

# DPLR4\1042

Darwin Plus Local - Final Report (1)

Officer: Linzi Ogden

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

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### Project Reference Number

DPL00102

### Q1. Project Title

*No Response*

### Overseas Territory(ies)

☒ St Helena, Ascension, and Tristan de Cunha

### Lead Organisation or Individual

Ascension Island Conservation and Fisheries Directorate

### Partner Organisation(s)

Ascension Island Conservation and Fisheries Directorate

### Value of Darwin Plus Local Grant Award

£35,160.00

### Project Start Date

01 October 2024

### Project End Date

31 March 2025

### Project Leader Name

Marcos Agiani Tieppo Junior

### Project Website/Twitter/Blog etc.

*No Response*

### Report Author(s)

Report Date

08 April 2025

Project Summary

No Response

Project Outcomes

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

⦿ 4 - Outcome moderately did not meet expectation

Project outcomes and justification for rating above

This project has unfortunately fallen short of its original objectives to generate photogrammetry models of Ascension Island’s mesophotic environments and implement a long-term monitoring plan. It was overly ambitious for a project timeframe of six months. The equipment was purchased, the ROV was assembled and the protocols for field data collection were drafted. However, due to significant delays explained below, the surveys were not able to be conducted before the project deadline.

















As pointed out in the "Project Risks" section of the project proposal, equipment delivery was a possible issue, since Ascension Island is such a remote territory and only one shipping company operates from the UK to the OT. All the mitigation measures listed in the proposal were taken (see email chains 1, 2 and 3 attached regarding purchase and delivery), with early arrangements done with the supplier and confirmations with the shipping company, but they were not sufficient to avoid a significant delay on the delivery of essential parts of the ROV to be used in the project.

Part of the ROV was assembled in advance, with the parts which arrived in November (see attached photos 1), including the necessary changes in the DVL and the underwater GPS. However, the rest of the parts only arrived mid March (there was an extra delay due to repairs on the delivery ship), which left only two weeks to finish the assemble and configuration of the ROV, collect data in the field and process it. Although extra work hours were done to try to finish in time, it was impossible to accomplish all the objectives of the project in time.

The assembly of the ROV was finished (see attached photos 2), including the modifications necessary to attach the DVL and the underwater GPS, which were produced by a different company. However, the configuration of the entire system demanded a large effort and took a long time, facing several issues with the firmware and connection, which demanded support from the supplier (see email chain 4 attached regarding support). These issues could have been solved in time if the equipment was delivered in November, as planned, or even in February, when the following ship was supposed to come.

Local staff was trained to configure and troubleshoot the ROV. When new firmware is released or the supplier and staff are capable of identifying the current connection issues, the ROV should be able to be used to collect data in the way it was planned. Data processing protocols were also created to be used in future data analysis.

### Supporting Evidence - file(s) upload

 <a href="#">Email chain 4-Support</a>  06/04/2025  16:08:41  pdf 601.23 KB	 <a href="#">Email chain 1-Delivery.</a>  06/04/2025  16:08:01  pdf 570.9 KB
 <a href="#">Email chain 3-Purchase and Support</a>  06/04/2025  16:07:59  pdf 830.25 KB	 <a href="#">Email chain 2-Delivery.</a>  06/04/2025  16:07:58  pdf 320.21 KB

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

All the supporting evidence was uploaded in the previous section.

- Email chain 1 - Delivery
- Email chain 2 - Delivery
- Email chain 3 - Purchase and Support
- Email chain 4 - Support

### Project Challenges

The delayed delivery was the main problem encountered, but no actions were possible to solve it, besides the preemptive ones taken to avoid it happening, which were presented in the email chains attached as supporting evidence.

The problems encountered regarding connection and communication with the ROV were anticipated, due to the nature of the equipment. However, originally much more time would be available for solving these issues and troubleshooting the ROV, in case the delivery was done in time. Mistakes from the part of the shipping company made that impossible. Even with a long consultation with the suppliers from the UK and the US, the problems could not be solved in time.

# Lessons Learned

The assembly of the ROV and the integration with the extra equipment (DVL and UGPS) worked very well regarding the hardware. The software integration part, however, was more challenging than expected. The large amount of detailed documentation describing step by step what to do gave the impression that it would work without major issues. In reality, persistent connection issues happened and could not be solved in time, even with the support from the supplier. These problems and the necessary troubleshooting were already expected on a certain level, but the short time to solve them made the solution unachievable.

If planning the same project again, a 1 year duration would be much more comfortable, providing enough time to finish the project, even in case of significant delays in the equipment delivery. The planned outputs may have been achievable, had the equipment been available in time. However, designing a long term monitoring programme can take considerable time so perhaps framing the project as a pilot study would have been more appropriate. Recommendations from the pilot could feed into a long term plan going forward.

## 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	35,160.00	34,585.93	2%	

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

The difference between the planned and actual expenses was not significant, staying around 2%. Despite changes in price for a few items and software licenses, the project did not overspend. The most difficult expense to predict, which was the shipping costs, also stayed in the budget.

## Section 4 - Contribution of Project to Darwin Plus Programme Objectives

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

### Group A Indicator Results

Two people from key national and local stakeholder groups completing structured and relevant training; One local organisation with improved capability and capacity as a result of project.

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

Unchecked	<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

N/A

## 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

N/A

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

Unchecked	<b>DPLUS-D01 Hectares of habitat under sustainable management practices.</b>
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Unchecked **DPLUS-D02: Number of people whose disaster/climate resilience has been improved.**

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

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## Group D Indicator Results

N/A

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

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### Project Partnerships

The project leader planned the entire project, from the procurement of equipment to data collection and analysis. He also implemented the project by assembling the ROV, configuring it, training staff members and writing protocols for data collection and analysis.

Ascension Island Government Conservation and Fisheries Directorate (AIGCFD) supported the procurement of all the equipment for the project, and did it with efficiency, which allowed for everything to be purchased in the planned time frame. It also offered the infrastructure to build and store the ROV and to perform tests.

### Wider Impacts and Decision Making

Due to the delay in the project, caused by delivery issues, the planned outputs were not achieved and the project could not influence decision making regarding the local MPA. However, as mentioned in a previous section, firmware changes and the constant work of local staff should achieve functioning equipment, and the data obtained following the plans and protocols from this project, should provide an important baseline for the exploration and monitoring of mesophotic environments around Ascension Island. This can ultimately influence decision making regarding the management of the MPA.

### Sustainability and Legacy

The equipment purchased and assembled will remain with AIGCFD to be used in the future. The local staff is capable of operating the ROV and the other equipment, and AIGCFD has a boat capable of supporting their use. Darwin Plus Local funding is not necessary to keep a continuous, long-term monitoring program of mesophotic zones with the ROV. The Blue Belt Programme finances the local marine team staff that are involved in these activities.

## Section 6 - Communications & Publicity

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### Exceptional Outcomes and Achievements


The main outcome of the project was the assembly of the Remotely Operated Vehicle (ROV) and the integration with a Doppler Velocity Logger (DVL) and an Underwater GPS (UGPS). The ROV is modular, and has to be assembled from scratch, including all the electronic connections. Since the DVL and UGPS are made by a different company, they demanded some modifications in the electronics of the ROV for the integration to work. The attached photos show part of the assembly process and the final product obtained. Some tests were also done in the pool, to finalise the configuration of the thrusters.


## 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.**

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 [ROV\\_UGPS](#)


 09/04/2025


 10:19:48


 jpg 3.09 MB

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 [ROV\\_DVL](#)


 09/04/2025


 10:19:22


 jpg 3.18 MB

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 [ROV\\_assembled](#)


 08/04/2025


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 [ROV\\_pool\\_test](#)


 08/04/2025

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 [ROV\\_assembly\\_4](#)


 08/04/2025


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 [ROV\\_assembly\\_2](#)


 08/04/2025

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 [ROV\\_assembly\\_5](#)


 08/04/2025


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 [ROV\\_assembly\\_3](#)


 08/04/2025

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 [ROV\\_assembly\\_1](#)


 08/04/2025


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 [ROV\\_assembled\\_2](#)

 08/04/2025

 10:12:16

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

ROV\_assembly\_1.jpg - ROV in the process of assembling the electronics enclosure - Ascension Island - Marcos Tieppo

ROV\_assembly\_2.jpg - ROV with all the electronics connections finished - Ascension Island - Marcos Tieppo

ROV\_assembly\_3.jpg - ROV with the electronics enclosure and the lights already positioned - Ascension Island - Marcos Tieppo

ROV\_assembly\_4.jpg - ROV with the electronics enclosure and the lights already positioned - Ascension Island - Marcos Tieppo

ROV\_assembly\_5.jpg - ROV with the electronics enclosure closed and fully attached - Ascension Island - Marcos Tieppo

ROV\_assembled.jpg - Fully assembled ROV - Ascension Island - Marcos Tieppo



ROV\_assembled\_2.jpg - Fully assembled ROV - Ascension Island - Marcos Tieppo

ROV\_pool\_test.jpg - ROV connected to the tether and the laptop ready for the first tests in the pool - Ascension Island - Marcos Tieppo

ROV\_UGPS.jpg - Underwater GPS installed in the ROV - Ascension Island - Marcos Tieppo

ROV\_DVL.jpg - Doppler Velocity Logger (DVL) installed in the ROV - Ascension Island - Marcos Tieppo

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.instagram.com/ascension\\_mpa/](https://www.instagram.com/ascension_mpa/)

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

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

## 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	Marcos Tieppo
Role within Darwin Plus Project	Project Leader
Email	
Phone	
Do you need further sections to provide additional contact details?	<input checked="" type="radio"/> Yes

### Additional Project Contact Details

Project Contact Name	Cuen Muller
Role within Darwin Project	Marine Team Leader at AIGCFD

Email

Phone

**Do you need further sections to provide additional contact details?**

☒ No