

The Rufford Foundation Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Ohene Boakye Adomako
Project title	Survey and Conservation Status of Two Threatened Hinge-backed Tortoises (<i>Kinixys homeana</i> and <i>K. erosa</i>) in South-Western Ghana
RSG reference	14546-1
Reporting period	One-year
Amount of grant	£5706
Your email address	eden.boakye@gmail.com
Date of this report	31 st October, 2015

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
Assess species distribution, population dynamics and threats		X		<p>We conducted extensive field surveys and gathered information through the distribution of questionnaires to local people. In addition to the study area, we also surveyed the Rubiso-Bosomkese Forest Reserve, Sui River Forest Reserve and Ankasa Resource Reserve. We recorded a total of 23 individuals of the two threatened hinged-backed tortoises during field and household surveys in fringe communities. With the help of local hunters, we also recorded 35 shells of <i>Kinixys</i> tortoises and identified previous captured locations and foraged sites. <i>Kinixys</i> tortoises were described as very scarce in recent years compared to the past 10-20 years when they were in abundance. Predominant threats recorded included hunting for the purposes of consumption and traditional medicine, illegal logging, farming and mining activities and bushfires. The trade in tortoises was also reported to be occasional.</p>
Increase awareness on the conservation needs of the tortoises and their habitats			X	<p>For the first time through this project, local villages surrounding project sites have benefitted from our awareness campaign. In collaboration with village authorities, we have reached an estimated one thousand local people with our conservation message using their native language to better communicate with them. We broadcast live on local radio stations, made visits to schools and churches. We also made house-to-house visits, ensuring we reached as many people as possible. In addition, we developed and freely distributed project materials including banners, t-shirts, posters and flyers to local stakeholders and the general public. These interventions have helped to enlighten people about the importance of tortoises, the threats to their survival and how to conserve them and their habitats. With the help of personnel from the Wildlife Division, Ghana's Forestry Commission and the Department of Wildlife and Range</p>

				Management, KNUST, we conducted capacity building workshops for students, hunters and farmers; training them on the basic ecology and the conservation needs of the tortoises.
Develop a conservation action plan for tortoises		X		Through collaborative meetings with all major stakeholders including farmers, loggers, opinion leaders and the Forestry Commission, the project has been able to draft management recommendations for the long-term persistence of tortoises and their habitats in our study areas. The final draft is yet to be completed as the first draft is currently being disseminated to stakeholders for final inputs.

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

We conducted series of dialogues through our local contacts before recruiting hunters to begin our field surveys. Most local hunters lack the necessary permits for their hunting activities. The hunters were reluctant in joining the project initially, since they feared we were government officials operating undercover to report their activities to authorities. This greatly affected our project timeline as it delayed the onset of surveys.

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

This study is among the few focused researches on *Kinixys* tortoises in Ghana hence an important information source for future investigations. With the help of hunters and locals we collected important baseline data on the species' biology and ethnozoology. *Kinixys* species were recorded from the following localities: Tano-offin forest reserve had nine individuals comprising the two species (8-*Kinixys homeana*; 1-*Kinixys erosa*), Suhuma forest reserve with eight individuals of the two species (6-*Kinixys homeana*; 2-*Kinixys erosa*), Sui river forest reserve with two individuals (2-*Kinixys homeana*), Rubiso-Bosomkese forest reserve with an individual (*Kinixys homeana*) and the Ankasa resource reserve (3-*Kinixys homeana*) all in south western Ghana. In addition, we recorded 35 shells of *Kinixys* tortoises altogether in these areas. We also identified that, the tortoises are mostly captured in October when locals go in search of edible mushrooms, which are also consumed by the tortoises.

We established that populations of the forest hinge backed tortoises are declining and also there are no taboos, which culturally offer protection for wildlife, restricting their use in all areas visited. Although many local people harbour various superstitious beliefs about tortoises including *Kinixys*. However, these beliefs do not help in the protection of the *Kinixys* species in the areas visited.

Through this project, ten local people (hunters, farmers and illegal loggers) and two bachelor students were successfully trained on the basic ecology and the conservation needs of tortoises. This training has enabled them to improve their knowledge base in chelonian ecology and conservation and hence will help sustain the project's initiatives.

Prior to this project, knowledge on the conservation needs of *kinixys* tortoises was non-existent in forest communities we visited. Our project is the first to rally conservation support for these species in these areas. We held meetings with community leaders, forestry officials and community members, sensitizing these stakeholders on the important role's tortoises play in the ecosystem. Our conservation education paid off as many local people willingly produced their captures for examination; something they usually were apprehensive about. Also, stakeholders welcomed the idea of protecting the tortoises and assisted with formulating management recommendations to reduce threats to the tortoises' and ensure their long-term persistence.

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

Local community members were involved at every stage of the project and contributed immensely to help us achieve our objectives. Through the efforts of local people, we identified experienced hunters who formed an integral part of our field surveys. These hunters benefited from technical skills in monitoring tortoises which included line transect techniques and how to collect basic environmental data. With this new skill, they are continuously collecting data and reporting their findings to us. Also, local community members gained understanding of the need to protect the environment and shared their knowledge on the species through the questions that were asked during focus group discussions, questionnaires administration and household surveys. Local stakeholders contributed in the formulation of management recommendations for the protection of tortoises, promising to help reduce threats to the species and their habitats.

The training we also offered these local people and students on the basic ecology and conservation needs of the tortoises will go a long way to sustain our conservation efforts.

5. Are there any plans to continue this work?

Having collected this primary data, the project seeks to embark on more systematic and long-term surveys to observe the field ecology of the two threatened hinged-back tortoises in our study areas and the additional detected areas. Also, efforts to involve the wider community through awareness and capacity building programs should be continued.

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

We have already shared the results to local stakeholders. A detailed technical report which we plan to make available to the Ghana Wildlife Division is currently in preparation. We intend to publish the findings of this research in the turtle and tortoise newsletter and in open access peer reviewed journals for the wider scientific community.

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

The Rufford Foundation Grant was used for about 18 months against the proposed 12 months period. We had to re-structure our project timeline due to the difficulties we encountered with local hunters who formed an integral part of the field surveys.

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
Reconnaissance survey	440	440	0	
Hiring of vehicle for field surveys	600	672	-72	Cost of hiring vehicle increased during the survey period as the local currency dropped. However, cost was buffered with contingency.
Cost of fuel for field surveys	720	795	-75	This was due to the rise in fuel prices and the depreciation of the local currency over survey period
Cost of developing map	45	45	0	
Daily subsistence allowance for team during field surveys	750	750	0	
Conservation education/radio programmes	1235	1135	+100	We obtained a free projector from the department of wildlife and range management for our video shows
Printing (photo guides/ t-shirts/posters)	1240	1240	0	
Organisation of 4 stakeholder workshops to conduct need assessments and develop a management plan	300	300	0	
Digital camera + Handheld GPS	104	104	0	
Contingency	272	272	0	
Total	5706	5753	-47	

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

The following are considered to be the most important next steps:

- I. *Kinixys* tortoises are rare and difficult to detect in the forest, we therefore suggest a thorough assessment of the field ecology needs in order to design appropriate conservation interventions. Field surveys should also encompass areas within south-western Ghana where *Kinixys* tortoises were detected during additional preliminary surveys.
- II. Further involve stakeholders to restore degraded portions within the species' detected ranges.

- III. Sustain the educational program to ensure local stakeholders understand the importance of protecting these tortoises and their habitats and other co-occurring endangered species.

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

We used the Rufford Foundation Logo on all project materials (flyers, posters and t-shirts). At the local community level, the RSGF was mentioned during focus group meetings and sensitisation programmes. The foundation has also been recognised in our draft management recommendations. We will also acknowledge the Rufford Foundation support in our technical reports and publications.

11. Any other comments?

We are very grateful to the RSGF for supporting us to promote tortoise conservation in Ghana. We would like to thank the Forest service divisions of the Sefwi Wiaso and Nkawie Districts for their support. We are also grateful to all local stakeholders of the various communities fringing the Tano-Offin and Suhuma forest reserves and the hunters who assisted on the project. We are as well grateful to the Wildlife and Range Management Department, KNUST for their support.

