

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	Conservation Action for the Two Endangered Hinge-backed Tortoises (<i>Kinixys homeana</i> and <i>K.erosa</i>) in South-western Ghana
RSG reference	21703-2
Reporting period	One-year
Amount of grant	£5000
Your email address	eden.boakye@gmail.com
Date of this report	10 October 2018

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
1) Promote alternative livelihood options that meet the economic needs of tortoise-hunting families				We used literature review, interviews and focused meetings to gather information on the best alternative livelihood options. Sixty households (total household members = 477) in three villages (Kyekyerewere, Pemuso and Kyereyaso) were first interviewed with semi-structured questionnaire. All the households interviewed were involved/ had engaged in tortoise hunting. Thirty household heads were voluntarily selected for the focused group meetings. Mushroom farming and beekeeping were the most favoured alternative livelihood options by local people. These options were also determined to be ideal incentives for protecting forest tortoises from hunting and habitat degradation in the Tano-Offin area.
2) Recruit tortoise "experts" as Tortoise Guardians to be involved in species surveys and awareness creation.				In collaboration with community leaders and the Ghana wildlife division (GWD) we recruited and trained five locals including a female as Tortoise Guardians. Two KNUST students were also trained and volunteered as Guardians for 3 months on the project. Tortoise Guardians monitored tortoise hunting in their villages throughout the project period. We also involved them in awareness campaigns in schools and religious centres. With the help of Guardians, we successfully rescued four <i>Kinixys</i> tortoises from villages and released them into the wild with technical assistance from the GWD.
3) Develop the <i>Kinixys</i>				So far we have accumulated

<p>Recovery Action Blueprint (KRAB) double the species' population sizes in the short-term and ensure their perpetual protection.</p>		<p>enough information through meetings with local people and experts about strategies to ensure the recovery of <i>Kinixys</i> populations both in the short and long-terms. We are completing our first manuscript on integrated actions for forest tortoises titled "Conservation incentives to protect forest tortoises in south western Ghana" which will feature our KRAB plan. We anticipate to communicate our findings in <i>Oryx</i> and the Turtle Survival Alliance Magazine.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We paused our project activities in late August 2017, due to political tensions over mining activities in the Tano-Offin forest reserve (<http://www.peacefmonline.com/pages/local/news/201708/324787.php>). In fact, tensions of this nature had earlier resulted in the cruel murder of a military officer in another part of Ghana. Therefore, it was wise and safe to take the recess especially by avoiding entry into the forest. This affected our planned activities as we missed forest surveys in September and October 2017, the periods which have been reported as the mushroom season and also active times for *Kinixys* tortoises. Nonetheless, local people were generally cooperative during the entire project duration.

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

- I. We identified sustainable incentives to enhance household income to curb hunting of tortoises or conversion of their critical habitats. Additionally, we identified factors that motivate local people to hunt tortoises and households that are highly dependent on tortoises and their habitats.
- II. This project trained five local people and two students as Tortoise Guardians. This training has enabled Tortoise Guardians to improve their expertise on educating other local people about how to protect tortoises and their habitats. They also received training on how to document and report illegal activities. Four individuals of *Kinixys homeana* were rescued from hunters and released at their respective captured locations in the Tano-Offin forest.
- III. This project has increased the interest of local people to protect forest tortoises and their habitats. Thus, the alternative livelihood component made them more eager to hear our conservation message. All the tortoise hunting families we interviewed, want to take part in the alternative livelihood

programs. More households (>70%) are willing to abandon tortoise hunting and their activities in the forest, if they get a sustainable means of survival.

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

Through this project, we have established warm and mutual relationships with tortoise hunting communities in the Tano-Offin area. We engaged the wider community through radio broadcasts, and educational programmes in religious and community centres, and local schools. Selected community members participated in focus meetings and questionnaire interviews to share their knowledge about tortoises. We also used these forums to solicit the inputs of local people for our KRAB plan. Some community members (Tortoise Guardians) also benefited from skills on how to start and sustain community and field patrols, and awareness campaigns. Guardians also received stipend for their effort to patrol and report illegal activities within their communities. Community authorities have pledged their support for our Guardian initiative.

5. Are there any plans to continue this work?

Yes, we will continue to work with local communities to build their capacity so that they will own and sustain the project for future generations. We have plans to start the mushroom farming and beekeeping programmes. There is enough evidence to show that poverty is a main reason for the persecution of forest tortoises. Generally, there is widespread poverty in Ghana. Therefore, we believe that using tortoises as symbols of poverty alleviation will make them more popular, thus local people will be more serious to protect tortoises and their habitats. We also have plans to engage school children and their teachers closely in tortoise conservation by instigating conservation clubs in schools.

A more serious threat to forest tortoises is the impending bauxite mining at Tano-Offin by the Ghana government (<https://www.myjoyonline.com/business/2017/december-5th/govt-eyes-450bn-with-new-law-to-build-integrated-aluminium-industry.php>). This threat warrants an urgent need to learn more about the biology of tortoises in the Tano-Offin forest reserve and thus contribute to their long-term conservation. Therefore, we have plans to collaborate with relevant government sectors (including the Forestry Commission, EPA, Ministry of Environment, Science, Technology and Innovation), to mainstream tortoise research and conservation in the mining activities.

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

The project findings have been shared with local communities and the Forestry commission (Forest Service Division and Wildlife Division). We plan to publish our findings in Oryx and the Turtle Survival Alliance Magazine and/the turtle and tortoise newsletter to reach a wider audience. We will continue to make available updates on the Rufford Foundation website.

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 RSG grant was used through April 2017 to August 2018. The extension period was due to difficulties we encountered during the project period, which were beyond our control. Although our timeline was destructed, we were still able to accomplish much of our project activities as outlined above.

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
Vehicle rent and fuel cost	600	705	-105	Additional charges were incurred due to rise in fuel prices over the project period and vehicle maintenance
Allowances	2740	2740		
Supplies	200	200		
Accommodation charges	400	400		
Printing charges	550	550		
Organising meetings and workshops/training	325	325		
Cost of map work for manuscript	30	30		
Organising education trips /radio programs	150	150		
Total	4995	5100	-105	

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

The necessary steps required within the Tano-Offin area are:

- i. Undertaking surveys to understand the biology of tortoises within sites earmarked for bauxite exploitation and also areas with concentrated bauxite deposits.
- ii. Piloting small scale alternative livelihood programmes (mushroom farming and beekeeping) and sustaining them in subsequent years.
- iii. Providing regular training on new techniques and project deliverables to Tortoise Guardians.
- iv. Working closely with school children and local adults to sustain educational programmes.

- v. Developing a web-based educational resource database that can be accessed by the general public.

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?

Yes, we used the RSG logo on printed materials including t-shirts and questionnaires. We also mentioned RSG support during community gatherings and questionnaire surveys. We will continue to acknowledge RSG in all our future publications.

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

Ohene Boakye Adomako (Project Leader): With the assistance of other members, he coordinated all project activities: planning, surveys, training, conservation education and dissemination of results.

Evans Amoako: He assisted with project planning and awareness campaigns in schools and communities.

Victor Agyei and Kwaku Afrifa: they volunteered as Tortoise Guardians. They also assisted with surveys and awareness campaigns.

12. Any other comments?

Our Rufford project has kindled interest in tortoise research and conservation in Ghana. Some young conservationists have consulted our findings and initiated their own projects in other parts of Ghana. It is also worth mentioning that, the project leader's proposed PhD research to explore in detail the conservation ecology of the two hinged-backed tortoise in south western Ghana was approved for admission at both the School of Life Sciences (University of Nottingham) and Department of Animal and Plant Sciences (University of Sheffield). So far, our RF support has had a positive influence on many lives in Ghana. We are very appreciative to the Rufford Foundation.



Left: *Kinixys homeana* rescued by Tortoise Guardians. ©Adomako. Right: *K. homeana* encountered during Community surveys. ©Adomako.



Left: Interview session with a hunter. ©Adomako. Right: Locals and student volunteers trained as Tortoise Guardians. ©Adomako.



Kinixys homeana rescued by Tortoise Guardians. ©Adomako.