15/04/2024, 15 54 Darwin Plus Local: Round 1

DPLR1\1022 DPL00006

Darwin Plus Local - Final Report (1)

Officer: Jessica Magnus

A Mrs Giselle HazellINDIVIDUAL

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

This should be the project reference provided in your offer paperwork and not your application number.

DPL00006

Q1. Project Title

Restoring peat soils and tussac grass habitat in the Falklands

Overseas Territory(ies)

Which UK Overseas Territory(ies) is your project working in?

✓ Falkland Islands (FI)

Lead Organisation or Individual

Giselle Hazell

Partner Organisation(s)

NONE

Value of Darwin Plus Local Grant Award

£11,397.60

Project Start Date

01 April 2023

Project End Date

31 January 2024

Project Leader Name

Giselle Hazell

Project Website/Twitter/Blog etc.

Facebook: @Rootsintheground and Instagram #falklandsrootsintheground

Report Author(s)

Giselle Hazell

Report Date

31 January 2024

Project Summary

No Response

Project Outcomes

Successful Darwin Plus Local projects must demonstrate measurable outcome in <u>at least one of the themes</u> of Darwin Plus, either by the end of the project or soon after through a credible plan.

Please refer to your original application form/proposal. Please tick which theme(s) of Darwin Plus that you originally indicated your project underpins:

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;
Checked	Environmental quality: improving the condition and protection of the natural environment;
Checked	Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.

Section 2 - Project Outcomes (Essential)

On a scale of 1 (high – outcome substantially exceeded) to 5 (low – outcome substantially did not meet expectation), how successful do you think your project has been?

Please select which rating you would give your project using the scale below, where 1 means the project outcome was substantially exceeded and 5 means the project outcome substantially did not meet expectation. Below, you will be asked to give your reasons for the rating and describe what has changed as a result of your project.

⊙ 3 - Outcome met expectation

Project outcomes and justification for rating above

Please explain why you have given the rating above. In your answer, you may want to consider:

i) What has changed as a result of the project? Where possible, concentrate on the actual changes achieved by your project rather than listing a series of activities undertaken. Activity does not necessarily mean a change has occurred.

ii) Has your project achieved its original objective(s) and outcomes? If you stated success indicators in your original application, have these been met and to what extent have these been met?

15/04/2024, 15 54

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*Below you will be asked to submit appropriate evidence to support your comments.

3. The Project met expectation: Project targets were reached -the expected benefits and outcomes will only be realised when the sites become functioning ecosystems again. In some aspects the expectations were exceeded in that the estimated daily planting averages were higher due to a strong motivated team. The original objective planting density was amended (and approved) and targets met.

OBJECTIVES

- The project planted 46334 tillers in 2.69 hectares over bare and eroding soil over 61.25 days.
- Soil temp and humidity loggers have been installed and tested

OUTCOMES

• Biodiversity: Summer surveys indicate that the habitat is being used by magellanic penguins actively burrowing in the plantations and harvesting plant material from the new tillers. Magellanic snipe are present where none recorded in previous surveys. Long tailed meadowlarks foraging for moths species that are now present in the groundcovers between the tillers where no birds or insects recorded in previous surveys. In an adjacent 18-month-old plantation, banded plovers have been found to be nesting where none were recorded before. Groundcovers/primary colonisers are establishing on bare ground between the tillers. At the infill sites tussac seedlings appear to be gaining a foothold in the soils over summer where the seedling success rate to date has been extremely poor.

• Climate Change: Soil samples have been taken at the sites and this could lead to future calculations of carbon drawdown (once a baseline for the Falklands and tussac peat soils have been established)

• Environmental Quality: The planted tillers seem to be benefiting the soils in the immediate vicinity- as evidenced by the colonisation of new species (refer to planting report attached) which would suggest it is reducing the laminar flow at the soil surface. This would suggest that there is less blowing material at the site reducing both the erosive and smothering action of the wind on peat. These conditions are all contributing long term to the recovery of a microbiome and hydrological cycle.

• Capacity Building: The planting scheme employed 3 labourers - wages cycle back into the Falklands economy via Income Tax/RPC and spending within the local market and align with national priorities of promoting rural livelihoods in camp.

• Over 400 hours have given the planters a firm foundation in restoration practices that can be employed in other projects around the islands.

• Blogs and presentations have increased the local awareness of the potential for restoration efforts to individual land holders in the Falklands.

• On the success and implementation of this project we have sought and been awarded three years funding (2024-2026) for further planting . This ensures our commitment to the long term restoration of bare soils on Dyke Island.

Supporting Evidence - file(s) upload

Please upload supporting evidence here. You may also provide a link to download supporting evidence in the following question. For example, evidence might include photos of the project site before and after, results of surveys, maps, images, new management plans or other tools or outputs created through the project, or even a video documenting the impact the project has had on the environment and community.

Your answers and this evidence will be reviewed by an external reviewer.

*Upload files (Max 10 files; Max 20MB per file).

셨	Darwin Plus Planting Log	公	DPL00006 Dyke Island Photo Surveys 2024
≣	16/01/2024	i	16/01/2024
0	17:15:14	()	17:14:52
×	xlsx 27.14 KB	ß	pdf 4.71 MB

A Darwin Plus Local report 2024

16/01/2024

③ 17:13:44

pdf 4.63 MB

Supporting Evidence - links to published document/online materials

Please provide links to access or download supporting evidence here. For example, evidence might include photos of the project site before and after, results of surveys, maps, images, new management plans or other tools or outputs created through the project, or even a video documenting the impact the project has had on the environment and community.

Your answers and this evidence will be reviewed by an external reviewer.

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Project Challenges

Did the project encounter problems, either anticipated or unexpected? If so, what actions did you take to resolve these problems?

1. The drone mapping portion of the project could not be followed up as our volunteers from the Elephant Seal Research Group could not come down to the Falklands this summer. Luckily Google Earth Pro have been updating the Falkland imagery and we have been able to use these images to record before and after evidence for the plantations. Using Google Earth Pro for our mapping has been a great addition to the project- and one we feel will be the basis for our future mapping. We have a library of drone images dated at the inception of the project and they can still be used for comparisons in future but relying on drone photography as a measurement tool on an annual basis has been adapted to longer intervals.

2. The TOMST Data loggers need soil calibration tests for each site. This has presented a small delay as the samples are being worked on by the agricultural department in Stanley and so we can only calibrate the data once we get the results returned(estimated some time in March 2024)

Lessons Learned

Please describe the key lessons learned (administrative, management, technical, monitoring and communications) through the project, considering:

i) What worked well and why?

ii) What did not work well and why?

iii) If you had to do it again, what would you do differently?

iv) What recommendations would you make to others doing similar projects?

1) Changing use from QGIS to Google Earth Pro has simplified things as I am not very well technically versed and I was loosing time in trying to teach myself programmes when I needed to be storing and using the data. For the smallness of my project and team I have learned its best to use simple methods and apps that I can work with.

2) Getting more planters in the field creates great work flows, is cost effective and less burdensome on machinery and infrastructure resources. In future bigger teams would be the ideal. (Currently we do not have the accommodation to house labourers in winter-or the transport to get them to the field. The remoteness and access difficulties of Dyke Island have been a challenge to transport and to install infrastructure to date. We were fortunate to have a planter who did not mind the rudimentary conditions.)

3) The time allocated for surveying and reporting where not sufficiently budgeted for- in future I will allocate a more realistic portion of my time -especially as the project keeps expanding. I had allocated 3 days when in fact it has taken 10 days.

4) Focussing on outcomes is good to set targets such has hectares covered but the value of the effort is quality over quantity. It is better to harvest and plant to a high standard and get fewer plants in the ground, than to plant many plants poorly.

Section 3 - Project Finance (Essential)

Project Expenditure

Complete the expenditure table below, providing a breakdown of salaries, capital items and explanations of 'Other' costs. If the budget was changed since the project started, please clarify the main differences. **Explain in full** any significant variation in expenditure where this is +/- 10% of the approved budget lines.

Project Spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual Darwin Plus Costs (£)	Variance %	Comments (please explain significant variances)
Staff Costs				
Consultancy Costs				
Overhead Costs				

Travel and Subsistence			
Operating Costs			
Capital Items			
Others			
Total	11,397.60	11,381.40	0.14%

Please provide a short narrative summary on project finances.

Your comments should describe:

i) Any difference between the planned and actual expenses and reason(s) for this.

ii) If co-financing was secured for the project, what was this spent on.

The drone pilots did not travel to the Falkland's this summer so their travel and luggage allowance was reallocated to internal travel for a planter. An aircraft delay combined with scheduling and weather meant instead of travelling via aircraft planters came via the road and ferry network. This added an extra day to the project and an overnight stay. Unforseen freight, banking and laboratory tests accounted for the remainder of the fund re-allocation.

This project was co-funded by Dyke Island- providing accomodation, meals, heating, laundry, planting equipment, safety equipment , internet and communication for the planter.

Section 4 - Contribution of Project to Darwin Plus Programme Objectives

Please select up to **one** indicator that applies within **each group/indicator list (A, B, C, D)** and report your results for that indicator in the text box underneath. If you do not have relevant results to report for any of the indicators in a particular group, you can leave them blank.

Please also submit some form of evidence (above) to demonstrate any results you list below, where possible.

Group A: Capability and Capacity - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

Unchecked	DPLUS-A01: Number of people from key national and local stakeholder groups completing structured and relevant training.
Unchecked	DPLUS-A02: Number of secondments or placements completed by individuals of key local and national stakeholders.
Unchecked	DPLUS-A03: Number of local/national organisations with improved capability and capacity as a result of project.
Unchecked	DPLUS-A04: Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.
Unchecked	DPLUS-A05: Number of trainers trained reporting to have delivered further training by the end of the project.

Group A Indicator Results

Please enter your results for the (above selected) indicator and the units. e.g. 10 people from key national and local stakeholder groups completed structured and relevant training.

n/a

Group B: Policies, Practices and Management- Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

Unchecked	DPLUS-B01: Number of new/improved habitat management plans available and endorsed.
Unchecked	DPLUS-B02: Number of new/improved species management plans available and endorsed.
Unchecked	DPLUS-B03: Number of new/improved community management plans available and endorsed.
Unchecked	DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans available and endorsed.
Unchecked	DPLUS-B05: Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).
Unchecked	DPLUS-B06: Number of Local Stakeholders and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.

Group B Indicator Results

Please enter your results for the (above selected) indicator and the units. e.g. 3 new species management plans available and endorsed.

n/a

Group C: Evidence and Best Practices - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

Unchecked	DPLUS-C01: Number of	f best practice guides and	knowledge products p	ublished and endorsed.
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Unchecked	DPLUS-C02: Number of new conservation or species stock assessments published.
Unchecked	DPLUS-C03: New assessments of habitat conservation action needs published.
Unchecked	DPLUS-C04: New assessments of community use of biodiversity resources published.
Unchecked	DPLUS-C05: Number of projects contributing data, insights, and case studies to national Multilateral Environmental Agreements (MEAs) related reporting processes and calls for evidence.

Group C Indicator Results

Please enter your results for the (above selected) indicator and the units. e.g. 1 new assessment of habitat conservation action needs published.

n/a

Group D: Sustainable Benefits to People, Biodiversity and Climate - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

Checked DPLUS-D01 Hectares of habitat under sustainable management practices.

Unchecked DPLUS-D02: Number of people whose disaster/climate resilience has been improved.

Unchecked DPLUS-D03: Number of policies with biodiversity provisions that have been enacted or amended.

Group D Indicator Results

Please enter your results for the (above selected) indicator and the units. e.g. 30 hectares of enriched forest under sustainable management practices

230 hectares of mixed coastal heath and tussac habitats under sustainable management practices- with 12.5 ha under active restoration.

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

Please describe the engagement among all formal partners involved in this project. Focus on the following:

i) The roles of the various partners in the project, including in planning and decision making and in implementation.

ii) Was the Government of the Territory/Territories involved in this project? If so, how?

iii) Particular achievements, lessons, strengths or challenges with the partnership(s) and how these have been addressed.

iv) Please also describe how key stakeholders and relevant local institutions, local communities and technical specialists, who are not formally partners in the project, have been involved.

• The 2023 winter restoration planting sessions were divided into two portions with funding from the Falkland Islands Government Environmental Studies Budget funding the first half of the winter and Darwin Plus funding the second half. The combined funding financed 110 days planting , in 5.8242 ha and 76 708 tussac tillers planted for the 2023 season.

Wider Impacts and Decision Making

Has the project influenced wider decision-making or in any way helped embed environmental issues into decision-making? If so, please briefly outline how the project has done this and what the changes are.

n/a

Sustainability and Legacy

Are there any continuing benefits resulting from the project, now that it has closed? What will happen to the project staff and resources now the Darwin Plus Local funding has ceased?

The project will continue with the aim of complete restoration of the 60 hectares of bare and eroding ground. Building on the experience and confidence gained from the Darwin Plus we have sourced a further 3 years funding from the Falklands Conservation Managed Spring Creek Grant and Falkland Islands Government Environmental Studies Budget. This co-funding will finance 330 more days of planting. The Tomst data loggers procured from the Darwin project should have a lifespan of 10 years and the soil data gathered from these loggers should provide measurable outcomes to restoration efforts in tussac peat soils.

We are actively trialling a native seed project -to determine best practices for harvesting/storing and dispersal which we hope may offer an alternative to the labour-intensive practice of tiller division and planting. In conjunction we are planning/costing a native plant nursery to provide plugs of several grass and shrub species to increase the biodiversity in the restoration site.

Section 6 - Communications & Publicity

Exceptional Outcomes and Achievements

Do you have any excellent or exceptional outcomes or achievements from this project that you would like to showcase? If so, what material can you provide us for communications and publicity to promote Darwin Plus Local and your project?

Please provide a (300 to 400 word) summary and photos/videos/graphics that you are happy for us to use in publicity.

We may use material from this section to promote the achievements of Darwin Plus and the knowledge generated by Darwin Plus projects. This may include publication in the Defra Annual Report, JNCC newsletters and reports relevant to Darwin Plus Local, Darwin Plus promotional material, including to the Biodiversity Challenge Funds social media platforms,

15/04/2024, 15 54

or on the Darwin Plus, GOV.UK or jncc.gov.uk websites.

The Falklands have lost over 70 % of its coastal tussac stands since man and their grazing flocks arrived in the islands. This may be the single most important habitat for all birds and mammals that call these islands home. Without this grassy band on the coast there is nothing to break the fierce Southern Ocean gales-there is less canopy to trap the little rain we get. Less snow nestles in the fronds- slowly seeping into soils. Nothing to stop the compaction from rain -the wicking of moisture from plants. Fewer nesting sites for seabirds. Fewer winter nursery sites for seal pups. Less water in the land begins a slow eroding of ecosystem services for fauna and folks who call these islands home. Without binding roots the peat soils blow away losing thousands of years of trapped carbon in a windy puff.

On Dyke Island a combination of over grazing and peat fires have razed through the southern portion of the islandleaving actively eroding soils and putting the remaining stands of tussac at risk. The scale of repair needed seems daunting, if not for grants like Dawin Plus Local. It has given our small project a real boost- evolving from one planter over a winter- to employing three. This initiative -to support individuals at a grass roots level -who are trying to make a difference, is what stands between helplessness and hope.

DPL00006:Restoring peat soils and tussac habitats in the Falklands is a labour intensive and physically demanding enterprise. To ensure the tillers get rooted, planting takes place in winter for wet, cool conditions. Tussac is a hardy species and it takes hardy planters to be out in the Falkland's winter. Persistent wind, few daylight hours, rain, snow, hail, fog and mud is normal for winter work in these high latitudes .A cold climate , combined with living and working in a remote location makes our project very challenging.

Despite the difficulties three tussac planters harvested and planted over 46 000 tillers in eroded tussac peat soils . All by hand. These new plantations will serve as soil builders and nursery stock and provide material for future plantations. They will continue to create rural livelihoods and ensure land remains habitable for folks living on this remote island. And they will become habitat for biodiversity , safe havens for our endemic island wildlife that depend so heavily on these grasses.

Photo, video or graphic to be used for publicity and communications.

Please upload at least one relevant and engaging image, video or graphic that you consent to be used alongside the above text in Defra, JNCC or NIRAS communications material.

By uploading these images, videos, or graphics you confirm that:

i) any people in the images or videos you share have consented to having their photograph taken.

ii) file name includes your project reference number and you provide the credits and captions for each photo, graphic or video in the text box below.

If you have content that was created in the course of the project, such as explanatory videos or impact graphics for reports, these can also be used for promotional purposes.

**Upload photo(s), video(s), etc. - Max 10 files; Max 20MB per file.



Photo, video, and/or graphic captions and credits.

Please provide a short descriptive caption for each photograph, video or graphic, including the location (Territory) and photo or video credit in the box below. Please label each clearly with the file name. e.g. FilenameDPLR1_1922 - photo caption/description - location (territory) - photo credit.

1. DPL00006-01:-Tussac tillers laid out ready to plant on an icy slope on Dyke Island. -Falkland Islands- photo Giselle Hazell

2. DPL00006-02: -Toby Poole plants a tussac tiller in the Saddle plantation- a newly restored site on Dyke Island-Falkland Islands. Photo Giselle Hazell

3. DPL00006-03 :A rare calm evening looking back on the days planting effort on the Saddle plantation on Dyke Island-Falkland Islands Photo Giselle Hazell

4. DPL00006-04 :Alec Hazell carries a bundle of freshly harvested tussac tillers to the edge of the stand before they are transported to the planting site. Tiller bundles consist of 50-100 divisions weighing from 10-15kg and have to be carried out of the stand by hand through uneven and slippery terrain.

5. DPL00006-05: Squalls approaching from the SW as the sun sets over a winter's day planting in the Saddle plantation on Dyke Island. Falkland Islands. Photo Giselle Hazell

6. DPL00006-06:The tussac team hard at work -Toby Poole, Alec Hazell, Bowser and Loki in the Saddle plantation on Dyke Island. Falkland Islands .Photo Giselle Hazell

7. DPL00006-07: Where once this was a lush coastal stand of tussac grass- what remains are peat soils eroding into the ocean below on Islands End Plantation, Dyke Island. Falkland Islands. Photo Giselle Hazell

8. DPL00006-08: Loading up the trailer attachment on the ATV to move tussac bundles from the harvesting site to the planting site after a nights snow. Islands End plantation, Dyke Island. Falkland Islands.

9. DPL00006-09: Tiller bundles ready for to be carried out to the planting site. Bundles consist of around 50-100 divisions and weigh around 10kg. All the harvesting and planting is done by hand over the course of our winters. Falkland Islands. Photo Giselle Hazell

10. DPL00006-10: Alec Hazell planting up his section of the Saddle. Dyke Island, Falkland Islands. Photo Giselle Hazell

I agree for the Biodiversity Challenge Funds Secretariat, Administrator, and/or JNCC to publish the content of this section.

Please only select 'no' below, if you really cannot provide any relevant photos, etc, for reasons of sensitivity.

• Yes, I agree for the BCFs Secretariat and/or JNCC to publish the content of this section.

Please list any accounts that you would like tagged in online posts here. This can include project pages, partners' pages or individuals' accounts for any of the following platforms: LinkedIn, Facebook, Twitter, or Instagram.

Facebook Account Roots in the Ground https://www.facebook.com/profile.php?id=100091508211987

Instagram Account: @falklandrootsintheground https://www.instagram.com/falklandsrootsintheground?igsh=MW0wcXfcj25sZHB4Mw==

Section 7 - Darwin Plus Contacts

Please tick here to confirm that you have read and acknowledge the BCF's Privacy Notice on how contact details will be used and stored and that you have sought agreement from anyone that you are sharing personal details with us on their behalf.

O I confirm I have read the Privacy Notice and have consent to share the following contact details

Project Contact Details

Project Contact Name	Giselle Hazell
Role within Darwin Plus Project	Project Leader
Email	
Phone	
Do you need further sections to provide additional contact details?	⊙ No