

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Leslie Wilmet
Project title	Lepilemurs conservation in Northwestern Madagascar
RSG reference	16764-1
Reporting period	February – July 2015
Amount of grant	£5000
Your email address	leslie.wilmet@hotmail.com
Date of this report	21/10/2015

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Evaluate population size of sportive lemurs.			X	We did two transect this year for density evaluation with the distance sampling method (Buckland). It was not enough for a density evaluation. More data are still required to be able to do a good density evaluation and those data will be collected in 2016.
Forest characterisation at home range scale by measuring parameters of structure and composition.			X	We measured tree diversity and tree density for four <i>lepitemurs</i> home ranges. Trees have been identified at genus level using existing flora and botanical collections in Tsimbazaza Botanical Garden in Antananarivo.
Determine habitat use and niche characteristics of <i>Lepilemur mittermeieri</i>			X	<ul style="list-style-type: none"> a. Every sleeping sites of the nine radio-collared animals have been described as well as and the micro-habitat around it. Occupation rate was also collected. b. Until now, a total of 44 tree species in both study sites has been identified as feeding trees. Very few food tree species seems to be shared between the two sites. c. Home range sizes of eight animals have been calculated. Differences seem to exist between the two study sites.
Assessment of the impact of habitat degradation and fragmentation on <i>Lepilemurs</i> population			X	Parts of the data required for this were collected as planned. However, we still need additional data to be able to address this research question and we will collect this data during the next field mission (2016)
To provide diurnal and nocturnal updates on lemurs' specific richness in those unstudied areas			X	We observed several species of lemurs in the area and we even get had the chance to catch a <i>Microcebus</i> sp. This species is also very little known in the area.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The project is carried out on the Ampasindava peninsula, in northwest Madagascar in isolated patches of forest. Those forests are only accessible by boat and/or several hours of walking. Some villages occur in the area but cities are quite far away. The forested areas have been classified as

“protected area” only few months ago. Until now, no regular field station exist neither permanent field local guides. Even though several organisations are in charge of the area, the management is quite young. All of those parameters make the logistic aspect of the field mission very challenging and quite intense to deal with. Communication problem with local people can also happen because of the differences of languages and/or culture. However, the person in charge of the project was used to deal with this kind of situation and environment of work. She was also used to work in this area of Madagascar and knew the local customs: therefore, she was prepared to it. Every little trouble or misunderstanding have been solved quite quickly and peacefully. The Missouri Botanical Garden with who we collaborated was also very helpful for several parts of the logistic of the work.

3. Briefly describe the three most important outcomes of your project.

The project has been carried out on the Ampasindava Peninsula in two patches of forest selected during a previous field mission: one site is at low elevation, the other one is at high elevation. Biodiversity is still present in the selected areas but it is highly threatened by forest degradation and fragmentation. Our project aim at a long term conservation action for those isolated areas and that's the reason why we worked with local organizations.

We can say that the three most important outcomes of the projects are:

1. **Scientific aspect.** We were able to achieve our objectives concerning the scientific parts of the mission. All the data required for the study of the habitat use of *Lepilemur mittermeieri* have been collected. We were also able to establish a forest characterisation at the home range scale of *L. mittermeieri*.
2. **Collaboration with Malagasy University, Malagasy students and International organisation.** Collaborations were established with the University of Antananarivo. Two students were involved in the project for their master thesis dissertation. We also met the head manager of the protected area from Missouri Botanical Garden with whom we exchange about work and ideas.
3. **Involvement, exchange and collaboration with local people surrounding the studied areas.** During the field work two field guides worked with us, beside the person in charge of logistic and cooking. They came from the village located directly in the surrounding area of our research. There got involved in the project and became very interested in the research. We also got involve with locals involved with regular management of the area.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

This project was carried out in collaboration with several departments of the University of Antananarivo, Madagascar. In particular, two Malagasy master students participated in data collection in the field (respectively from the Department of Anthropology and Paleontology and from Department of Biology and Ecology). Both took part to a multidisciplinary project and benefitted from a relevant field experience which is important for their future career.

We also had close contact with several members of the local association in charge of the protection of the new protected area “Ampasindava-Galoka”. In doing so, we got the opportunity to discuss the management of the area with them and share our experience. During the entire time spent in the field we worked with at least two local field guides and one logistician/cook from the village where

this association is based (Bemanivika village). During the work, there were familiarised with morphometric measurement on lepilemurs, radio-tracking during the night, sleeping sites characterisation, distance sampling methods as well as forest characterisation methods. It was a real pleasure to work with them as they were all the time very enthusiastic and motivated. They also show a real interest in our research goals and in the forest protection. One of them was also very motivated to learn French with the Belgian team.

We also had repeated contacts with the managers of the Protected Area “Ampasindava-Galoka” as well as the organisation who worked on the development of this new protected area (MRPA – Management Resource of Protected Area). We gave them the report of our mission and they assured us that our results will be used for identification and planning of the management of the protected area, as well as for developing local communities’ awareness programs.

It is clear that the local communities living around our study area got benefit from our presence. We really believe that involving Malagasy people in the project will also ensure long term relevance, as our team members may contribute to the development of future conservation actions.

5. Are there any plans to continue this work?

This mission is part of a four years research programme and the work is still ongoing. On the basis of knowledge and data accumulated during the project, we want to evaluate extinction risks and minimum area requirements for the long term survival of *Lepilemur mittermeieri*. Our approach takes into account landscape features of the Lepilemur’s ranges. The results we got so far are really interesting and encouraging. As our objectives require a long term research, another 6 months mission in Madagascar is planned from February 2016 to July 2016.

We want to carry on gathering crucial data to develop conservation and management strategies that will be essential in the long term. The collaboration that we started with managers of the Protected Area “Ampasindava-Galoka” will continue, as well as with the University of Antananarivo. This protected area is very young and still requires further identification of important areas for conservation, a management plan, as well as development and implementation of local communities’ awareness programmes.

6. How do you plan to share the results of your work with others?

Our work will be shared with others by different ways:

1. **Scientific publications** will be produced on the research and the analysis of the data we collected.
2. **Global report** on the mission will be sent at every organisation we worked with (Missouri Botanical Garden, Madagascar National Park, Department of the University of Antananarivo, Wildlife Conservation Society, and Ministry of Environment of Madagascar).
3. During **several congresses**, our work will be/has been presented by oral presentation or poster (European Federation of Primatology congress 2015/ Belgian Group of Primatology meeting 2015).
4. **Seminaries at Belgian University** were given in order to present our project (Liège University–Gembloux Agro-Bio Tech/ University of Brussels (ULB)).
5. **Seminaries in high school** (VivaScience program).

6. **A Belgian TV programme** will broadcast the project with a 20 min documentary (Jardin Extraordinaire RTBF).

7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

The grant was required for a 6 month field mission planned from January to June 2015. Because of some logistic problems needed to be solved before going to the field, the mission took place from February to July 2015. However, we can consider that the timescale of the project was respected.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Transport (boat location/petrol for the boat/transport from the capital city until the study sites)	1590	1300	290 (-)	We also used other source of funding to pay a part of the transport
Salary for field assistant/cook/ per diem for Malagasy student	1410	1600	190 (+)	The budget estimated was lower the actual price we had to pay to our local team
Field work equipment (solar panel/camping equipment/ a part of the radio collar equipment for Lepilemur)	2000	2000	0	The budget was higher than £2000 but we used other funding to pay the difference. So the budget predicted for field equipment of the Rufford Small Grant was completely used.
Subsistence (food)	0	100	100 (+)	We used part of the funding we got from the Rufford Small Grant to pay for the food supply in the field for the team.
Total	5000 £	5000 £	0	

9. Looking ahead, what do you feel are the important next steps?

This mission was the second one of a four years project. To reach the achievement of the project it is essential to ensure that the conservation objectives we identify can be translated into actions in order to protect these endangered species and their forest habitats. To do so, involving Malagasy people and working with local community is the key. They have to be involved in the development of future conservation actions.

Collaboration between all the actors is also essential (between the University of Antananarivo, the local NGO, the Madagascar National Park, the PNUD, the Missouri Botanical Garden, the Wildlife Conservation Society as well as scientific as ourselves).

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes, I presented my work in several meeting and the RF logo appeared every time at the end of the presentation (Power Point presentations).

To know the list of the meeting where the RF logo appeared, please refer to my answer of question n°6.

11. Any other comments?

I really want to thank the Rufford Foundation for giving me this grant which allowed me to carry on this project in which I strongly believe. This project has so much importance at several scales (local community level, scientific and environmental level).

It is a gift for humanity that a foundation such as The Rufford Foundation exists to support conservation efforts, in particular the preservation of highly endangered species.