

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	KAMENI NGALIEU Michele Marina
Project title	Present status, distribution and ecology of endemics skinks of part of the Cameroon highlands (Mounts Manengouba, Bamboutos and Oku)
RSG reference	20652-1
Reporting period	October 2016 to October 2017
Amount of grant	£5000
Your email address	Marinafr05@yahoo.fr
Date of this report	October 2017

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
<p>Determine skinks diversity in mounts Bamboutos, Oku and Manengouba</p>				<p>It comes out from this project that some mountains are more diverse (like Mount Bamboutos) than others.</p> <p>Mount Bamboutos came out with seven species in three genera:</p> <ul style="list-style-type: none"> -Genus <i>Lacertaspis</i>: <i>Lacertaspis chriswildii</i>, <i>L. lepesmei</i>, -Genus <i>Leptosiaphos</i>: <i>Leptosiaphos ianthinoxantha</i>, <i>L. vigitisserierum</i> and <i>L. pauliani</i> -Genus <i>Trachylepis</i>: <i>Trachylepis mekuana</i> and <i>T. sp</i> <p>Mount Manengouba went out with three species belonging to <i>Leptosiaphos</i> genus (<i>L. ianthinoxantha</i>, <i>L. vigitisserierum</i>, <i>L. pauliani</i></p> <p>Mount Oku was the less diverse with one species belonging to one Genus; <i>Lacertaspis chriswildii</i></p>
<p>Determine the distribution and habitat preferences of skinks in different habitat types in the study area</p>				<p>According to the record of diversity and habitat characteristic, we distinguish three kind of endemic skinks:</p> <ol style="list-style-type: none"> 1- Endemic skink of a particular mountain (<i>Trachylepis mekuana</i> and <i>Lacertaspis lepesmei</i> on Bamboutos mountain) 2- Endemic skink of the three mountains (<i>Leptosiaphos ianthinoxantha</i>, <i>L. Vigitisserierum</i>) 3- New distribution of endemics skinks <p>*<i>Lacertaspis chriswildii</i> previously known from Mount Oku and Koupe was observed in Mount Bamboutos</p> <p>* <i>Leptosiaphos pauliani</i> previously known from Mount Bamboutos and Koupe was observed in</p>

			<p>Manengouba Mountain</p> <p>◆ it is very important to note that we have observed a new species of endemic skink belonging to <i>Trachylepis</i> in Bamboutos Mountain and mire study should be done to confirm our observation</p> <p>The habitat preference of endemics skinks was grassland under rocks.</p> <p>We also have a strange observation of <i>Lacertaspis chriswildii</i> in Oku Mountain which were inside a secondary forest around and inside slow flowing stream</p>
Record GPS coordinates of endemic skinks to map species distributions			All skinks observed were recorded and there is available primary map of their distribution.
Based on data collected, propose a major conservation action at various sites			In partnership with Cameroon herpetology-Cameroon Biodiversity Foundation (CAMHERP-CBF) a report that's supposed to be submitted to the Ministry of Forestry and Wildlife is ongoing. The report will be written.

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

They were no major problem encountered during the accomplishment of our project.

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

At the end of this project the three most important results were:

- The new distribution of two endemics skinks: *Leptosiaphos pauliani* (endangered IUCN) recorded in Mount Manengouba with an abundance of four individuals and *Lacertaspis chriswilldii* recorded in Mount Bamboutos with an abundance of three individuals. This project permits us to update also the diversity and distribution of endemic skinks in the three mountains.
- We have also determined habitat description of each endemic skink in the three mountains and the strange result was habitat of *Lacertaspis chriswilldii* in Mount Oku.
- A suspected new species of skink from Mt Bamboutos has been collected and currently going on diagnosis. This species belongs to the genus *Trachylepis*. At the moment, two individual species have been observed.

- Some local populations agreed to work for protecting endemic chameleon by chasing chameleon hunters in the villages of Nsong and Ekona Lelu.

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

The involvement of local communities was first acting as field guide, and some of them were trained in mountain endemic skink identification.

In Manengouba Mountain for example, the guide has worked with previous researchers, but this project permit him to know the preferential habitats of mountain skink.

5. Are there any plans to continue this work?

It is really important to continue this project in Bamboutos and Manengouba.

Bamboutos is one the most threatened mountain of the volcanic line and endemics diversity skink is very high there. We also have a new record of skinks and maybe a presence of a new endemic skink of Cameroon. It is very important to make more sampling to confirm the presence or absence of the new skink in this mountain and the surrounding mountain such as Mount Manengouba in the south of Bamboutos and Mount Oku in the north of Bamboutos.

The new record of *Leptosiaphos pauliani* in Manengouba is a real reason to carry on sampling there. It is important to note that this skink is endangered (IUCN)

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

Our results will be published in peer reviewed journals. Some posters with the new distribution will be printed and distributed to local chiefs where these species occur. We will also share our result with our NGO CAMHERP-CBF (Cameroon Herpetology – Conservation Biology Foundation). Some of the results of our work will be shared through newsletter.

We intend to share the proposition of conservation statute with the Ministry of Fauna and Flora (MINFOF) and the posters will be pasted in the laboratory of zoology in University of Yaounde I so that every student of the laboratory can directly have an idea of the distribution and statute of endemic skinks in our study area.

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

This Rufford Foundation grant has been used during the period from October 2016 to October 2017. During this period, I have finished all my project works

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
Salaries/field staff & assistants	£2160	£2160	0	
Food/per diems	£1440	£1548	-£108	£2.15 instead of £2 was used for food due to the rising price of food commodities.
Travel local public	£672	£720	-£48	The prize of the fuel increased at the beginning of the project and the transport prize between the different city increased as well
Communications	£147	£147	0	
Overnights	£192	-£170	+£22	
Supply	£100	£100	0	
Miscellaneous	£239	£242.25	-£3.25	£ is the extra money from food and local transport during this trip. This money was obtained from the predicted £239 for miscellaneous.
Total	£4950	£5087.25	+£137.25	

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

The next important step toward this work is to continue this study and gather data on these species of skinks from the Cameroon volcanic line, in order to be able to produce a report. Through that, we can have enough information to determine whether the whole population from mountain endemic skinks from Cameroon is subject to an important population decrease. We will help the ministry with these data in the update of status IUCN species of skinks.

Another important step for this work is to make more sessions of awareness raising within these species and their habitat. The mountain forest is fragmented due to intensive culture. This was notice during our field work in the field.

It is really very important to gather data on the species *Leptosiaphos pauliani*, *Trachylepis* sp., *Lacertaspis lepesmei* and *Trachylepis mekuana* due to their restricted distribution and abundance; and *Lacertaspis chriswildii* to assess the difference appearance inside their habitat description. The observation of a new species will be a great record for Conservation Scientist world and we are preparing a publication on it.

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

The RF received publicity in the area where we were working. And on our website the RF is also cited as a funding partner for our activities. The RF will also receive acknowledgment during all presentations, publications and poster produce from this work. We are preparing two publications; one on distribution of these endemics skinks and another one on the new species of skink.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Kameni Ngalieu Michele Marina: Project Leader

Gonwouo Nono Legrand: Head of Camherp-cbf and Project Supervisor

Data Collection:

Tchassem Fokoua Arnaud Marius & Tapondjou Nkongmeneck Walter Paulin

Field Guides:

Mount Oku - Mr Gwan Philip and Mr Ngon

Mount Bamboutos – Mr Souleymane and Mr Seydou

Manengouba Mountain – Mr Abdou & Mr Eithelbert

Mungo – Mr Abdou

Banguem – Mr Eithelbert

12. Any other comments?

I feel heartily that this type of support is crucial to build up a challenging research career as an academic and researcher from developing country and thereby working for the better future for the country



Leptosiaphos ianthinoxantha endemics of Cameroon Mountain



Leptosiaphos pauliani endanger (IUCN) found in Mount Manengouba