO	DEPLOYED_BY (Last Technicians)	RECOVERED_Y/N	RECOVER_DATE_TIME (YYYY-MM-DDTHH:MM:SS)	RECOVER_LAT (see notes)	RECOVER_LONG (see notes)	DATA_SOURCE
TCAT	#16	2025-09-25T12:30:00	21.878983	-72.077507	5.5	0.4	5.1	NewTrak R1	802811				NA	NA	Dr Ed Butler	y	2025-11-11T14:12:00			y
TCAT	#18	2025-09-25T12:50:00	21.890988	-72.070261	10.3	0.4	9.9	NewTrak R1	802812				NA	NA	Dr Ed Butler	y	2025-11-11T13:44:00			y
TCAT	#19	2025-09-25T13:15:00	21.905291	-72.075459	4.3	0.4	3.9	NewTrak R1	802814				NA	NA	Dr Ed Butler	y	2025-11-11T12:49:00			y

Figure 4: Agreed tagging (top) and receiver deployment (bottom) data templates ensure data collected by different organisation is compatible and can be housed within a single repository – Ocean Tracking Network.

A proposal, which was submitted to the Ocean Tracking Network (OTN) equipment loaner programme for an additional 15 receivers, was recently granted. This is a major project achievement and has demonstrated how the initial array, along with its potential to drive further collaboration and conservation has already been successful in leveraging further support for the expansion of the network (**Activity 12; Figure 4**). These additional receivers will be installed in January, expanding the project-managed array to 36 receivers.



Figure 5: Fifteen Innovasea acoustic receivers valued at \$30,000 were awarded to the TCAT Network on loan from the Ocean Tracking Network (OTN).

Moving into 2026, the focus will be to complete the tagging of all project animals (**Activity 8**). A workshop is planned for February/March which will involve all key stakeholders. This workshop aims to expose local stakeholders to equipment and data use, maintenance and management (**Activity 10**) while providing an opportunity for all parties to discuss and plan the future development of the TCAT Network. The workshop will align the research priorities and direction of the network with the conservation and management goals of local government agencies and produce a roadmap for the development of acoustic telemetry in the TCI (**Activity 11**).

All receivers will be serviced in March (**Activity 13**) and preliminary data will be downloaded, analysed and reported (**Activity 14**). A presentation will be made to TCI government stakeholders, demonstrating the utility of the array and how the data can be used to inform spatial and species management planning (**Activity 15**). A final report will be completed in May (**Activity 16**).

Meetings amongst the project group took place in September, October and November and will continue in January (**Activity 17**).

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 registration of the Parrot Cay Sustainability Foundation (lead partner) was delayed and will take place in early 2026. This has not impacted the project in any significant way as Caicos Holdings has formally administered the project to date. This was communicated previously, prior to the project start. However, some elements, like **Activity 5**, were delayed as a result.

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:	No
Received confirmation of change acceptance:	Yes
Change Request reference if known: <i>If you submitted a financial Change Request, you can find the reference in the email from NIRAS confirming the outcome</i>	

Guidance for Section 4: The information you provide in this section will be used by Defra to review the financial status of projects. This review will identify projects at random for spot checks on financial management and will include requests for evidence of the actual spend information provided below. Please ensure the figures you provide are as accurate as possible and that you have the evidence to support it. You do not need to provide it now.

<p>4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2025 – 30 September 2025)</p> <p>Actual spend: XXXXXXXXXX</p>
<p>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 2026)?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Estimated underspend: £</p>
<p>4c. If you expect an 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.</p> <p>If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible, and not later than 31st December. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes to your project if necessary.</p> <p>Please DO NOT send these in the same email as your report.</p> <p>NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.</p>
<p>5. Are there any other issues you wish to raise relating to the project or to BCFs management, monitoring, or financial procedures?</p> <p>Suspensions or allegations related to fraud and error concerns should be reported to fraudanderror@Defra.gov.uk</p> <p>No</p>
<p>6. Project risk management</p> <p>6a. If your project has an Overseas Security and Justice assessment, please provide an update on any related risks, and any special conditions in your award paperwork if relevant for your project.</p>

NA

7. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent Annual Report. As a reminder, all projects that were scored as 'Not Yet Sensitive' in the Gender Equality and Social Inclusion (GESI) assessment of their latest Annual Report should demonstrate how they are meeting the minimum GESI-Sensitive standard.

NA

Checklist for submission

Have you responded to feedback from your latest Annual Report Review ? You should respond in section 6, and annexe other requested materials as appropriate.	
Have you reported against the most up to date information for your project ?	
Have you clearly highlighted any confidential information within the report that you do not wish to be shared on our website?	
Include your project reference in the subject line of submission email.	
Submit to BCF-Reports@niras.com	
Please ensure claim forms and other communications for your project are not included with this report.	