



**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 2024

Please note all projects that were active before 1 October 2024 are required to complete a Half Year Report.

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

Project reference	DPLUS175
Project title	Enhancing monitoring and prevention of invasive non-native species across UKOTs
Country(ies)/territory(ies)	Anguilla, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn, South Georgia and South Sandwich Islands, Sovereign Base Areas of Akrotiri and Dhekelia (on Cyprus), St Helena, Ascension and Tristan da Cunha, Turks and Caicos Islands
Lead Organisation	UK Centre for Ecology & Hydrology
Partner(s)	Joint Services Health Unit, Cyprus
Project leader	Helen Roy
Report date and number (e.g. HYR1)	DPLUS175 HYR3 – 30/10/2024
Project website/blog/social media	https://darwinplus.org.uk/project/DPLUS175/ https://www.ceh.ac.uk/our-science/projects/enhancing-monitoring-and-prevention-invasive-non-native-species-across-ukots

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).

1. On-line open Non-Native Species (NNS) databases developed for all UKOTs with CyDAS as a prototype system

1.1 Compilation and harmonisation of available baseline information on non-native species in collaboration with the stakeholders on each UKOT and through review of relevant databases e.g. GBIF

Data can be accessed on the development website: [Home | UK Overseas Territories database of Alien Species \(dev-ceh-ukotas-d10.pantheonsite.io\)](#)

Over the next 6 months we will be compiling detailed metadata to accompany this information to provide guidance for the UKOTs on using the data system.

1.2 Collaboratively develop an approach for a relevant biodiversity indicator for INNS on each UKOT underpinned by key metrics (e.g. temporal trends in number of INNS) for evaluating biosecurity efficiency

Real-time reporting of simple summary information (e.g. number of non-native species per taxonomic group) will be included in the data system. Following the cross-Caribbean workshop in Anguilla held jointly with DPLUS125 (21-25 October 2024) there was a request to include a notification system that would alert each UKOT of newly added INNS within the data system. We will explore possibilities to implement this in the coming months.

1.3 Implement approaches to quantifying impacts using current evaluation frameworks such as the IUCN Environmental Impact Classification of Alien Taxa (EICAT) including on natural capital and ecosystem services (information added to NNS database through 1.1)

Approaches have been co-developed with partners and stakeholders in Montserrat, Anguilla and St Helena. These approaches have been shared with the other UKOTs through the resources available on the [project website](#) and a summary is provided as a [blog](#). It will not be possible to complete this information for all NNS within the database because of lack of available information.

1.4 Workshops with clusters of UKOTs to collaboratively develop processes for updating and maintaining the NNS databases

During the workshops we have worked with partners and stakeholders to discuss updating and maintaining the on-line systems. During the next year further support will be provided through in person workshops and on-line meetings. Presentations outlining the data system are available on the [project website](#). Most recently we have held a cross-Caribbean workshop (21-25 October 2024) in Anguilla and the meeting notes will be available for the final report and within a blog that will be written collaboratively by 1 November 2024. Through the cross-Caribbean workshop additional data sources were provided and we will endeavour to collate these by the end of the project.

Table 1. Number of non-native species included within the on-line data system for each UKOT and number of resources, including variable numbers of non-native species, to compile (Access date: 22 October 2024). Further resources will be made available from the Caribbean UKOTs following the workshop and these will be added here).

UKOT	Number of non-native species	Number of resources including non-native species to process and compile. Number in brackets is compiled so far.
Anguilla	568	19 (19)
Ascension Island	517	4 (4)
Bermuda	126	2 (2)
British Antarctic Territory	Held by BAT	23 (processed by BAT)
British Indian Ocean Territory	716	38 (11)
British Virgin Islands	78	5 (5)
Cayman Islands	408	10 (10)
Falkland Islands	1639	12 (10)
Gibraltar	545	32 (32)
Montserrat	564	13 (12)
Pitcairn	211	6 (6)
South Georgia and the South Sandwich Islands	140	13 (7)
St Helena	1963	8 (8)
Tristan da Cunha	325	7 (7)
Turks and Caicos	151	10 (10)

Data can be accessed on the development website: [Home | UK Overseas Territories database of Alien Species \(dev-ceh-ukotas-d10.pantheonsite.io\)](https://dev-ceh-ukotas-d10.pantheonsite.io)

Functionality of the on-line data system has been enhanced in response to feedback from the UKOTs including simplified and more user-friendly taxonomic interface, extended data fields for NNS on the horizon, extended search capabilities modelled on IUCN systems for Red Lists. These enhancements were demonstrated during the cross-Caribbean workshop and positive feedback was received.

2. INNS monitoring and surveillance scoping report and outline design of relevant initiative

2.1 Workshops with clusters of UKOTs to consider opportunities and challenges for approaches to INNS surveys including citizen science

The on-line questionnaire completed in advance of the workshops and the dedicated consensus sessions ([Workshop programmes](#) and workshop reports which have been sent as attachments) within the workshops have outlined opportunities and challenges for citizen science. Additionally, the partners and stakeholders have identified needs for raising awareness including through, as an example, a policy brief St Helena and cross-Caribbean.

2.2 Collaborative development of relevant surveys informed through the workshop (informed through 2.1)

2.3 Implement on-line recording (e.g. using iNaturalist or indicia) for general INNS surveillance

For most UKOTs [iNaturalist](#) will be the main application for recording non-native species. Projects can be created within iNaturalist and through [Darwin Plus 151](#) an iNaturalist Project has been created for the [British Indian Ocean Territory](#). During the cross-Caribbean workshop there was considerable interest in arranging a BioBlitz on INNS that would be held simultaneously across the Caribbean UKOTs perhaps during Invasive Species Week. iNaturalist would be used to capture observations using the project function with an umbrella project and subprojects within it for each UKOT. A session was held at the cross-Caribbean workshop to demonstrate the project functions within iNaturalist.

3. Predictive modelling tools and outputs available to inform biosecurity specifically arrival and spread of INNS including during extreme weather events

3.1 Expert-elicitation workshop with clusters of UKOT to agree INNS representing greatest threat to the territories through arrival and spread within and between islands (where the UKOT comprises multiple islands)

We collected INNS monitoring priorities and key pathways of spread through the on-line questionnaires. We then ranked the collective list, based on expertise of the participants, to reach a consensus on the priorities for each UKOT. The results of this ranking exercises is shown in the figures within the workshop reports. This is being updated with further responses from across the UKOTs and specifically those that had not completed the questionnaire previously. The information will be available in the final report.

3.2 Consult with the stakeholders and modelling experts to identify data needs to inform climate conceptual models

The climate change session during the workshops began with identifying the key climatic components that are of most concern to each UKOT. The importance of these climatic components for the direct and indirect pathways affecting invasive species were then mapped. These climate components represent the data needs to improve any future statistical models, beyond the scope of our project. These components are discussed in the workshop reports for each UKOT sent as separate files.

3.3 Develop, synthesise and interpret outcomes from conceptual models to inform predictions and mitigation of the risk from biological invasions following extreme weather events

Based on our conceptual model, and the expertise of the workshop participants, predictions for climate change impacts were made for four case study species for St Helena, Anguilla and

Montserrat as reported in the Annual Report YR2. This will now be updated for the Caribbean UKOTs following the cross-Caribbean workshop.

4. On-line resources and published research outputs produced and shared with UKOT communities through collaboratively and inclusively developed dissemination materials

4.1 Draft and publish journal article providing descriptive summary of INNS and predictions of future threats from INNS on UKOTS by Y2 submitted to Journal of Applied Ecology as open access

As stated previously, the journal article will be developed through year 3.

Over the last 6 months the project has been included in conference presentations, webinars and talks on the project:

Unravelling the ecology of ladybirds through community (citizen) science. International Congress of Entomology, Kyoto, Japan. 25-20 August 2024.

Biological invasions: monitoring, detection & management. Digital with Purposes - Global Summit, Cascais, Portugal. 9-11 July 2024.

An abstract has been accepted for a poster presentation on the project at the forthcoming British Ecological Society Annual meeting.

4.2 Demonstration and training workshops on maintaining on-line databases and data flow with clusters of UKOTs

As stated above, during the workshops we have worked with partners and stakeholders to discuss updating and maintaining the on-line systems including most recently cross-Caribbean workshop (21-25 October 2024). During the final 6 months further support will be provided through on-line meetings. Presentations outlining the data system are available on the [project website](#).

4.3 Final virtual webinar with all UKOTs to deliver priority training on INNS data flow recognising development needs identified through the workshops on each UKOT alongside dissemination of on-line training materials

To be organised in the final year.

4.4 Collaboratively write three popular articles and information sheets with information on biosecurity approaches available for download through the project website including Darwin Newsletter articles and promote through press releases and social media.

We have written four [blogs](#) (popular articles) and disseminated three project [newsletters](#). A further newsletter will be released and a blog on the cross-Caribbean workshop will be posted within the next two weeks. An article has been published in the [Environmental Scientist](#) which includes description and summary of the project.

The Annual Report Review was very encouraging and we would like to express our appreciation to the Darwin team and reviewer - the project team and partners welcomed the positive feedback. There were no issues raised to report on within this report but noting the comment "Should you be more proactive in setting up iNaturalist projects for each UKOT?", we included a lunchtime session at the recent cross-Caribbean workshop to demonstrate project functionality within iNaturalist.

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 no notable or unexpected problems to report. There is a lack of information for some fields, including assessment of impact, within the database for many non-native species but this knowledge gap was anticipated. We have been collaboratively developing approaches to address this with some of the UKOT participants in the project. There will be no impact on the budget or timetable but we will seek additional funding to complete these fields in subsequent years.

3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?

These have been noted in previous but the data available will be collated and this meets the requirements of the plan.

Discussed with NIRAS:	No
Formal Change Request submitted:	No
Received confirmation of change acceptance:	No
Change Request reference if known: Not applicable	

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2024 – 30 September 2024)

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 2025)?

Yes ☐ No ☒

4c. If you expect and 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.

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 to your project 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?

None.

6. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent annual report. If your project was subject to an Overseas Security and Justice Assistance assessment please use this space to comment on any changes to international human rights risks, and to address any additional mitigations

outlined in your offer letters. Please provide the comment and then your response. If you have already provided a response, please confirm when.

Checklist for submission

For New Projects (i.e. starting after 1st April 2024)	
Have you responded to any additional feedback (other than caveats) received in the letter you received to say your application was successful which requested response at HYR (including safeguarding points)? You should respond in section 6, annexes other requested materials as appropriate.	Yes
If not already submitted, have you attached your risk register ?	Yes
For Existing Projects (i.e. started before 1st April 2024)	
Have you responded to feedback from your latest Annual Report Review ? You should respond in section 6, annexes other requested materials as appropriate.	Yes
For All Projects	
Include your project reference in the subject line of submission email.	Yes
Submit to BCFs-Report@niras.com .	Yes
Have you clearly highlighted any confidential information within the report that you do not wish to be shared on our website?	Yes
Have you reported against the most up to date information for your project ?	Yes
Please ensure claim forms and other communications for your project are not included with this report.	