DPLR3\1028

Identifying Cetacean Species in Montserrat by Establishing a Hydrophone Network

Annually, humpback whales migrate through Montserrat however little is know about these whales, or the 29 other potential marine mammals that are found in the Caribbean, while in the island's territorial waters. This project will establish a hydrophone network around the island to capture cetacean audio recordings. These recordings will be analysed to provide an accurate record of the cetacean biodiversity in Montserrat waters. Photo documentation will be gathered and provided to the regional database to identify migratory whales.

PRIMARY APPLICANT DETAILS

Title	Mr
Name	Andrew
Surname	Myers
Organisation	Island Solutions Inc.
Website (Work)	███████████████
	███████████████
Tel (Work)	████████████████
Email (Work)	███████████████
	█████████████████
Address	██████████
	██████
	█████
	█████
	█████

CONTACT DETAILS

Title	Ms
Name	Emmy
Surname	Aston
Organisation	Island Solutions Inc.
Website (Work)	███████████████
	███████████████
Tel (Work)	████████████████
Email (Work)	██████████████
	█████████████████
Address	██████
	████
	█████
	█████

DPLR3\1028

Identifying Cetacean Species in Montserrat by Establishing a Hydrophone Network

Section 1 - Project Title & Contact Details

Q1. Project Title

Identifying Cetacean Species in Montserrat by Establishing a Hydrophone Network

Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

⊙ Organisation

PRIMARY APPLICANT DETAILS

Title	Mr
Name	Andrew
Surname	Myers
Organisation	███████████
Website (Work)	████████████
Tel (Work)	███████████
Email (Work)	████████████████
Address	███████████
	████████
	██████
	██████
	███████

CONTACT DETAILS

Title	Ms
Name	Emmy
Surname	Aston
Organisation	Island Solutions Inc.
Website (Work)	████████████
Tel (Work)	██████████
Email (Work)	████████████
Address	███████
	████
	█████
	███████

GMS ORGANISATION

Type	Organisation
Name	Island Solutions Inc.
Phone (Work)	███████
Email (Work)	███████████
Website (Work)	██████████
Address	████████
	████
	██████
	██████

Section 2 - Overseas Territory(ies)

Q3. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a non-permanent resident population you need to demonstrate a clear, meaningful, long-term link to the territory.

☑ Montserrat

* if you have indicated a territory group with an asterisk, please give detail on which territories you are working on here:

No Response

In addition to the UKOT(s) you have indicated, will your project directly benefit any other UK OT(s) or country(ies)?

⊙ No

Section 3 - Project Partners

Q4. Project partners (Guidance section 3.2)

In this section, please give details of all the partners involved (including the Lead Partner) and provide a summary of their roles.

Project Leader name (Guidance section 3.1):	Andrew Myers
Lead Partner name (if applying as an organisation; Guidance section 3.1):	Island Solutions Inc.
Lead Partner Website (if applicable):	www.islandsolutions.org
Is the Lead Partner based in a UKOT where the project is working (Guidance section 3.1)?	⊙ Yes

List other partners involved and where are they based:	Government of Montserrat - Ministry of Agriculture, Lands, Housing and Environment - MAHLE
Summary of roles and responsibilities of each partner in the project:	Island Solutions will be responsible for full delivery and financial management of this project. Aspects of the project delivery will include: 1. Sourcing, designing, and installing the multiple location long term hydrophone recorder network; 2. Data collection and system maintenance of hydrophone network; 3. Data analysis of audio recordings; 4. Whale fluke photo and video documentation for upload to North American whale networks; 5. Training on systems to GoM marine science/dive team. 6. Developing and conducting educational and outreach programs, 7. Documenting all programmes and maintaining a minimum of 2 copies of each file and provide the GoM with a copy. MAHLE: 1. The GoM's Departments of Agriculture and Environment, respectively, will provide availability to Montserrat Marine Science Dive Team personnel; 2, Assist with community engagement by collaborative outreach efforts; 3. Maintain back- up project data; 4. Assist in the monitoring and evaluation project and advise on adjustments to the project. 5. Consider developing protective legislation guided by data collected from the project
I confirm that all listed partners are aware of this application and have indicated support:	Checked

Attach a Cover Letter for your application (Guidance section 4.2).

⤓ 1028MNI-Identifying Cetaceans-Montserrat-Cover letter-Island Solutions
📅 29/11/2023
🕐 13:45:30
📄 pdf 106.92 KB

Section 4 - Project Summary & Description

Q5. Project Summary (Guidance section 3.8)

Please provide a brief summary of your project. This may be used in communication activities and/or published online, if your application is successful.

Annually, humpback whales migrate through Montserrat however little is know about these whales, or the 29 other potential marine mammals that are found in the Caribbean, while in the island's territorial waters. This project will establish a hydrophone network around the island to capture cetacean audio recordings. These

recordings will be analysed to provide an accurate record of the cetacean biodiversity in Montserrat waters. Photo documentation will be gathered and provided to the regional database to identify migratory whales.

Q6a. Description (Guidance section 2.1 and 6)

Please provide a description of your project, including:

- **the overall objective**
- **the current situation and the problem the project is trying to address**
- **what success will look like and how you will measure it**

Please be as specific as possible when describing the project, using quantified data and evidence where available. You may wish to consider: what are the specific threats to the environment that the project will attempt to address, and what should we know about these threats? What does your successful project look like? And how will you demonstrate whether and how your project has been successful?

To establish a comprehensive picture of the biodiversity found in Montserrat's waters an accurate assessment of species, both resident and migratory, and their abundance must be determined. This knowledge is essential to determine policies to protect habitat and species, especially internationally protected species recognised by CITES, CMS and the IUCN.

Montserrat currently does not have extensive or accurate data on the species of whales and dolphins, Cetacea, found around Montserrat. Though it is known humpback whales migrate through Montserrat waters in the first few months of the year, little is known about other migratory and resident species. This project will install long term hydrophones in all sectors of the island to capture the audio record of the cetaceans within Montserrat waters. This information will create a robust database with information on time when migratory species are present, resident species and a general idea, at least in the case of migratory whales, of numbers.

This project will deliver the following to achieve our objectives:
1. A network of a minimum of 4 long term hydrophone recorders will be installed to cover the 4 quadrants of the island. This network will be operational for a minimum of 6 months.
2. The recordings will be analysed through designed software to determine species from audio recordings.
3. Data from this project will be provided to all relevant databases to assist international efforts to protect these species.
4. Island Solutions will provide a drone to capture fluke patterns and provide those images for collaboration with whale tracking organisations.
5. The project will develop educational programs and conduct at least 1 public event.
6. A citizen science whale watching community group will be created to increase public engagement and provide valuable records of sightings from Montserrat.
7. A minimum of 4 of the Government of Montserrat (GoM) and 1 youth marine science dive team members will be trained on systems installation and recovery, data transfer and maintenance, and data analysis from the hydrophones.
8. A minimum of 4 of the GoM and 1 youth marine science dive team members will be trained on drone usage.
9. All data will be provided to the GoM Departments of Agriculture and Environment to support policy and further research and accessible to other researchers and organisations.

Q6b. Long-term sustainability (Guidance section 2.1 and 6)

Please describe the long-term benefits of the project and the change it will bring about. How will the outcomes of the project be sustained after the funding is finished?

The data collected from this project will expand Montserrat's understanding of the island's marine ecosystems and the species within. Currently there are not specific policies in place to address cetacean protection in Montserrat. This project will provide needed data to guide policy and protection.

The equipment purchased through this programme's funding will be maintained and will continue to be operated to expand the record of Montserrat's cetacean community. Island Solutions will actively expand already established relationships with NOAA, University of Exeter and the JNCC to sustain this program, as well as, develop new relationships with educational institutions and NGOs. Data will be made accessible to the public. Furthermore, Island Solutions will support operations through donation campaigns and self-generated funding.

(Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 sides of A4, and is combined as a single PDF:

⤓ 1028-Identifying Cetaceans-Montserrat-Supporting documents
▦ 29/11/2023
🕐 15:32:35
▯ pdf 2.23 MB

Section 5 - Project Outcome(s)

Q7. Project Outcome(s) (Guidance section 1.2)

Successful Darwin Plus Local projects must demonstrate measurable outcomes in <u>at least one of the themes of Darwin Plus with a clear focus on biodiversity and the natural environment</u>, either by the end of the project or soon after through a credible plan.

<u>Please confirm that your project has a clear focus on biodiversity and the natural environment.</u>

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.**

Please justify your selection. Please use quantitative information where possible here.

Biodiversity: This project will generate new information on species that inhabit Montserrat territorial waters, expanding knowledge on the nation's biodiversity.

Environmental quality: The information collected in this project will provide essential data to assist in educated policy implementation on protection of migratory and threatened species in Montserrat waters..

Capability and capacity building: This project will provide training and demonstrations of the hydrophone usage, installation, retrieval, and data analysis and use of drones for species documentation for JNCC-funded GoM dive/marine science program persons.. The hydrophone system will be the first with long term comprehensive coverage within the Eastern Caribbean region.

Section 6 - Workplan

Q8. Workplan (Guidance section 2.2)

Please provide anticipated dates for the start and end of your planned project here. Please use the Darwin Plus Local Project Workplan (available at: Darwin Plus website) to provide a list of the individual activities you have planned for this project, a brief description of what each activity entails, and the months in which the activities will be carried out. If the project involves only one activity (e.g. a purchase), please still provide project start and end dates (noting estimated times for procurement). Please note that your project must start after 1 April 2024 and be completed by 31 March 2025.

Start date:	End date:	Duration (e.g. 3 months):
01 April 2024	31 March 2025	12 months

Please upload the completed Darwin Plus Local Project Workplan with your proposed project activities here

⤓ 1028-Montserrat Cetaceans-Workplan-Island Solutions
📅 29/11/2023
🕐 16:29:39
📄 docx 37.02 KB

Section 7 - Costs

Q9. Costs (Guidance section 2.2 and please read the Finance Guidance)

Please provide a breakdown of costs to be funded through Darwin Plus Local (in GBP).

Are you seeking any matched funding for this project?

⊙ Yes

How much matched funding are you seeking and where from?

Island Solutions will provide in-kind matching funds through rate reductions on management, staff, equipment hire, no charge equipment usage, and coverage of a portion of the project overhead.

Total matched funds provided by Island Solutions - ███████

Budget line	Explanation	Cost in GBP

Staff costs:	Covers project management, data analysis, program implementation and community outreach efforts	▉
Consultancy costs:	N/A	£0.00
Overhead costs:	Covers approximately 20% of the annual cost of office rent, operations space, and utilities	▉
Travel & subsistence costs:	N/A	£0.00
Operating costs:	Covers all field work operations, equipment hires, support personnel and supplies.	▉
Capital equipment:	Covers cost of the hydrophones	▉
Other Costs	Covers small equipment items, software, educational and outreach items and program, shipping, taxes, and M&E	▉
Total:		▉

This section provides more information on the budget to help evaluators understand how you will use the funds you are requesting. You do not need to list all costs, but please list and detail costs of more than £1,000 per item below, under the appropriate budget line.

Details of staff costs over £1,000 (if relevant)

Andrew Myers - project manager - ▉
Emily Aston - Program manager - ▉
Ben Cresswell - Outreach manager - ▉
Dr. Gemma Galbraith - data and science manager - ▉

Details of overhead costs over £1,000 (if relevant):

N/A

Details of travel and subsistence costs over £1,000 (if relevant):

N/A

Details of operating costs over £1,000 (if relevant):

Boat hire - hydrophone recovery - 8 trips - ▉
Support divers/crew - 2 persons - hydrophone recovery - 8 trips - ▉
Boat hire - tow ops - 4 trips - ▉
Support divers/crew - 2 persons - tow ops - 4 trips - ▉
Drone ops - 5 sessions - ▉

Details of capital equipment costs over £1,000 (if relevant):

High frequency hydrophone recorder - 2 units - ▉
Standard frequency recorder - 3 units - ▉

Details of consultancy costs over £1,000 (if relevant):

N/A

Details of other costs over £1,000 (if relevant)

N/A

If your project budget was prepared in another currency and converted to GBP, please provide the exchange rate, its source, and the date it was accessed:

Other currency:	Exchange rate:	Source of this exchange rate:	Date exchange rate accessed:
USD	1 USD = 0.7877 GBP	xe.com	29 November 2023

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory.

What % of the total will be spent in the OTs?	64

If less than 80% of the total project spend is to be spent within the OT(s), please explain why.

The specialised equipment, hydrophones, have to be purchased from outside of Montserrat but the equipment will remain and continue to be in Montserrat beyond the delivery period of the project.

Section 8 - Local and National Priorities

Q10. Local and national priorities

Please explain how this project aligns with local and national priorities? You may wish to consider the project in the context of national environmental laws, objectives, strategies, territory specific agreements, action plans or policies.

This project aligns with these international, regional and local priorities:
International agreements:
-Convention on Biological Diversity (CBD) – educating Montserrat public on the interactive relationship of habitats, species, and impacts that make up biodiversity.
-UN SDP Goals 13,14 - Climate action and life below water.
-CITES
-CMS

Regional agreements via the Organisation of Eastern Caribbean States (OECS) include:
-St. George's Declaration of Principles for Environmental Sustainability (SGD 2040) - Addresses goal focused on "biodiversity and ecosystems", "climate and disaster resilience", and "oceans and fisheries".
SGD 2040 associated sustainable development goals:
-Eastern Caribbean Regional Ocean Policy and Strategic Action Plan;
-Marine Research Strategy;
-OECS Green Blue Economy Strategy and Action Plan;
-Caribbean Regional Fisheries Mechanism Strategic Action Plan, 2013 to 2021;
-Sustainable Management of Shared Marine Living Resources in the Caribbean;
-Regional Strategy and Action Plan for the Valuation, Protection and/or Restoration of Key Marine Habitats in the Wider Caribbean 2021-2030.

National:
-Montserrat Environment Charter - 2001 - protection of Montserrat species and habitats;

-Conservation and Environmental Management Act (CEMA) - 2019 - protection of Montserrat species and habitats;
-Fisheries Act (2000) - Conservation of habitat and species and development of protected areas.

Will the project take place on Government owned land or water or involve biocontrol, invasive alien species control or eradication?

⊙ Yes

Please attach evidence that you have Government support for this project i.e. a Letter of Support. Applications which indicate that they do not take place on Government land or water, but which propose work that appears to the reviewers would be difficult/impossible to carry out without working on government land or waters may be ineligible if no Letter of Support is provided.

    ⤓   MAHLE-Letter of Support for DARWIN Local Sub missions-Island Solutions
    📅   29/11/2023
    🕐   17:22:19
    📄   pdf 1001.63 KB

Section 9 - Project Risks

Q11. Project Risks

Please demonstrate your consideration of any risks involved in this project and how you intend to manage them. Please note the importance of health and safety and environmental risk assessment in the design of your project. If there is any possibility that your project may have negative impacts on the environment or human health, it is important that you provide a comprehensive analysis of potential environmental and human health risks, and the prevention measures you will take to ensure the work does not cause harm.

Depending on your project, you may wish to consider:

- Biosecurity risks – particularly for projects involving external equipment.
- Safeguarding risks – particularly for projects involving vulnerable groups such as children, older people or people with disabilities.

Risk	Mitigation

	To reduce risk the following will be done:
Field operations - Diving risks	1) All divers must be assessed for competence, provide proof of certification, 2) All divers must have dive insurance, 3) Island Solutions has an Emergency Action Plan for dive operations. This plan will be discussed. 4). All participants must agree to abide by safety procedures, 5). A minimum of 2 professional level divers with first aid training will be on each dive. 6) Dive safety equipment will be provided during every dive operation. 7) A policy will allow any diver to stop operations if the conditions are deemed unsafe.
Weather and extreme weather impacts	1) The project will avoid field work during peak hurricane season. 2) Weather conditions will be assessed prior to in field operations. 3) Boat will be regularly maintained and have appropriate tools and safety equipment to address weather issues.
Safeguarding risks	1) A policy to report inappropriate behaviour will be implemented that has multiple persons to report to. 2) Public outreach event will offer a feedback option that will allow for anonymous complaints

Do you require more fields?

⊙ No

Section 10 - Terms & Conditions

Q12. Terms and conditions (Guidance section 3.10)

By applying for Darwin Plus Local you are adhering in full to the grant Terms and Conditions in full (available at: Darwin Plus website **and as referenced in the Guidance at section 3.10). For information, the Terms and Conditions include requirements for all applicants to (amongst other requirements as per the full Terms and Conditions):**

- Uphold a zero tolerance for inaction approach to tackling sexual exploitation, abuse, and harassment.
- Where appropriate, make all reasonable and adequate efforts to address gender inequality and other power imbalances.
- Notify all cases of fraud and theft (whether proven or suspected) relating to the project to the Grant Administrator as soon as they identified.

Please indicate you have read, and understood, and will adhere to the Terms and Conditions.

Checked

Supporting documents list (please have these ready to attach with application)

- Cover Letter of no more than two A4 pages. (Guidance section: 4.2 has information on what this cover letter should include).
- If the project takes place on public land or water or is addressing invasive alien species, a Letter of support from OT Government.
- Project Workplan in the template provided for Darwin Plus Local (available at: Darwin Plus website).
- Map and additional information (optional) maximum five additional pages.

If your application is successful

If your project application is successful, the Fund Administrator (NIRAS) will ask you to provide some financial evidence for due diligence checks before you receive your project grant. (Please see section 3.3 of the Darwin Plus Local Finance Guidance). Please be ready to provide this evidence promptly.

- **Financial evidence for organisations**: Year-end financial statements, the latest management accounts or audited accounts (if you have these).
- **Financial evidence for individuals**: Proof of identity such as a passport, ID card or driving licence and solvency (such as bank statements) and a police check.

Section 11 - Certification

Certification

I certify that, to the best of my knowledge and belief, the statements made in this application are true and the information provided is correct.

Checked

I have the authority to submit an application on behalf of my organisation.

Checked

Name:	Andrew Myers
Position in the organisation: (if applicable)	President/Project lead
Signature (please upload e-signature)	⤓ SIGNATURE 📅 29/11/2023 🕐 17:27:31 📄 jpg 229.84 KB
Date:	29 November 2023

Section 12 - Submission Checklist

Checklist for submission

Check

I have read the Guidance **documents, including the "Darwin Plus Local Guidance" and the "Darwin Plus Local Finance Guidance".**	Checked
If my proposed project takes place on public lands or water or is addressing alien invasive species, I have uploaded a Letter of Support from Government.	Checked
I have uploaded a cover letter that details the information requested in the guidance (Guidance section 4.2 has information on what this cover letter should include).	Checked
I have read, and can meet, the current Terms and Conditions **for this fund.**	Checked
I have provided actual start and end dates **for my project that fit this Round.**	Checked
I have provided my summary budget based on UK government financial years **i.e. 1 April – 31 March and in GBP in the application form.**	Checked
I have uploaded my project workplan using the specific template **provided.**	Checked
I have uploaded all supplementary documents if I have any.	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
The application has been signed by a suitably authorised individual **(clear electronic or scanned signatures are acceptable).**	Checked
I have checked the Darwin Plus website **immediately prior to submission to ensure there are no late updates.**	Checked
I have read and understood the Privacy Notice on the Darwin Plus website**.**	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under Darwin Plus. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share project news. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the Forms and Guidance Portal.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising Darwin Plus including project details (usually title, lead partner, project leader, location, and total grant value).