

## 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 2022**

<b>Project reference</b>	DPLUS140
<b>Project title</b>	<b>Assessment and conservation of Cayman Islands' deep-water reefs and fishes</b>
<b>Country(ies)/territory(ies)</b>	Cayman Islands
<b>Lead partner</b>	Heriot-Watt University
<b>Partner(s)</b>	Marine Conservation International, Beneath the Waves & Cayman Islands Dept. of Environment
<b>Project leader</b>	Mauvis Gore & Austin Gallagher
<b>Report date and number (e.g. HYR1)</b>	HYR2
<b>Project website/blog/social media</b>	

**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 Deployment of BRUVS at 50 - 200m around the islands and on offshore “Cayman Bank” on twice yearly basis**

Between the delayed start to the project in March 2022 and September 2022, we have deployed 80 of the planned 180 standard deep BRUVS (Baited Remote Underwater Video Stations) around Grand Cayman, Cayman Bank and Little Cayman. [database attached: 1]

**1.2 Deployment of drop down camera rigs to 500 – 2000m around the islands and on offshore “Cayman Bank”**

In the same time period 19 of 60 planned deployments of Deep-Water drop down camera rigs (BRUVS) have been completed off Grand Cayman, the deepest to 1094 metres depth. [database attached: 2]

**1.3 Video surveys by open-water BRUVS of zones adjacent to Activities 1.1 and 1.2 around the islands and on offshore “Cayman Bank” on twice yearly basis**

The cameras for the Blue Abacus's Blue Belt BRUVS that were being used for this work had to be sent back to the manufacturer for recalibration and were not returned to Cayman until this September (i.e. 2022). As a result, the team could not extend the work beyond preliminary trials in March 2022.

**1.4 Technical dives to 100m at focal areas around Grand Cayman**

Due to the Covid-related retraction of the dive industry in Cayman, the tech-diving centre that had volunteered to lead this work has not been able to undertake deep water dives. While waiting for their tech-diving activities to restart, we have explored the

options to undertake the same surveys using a suitable ROV (Remote Observation Vehicle), which the Cayman DoE (Department of Environment) has agreed in principle to purchase.

### **1.5 Angling groups and fishers discussion of results and interpretation of data collected**

We have continued our informal discussions with anglers and fishers on our results. They have been able to advise us on areas of interest with deep sea fish stock.

### **1.6 Viewing and analysis of video footage and annotating records of species and habitats observed**

Half of the standard deep BRUVS (50 – 200m) have been analysed for fish species, including sharks. Categories for substrate / habitat classification have been completed and substrate / habitat analyses are underway [database attached: 1].

### **1.7 Entry of observations into digital database**

Data from analyses of the standard deep BRUVS (50 – 200m) and deep water drop down camera rig have been recorded in a digital database and shared with the DOE. [database attached: 1, 2]

### **2.1 Entry of significant records and observations into pre-existing DoE GIS system**

Data from analyses of the standard deep BRUVS (50 – 200m) have been shared with the DoE GIS Officer and are now part of the DOE GIS system. [initial maps attached: 3, 4, 5]

### **2.2 GIS work to generate appropriate outputs**

Regular meetings with the DoE GIS Officer have resulted in data from the standard deep BRUVS (50 – 200m) being generated as an initial maps [initial maps attached: 3, 4, 5].

### **3.1 Collation and statistical analysis of data**

Data on fish, shark and substrate features from the standard deep BRUVS (50 – 200m) have been collated. It is too early for statistical analysis. [database attached: 1, 2]

### **3.2 Preparation of figures (graphs and images) to be used in scientific report or paper**

Images from the standard deep BRUVS and drop down camera rig are being collated for use in scientific report / papers. It is too early for graphs to be prepared.

### **4.1 Development of policy and recommendations for Habitat Action Plan (HAP), including for establishment or new MPA(s) or extensions into deep water of existing ones**

We have held discussions with the DoE Manager of the Legislation, Implementation & Coordination Unit on developing the HAP for consideration by the NCC (National Conservation Council) and then by the public. [minutes attached: 6]

### **4.2 Development of policy and recommendations for Species Action Plan (SAP)(s) including for management of deep-water fish stocks**

As in item 4.1, we have also discussed developing appropriate SAPs. [minute

s attached: 6]

#### **4.3 Discussions of proposed recommendations with DoE administrative and policy staff**

We have also held meetings (as in item 4.1) with the Director and Deputy Director of the DoE to discuss the findings to date and how these can be most appropriately developed. [minutes attached: 6, 7, 8]

#### **5.1 Preparation of press / media releases**

Four media pieces have been prepared and two released:

1: [https://m.facebook.com/story.php?story\\_fbid=pfbid0uZreAXbmLTAx5mQveAZEDxpc7qovagcPoVay2vQnoxaJEUdC8NAGkyenZkvBmKFwl&id=100064457990837](https://m.facebook.com/story.php?story_fbid=pfbid0uZreAXbmLTAx5mQveAZEDxpc7qovagcPoVay2vQnoxaJEUdC8NAGkyenZkvBmKFwl&id=100064457990837)

2: <https://fb.watch/gnNgkXzEuf/>

#### **5.2 Distribution of media / press releases and posting on DoE and other websites**

One of the media pieces has been released and posted on DoE and BTW (Beneath the Waves) platforms

#### **5.3 Preparation of talk describing purposes, progress and findings of project**

A talk has been prepared. [attached: 9]

#### **5.4 Arranging and giving of talks to relevant stakeholders (DoE, National Conservation Council, local communities and particularly fishers, dive centres)**

A presentation [attached: 8] was given to the Cayman's NCC (National Conservation Council) in Sept. 2022 describing the purpose, progress and findings of the project to date. The response of the NCC was very positive. The DoE Director and Deputy Director remarked that the project is both timely and important for the work of the DOE, since it has become pressing to extend the project's objectives and activities further offshore. Lisa Hurlston-McKenzie, Senior Policy Advisor (Environment) in Cayman's Ministry of Sustainability and Climate Resiliency, noted that Cayman is working towards a climate change policy, and consultants on climate change risk assessment highlighted the deep sea and offshore environment as a knowledge gap for Cayman and that this project was providing information to help fill this gap.

## **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.**

It should be noted that during the previous 6-month reporting period, administrative problems outside our control delayed the start of the project by 5 months (from 1<sup>st</sup> October 2021 to 1<sup>st</sup> March 2022). This has been recorded and accepted by the funders. Outcomes of this delay resulted in a 5-month set-back to the project, which has been approved by LTS.

During the present 6-month reporting period, Hurricane Ian (which passed close by Grand Cayman) prevented our being able to undertake any fieldwork for a week during the limited time when all field teams were present. There was also an engine failure on the boat needed for the 50-200m BRUVS deployment, although of course it is anticipated that setbacks do take place and thus we have included contingencies to ensure we will be able to make up for this by amending the ongoing work schedule, as necessary.

Suggestions raised by the DAPG have been considered and addressed [document attached: 10].

As indicated above, the proposed technical dives have not been possible to date due to the effects of the COVID-19 pandemic on the business of the only dive centre able to perform technical dives. We have been exploring other options and now anticipate the DoE acquiring a medium-sized ROV (Remote Observation Vehicle) capable of undertaking comparable survey work down to 200 metres (see: <https://bluerobotics.com/store/rov/bluerov2/> and details above).

**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](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**