





Darwin Plus Local Final Report Template

We recommend preparing your project's final report in this Word template and collecting all of the supporting files/evidence that you will need to submit with this in advance. You may then copy and paste your answers into the online form, and upload the supporting files, images, and evidence, and submit at: https://bcfs.flexigrant.com/. Please note reports will only be accepted via the Flexi-Grant Portal. Any reports received on the Word form via email will be rejected.

We recommend that you also refer to your original project application form while completing this report, to remind you of your original goals as stated in your original project application.

It is important that every project completes the 'essential' sections (1, 2, 3 and 7). While the remaining sections (4 to 6) are optional, it is highly encouraged and useful for you to complete all sections (if you have appropriate/relevant contributions to them) because it helps demonstrate to funders how your project has contributed to the portfolio. Essential sections are shown in blue text. Optional sections are shown in black text.

If you have any questions at all, please contact us at: BCF-Reports@niras.com including your project ref in the subject line.

The report submission deadline is no later than **one** month after the agreed end date of your project. In addition, please be aware that the approval of the final payment/claim for your project is dependent on the completion and acceptance of this final report.

Section 1: Darwin Plus Local Project Information

Project reference number (as provided in your award letter)	DPL00113
Project title	Managing Invasive fire ant population on Montserrat.
Overseas Territory(ies)	Montserrat
Lead organisation or individual	Department of Environment\MALHE
Partner organisation(s)	Fera Science Ltd.
Value of Darwin Plus Local grant award	49,000 .00 GBP
Project start date	01 October 2024
Project end date	31 MARCH 2025
Project leader name	Miss Ernestine Corbett
Project website/Twitter/blog etc.	MALHE Website

Report author(s) and date	Ms Ernestine Corbett 05 [™] May 2025				
Project Summary	This is automatically inputted from the project application form – no need to complete here				

Section 2: Project Outcomes

Successful Darwin Plus Local projects must demonstrate measurable outcome in <u>at least one of the themes</u> of Darwin Plus, either by the end of the project or soon after through a credible plan.

Please refer to your original application form/proposal. Please tick which theme(s) of Darwin Plus that you originally indicated your project underpins:

☑ Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;

□ Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities.

☑ 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.

This section enables you to report and reflect on how well your project met its original objective(s).

Please reflect on your project and how well you think it has achieved its original objective. Have there been other significant achievements or impacts of your project?

On a scale of 1 (high) to 5 (low), how successful do you think your project has been? Please select which rating you would give your project using the scale below, where 1 means the project outcome was substantially exceeded and 5 means the project outcome substantially did not meet expectation. Below, you will be asked to give your reasons for the rating and describe what has changed as a result of your project.

1	Outcome substantially exceeded		
2 Outcome moderately exceeded			
3 Outcome met expectation			
4 Outcome moderately did not meet expectation			
5	Outcome substantially did not meet expectation		

Project Outcomes and justification for rating above

Please explain why you have given the rating above. In your answer, you may want to consider:

- i) What has changed as a result of the project? Where possible, concentrate on the actual changes achieved by your project rather than listing a series of activities undertaken. Activity does not necessarily mean a change has occurred.
- ii) Has your project achieved its original objective(s) and outcomes? If you stated success indicators in your original application, have these been met and to what extent have these been met?
- iii) Did you receive any recommended improvements in your feedback letter? If so, please outline how you considered these in your project implementation.

*Below you will be asked to submit appropriate evidence to support your comments.

The fire ant infestation increased dramatically since the last treatment conducted in 2018. With the implementation of this project, over 2,367 fire ant mounds were treated in various places in Montserrat including mounds at the border of the exclusion zone. Due to the high population of fire ant, mounds were treated using pesticides and an Insect Growth Regulators as the most urgent suppression method. Moreover, non-chemical treatment such as hot/boiling water were also used and recommended for smaller mounds which were mainly found in residential areas. It was determined that a combination of different suppression methods in the current infestation condition and the cooperation of the community is very important. Three fire ant baiting teams composed of community workers were deployed throughout the island to treat mounds present in the area of government institutions, public spaces, health facilities, schools and community centres.

Ants and other soil invertebrates were collected in seven forests, disturbed areas and in urban/settlement areas. A total of 853 ant samples yielding 3,552 individuals and 56 species were collected and identified. There were 14 species of ants that are non-native on the island of which four species are known to be invasive. Furthermore, 35 ant species were native to the region while seven-ant species has unknown distribution because they were identified at morphospecies level due to lack of keys and did not match to any genomic databases following molecular sequencing. Data is now being analysed and a manuscript will be drafted for potential publication. This is the most comprehensive ant collection data in Montserrat and perhaps in Caribbean. We hope to provide substantial ecological evidence on the potential negative impact of fire ant on the community structure of ants and other invertebrates along with the potential changes on the ecosystem functioning of sampled areas and the island of Montserrat. We hope to present the results of the study relevant conference.

A mini workshop on the importance of managing the fire ants was conducted on 14 March 2025. The workshop was participated in by different government representatives such from the Tourism Sectors, Forestry, Agriculture and the Environment and members of the public to discuss biosecurity regulatory policies that will prevent further spread of fire ants not just within Montserrat but to other countries. Information materials such as brochures and posters were also distributed since the start of the project to increase the awareness in the community and how they can contribute to reducing the spread and supress the population of fire ants.

Community workers and staff of MAHLE were also trained on how to identify fire ant and mound recognition for an effective monitoring and implementation of management activities.

More information on the above rating can be found in this project website.

Supporting evidence – file(s)

Please upload supporting evidence here. You may also provide a link to download supporting evidence in the following question.

For example, evidence might include photos of the project site before and after, results of surveys, maps, images, new management plans or other tools or outputs created through the project, or even a video documenting the impact the project has had on the environment and community.

Your answers and this evidence will be reviewed by an external reviewer.

Files: Please upload evidence to support your answer above. You may upload up to 10 files here, maximum 20MB each.

Links: Please provide links to access or download supporting evidence here. For example, evidence might include photos of the project site before and after, results of surveys, maps, images, new management plans or other tools or outputs created through the project, or even a video documenting the impact the project has had on the environment and community. Please provide hyperlinks here, along with a description and credit.

A <u>website on the project</u> was created showing the different activities. This website is being updated on regular basis and even beyond the project.

Project challenges

Did the project encounter problems, either anticipated or unexpected? If so, what actions did you take to resolve these problems?

The release of funds from the Government of Montserrat has caused a delay in the implementation of the project activities despite several follow up messages. The delay was due to the Political election in October 2024.

We have identified that reinfestation of fire ant in treated areas is highly likely to occur because half of the island is not accessible to conduct treatment. Ant sampling collection at the border of the exclusion zone revealed a high-density population of fire ant species. As a result, the border was identified as a priority area to be treated, and an ecological restoration of the area should be considered to improve the habitat quality that will discourage the further establishment of fire ant colonies reinvading the treated areas.

Lessons Learned

Please describe any key lessons learned (administrative, management, technical, monitoring and communications) through the project, considering:

- i) What worked well and why?
- ii) What did not work well and why?
- iii) If you had to do it again, what would you do differently?
- iv) What recommendations would you make to others doing similar projects?

The project has contributed significantly to reducing the number of active mounds particularly in priority areas such as in school and public spaces. Community workers and staff were trained in various aspects of managing the fire ant such as ant identification, fire ant mound recognition, sampling techniques, monitoring activities and preventing the spread. By these experiences, people involved in the project abled to learn the best practices in managing or dealing invasive species including challenges in implementing activities.

The purchase of additional pesticide was delayed, and this contributed to the new formation of mounds in some treated areas. However, this situation is inevitable as an island where the delivery of supplies is not consistent. Should there be a similar project in the future, funds to implement activities should always be available when needed. There should be enough supply of pesticides so the treatment activities will be continuous and consistent. We will increase the number of community workers as a channel in increasing awareness of the members of the public regarding the negative impact of fire ants and how to deal with it. Moreover, having a team to implement management activities, monitor progress and ensuring the high biosecurity of the island is very important.

Lastly, managing fire ant is a long-term commitment that also requires a corresponding long-term support both financially and socially and must be continued beyond the project.

Section 3: Project Finance

This section seeks summary information about the finances of your project. If all receipts have not yet been received, please provide indicative figures and clearly mark them as draft. The final claim form will be taken as the final accounting for funds.

Project expenditure

Complete the expenditure table below, providing a breakdown of salaries, capital items and explanations of 'Other' costs. If the budget was changed since the project started, please clarify the main differences. **Explain in full** any significant variation in expenditure where this is +/- 10% of the approved budget lines.

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25Total actual Darwin Plus Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others				
TOTAL	49900	49900		

Please provide a short narrative summary on project finances;

Your comments should describe:

- i) Any difference between the planned and actual expenses and reason(s) for this.
- ii) If co-financing was secured for the project, what was this spent on.

The greatest challenges with implementing this project are the fluctuation in the exchange rate against the GBP. Over 80% of the fire ant bait and supplies for this project had to be imported and shipped to Montserrat, significantly increasing the local suppliers cost for items. Fera Science Ltd. UK consultancy fees were much higher than initially budgeted due to the delayed release of funds of which travel cost such as airfare has changed.

Section 4: Contribution of project to Darwin Plus Programme Objectives

While the sections 4-6 are optional, it is very useful to complete it if you, where you can, because it helps demonstrate to funders how your project has contributed to the portfolio.

Please select up to **one** indicator that applies within **each group/indicator list (A, B, C, D)** and report your results for that indicator in the text box underneath. If you do not have relevant results to report for any of the indicators in a particular group, you can leave them blank.

Please also submit some form of evidence (above) to demonstrate any results you list below, where possible.

Group A: Capability and Capacity - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

☑ DPLUS-A01: Number of people from key national and local stakeholder groups completing structured and relevant training.
□ DPLUS-A02: Number of secondments or placements completed by individuals of key local and national stakeholders.
□ DPLUS-A03: Number of local/national organisations with improved capability and capacity as a result of project.
□ DPLUS-A04: Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.
□ DPLUS-A05: Number of trainers trained reporting to have delivered further training by the end of the project. *[Single choice of one of the above – select one of the above from the drop-down menu in the online form]

Group A indicator result:

Please enter your results for the (above selected) indicator and the units. e.g. 10 people from key national and local stakeholder groups completed structured and relevant training.

Two strategic training workshops was conducted comprising of twenty-five participants (25) from various stakeholders' groups. They got training on identification of fire ant species and mound recognition, different treatments against fire ants. The sessions included both class room demonstration and field activities. It is also important to emphasis that community field crews and youth trainees were included as part of the project long term strategy.

Group B: Policies, Practices and Management- Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

\boxtimes	DPLUS-B01	Number of	f new/improved	habitat mana	agement p	lans avai	lable and	l endorsed.

□ DPLUS-B02 Number of new/improved species management plans available and endorsed.

□ DPLUS-B03: Number of new/improved community management plans available and endorsed.

□ DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans available and endorsed*.

□ DPLUS-B05: Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).

☐ DPLUS-B06: Number of Local Stakeholders and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.

**[Single choice of one of the above – shows as drop-down menu in the online form]

Group B indicator result:

Please enter your results for the (above selected) indicator and the units. e.g. 3 new species management plans available and endorsed.

The project has presented the importance of allocating funds in tackling invasive species and to strengthen all biosecurity regulatory policies to prevent further spread and protect the island's biodiversity. Staff trainings on the different aspects of managing invasive is key element in the surveillance, monitoring and implementing activities

Group C: Evidence and Best Practices - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.

□ DPLUS-C02: Number of new conservation or species stock assessments published.

☐ DPLUS-C03: New assessments of habitat conservation action needs published.

□ DPLUS-C04: New assessments of community use of biodiversity resources published.

□ DPLUS-C05: Number of projects contributing data, insights, and case studies to national Multilateral Environmental Agreements (MEAs) related reporting processes and calls for evidence.

**[Single choice of one of the above – shows as drop-down menu in the online form]

Group C indicator result:

Please enter your results for the (above selected) indicator and the units. e.g. 1 new assessment of habitat conservation action needs published.

Staff and community workers involved in the project learned the importance of managing invasive species. Should there be insufficient funds to purchase pesticides, other non-chemical treatments were also presented including ecological approach such as creating more green spaces and taking part on ecological restoration activities.

Group D: Sustainable Benefits to People, Biodiversity and Climate - Core Darwin Plus Standard Indicators (select one)

If you can report on one of these indicators for your project, please select the indicator from the menu below and report your corresponding result in the text box below.

DPLUS-D01: Hectares of habitat under sustainable management practices.

□ DPLUS-D02: Number of people whose disaster/climate resilience has been improved.

□ DPLUS-D03: Number of policies with biodiversity provisions that have been enacted or amended.

**[Single choice of one of the above – shows as drop-down menu in the online form]

Group D indicator result:

Please enter your results for the (above selected) indicator and the units. e.g. 30 hectares of enriched forest under sustainable management practices

The development of agroforestry systems on the island is one of our Integrated Pest Management (IPM) approaches to control fire ants' populations. The DOE would continue to incrementally expand our plots at Silver Hills (75 ha) and Duck Pond (5ha).

Section 5: Project Partnerships, Wider Impacts and Contributions

This section is optional because it won't apply to all projects. Please only complete this section if you can report on these for your project, referring to evidence.

Project partnerships:

Please describe the engagement among all formal partners involved in this project. Focus on the following:

- i) The roles of the various partners in the project, including in planning and decision making and in implementation.
- ii) Was the Government of the Territory/Territories involved in this project? If so, how so?
- iii) Particular achievements, lessons, strengths or challenges with the partnership(s) and how these have been addressed.

iv) Please also describe how key stakeholders and relevant local institutions, local communities and technical specialists, who are not formally partners in the project, have been involved.

Fera Science Ltd. have provided the foundation of the project following the training given to the staff of MAHLE in January 2023 and in January 2025. Both trainings were focused on identification of fire ant species and mound recognition, different treatments against fire ants ranging from the use of pesticides containing the appropriate active ingredients, non-chemical treatment, health and safety application of pesticides, assessing and monitoring on the efficacy of the pesticides used, making aware regarding signs of fire ants reinfestation and the challenges in managing fire ants.

Following the implementation of the project activities the release of funds was delayed, and this resulted in the late purchase of pesticides, materials, and logistical arrangements. Nonetheless, activities were able to be performed and this showed a collaborative effort both by the implementing organization and the community.

Wider impacts and decision making: Has the project influenced wider decision-making or in any way helped embed environmental issues into decision-making? If so, please briefly outline how the project has done this and what the changes are.

The project has presented the importance of allocating funds in tackling invasive species and to strengthen all biosecurity regulatory policies to prevent further spread and protect the island's biodiversity. Staff trainings on the different aspects of managing invasive is key element in the surveillance, monitoring and implementing activities.

Sustainability and legacy: Are there any continuing benefits resulting from the project, now that it has closed? What will happen to the project staff and resources now the Darwin Plus Local funding has ceased?

Staff and community workers involved in the project learned the importance of managing invasive species. Should there be not enough funds to purchase pesticides, other non-chemical treatments were also presented including ecological approach such as creating more green spaces and taking part on ecological restoration activities.

Section 6: Communications and Publicity

Exceptional Outcomes and Achievements: Do you have any excellent or exceptional outcomes or achievements from this project that you would like to showcase? If so, what material can you provide us for communications and publicity to promote Darwin Plus Local and your project?

Please provide a (300 to 400 word) summary and photos/videos/graphics that you are happy for us to use in publicity.

We may use material from this section to promote the achievements of Darwin Plus and the knowledge generated by Darwin Plus projects. This may include publication in the Defra Annual Report, Darwin Plus promotional material, including to the Biodiversity Challenge Funds social media platforms, or on the Darwin Plus, Gov UK or JNCC websites.

Data on the ants and invertebrates collected in various habitats are being analysed and a manuscript for potential publication will be written. Results will also be presented in future relevant conferences. The website created will be updated and will be shared to other territories regarding the experience of Montserrat on managing fire ants. Additional webpages such as images of ants collected and keys on ant identification will be uploaded. Experiences on the safety application of pesticides and appropriate suppression methods will also be highlighted and share to other territories wishing to do similar project.

Photo, video or graphic to be used for publicity and communications. Please upload at least one relevant and engaging image, video or graphic that you consent to be used alongside the above text in Defra, JNCC or NIRAS communications material.

By uploading these images, videos, or graphics you confirm that:

- i) any people in the images or videos you share have consented to having their photograph taken.
- ii) file name includes your project reference number and please provide the photo, graphic or video credits and captions in the text box below.

If you have content that was created in the course of the project, such as explanatory videos or impact graphics for reports, these can also be used for promotional purposes.

**Upload photo(s), video(s), etc. - Max 10 files; Max 20MB per file.

Photo of Managing Invasive Fire ant population on Montserrat:



applying an insect growth regular on mounds on fire ants in Silver Hill.



Community workers and staff of MAHLE were trained in identifying fire ant and other ant species.



Community workers and MAHLE staff are collecting ground dwelling ants and other invertebrates to study the species diversity and investigate any negative impact of fire ant.



Community workers and field crews were trained by DOE staff member.

Photo, video, and/or graphic captions and credits.

Please provide a short descriptive caption for each photograph, video or graphic, including the location (Territory) and photo or video credit in the box below. Please label each clearly with the file name. e.g. FilenameDPLR1_1922 - photo caption/description - location (territory) - photo credit.

The <u>website</u> created regarding the experience of Montserrat on managing fire will be updated and shared with other territories. The site contains photos of every stage of the project.

I agree for Darwin Plus/the Biodiversity Challenge Funds Secretariat and/or JNCC to publish the content of this section.

Please only select 'no' below, if you really cannot provide any relevant photos, etc, for reasons of sensitivity.

☑ Yes, I agree for the Biodiversity Challenge Funds Secretariat and/or JNCC to publish the content of this section.

☐ No. I have no project photos for reasons of sensitivity.

Please list any accounts that you would like tagged in online posts here. This can include project pages, partners' pages or individuals' accounts for any of the following platforms: LinkedIn, Facebook, Twitter, or Instagram.

MALHE Facebook Account/Montserrat project website.

Section 7: Darwin Plus Contacts

To assist us with future evaluation work and feedback on your report, please provide details for the main project contact(s) below. Please add new sections to the table if you are able to provide contact information for more people than there are sections below. If you are providing personal details on behalf of someone else, please ensure that they have agreed to sharing their information with us.

Please see our Privacy Notice on how contact details will be used and stored: https://darwinplus.org.uk/privacy-policy/

Please tick here to confirm that you have read and acknowledge the BCF's Privacy Notice on how contact details will be used and stored and that you have sought agreement from anyone that you are sharing personal details with us on their behalf.

☐ I confirm that I have read the Privacy Notice and have consent to share the following contact details.

Project Contact Name	Ms Ernestine Corbett
Role within Darwin Plus Project	Director of Environment (MALHE)
Email	
Phone	