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	Walter Paulin TAPONDJOU NKONMENECK
Project title	Influence of anthropogenic activities on the habitat selection, perch height and feeding ecology of endemic chameleons of the Cameroon volcanic line
RSG reference	14011-1
Reporting period	June 2014 to June 2015
Amount of grant	£5442
Your email address	tankwalter@yahoo.fr
Date of this report	May 2016

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
Documenting the species composition, distribution and habitat preference of various chameleon species following an altitudinal gradient;				It comes out from this project that the endemic species of chameleons can be separated in two groups: less disturbed forest like group and fragmented habitat tolerant group. The species *T. pfefferi*, *T. quadricornis quadricornis*, *T. q. gracilior* belong to the first group and the species *T. serratus* and *T. perreti* to the second. The species *T. montium* belong to both groups, as important individuals were observed in both habitats. The species
Recording the perch heights of various species in different habitats types with respect to various anthropogenic activities				According to the record of perch height, the species like *T. pfefferi* showed a preference for higher perch height compare to *T. perreti* that has the lowest perch height. This is an evidence of their habitat preference, as *T. perreti* prefer savannah, farms and houses fences and low height bush in the forest at an elevation between 1300 to 2400m asl; and *T. pfefferi* preference for less disturbed forest and high perch height. The other species were observed at transitional perch comprised between 1.2 and 1.8 m above the ground.
Based on the results obtained, developing solid conservation measures for chameleon conservation along the Cameroon Volcanic Line.				In partnership with Cameroon herpetology-Cameroon Biodiversity Foundation (CAMHERP-CBF) a report that's supposed to be submitted to the Ministry of Wildlife is

				ongoing. The report will be written.
Raising awareness on wild chameleon care and the risk of intense fragmentation of their habitat				We were able work with the local chief of Nsoung, Ekona Lelu and Elak-Oku. But not in the other small locations where the study was done.
Assess the endemic chameleons from Cameroon feeding habits				The chameleon feeding habits were assessed too during this study, and the results without so much surprised revealed that they are 95% feeding on arthropods. With the order of Diptera highly, represented followed by Hymenoptera and Hemiptera.

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

N/A

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

- This study has allowed us to update the perch height of the really uncommon species *T. pfefferi* on mount Manengouba.
- We were able to raise awareness in the village of Nsoung (Mt Manengouba) and Ekona Lelu (Mt Cameroon).
- Part of our results were used to propose a new Cameroonian conservation status for the species *T. pfefferi*, *T perreti* and *T. quadricornis* from class B to Class A.
- A suspected new species of skink from Mt Bamboutos has been collected and we are currently doing it's diagnosis.
- Some local populations agreed to work for protecting endemic chameleon by chasing chameleon hunters in the villages of Nsoung and Ekona Lelu.

4. Briefly describe the involvement of local communities and how they have benefitted 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 chameleon identification.

5. Are there any plans to continue this work?

It is really important to continue this project on other mountains from the Cameroon volcanic line (Mt Rumpi, Mount Kupe, Mt Lefo, Mbulu hills and Tchabal Mbabo). We have the case for example of *Trioceros quadricornis eisentrauti* only known from Rumpi hills, and the case of *Trioceros wiedersheimi* with a distribution range between Nigeria and Cameroon, the

Cameroonian population can be found on Tchabal Mbabo mountain. It will be really useful to gather knowledge on these two other species. The mount Kupe is known to host of *T. pfefferi*, *T. montium* and also *T. quadricornis quadricornis*. And the Mbulu Hills has a small population of *T. pfefferi*.

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 conservation status class A (entirely protected by the Cameroonian law and their collection is authorized only to people with a permit issued by the ministry of wildlife) will be printed and distributed to local chiefs where these species occur. We just launched our new website to share the activities of our NGO CAMHERP-CBF (Cameroon Herpetology – Conservation Biology Foundation). Some of the results of our work will be shared through newsletter.

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 June 2014 to October 2015. The anticipated period was from June 2014 to May 2015. The difference between these two timescales is due first to a travel as an exchange student visitor I did in the United States from March to May 2015. To be trained on Phylogeography at Villanova University, Pennsylvania and to visit and update the chameleon collection from the California Academy of Science of San Francisco. Then also to get some replication from the field.

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
Field staff	£1080	£1080	0	
Field assistant:	£900	£900	0	
Supplies and materials	£500	£500	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	£720	£860	-£140	The prize of the fuel increased at the beginning of the project and the transport prize between the different city increased as well
Communications	£100	£100	0	
Overnights	£192	-£170	+£22	
Camping materials	£250	£250	0	

Miscellaneous	£260	-£226	+£34	£ is the extra money from food and local transport during this trip. This money were obtained from the predicted £260 for miscellaneous.
Total	£5442	£5408	+£34	

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 chameleon from the Cameroon volcanic line, in order to be able to produce a report within we can have enough information to determine whether the whole population from mountain endemic chameleon from Cameroon is subject to an important population decrease. We will help the ministry as well with these data in the production of export quota for CITES species of chameleons.

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. We were able to notice that during our work.

Something really important will be to gather data on the species *T. q. eisentrauti* and *T. wiedersheimi*. *T. q. eisentrauti* due to his really restricted distribution, and *T. wiedersheimi* to assess where his separation occurs geographically between this species and *T. serratus*.

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?

The RSG received publicity in the area were we were working. And on our website the RSG is also cited as a funding partner for our activities. The RSG will also receive acknowledge during all presentations, publications and poster produce from this work.

11. Any other comments?

All my apologies for the delay observed before submitting this final report. This was due to extra professional duties.

The balance will be used for publications fees of the results of this work in a scientific peer reviewed journal.