

### 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	Gidey Yirga			
Project title	Conservation status of the lion ( <i>Panthera leo</i> , Linnaeus 1758) in Mago National Park, southern Ethiopia			
RSG reference	15814-1			
Reporting period	12 months			
Amount of grant	£4985			
Your email address	gidey.yirga@yahoo.com			
Date of this report	7/25/2015			



# **1.** Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

	Not	Partially	Fully	
Objective	achieved	, achieved	achieved	Comments
Abundance and density of lions			V	Call-up stations were conducted but no lion response. During our extensive filed work one juvenile lion was opportunistically observed in our way to a second call-up station. Most of the park was not accessible for calling stations.
Livestock depredation			V	Spotted hyenas and leopards were the main predators on livestock species followed by jackal and lions. Mago national park is under extensive anthropogenic pressure from illegal hunting, livestock grazing, forest fire, illegal settlement and agricultural expansion. Local pastoralist hunt wildlife illegally for meat, prestige and status. Lions, elephants and buffalo are more targeted. Forests are increasingly being converted for subsistence agriculture. Grasslands of the park are used for livestock grazing, for example, more than 130,000 cattle are grazing in park.
Community perceptions towards lion conservation			V	Community perceptions towards lion conservation were strongly negative indicating very low support and commitment of local communities to protect and conserve lions. Conservation attitude of the local community is highly influenced by the livestock depredation problem. The relationship between the local people and park staff was violent. A scout was killed by the local people during the study period.
Lion attacks on humans and retaliatory lion killings			V	No attacks on humans were recorded by carnivores expect one 42 years old man was injured by lion in 2014 inside the park. At least five lions have been killed as a result of livestock depredation in park.



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

Two unforeseen difficulty arose during the implementation of this project. During the study period severe disputes over hunting erupted between the local people and scouts as a result a scout was killed and that incident was a challenge for our lion survey. Thanks for the staff of the park; we safely completed our lion survey. Households normally demanded for payments during interviews. By explaining the objectives of the research we finally mangled the problem.

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

The most important outcomes of the project are

1. Abundance of predators

We estimated abundance and density of lions, spotted hyenas and jackals using call-up stations. Population assessment will help for future planning and for effective management of the species in the park.

2. Perceptions towards lion conservation

Community perceptions towards lion conservation were strongly negative indicating very low support and commitment of local communities to protect and conserve lions. Sample respondents were interviewed on four main issues: conflict, mitigation, perception and losses. We have already identified local people's perception towards lion conservation.

3. Livestock loss factors

Spotted hyenas and leopards were the main predators on livestock species followed by jackals and lions. No attacks on humans were recorded by carnivores expect one 42 years old man was injured by lion in 2014 inside the park. Disease ranked first as livestock loss factor followed by depredation and theft, respectively.

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

Field training was given to the scouts involved in the project during actual filed survey in order to build conservation capacity focusing on call-up stations. People from the management of the park who speaks the local language were trained to complete a semi-structure interview with a four page questions. The communities were actively involved as sample respondents. They provide extremely useful information in relation to lion conservation, livestock loss factors and their feeling towards lion conservation. This is extremely important for effective long term conservation of lions in the area.

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

Yes. We even plan to apply for the 2nd Rufford Small Grant. Community perceptions towards lion conservation were strongly negative indicating demand for communication of wildlife conservation to the general public. Future research will focus on conservation capacity building and awareness raising campaign. There is demand from the protected areas staff to train and develop their conservation capacity. Lion population survey in Omo and Mago national park may provide a complete data of the lion population in Ethiopia and hence we are now looking ahead to a number of research and conservation activities in these national parks as well.



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

We have almost drafted the first manuscript for publication in peer reviewed international journal. The final report will be provided to Ethiopian Wildlife Conservation Authority and Mago national park. The findings will be presented to Mekelle University community during the annual research review days which will be heled at the end December, 2015.

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

As planned, the grant was used over the period of September 2014 to July 2015.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in  $\pounds$  sterling, indicating the local exchange rate used.

Item	Budgeted	Actual	Difference	Comments
	Amount	Amount		
Per Diem	2310	2360.12	50.12	During the study period severe disputes over hunting erupted between the local people and scouts as a result a scout of Mago National Park was killed and that incident was a challenge and risky for our lion survey in the park. For safety reasons, additional armed scouts were involved during the lion population survey.
Mileage and fuel cost	2380	2387.5	7.5	We travelled a little more distance to locate calling stations in open areas.
Battery, printing and Copying	295	306.3	11.3	We used more battery for night vision binoculars.
TOTAL	4985	5053.92	68.92	

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

The important next steps include publication of the findings in international journals for wider communication and sharing the results with Ethiopian Wildlife Conservation Authority, Mago National Park and Rufford Foundation. Also the findings will be presented during the annual research review day at Mekelle University. Conservation capacity building and awareness raising campaign will be invaluable for long term lion conservation outcomes. Therefore, we anticipated that Rufford Foundation to provide grants for our next projects.

## **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?

We advertised the generous support and ensure maximum publicity of the Rufford Foundation at least at Mekelle University during meetings at Department, College and University levels. Rufford



Foundation was mentioned as the funding partner of the project during flied work and many researchers at Mekelle University have submitted proposals to the foundation as a result of this advertisement.

#### 11. Any other comments?

The Rufford Foundation grant support has been extremely useful in assessing the lion population and local people perception towards lion conservation in Mago National Park. We hope that Rufford Foundation will continue supporting lion conservation in Ethiopia and we look forward to continuous engagement with the foundation.