

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	Tariku Mekonnen Gutema
Project title	Foraging Ecology and Resource Competition between Sympatric African Wolf (<i>Canis lupus lupaster</i>) and Ethiopian Wolf (<i>Canis simensis</i>) in the Ethiopian Highlands
RSG reference	Application ID: 16215-1
Reporting period	November/2014 to November/2015
Amount of grant	£4880
Your email address	jtarikumg@gmail.com
Date of this report	20/11/2015

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
1) Trapping and radio collaring seven individuals of African wolf			x	Seven individuals of African wolf is successfully taped and collared on April/2015.
2) Diet and foraging behavior			x	We are successfully doing the focal watch on the collared individuals for the behavioural ecology studies. Even if identification of specific food item consumed by the wolves are difficult, a reasonably good data on diet and foraging ecology is being collected. The African wolf feeds on sheep, vegetables, insects and rodent carcasses. African wolf is the most serious predator the area, and often kills sheep and goats.
3) Habitat use and ranging patterns			x	In 98% of the field working days (12hr diurnal and 12 hr nocturnal) so far, we successfully locate the collared animals and record their locations every 15 minutes. This data will be used for the ranging pattern and habitat use.
4) Interference and exploitative competition between African wolves and sympatric Ethiopian wolves			x	This project is progressing very well, and I found this section by far more important than I first imagined. Please see detail report for more information.
5) Threats for African wolves			x	There is a serious human-African wolf conflict due to sheep predation.

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

In some occasion, due to the landscape of the mountains and gorges, we fail to locate our focal wolves with our antenna even from close distance. It is also sometimes difficult to follow wolves as they cross inaccessible mountains or gorges. Otherwise, I really do not have issue for difficulties with this project. I found much of the plans much easier than I expect. In particular, I expect capturing and collaring the African wolf would be very difficult from logistic and practical matters. Luckily, we successfully capture and collar seven individuals in locality we aim (close range of Ethiopian wolf) without much trouble.

**3. Briefly describe the three most important outcomes of your project.
In this study, the most important outcomes we have got are:**

a) Interference and exploitative Competition between the two sympatric wolves

While African wolves feed on rodents occasionally, they are not efficient rodent hunters, and hence the exploitative competition between African wolves and Ethiopian wolves may be insignificant. However, range of African wolf is restricted due to the presence of African wolf in their buffer zone. Both species are territorial, and all the observed physical interactions end up with fight. While Ethiopian wolf dominate the fight in its territory, African wolf dominate all the interactions in the buffer zone and its territory.

b) Conservation threat of African wolf

We found that the most important threat for the survival of the African wolf is persecution by humans as a result of conflict over livestock predation by African wolf. Local people attempt to keep the African wolf population by killing puppies by blocking the den site. African wolf is the most serious predator and spend much of their time in close vicinity of sheep and goats waiting for an opportunity to attack in the absence of shepherds.

c) Impact of Local rodent trapping (Difit) on feeding and movement behaviour of African wolves

Due to high abundance of rodents in the area, the local community use Difit, local rodent trapping. Difit is efficient in killing large number of rodents in the barley crop. This provide an important food source for the African wolf living in agricultural dominated landscape, and significantly affect their movement pattern and forging ecology. During the period when rodents are available from Difit, livestock predation by African wolf becomes less often.

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

Two field assistants (Demeke and Abebe) are permanently employed full time for 2 years contact and four more field assistants are currently working in the project on per diem-based contract. All assistants involved in the project get an important experience that may benefit the future conservation in the Guassa Community Conservation Area. This project will create awareness on wildlife conservation and how to resolve the carnivore-human conflict that benefits the local community in the long run.

5. Are there any plans to continue this work?

Yes, so far we followed our seven collared animals for about 8 months and we need to extend the data collection at least for the coming 16 months to have complete data on the behavioural ecology of the African wolf from 2 years intensive focal watch. The batteries used in the collars are expected to work for at least 2 years. From my previous grant, I bought a total of 14 collars, and I still have seven collars to be deployed in the other Ethiopian wolf range some 100 km from our current study area, Borena Saynt National Park. This will provide even border knowledge on the ecology of the African wolf and its potential impact on the survival of Ethiopian wolf.

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

From this project, I intend to have at least four articles published in leading, peer-reviewed international journals. I also intend to give presentations at international and national workshops.

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

The fund from RSGF has been used for one year and used effectively as originally proposed.

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 (1£=32.18 ETB).

Item	Budgeted Amount (£)	Actual Amount (£)	Difference (£)	Comments
Per diem for PIs	550	600	+50	
Per diem for four field assistants (135 days x 5 £)	2700	2380	-320	Number of assistants increased because of night tracking
Local Transportation	300	300	0	
VHF Collar	1600	1600	0	
Total	5150£	4880£	-270£	

9. Looking ahead, what do you feel are the important next steps? (For more detail see point 5 above)

My current study of the African wolf is limited to the Guassa area and extending the study to the other Ethiopian highlands where Ethiopian wolf persists is needed to provide more conclusive results. My focal sample individuals (seven individuals) are also not a big number to answer some of the ecological questions. Hence, increasing the sampling number of individuals at larger spatial range is important. The other important issue to study what effective measure should be considered for the best conservation effort of African wolf and Ethiopian wolf which appeared to be rivals. This I expect to be debatable but may need an answer. In the Guassa Mountains, it is clear that the African

wolf population is kept low by the local community. If this is stopped, will the African wolf displace the critically endangered Ethiopian wolf? While it is difficult to conclude, it is important to question if the African wolf displace some of the Ethiopian wolf population in Gosh meda and Mount Choke where Africa wolf was lost some decades back.

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, Guassa-Menz Community Conservation Area is visited by tourists and is the first recipient of the UIAA Mountain Protection Award. This project was visited by several interested conservation advocates and a film maker. I will acknowledge in the articles and presentation I am planning in the near future.

11. Any other comments?

This project was impossible without the support of the RSGF and I am glad to see RSGF grant supporting this and many other important conservation researches in Ethiopia.





