Darwin Initiative
Overseas Territories Challenge Fund
Final Report

This report should be completed and submitted within a month of agreed end date of project

Darwin Ref Number	EIDCF004
Darwin Project Title	Laying the foundations for invertebrate conservation on St Helena.
Country (ies)	St Helena
Award holding Organisation	Buglife – The Invertebrate Conservation Trust
Partner Organisations	St Helena National Trust, St Helena Government (Agricultural and Natural Resources Department).
Grant Value	£24,956.50
Start/end date	1 Aug 2010 – 31 Jul 2011 (scoping visit 7 Apr – 1 May 2011)
Author(s), date	Dr R M Smith, 19 June 2011.

1. Challenge Fund Background

St Helena is a UK Overseas Territory, lying in the tropical South Atlantic Ocean, between Africa and South America.

The endemic biodiversity of St Helena is severely threatened by the combined effects of habitat degradation and invasive alien species. Most of St Helena's endemic, terrestrial animals are invertebrates – some 300-400 species. They form the richest, globally endemic invertebrate fauna of any UK Overseas Territory.

Ongoing conservation effort is focused on protecting critically endangered species (endemic flora and Wirebird) and restoring the native vegetation. Invertebrates need to be included in conservation action because they too are highly threatened. Conserving the functional roles of invertebrates (e.g. pollinators, decomposers) is also essential to promoting successful ecosystem restoration.

The Challenge Fund award was intended to develop a framework for the delivery of a project integrating invertebrate needs with practical and strategic conservation efforts on St Helena.

2. Challenge Fund Activities

Summary

The Challenge Fund award was managed by Richard Smith (Buglife – The Invertebrate Conservation Trust). The work involved gaining a better understanding of the state of knowledge of St Helena invertebrates and planning and executing a scoping visit to St Helena.

This visit was carried out with Roger Key (consultant entomologist), in conjunction with island partners: the St Helena National Trust (Jamie Roberts, Director), which arranged the schedule of activities, and St Helena Government conservation staff (Darren Duncan, Head of Agricultural and Natural Resources Department). Opportunities for local outreach and education were taken during the scoping visit, which informed potential future strategies for local public engagement.

The main activities were:

1. To understand better the state of knowledge of St Helena's invertebrates and their conservation priorities, we made links with institutions and individuals to explore the outcomes of previous visits and studies on St Helena:

   We corresponded with the Royal Museum of Central Africa (Tervuren, Belgium) and visited the Natural History Museum (Howard Mendel and library), Zoological Society of London (Paul Pearce-Kelly), Royal Botanic Gardens, Kew (Phil Lambdon), Centre for Ecology and Hydrology, Edinburgh (Alan Gray) and Philip and Myrtle Ashmole (Edinburgh). Although not planned in advance, the visits were arranged when it became apparent that face-to-face meetings would be invaluable for exchanging information and resources.

2. To understand the requirements for delivering invertebrate conservation on St Helena. This was the principal goal of the scoping visit, which lasted 15 days. The visit was postponed, due to the difficulty of confirming ship passages and flight seats in advance; this was foreseen in the original application and accommodated by flexibility in the project plan. Main tasks were:

- Visiting key sites for native habitat and restoration effort, to learn about conservation problems, practical management activities and the feasibility of different survey techniques (Blue Point, Central Peaks, Fishers Valley, Manati Bay, Millennium Forest, Peak Dale, Prosperous Bay Plain, The Barn). Field visits were occasionally rearranged due to poor weather or to a hired vehicle breaking down. A flexible work programme allowed this.
- Meeting stakeholders to examine how to build capacity and skills, and develop resources, for invertebrate conservation; to learn how conservation is currently delivered and how this will change under the current Institutional Review of Environmental Management (St Helena National Trust - SHNT, Agricultural and Natural Resources Department - ANRD, Environment Coordinator, Planning Department – GIS section).
- Meeting stakeholders and target audiences for education and public outreach, achieved through: a primary school assembly and outdoor classroom session (Harford School); meetings with the primary schools science teacher (Steve Plato) and St Helena Museum Director (Lucy Caesar); a one-day training session on invertebrate survey techniques for six Darwin apprentices (SHNT); a one-day workshop (office and field-based) on invertebrate conservation for ANRD field staff; a half-day public outreach event at the George Benjamin Arboretum; and discussions on education with the current SHNT Darwin project manager (Jodie Mills). It was not possible to visit Prince Andrew secondary school as the visit coincided with staff training days and the Easter holiday break; however, the integration of outdoor learning in the secondary curriculum was discussed with the previous Head Teacher (Derek Henry).
- Opportunities to publicise the Scoping project and its intended outcomes on St Helena were taken in the form of a newspaper article (*St Helena Herald* and *St Helena Independent*) a radio interview (Saint FM) and a public lecture (St Helena Museum). A regular column in the St Helena Herald, titled 'Saints and Sinners' was initiated during the Scoping visit and is ongoing. This is a popular account of the 'good, bad and the ugly' among St Helena's endemic and invasive flora and fauna. It aims to make Saints more aware of their island's special biodiversity and of non-native threats. Richard Smith and Roger Key are contributors on invertebrates.
- As travel tickets were less expensive than had been planned for, following agreement with LTS International, additional entomological resources were taken to the St Helena National Trust. This immediately increased capacity to deliver invertebrate outreach events or limited surveys (e.g. nets for use by youth groups, a portable moth trap enabling an amateur entomologist to reach new sites). Copies of the Belgian's invertebrate expedition reports were taken to replace missing volumes in the ANRD library.

Main achievements

The Challenge Fund award has made it possible to develop a full Darwin project proposal that meets the needs of conservationists and other stakeholders on St Helena. Key outcomes were:

1. Extensive links were made with institutions and individuals in the UK and Europe who had conducted invertebrate studies on St Helena. This allowed us to obtain a clear overview of the current knowledge base and define the objectives for making it available to conservationists on St Helena.

2. A wide range of meetings and workshops was achieved, with staff from a spectrum of strategic and practical conservation roles. This enabled us to understand the conservation issues (e.g. skills, resources, staffing) facing different aspects of delivery and develop realistic goals for a full project.

3. Visits to a diversity of field sites provided first-hand experience of the invertebrate fauna, as well as the threats and management issues affecting St Helena's native habitats. This was essential for formulating practical survey approaches and understanding conservation priorities.

4. Numerous educational and outreach events or sessions were delivered in a variety of formal and informal settings. This provided direct experience of the resources and approaches required for effective environmental education and outreach.

3. Outcome & Impact of Challenge Fund

The Challenge Fund award has enabled us to confirm that bringing the needs of invertebrates into conservation delivery is a high priority for institutions on St Helena.

Of outstanding importance is the timing of new institutional arrangements being made for government conservation, which a full Darwin project could assist. The recent Institutional Review of Environmental Management explicitly stated the inclusion of invertebrates as a strategic conservation goal, if skills and resources were available. This was supported by meetings with the Environmental Coordinator, who is directly involved with the current institutional reforms. Thus the objectives of the project have been moulded to the changing situation on St Helena, e.g. an invertebrate coordinator's role, initially funded by a Darwin project, is intended to transfer to a core role in government conservation at the end of the project – once skills and tools for invertebrate conservation are in place.

The award has also allowed us to identify priorities for St Helena, e.g. new invertebrate surveys are less important than making current information accessible; understanding the functional roles of invertebrates in the St Helena ecosystem is vital for successful restoration of native habitats; and which resources on-island are required to encourage learning and the development of skills. Such detailed insights were only possible following a visit to St Helena.

Preparation for main Darwin project bid

We are now ready to submit the Stage 1 application for a main Darwin project (Round 18).

Difficulties and setbacks

Although many aspects of running a scoping project on St Helena are challenging (see lessons learned), they did not impact the achievements of the work.

It has not yet been possible to establish formal collaboration with the Natural History Museum, London, which holds important collections of St Helena invertebrates, because of staff turnover among key contacts: both the Head of Collections (Howard Mendel, with collecting experience on St Helena) and the Head of the Entomology Department (Malcolm Scoble – Keeper of Entomology) retired during the course of the scoping project; efforts to build a relationship with the NHM are ongoing.

4. Lessons

Planning a visit to St Helena is logistically very difficult, requiring considerable time to arrange the travel stages (UK – Ascension – St Helena) and make accurate financial assessments for the budget. Locating suitable time windows to visit St Helena is also challenging. These obstacles stress the need for future work to be flexible in its timing and budget.

St Helena is a relatively small community where staff turnover can have a significant impact. Developing broad collaboration between institutions and individuals is likely to enhance the effectiveness of projects. This emphasises the need for good communication at all levels of organisation.

The adult public on St Helena has a relatively negative attitude to invertebrates (just as in the UK), in contrast to children. Successful conservation work requires popular backing, so future outreach and awareness work with invertebrates must focus on positive messages for adults and influencing as wide a child audience as possible.

5. Project Expenditure

Item	Budget for whole project*	Actual Expenditure	Variance ** as a %	Comments
Travel Costs			-24.4%	At the time of grant application, timetables for flights and sailings were not yet published, so costs had to allow for return via South Africa. Actual tickets were obtained for return via Ascension, which was a cheaper option.
Subsistence costs			-19.1%	At the time of grant application, timetables for flights and sailings were not yet published, so accommodation costs had to allow for 23 nights on St Helena; 15 nights were actually required.
Overhead costs				
Operating Costs			+42.2%	Operating costs are higher because certain equipment was purchased to assist with delivering the Scoping project, following agreement with LTS.
Capital Costs				Capital costs were not originally specified in the budget (recorded as operating costs), but certain items were purchased to assist with delivering the Scoping project, following agreement with LTS.
Other: Contracted costs: R M Smith R S Key J Roberts				
TOTAL			-1.8%	Refund from cancelled accommodation on Ascension, handed back to Defra.

***** Figures refer to project application please indicate which document you refer to if other than your project application or annual grant offer letter

** please explain any variance of +/- >10%

6. Other comments not covered elsewhere

A report by Roger Key, on testing invertebrate sampling techniques, is included with this report.

Darwin Challenge Fund Reporting Guidelines

All Darwin projects are required to report on the work they have undertaken with Darwin funds and this offers you the opportunity to report on your achievements and lessons learnt and on any other issues you would like to raise. You report should show how you have progressed against the activities outlined in your application, or clearly explain any changes and the reasons why these changes were necessary.

You are expected to prepare the report in conjunction with your partners and you are expected to submit a Final Report within 1 month of completion of the agreed dates for the award (max 6 pages excluding annexes).

We will acknowledge and read all reports submitted, but will only contact you about your report if there are specific concerns.

If you have any additional queries about reporting, please feel free to email or call on 0131 440 5181.

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project reference number in the Subject line.	yes
Is your report more than 5MB? If so, please advise Darwin-Projects@ltsi.co.uk that the report will be send by post on CD, putting the project reference number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	no
Have you involved your partners in preparation of the report and named the main contributors	yes
Have you completed the Project Expenditure table fully?	yes
Do not include claim forms or other communications with this report.	