

Darwin Initiative: Half Year Report

(due 31 October 2013)

Project Ref No	19-029
Project Title	Laying the Foundations for Invertebrate Conservation on St Helena.
Country(ies)	St Helena and UK
Lead Organisation	Buglife – The Invertebrate Conservation Trust
Collaborator(s)	St Helena National Trust, St Helena Government, Centre for Ecology and Hydrology
Project Leader	Vicky Kindemba
Report date and number (eg HYR3)	11 October 2013
Project website	http://www.nationaltrust.org.sh/shnt-conservation-programmes/natural-heritage/bugs-on-the-brink-our-invertebrates/

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).

The project has collated an invertebrate species list, which provides a complete baseline of invertebrate species for the island. It has been drawn up in taxonomic hierarchy, with complete synonymic information and information on endemism and a rarity category (common, scarce, rare or extinct). The list contains a total of 1231 invertebrate species, 440 of which are endemic, this list is available on the project website and is currently being used by the government and others on island as a resource. The list will continue to evolve as new information comes to light. The list was recently used to define 285 invertebrate species that are proposed to be protected by law under the new Environmental Protection Ordinance. These species (and eggs/nests) will be protected from injury, disturbance, killing etc. The proposed list of species for protection is currently out for consultation.

Species records with dates and locations have also been extracted from existing literature. A total of over 2300 records Coleoptera (beetles) have been extracted so far, and this has also been expanded to other invertebrate groups providing a total of 3700 species records. This will allow the mapping of species distributions; the data will be shortly integrated into the government database to inform the current development of the protected area system. The database will also form a key component of information for the future red listing process.

Training took place with Jill Key, the Biosecurity Officer from St Helena Government and Basil Read staff (contractors on the new airport working on behalf of the government) on biosecurity across their sites. It was agreed to set up a monitoring programme using sticky traps and small 'insect hotels' in breeze blocks that will be checked monthly to see what has colonised them.

12 government agricultural officers were trained over 3 days in October on Agricultural Entomology. The project focus and aims are outlined below, and there was very positive feedback from the participants. This type of training is now to be implemented more widely to other government officers.

- Describe what an insect is
- Understand the basics of naming and taxonomy
- Explain the differences between the main insect orders of interest to growers
- Explain the distinguishing features of the other groups of invertebrate of interest to growers
- Explain why understanding the ecology of the different insect and invertebrate groups helps in their management
- Identify a range of common agricultural insects and other invertebrates

- Understand why and how insects get resistant to pesticides, and how to avoid it
- Identify a range of farmers friends and understand how to help them control pests

Education delivery is very successful, since April there have been 18 educational events with the Primary and Secondary Schools, providing activities for 237 children, and some events included parents as well. Activities have ranged from 'The colourful magic garden' for the 4-5 year olds, creating bugs and garden art showing different types of bugs from worms to bees and where they would live in a garden. For 9-10 'Habitats, micro-organisms, food webs/keys' understanding bugs what they are and their life cycles, as well as what a food web is and how animals are dependent on each other and plants for food. For 11-13 'Insect surveys and traps' on what are insects, how to use survey equipment and how to use a simple key.

There has been a range of media and awareness raising during the project. A presentation was given on the project as well as a bug walk by the Invertebrate Coordinator, with support from the Education Officer, to 115 people at the opening of the Dainas Peak National Park in September. The island's first environmental conference took place at the Canister, Jamestown on 14th August. The Invertebrate Coordinator presented a talk on 'Beating the bottleneck – conserving St Helena's endemic weevils' which was well received. A talk on the project's education work was given at the St Helena museum in August to 29 people by the project's Education Officer. There have been 4 articles on the project in local papers. Sentinel 9th May an article produced after the island's first science fair at St Paul's Primary School. Independent 5th July and Sentinel 4th July, from a press release after the rediscovery of a very rare leafhopper. Sentinel 11th July a follow-up article on the rediscovery following pre-recorded radio interview. There have been radio interview as well on Thursday 2nd May the Invertebrate Coordinator gave an half-hour live radio interview about the project to SAMS Radio 1's DriveTime show, this was repeated on the following Sunday morning.

CEH Summary of activities on restoration work focusing on plant fitness and pollination, included a two week trip to St Helena was carried out by Alan Gray during April/May 2013 the main activities during this period were as follows: Invertebrate Site Reconnaissance, which included several visits with the Invertebrate Coordinator to establish suitable sampling sites included, Peak Dale hand searching deadwood; Millennium Forest pitfall trapping and hand searching; the Peaks pitfall trapping; the Airport site pitfall trapping and hand searching.

Restoration training workshop covering the Introduction to Plant Population Fitness with 6 government officers attending the workshop. Training session with discussions on hybridisation in *Commidendrum*, techniques for measuring Plant Fitness and planning common garden experiments for *Plantago*. Draft versions of the Plant Fitness protocols have also been developed, and will be finished by the end of the year.

2a. Give details of any notable problems or unexpected developments 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 has been a number of the changes within the St Helena government recently, relating to changes in staff and department budgets, and this is causing a delay in establishing the in-government Invertebrate Coordinator post being set up. We are currently working hard with the government to resolve these issues and so it is hoped at this stage it won't affect the Darwin project.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

3a. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No

3b. If yes, and you wish to request a carryforward of funds, this should be done as soon as possible through the formal Change Request process. However, it would help Defra manage Darwin funds more efficiently if you could give an indication now of how much you expect this request might be for.

Estimated carryforward request: £

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan or budget should not be discussed in this report but raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 17-075 Darwin Half Year Report**