

The Rufford Small Grants 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

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|----------------------------|--|
| Your name | Amaning Kwarteng David |
| Project title | Mitigating Biodiversity Extinctions in Ghana: the case of <i>Hyperolius bobirensis</i> |
| RSG reference | 11044-1 |
| Reporting period | |
| Amount of grant | £6000 |
| Your email address | davekwart@gmail.com |
| Date of this report | 3 rd May 2013 |

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 |
|---|--------------|--------------------|----------------|---|
| Determine whether amphibian chytrid fungus is contributing to decline of <i>H. bobirensis</i> | | | x | The loss of <i>H. bobirensis</i> cannot be blamed on the amphibian chytrid fungus. Evidence gathered from this work and other colleagues in Ghana and West Africa sub-region suggests that the chytrid fungus is not yet in Ghana and the sub-region as a whole (publication in prep). |
| Determine population size and distribution of <i>H. bobirensis</i> | | X | | <p>Population Size: One hundred and thirty individuals of the <i>H. bobirensis</i> were recorded in two isolated forest in Ghana. In the Ankasa reserve we counted just 10 individuals. What appears to be the only viable population was found in the Atewa Range. Even that, only about 120 counted. Due to the critical nature of the population, we failed to conduct a mark-recapture study on it (though that would have given a more accurate estimates). Toe-clipping which is usually used during amphibian population census is currently under severe global criticisms. We are therefore looking into a more humane method to conduct such a study. We wanted to avoid infections and mortalities associated with this method on such a critical population.</p> <p>Distribution</p> <p>The Bobiri reed frog was found in a single pond in the Atewa reserve (120 individuals) and a single pond in the Ankasa reserve (10 individuals). The frog was not found in the Kakum National park and the bobiri reserve where it was first sighted and described. This was after 8 months of intensive field surveys. See map attached.</p> |
| Build capacity of students on amphibian monitoring | | | x | Ten students were trained on amphibian identification and monitoring protocols. This was achieved through joint field visits and capacity building workshops. We are very excited that student beneficiaries can now set-up their own small amphibian projects. Also student trainees can now catch, handle and |

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|--|--|--|---|---|
| | | | | successfully identify some common frog species in the field. |
| Raise conservation awareness of <i>H. bobirensis</i> | | | x | Our project team in collaboration with the Renewable Natural Resources Students Association (RENARSA) of Kwame Nkrumah University of Science and Technology (KNUST) and support from the East Akyem Municipal Assembly, took over 250 students volunteers to storm some villages fringing the Atewa reserve with our conservation message. This was in the spirit of winning the goodwill of the people towards the conservation of <i>H. bobirensis</i> and by extension many other biodiversity occurring within the range. We also took our conservation message to the doorstep of the local community members and visited local schools to share with them the importance of amphibian conservation. |

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

Our team was faced with unprecedented fuel increment and increase in the cost of vehicle hiring. For this reason the daily subsistence allowance for team members was reduced significantly. Also the need to buy a refurbished laptop for on-site data entry was also cancelled.

The delay in the emergence of the dry season significantly altered our work plan forcing the delay in our dry season field survey. This has caused the delays in the submission of our final report. Also the team was confronted with a major challenge as to whether or not to use the more recognised toe-clipping to assess the population of the *H. bobirensis* due to the nature of the population. Upon advice from mentors, the team adopted a less robust total count to assess the population of the *H. bobirensis* found.

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

The project has been overall very successful. Most importantly, the project can enumerate the following success stories;

- ✚ The project discovered what is believed to be the last remaining viable population of the *H. bobirensis* (120 individuals) from the Atewa Range. Also for the first time, we saw about 10 individuals of the species from the Ankasa reserve. Previous sighting from the Ankasa has been just a single juvenile.
- ✚ We are happy to report that this project has been successful in signing a memorandum of understanding (MOU) with the representatives of the local communities to help protect the remaining population of the *H. bobirensis* and its habitat. This was achieved following a 2-day workshop to share the results of our findings and discuss the way forward for the

conservation of the bobiri reed frog. Community members have agreed to work with our team closely to mitigate the threats faced by the species.

- ✚ We are excited to have been able to train 10 students from the Faculty of Renewable Natural Resources (FRNR-KNUST) in amphibian sampling protocols. Student beneficiaries received training on frog catching, handling and identification protocols. Also they receive basic training in designing basic field research.

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

Local community members were involved in the planning and the execution of this project. For instance the district assembly collaborated with the project to carry out conservation education for the villages fringing the reserves. Also community members were involved in the stakeholder discussions. Together with community members, pragmatic steps were developed as an outcome of the workshop to conserve the species.

5. Are there any plans to continue this work?

Yes

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

Locally the result of this work was shared through the stakeholder workshop. Also a short communication on the discovery of the new population of the bobiri reed frog has been submitted for publication and it's currently under review. This would give the opportunity for the wider scientific community to read about this work.

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

The RSG was used in the period of 1 year.

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 |
|---|-----------------|---------------|------------|---|
| Hiring of four wheeled drive | 960 | 1666 | 706 | The cost of hiring a four-wheeled drive almost tripled during the project life span. |
| Tents for team members | 300 | 300 | 0 | |
| 10 sets of swabs for chytrid monitoring | 366 | 366 | 0 | |
| DSA for team members and assistants | 1200 | 1000 | 200 | DSA was reduced for team members in order that we could foot the bills for the hiring of vehicle for fieldwork. |
| Fuel for vehicle | 1500 | 1700 | 200 | There was an anticipated increase in fuel prices during the project. |

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|--------------------------------------|-------------|-------------|-----|---|
| T-shirt's for conservation education | 200 | 200 | 0 | |
| Refurbished laptop | 250 | 0 | 250 | We failed to buy the refurbished laptop in order that we can support the budget for the four-wheeled drive. |
| Hiring of projector | 100 | 0 | 100 | We were lucky to get free project for use by a sister organisation (A rocha-Ghana) |
| Cost of headlamps | 209 | 209 | 0 | |
| Camping fees | 500 | 500 | 0 | |
| Communication | 50 | 50 | 0 | |
| Stationary | 100 | 100 | 0 | |
| Digital Camera | 232 | 232 | 0 | |
| TOTAL | 6000 | 6123 | | |

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

A thorough assessment of the population needs to be carried out in order to understand the dynamics of the population and to design appropriate conservation actions. Conservation education in the area where the population has been discovered needs to be strengthened. This is even more necessary as our conservation education could not reach all communities fringing the reserve. As part of our stakeholder workshop, the need for alternative livelihood support training for people depending on the resource became paramount. In this regard future projects in this area should incorporate training of some alternative livelihood support options for the resource dependents.

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?

Yes the RSG logo was used in our project T-shirts, Presentations, community meetings and workshops. Also the RSG is duly acknowledged in the short communication, which is currently under review.