

**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	<i>DPLUS174</i>
Project title	A cross-UKOT camera network to enhance marine predator conservation
Country(ies)/territory(ies)	British Antarctic Territory (BAT) Falkland Islands (FI) Gibraltar Montserrat St Helena, Ascension and Tristan da Cunha South Georgia and the South Sandwich Islands (SGSSI)
Lead partner	University of Oxford
Partner(s)	Ascension Island Government, Antarctic Research Trust (Falklands), Gibraltar Botanic Gardens, Montserrat National Trust, SGSSI Government, British Antarctic Survey (Antarctica)
Project leader	<i>Tom Hart</i>
Report date and number (e.g. HYR1)	<i>HYR1</i>
Project website/blog/social media	https://www.zooniverse.org/projects/penquintom79/seabirdwatch https://twitter.com/seabird_watch https://www.instagram.com/seabird_watch/

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).

Output 1 – Marine species health index guidelines established to support the development of partners conservation priorities and UKOTs conservation policy

- **Indicator 1.1 Three to five colonies per UKOT are monitored consistently and population health determined using historical records available through partners (baseline) and project data (yearly from Y1).**
 - It will not be possible to start the monitoring in Ascension on Y1. Due to various logistical hurdles, we must ship the equipment independently and trained the local partners remotely on Y1. This means we will miss the first season. However, Ascension Government does have a drone operator in-house who will start drone surveys.
 - Four monitoring sites have been identified as priority during our visit (i.e., Gorham's Cave, Eastern Catchment Slopes, Rosia Bay Landside, Rosia Bay Oversea) and all of them has been flown using a drone to assess feasibility and create maps for flight automation. The main objectives are monitoring the shag nesting sites to assess breeding and survival and improve understanding of phenology (never done before) and monitoring urban and coastal gulls for population trends and phenology. We are working on ordering the cameras (time-lapse and long-range) to send to each new territory (i.e., Ascension, Montserrat, and Gibraltar) and replacing/servicing the cameras in the existing network on the Antarctic Peninsula, the Falkland Islands and SGSSI.
 - Y1 breeding season on Gibraltar, Falklands, SGSI and the Antarctic Peninsula will be capture. For Ascension, Montserrat and Gibraltar, the project will rely on existing data historically collected by our partners and the network should be running on time for Y2 breeding season.
- **Indicator 1.2 Population trends for two to five species per territory extrapolated from data collected and historical records by Y3.**
 - Work on this indicator has not yet started as per project timeline.
- **Indicator 1.3 Participating UKOT governments and conservation organisations partners involved perceive value in species health index.**
 - Work on this indicator has not yet started as per project timeline but all government are now involved in the project, if not as a direct partner, as a consultant on local policy and historical effort.

Output 2 – Artificial Intelligence (AI) tool development for data processing to speed up access to evidence made accessible in the time frame of the project

- **Indicator 2.1 Computer vision algorithm fully trained for shags, cormorants, and boobies by Y2 using existing Seabird Watch algorithm.**
 - We do not have the input data for this yet, so this may slip into Y3.
- **Indicator 2.2 Computer vision algorithm for Sooty terns 50% developed by Y3.**
 - We are on track to achieve this. More update on this will be provided for the end of Y1 report.

Output 3 – Online open access web portal to fill critical knowledge gaps in UKOT and improve policymakers access to marine health research evidence

- **Indicator 3.1 Creation of an R package for data access within 6 months of project start.**
 - We are halfway through achieving 3.1 but need to finalise the design spec for the database. This will be completed within the first quarter of Y2.
- **Indicator 3.2 Portal requirements defined (Y1) and portal designed (Y2).**
 - We have been working on a draft with the web designer – he has now been formally hired and he is coming back with a scope and design outline to take to partners and key stakeholders in a series of online workshops and discussions. We are on track to meet this objective by the end of Y2 (pending on stakeholder feedback).

- Indicator 3.3 Database complete (i.e., web application accessible and data migrated to online location) by end of Y2 and a minimum of 6000 images per site per species uploaded plus aerial survey (complete stitched survey) each year.
 - We are on track to complete 3.3 by end of Y2, but it is too early to report on it.

Output 4 – Establish a cross-UKOTs network aimed at facilitating knowledge exchange, cross-training and lowering barriers to marine predator conservation

- 4.1 Network established on Y1 with at least one member from OT Government and one field staff representing each of the territory (key contact selected at workshop 1).
 - In progress. Identify point of contacts for each territory include Keith Bensusan for Gibraltar, Ajhermae S. White for Montserrat, Laura Shearer for Ascension, Jen Black for SGSSI and a consortium of stakeholders for the Antarctic Peninsula. We are working on scheduling a meeting in the Falklands while we are leading our Antarctic season this year with the aim to identify a point of contact.
- 4.2 Yearly workshop to establish priorities and initiate capacity building (field training) conducted with partners and key stakeholders (from Y1).
 - In progress. We are aiming to host an online working in spring 2023 once we have had a first contact with each territory and identified the key contacts. In the meantime, we are setting up WhatsApp groups to facilitate communications.
- 4.3 Marine monitoring included in updated UKOT Conservation Strategy by project end.
 - Work on this indicator has not yet started as per project timeline.
- 4.4 At least one field staff per territory is trained to fly drones and service cameras by Y1.
 - Work on this indicator has started with Gibraltar as we have identified government staff already trained and who at the Botanic Garden require training to improve overall capacity. We aim to train our Ascension partners remotely until we can access the island on Y2. We aim to provide training to the Falklands over the next two Antarctic field season on Y1 and Y2 of the project. Montserrat will be training on Y1 during our first field visit in spring 2023. We are conducting the major drone survey and camera maintenance for the Antarctic Peninsula and SGSSI. Furthermore, we are exploring collaboration with BAS, harnessing in-house skills, for both territories to increase capacity.
- 4.5 UKOTs-wide Marine Monitoring Strategy drafted by project steering committee (Y3) to start a new discussion with all UKOT government about the pertinence of marine monitoring for conservation policy (supported by project outcomes).
 - Work on this indicator has not yet started as per project timeline.

General updates per territory



GIBRALTAR. First field visit to Gibraltar (25/09/22 to 28/09/22). The territory has been very receptive and appeared ahead in term of equipment and training compared to the other territories, so we decided to use them as a proof of concept. The trip was very positive and allowed us to identify gaps for our methods to be adapted to monitoring seabirds in warmer climate but also to prove that the method should be reproducible with a few changes. We are now planning to update our environmental risk assessment with the support of our local partner which then will be shared with the other territories

for feedback. The core team we are working with now includes Keith Bensusan and his team, who lead Gibraltar seabird monitoring out of Gibraltar botanic gardens, and Stephen Warr (Environment Officer) and his team from the Gibraltar Government. We have also met twice with the Directory of Civil Aviation of Gibraltar Government which was extremely helpful in term of better understanding needs and gaps for drone survey. We took the opportunity to invite

fellow DPLUS Project leader, Dr Rhiannon Austin, (DPLUS164: *Conservation Actions for Seabirds on the Turks and Caicos Cays*) on our field visit to Gibraltar. Considering the similarities and partial overlap between our projects, this visit allowed us to better explore collaboration and exchange knowledge on methods, the Caribbean context and how we could help each other reach our targets.

MONTSERRAT. We are planning a visit to Montserrat in Spring 2023 on time to set up some time-lapse cameras and long-range cameras on key breeding colonies. After discussing with Montserrat, we have also decided to attempt creating an artificial colony for least terns. They have been observed nesting on an industrial jetty in the local protected area but unfortunately the eggs were destroyed by vehicles. We would like to attempt placing floating platforms to encourage settlement as to date, no least tern colonies have been observed on the island. We will reach out to a few seabird experts in Florida and the Caribbean as this has been successfully attempted on other species of terns. Our partners in Montserrat are the first partner we introduce to our EID project advisor (Lauren Rudd). Lauren's role will be to ensure that we are following the appropriate steps to provide the tools and training needed for the territories to take full ownership of local seabird monitoring by the end of our project without creating added strains on their budgets and limited manpower.

ASCENSION. With regards to Ascension Island, we have been working with our local partner to ship all the needed equipment (tripods, cameras, batteries, chargers, and memory cards) to the territory by the next breeding season. Unfortunately, it is not currently practical for us to visit the territories as flights remain limited following the COVID-19 pandemic, but we trust that our partner has the right skills to be trained remotely and set up the cameras for the first season. We remain in regular contact with them.

SGSSI, FALKLANDS, ANTARCTIC PENINSULA. The field season for South Georgia and the South Sandwich Islands, the Falkland Islands and the Antarctic Peninsula has officially started. This year, we are organising 12 expeditions (2 field staff per expedition) to visit more than 100 sites around the region. We are also working on strengthening our contacts with BAS and Falklands Conservation as both organisations would be key in increasing capacity for seabird monitoring in the region. This is particularly with the Falklands. Staff turn-over means that our contact at the government has now moved on to a new position. We are planning a face-to-face discussion onsite to assess the local capacity in taking full ownership of the site we have been monitoring historically. We have also met with the British Antarctic Survey and are partner on a Darwin Plus: Round 11 proposal led by Norman Ratcliffe which will help further our Darwin Plus project by increasing sustained monitoring in the South Sandwich Islands. We have also responded to the Avian Flu in the northern hemisphere by using the camera network and sampling plans to monitor outbreaks: <https://ecoevorxiv.org/repository/view/3686/>. Our advice has been adopted by the International Association of Antarctic Tour Operators as well as the FCDO.

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.

Notable problems

- There are some delays to reach Ascension due to ongoing limitation in number of flights (1 per month).
- Due to the ongoing financial crisis, the prices of goods have increased significantly.

Unexpected developments

- Tom Hart has secured a position at Oxford Brookes University which means his salary will be covered from Y2.

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:	Not yet
Formal Change Request submitted:	Not yet
Received confirmation of change acceptance	Not yet
Change request reference if known:	

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?

Considering the problems and developments reported in Q3, we would like to ask the permission to re-work the project budget to account for this in Y2 and Y3.

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**