Applicant: Myers, Andrew Organisation: Island Solutions Inc. Funding Sought: £49,006.00

# **DPLR5\1036**

#### The Montserrat Bat Project: Enhanced Species Health and Impact Assessments

As climate change and human activity alter Caribbean ecosystems, bat populations and diversity are shifting. Bats play critical roles in agriculture pest control, pollination, and reducing vector-borne diseases. Modern monitoring tools like ultrasonic recorders and AI will provide updated, comprehensive data on bat populations while contributing to regional acoustic libraries. The program also includes citizen science initiatives, engaging communities to monitor bats on private lands and offering bat houses to residents, emphasizing the ecological importance of these key species.

#### **PRIMARY APPLICANT DETAILS**



# **DPLR5\1036**

The Montserrat Bat Project: Enhanced Species Health and Impact Assessments

# **Section 1 - Project Title & Contact Details**

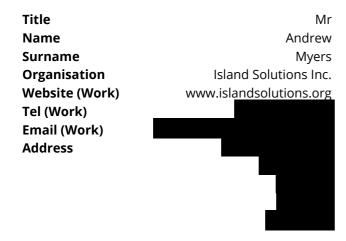
# Q1. Project Title

The Montserrat Bat Project: Enhanced Species Health and Impact Assessments

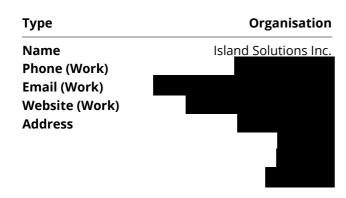
# Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

Organisation

#### PRIMARY APPLICANT DETAILS



#### **GMS ORGANISATION**



# Section 2 - Overseas Territory(ies)

Q3. Please state whether the same (or a similar) project proposal has previously been submitted (or you are planning to submit it) to the UK Government for funding. This includes through Darwin Plus Local, Defra's other Darwin Plus grant schemes or other UK Government funding mechanisms. Failure to share this information may result in the application being ineligible (see Guidance section 2.1.1).

No

#### Q4. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in?

☑ 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)?

Yes

Project Leader name:

#### Please list these here and describe how they will benefit:

This project will develop a project template that can be conducted in all the Caribbean UKOTs and contribute to regional and international databases on bat diversity, abundance and health, as well as, adding to bat acoustic libraries.

# **Section 3 - Project Partners**

#### Q5. Project partners (Guidance section 3.2)

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

Lead Organisation name: (if applying as an organisation; Guidance section 3.1)  Lead Organisation Website (if applicable):  Is the Lead Organisation based in a UKOT where the project is working?  Yes	ce section 3.1)	ndrew Myers
applicable):  Is the Lead Organisation based in a UKOT where the project is working?  WWW.ISIANGSOIUTIONS.OFG  Yes	<b>ing as an organisation;</b> Is	land Solutions
in a UKOT where the project is working?  • Yes	- \	ww.islandsolutions.org
(Guidance section 3.1)	T where the project is ?	<b>⊙</b> Yes

List other partners involved and where are they based:	There will be no other partners however the project will collaborate with the Government of Montserrat Departments of Agriculture and Environment locally, respectively. Internationally, collaboration will be done with and data will be shared with the North American Bat Monitoring Program, the Alderney Wildlife Trust and the British Trust for Ornithology. We are currently connecting with the Anguilla National Trust, who has a partial acoustic library.
Summary of roles and responsibilities of each partner in the project:	Island Solutions will manage all aspects of this project.
I confirm that all listed partners are aware of this application and have indicated support:	Checked
	<u> </u>

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

- 4 1036-The Montserrat Bat Project-Enhanced Species Health and Impact Assessments-Cover letter-Island Solutions
- ① 14:28:26
- pdf 103.15 KB

# **Section 4 - Project Summary & Description**

# Q6. 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.

As climate change and human activity alter Caribbean ecosystems, bat populations and diversity are shifting. Bats play critical roles in agriculture pest control, pollination, and reducing vector-borne diseases. Modern monitoring tools like ultrasonic recorders and AI will provide updated, comprehensive data on bat populations while contributing to regional acoustic libraries. The program also includes citizen science initiatives, engaging communities to monitor bats on private lands and offering bat houses to residents, emphasizing the ecological importance of these key species.

# Q7a. 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?

Montserrat has a diverse and extensive terrestrial ecosystem; unique within the region for a combination of restricted access areas caused by recent volcanic activity, protected nature reserves and low human population. However, as with all the planet, effects of climate change and human activity are active. This project will provide updated and accurate current data for a key species on Montserrat terrestrial habitats - Bats.

Bats provide essential habitat processes including pollination, seed disposal, fertilisation, agriculture pest control and, for important human concern especially within the Caribbean region, removal of vector-borne disease carrying mosquitos.

Current data on the recorded the 13 species of bats found in Montserrat is 12 years old. That data was collected using only capture systems such a mist netting. New acoustic monitoring systems can collect detailed and accurate data for extended periods of time therefore allowing a more comprehensive understanding of bat species and removing data anomalies. Recordings from programs like the one we are proposing for Montserrat are added to international acoustic databases to create libraries through which machine-learning or AI systems can quickly assess for species. This will provide valuable insights not just for Montserrat but will be applicable to other Caribbean nations. Climate change and human activities including development and habitat changes are likely impacting the bat population in Montserrat, and certainly throughout the region.

Accurate data will provide the basis for educated environmental policy decisions. This is essential for food security and disease control.

To achieve our data collection driven goals the project will:

- 1. Produce acoustic data from 4 long-term monitoring stations for a minimum of 6 months;
- 2. Provide 3-4 ultrasonic bat recorders to the local community for short-term assessments at a minimum of 30 sites for 4-nights;
- 3. Analyse recordings to identify species that are not confirmed in acoustic libraries including the British Trust of Ornithology's Acoustic Pipeline (their bat program has generated a library for the UK Crown Dependents);
- 4. Provide recordings to assist machine-learning and expand the bat acoustic libraries;
- 5. Use mist nets to collaborate acoustic data and assess populations;
- 6. Conduct 1 community outreach event and 2-3 youth group programs;
- 7. Generate at least 1 informational poster to be distributed in Montserrat;
- 8. Develop working relationships with other UKOT and UKCD bat programs.

# Q7b. 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?

Bats provide multiple highly important ecosystem functions including:

- 1. Pollination;
- 2. Seed dispersal;
- 3. Control of agriculture impacting pests;
- 4. Removal of vector-borne disease carrying mosquitos;

They also provide an indication into the health and impacts to Montserrat's terrestrial ecosystem. This project will provide effective procedures and essential data to strengthen the national database for these ecosystem keystone species, a database which has not been updated since 2012. By comparing previous data with the extensive datasets to be collected in this project we will have insights into impacts caused by human activity and climate change. This information is essential for policy decisions to reduce impacts.

The programs conducted within this project will also expand international bat acoustic libraries through which Al data analysis can efficiently assess species distribution.

To maintain this program our organisation will use multiple fundraising and sustaining systems:

- -The citizen science program will be continued as "donation for use" program and promoted to tourists;
- -Program merchandise will be developed to generate funds;
- -An "adopt a bat" program will be created to generate program specific funds;
- -Support for follow-up bat research programs will be provided.

(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:

- ₺ 1036-Montserat Bats-Support document
- O 14:24:20
- pdf 3.59 MB

## **Section 5 - Project Outcome(s)**

# Q8. Project Outcome(s) (Guidance section 1.2)

Successful Darwin Plus Local projects must demonstrate measurable outcomes in <u>at least one of the</u> <u>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.

Please note: Any proposals including research or monitoring are required to demonstrate a clear link to tangible outcomes for conservation of biodiversity and the natural environment. Please explain how any new research will be applied to drive environmental outcomes on the ground.

<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;

Please tick which additional theme(s) of Darwin Plus your project contributes to (if relevant):

Checked 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

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.

This project will deliver on all four focus objectives of this program in the following ways: Biodiversity- This project will generate updated information on bat species that inhabit Montserrat, expanding knowledge on the nation's current biodiversity.

Environmental quality & climate change- The information collected in this project will provide essential data for comparison to previous assessments and assist in educated policy implementation on protection of essential

species.

Capability and capacity building- This project will engaged with persons from Montserrat departments of Agriculture and Environment, respectively, as well as local schools and youth groups while introducing new assessment techniques to Montserrat.

### Section 6 - Workplan

# Q9. Workplan (Guidance section 2.2)

<u>Please provide anticipated dates for the start and end of your planned project here</u>. Please use the <u>Darwin Plus Local Project Workplan</u> (available at: <a href="https://darwinplus.org.uk/how-to-apply/local-applications/">https://darwinplus.org.uk/how-to-apply/local-applications/</a>) 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). <a href="Please note that your project must start after 1 April 2025">Please note that your project must start after 1 April 2025</a> and be completed by 31 March 2026.

Start date:	End date:	Duration (e.g. 3 months):
01 April 2025	31 March 2026	12 months

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

- 4 1036-The Montserrat Bat Project- Enhanced Species Health and Impact Assessments-Timetable
- **ii** 25/11/2024
- O 14:40:21
- pdf 146.19 KB

#### Section 7 - Costs

# Q10. 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? (Please note that this is optional and there is no requirement to seek matched funding for Darwin Plus Local projects).

Yes

#### How much matched funding are you seeking and where from?

Island Solutions will provide in-kind funding to supplement operational costs. Our organisation will provide 52,572 GBP of in-kind funding applied to management expenses, labour costs, equipment access and data analysis.

Budget line	Explanation	Cost in GBP
Staff costs:	Management costs, operations labour and training program labour.	
Consultancy costs:	Consultant conducting a training program on mist netting, acoustic monitoring and data analysis. Costs cover travel and travel expenses. Monitoring and evaluation is also covered in this category.	
Overhead costs:	Island Solutions will cover all overhead costs.	
Travel & subsistence costs:	There is no travel and subsistence for the Montserrat team.	
Operating costs:	Operating costs covers equipment purchases (no capital items), field operations, training program general costs, and data analysis.	
Capital equipment:	No capital expenses.	
Other Costs	Other costs covers educational/promotional material, outreach events and shipping, taxes and extras.	
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 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):

Equipment purchases - multiple recorders and monitoring items - GBP

Training program operational costs - transportation, meals, tools, etc - Data analysis/international program interactions - GBP - 320 hrs

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

N/A

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

N/A

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

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

Educational/promotional materials - 1191 GBP Outreach events - 1191 GBP

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 = 0.793899 GBP	xe.com	24 November 2024

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory (Guidance section 2.1.1 and section 1.8.4 of the Finance Guidance).

In-territory spend is defined in Darwin Plus Local as including funding spent on:

- · Equipment purchased in-territory;
- Equipment that cannot be acquired in-territory and is therefore purchased abroad, but will remain and be used in-territory beyond the life of the proposed Darwin Plus Local project;
- Training or skills that cannot be acquired in-territory and are therefore purchased abroad, but will be used in-territory beyond the life of the proposed Darwin Plus Local project;
- Time for consultants or staff based in-territory.

#### In-territory spend does not include:

- Time for consultants or staff who are based abroad, even if they travel to the OT to undertake the work;
- · Shipping and import costs for equipment purchased abroad;
- Travel and subsistence costs where they incur spend outside the OT.

What % of the total will be spent in-territory?

If less than 80% of the total project spend is to be spent in-territory, please explain why.

No Response

#### **Section 8 - Local and National Priorities**

# Q11. 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 Sustainable Development Goals 3, 13, 15, 17- Good Health, Climate action, Life on Land and Sustainable

#### **Partnerships**

- -CITES the Convention on International Trade in Endangered Species of Wild Fauna and Flora
- -CMS Convention on the Conservation of Migratory Species of Wild Animals

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;

SGD 2040 associated sustainable development goals.

#### National:

- -Montserrat Environment Charter 2001 protection of Montserrat species and habitats;
- -Conservation and Environmental Management Act (CEMA) 2019 protection of Montserrat species and habitats.

#### Will the project...

Take place on Government owned land or water?

Yes

Involve biocontrol, invasive alien species control or eradication?

No

Require permit(s) from Government departments for completion of activities?

Yes

If you have answered yes to any of the questions above, 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.

- ① 19:18:09
- pdf 258.27 KB

# **Section 9 - Project Risks**

# Q12. 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.

For example, you should consider the ratio of vulnerable people or children to adults, ensuring there are appropriate background checks of all staff, and informing vulnerable groups and children of their right to safety and protection.

Risk	Mitigation
	1) A policy to report inappropriate behaviour will be implemented that has multiple persons to report to;
Safeguarding risks	2) Public outreach events and youth group interaction will offer a feedback option that will allow for anonymous complaints.
Diagogurituriaka	1) Equipment will be purchased unused to insure no contaminants;
Biosecurity risks	2) Equipment will be disinfected between short-term deployments.
	Risk assessments of monitoring sites will be conducted during day light and risk reduction will be implemented as needed;
	2) An emergency action plan will be created to address potential risks and injuries;
	3) A first aid kit and multiple communication options will be required for field operations;
Field operations	4) Operations will assess weather forecasts prior to operations and will not be conducted during adverse weather;
	5) Equipment used during operations will be properly maintained and personnel will be required to use appropriate safety equipment;
	6) Equipment will be removed prior to known extreme weather events to reduce damage risk.

#### Do you require more fields?

No

#### **Section 10 - Terms & Conditions**

# Q13. 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: <a href="https://darwinplus.org.uk/how-to-apply/local-applications/">https://darwinplus.org.uk/how-to-apply/local-applications/</a> 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, is addressing invasive alien species or includes activities requiring a permit, a Letter of support from OT Government.
- Project Workplan in the template provided for Darwin Plus Local (available at: <a href="https://darwinplus.org.uk/how-to-apply/local-applications/">https://darwinplus.org.uk/how-to-apply/local-applications/</a>).
- 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

Signature (please upload e- signature)	<ul> <li>♣ SIGNATURE</li> <li>★ 25/11/2024</li> <li>♦ 01:51:33</li> <li>♣ jpg 229.84 KB</li> </ul>
Date:	25 November 2024

### **Section 12 - Submission Checklist**

#### **Checklist for submission**

	Check
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
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
have read, and can meet, the current Terms and Conditions for this fund (found at: https://darwinplus.org.uk/apply/local-applications/) for this fund.	Checked
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
have uploaded my project workplan using the specific template provided (available at: https://darwinplus.org.uk/apply/local-applications/).	Checked
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 <u>Forms and Guidance Portal</u>.

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).