# DPLR3\1028

Darwin Plus Local - Final Report (1)

**Officer: Linzi Ogden**

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

### Project Reference Number

DPL00091

### Project Title

*No Response*

### Overseas Territory(ies)

☑ Montserrat

### Lead Organisation or Individual

Island Solutions Inc

### Partner Organisation(s)

N/A

### Value of Darwin Plus Local Grant Award

£49,079.00

### Project Start Date

01 April 2024

### Project End Date

31 March 2025

### Project Leader Name

Andrew Myers

### Project Website/Twitter/Blog etc.

www.islandsolutions.org

### Report Author(s)

Andrew Myers

## Report Date

23 April 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?

⦿ 3 - Outcome met expectation

## Project outcomes and justification for rating above

This project was able to deliver beyond expectations in most areas outlined in our original application. The programmes developed through this project will continue beyond the project period to further expand and exceed the intended outcomes. While we will address some delivery challenges in the "Challenges" section, we believe the project strongly delivered in the following key areas:

1. Developed a Comprehensive Hydrophone Network:
We established a hydrophone network that monitors over 75% of Montserrat's surrounding waters, covering approximately 44 km in linear distance. This system now provides a solid foundation for a national cetacean monitoring network.

2. Achieved and Continued Sea Monitoring:
We successfully monitored Montserrat's marine space for six months during the project period, meeting our original target. Monitoring continues beyond the funded phase, with an additional three months of data

collected as of late June 2025.

3. Collected Extensive Acoustic Data:
We gathered 4.98 TB of compressed acoustic data across two deployments. This substantial dataset will provide critical, previously unavailable information on cetacean species in Montserrat's waters.

4. Contributed to Regional Research:
All acoustic data has been made available to NOAA to support broader regional analysis. Given the migratory routes of cetaceans through North America, this partnership strengthens cross-regional monitoring efforts.

5. Built a Citizen Scientist Monitoring Network:
We created a WhatsApp-based citizen scientist network with over 50 members (the number fluctuates as participants join or leave). This group includes local residents, regional stakeholders, expatriates, and visitors, generating both local and international interest.

6. Developed a Cetacean Sightings Log:
We compiled a sightings log that documents visual observations and diver-verified acoustic detections of cetaceans. This living document was developed through contributions from multiple participants.

7. Delivered Community Outreach:
We conducted seven outreach tours, engaging the public, including more than 18 youth participants and at least two women-focused groups. These tours provided valuable opportunities to share the project's goals and findings with the wider community.

8. Promoted Environmental Stewardship:
We distributed 50 reusable shopping bags featuring project information and messages promoting the programme. An additional 18 reusable bags were provided to encourage the reduction of single-use plastics. This side initiative supported broader waste reduction awareness.

9. Facilitated Public Engagement through Drop Hydrophone Sessions:
We conducted 11 drop hydrophone listening sessions, many of which were open to public participation. These interactive experiences significantly increased public awareness of Montserrat's marine mammals.

10. Implemented Land-Based Monitoring:
We conducted approximately 15 hours of land-based monitoring and maintained a detailed log of these observations. Nearly daily sessions were held during the peak cetacean migration periods.

11. Established Research Collaborations:
We developed a working relationship with other cetacean research initiatives, including collaboration with Dr. Xavier Jean-Marie S. Raick of Cornell University, who is building a minke whale migratory database. We have provided access to our dataset to support both local and international research projects.

## Supporting Evidence - file(s) upload

DPL Cetaceans - Donation poster
04/06/2025
21:18:33
png 3.3 MB

FINAL Have you seen whales this season!-2
04/06/2025
21:01:08
jpg 264.81 KB

DPL-Hydrophone network-Montserrat 2024
04/06/2025
21:00:21
jpg 556.85 KB

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

[redacted] - https://drive.google.com/drive/folders/1Yjyem90F9eB-EMW8kRlpwzBGtizlyHFN?usp=sharing

Outreach video
[redacted]

Collaborators:
Xavier Jean-Marie S. Raick [redacted]

NOAA -Passive Acoustic Research Group - Northeast Fisheries Science Center - Rhett Finley - NOAA Affiliate [redacted]

## Project Challenges

Our project certainly encountered challenges, both anticipated and unforeseen.

1. The primary unexpected issue arose from the shifting US and global political landscape. Specifically, the reduced support capacity of the US NOAA Passive Acoustic Monitoring network significantly impacted us. Following changes in the US administration, key federal agencies experienced staff reductions and the withdrawal of previously granted permissions for project support. Our NOAA contact was ultimately unable to provide the direct data analysis assistance initially planned. In response, we initiated the analysis process independently, though this specialised work has required additional time and resources.

2. As anticipated, weather conditions and sea state occasionally limited our ability to safely access offshore equipment. Operating in marine environments using smaller vessels inherently carries such operational constraints, and safety always remained our top priority.

3. Another expected challenge was the availability of Government of Montserrat staff and youth marine science dive team members. Their participation was often limited by school or work commitments, which we had planned for in our scheduling.

In each case, we adapted our operations and workflows to address these issues and were able to maintain the project's overall momentum and efficiency.

## Lessons Learned

The lessons learned from this project, while not surprising, will be invaluable for our future work as our organisation continues to grow and improve.

What worked well:
- Engaging local youth groups and schools significantly increased community participation. By integrating our programmes into educational activities for visiting students and local youth, we were able to generate strong interest, particularly because the project's goals were unique and easily understood.

- Using messaging platforms like WhatsApp and social media proved highly effective in reaching the broader Montserrat community. Even in a small population, leveraging widely used communication channels can greatly enhance outreach.

What did not work well:
- We experienced the negative impacts of government transitions, particularly in the loss of anticipated support from US federal agencies. These changes disrupted critical elements of the project, especially around data

analysis, highlighting the vulnerability of relying too heavily on single external partners.

What we would do differently:
We would prioritise developing more diverse academic and NGO partnerships early in the project to ensure continuity in technical processes like data analysis, even in the face of political or institutional shifts.

Recommendations for others:
Plan for extensive public outreach—it effectively builds community interest and ownership, which can strengthen long-term project sustainability.

Build broad networks for technical support to reduce risks associated with losing key partners.

For Island Solutions these insights will shape how we approach future projects.

## Section 3 - Project Finance (Essential)

## Project Expenditure

| Project Spend (indicative) | Total Grant (£) | Total actual Darwin Plus Costs (£) | Variance % | Comments (please explain significant variances) |
|---|---|---|---|---|
| **Staff Costs** | [redacted] | | | |
| **Consultancy Costs** | | | | |
| **Overhead Costs** | | | | |
| **Travel and Subsistence** | | | | |
| **Operating Costs** | | | | |
| **Capital Items** | | | | |
| **Others** | | | | |
| **Total** | 49,079.00 | 49,079.00 | 0 | |

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

This project remained on the projected budget; here are some additional details on higher amount budget lines:
- Staff costs remained as expected with no changes in management fees or program support.

- Operating and Capital expenses: The variance in cost associated with increased capital expense directly reduced operational cost, while increasing the project's capacity. This adjustment was a great positive for the project.

As projected our organisation, Island Solutions, co-financed additional staff, equipment, overhead, outreach and operational 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

2 - Both local NGO Island Solutions and the Government of Montserrat have improved capability and capacity.

### 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.** |
| Checked | **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

Total number from all outreach and interactive events: 7

## 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.** |
| Checked | **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

2 - Stock assessments are still ongoing but the findings will be produced through both collaborators.

## 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

Island Soltions interacted with and provided data to the following entities:
Government of Montserrat:
Fisheries Unit - This is the division of the Department of Agriculture that focuses on ocean governance and ocean health. Multiple meetings were held with the Chief Fisheries Officer Dan Edwards to discuss the project progress. A member of this unit, Chase Buffonge, is also part of the GoM dive team and assisted on multiple days of the project.

Department of Environment- We had regular discussions on the project with Stephen Mendes, environment technician, from the DoE. Additional, head of the department, Ernestine Corbett, was informed of project progress and invited to outreach events directly.

Ministry of Agriculture, Land, Housing and Environment - Our project leaders met with Minister John Osborne and Parliamentary Secretary Dwyane Hixon soon after their appointment to the government and provided summaries and briefings on all of our projects that support and interact with the GoM.

International:
NOAA - Our team regularly interacted with multiple persons form NOAA's Passive Acoustic Research Group including director Sofie Van Parijs, with our main point person being Rhett Finley, Fieldwork Team Lead & Baleen Whale Acoustician. Our program used the protocols established by NOAA to make the data collected applicable to other active programs. NOAA is assisting with data analysis possibilities.

Cornell University Center for Conservation Bioacoustics - we are interacting with Dr. Raick's minke whale program to expand knowledge of Caribbean.

Local groups - Interactive programs were conducting with youth groups and in school programs.

## Wider Impacts and Decision Making

The data collected from this project will provide new and valuable information on migratory and general presence of cetacean species. While the data generated from this project will be able to address local decisions on biodiversity protections it will also:

- Provide data to strengthen regional species knowledge and migratory movements through the comprehensive coverage and extended duration of the data collection. We will provide access to all regionally relevant government and non-government organisations.

-Fill data gaps in migratory species movements from the Caribbean region to eastern coast of the United States

and Canada. Additionally, our data is assisting with research programs such as the one Dr. Raick's program. Minke whales have been detected in Montserrat recordings, which was unknown prior to this program.

- Provide additional researchers access to data that can develop new projects and/or support active projects.

## Sustainability and Legacy

Island Solutions has continued the monitoring program and will maintain the program going forward to expand data on cetaceans within Montserrat. This data will help evaluate changes caused by climate change and human impacts.

# Section 6 - Communications & Publicity

## Exceptional Outcomes and Achievements

All of our projects under the Darwin Initiative have provided significant value to Montserrat, whether through coral restoration, species protection, habitat assessment, or reducing human impacts on the marine environment. Each has contributed to building our national understanding of local ecosystems, the species they support, and potential for protection and improvement. However, this particular project stands out not only for the depth of data it produced—much of it previously undocumented—but also for its power to connect with a wider audience through the charismatic species it focused on.

Whales and dolphins are instantly recognisable and resonate with people in a way that other species sometimes cannot. This relatability allowed us to engage deeply with the Montserrat community, especially young people and families. We are proud to have introduced many individuals, some of whom had never been to sea before, to the marine environment and the rich biodiversity just off our shores.

The project's exceptional outcomes include:
- Making complex marine science more accessible and relevant to the general public.
- Inspiring a new appreciation for Montserrat's marine biodiversity, even among those previously unfamiliar or uncomfortable with the sea.
- Creating opportunities for direct community participation, including meaningful interactions with multiple youth groups.
- Allowing local residents to hear the songs of whales for the very first time—a simple but powerful moment of connection.
- Establishing the most comprehensive cetacean monitoring network within the UK Overseas Territories.
- Developing Montserrat's first passive acoustic monitoring library, which not only supports local conservation but contributes to regional research initiatives.

The impact of this project will continue through our organisation Island Solutions, ensuring sustained community engagement and scientific contribution.

The following photos, videos, and sound recordings from this project captured some of the special moments from the project and showcase what is possible when science and community come together.

## 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.**

PA040040
01/07/2025
23:35:11
jpg 3.1 MB

P1160009
01/07/2025
23:32:56
jpg 2 MB

IMG_2384
01/07/2025
23:30:49
jpg 3.92 MB

IMG_2376
01/07/2025
23:27:46
jpg 1.6 MB

P1090142
01/07/2025
23:25:14
jpg 2.29 MB

VIDEO-2025-03-30-07-07-40
01/07/2025
23:23:13
qt 9.97 MB

How far can the Hydrophones pick up sound 5km 3mi (dragged).pdf
28/06/2025
17:22:32
png 725.74 KB

DPL-Hydrophone network-Montserrat 2024
04/06/2025
22:03:45
jpg 556.85 KB

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

How far can the Hydrophones pick up sound 5km 3mi (dragged).pdf.png - Infographic used on the project promotion bags - credit: Island Solutions

DPL-Hydrophone network-Montserrat 2024.jpg - Image is of the monitoring coverage area of Montserrat's hydrophone network - Montserrat - credit: Island Solutions

Video-2025-03-30-07-07-40.mov - Outreach event with audio from hydrophone of humpbacks - Montserrat - credit: Island Solutions

P1090142.JPG - A reef ball was used as the anchor for the hydrophone that has become a new home for fish and marine life, 40m underwater - Montserrat - credit: Island Solutions

IMG_2376.jpeg - As part of the project's outreach we provided reusable shopping promoting the project and keeping plastic from the sea - Montserrat - credit: Island Solutions

IMG_2384.jpeg - Families enjoying the outreach boat ride to listen for "singing" humpbacks (they did!) - Montserrat - credit; Island Solutions

P1160009.JPG - Project diver Shane Caesar inspecting one of the hydrophones - Montserrat - credit: Island Solutions

PA040040.JPG - Project divers Emmy Aston and Shane Caesar capture of selfie 40m underwater during hydrophone installation! - Montserrat - credit: Island Solutions

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.

Facebook - Island Solutions Montserrat
Instagram - @islandsolutions_org

## 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** | Andrew Myers |
| **Role within Darwin Plus Project** | Project leader |
| **Email** | [redacted] |
| **Phone** | |
| **Do you need further sections to provide additional contact details?** | ⦿ No |