DPLR4\1078

Managing Invasive fire ant populations on Montserrat.

UK Overseas Territories are currently battling the infestation of fire ants causing disruption on the activities of the community, livelihoods and threatening biodiversity. Farmers and school children are facing the consequences of the painful sting of the fire ant affecting their daily activities and performance. By learning how to manage the fire ants in the UKOT, it will contribute to mitigating its negative impact in people's lives, protecting the island's biodiversity from further colonization and will prevent economic losses .

DPLR4\1078

Managing Invasive fire ant populations on Montserrat.

Section 1 - Project Title & Contact Details

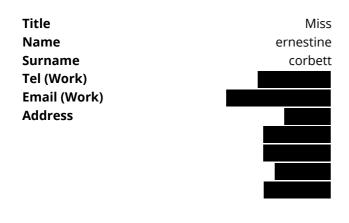
Q1. Project Title

Managing Invasive fire ant populations on Montserrat.

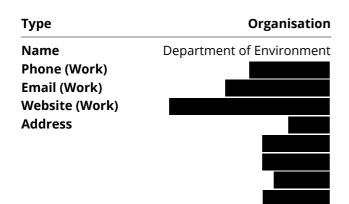
Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

Organisation

PRIMARY APPLICANT DETAILS



GMS ORGANISATION



Section 2 - Overseas Territory(ies)

Q3. Please state whether the same (or similar) project proposal has previously been submitted to the UK Government for funding, including through Darwin Plus Local, Defra's other Darwin Plus grant schemes or other UK Government funding mechanisms. Failure to do so may result in the application being ineligible.

• Yes

Please provide details including the grant scheme applied for, round number, project and/or application number, whether your submission was successful and in case this is a resubmission, how you have addressed the feedback in your cover letter.

In 2009 a project proposal to control the Red Fire Ant population was submitted and was successful. Another project to control the fire ants was submitted in 2023. However this was unsuccessful.

Q4. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a nonpermanent 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

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.

Project Leader name (Guidance section 3.1):	Barry Mahabir
Lead Organisation name (if applying as an organisation; Guidance section 3.1):	Department of Environment
Lead Organisation Website (if applicable):	Government of Montserrat

Is the Lead Organisation based in a UKOT where the project is working (Guidance section 3.1)?	⊙ Yes
List other partners involved and where are they based:	Fera Science Ltd, UK
Summary of roles and responsibilities of each partner in the project:	Fera Science Ltd. UK will provide ant identification, treatment design, training, data analysis and report writing
l 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).

- 盘 Cover Letter Eradicating Invasive Spp
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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.

UK Overseas Territories are currently battling the infestation of fire ants causing disruption on the activities of the community, livelihoods and threatening biodiversity. Farmers and school children are facing the consequences of the painful sting of the fire ant affecting their daily activities and performance. By learning how to manage the fire ants in the UKOT, it will contribute to mitigating its negative impact in people's lives, protecting the island's biodiversity from further colonization and will prevent economic losses .

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?

Solenopsis invicta (Red Imported Fire Ant) is one of the fire ants that is aggressive, destructive, and highly invasive worldwide. It is challenging to eradicate due to its unique biology and ecology. The ant was first introduced in USA in the 1930s and continued to spread to many parts of the world including Caribbean with Montserrat being one of the countries with a severe infestation.

There is no specific date for when S. invicta was introduced in Montserrat, but it is believed to have been introduced through the importation of aggregates from overseas during the construction of the new airport which was completed in 2005. Subsequently, in 2007 the ant was identified after members of the public reported painful bites and stinging burning sensation. The ant continues to spread in open and disturbed areas especially in farms, schools, beaches, playground, residential and business areas causing major disruption in daily activities and operation. Fire ant can harm livestock and have been found to damage the production and yield of commercial food crops. Moreover, fire ant can reduce the biodiversity of native flora and fauna, including other ant species.

The proposed project aims to achieve the following overall objectives.

1. To conduct feasibility and viability study for the management of the fire ant in priority areas using the most compatible, effective, and ecologically sound suppression methods (chemical, cultural, biological) and engage in ecological restoration where needed.

2. To assess if the invasive species have caused any changes to the community structure of local ant diversity and to other invertebrates by collecting samples within and surrounding the infested area. Data gathered will be compared to previous records to determine if some species were already or will likely to be displaced by the invasive species as a result of aggression and competition. Species to be collected will also determine if there are other invasive ant species that may also require management or control.

3. To develop and strengthen regulatory policies on biosecurity actions which are essential in keeping the population levels low and mitigate its negative impact on the ecosystem, public health, infrastructure, and the economy.

4. To increase the awareness and cooperation of the whole community to reduce the negative impact and spread of the fire ant. This will be done through workshops and training activities.

To measure the effectiveness of managing the fire ant, the population level in priority areas should be low or have been eliminated as indicated by reduced number of active mounds. People can then resume with their daily activities with reduced reports of painful stings/bites and farmers productivity will not be as impacted. Members of the public are aware on how to stop further spread of the fire ant and be able identify, monitor, and control immediately and using the most compatible and effective suppression method. Pathways of further introduction and spread are being monitored as part of the bio-security regulatory procedures.

Fire ants prefer and thrive very well in open and disturbed areas due to lack of habitat heterogeneity which is essential for their effective colonization communication through pheromones. To address this issue, open and disturbed areas will be subject to reforestation or ecological restoration to provide more habitats for native species resulting in increasing biodiversity and higher genetic composition. The presence of higher biodiversity after restoring open areas breaks the dominance of fire ants with species with stronger pheromones that the fire ant recognized as a threat to their colonization.

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?

Managing fire ants in Montserrat is an important initiative in mitigating its negative impact on the environment, economy, public health and biodiversity. It will determine the most compatible, effective, and ecologically sound suppression method in reducing the population level of the fire ant. Specifically, learning how to reduce their population and infestation level will increase the production of agricultural crops on which most families in Montserrat are solely relying to and to reduce its threats to the astonishing array of biodiversity in Montserrat. The proposed project offers various suppression methods in which the members of the public can choose based on their capacity. Ultimately, the importance of rehabilitating open and disturbed areas is the most economical and sustainable way of reducing the further colonization of fire ants.

(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:

No Response

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):

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.

The proposed project will generate ant and other invertebrate diversity data from various habitats in Montserrat. Each ant species collected will be assigned to different functional groups and nesting behaviour

which are important elements in understanding ecosystem functioning. Moreover, the data will provide information if they are any native species or vulnerable species that will likely to be affected by the invasive ant. The proposed project will be instrumental for a wider management of fire ants in Caribbean Territories and will address any taxonomic impediment on ant within the region.

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</u> <u>Plus Local Project Workplan</u> (available at: <u>https://darwinplus.org.uk/apply/local-applications/</u>) 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). <u>Please note that your project must start after 1 October 2024 and be completed by 31 March 2025</u>.

Start date:	End date:	Duration (e.g. 3 months):			
01 October 2024	31 March 2025	6 months			

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

 <u>A</u> <u>A</u> <u>DPlus Local Implementation Timetable Te</u> <u>mplate FINAL----</u>
 <u>a</u> 24/06/2024

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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?

No

Budget line	Explanation	Cost in GBP
Staff costs:	None. Staff will not be paid as work done will be under their usual workday activities	£0.00

Travel - Accommodation - GBP GBP	£
Training and awareness material	£
stipend for community workers to travel to baiting areas	£
ink for printing Stationery room rental 4 community workers - 5 days per week @ GBP per day for 16 weeks	£
6 bait chemical granular spreader Ant Bait - 48 bags Extinguish Plus (25lb bags)	£
Contingency	£
	50,000.00
	Accommodation - GBP other expenses - GBP Training and awareness material stipend for community workers to travel to baiting areas ink for printing Stationery room rental 4 community workers - 5 days per week @ GBP per day for 16 weeks 6 bait chemical granular spreader Ant Bait - 48 bags Extinguish Plus (25lb bags)

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)

No Response

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

Training and awareness material, signage

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

stipend for community workers to travel to baiting areas

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

ink for printing Stationery room rental 4 community workers - 5 days per week @ GBP per day for 16 weeks

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

6 bait chemical granular spreader Ant Bait - 48 bags Extinguish Plus (25lb bags)

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

No Response

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

No Response

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:		
Eastern Currency	3.1	BOM	24 June 2024		

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?

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

It is part of the Department of the Environment Annual work program which includes the control of invasive species and educational awareness and out reach on environmental matters

It aligns with the Government of Montserrat's Agricultural strategy to control pest and diseases that are negatively impacting food security

It supports one of the key strategies of the Department of Environment, that is to conserve biological diverseness of the island through the implementation of activities including invasive species control

The Strategic Development 3 which speaks to disaster mitigation and Environmental management.

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.
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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.

Risk	Mitigation
	Source bait very early in the project's implementation .
Cost and availability of bait	
	Purchase bait in bulk and have it securely stored at MALHE HQ
No Response	No Response
No Response	No Response

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: <u>Darwin Plus website</u> 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: https://darwinplus.org.uk/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

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:	ernestine corbett		
Position in the organisation: (if applicable)	Director of Environment		
Signature (please upload e- signature)	 ▲ E signature - ■ 24/06/2024 ④ 22:22:20 △ pdf 89.38 KB 		

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
l 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 (found at: https://darwinplus.org.uk/apply/local-applications/) 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 (available at: https://darwinplus.org.uk/apply/local-applications/).	Checked
l have uploaded all supplementary documents if l 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
l 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). Project Title:

Darwin Plus Local

Provide a **Project Implementation Timetable** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Round 4 is for a **maximum of 6 months** with activities starting from 1 October 2024. All activities must be completed by 31 March 2025.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

		No. of	UK Financial Year 2024/25					
Activity #	Activity # Description (max 25 words)		Calendar Year 2024		024	Calendar Year 202)25
			Oct	Nov	Dec	Jan	Feb	Mar
	Purchase of Fire ant bait and equipment for baiting.	1 month						
	Recruitment of Community workers	1 week						
	Training of Community Workers	1 week						
	Baiting Ant colonies	5 months						
	Engagement of consultant	2 weeks						
	Awareness activities	For the duration of the project 3 radio programs,						
		student activities such as quizzes and artwork , leaflet						

		No. of	UK Financial Year 2024/25					
Activity # Description (max 25 words)		months	Calendar Year 2024		Calendar Year 2025)25	
			Oct	Nov	Dec	Jan	Feb	Mar
		with guidance on baiting etc 2 Communit y meetings to discuss impacts and control of fire ants						