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	Meseret Chane Alemu
Project title	Effects of anthropogenic habitat modification on ecological niche partitioning in sympatric DeBrazza's monkey and Boutourlinii's blue monkey in southwestern Ethiopia
RSG reference	1954-1
Reporting period	21October 2016 to 20 December 2017
Amount of grant	£5000
Your email address	meseret.chane2009@gmail.com
Date of this report	10 March, 2018

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
Habitat Description and Phenology assessment			✓	Vegetation compositions of both habitats (coffee plantation and continuous forest) for each group were asses. Phenology of plants (tree and linas) were recorded for 18 months to determine the food availability of each species
Behavioural ecology		✓		Data on activity patterns were fully collected for two groups of blue monkeys in both habitats (coffee plantation and continuous forest) using instantaneous scan sampling method. However, Debrazza's monkeys were shy and challenging to collect the full data, therefore, these data were collected with some interruption.
Feeding ecology			✓	The type of food item, name of species and growth form of the plant species consumed by both monkeys (DeBrazza's monkey and Boutourlinii's blue monkey) were recorded. Unidentified species were collected and transported to National Herbarium of Addis Ababa University for further taxonomic Identification.
Ranging ecology			✓	Geographical locations of the study groups were recorded using hand held Garmin GPS Map 62s every 15 minute intervals from dawn to dusk during scan sampling. These have been analysed to determine the daily ranging patter and home range.
Habitat use			✓	Both monkeys were often used three habitat types, tree dominant forest, coffee plantation and natural coffee forest. These were confirmed from the record in each 15 minutes interval during scan sampling. These preferred habitat types

				have been recommended for further conservation action.

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

The first difficulty I faced was the distance of the study area. It is 636 km away from my university and took 6 days journey in one round and challenging to manage the activities with a planed schedule. Second, the study area is covered with highly intact forest and no road for penetration. It is also hilly, high ridge that prevents easy moving from one locality to other. We moved only on foot. The third was how to habituate and follow up Debrazza's monkeys. They were very shy and moved when we tried to approach them.

To tackle the first problem local field assistants were trained the techniques of data collection in order to manage the activities in my absence with a planned schedule. The second was solved through the involvement of local guides and even clearing of bush, if it prevents complete penetration. I solved the third problem by continuous habituate (partially habituate) and following them from a distance using binoculars.

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

1) The project has come up with new general scientific data on niche partitioning between the rare Debrazza's monkey (*Cercopithecus neglectus*) and the little known Ethiopian endemic, blue monkey (*Cercopithecus mitis boutourlinii*) in Hamuma Forest, south-west Ethiopia by comparing their behavioural and ecological differences in modified and natural habitats.

2) The newly generated data eventually used as inputs to Woreda district, Zone, Oromia Region Forest and Wildlife Office, Ethiopia Wildlife Conservation Authority (EWCA) and other stakeholders to tailor their conservation activities on wildlife in general and the study species and their habitats in particular.

3) The local field assistants were trained on the techniques of data collection methods and also acquired awareness on the conservation issue of primates and other wildlife. During the study period, there was informal communication with the local community to create awareness on the issue of wildlife conservation and develop sense of ownership that will be manipulated to build up strong community based conservation programmes in the future.

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

The local community provided employment opportunities from the project as local field assistants of data collection, field guides, camp attendants and climate data recorders and benefited economically. The other local residents also obtained benefits from renting their home and selling food and drink to the principal researcher and co-researchers of this project. The longer-term advantage for the

local community (local field assistants) is, however, training and sharing skills to participate in scientific data collection techniques for further project of conservation of study species in their habitats. In addition, the area is still underappreciated as a potential primate conservation priority area and the output of the project is used to attract other primatologists and tourists and, hence, the local people will be benefitted both directly and indirectly by involving in different projects.

5. Are there any plans to continue this work?

Yes, we have long-term planned to continue further research project for the conservation and protection of study species and their habitats. From the experience we obtained, detail study will be required on the population status, distribution of the study species and modelling habitat suitability. Since the species lived in non-protective area which is owned by the local community, a special systematic conservation activities and awareness creation are essential. Especially, the total number of Debrazza's monkeys and the number of individuals in group is very minimal in study area. Therefore, they need special conservation practices to reduce local extinction.

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

The result of this project will be published in peer-reviewed scientific journals with reasonable time after completion of the work to enhance knowledge among the scientific community about niche portioning between the study species.

A copy of the final report will be disseminated to Woreda district, Zone Agriculture and Wildlife Conservation Offices, Oromia Region Forest and Wildlife Conservation Office, the Ethiopian Wildlife Conservation Authority (EWCA) and NGOs working on wildlife to implement conservation actions of study species and their habitats.

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

We spread out the use of funds over the full duration of the project.

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
I) Personnel: Field per diem and individuals involve				
Principal Investigator (1indiv.)	£1250	£1300	+£50	
Field assistant (1indiv.)	£700	700	0	

Local guide per diem (1indiv.)	£600	600	0	
Camp attendant (1indiv.)	£600	600	0	
Climate data recorder (1indiv.)	£450	£500	+£50	
II) Travel cost for the research				
Mule, Fuel and hiring a vehicle	£550	£550	0	
III) Consumables				
GPS batteries, stationery, photocopies, printing / binding	£450	£450	0	
Mattress, Rain coat and Field shoes	£200	£200	0	
Cooking material and stove	£100	£100	0	
Tent	£100	£100	0	
TOTAL	5,000	£5,100	+£100	

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

We would like to finalise the work started during the Rufford project.

1) We were successful to collect and document the important ecological data that showed the impact of habitat modification on niche partitioning of the study species compared to their natural habitats. So next, we will plan to expand this study on the population status, distribution of the species, habitat preference modelling and threat factors.

2) The habitat is non-protected; the researchers understand that the area needs special concern to conserve species. Therefore, we plan to continue work either on the conversion of the area into protected if possible, or to continue special technical studies on awareness creation and other management plans with the participation of local community and other stake-holders to enable them live with mutually associated with study species.

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?

Yes, we used The Rufford Foundation logo in the final report and will use for any materials that we produced related to this project in the future.

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

1. Pro. Afework Bekel (supervisor of the project)
2. Addisu Mokennen (co-supervisor of the project)
3. Meseret Chane (principal-researcher)
4. Sisay Beyene (local guide + assistant)
5. Bye Woddajo (field assistant)

6. Jamal Argene (field assistant)
7. Wondimu Merdassa (camp attendant)
8. Mitiku Merdassa (climate data recorder)

12. Any other comments?

We would like to give our appreciation for Rufford Foundation for financial support of this project. The grant was very crucial for collecting ecological data of this project. Since the area was very remote and inaccessible, this project would not be successful without the support of RF. Thus, RF grant support was vital to protect and to save these little know sub-species of blue monkey and rare Debrazza's monkey and their habitats. We thank you very much for the support. We hope we continue working together to safeguard wildlife.