



DARWIN INITIATIVE FUND PLUS

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.

Project reference	DPLUS135
Project title	From Pseudoscorpions to crickets: securing Ascension Island's unique invertebrates
Country(ies)/territory(ies)	Ascension Island
Lead partner	Ascension Island Government
Partner(s)	MAIISG, UKCEH, SHNT
Project leader	Diane Baum
Report date and number (e.g. HYR1)	HYR2
Project website/blog/social media	n/a

Submission Deadline: 31st October 2022

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).

Progress is reported below against activities in the agreed project timeline. Almost all activities are on or ahead of schedule.

A decision was taken to prioritise sample collection and processing in the first half of Year 2 because other major outputs of the project are dependent on this being completed. The actions linked to sampling and identification are now ahead of schedule. As a consequence, two actions relating to biosecurity assessment and response planning have been slightly delayed. No other outputs are directly linked to these actions and they will be completed by Y2Q4, so this reprioritisation has had no impact on overall project delivery.

1.1 Training and upskilling of Project Coordinator in UK and St Helena, by knowledge exchanging with existing UKOT invertebrate specialists. Completion Y1Q2.

Completed. Knowledge exchange between Invertebrate Project Coordinator and UKOT invertebrate specialist before arrival on Ascension. Training not required due to extensive experience of Project Coordinator.

1.2 An invertebrate record database template is built with appropriate fields and format, that will allow comprehensive recording as well as integration into wider data systems. Completion Y1Q3.

Completed. Access database created.

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			_220915_ELEV_NE450_I		Sciaridae				1			Ц	
			_LBOX_PLAT_OPP1	Specimen	Webspinne				1				
Loans			_LBOX_PLAT_OPP1	Specimen	Tineidae				4			H	
Occurrence Records			_LBOX_PLAT_OPP1	Specimen	Scutigerida	2			2				
Organism Groups			_SC_EB_B0_LT	Specimen	Histeridae				13			Ц	
			SC_EB_BO_LT	Specimen	Gryllidae				21				
Samples			_SC_EB_B0_LT	Specimen	Sarcophagi	lae			2			Ц	
Sampling Methods			SC_EB_BO_LT	Specimen	Formicidae				25				
Site Visits			_SC_EB_B0_LT	Specimen	Anobiidae				1				
Sibes			SC_EB_B0_LT	Specimen	Phoridae				1				
			_SC_EB_AD_LT	Specimen	Formicidae	Paratrechina	longicorn		13				
Specialists			_SC_EB_A0_LT	Specimen	Calliphoride	e			2				
Taxonomic Groups			SC_EB_AD_LT	Specimen	Histeridae				31				
Taxonomy			_SC_EB_A0_LT	Specimen	Gryllidae				7				
		5779 INV	SC_LL_F0_LT	Specimen	Milchidae				1				
			_SC_LL_F0_LT	Specimen	Histeridae				47				
		5777 INV	_SC_LL_F0_LT	Specimen	Cockroach	Periplaneta a	imericana		1				
			_SC_LL_F0_LT	Specimen	Tenebrionic	lae			3				
			_SC_LL_F0_LT	Specimen	Cleridae				2				
		5774 INV	SC_LL_E0_LT	Specimen	Sarcophagi				1				
		5773 INV	_SC_LL_E0_LT	Specimen	Mogoplistic	ae			1				
		5772 INV	SC_LL_E0_LT	Specimen	Anobiidae				4				
		5771 INV	_SC_LL_E0_LT	Specimen	Histeridae				24				
		5770 INV	SC_LL_E0_LT	Specimen	Phoridae				7				
		5769 INV	SC_LL_E0_LT	Specimen	Muscidae				1				

1.3 Historic invertebrate data records and associated references are collated and integrated into the Ascension Biodiversity Catalogue. Completion Y1Q4.

Completed. All existing records and databases combined and compiled into single comprehensive database. Updated species list shared with JNCC.

1.4 Undertake invertebrate surveys on 100 sites, taking samples and recording associated environmental data. Completion Y2Q4.

Significant progress, on schedule. Over 200 distinct sites sampled covering all major habitat types on the island (lava/forest/caves/subterranean/endemic plant communities). Multiple different sampling techniques have been used to target effectively different taxa.

1.5 Survey samples are processed and identified using initial sorting to groups and family by Project Officer and groups labelled, and sent to external specialists in St Helena National Trust, Natural Museum. Completion Y3Q1.

Significant progress, on schedule. Over 50,000 individuals from 2,000 surveys have been processed, sorted and sent to a growing network of over ten international taxonomic experts. Identification of surveyed ants and beetles is complete or near-complete. Identification of other taxa is beginning or in progress.

1.6 Voucher specimens linked to DNA samples of each species stored on Ascension and sent to BIOSCAN project to establish DNA reference collection for Ascension. Completion Y3Q3.

In progress, on schedule. All samples identified are appropriately preserved in ethanol and will be sent to the Natural History Museum for incorporation into the BIOSCAN project.

1.7 Verified species records added to Ascension Biodiversity Catalogue (ABC) and made available via SAERI. Completion Y3Q3.

In progress. On schedule. Invertebrate records are in a format where they can be easily absorbed into the ABC and made available via SAERI. Records are being added to the ABC and the identification work proceeds.

2.1 Red listing process is undertaken working with MAIISG and appropriate IUCN taxon Specialist Groups is used for review, and submitted for publishing. Completion Y2Q4.

In progress, on schedule. Project Coordinator attended Red Listing training workshop organised by Queens University, Belfast. Red list applications prepared and submitted for three species (*Discophallus phillipi, D. amplus* and *Stenowithius duffeyi*), which are currently in review. Material for five further species has been collated ready for further applications. Completion Y2Q4.

2.2 Endemic invertebrate conservation plan written based on background information and consultation with project partners. Completion Y3Q3.

In progress, on schedule. Key sites for endemic scaly crickets, flightless moth and goblin spider have been identified. Data being collected on habitat preferences and the co-occurrence and potential threat from non-native species. Conservation plans not started.

2.3 Invertebrate actions, species and broader actions, are incorporated into protected area management plans and development control guidance. Completion Y3Q3.

In progress, on schedule. Policy and evidence-base being developed to designate new protected areas to provide comprehensive coverage of all key sites for endemic invertebrates.

2.4 Training in invertebrate conservation is delivered to AIGCFD staff and volunteers by the Project Officer supported by international specialists. Completion Y3 Q1.

No progress. On schedule.

3.1 Profiles of 19 invertebrate species including best-practice surveillance and control methods will be researched and written using existing invasive species databases and partner input. Completion Y2Q2.

Significant progress. Slightly behind schedule. 19 high priority species identified via a horizon scanning exercise completed by the Project Coordinator. Six species profiles completed. Information collected for a further three profiles of invasives already present on Ascension and sources of data on potential new introductions identified. Decision was made to prioritise sample collection and processing because (in contrast to the species profiles) further elements of the project depended their completion. As a result, sampling is now ahead of schedule and the species profiles will be picked up and completed by Y2 Q4.

3.2 Training on surveillance and control of 19 high-risk invasive invertebrate species provided to 3 staff in the AIGCFD team. Completion Y2Q2.

Completed. Project Coordinator provided training to AIG Biosecurity Team on effective trapping and monitoring measures for routine surveillance and enhanced monitoring linked to a major development on Ascension. Further advice has been provided on appropriate survey methods when pre-border measures have not been followed and new post-border controls need to be devised rapidly to control potential threats. Further training will be delivered to new members of the AIG team in Y3 of the project.



3.3 Surveillance methods for high risk invertebrates implemented as part of existing biosecurity monitoring. Completion Y4Q1.

In progress, on schedule. Routine surveillance methods in place and refined through this project. Discovery of Pharaoh ants on US base has been used to inform biosecurity protocol for exports. Biosecurity samples from runway repair project show effective treatment of aggregate to prevent introductions. Further surveillance targeted at particularly high risk invasives or sensitive areas will be developed later in the project once risks are better understood.

3.4 Control methods for high risk invasives incorporated into existing AIG biosecurity response. Completion Y2Q4.

In progress. Slightly behind schedule. As for action 3.1, this has been delayed slightly to allow focus on the sampling effort. This will be picked up and completed by Y2 Q4.

3.5 Control methods for BHA applied in trial sites and complementary monitoring undertaken to understand impact of control. Completion Y3Q3.

In progress, on schedule. Good sites for big-headed ant control close to sites of endemic crickets and flightless moth have been identified for future trials. No further work on this action to date.

4.1 Create short booklet on Ascension's endemic invertebrates is written and designed and published both as a hard copy and an online version. Completion Y4Q1.

In progress, on schedule. Information and media are being collected for the guide including the first photographs of living specimens of some of Ascension's endemic invertebrates.



Discophallus sp.



Erechthias grayi

4.2 Plan and deliver school events run, engaging 65 pupils with Ascension's invertebrates. Completion Y3Q2.

Significant progress. On schedule. Field trip to explore invertebrates on Green Mountain led by Project Coordinator and attended by 22 children and 12 adults from the Ascension community.



4.3 Produce a video showcasing Ascension's invertebrates and distribute via AIGCFD. Completion Y4Q1

No progress. On schedule. Work has not yet begun on this action in line with the project timetable.

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.

No significant problems have been encountered over the last six months and the project is on schedule to deliver all actions and meet all outputs and outcomes.

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:	No
Formal Change Request submitted:	No
Received confirmation of change acceptance	No
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	
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No

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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?

None	
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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 <u>planned</u> 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 <u>BCF-Reports@niras.com</u>. The report should be between 2-3 pages maximum. <u>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</u>