

Applicant: **Myers, Andrew**  
Organisation: **Island Solutions Inc.**  
Funding Sought: **£49,574.00**

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## **DPLR5\1089**

### **Using Micro-fragmentation Coral Restoration to Strengthen Impacted Reefs - Montserrat**

Coral reefs are extremely valuable but also highly impacted essential biodiversity ecosystems. They provide coastal protection, food sources, tourism revenue and valuable oxygen to the atmosphere. Corals are being heavily impacted by climate change, disease and human activities/development. This project will establish a land-based coral micro-fragmentation nursery that will grow essential and critically impacted corals at highly accelerated growth rates. These corals will be reintroduced to Montserrat's coral reefs to strengthen those marine habitats.

**PRIMARY APPLICANT DETAILS**

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

**CONTACT DETAILS**

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Title Ms  
Name Emily  
Surname Aston  
Organisation Island Solutions Inc.  
Tel [Redacted]  
Email (Work) [Redacted]  
Address [Redacted]

# DPLR5\1089

Using Micro-fragmentation Coral Restoration to Strengthen Impacted Reefs - Montserrat

## Section 1 - Project Title & Contact Details

### Q1. Project Title

Using Micro-fragmentation Coral Restoration to Strengthen Impacted Reefs - Montserrat

### 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	Island Solutions Inc.
Website (Work)	
Tel (Work)	
Email (Work)	
Address	

#### CONTACT DETAILS

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

#### GMS ORGANISATION

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

## 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

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

The systems and processes used in this reef restoration program can be used in other UKOTs that have coral reef systems. A goal of the project will be to develop up affordable and cost effective programs for limited funded countries and/or organisations.

## 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.**

<b>Project Leader name:</b> (Guidance section 3.1)	Andrew Myers
<b>Lead Organisation name:</b> (if applying as an organisation; Guidance section 3.1)	Island Solutions
<b>Lead Organisation Website (if applicable):</b>	www.islandsolutions.org
<b>Is the Lead Organisation based in a UKOT where the project is working?</b> (Guidance section 3.1)	<input checked="" type="radio"/> Yes
<b>List other partners involved and where are they based:</b>	No formal partners but the project will collaborate directly with the Government of Montserrat's Departments of Environment and Agriculture, respectively (part of MAHLE). Coral system design will be developed with innovator of the system Dr. David Vaughn and his nonprofit Plant a Million Corals.
<b>Summary of roles and responsibilities of each partner in the project:</b>	Island Solutions will manage all aspects of this project.
<b>I confirm that all listed partners are aware of this application and have indicated support:</b>	Unchecked

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

📎 [1089-Using Micro-fragmentation Coral Restoration to Strengthen Impacted Reefs - Montserrat-Cover letter-Island Solutions](#)

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## 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.**

Coral reefs are extremely valuable but also highly impacted essential biodiversity ecosystems. They provide coastal protection, food sources, tourism revenue and valuable oxygen to the atmosphere. Corals are being heavily impacted by climate change, disease and human activities/development. This project will establish a land-based coral micro-fragmentation nursery that will grow essential and critically impacted corals at highly accelerated growth rates. These corals will be reintroduced to Montserrat's coral reefs to strengthen those marine habitats.

### 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?**

The coral reef habitats throughout the Caribbean, and the world, continue to face impacts including:

- Stony Coral Tissue Loss disease, which has reduced hard coral coverage throughout the region and lowering some species to critical and local extinct levels - 2014-current;

- Extreme seawater temperatures - Seawater throughout the Caribbean have reached record high levels, decreasing live coral coverage. There is a currently active event in Montserrat, the second year in a row - 2023-current;

Human activity and development - Montserrat has lost reef habitats from infrastructure development and poor shipping practices.

The level of stress to the coral reef ecosystem requires assisted recovery and restoration to avoid additional deterioration. The function of a reef is not merely to provide a revenue source through tourism, but even more importantly protect coastlines, provide food sources and long-term food security, livelihoods, contribute to the health of the Earth's atmosphere and prevent further ecosystem services collapse. Through previous Darwin Initiative programs Island Solutions has implemented systems to reestablish corals through in-situ propagation and the development of reduction and prevention of coral disease processes. To further these restoration efforts this program will use a system called coral micro-fragmentation which increases growth rates and population of focus coral species in a control land-based wet lab nursery.

This project will:

1. Adapt our coral wet lab developed through the Darwin Plus Local program for coral disease treatment to a coral nursery system;
2. The nursery will grow 4 different IUCN listed critically endangered and/or locally heavily impacted corals;
3. The nursery will produce 50 new corals from each species;
4. 2 coral growing sessions will be conducted - July through November 2025 followed by December through March 2026.
5. Survival rate will be a minimum of 75% across all corals within the nursery;
6. A minimum of 5 persons will be trained in micro-fragment coral nursery techniques;
7. 1 community outreach event and 2 youth group educational programs will be conducted;
8. A minimum of 200 corals will be out planted during the funding period;
9. The project will produce at least 1 informational poster and have 8 social media posts (1 per active month of the coral nursery).
10. Results will be documented and shared with the Government of Montserrat, the Coral Conservation in the Oversea Territories (CCOT), JNCC, Plant a Million Corals and provided to interested individuals/organisations.

## **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?**

The leading goal of this project is to strengthen Montserrat's coral reefs through species restoration but the project design will have additional overall benefits. The benefits of this project will include:


1. Increased local capacity to address species loss using multiple reef restoration best practices - different species, stressors and impacts require different solutions;
2. Reestablishment of critically low population levels of certain corals. Currently in Montserrat, Pillar Coral (*Dendrogyra cylindrus*) only exists in known colonies in one location, SCTLD killed all other colonies. This program will include it as a focus species to reintroduce to additional reefs;
3. Establishment of a multi-function coral research lab to support additional research, national and regional challenges and goals.


Island Solutions will maintain this project by:


1. Engaging with local educational institutions (Bard College), international organisations (the Ushijima Lab and Plant a Million Corals), and other regional organisations;
2. We will also use "pay to participate" conservation model to bring in interested divers to pay to be part of the program;
3. We will develop fundraising aspects including donation drives and merchandise sales.

**(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:**

 [1089-Supporting documents](#)

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 pdf 426.53 KB

## Section 5 - Project Outcome(s)

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

**Successful Darwin Plus Local projects must demonstrate measurable outcomes in at least one of the themes of Darwin Plus with a clear focus on biodiversity and the natural environment, 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.**

**Please confirm that your project has a clear focus on biodiversity and the natural environment.**

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**

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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.**

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

This project will deliver on all focus objectives:

Biodiversity: Implementing systems designed to reduce species loss and habitat degradation. Assisted restoration of critically endangered corals will improve survival and recovery potential.

Climate Change: Corals impacted by increasing temperatures will be used for this restoration program and pairing survivor colonies the potential for thermal adaptation is increased.

Environmental quality: Increased live coral coverage provided the mechanisms for a balanced marine ecosystem and maintains coastal protections..

Capability and capacity building: This project is maintains activity of the GoM team while increasing capability to support projects that protect, restore and preserve Montserrat's reefs.

## Section 6 - Workplan

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### Q9. 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: <https://darwinplus.org.uk/how-to-apply/local-applications/>) 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 2025 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**

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 [1089-Using Micro-fragmentation Coral Restoration-MNI-Timeline](#)  
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## Section 7 - Costs

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### 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 [REDACTED] in-kind funding applied to management expenses, labour costs, lowered equipment rental rates and data processing.

Budget line	Explanation	Cost in GBP
<b>Staff costs:</b>	Management costs, field work dive labour, and nursery maintenance teams.	[REDACTED]
<b>Consultancy costs:</b>	Consultant conducting a training program micro-fragmenting and system processes. Costs cover travel and travel expenses. Monitoring and evaluation is also covered in this category.	[REDACTED]
<b>Overhead costs:</b>	Island Solutions will cover all overhead costs.	£0.00
<b>Travel &amp; subsistence costs:</b>	Coral micro-fragmentation facility visit to 2 project leads - flights, accommodation and travel costs.	[REDACTED]
<b>Operating costs:</b>	Operating costs covers equipment purchases (no capital items), field operations - boat, fuel, equipment, daily ops costs, training program general costs, and coral lab utilities and maintenance needs.	[REDACTED]
<b>Capital equipment:</b>	No capital expenses.	£0.00
<b>Other Costs</b>	Other costs covers educational/promotional material, outreach events and shipping, taxes and extras.	[REDACTED]
<b>Total:</b>		[REDACTED]

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 management & operations labour - [REDACTED]  
Emily Aston - project management & operations labour - [REDACTED]  
Shane Caesar - operations lead - [REDACTED]  
Owen Layne - nursery management - [REDACTED]

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

N/A

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

Flights for 2 to Florida - [REDACTED]

Travel expenses and hotel for 2 for 5 days - [REDACTED]

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

Equipment purchases - [REDACTED]

Diving field operations - Boat, fuel, equipment, general ops costs, and nursery operational expenses - [REDACTED]

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

N/A

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

Monitoring and evaluation, travel expenses for trainer, day rate for trainer - [REDACTED]

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

Educational/promotional materials - [REDACTED] Outreach events - [REDACTED]

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**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

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**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? [REDACTED]

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**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

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### 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 SDP Goals 13,14, and 17- Climate action, Life below water and Global Partnerships.

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?**

☒ 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.**

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## Section 9 - Project Risks

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### 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
Field operations - Diving risks	<p>To reduce risk the following will be done:</p> <ol style="list-style-type: none"><li>1) All divers must be assessed for competence, provide proof of certification,</li><li>2) All divers must have dive insurance,</li><li>3) Island Solutions has an Emergency Action Plan for dive operations. This plan will be discussed.</li><li>4). All participants must agree to abide by safety procedures,</li><li>5). A minimum of 2 professional level divers with first aid train will be on each dive.</li><li>6) Dive safety equipment will be provided during every dive operation.</li><li>7) A policy will allow any diver to stop operations if the conditions are deemed unsafe</li></ol>
Weather and extreme weather impacts	<ol style="list-style-type: none"><li>1) The project will avoid field work during peak hurricane season.</li><li>2) Weather conditions will be assessed prior to in field operations.</li><li>3) Systems have been implemented to protect the testing facility from weather damage and an extreme event plan has been designed to secure the equipment if required.</li><li>4) Vessel will have regular maintenance and carry required safety equipment for weather impacts during operations.</li></ol>

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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.
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Do you require more fields?

☒ No

## Section 10 - Terms & Conditions

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### 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: <https://darwinplus.org.uk/how-to-apply/local-applications/> 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: <https://darwinplus.org.uk/how-to-apply/local-applications/>).
- 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

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### 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)	 <u>SIGNATURE</u>  25/11/2024  19:07:32  jpg 225.34 KB
Date:	25 November 2024

## Section 12 - Submission Checklist

### Checklist for submission

	Check
<b>I have read the Guidance documents, including the “Darwin Plus Local Guidance” and the “Darwin Plus Local Finance Guidance”.</b>	Checked
<b>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.</b>	Checked
<b>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).</b>	Checked
<b>I have read, and can meet, the current Terms and Conditions for this fund (found at: <a href="https://darwinplus.org.uk/apply/local-applications/">https://darwinplus.org.uk/apply/local-applications/</a>) for this fund.</b>	Checked
<b>I have provided actual start and end dates for my project that fit this Round.</b>	Checked
<b>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.</b>	Checked
<b>I have uploaded my project workplan using the specific template provided (available at: <a href="https://darwinplus.org.uk/apply/local-applications/">https://darwinplus.org.uk/apply/local-applications/</a>).</b>	Checked
<b>I have uploaded all supplementary documents if I have any.</b>	Checked
<b>(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.</b>	Checked
<b>The application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).</b>	Checked

<b>I have checked the Darwin Plus website immediately prior to submission to ensure there are no late updates.</b>	Checked
<b>I have read and understood the Privacy Notice on the Darwin Plus website.</b>	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).**