

DPLR1\1053 Project DPL00019

Darwin Plus Local - Final Report (1)

Officer: Linzi Ogden

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

DPL00019

Q1. Project Title

Mapping South Georgia's plant biodiversity

Overseas Territory(ies)

South Georgia and The South Sandwich Islands (SGSSI)

Lead Organisation or Individual

Government of South Georgia & the South Sandwich Islands

Partner Organisation(s)

N/A

Value of Darwin Plus Local Grant Award

£24,100.00

Project Start Date

01 November 2023

Project End Date

31 March 2024

Project Leader Name

Jennifer Black

Project Website/Twitter/Blog etc.

www.gov.gs

Report Author(s)

Report Date

31 March 2024

Project Summary

No Response

Project Outcomes

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;
Unchecked	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?

3 - Outcome met expectation

Project outcomes and justification for rating above

Prior to this project, information on the distribution of native and non-native plant species on South Georgia was patchy. Some data was available for non-native plant species with a focus on areas surrounding the former whaling stations and some hand drawn or satellite derived habitat maps were available for areas on the north coast. However, limited species level information or data on distribution of smaller, inconspicuous species was available. As a result of this project, a Territory specific tool for plant biodiversity data has been developed and trailed. This tool means it is now easy to rapidly gather botanical data. As a result knowledge of South Georgia's plant biodiversity has improved. This information will be used to inform the development of spatially refined management plans as part of the South Georgia Terrestrial Protected Area.


The two main objectives for the project were (1) Develop an application to increase local capacity to survey for native and non-native plants (2) Use this application to conduct surveys of plant biodiversity with a focus on sites which are currently data deficient .


The application was developed in open-source software (B4X) and compiled into an Android application file (APK). This was installed onto the project funded Android devices and trialed. The app was formatted so data was recorded using Core Standards for Occurrence Datasets <https://www.gbif.org/data-quality-requirements-occurrences>. Project members took part in a round-island survey in January and February 2024. The survey was yacht based and was able to access the entire coastline of South Georgia, including many areas for which there were no plant occurrence records. During the survey an additional 1447 plant distribution data points have been collected in 48 locations from where previously there were no records. Although no formal estimation of the number of data points which would be collected was provided, the team were very happy with this result. By reviewing and collating records from other data sources, there are now 2488 occurrence records.

The project has therefore achieved all its original objectives. As a further output from the project and to ensure a legacy resource for future research, ultimately the data will be published on the Global Biodiversity Information Facility. However, this was not possible in the project time frames.

Supporting Evidence - file(s) upload


 [SG Plants 240211](#)


 01/03/2024


 11:54:24

366.03 KB


 [PointsCollected1447](#)


 01/03/2024

 11:54:16

 jpg 406.62 KB

 [GridsVisited48](#)

 01/03/2024

 11:53:40

 jpg 506.35 KB

Supporting Evidence - links to published document/online materials

Link to APK file for app download:

<https://app.box.com/s/70v0shnthxhozdl39m73r87j5h8pavd5> (17mb)

Project Challenges

Weather: 2024 was an El Niño year and as such the weather in the South Atlantic was more unsettled than usual. As access to some sites required stable sea conditions careful planning was required to ensure optimum use of time. Where many surveys struggle in this regard, use of accurate forecasting and the local knowledge of team members almost fully mitigated this challenge and there were no days during the survey period where some work on shore was not undertaken. However, had the weather been more settled, even more sites and more data points could have been gathered.

Highly Pathogenetic Avian Influenza: Biosecurity was identified as a project risk and the occurrence of a Highly Pathogenic Avian Influenza (HPAI) at the start of the proposed field season could have been a challenge as biosecurity protocols dictated that sites with HPAI have restricted access. However, as a multi-disciplinary team, the project was able to assist in the HPAI response by conducting surveys at infected sites. This allowed samples for HPAI analysis to be collected but whilst ashore project members were also able to conduct botanical surveys. Strickt cleaning and disinfection procedures were carried out between sites

Lessons Learned

Pairing the plant surveys with other environmental surveys worked well and was an optimum use of time and resources. Having a multidisciplinary team who were able to undertake a range of tasks while in the field was

key to this success. As the focus of the project was developing electronic data collection tool, using a staff member with the technical expertise in this area present during field work was essential to achieving outcomes.

The timing of the surveys was set for January coincide with the egg laying period of the wandering albatross as this was the primary purpose (and source of funding) for the yacht charter. If it were purely a botanical survey it may have been optimum to do it a few weeks later when grass species were in flower making identification easier. Whilst this was not a major constraint as it was generally a warm spring and many species were well developed, for future projects it would have been worthwhile acknowledging this as a potential limitation/challenge.

Project administration and proportion of final reports and accounts has been a challenge as some project members are still in the field and others only returned shortly before the reporting deadline. As such there has been limited opportunity for consolidation and reflection although we anticipate this happening once all project members have returned from the field. Would recommend to other projects to factor this into planning.

Section 3 - Project Finance (Essential)

Project Expenditure

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 Cos				
Overhead Costs				
Travel and Subsistence				
Operating Costs				
Capital Items				

Others			
Total	24,100.00	24,665.19	2.3%

Please provide a short narrative summary on project finances.

Overall the project stayed within expected spend with no significant variance in any area.

The main expenditure was on staff costs. K Floyd transferred onto another project earlier than expected as duties were complete and J Black was involved for more time than originally allocated. However, this overall did not make any significant difference to either the budget or project deliverables.

The field work element of the project was co-financed by a range of other sources including GSGSSI core funds, UK Blue Belt Programme, Antarctic research trust, South Georgia Heritage Trust. These funds contributed to the £190K charter fees for the yacht which the survey team traveled. Without this co-financing and collaboration between of this project and other survey teams it would not have been possible to access the large area of the coastline which was surveyed.

There was also significant, but unquantified, in-kind support in terms of administrative support from GSGSSI in the form of travel bookings and accounting.

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)

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.**

Checked	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

1 national organisation (GSGSSI) and two local organisations (Indigena and South Georgia Surveys) has improved capability as a result of project

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

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

[no new habitat management plans have yet been developed but this is an intended output from the project longer term]

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

Unchecked	DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.
-----------	---

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

N/A

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

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

380000 hectares managed as Terrestrial Protected Area with the objectives of (a) the conservation, protection and preservation of the ecosystem and restoration of biodiversity; and (b) ensuring that any activity in the specially protected areas is managed sustainably, with minimal impact on the ecosystem.

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

i) Jennifer Black provided oversight of project delivery, financial management, reporting, as well as participation in field work. Now the data gathering stage of the project is complete, Jennifer will ensure that results from the project contribute directly Government policy. Kelvin Floyd designed and created the plant survey app, trained staff members in its use. Now the data gathering is complete, Kelvin will curate the data set and make sure it becomes publicly accessible.

ii) This project was led by the Government of South Georgia & the South Sandwich Islands. The data gathered will be used by the Government to inform the development of the newly designated Terrestrial Protected Area framework and contribute to the non-native plant management strategy

iii) Clearly outlining roles, responsibilities and time frames for project partners at the inception was key to success. As a small Government, it was easy to successfully integrate the project into a wider work package and adapt to changing circumstances i.e. HPAI

iv) Information about the project and app were shared verbally with staff and visiting scientists to South Georgia.

Wider Impacts and Decision Making

The data and methodologies gathered as part of this project will be submitted to the GSGSSI TPA Advisory Group and used to inform the development of site-specific management plans.

Sustainability and Legacy

The app developed as part of this project will be made available to all field parties working on South Georgia so plant distribution data can continue to be collected and management can plans refined as appropriate.

The project staff will continue to work in South Georgia and so ensure there is a legacy of the capacity development. The android data collection devices that were bought as part of project funds will remain available for use in the Territory.

Section 6 - Communications & Publicity

Exceptional Outcomes and Achievements

Without accurate information on the distribution of plant species, it is not possible to make evidence-based decisions implement appropriate management plans.


This project developed a user-friendly android app with embedded plant identification information which allows GPS positions of plants to be captured along with accompanying metadata. Project members equipped with the new app joined an archipelago wide survey in January 2024 and collected 1447 survey points at 48 locations many of which had no previous plant records. By collaborating as part of a multidisciplinary team, project members were able to visit sites on the remote south coast of South Georgia including, Annenkov Island which was last visited by a survey team more than 20 years ago.


This accurate, up-to date, island wide information on South Georgia's flora is required to identify areas of with high floristic conservation value and where this may be threatened by non-native species and will contribute to the development of site-specific management plans as part of the newly designated South Georgia Terrestrial Protected Area.


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.


 [2_DPL00019](#)


 01/03/2024


 13:32:54

 jpg 3.86 MB

 [1_DPL00019](#)

 01/03/2024

 13:30:52

 jpg 4.99 MB

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

1 - Alopecurous at Mouse Cove, South Georgia. Photo - GSGSSI

2 - Annenkov Island, South Georgia. Photo - GSGSSI

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

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.

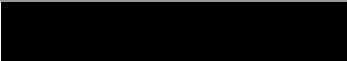

@govsgssi

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.

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

Project Contact Details

Project Contact Name	Jennifer Black
Role within Darwin Plus Project	Project Leader
Email	
Phone	
Do you need further sections to provide additional contact details?	<input checked="" type="radio"/> No
