

The Rufford Small Grants Foundation

Final Report

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

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. 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. 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	Stanislaus Mulu Kivai
Project title	Are the endemic and endangered Tana River primates culprits of crop raiding? Evaluating Human – Nonhuman primate conflict status around Tana River Primate Reserve, in Kenya.
RSG reference	26.02.09
Reporting period	July 2009 - July 2010
Amount of grant	£ 6000
Your email address	skivai@primateresearch.org
Date of this report	4 th October 2010

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
i). Map the spatial and temporal distribution of nonhuman primate crop raiding and livestock predation and factors that render the poor farmers vulnerable to the conflict around the Tana River Primate Reserve Ecosystem.			X	This was well covered in the targeted or chosen representative areas. However, the whole ecosystem where the primates occur in Tana is huge and future studies should think of increasing the representative sample.
ii) Identify the nonhuman primate species involved and the target crops or livestock.			X	This objective was fully achieved
iii) Assess the food and economic losses incurred by the locals as a result of crop raiding and livestock depredation by nonhuman primates.			X	This was fully achieved although the cases of livestock predation were very minimal and the economic losses considered focused more on crop loss.
iv) Explore the range of deterrent methods in place, their effectiveness and suitability with a view of devising an effective primate's deterrent method.		X		Though the deterrent methods in place were explored, their suitability and effectiveness was not adequately tested due to resources and season complexity. The season was too short with inadequate amount of rainfall to sustain crops in the field for long as expected. Also, some farmers where guarding where intended to take place demanded for some payment yet this was not budgeted for.

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

a) Unpredictable changes in fuel prices due to supply problem in the country and operating in very remote area where fuels costs were always higher than normal. To ensure that I did not spent more than budgeted for transport due to fuel costs, I tried to minimize the distance which was to be covered in the course of the study. This included; change in transport logistics (instead of getting a car from Nairobi I boarded a bus and hired a car from Mombasa which is closer to the study site),

unnecessary trips while in the field were discouraged completely, walking to forest patches and farms which were not very far from the research camp was always done instead of driving. This worked and I was able to cut down fuel consumption.

b) Changes in transport cost and logistics – The cost for transport failed to work as I anticipated and instead of getting a car at £ 24.20 per day for the second trip it costed me £ 28.23. However, this situation was overcome by the fact that it was cheaper to hire a car from Mombasa and instead my Research assistant and I had to board a bus to Mombasa to get hired vehicle which also minimize the transport cost mainly through fuel cost.

c) Season complexity – the rains were not adequate and crop production was not as expected by farmers in a good year, this could have affected crop yields, development stages and raiding patterns as well. Here we had no choice, but we worked with the situation since it was beyond my control

d) Need for additional local scout in conflict monitoring and GIS analysis – although we budgeted for three local scouts, to get a representative and more reliable data there was need to sample Kitere and the local person in Baomo could not do this because of the distance and I had no option other than hiring an extra local scout. Also because of incapability of my research institution to analyse GIS data I had to pay extra fee for GIS analysis. However, I used savings from other budget items like transport where I had saved to cover this cost.

e) Two locals got better jobs to do during the course of the project and had to be replaced. This was easier and I identified and trained other two to replace them in good time and did not affect the project data collection.

f) The need to monitor the conflict in Kitere also seem to have had some implication on supplies since this added the quantity of things like GPS batteries and stationery but this was not significant and was accommodated in savings from other budget items.

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

- i) The endemic and endangered Tana River primates are “problem animals” as they are involved in human-nonhuman primate conflict.
- ii) Hunting and consumption of bushmeat threatens the endangered and endemic primates of Tana River.
- iii) The invasive species (*Prosopis juliflora* and *Opuntia* sp.) have penetrated the Tana River National Primate Reserve and this coupled with human encroachment might be altering the core primate habitat.
- iv) Observation of complex unique and rare behaviour of predation between the yellow baboon (predator) and the endangered Tana River mangabey (prey).
- v) Most of commonly used deterrent methods are preventive but also include elimination methods such as poisoning (using furdin), spearing and killing with dogs.

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

I worked with about six locals of which majority are part of the youth conservation group from the area. The locals learnt more on primate monitoring and this was useful as they are in the process of setting up a conservancy with aim of protecting the endangered Tana River primates. They local also were paid some allowances and this helped in improving their livelihoods.

5. Are there any plans to continue this work?

Yes, I would like to test the effectiveness of the existing methods in resolving the conflict and developing new conflict mitigation methods to minimise or prevent the conflict. Have noted that, the primates will raid crops less when men are guarding as compared to women, I would like to try if using men hormones and those produced by their key predators can be a good deterrent product

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

The results will be shared through.

- Publishing the project findings in peer reviewed journal.
- Writing a detailed report and sharing it with all relevant stakeholders.
- Sharing the findings in scientific forums both international and local.
- Holding community workshop and sharing the study findings with them.

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

The period was 12 months and this period was as anticipated.

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 (Exchange rate used 124KES=1 £ after fluctuating 1£ = 110 KES) .

Item	Budgeted Amount	Actual Amount	Difference	Comments
Personnel	2854.56	2995.16	140.6	This was increased by the cost of GIS work which was not factored and hiring of additional local scout for monitoring in Kitere
Transport	3009.09	2859.60	-150.30	This was because fuel consumption was less than expected despite the price changes and highway transport which was not expected.
Supplies	135	144.76	9.76	The camera and GPS batteries were spent more than expected, and communication cost which was not factored during budgeting
TOTAL	5998.65	5999.52	0.06	

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

- Test the suitability and effectiveness of the deterrent methods in place and develop and try new deterrent methods from the experience of what is existing.
- Conduct quick survey of the distribution of the invasive species in the primate habitat particularly *Prosopis juliflora* and possible ecological implications.
- Sensitise the community on primate conservation and the dangers involved in primate bush meat consumption

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

Yes, this was presented during the IPR international scientific conference held in Nairobi Kenya from 6-8th July and also during the National primate Conservation Workshop held at Kenya Wildlife Service in Nairobi in 1st & 2nd September 2010.

11. Any other comments?

RSGF through support of this work has made a huge impact in primate conservation in Kenya. The work has been identified as crucial to the national primate task force in Kenya and the output are going to advice the task force in developing the strategic plan for the Tana River endangered primates as well as management guidelines for the common problem primates in the Kenya. Also more need to be done in redressing the conflict in the area and enhancing survival of the endangered Tana primates.