



## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31<sup>st</sup> October 2018)

<b>Project Ref No</b>	DPLUS059
<b>Project Title</b>	Establishment of the national framework for invasive plant management
<b>Country(ies)/Territory(ies)</b>	St. Helena, South Atlantic Ocean
<b>Lead Organisation</b>	Environment and Natural Resources Directorate, St Helena Government
<b>Partner(s)</b>	St Helena National Trust
<b>Project Leader</b>	Derek Henry and Darren Duncan
<b>Report date and number (e.g., HYR3)</b>	31/10/18 HYR2
<b>Project website</b>	<a href="http://www.sainthelena.gov.sh/the-weed-page/">http://www.sainthelena.gov.sh/the-weed-page/</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).

Since 1<sup>st</sup> April 2018, the project has progressed well, with some delays due to weather. The Invasive Plant team consisting of two Weed Busters, Invasive Plant Support Officer and Invasive Plant Specialist is now well established and making up time for delays caused year one.

Some of the key activities listed against the project outputs over the past six months include:

1. Strategic leadership for invasive plant management is evident at the national level
  - At the start of October 2018 the agreement with partner organisation the St Helena National Trust (SHNT) was amended from the original 12 days/month to 20 days/month for the IPSO and two Weed Busters to ensure all project outcomes are achieved in time. This change has already proven to greatly increase the team's ability to keep to the planned programme.
  - On 3rd of May 2018 the Biosecurity Officer, Pest Control Officer, Head of ANRD and the IPS attended the first conference call with conservation officers from Ascension and the CABI (Centre for Agriculture and Biosciences International) team working on a **Darwin Plus Project on Improving biosecurity in the SAUKOTs through Pest Risk Assessments (PRA)**. The aim of the first audio/video conference with all project partners present was to introduce the project, discuss the work plan, establish communication channels, to collate information on existing PRA procedures and list priority needs. The second conference call was held the 7th of August where feedback from all project partners was discussed and the third conference call is scheduled for the 27th of November  
Link to webpage: <https://www.cabi.org/horizonscanningtool>
  - In November 2018 (12-16Nov) the IPS and IPSO will take part in workshop hosted on St Helena focussing on pathway analysis and horizon scanning. The workshop will be attended by representatives from ANRD, EMD, SHNT, CABI (Centre for Agriculture and Biosciences International), CEH (Centre for Ecology and Hydrology) and APHA (Animal and Plant Health Agency). The aim is to continue improving horizon scanning tools, identifying potential risks and management strategies.
2. Community, industry, Government and land managers engaged in invasive plant Management

- On the 20<sup>th</sup> of July the IPS presented an overview of the project to the members from the public, government and stakeholders who attended the Environmental Management Division's yearly open day.
- In August the IPS was asked by the St Helena Councillors to give an overview of the project and report on the progress. Following this meeting the IPS wrote a progress report and sent it to the Elected Members of the Council. This report is currently being reviewed after feedback from Councillors.
- After some concerns were raised regarding the herbicide spraying and general maintenance of the road verges on the island we planned and hosted a workshop 8th June 2018 to address these concerns. These comments broadly included the impacts of the spraying on endemic/protected species, on pasture land, weed control, aesthetics, visibility and road safety. The aim of the workshop was to get input from all relevant stakeholders regarding their concerns and discuss possible solutions. Twenty people attended the workshop representing Environmental Management Division (EMD), Roads sector, Landscape and Ecology Mitigation Programme (LEMP) and Agricultural and Natural Resources Division (ANRD). Following the workshop it was agreed that IPS will develop 'Best Practice guidelines' for road verge vegetation management. Once the first draft is complete, it will be sent out to all relevant stakeholders for input and feedback. Two site visits were conducted along the road verges with EMD and Roads Sector. Temporary assistance was provided to the Roads sector by surveying and marking areas where endemics occur and herbicides should not be used. The IPSO spent a full day with Nursery staff to help them with identifying endemics and invasive plants.
- IPS took part in a workshop hosted by Samantha Cherret (DPLUS052 - Mapping St Helena). Katie Medcalf from Environment Systems presented a summary of the data from the project and led a workshop on how to use the data, the uses of remote sensing and selecting the correct data for different applications. John Scullion from Aberystwyth University presented the results from the soil sampling done as part of DPLUS052 and how the island can benefit from the data. The soil data and habitat maps have already proven useful in gaining insight into current distribution of invasive plant species and the possible correlations between invasive plants and environmental/anthropogenic variables.

### 3. Strengthened local capacity to manage priority invasive plants

- Two sites have been selected for white weed (*Austro eupatorium inulifolium*) control trials and the first trials have been completed. Follow-up control and monitoring will take place over the next 6 months. Different methods are tested to determine the most cost-effective options. Results will be analysed after the 6 month period.
- On the 1<sup>st</sup> of October the first round of control trials started to test different control methods for the control of wild mango (*Schinus terebinthifolius*). We selected a test site that is heavily invaded by a large population. The site is situated in a valley where the wild mango has out-competed the majority of other species. The dense thickets formed by the trees restrict access to the area and can be challenging to work in. It is clear to see even after just one month's work that this is a very challenging and costly species to manage. Additional methods will be tested in the next month.
- Targeted removal of African fountain grass (*Pennisetum setaceum*) in the upper Sandy Bay area proved challenging due to weather conditions that limited safe access. To ensure that the trials continue an additional isolated satellite population was identified through consultation with EMD and LEMP. The site selected is an area where several endemic plant and invertebrate species occur. First round of removal and follow up monitoring has been completed. The selected sites will be revisited in December 2018.
- Fuchsia (*Fuchsia coccinea*). After consultations and site visits with the Terrestrial Conservation Officer and SHNT, High Peak Conservation area was selected to test control options for Fuchsia. The first round of trials and follow up has been completed. The third follow-up is planned for November 2019.

- Pheasant tail fern (*Nephrolepis cordifolia*). Control trials in Plantation forest was conducted on 8 February 2018. Methods tested included manual digging and turning over the plant material as well as removing bulbs from the soil. Follow up monitoring was done on 14 March 2018. Pheasant tailed fern occurrence was surveyed in Diana's Peak conservation area and targeted manual removal by pulling out the plants, putting the material in bags and taken to the landfill site for disposal. The two trials areas were selected to represent at least two different land use types. An additional site was selected in the Pouncey's area where a very dense population of Pheasant tail fern occurs where the first round of contrails have been tested. Four different options of herbicide use, dilution and adjuvants are being tested. Based on the current results manual removal thus far has yielded the best die-off. However, this method is also the most costly and time consuming. Results will be analysed after the third round of follow-up treatments.

4. Improved knowledge for invasive plant management strategies and tactics

- Following concerns were raised regarding the continual spread of the newly introduced Namibian ice-plant (*Galenia papulosa*), it was decided that management protocols should be developed to minimize the spread and to prevent such introduction in the future. The species was reportedly introduced to St Helena through river sand from Namibia used in the construction of the airport. To better understand the problem and scale of the invasion we arranged a site visit to the airport. Ten people took part in the visit including LEMP, SHNT, EMD, Biosecurity and IPM. During the visit we surveyed the whole runway and surrounding area for the invasive Namibian ice-plant. Over 150 plants were found. In addition to surveying and destroying any ice-plants the aim of visit was to show people how to take the correct photos of plants to help with identification. Lourens Malan (Terrestrial Conservation Officer) also gave a demonstration on how to collect herbarium specimens. We are currently developing airport invasive plant management protocols. Once the first draft is complete we will host a workshop to discuss the protocols and get feedback and input from all the stakeholders.

5. Nationally significant invasive plant species under innovative and cost-effective management.

- Swampy Gut Pasture and Invasive Plant Management on Adjoining Land Parcels. During June a site visit with landowners, farmers, ANRD, Roads Sector and IPS were conducted focussing on area where grazing pasture is being affected by invasive plants species such as white weed, furze and bull grass. The pasture land is being invaded by species that seem to originate from outside of the property and other land parcels. All the adjoining land owners were contacted and on-site discussion was held to list key issues and discuss possible collaborative clearing plans.

**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.**

A change request form was submitted in April 2018 and accepted in August 2018. Continual rainy and windy weather over the past 3 months have caused some delays. Certain sites cannot be safely accessed when it is raining due to the terrain and high risk of injury. To account for the unpredictable weather we adopted a "assess the weather and then decide where it would be safe to work" approach. Luckily our sites are well distributed over the island (i.e. different weather zones) and work still continued with only slight changes to scheduling.

**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
Formal change request submitted:	Yes
Received confirmation of change acceptance	Yes

**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: There was significant underspend, however the budget was revised and a change request submitted and approved.

**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.

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

None at present.

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/work plan 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**