

The Rufford 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	Amera Moges Gebeyehu
Project title	The distribution pattern, habitat use, population status and ecology of Arsi Geladas (<i>Theropithecus gelada</i> unnamed subspecies) in eastern Arsi, Ethiopia.
RSG reference	18192-1
Reporting period	September 2015 to October 2016
Amount of grant	£5000
Your email address	ameramoges2000@gmail.com
Date of this report	OCT. 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
Distribution of Arsi geladas			<input type="checkbox"/>	The distribution of the isolated and endangered Arsi geladas were fully assessed in different localities of Eastern Arsi.
Habitat use of Arsi geladas			<input type="checkbox"/>	The habitat use of the isolated and endangered Arsi geladas were assessed in anthropogenic disturbed and different cliffy localities. The preferred habitats of geladas have been identified and recommended for further conservation of the species and its habitats.
Population estimation and density of Arsi geladas			<input type="checkbox"/>	The population size and density estimation data were collected from different localities including the anthropogenic disturbed and remote areas. Currently, the status of the Arsi geladas have not been known, it has been earnestly grouped together with <i>T. g. obscurus</i> , the central gelada population in IUCN status. Thus, the study results of the population status will be reported soon to the IUNC for further revision of the three gelada subspecies independently.
Ecology of Arsi gelada (foraging, activity and ranging pattern of Arsi geladas)			<input type="checkbox"/>	One Male Unit (OMU) of a band gelada group was selected for conducting behavioural ecology of Arsi geladas. Scan sampling technique was applied in study of foraging ecology, Activity and ranging patterns of Arsi geladas.
Vegetation composition and Phenology			<input type="checkbox"/>	Vegetation composition was assessed in the home range of the study group. Grass and plant phenology was assessed in home range of the study group to determine food availability of the Arsi

assessment				geladas.
Human gelada conflict	-		<input type="checkbox"/>	The status of human disturbance to the Arsi geladas was assessed via questionnaire survey from the local people at all the gelada habitats.

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

The study localities were very harsh and remote especially during the dry season, and was not accessible to vehicle to travel from one locality to another. I conducted the survey using mule and on foot journey. I faced a problem to communicate with the local people as I couldn't speak the local language, Oromipha, especially at the beginning of the study. The area is very cliffy and the geladas were frightened the local people, they continuously flee to the cliff when the local people close them, and was difficult to observe them closely at the beginning of the study. It was difficult for the researcher to access and descending the cliff when the geladas remained down the cliff during the dry season when they spend much time in the shade of trees and bushes in the cliff to avoid the hot time. I solved the problem by continued habituation of the study group. I gradually used different mechanisms to move down the cliff to reach geladas and worked effectively.

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

- 1) Generate scientific data on the distribution pattern, population size, habitat use, foraging ecology, activity and ranging pattern of the isolated endangered subspecies of Arsi geladas in eastern Arsi. Population estimated from seven remaining gelada localities including three new localities in eastern Arsi.
- 2) The data are inputs to Woreda district, Zone, Oromia Region Forest and Wildlife Office, Ethiopia Wildlife Conservation Authority (EWCA) and other stakeholders for the legal protection of the remaining areas where Arsi geladas occurred and to incorporate the results and devise the wildlife conservation and management plan. The data will help to assess the IUCN Red List status of the new third Arsi gelada subspecies that almost certainly warrants "Endangered" status.
- 3) The researcher creates awareness among the local community to reduce human-gelada conflict and to develop the local as sense of ownership to build up strong community based conservation programmes.

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

The local people provided employment opportunities from the project for local field assistants of data collection, field guide and camp attendants and benefited economically. Other local people also obtained benefits from renting their mule for the Arsi gelada project. The longer-term advantage for the local community is, however, in learning and sharing skills to participate in scientific data collection and for further project of conservation of geladas in their home region.

5. Are there any plans to continue this work?

Yes, I have plan to continue further research project on the conservation and protection of Arsi geladas. From the knowledge I obtained, more detail study will be continued on gelada conservation research such as habitat suitability model and awareness creation activities to the local community to resolve the human-gelada conflict and lobby wildlife officers and policy makers such as EWCA for conserving and protecting the endangered Arsi geladas in their habitats and to delineate the areas as legally protected for the geladas and other wildlife.

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

I am in drafting at least three manuscripts of this study of my PhD Thesis to publish in peer-reviewed scientific journals to increase knowledge among the scientific community about the ecology of the little-known, endangered Arsi gelada.

At the end of the project, a copy of the final report will be given to Woreda district, Zone Agriculture and Wildlife Conservation Offices, Oromia Region Forest and Wildlife Conservation Office, the Ethiopian Wildlife Conservation Authority (EWCA) and NGOs working on wildlife to implement conservation actions of Arsi geladas and their habitats.

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

The project was conducted according to the time frame as planned.

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
I) Personnel: Field per diem and individuals involved				
Principal Investigator (1indiv.)	£1400	£1600	+£200	
Camp attendant (1indiv.)	£800	£800		
Field assistant (1indiv.)	£1000	£1000		
Local guide per diem (1indiv.)	£600	£600		
II. Transportation: public transport, Mule/donkey rent, vehicle hire for transport for research team & fuel	£400	£750	+£350	
III. Consumables: Gps batteries, stationaries, photocopies, printing/binding	£500	£450	-£50	
Flash light, battery, film developer, raincoat & field shoes	£300	£300		
TOTAL	£5000	£5500	+£500	

1£ = 30 ETB (the current currency exchange rate)

I have used additional budget for this project from my own funds due to the current inflation that the field cost becomes expensive.

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

The current project was very successful in documenting all necessary data. I documented the distribution, habitat occupancy, Population size and ecological data of Arsi gelada. Currently I am conducting analysis of data and write up my PhD Thesis and drafting the manuscript. Next completing this work, further project will be continued on the gelada conservation research and habitat modelling and awareness creation works for conserving endangered endemic Arsi geladas.

The gelada habitats are highly fragmented. The previous gelada habitats are converting to Human settlement, agriculture and grazing land. The Arsi gelada population may not



survive over the long-term in their current condition. Thus, intensive work is crucial for awareness creation among the local community, local and regional wildlife professional and decision makers to delineate and legally protect the area of the little known Arsi gelada. The current project educates the local people to create a buffer zone between the cliffs used by the geladas and nearby farmlands. However, a big work is needed. The next plan will be to build the local capacity for the protection and conservation of Arsi geladas.

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?

I am using the RSGF logo in this progressive report and will use the RSGF logo for any reports, PhD thesis and drafting materials produce in relation to this project and for the final document which will be given to the local and regional Wildlife offices and NGO.

11. Any other comments?

I would like to give appreciation for Rufford Small Grants Foundation for financial support for my Arsi gelada project. The grant was very crucial for collecting ecological data of the Arsi gelada project. Arsi geladas are the isolated and little known endangered endemic subspecies. Thus, RSGF grant support was vital to protect and to save this endangered charismatic subspecies of the recently discovered *Theropithecus gelada* and their habitats. I thank you very much for the support. I hope we continue working together to save wildlife.