Applicant: **HUNTLEY THOMAS, RONETA**
Organisation: **DEPARTMENT OF AGRICULTURE**
Funding Sought: **£49,854.00**

DPLR5\1070

Ant diversity and managing invasive ants in Turks and Caicos

Understanding of the species diversity, species composition and functional groups of ants in Turks and Caicos Islands and the threat of invasive fire ants in changing the community structure of ants and other invertebrates assemblages. Implementation of suppression methods against the population of invasive fire ants and the strengthening biosecurity protocols to increase the protection and conservation of local biosecurity.

PRIMARY APPLICANT DETAILS

Title	Mrs
Name	RONETA
Surname	HUNTLEY THOMAS
Organisation	DEPARTMENT OF AGRICULTURE
Tel (Mobile)	[redacted]
Email (Work)	
Address	

DPLR5\1070

Ant diversity and managing invasive ants in Turks and Caicos

Section 1 - Project Title & Contact Details

Q1. Project Title

Ant diversity and managing invasive ants in Turks and Caicos

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	Mrs
Name	RONETA
Surname	HUNTLEY THOMAS
Organisation	DEPARTMENT OF AGRICULTURE
Tel (Mobile)	[redacted]
Email (Work)	
Address	

GMS ORGANISATION

Type	**Organisation**
Name	DEPARTMENT OF AGRICULTURE
Phone (Work)	[redacted]
Email	
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).

⦿ 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.

The proposed project will be patterned from DPLR4\1078 Managing Invasive Fire Ant Populations on Montserrat as a response to regional approach in mitigating the negative impact of invasive ants on the environment, economy and public health in Caribbean territories. Moreover, to exchange experiences, data and expertise for a collaborative regional approach in strengthening biosecurity procedures to prevent further spread of the invasive ant species. The proposed project will be carried through the assistance of a Darwin Fellow.

The Montserrat project was successful in their Application for a Darwin Grant.

Q4. Overseas Territory (Guidance section 1.3):

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

☑ Turks and Caicos Islands (TCI)

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

Nil

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 proposed project will contribute to reducing the population and spread of invasive fire ant in the Caribbean. Results of the management procedures will be important on how the native flora and fauna will be protected and reduced the disruption of community-based activities in UKOTs. Results of the proposed project will be shared to other UKOTs to help them manage the population of the invasive species or to help them prepare for possible introduction.

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)	Roneta Huntley Thomas
Lead Organisation name: (if applying as an organisation; Guidance section 3.1)	Department of Agriculture
Lead Organisation Website (if applicable):	*No Response*
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:	Department of Agriculture, Ministry of Tourism, Environment, Culture and Heritage, Agriculture, Religious Affairs and Gaming, Turks and Caicos Environmental Health Department, Ministry of Health and Human Services Fera Science Ltd, York, UK
Summary of roles and responsibilities of each partner in the project:	Department of Agriculture, Ministry of Tourism, Environment, Fisheries and Marine Affairs, Culture and Heritage, Agriculture, Religious Affairs and Gaming. Officers from the Department will be invited to collect samples of ants in the field and participate in capacity building training on identifying ants. Environmental Health Department, Ministry of Health and Human Services will oversee local vector control initiatives, focusing on invasive ant species management and biosecurity improvements. Responsibilities include assist in coordinating field assessments, contributing to the development of management strategies, and support the implementation of biosecurity measures in TCI. Additionally, support capacity-building efforts for local biosecurity staff, ensuring that the project's long-term sustainability is embedded within national health and environmental frameworks. FERA SCIENCE LTD. – Darwin Fellow Noel Tawatao of Fera Science Ltd. will provide training on ant sampling and identification, confirm presence of any invasive ant species, facilitate the development of management plans, data analysis, assisting in preparing reports and potential manuscripts for publication.
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).

Cover Letter- Darwin Plus Local 5_signed
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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.

Understanding of the species diversity, species composition and functional groups of ants in Turks and Caicos Islands and the threat of invasive fire ants in changing the community structure of ants and other invertebrates assemblages. Implementation of suppression methods against the population of invasive fire ants and the strengthening biosecurity protocols to increase the protection and conservation of local biosecurity.

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 Turks and Caicos is a small and isolated archipelago in the Caribbean and home to many types of native and unique flora and fauna. The high tourism industry and rising development market on the Island are causing a potential negative impact on the environment resulting to some of the species being endangered and threatened especially with the introduction of invasive species. Among the threatened species on the Island are the smaller reptiles, migratory birds and turtles that rely on nesting on the ground or beaches of the Turks and Caicos Islands. However, with the presence of invasive ant species such as the Red Imported Fire Ant, it will have a significant impact on their population along with the ant assemblages that are native to Neotropical region. To address these biodiversity and conservation issues, the proposed project aims to achieve the following objectives:

1. To collect ant samples in various sites of the island and provide updated species lists. The data aims to provide information on the mechanism of ant colonization and community changes, and ecological functioning as threatened by the presence of invasive fire ant.
2. To implement management of the fire ant procedure in priority areas using the most compatible, effective, and ecologically sound suppression methods (chemical, cultural, biological) patterned from DPLR4\1078.
3. To train staff and individuals in ant identification as a tool in strengthening biosecurity procedures and prevention against further introduction of invasive ant species.
4. To increase the awareness and encourage participation of the whole community on how they can contribute to protecting and conserving the local biodiversity through workshops and training capacity.

By the end of the project, different species of ants and their functional groups will be identified and used in support in addressing issues on protecting and conserving biodiversity, improving biosecurity procedure against further introduction, and spread of invasive species, and habitat restoration.

A management plan will be implemented for suppressing the population level of invasive species such as fire ant by adapting the procedures and experiences of the Darwin Plus Local project in Montserrat (DPLR4\1078). Through this project it will seek to mitigate the environmental and health threats posed by Red Imported Fire Ant, which is a known public health hazard in TCI.

Biosecurity staff will be confident in identifying ants and able to determine pathways of further introduction and spread, which are also being monitored as part of the biosecurity regulatory procedures. It will enhance local biosecurity and vector control through field assessments and training. Members of the public will have significant contribution for stopping the further spread of invasive ant species and will be able to control immediately using the most compatible and effective suppression methods.

Success will be measured through improved biodiversity outcomes, a reduction in invasive ant populations, and enhanced local capacity to manage invasive species in the long term. The project will also provide essential data to inform broader Caribbean biosecurity efforts.

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 ability to identify ants, improved biosecurity procedures and managing invasive fire ant species will be the significant long-term benefits of the proposed project. The skills gained and programmes learned are essential to improve the quality of biodiversity conservation efforts, and further enforcement of protection of the unique flora and fauna of the island and can sustained following the funding support because of empowering both members of the public and the government.

The knowledge gained through this project remains institutionalized, and that biosecurity measures are strengthened across government agencies. The skills developed will continue to be applied to protect TCI's unique biodiversity and public health, well beyond the project's timeline.

(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 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):

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.

This proposal will provide ant species diversity, species composition and functional groups from various habitats on TCI which are important elements in understanding the ecosystem functioning of small islands. It will produce expertise addressing the taxonomic impediment on ants not just within TCI but also within the Caribbean. Furthermore, through the implementation of the procedures in managing fire ant, it will protect the local biodiversity and will increase the competence of biosecurity staff in mitigating the further introduction of invasive species.

Section 6 - Workplan

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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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).

⦿ No

Budget line	Explanation	Cost in GBP
Staff costs:	[redacted]	
Consultancy costs:		
Overhead costs:		
Travel & subsistence costs:		
Operating costs:		
Capital equipment:		
Other Costs		
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)

Four staff from Department of Agriculture and the Environmental Health Department will be assigned to the proposed project to conduct sample collection, identification, application of fire ant treatment and monitoring of treatment progress in various places on the Island.

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

NA

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

To cover international and domestic travel cost, accommodation, and food allowances for consultant from Fera Science Ltd. UK and local staff from Department of Agriculture, Department of Environmental Health.

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

Cost of fuel and local transportation in various places conducting fieldwork.

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

Procurement of chemicals against fire ants, stereo microscopes for identification of invertebrate samples, collecting tubes/containers, PPE, dissecting kits, ethanol, bait spreaders, petri dishes, sample bags and specimen curation kits.

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

Consultant time from Fera Science to conduct ant sampling, identification, training on fire ant management

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

NA

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:
NA	NA	NA	*No Response*

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?	77

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

About 23% of the proposed budget will be spent through the external consultancy and international travel costs.

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.

The proposed project aligns with Turks and Caicos Islands' national priorities by addressing the pressing need for invasive species management and biosecurity. Invasive ants, such as the Red Imported Fire Ant, threaten local biodiversity, public health, and the economy, particularly in sectors like tourism that rely on a healthy environment. The proposed project goals outlined in the National Biodiversity Strategy and Action Plan (NBSAP) to protect native species and ecosystems from invasive threats.
By building local capacity for invasive species identification and control, the project enhances our ability to mitigate health and environmental risks associated with invasive ants. This initiative supports the national objective of sustainable ecosystem management and aligns with Sustainable Development Goals (SDGs) on biodiversity and health. In addition, it strengthens local biosecurity measures, ensuring lasting impacts through training and public awareness activities that build community resilience and support proactive biosecurity efforts across TCI.

Will the project...

Take place on Government owned land or water?

⦿ Yes

Involve biocontrol, invasive alien species control or eradication?

⦿ Yes

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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Letter of Support-Roneta Huntley Thomas_signed
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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.**

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
Safeguarding risks	Prior to the deployment of chemical control, there will be media campaign and awareness to ensure that members of the public are well-informed. Signage of on-going treatment will be put up as safety measures.
Possible delay in the delivery of fire ant baits, microscopes and other items that will be coming from abroad.	To purchase large quantities of fire ant baits and advance processing of purchase request to be paid upon receiving the fund transfer.
Inclement weather that may affect fieldwork activities, efficacy of treatments and accessibility of sites.	In the event of bad weather, staff will sort, identify and curate collected samples at the laboratory. Media materials, online training/consultation and data analysis can be done.

Do you require more fields?

◉ Yes

Risk	Mitigation
Lack of public understanding or cooperation in biosecurity measures Mitigation	Public outreach campaign to educate communities on the importance of controlling invasive ant species for both environmental and public health reasons. The campaign will include workshops and informational sessions targeting schools, landscapers, pesticide application companies and community groups, to build local ownership and cooperation.
Insufficient local capacity to sustain biosecurity measures after the project ends Mitigation	Developing training programs for the relevant agencies. This will ensure that staff are equipped to continue monitoring and controlling invasive species independently after the project is completed. Regular follow-up sessions will be scheduled to review progress and refresh training as necessary.
NA	NA
NA	NA
NA	NA

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: 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

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:	Roneta Huntley Thomas
Position in the organisation: (if applicable)	Chief Plant Protection Officer

Signature (please upload e-signature)	Penned signature 24/11/2024 01:58:39 pdf 682.13 KB Signature 24/11/2024 01:52:25 pdf 137.61 KB
Date:	23 November 2024

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 (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
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!