DPLR4\1004

Darwin Plus Local - Final Report (1)

Officer: Linzi Ogden

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

DPL00109

Q1. Project Title

No Response

Overseas Territory(ies)

☑ Gibraltar

Lead Organisation or Individual

University of Gibraltar

Partner Organisation(s)

Gibraltar Botanic Gardens, Gibraltar Ornithological & Natural History Society (GONHS)

Value of Darwin Plus Local Grant Award

£36,145.48

Project Start Date

01 October 2024

Project End Date

31 March 2025

Project Leader Name

Caroline Moss-Gibbons

Project Website/Twitter/Blog etc.

https://unigib.soutron.net/Portal/Biodiversity/en-GB/Search/SimpleSearch

Report Author(s)

Caroline Moss-Gibbons, Nell Cava

Report Date

30 April 2025

Project Summary

No Response

Project Outcomes

Unchecked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Unchecked	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

The main aim of the feasibility project was to develop a new Gibraltar biodiversity related cloud-based portal where disparate, scattered resources created and managed by a variety of stakeholders, researchers, groups, policy makers and the public could be brought together through a single access point and in turn act as a finding aid for that same broad range of potential users, including internationally. This objective was achieved; a fully functioning cloud-based portal was designed, developed, populated and launched within the six-month timescale.

The new finding aid successfully incorporates all the features described in the 'How it will Look' section of the original funding application, i.e. "Extensive indexing and thesaural keywording, including separate indices of scientific and common names for all flora and fauna included in the database. There will be a rolling 'new additions' feature, providing updates. Users will be able to search across the entire database at all times. In addition, several pre-selected topic areas will be presented for focused results, e.g. 'Land Birds of Gibraltar', 'Invasive Species', 'Ants of Gibraltar', 'Cacti', 'Macaques' 'Legal & Regulatory Framework', etc."

Extensive description within records are what make the portal an effective finding aid. In response to the application feedback the individual records forming the 'Policy & Legislation' special collection are particularly extensive, with 'see also' references and links to related reports and legislation, increasing their value to decision makers.

Another key feature of the portal was the development of mechanisms to allow local partners to add catalogue records independently, thus expanding the capacity for database growth beyond the University Library team. A critical development supporting this was the creation of an 'End User Submission' template capable of accommodating all resource types. To build local expertise, the Project Lead conducted a 'Train the Trainers' workshop for researcher-contributors from the Gibraltar Botanic Garden and the Gibraltar Ornithological & Natural History Society (GONHS).

The feasibility of capturing citizen science output was demonstrated by linking to the Gibraltar-specific entries added to 'iNaturalist' during a GONHS 'Bioblitz' event. Local naturalists have also provided their own Gibraltar single-specimen flora and fauna photographs for inclusion. World Wildlife Day (WWD) 2025 was an opportunity for outreach to younger citizens with a 'Find the Species' poster game and field guide. Further citizen science projects will be explored now that the feasibility has been established.

An example of how new information has been created by shining a light on 'hidden gems' in Gibraltar is from the 'resource discovery' throughout the project. Invasive species management is a key activity locally (and in other Overseas Territories). Whilst the presence of Oxalis pes-caprae has been known to be problematic for some time, when a naturalist's watercolour in the Garrison Library was added to the database a handwritten note accompanied the artwork which referred to the invasive Oxalis as already being prolific and 'found everywhere' even in 1876, providing an important, previously unrecorded datum for today's researchers.

Supporting Evidence - file(s) upload

- & DPL00109 End-User-Submission-Form-Info-Sheets
- O 10:50:19
- xlsx 30.13 KB
- & DPL00109 World-Wildlife-Day Outreach-Material Poster
- 30/04/2025
- ① 10:49:45
- **□** jpg 413.24 KB

- ♣ DPL00109 Catalogue-entry-before-and-after
- 30/04/2025
- © 10:50:06
- pdf 1.52 MB
- & <u>DPL00109 World-Wildlife-Day Outreach-Material Field-Guide</u>
- ₫ 30/04/2025
- © 10:49:31
- pdf 4.49 MB
- & DPL00109 Stakeholder-Launch-Presentation
- ₫ 30/04/2025
- © 10:49:12
- pdf 17.86 MB

Supporting Evidence - links to published document/online materials

https://unigib.soutron.net/Portal/Biodiversity/en-GB/Search/SimpleSearch - Gibraltar Biodiversity Portal

https://unigib.soutron.net/Portal/Biodiversity/en-GB/RecordView/Index/5030 - Catalogue entry - Nature Protection Act Gibraltar 1991 with multitiered seed-references to international and local subsidiary legislation

https://unigib.soutron.net/Portal/Biodiversity/en-GB/RecordView/Index/4979 - Catalogue entry - GONHS Bioblitz Med Steps 2 with link to iNaturalist citizen science records

https://unigib.soutron.net/Portal/Biodiversity/en-GB/RecordView/Index/5052 - Catalogue entry - Ophrys fusca group from personal collection of Kian Khalilian

https://unigib.soutron.net/Portal/Biodiversity/en-GB/RecordView/Index/5082 - Catalogue entry - A Few of the Wildflowers of Gibraltar from November to May showing rediscovered invasive species data

https://www.linkedin.com/posts/university-of-gibraltar_we-are-happy-to-announce-that-today-we-hosted-activity-7312462504188628992-anKI?

utm_source=social_share_send&utm_medium=member_desktop_web&rcm=ACoAACmDBCwB3XUHcUnGVos3WweCNmd7D_76SPY – Announcement of Launch event on University of Gibraltar LinkedIn

https://www.unigib.edu.gi/news/darwin-funded-projects-showcased-at-world-wildlife-day/ - World Wildlife Day 2025 Public Outreach – Photos and text by Leon Leanse

Project Challenges

An anticipated issue with working with external partners and local stakeholders is that matching the project timetabled milestones and tasks with others' limited availability would require flexibility and compromise. Some task timings and sequencing had to be adapted to fit in with others, as achieving the deliverables themselves was the aim.

Lessons Learned

Working directly with local stakeholders and researchers worked particularly well as the benefit was two-fold – they were a crucial element of resource discovery from their own knowledge and collections, as well as providing invaluable insight into what would make a finding aid useful to them, which aided the design and structure phases.

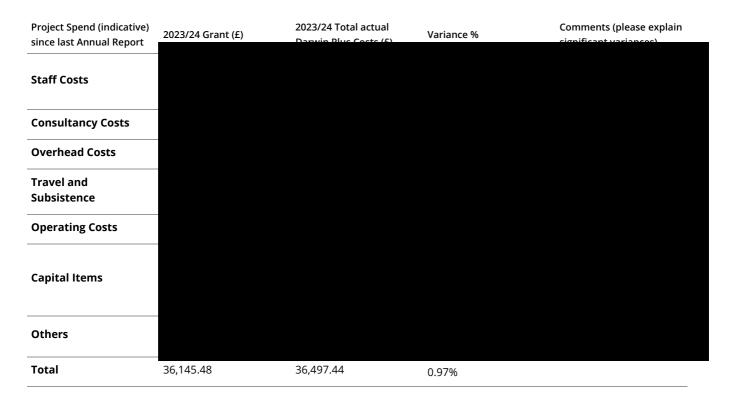
For a future finding aid project, adding in more time for the 'on site' resource discovery phase (beyond the desk-based resource discovery) should be considered, where project team members physically explore 'hidden gem' collections with the local experts. Those visits sparked useful discussions and insights between the participants and project team (including ideas for future projects and collaborations), and the extent of 'gems' discovered or re-discovered was far greater than anticipated.

One aspect particularly useful was allowing more discussion time with stakeholders at the stage when there is a tangible product to show them, but still time left for any enhancements to be included based on that informed feedback. This approach is recommended for any similar projects.

Delays in reporting outcomes can significantly affect project viability, particularly for short-term Darwin local projects. For example, they may shorten recruitment periods, delay implementation schedules, and impact permits and employability. These risks should be carefully considered when planning future short-term projects.

Section 3 - Project Finance (Essential)

Project Expenditure



Please provide a short narrative summary on project finances.

Staff Costs: In order to recruit speedily (and locally) to cover the 1FTE Project Officer budgeted for during the project period, it was necessary to split the Project Officer post into two part-time posts as no individual candidate was available for the whole period. Near the end of the six-month project period one of the post-holders took up a permanent job elsewhere, so the remaining post-holder became full-time to ensure project delivery. This variance during the project led to a small overspend in the Staff Costs budget, though overall, the total project overspend came to a modest £ This overspend will be funded by the University unless private donations can be found to cover it.

Operating Costs: The underspend is mainly attributable to not having to pay for venue hire for researcher meetings, events or outreach activities.

Capital items: The final cost for laptops for the project assistants came in under the budgeted amount. NB There is no VAT in Gibraltar, which is a significant saving on equipment costs.

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

Researchers at the Gibraltar Botanic Garden and GONHS now have the capability and capacity to create catalogue records for the portal, utilising their expertise to enhance record entries and adding material never recorded before, particularly grey literature, unpublished material such as field diaries and physical specimens within their collections.

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	Unchecked DPLUS-B03: Number of new/improved community management plans available and endorsed. DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans	
Unchecked		
Unchecked		
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

n/a

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

 $\label{eq:unchecked} \textbf{DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.}$

Unchecked	ed DPLUS-C02: Number of new conservation or species stock assessments published.	
Unchecked	ked DPLUS-C03: New assessments of habitat conservation action needs published.	
Checked	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

The portal is a streamlined tool for access to biodiversity resources, directly addressing community knowledge acquisition needs. Given that the portal was launched to the public in March 2025, it is too soon to have specific data on user metrics.

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

Group D Indicator Results

n/a

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

This project primarily required professional Library & Information Science input, hence the Project Lead being the University Librarian of the University of Gibraltar. Expertise in database design, analytical cataloguing, information retrieval and dissemination were fundamental to the creation and success of the portal. The project partners (and other researchers in Gibraltar) were particularly involved in the resource discovery aspects and providing input on what they would expect from a finding aid for it to be of value to them.

The Department of the Environment supported the original project application and were particularly useful during the resource discovery phase focusing on government reports, policy and legislation, eg the annotated map of the legally protected trees of Gibraltar.

Tight timescales were the main challenge, as human resource is limited at all sites and competing priorities had to be accommodated. The working relationships were positive during the project and continue to develop, particularly now that there is a tangible 'product' to build on.

There was wide engagement with local stakeholders including individual naturalists whose personal knowledge and expertise provided access to unique materials, including field notes and photographs of local flora built up over decades. This type of personal material accumulated over time is the most vulnerable to loss. Adding it to the Gibraltar Biodiversity portal preserves it for posterity and enables researchers locally and internationally to access to it alongside more formal materials.

Wider Impacts and Decision Making

Having readier access to a wide range of information on biodiversity in Gibraltar will support the decision-making process for researchers and government. Decisions require an evidence base, and the portal brings that evidence base together in one place.

Grey literature is often the hardest to identify and find. Individual offices and departments commission reports that stay within that office and over time they are forgotten about. The Gibraltar Biodiversity portal enables that grey literature across departments to be

retrieved in a single search that was not possible before.

The flexibility of the portal is an acknowledgement that valuable biodiversity information comes from multiple source types, beyond published academic articles. By including unconventional data sources such as personal photograph collections, the portal contributes to a complete understanding of Gibraltar's biodiversity.

Sustainability and Legacy

The University of Gibraltar is committed to continue to support the growth of the Gibraltar Biodiversity Portal. The Project Lead continues in post as the University Librarian and will be the 'super administrator' of the portal continuing to work with local researchers and other stakeholder groups to add more records and 'hidden gems' to the database as well as continue to build local capacity to add their own resources. The Project Officer role was funded by the project and was for a fixed term now expired.

As mentioned in the original submission, this feasibility project was intended as a springboard for a Darwin Initiative Main application, an aim which met with positive feedback from the reviewers. The Portal structure has been designed to enable further research and development and expansion beyond Gibraltar to include other Overseas Territories. We have already engaged in initial discussions about a collaboration with St Helena, and will also approach Ascension and the Falkland Islands.

Section 6 - Communications & Publicity

Exceptional Outcomes and Achievements

The 'Gibraltar Biodiversity Portal' is a cloud-based finding aid for Gibraltar-related biodiversity resources of all media types, recognising that environmental information is not contained in academic articles alone but also in organisations, collections, artworks, legislation, social media platforms and much more. It brings together otherwise hard-to-find resources created and maintained by a large number of disparate organisations and individual researchers, both locally and internationally. The Portal is a nexus for researchers, policy makers, and the wider public to delve into the location specific biodiversity information spanning centuries in Gibraltar. Developed and maintained by the Parasol Library of the University of Gibraltar with generous funding from Darwin Plus, the Gibraltar Biodiversity Portal shines a light on 'hidden gems' and showcases the wealth of information on the biodiversity of The Rock.

To learn more, visit https://unigib.soutron.net/Portal/Biodiversity/en-GB/Search/SimpleSearch .

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.

& DPL00109 Publicity-Portal-Collections-Image Gibraltar

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& DPL00109 Publicity-Portal-Front-Page-Image Gibraltar

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⊉ jpg 514.15 KB

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

 $DPL00109_Publicity-Portal-Front-Page-Image.jpg-The\ front\ page\ of\ the\ Gibraltar\ Biodiversity\ Portal-Gibraltar\ Biodiversity\ Biodiversity\ Biodiversity\ Portal-Gibraltar\ Biodiversit$

DPL00109_Publicity-Portal-Collections-Image.jpg – Selected Collections of key topics included in the Gibraltar Biodiversity Portal - Gibraltar

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.

University of Gibraltar

Instagram: https://www.instagram.com/uni_gib?igsh=cGt0NWkwOWhkdmJs

Facebook: https://www.facebook.com/unigib/

LinkedIn: https://www.linkedin.com/school/university-of-gibraltar/?originalSubdomain=gi

GONHS

Instagram: https://www.instagram.com/gonhs_gib?igsh=MWdxMWdxc2x5bTMzYw==

Facebook: https://www.facebook.com/gonhsgib/

Gibraltar Botanic Gardens

Instagram: https://www.instagram.com/alamedagardens?igsh=MWJucXUwaGF3cTZ6Zw==

Facebook: https://www.facebook.com/alamedagardensgib/

LinkedIn: https://www.linkedin.com/posts/isolas_alamedabiodome-gibraltar-community-activity-7296133394063585280-yi_O/

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	Research Office	
Role within Darwin Plus Project	Main Contact	
Email		
Phone		
Do you need further sections to provide additional con	⊙ Yes	
details?	O 163	

Additional Project Contact Details

Project Contact Name	Caroline Moss-Gibbons
Role within Darwin Project	Project Lead
Email	
Phone	
Do you need further sections to provide additional contact details?	⊙ No