

**The Rufford Foundation  
 Final Report**

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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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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<b>Grant Recipient Details</b>	
<b>Your name</b>	Chrispine Ngeessah Odhiambo
<b>Project title</b>	Effects of Land use Changes on Avian community Structure in afro-montane Forests, a case of Mt Elgon Ecosystem, Kenya.
<b>RSG reference</b>	14675-1
<b>Reporting period</b>	2015
<b>Amount of grant</b>	£2735
<b>Your email address</b>	ngesa@kws.go.ke
<b>Date of this report</b>	7 <sup>th</sup> 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
Assess avifaunal community species composition at different vegetation zones along altitudinal gradient		Y		Data collected successfully and analysis is on progress. Preliminary observation show variation in species composition at different vegetation zones forest specialists seem to prefer lower mixed forests while other species prefer upper elevations.
Determine variation in plant community along elevation gradient		Y		Data collection with respect to vegetation assessment is ongoing. Preliminarily, a vertical stratification in plant species composition is observed at different elevations. The lower elevations are characterised by mixed broadleaved forest, followed by bamboo and <i>Podocarpus</i> associations, ++++++
Establish variations in plant community structure with respect to different land use systems in comparison with different vegetation zones.			Y	Data collection completed detailed analysis in progress. Preliminary analysis show clear variation in species richness and abundance at different land use zones. Mixed indigenous forest in the park and part of the forest exhibited higher species diversity than area under plantation forest and cultivated forest blocks. However, some species were observed to prefer cultivated fields and livestock grazing areas and not intact natural forests.

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

Activities were affected by:

- Heavy rains, which increased field data collection time and reducing on the frequency of mist netting. Nets were opened only when weather is favourable.
- Destruction of mist nets by wildlife and livestock. This was unavoidable since manning mist nets would scare birds away and reduce productivity.
- Cold weather at high altitudes led to reducing working time since teams could not camp at the moorlands. A camp was set at mid altitude within the *Podocarpus* zone.
- Lack of specific vehicle allocated for the field team therefore, leading to some level of uncertainty and delay.
- Constant fluctuation in currency exchange rates.

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

- The project discovered one species, the spotted creeper (*Salpornis salvadori*) whose range is not known to include Mt Elgon ecosystem, nor anywhere in western Kenya. This information was shared with Nature (partner institution with Birdlife international) for inclusion in the national bird atlas.
- Preliminary analysis show some variation in species composition and abundance at different habitat types located at various altitudes, with the lower montane forest having higher diversity compared to higher altitudes. Higher altitudes are also inhabited by mountain endemics
- A check list of birds has been developed which shall be used to update Kenya Bird Map.

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

- One local guide was trained on field avian monitoring and identification. This has improved the guides skill related to ornithological tour guiding. The local guide was able to relate land use and species diversity.
- One student volunteer was involved and acquired skill related to field avian monitoring, mist netting and bird identification.
- There shall be a community sensitization workshop to create awareness on bird conservation.

**5. Are there any plans to continue this work?**

Yes, permanent avian and vegetation transects were developed for future monitoring. This will determine trends in avian diversity and abundance over time and therefore activity shall be part of the ecological monitoring program of the ecosystem. Community sensitization workshop is also hereby envisaged.

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

I plan to publish my results in a scientific journal, final scientific paper and thesis report shall also be shared with Kenya Wildlife Service management at national and at site level so that recommendation with respect conservation of avifauna and their habitats can be domesticated at site. I also intend to hold an information sharing workshop with local communities and other stakeholders to share findings and recommendations. I also intend to produce posters to be shared with Kenya Wildlife Service and local stakeholders.

**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 used over period of 18 months. This is against the anticipated period of 6 months, due mainly to seasonality determining abundance and distribution some species coupled with other reasons such as availability of transport and accessibility of the park as mentioned in (2) above.

**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
Hire of mist net	120	144	-24	
Sound recording machine	200	173	27	
Vehicle running	400	408	-8	
Vehicle maintenance	72	108	-36	
Communication cost	50	43	7	
Accommodation expenses for team members	1725	1758	33	Includes cumulative accommodation expenses for 1 field technician, 3 armed rangers, and 1 driver @ £14.4 pd for 14 days; 1 local guide, 1 student assistant @ £7.2 pd for 21 days; 2 field supervisors @ £36.02 for 2 days, the researcher's @ £14.4 pd for 21 days.
Report writing cost	38			Activity in progress
Contingency	130	74		Travel expenses for field supervisors
<b>Total</b>	2735	2708	27	The balance is in being used in the remaining components and report production.

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

The following are the important next steps in my project.

- Finalisation of data collection for vegetation, data analysis and final research paper production and submission to KWS for application of recommendations.
- Submission of manuscripts for publication in a peer reviewed journal.
- Community/stakeholder information sharing workshop around the ecosystem. This will target organized conservation groups (community-based organisations), schools and conservation institutions.
- Annual monitoring program based on the baselines generated.

**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. Used RSGF Logo during presentation of my findings to stakeholders.

**11. Any other comments?**

I wish to pass my sincere apologies to RSGF for the delay in producing this final report. This was due to delay in finishing my work due to logistical problems other job demands at my place of work. Climate of the area occasioned with harsh terrain also led to an extended period of data collection.

Otherwise I wish to thank RSGF for the kind financial assistance and also wish appeal for further assistance as I proceed with other components of the project. I will be ready to furnish you with further updates as when required.

Thank you so much.