

Applicant: **Eggleton, Paul**
Organisation: **Natural History Museum**
Funding Sought: **£8,038.35**

DIR25PP\100071

Investigating the soil biodiversity of western Madagascar for ecosystem restoration

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Name Emma
Surname Sherlock
Website www.nhm.ac.uk
Tel (Work) [REDACTED]
Email (Work) [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

CONTACT DETAILS

Title Dr
Name Paul
Surname Eggleton
Website www.nhm.ac.uk
Tel [REDACTED]
Email [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

GMS ORGANISATION

Type	Organisation
Name	Natural History Museum
Phone	[REDACTED]
Email	[REDACTED]
Website	[REDACTED]
Address	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Please add any 'Committee Feedback' to the field below:

No Response

Please add any 'Specific Ineligibility' feedback to the field below:

No Response

Please add any 'Conditions' to the field below:

No Response

Please add any 'Positive Feedback' to the field below:

No Response

Section 2 - Title & Location

Q3. Working title of the proposed Darwin project

Investigating the soil biodiversity of western Madagascar for ecosystem restoration

Q4a. Host country (of proposed Partnership Project trip)

Madagascar

Q4b. Other collaborating country/ies

France










Q5. Is this a resubmission of a previous scoping application?

No

Section 3 - Partnership Project Principals & Lead Organisation Summary

Q6. Principals in Partnership Project work i.e. the travellers

Please give the details of the individuals (up to 2) from the lead organisation who would be directly involved in the Partnership Project work – i.e. making a visit to a host country. One page CVs must be uploaded below.

Details	Main traveller (Project Leader)	Second traveller
Surname	Eggleton	Sherlock
Forename(s)	Paul	Emma
Post held	Merit Researcher	Senior Curator
Department	Life Sciences	Life Sciences
		
		
		

Have you included an one page CV? Yes

Yes

Please upload one page CVs for all Principals involved in Partnership Project work


 [CV PE](#)


 13/11/2018

 15:27:20

 pdf 13.06 KB

 [CV ES](#)

 13/11/2018

 15:05:53

 pdf 16.68 KB

Q7a. About the lead applicant organisation

Briefly discuss your expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record you have in this field. You may be asked to provide evidence of this track record.

The Natural History Museum London is a world leader in the conservation and recording of biodiversity. Our mission is to describe biodiversity and provide solutions for a sustainable future. We lead numerous projects aimed at health, food security, natural resources, biodiversity and conservation using our unique collections and research expertise. We are experienced in leading large scale monitoring and research programmes such as DeWorm 3 (funded by the Gates foundation).


Q7b. Have you obtained a letter of support from the lead applicant organisation?


If yes, please upload below.

Yes

The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.

 [DarwinInit Eggleton2018](#)

 13/11/2018

 14:38:45

 pdf 70.89 KB

Section 4 - Project Partners

Q8. About the partner organisation(s)

Please list all the partners involved and explain their roles and responsibilities in the Partnership Project work. Briefly discuss your partner's expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record they have in this field. You may be asked to provide evidence of this track record. If there is more than 1 partner organisation, you can enter the details of more partners below. Please specify which of the partners is new to the partnership.

1. **Partner Name:** Laboratoire des Radiosotopes (LRI) / Université d'Antananarivo

Website address: <http://www.laboradioisotopes.mg>

Details of anticipated roles and responsibilities: Facilitate the field visits and liaise with local communities
Co-leading the project with the UK participants in order to design the first draft of a resultant Darwin initiative main project

Expertise in sustainable use or conservation of biodiversity and/or development: Through partnerships and collaborations with stakeholders, the radioisotope Laboratory has undertaken many research projects on soil and plants interactions in numerous ecosystems (from terrestrial or wetland natural forests to croplands) for the benefit of different users. These are: government organisations concerned with land degradation, climate change and food securing; NGOs involved in the development and promotion of sustainable land use management; scientists with their need of technical and social knowledge to improve soil and forest management; and local communities attempting to maximise productivity. We are particularly interested in soil biodiversity, and soil ecosystem services and their restoration.
The LRI have well-established experience in student (Master, PhD) supervision, and in networking (e.g. the 4P1000 international initiative, CaSA (Carbon Network for Sustainable Agriculture in Africa) and Forest and Biodiversity partnerships / DP Forest and Biodiversity).
In addition, LRI is a reference laboratory at a national level for physico-chemical soil analysis and field sampling.
LRI team will be fully at the disposal of this partnership project.

Name of main contact point and post held: Malaladiana Razafindrakoto , post doctoral researcher

Have you included a letter of support from this organisation? Yes

Do you have more than one partner involved in the Partnership Project work?

Yes

2. Partner Name: Muséum national d'Histoire naturelle

Website address: <https://www.mnhn.fr/en>

Details of anticipated roles and responsibilities: The Museum has managed the Antrema protected area for 20 years. This is the area in which the research will be conducted and so we will be responsible for implementing any of the outputs.

Expertise in sustainable use or conservation of biodiversity and/or development:

The local team that manages the Antrema protected area (# 20 000 ha, North West Madagascar) for the Museum is composed of scientists, experts in animal and plant biodiversity, ecosystems: mangroves, dry forests, and savannas. Dr. Gauthier, primatologist, created this protected area at the request of the local community in 2000 and provides technical coordination with Dr. Edmond, botanist of the University of Antananarivo. Assisted in their work by a local team, they work closely with the Sakalava community (1000 people) who maintain a traditional culture of nature conservation. They also monitor the evolution of terrestrial and marine ecosystems in their interactions with human populations. As managers of a site that constitutes the unique reservoir of *Propithecus coronatus*, home to the last dry forests on dunes and a preserved lagoon of mangroves composed of seven species, the Museum has always relied on scientific data that allow for the preservation of ecosystems as well as development for the local population through ecosystem services.

Name of main contact point and post held:

Claude Anne Gauthier, researcher environmental sciences

Have you included a letter of support from this organisation?

Yes

3. Partner Name:

Institute of Research for Development

Website address:

www.ird.fr

Details of anticipated roles and responsibilities:

Lead in the macrofaunal survey

Expertise in sustainable use or conservation of biodiversity and/or development:

Expertise in soil ecology, soil biodiversity, earthworms and soil ecological intensification in low-input tropical agriculture. Long expertise in tropical ecosystems and agrosystems: soil structure, nutrient cycling and organic matter decomposition. Many scientific papers published on the roles of earthworms and other soil organisms on soil functioning and plant response

Name of main contact point and post held:

Dr. Eric Blanchart, Researcher, IRD Eco&Sols, Montpellier, France

Have you included a letter of support from this organisation?

Yes

4. Partner Name:

No Response

Website address:

No Response

Details of anticipated roles and responsibilities: *No Response*

Expertise in sustainable use or conservation of biodiversity and/or development: *No Response*

Name of main contact point and post held: *No Response*

Have you included a letter of support from this organisation? Yes
 No

5. Partner Name: *No Response*

Website address: *No Response*

Details of anticipated roles and responsibilities: *No Response*

Expertise in sustainable use or conservation of biodiversity and/or development: *No Response*

Name of main contact point and post held: *No Response*

Have you included a letter of support from this organisation? Yes
 No

6. Partner Name: *No Response*

Website address: *No Response*

Details of anticipated roles and responsibilities: *No Response*

Expertise in sustainable use or conservation of biodiversity and/or development: *No Response*

Name of main contact point and post held: *No Response*

Have you included a letter of support from this organisation? Yes
 No

Please provide all partner letters of support in one combined PDF.

📄 **Letter of support LRI**

📅 13/11/2018

🕒 14:37:44

📄 pdf 123.85 KB

📄 **Letter of support IRD**

📅 13/11/2018

🕒 14:37:38

📄 pdf 226.45 KB

📄 **143-Letter of support-CAG-Antrema**

📅 13/11/2018

🕒 14:37:30

📄 pdf 47.4 KB

Q9. Can you confirm that at least one of the partners have not previously been in receipt of Darwin funds?

Yes

Section 5 - Justification & Concept Notes

Q10. Justification of need for a Partnership Project

Please provide written details of why alternative funding is not available from within your own organisation or from other sources. Will matched funding be provided?

There are very limited funds for taxonomy, biodiversity and conservation training at the level that we are seeking, and most of these funds (e.g. NERC funding) is predominantly for the UK partner.

Within Madagascar, there are no specific funding streams at all to apply for. The NHM and LRI will provide matched funding in terms of time to be allocated to the project. For both organisations the time committed will be 2.5 weeks of time from the two participating staff (5 weeks of staff time in total per institution).

That's 10 days for the pilot itself and 10 days developing and planning the pilot as well as developing the plans for the main project, from both the UK and Madagascar.

Q11. Concept note for the Partnership Project

This question concentrates on the Partnership Project work and should demonstrate the objectives of the project including:

- **objectives of the visit**
- **what work (including research, remote communications or other collaborations) has been carried out prior to applying for this project**
- **what work will be carried out under the project – please see the guidance for advice on what type of activity can be funded**
- **evidence of the proposed partners' intentions to collaborate in your Partnership Project work**

The visit will enable the Lead Applicants to visit the Malagasy Partners to scope out a full Darwin Initiative proposal. This will be an opportunity to meet the partners face to face, to review their facilities and to examine potential field sites.

During this time, the consortium will design and write a draft of the main project. This will include:

investigating in detail the area of study, meeting the local communities, and exploring the main outputs required.

The main thread of the project will be developing local capacity to document and understand patterns of soil biodiversity and the ecosystem services they provide. Then applying this to the land management practices currently in place.

The work will be carried out in the Antrema forest, a 20,000 ha area of mixed habitat in Western Madagascar. This is a region of savanna and dry forest, poorly studied, but known to be of exceptional conservation value. It's currently a protected area and unique due to the diversity of different ecosystems and land uses to be found in such a relatively small area. Although owned by the Paris Museum the sites day to day running is by the local population. It an important site for biodiversity but there are known threats through some of the local practices in use such as; the use of bushfires, intensive agriculture and also external pressures like climate change, and illegal logging.

Results from the main project, if funded, would make a difference in how the land is managed and run in the future working with the local communities to achieve this, and therefore ensure the health of the soils long-term and ecosystems they support.

The Lead Applicants were approached by the Partners, who have a strong desire to build up their capacity in soil biodiversity and conservation, but have limited access to the necessary funds. They are totally committed to the project.

Q12. Concept note for the resultant project

This question concentrates on the full Darwin application you intend to submit after the Partnership Project and should discuss:

- **the expected Outcome and Outputs of the resultant Darwin project**
- **how the resultant Darwin project would meet a need in the host country (and the wider region if applicable e.g. if the proposed project would be based in a UMIC)**
- **how the project would contribute to any or all of the following Conventions: the Convention on Biological Diversity (CBD); the Nagoya Protocol on Access and Benefit-sharing (ABS); the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Convention on the Conservation of Migratory Species of Wild Animals (CMS); the Ramsar Convention on Wetlands**
- **how the project will contribute to sustainable development in the country concerned**
- **briefly explain the proposed partner roles in the resultant Darwin project**
- **briefly the expected role of the Partnership Project travellers in the resultant Darwin project.**

This project aims to investigate the ecosystems of degraded lands in the Antrema forest area regenerating them through the application of improved understanding of soil biodiversity, befitting biodiversity and local livelihoods

There would be comprehensive soil biodiversity surveys across all the encompassed ecosystems in the Antrema forest; mangrove, secondary forest, savanna and agricultural. Once this is complete a soil biodiversity database would be established to document the species found in each ecosystem. Reference collections of all soil fauna encountered would be held at the University so future studies and identifications can take place after the project has ended, building a legacy for the future. A reference collections would also be housed in London to safeguard the collection further and make this an

Internationally available resource for global scientific exploration.

An assessment would be made from these comprehensive surveys on the degradation of the soil that has occurred in areas, what land practices have lead to this and what remedial activities could take place in terms of land restoration to improve the situation. Land management of the area going forward would be based on these findings with the proposed outcomes of ; improvement of livelihood for the local population through better soil productivity, higher biodiversity presence and a greater input and involvement of the local population in soil management and their understanding of the importance of the soil fauna in soil health.

Outputs concisely are :

Baseline data on soil biodiversity in major environment types in the Antrema forest area(primary, degraded, sustainably farmed) compiled and made available to those involved in its management. Local capacity to monitor and assess soil biodiversity developed and embedded in sustainable structures. Local understanding of soil biodiversity maintenance to benefit agriculture enable the local communities to gather increased revenue and productivity whilst also benefitting the local ecosystem.

Proposed partner roles in the resultant Darwin Project:

- UK Museum: Leading the project, bringing vital statistical analytical skills to soil assessments , building an International reference collection. .
- Paris Museum: Responsible of all site logistics and activities as the Owner of the site to be used.
- LRI/Univ Tanà: Ensuring local coordination, providing Students supervision (Master, PhD)and ensuring the longevity of these finding.
- IRD: To be the lead of soil macrofauna survey.

Expected role of PP travellers in the resultant Darwin project: main applicants/lead, collection of soil biodiversity specimens, building an International reference collection as well as a local one, guidance on analytical tools and assessments of soil quality and spatial analysis of the biodiversity.

Section 6 - Costs

Q13. Costs

Provide a detailed breakdown of costs to be funded by the Darwin Initiative in GBP.

	Main traveller	Second traveller	Total
Airfare including travel to airport	£ [REDACTED]	[REDACTED]	[REDACTED]
Visas and other travel documents	[REDACTED]	[REDACTED]	[REDACTED]
Daily subsistence rate per day	£ [REDACTED]	[REDACTED]	
Number of days subsistence claimed (max 30 days per traveller)	[REDACTED]	[REDACTED]	

Total daily subsistence claimed (calculated from figures above)	£		
Workshop costs (please provide details below)			£
Other costs (please provide details below)			£
Total request from Darwin (must not exceed £10,000)			£
			8,038.35

Workshop costs

Please provide further details on your workshops costs. Put N/A if not relevant.

N/A

Other costs

Please provide further details on your other costs. Put N/A if not relevant.

- Reginal airflight for 5 people £
- Car hire driver and fuel £
- Indemnities £
- Local boat transportation people and car £
- Accommodation for all and meals for the Malagasy contingent £
- Guide £
- Meeting for local people in the field £

Section 7 - Timetable & Activities

Q14. Provide anticipated dates of travel (start and finish) and activities to be undertaken on your trip.

N.B.: this question is specifically about your travel plans – your dates and specific milestones during travel – NOT your timetable to Stage 1 application. Your application will be considered ineligible if this section does not specifically cover your planned Partnership Project trip.

Date	Milestone
01 October 2019	START
01 October 2019	Travel to Madagascar
02 October 2019	Meet the Partners for the project and travel to the project sites
11 October 2019	Travel back to the UK

14 October 2019	put together the fully fledged project bid
21 October 2019	Submit the main project report
No Response	No Response
No Response	No Response
No Response	No Response
No Response	No Response
No Response	No Response
No Response	No Response
22 October 2019	FINISH

Q15. In what year would you expect to submit the full Darwin project application?

Round 26

Section 8 - Certification

Q16. Certification

On behalf of the

trustees

of

The Natural History Museum

I apply for a grant of

£8,038.35

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the Partnership Project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)





- I have uploaded CVs for project principals**
- I have uploaded letters of support from the lead application organisation and the partner(s)**

Checked

Name

Tim Littlewood

Position in the organisation Head of Life Sciences

Signature (please upload e-signature)  [signature med copy](#)
 13/11/2018
 14:34:56
 jpg 30.01 KB

Date 13 November 2018

Section 9 - Submission Checklist

Checklist for submission

	Check
Have you provided anticipated start and end dates for your Partnership Project trip?	Checked
Has your application been signed by a suitably authorised individual?	Checked
Have you read the Guidance documents for both Main projects and Partnership Project, and are you satisfied that your concept would be eligible for a main project application?	Checked
Have you read the current Terms and Conditions for this fund and can you confirm you are willing to be bound by these if your application is successful?	Checked
Have you uploaded 1 page CVs and letters of support as required?	Checked
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	Checked
Have you read and understood the Privacy Notice on GOV.UK?	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 main traveller/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 the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available [here](#). This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information, but not personal data, may be used when publicising the Darwin Initiative

including project details (usually title, lead organization, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).