

## The Rufford Foundation

### Final Report

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Congratulations on the completion of your project that was supported by The Rufford 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**

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Grant Recipient Details	
Your name	Russom Teklay Tewelde
Project title	Species composition, relative abundance and habitat use of bird species in the suburbs of Asmara City, Central Region-Eritrea
RSG reference	27329-1
Reporting period	May 2020
Amount of grant	£4,905
Your email address	<a href="mailto:teweledert@gmail.com">teweledert@gmail.com</a>
Date of this report	05/05/2020

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
Collect data on temporal and spatial Species composition				During the rainy season, the survey was conducted only in the morning hours which may affect the results.
Determine the relative abundance of each species				Repeated survey over a long period is required to determine accurate abundance of each species. Thus, this project is more subjective, and it only provides a broad overview.
Identify habitat preference by the species				Due to anthropogenic activities the natural habitat has been changed a lot and reduced to an almost homogenous habitat type. This, in turn, affects species diversity.
Increase Awareness level of the local community				Local communities were more suspicious of participating in the awareness programme related to conservation issues as they were afraid that such training would have negative consequences on their future settlement and agricultural activities.

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

- Some study sites were not as easily accessible as planned due to security reasons; for example, areas near the international airport and military camps. To solve this, a special permission has been requested to access such sites at least partially. Moreover, some survey sites were replaced with similar habitat types close by.
- Parallel to other factors, the presence of ornithological experts is a key role to the success of ornithological projects. Thus, the lack of local experts was a great challenge. The research team extended the working days to allow visit all predefined study plots and collect representative data.
- Funds requested from the CROWDER MESSERSMITH CONSERVATION FUND to cover additional expenses of transportation and accommodation was not awarded. The research team thus formed two groups to operate simultaneously.

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

- Seasonal and spatial species composition and the relative abundance of bird species have been determined which is central for monitoring and conservational planning. This will help prioritise conservation measures for threatened species, highlight the role and importance of the site in the bird's annual cycle and encourage continued monitoring of the sites by taking corrective measures. Anthropogenic activities and habitat transformation were identified as major threats.
- The study area was stratified into habitat types, open seasonal farmland, irrigation land and wetland and/or water bodies, and bird species inhabiting in each habitat type were identified and recorded. This shows the habitat type/species diversity relationship. Thus, the habitat preference of each species encountered was determined.
- Awareness programmes, through public seminars and social gatherings, were organised in the local communities, particularly with schoolchildren and farm workers, to increase their understanding/consciousness level on the value of biodiversity in general and appreciate the value of birds in particular and, in the long term, take part in the bird monitoring scheme.

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

Community participation was crucial for the success of the project. Through experience, the local people know which species of birds are commonly visiting the area for breeding, wintering or pass over, which of these are migratory and permanent residents and birds with increasing and decreasing trends. In reverse, the local communities were convinced and changed their attitude towards birds. Now they understand the value of birds in controlling pests and pollination.

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

Eritrea exhibits a number of globally and regionally threatened bird species, many of which inhabit the central highlands. Thus, the team is planning to continue the project within and beyond the current study area. Expanding the existing project to a larger scale provides a basis for conservation and management programmes through generating reliable information on current status. Here, the distribution range of each species, especially those considered threatened, will be determined, major threats will be identified, and corrective measures and conservation actions will be implemented in collaboration with the governmental bodies and local communities.

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

Immediately after the completion of data analysis, an article will be published in a peer reviewed scientific journal. Moreover, the research results will be given to stakeholders, especially the Wildlife Department, and a seminar will be organised for

scholars and students in the Department of Biology, Eritrea Institute of Technology (EIT).

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

Originally the project was proposed to be accomplished in 10 months. Accordingly, the project was implemented within the specified period of time, without any delay and/or interruption. The Rufford Foundation grant was used to run the project solely in the previously proposed timeframe.

**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
<b>Project preparation:</b> Communications, Medical supplies, Team training, stationery and reconnaissance.	727	550	+227 *	
<b>Equipment:</b> Field guide, map, Journals and printed materials; Video camera hire.	301	301		
<b>Project Implementation:</b> Accommodation, food, transportation, awareness and outreach activities.	3087	3704	-617	The difference covered from *
<b>Post-Fieldwork Expenses:</b> Report production and monitoring.	790	400	+390 *	
<b>Total</b>	<b>4905</b>	<b>4905</b>		
<b>Local exchange rate:</b> £1 = 19.78 NK				

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

- Bird records in Eritrea are very incomplete, data quality is poor and conservation policy is in its infancy. Many areas have not been surveyed or visited for 60 years or more, some areas have never been investigated and many recent records are from relatively accessible areas. Undertaking additional research projects in the central highlands of Eritrea will allow us to collect all the basic information and promote the next level of designing bird conservation strategies, as the Eritrea harbours many globally and regionally threatened species.
- Lack of professionals and skilled manpower is identified as a key problem. To promote and enhance a bird monitoring scheme in Eritrea, a training workshop and outreach programmes have to be carried out. It is believed to

build local capacity and generate trained personnel with substantial information and skills required to boost birding activities in Eritrea.

- Public education and awareness raising are fundamental issues in conservation programmes and activities. Thus, an additional awareness programme through public seminars and events needs to be organised within and beyond the current study area.

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

As part of the project, an awareness and outreach programme has been carried out for school children from the study area, where The Rufford Foundation logo was used. Moreover, the logo will be used during the seminar event in EIT, delayed due to the emergence of COVID-19.

**11. Please provide a full list of all the members of your team and briefly what was their role in the project.**

**Russom Teklay:** Team leader, project coordinator, researcher, data processor and final report writer.

**Rezene Habte:** Researcher; Awareness program organizer, coordinator, facilitator and presenter; and data processor.

**Dawit Berhane:** researcher, awareness program presenter and tour guide.

**Bereket Andeberhan:** Public relations and advocacy, First Aid, documentation and data management.

**12. Any other comments?**

Cooperation from the Department of Biology, Eritrean Institute of Technology, and positive assistance from the local communities and experts throughout the research period was key for the success of the project. Overall, the project funding from The Rufford Foundation is extremely appreciated, in that it facilitated the implementation of the project successfully.