



## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31<sup>st</sup> October 2017)

<b>Project reference</b>	DPLUS051
<b>Project title</b>	Water Security and Sustainable Cloud Forest Restoration on St Helena
<b>Country(ies)/territory(ies)</b>	St Helena
<b>Lead organisation</b>	St Helena Government (Environment and Natural Resources Directorate)
<b>Partner(s)</b>	Connect St Helena, Arctium, CEH
<b>Project leader</b>	<i>Derek Henry</i>
<b>Report date and number (e.g., HYR3)</b>	<i>HYR2 2017</i>
<b>Project website/blog/social media etc.</b>	<a href="http://www.arctium.co.uk/StHelena">www.arctium.co.uk/StHelena</a>

**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 to end September).**

**Desk Study Reporting.** The desk study section has been completed.

**Drone Certification by ASSI and St Helena Airport.** The project has successfully applied for a new permission to fly within the study area during October and November 2017. After consultation with ASSI, Arctium have agreed a methodology to support the submission of a permission to fly by the St Helena Government's Environmental Management Division (EMD). Arctium will complete additional flight training for EMD staff and lead a permission application workshop during October and November 2017.

**Baseline Botanical Surveys.** These will be completed during November 2017. The surveys have been delayed due to problems with data loggers and collection of logger data taking up most of the available staff time on island in the first 6 months.

**Monitoring Network and Data Collection.** Two rounds of quarterly data collection have been completed within the last 6 months. Surface water loggers have not been downloaded for the past 6 months, so the quality of recent data is unknown. Data collection during November 2017 will confirm the quality of this data, alongside additional surveys of the catch pits and v-notch weir within Wells Gut and Grapevine Gut.

**Data Interpretation.** Logger data has been forwarded to Arctium for review by EMD. The data interpretation has been used to diagnose problems with the equipment. The project has identified the minimum elevation within the cloud forest where moisture is likely to collect on vegetation. Other trends and calculation of the sub-catchment water balances will be dependent upon the collection of 12 months data during October and November 2017.

**Climate Change Assessment.** This section of the report has been 65% completed and has reviewed long term data between 1892 and the present day.

**Outline Cloud Forest Restoration Plan.** Arctium and EMD are meeting during November 2017 to discuss the outline project results and current conservation management plan for the

Peaks. Outputs from DPLUS051 will assist in the identification of conservation tasks within the Peaks Management Plan that can maximise the opportunity for harvesting mist and improving the islands water supply.

**2a. 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.**

**Monitoring Network and Data Collection.** There have been problems with two of the weather stations (Perkins Gut and Wells Gut) and a soil moisture logger in Grapevine Gut. The weather station problems were linked to backup batteries within the loggers which have now been replaced and a solar array which was not charging the main logger battery at Perkins Gut. The identification of the equipment problems, movement of equipment between sites within the cloud forest and maintenance of equipment used more staff time than planned, resulting in a delay completing ecology baseline surveys.

The delays will not impact the overall project deadline, nor will there be any impact on the project budget. However, some equipment was offline for 3 months which will reduce the quality of data at a select number of monitoring locations within Perkins Gut, Grapevine Gut and Wells Gut. The collection of data for an additional 3 months, until March 2018 will help to reduce the data gaps. In addition, some redundancy was built into the monitoring network with duplicate data sets collected for temperature and humidity in a number of locations. This will reduce the overall impact of some equipment being off-line for 3 months at the same monitoring location.

**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: No

Formal change request submitted: No

Received confirmation of change acceptance No

**3a. 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: £

**3b. 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 rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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

No.

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. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate document.

**Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk) . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 22-035 Darwin Half Year Report**