

# DPLR1\1009 Project DPL00008

Darwin Plus Local - Final Report (1)

Officer: Jessica Magnus

## Section 1 - Darwin Plus Local Project Information (Essential)

---

### Project Reference Number

DPL00008

### Q1. Project Title

**Biodiversity survey and environmental management plan in Antarctica**

### Overseas Territory(ies)

British Antarctic Territory (BAT)

### Lead Organisation or Individual

UK Antarctic Heritage Trust

### Partner Organisation(s)

British Antarctic Survey

### Value of Darwin Plus Local Grant Award

£32,800.00

### Project Start Date

01 April 2023

### Project End Date

01 April 2024

### Project Leader Name

Dr Ruth Mullett

### Project Website/Twitter/Blog etc.

[www.ukaht.org](http://www.ukaht.org)

### Report Author(s)

## Report Date

27 March 2024

## Project Summary

*No Response*

## Project Outcomes

Checked	<b>Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;</b>
Unchecked	<b>Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;</b>
Checked	<b>Environmental quality: improving the condition and protection of the natural environment;</b>
Checked	<b>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.</b>

## 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

We set out to:

1) Biodiversity: deliver a new plan to heighten knowledge, make recommendations and implement actions for protecting diversity. DELIVERED.

- A full survey of existing data sets for all our sites was undertaken, as well as a literature review of relevant secondary research. This data was synthesized and used to inform the production of the Environmental Management Plans (EMPs) and Action documents.
- Environmental Management Plans were prepared laying out policies and recommendations for the UK Antarctic Heritage Trust (UKAHT) to implement in their management of two historic sites in Antarctica for which we have existing data.
- A list of achievable and quantifiable next steps/ actions was prepared for these sites, outlining the UKAHT's commitment to the management of these sites.

- For sites without existing data, relevant data relating to nearby sites was collated, and a document offering guidance on how to collect further information was prepared. Pro-formas for wildlife surveying were also prepared.
- These documents were tested during the 2023-24 Antarctic field season, with the EMPs integrated into activities at Port Lockroy, and the wildlife surveyed according to the guidance at Detaille Island.

2) Environmental quality: a new Environmental Management Plan which will proactively guide ways of improving and protecting environmental quality. DELIVERED.

- The new Environmental Management Plans are now in place and are already being actively implemented by UKAHT.

3) Capability and capacity building: enhanced knowledge and awareness of the biodiversity and natural environment. Our aim for conservation is to make all our guiding documents publicly available, through the website, including Conservation Management Plans and the EMP. The idea is that they can be consulted. DELIVERED IN PART.

- Within our own organisation, through this project we have learned a lot about the biodiversity and natural environment at the sites we manage. We are now applying new Environmental Management Plans and Wildlife Monitoring Guidance to our internal management in a way that has never been done before. We have also worked with stakeholders to increase knowledge of the environmental sensitivities of our sites, with communication about the risks of Avian Flu being key to our relationship with the International Association of Antarctic Tour Operators a central part of this years conversation. We presented at their annual meeting, and were in constant communication with their headquarters throughout the Antarctic season.
- We have not yet made our guiding documents publicly available due to technical difficulties with our website. We hope to resolve this in the coming year.
- We are delivering a public webinar on the topic of biodiversity, which is scheduled for May/June.
- Beyond the scope of our initial proposal, we have also prepared guidance for submission to the Antarctic Treaty System on best practice for monitoring penguin populations using unmanned aerial vehicles (UAVs). This is directly relevant to the management of Port Lockroy and Damoy Point, which are frequently surveyed using UAVs.

## Supporting Evidence - file(s) upload



## Supporting Evidence - links to published document/online materials

Please see above (no links online).

In addition to the above, the project synthesised available data sets and best practice guidance in order to inform the EMPs.

The project also provided guidance on data collection for all other UKAHT sites that are not yet studied. This guidance was utilised during the 2023-24 season, and resulted in a mew biodiversity survey for Dettelle Island, the site visited this year by the UKAHT's conservation team.

Finally, UKAHT has provided recommendations on behalf of the UK Government on the monitoring of penguin populations in Antarctica by unmanned aerial vehicles (UAVs) for submission to the 2024 Antarctic Treaty Consultative Meeting in the form of a Working Paper (draft paper included).

## Project Challenges

The biggest challenge to the project was the integration of data on terrestrial biology. It was known that data sets for flora at our specific sites was limited, though data could be extrapolated from nearby sites. Terrestrial biologist at British Antarctic Survey, Professor Pete Convey, was able to add relevant data sets and guidance to the Environmental Management Plan. However, we found that integrating fauna collection into our field work

was challenging. Such work requires a specific permit from the UK's Foreign and Commonwealth Development Office, specialist expertise, and laboratory processing facilities. The work itself needs to be conducted late into the season, when the snow cover is reduced. It was not possible during this season to accommodate another member of the field team with the appropriate expertise, or plan the timing of the season around this requirement. This problem illustrated the constraints around our Antarctic operations, which are heavily reliant on the timing and capacity of support offered by our stakeholders (Royal Navy).

It needs to be noted in general that Antarctic operations are extremely complicated, high risk and costly, so despite the above, we are pleased with our outcomes for this project.

## Lessons Learned

Our office and field team was our greatest asset in this project. We were able to build a team of experienced and knowledgeable contributors who made this project a success. When operating in Antarctica, it is essential that the team has a good understanding of our constraints, and the ability to work flexibly around them. Our main author had direct experience monitoring wildlife at two of our sites, and was able to apply this knowledge to our wider range of sites. She also had experience writing Environmental Management Plans, and identifying trigger points for organisational intervention. She was able to work closely with our stakeholders, including BAS, to produce expert documentation that is already enabling our organisation to manage our sites more responsibly.

We have not yet been able to make our Environmental Management Plans public. This is partly due to the limitation of our website back-end, which is in need of upgrading. We plan to do this upon the upgrade of our website, and for now, documents are available upon request.

We learned that we need to review methodologies and techniques for collecting biological samples and that it was very important to ensure your project team is experienced in the specific environment you wish to work.

## 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)
<b>Staff Costs</b>				
<b>Consultancy Costs</b>				
<b>Overhead Costs</b>				
<b>Travel and Subsistence</b>				
<b>Operating Costs</b>				
<b>Capital Items</b>				
<b>Others</b>				
<b>Total</b>	32,800.00	32,700.00	100	

## Please provide a short narrative summary on project finances.

The only main variance is the use of consultancy costs. Whilst BAS and BAS scientists did contribute to our EMP, consultancy fees were further allocated to Dr Mairi Hilton to develop additional work on the recommendations to standardise conducting and reporting on un-crewed aerial vehicle (UAV) surveys of penguin colonies, after we found that this was missing from protocols. The cost for consultancy was £6,000 + vat at 20%, fractionally less than the original budget.

Operations in Antarctica are costly, and our field seasons, which include this project, are also funded from charity trade and fundraising from our supporters, trusts, businesses and stakeholders.

## 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

More than 3 staff within our organisation have improved capability and understanding as a result of this project and a new EMP.

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

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

## Group B Indicator Results

2 new EMPs produced, along with accompanying plans, and new baseline data collected.

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

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

## Group C Indicator Results

Our plan has not yet been published.

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

Unchecked **DPLUS-D01 Hectares of habitat under sustainable management practices.**

---

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

---

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

---

## Group D Indicator Results

2 new EMPs have been produced to guide future working practice.

## Section 5 - Project Partnerships, Wider Impacts and Contributions

---

### Project Partnerships

British Antarctic Survey (BAS) acted as stakeholder and advisor in the preparation of our Environmental Management Plans. Professor Peter Convey, BAS terrestrial biologist, authored relevant sections of the EMPs, and both Mike Dunn and Ashley Bennison, BAS wildlife specialists, provided feedback on the documents. BAS also provided training for our wildlife monitors at Port Lockroy and Detaille Island. This is an ongoing relationship, and the hope and expectation is that BAS will continue to provide training and advice for our seasons.

The UK Foreign and Commonwealth Office, as the UK permitting authority, were consulted on the nature of conservation works and the wildlife monitoring plans as part of the preparations for the Antarctic season.

We have also prepared our guidance on UAV penguin monitoring on behalf of the UK Foreign and Commonwealth Office as part of the Antarctic Treaty Consultative Meeting 2024.

### Wider Impacts and Decision Making

The production of the Environmental Management Plans were written with the intention of fully integrating the protection of the natural environment into all decision-making across UKAHT. This includes the decisions around conservation task methodologies, wildlife monitoring on site, and the identification of trigger points where intervention would be necessary. The adoption of these policies is already indicated by the next steps documents attached. The UAV paper was also produced because there was no existing guidance on wildlife monitoring in this manner for Antarctic Treaty parties.

UK is also working towards a net zero policy, and this takes into account all of our policies and management plans.

### Sustainability and Legacy

The production of EMPs provide a long-lasting legacy to the project, as the policies continue to be adopted, and the documents continue to be updated, in line with best practice. The project has set in place a strategy for data collection at sites where no information had been gathered previously, with the objective of writing specific EMPs for an additional four sites in the coming years.



The project has also strengthened our relationship with our stakeholders, notably British Antarctic Survey, who continue to provide training and advice to our seasonal team on correct techniques for biosurvey data collection.

We are more confident about data collection across our sites as part of fieldwork.

## Section 6 - Communications & Publicity


---


### Exceptional Outcomes and Achievements


n/a - no specific outstanding achievement, but we are proud of initiating our new EMPs and papers!


### 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.**

 [UKAHT \(c\) Jerome Viard DPL00008](#)

 31/03/2024

 16:01:21

 jpg 106.57 KB

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

UKAHT (c) Jerome Viard DPL00009 - Port Lockroy UK Antarctic Heritage Trust - Antarctica - credit Jerome Viard.

Penguins surround the boatshed at Port Lockroy in Antarctica, cared for by the UK Antarctic Heritage Trust.

**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.**

<https://www.facebook.com/UKAntarcticHeritageTrust>

## 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	Ruth Mullett
Role within Darwin Plus Project	Project Lead
Email	[REDACTED]
Phone	[REDACTED]
<b>Do you need further sections to provide additional contact details?</b>	<input checked="" type="radio"/> No