

Final Evaluation Report

Your Details				
Full Name	Paul Tehoda			
Project Title	Safeguarding the Persistence of Robbins' House Bat in Southwestern Ghana			
Application ID	31139-B			
Date of this Report	10 th January, 2023			



1. 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
Population trend of the species				The population trend analysis of the Robbins' house bat with data from 2015 to 2022 bat surveys in the Krokosua Hills Forest Reserve suggested that there has been a continuous increase in the population of the Robbins' house bat (Scotophilus nucella) and other bat species captured during these survey periods. A total of 43 individuals of the Robbins' house bat were recorded during this third phase of this project compared to 21 individuals in the second phase and seven in the first phase. There was also a general increase in the abundance of other bat species recorded compared to the two previous phases. The population structure of the 43 individuals of the Robbins' house bat was 20 adult females, 16 adult males, four sub-adult females, two sub-adult males and one mother with a baby.
Conservation awareness campaigns				Over 1000 people were educated on the conservation importance of bats and forest. Most of these locals are currently adopting environmentally sound practices (creating riparian buffer of 50 m, control burning, use of recommended pesticides), which are not detrimental to habitats of bats and other wildlife species.
Training of locals in alternative livelihood ventures				Thirty locals from two fringe communities were trained in beekeeping and snail rearing and provided with two beehives each to start beekeeping project.
Training of volunteers in bat sampling and identification techniques				Eight volunteers made up of locals and university students were trained in bat sampling (mist netting, handling of bats and morphometric measurement, taking tissue samples, etc.) and identification techniques. They are equipped with the skills to conduct independent survey of bats.



2. Describe the three most important outcomes of your project.

- a) Over 1000 locals from five communities were educated on the conservation importance of bats and the role they could play in their conservation. They were also educated on myths about bats and being reservoir for many viruses and how they can harmoniously live with them in their communities. These have engendered local community support for the species and have highly reduced the wrong perception about bats.
- b) Eight volunteers, five university students and three local community members, were trained in bat survey and identification techniques. This has increased expertise for bat research and conservation in Ghana as currently very few bat scientists exist in the country. The locally trained volunteers are currently leading conservation actions of the species on the ground and have been providing us with information on the habitat status of the species.
- c) We established two community groups and provided them with training in beekeeping and snail rearing as a green alternative livelihood ventures. Thirty members of the community groups were supported with two beehives each to start the beekeeping venture. The beekeeping venture is at its early stage so no harvesting is done yet at the end of the project period.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

The provision of locals with beehives and its accessories to start green alternative livelihood venture delayed for about 6 months due to the inability of the carpenter that I awarded the contract to deliver on time.

4. Describe the involvement of local communities and how they have benefitted from the project.

Through this project, 30 locals were trained in beekeeping and snail rearing, and based on assessment on availability or easy market access for their products, they have all concluded on beekeeping and were provided with seed capital of £87 each in the form of two beehives each with their accessories. The fringe community members were also engaged in other project activities including field survey, conservation education programmes and stakeholder workshops and training in bat sampling and identification techniques. Few community members were also recruited as local field assistants and paid for their services. Some community members that participated in our program with great enthusiasm were given project t-shirt to promote bat conservation in the fringe communities.

5. Are there any plans to continue this work?

Yes. I hope to apply for the Rufford 2^{nd} Booster Grant and other grants to continue the conservation work on bats in the Krokosua Hills Forest Reserve. I hope to continue with the population monitoring of the species, habitat restoration and build more local support for bat conservation.



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

The research findings are intended to be published in international peer-reviewed journals for wider accessibility. Hence, we are currently preparing a manuscript on the outcomes of the project for submission to the Journal of Ecology and Evolution. Updated technical report on the research finding is being prepared and will be shared with the Wildlife Division and Forest Service Division of the Forestry Commission of Ghana, Department of Wildlife and Range Management- KNUST, the Juaboso District Assembly and other concerned conservation organisations.

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

- 1. Habitat restoration or enrichment planting in degraded or disturbed areas that form part of foraging grounds for the species to fully protect this habitat for long term persistence of the species.
- 2. To continue with green alternative livelihood training for local community members and provide another cohort with seed capital to start any of the green alternative livelihood venture.
- 3. Extend conservation education programmes and stakeholder dialogues to other communities of the reserve to rally more local support for conservation.

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

The RF logo was embossed on the conservation education t-shirt produced, Flyers and posters and was also put on the PowerPoint presentations. The RF logo was also verbally acknowledged as the funders of this project during our stakeholder workshops and community education programmes.

9. Provide a full list of all the members of your team and their role in the project.

Paul Tehoda: I am the leader of the team which successfully implemented this project. I oversaw all project activities and have led the field survey and bat training programme. I organised and played key roles in the stakeholder workshops and conservation education programmes.

Alfred Assumang: He was a team member and assisted on the field survey and bat training programme. Thus, assisted with mist netting, handling of bats, taking morphometric measurements, data recording etc. He also led the stakeholder dialogue and conservation education programmes.

Florence Ghansah: She was a team member and assisted on all aspect of project activities including the field survey, training and conservation education programs.



Francis Twum-Barimah: He was a team member and assisted on all project activities. He also played additional role as a cameraman on the project.

10. Any other comments?

I am most thankful to The Rufford Foundation for providing me and my team with the 1st Booster Grant to successfully implement this phase of the project.

