

DPLR4\1073

Darwin Plus Local - Final Report (1)

Officer: Linzi Ogden

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

DPLR4\1073

Q1. Project Title

No Response

Overseas Territory(ies)

☒ St Helena, Ascension, and Tristan de Cunha

Lead Organisation or Individual

Ascension Island Government

Partner Organisation(s)

CEFAS

Value of Darwin Plus Local Grant Award

£12,938.00

Project Start Date

01 October 2024

Project End Date

31 March 2025

Project Leader Name

Cuen Muller

Project Website/Twitter/Blog etc.

www.ascension.gov.ac

Report Author(s)

Report Date

01 May 2025

Project Summary

No Response

Project Outcomes

Checked	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;
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?





☒ 2 - Outcome moderately exceeded





Project outcomes and justification for rating above

The specific listed outcomes of this study included the (i) age determination of at least two coastal fish species along with development of age-growth models; (ii) creating reference collections to aid the processing and aging of otoliths for target species; (iii) train additional staff and produce manual on the collection, processing and reading of otoliths.

This project met and exceeded these objectives by developing reference collections for three species of fisheries concern. These included the pelagic wahoo, and the inshore rockhind grouper and moray eel, all of which are exploited by the recreational fisheries of Ascension Island. Age and growth models for these species have been developed although the number of samples needs to be increased before more reliable estimates can be determined. The reference collections which have been created for each of these species, along with the training of two additional staff members, will ensure that otoliths continue to be collected, processed and aged thus refining age-growth models.

Supporting Evidence - file(s) upload

 [Otolith processing protocol and procedure manual cm](#)
 01/05/2025
 12:48:08
 pdf 422.46 KB

 [Ascension Island age and growth CM](#)
 01/05/2025
 12:48:08
 pdf 379.59 KB

Supporting Evidence - links to published document/online materials

Otolith processing protocol concerns the collection, processing and aging of otoliths at the Conservation and Fisheries Laboratory and with relevant species at Ascension Island.

The 'Ascension Island age and growth' document describes the results from this project.

Project Challenges

Shortly after beginning the project, the UltraTec macrotome cutting machine, which would have been used for the sectioning of otoliths, had a severe malfunction requiring the acquisition of a new motor from the United States. A long lead time for the required part led to the majority of otoliths being processed using only the grinding machine. While this may have slowed the progress, we were able to continue with the work nonetheless and process the required number of otoliths to create reference collections.

Long lead times on shipping, particularly for hazardous goods such as resin, resulted in some consumables arriving later than expected. We were able to carry on with the work nonetheless by being economical with the existing supply.

Lessons Learned

The short time-span of this project presented some logistical challenges which, fortunately, we had anticipated. Economical use of available materials and consumables was necessary as delays in deliveries did occur. Likewise, more conservative objectives meant that we could meet our goals and expand the project when we discovered gaps. Our intention is to carry on with this work toward developing improved fisheries management at Ascension Island. Our recommendation would be to encourage more experience in foundational fisheries biology and data gathering toward improved fisheries management within the UKOTs.

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 Costs				
Overhead Costs				
Travel and Subsistence				

Operating Costs			
Capital Items			
Others			
Total	12,938.00	10,151.00	21

Please provide a short narrative summary on project finances.

Outstanding orders and shipment costs yet to be delivered. Final financial report and Actual claim form may reflect more accurate figures and will be submitted as soon as possible. Delays in shipping have unfortunately resulted in delays.

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)

Checked	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

Three staff members at the Conservation and Fisheries Directorate trained in the processing and reading of otoliths along with the appropriate use of equipment.

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

None

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

Checked	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

While not formally published a Manual on the collection, processing and reading of otoliths has been created detailing protocol and use of machinery. Three reference collections created for recreationally important fisheries species.

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

None

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

- i) Project partners at the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) are providing quality checks for otolith readings to validate reference collections.
- ii) The project was awarded and carried out by the Conservation and Fisheries Directorate under the Ascension Island Government (AIG). As such, the AIG were involved in all aspects of this project including the hiring, financial and management of the project.
- iii) The original training by CEFAS along with their ongoing support has been critical for the successful outcome of this project.
- iv) Local fishers from the community have assisted with specimen collection, outcomes of this study have been discussed with them.

Wider Impacts and Decision Making

None

Sustainability and Legacy

This project is certain to have a legacy as additional staff at the Conservation and Fisheries Directorate have been trained, necessary resources have been procured, and relevant reference collections have been created. The ongoing collection and aging of fishes will enable us to refine age and growth models and develop further capacity and skills which will provide the groundwork for population assessments in the future and improved fisheries management.

Section 6 - Communications & Publicity


Exceptional Outcomes and Achievements


None


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.


 [Rock Hind](#)


 01/05/2025


 16:59:55

 jpg 2.88 MB


 [Wahoo](#)


 01/05/2025


 16:59:01

 jpg 2.49 MB


 [Moray eel](#)


 01/05/2025


 13:18:13

 jpg 4.31 MB

 [Reference collection](#)

 01/05/2025

 13:15:29

 jpg 3.73 MB

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

Reference_collection_DPLR1073-Rockhind grouper reference collection of aged otoliths (Ascension Island)-
Pascal Walters

Spotted_Moray_DPLR1073 - Spotted Moray eel otolith estimated age 10 years - Pascal Walters

Wahoo_DPLR1073 - Sectioned wahoo otolith estimated age 3 years - Pascal Walters

Rock hind_DPLR1073 - Sectioned rockhind grouper otolith estimated age 13 years - Pascal Walters

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.

Ascension Island MPA - Facebook

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	Cuen Muller
Role within Darwin Plus Project	Project Lead
Email	
Phone	
Do you need further sections to provide additional contact details?	<input checked="" type="radio"/> No