

## 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. 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**

Grant Recipient Details	
<b>Your name</b>	Berihun Gebremedhin Mewicha
<b>Project title</b>	Habitat suitability modeling for the endemic Walia ibex ( <i>Capra walie</i> ) in Simen Mountains, Ethiopia
<b>RSG reference</b>	8960-1
<b>Reporting period</b>	December 2011
<b>Amount of grant</b>	£5876
<b>Your email address</b>	<a href="mailto:berihungm@yahoo.com">berihungm@yahoo.com</a>
<b>Date of this report</b>	28/12/2011

**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
Presence/absence data collection for Walia ibex habitat suitability			✓	But absence of Walia ibex in some areas (habitat) could not be confirmed if it was because of unsuitability of the habitat or a result of human factor. Presence-only data will be used for the habitat suitability study. The data is under analysis.
Plant specimen collection in sub-alpine ecosystem of the park			✓	Plant specimens collected in areas where Walia ibex were observed. The specimens will be used for diet analysis of the animal using DNA barcoding.
Gathering information on historical distribution of Walia ibex outside of the present ranges will be gathered	✓			Questionnaires were designed and distributed to assess the historical ranges of the Walia ibex. However, local informants were suspicious of answering the questionnaires related to historical ranges, as they were afraid that such information would have negative consequences on their future settlement.
GIS training for staff members of Simen Mountains National Park (SMNP)		✓		The research leader trained separately, but Park staff training was delayed due to tight time schedule inconveniences. This will be accomplished in January 2012.

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

- The Simen Mountains are characterised by highly rugged and dissected mountain ecosystem, and is among the most densely populated agricultural areas in Ethiopia, fragmented by extensive agriculture and human settlement. This has hampered sampling and collection of ecological variables in an area of 3500 square kilometres as proposed originally.
- This problem has limited the actual area surveyed for assessment of potential area of distribution for the Walia ibex. Attention was given to areas with ecological characteristics that are presumed to have significant impact on the distribution of Walia ibex.

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

- Generation of presence-only data that are the bases for modelling the distribution of the Walia ibex. Key factors that influence the abundance of Walia ibex have been identified. While distance from escape is the main environmental factor, level of disturbance by man was the major factor that influences abundance and occupancy.

- Collection of plant specimens from the sub-alpine ecosystem would enable filling the paucity of previous surveys and collections of the flora of the Park.
- Training of the park staff members on basics of GIS and GPS, and its application for distribution data analysis of Wild animals.

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

- Local peoples participation was very crucial for the successful completion of the field work. The park staff and game scouts have been involved in collection of plant specimens, identification of plants by local names, faeces samples and other ecological information. Members of the local community were also involved in working as day labourers, local informants, and have been benefited from renting horses and mules. The field work was participatory in the sense that people from specific villages were hired whenever data collection was done in/near their respective localities.
- Objective of the study and conservation significance of Walia ibex and other wildlife species of the park has been communicated and explained to local communities in social gatherings.
- Game scouts obtained the opportunity to accomplish park enforcement activities, patrolling of illegal activities such as fire, tree cutting, etc.

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

Assessing the impact of predators on the population size and distribution patterns of Walia ibex and other herbivores communities of the park would be very important for management of the Park. Undertaking this conservation problem would enable understanding the influence of predators on the management of this highly critical and important species. There is a plan to continue on this aspect of the research. As predators have a very wide home range, such study requires a close follow-up and long time field data. This is proposed to be conducted in collaboration with the park office.

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

This research is part of my thesis, and publishing the result of the findings in scientific journal is a requirement and mandatory. So after completion of the data analysis, an article will be prepared and sent to a scientific journal for publication. Moreover, the work will be delivered in international conference, especially, the upcoming sixth conference of the World Mountain Ungulates, and also at both national and local level workshops.

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

The RSG was used for 6 months. Although, originally, the field data collection was proposed to be accomplished in 3 months of intensive field work, the practical accomplishment of the data collection was delayed mainly because the large portion of the study area was inaccessible by car. Attempt has been made to complete the field work and data entry in one year with the budget requested in the proposal.

**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
Mileage (gas and vehicle maintenance) to field site for researcher	1576	1355	+221*	
Allowance for local experts	1800	1780	+20*	
Field rate periderm (lodging & meals)	2400	2400	0	
Topographic map	100	100	0	
GIS training	--	241		Covered from unused budget above*
<b>Total</b>	<b>5876</b>	<b>5876</b>		

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

- Once the research findings published, effort should be made to convince park managers to consider the information in the management of the protected area, or prepare an action plan for conservation of the species that consider the habitat suitability modelling as future expansion model to increase abundance of *Walia ibex*.
- Enhancing conservation education activities for awareness creation on wildlife conservation. Routine interaction with local community leaders and find ways for benefiting local people from tourism.
- Strengthening of enforcement and patrolling in areas where the intensity of human disturbance is relatively high.

**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?**

There was no plan of carrying out a conservation education programme at schools level, and the logo of RSGF was not used throughout the field data collection period. But it was used while presenting progress report at the annual meeting of the Centre for Ecology and Evolutionary Synthesis, University of Oslo, Norway, held in October 2011. I have submitted copy of the grant award letter from RSGF to the Ethiopian Wildlife Conservation Authority (EWCA).

**11. Any other comments?**

The assistance and cooperation from the Ethiopian Wildlife Conservation Authority and the SMNP in general and especially from the local experts and game scouts and the local community was also immense which I think was great, which partly has contributed for effective utilization of the RSG. The Grant has greatly facilitated my field work and helped in collection of ecological data from all potential habitats of the *Walia ibex*. Hence, RSGF is greatly appreciated.