

#### 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	
Your name	Caleb Ofori-Boateng
Project title	Conservation of the Togo Slippery Frog ( <i>Conraua derooi</i> ) in the
1 Toject title	Togo-Volta Hills
RSG reference	11305-2
Reporting period	November 2011 to January 2013
Amount of grant	£6000
Your email address	calebofori@gmail.com
Date of this report	20th April 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
1. Raise public awareness on the plight of the Togo slippery frog.			X	Series of awareness creation lectures were given at schools (Gbajeme Junior High School, Bompata Senior High School, Kibi Secondary and Technical etc.), Churches (Presbyterian Church of Ghana-Kibi, Church of Pentecost etc.) and in outdoor community gatherings. T-shirts were printed and distributed to local people.  Local communities embraced our conservation efforts and actively participated in field surveys.  The project received support from government officials and traditional authorities in the targeted project localities.
2. Provide information for conservation planning  A. Determine the population size of the Togo slippery frog in the Togo-Volta Hills  B. Assess genetic variation between the two known populations of the slippery frog.		x	x	At least 153 (±25) individuals of the Togo slippery frog persist in the Ghanaian side of the Togo-Volta Highlands.  The population in this region remains highly fragmented and small (also based on encounter rates). Thus in most cases mark-recapture studies did not yield any useful results due to low recapture rates.  Also, we could not confirm the persistence of the species in two localities where the Togo slippery frog have previously been rediscovered in 2007 (Biakpa).  Preliminary analyses of mtDNA from 10 samples suggest only a slight genetic variation between the two known populations. Further analyses (nuDNA) of additional tissue samples are ongoing at the University of Washington, Seattle.
3. Enhance local capacity to protect the Togo slippery frog.			х	A large number of graduate and undergraduate students, environmental units of mining



companies (NGRL) and some local conservation personnel received training on amphibian biology, capture and handling.  Ten participants who excelled in the training programme, demonstrating the highest enthusiasm in amphibian conservation received advance training with my team during a 2-week field expedition program to the Atewa Hills. Participants gained hands on training in amphibian identification, sampling and censusing of amphibian
populations.

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

Except for the usual breakdown of field vehicles almost everything went as planned.

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

We are indeed most delighted with the outcome of our on-going amphibian conservation efforts in Ghana. We wish here to highlight a few of our successes.

- Through this project, a number of students and local conservation practitioners have gained relevant skills in amphibian identification, sampling protocols and engagement of local people in amphibian conservation efforts. Three beneficiaries of the capacity building component of this project are current recipients of various conservation awards (including one future conservationist award and two RSG awards) and spearheading the conservation of amphibians in West Africa. Previously, I was the only formally trained amphibian biologist in Ghana. The now availability and access to in-country expertise in amphibian taxonomy and ecology has several advantages. For instance, public universities in Ghana are now able to accept and supervise a number of student researches on amphibian ecology and conservation. Thus this project has directly contributed to the built-up of a new generation of biologist well equipped to save species.
- → Data provided on population, ecology and genetics of the target species is unprecedented and an important outcome of this project. This data reveals that the Atewa Mountains population although the largest among the two known populations, the Togo Volta population is genetically distinct. This later results emphasize the need to protect both populations as a significant amount of genetic diversity would be lost if one population is extirpated. This information helping national wildlife authorities; to develop conservation action plan to save this species.
- A third major outcome of this project is a voluntary involvement of religious groups and schools in conservation efforts as they understood the value of amphibian conservation. In an interfaith workshop comprising Christian and Muslim leaders, participants embraced project objectives and agreed to work with their congregations to conserve the nature and the environment. Also, teachers and students' demonstrated high enthusiasm for amphibian conservation as they formed clubs to help conserve them (see photos). I am thus really thrilled by the impact project this has made.



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

Local communities have been an integral part of this RSG supported project. The project began with a lot of consultation with both traditional and local government authorities in our target communities. Their needs were considered during the implementation of this project. This is evident by active participation of local people in our projects activities including field work and workshops. Several benefits accrued to the local communities in which we worked. Many people understood for the first time the value of amphibians and found it fulfilling to contribute to its protection. In the township of Amedzofe in the Volta region of Ghana for instance, local tour guides are incorporating new information of the unique amphibians of their locality in their ecotourism brochures to increase tourist visits and thus community income.

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

Yes. Local people need to be engaged urgently to restore degraded habitats of the Togo slippery frog in the Volta region whilst sustaining both capacity building efforts and behaviour change education.

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

Two publications are in preparation based on the genetic and ecological results of this study. In July 2013, I would present the results of this project at the International Congress of Conservation Biology (ICCB) at Baltimore, US. Locally, technical reports have been submitted to all major stakeholders including the Ghana Wildlife Division. Also, a short video of project activities is being finalized to further highlight the projects activities and results.

## 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 18 months as opposed to the planned 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
Cost of vehicle rental @ 30 /day for 60-days (field surveys)	1800	2080	280	We under budgeted the cost of renting a 4-wheel drive (£40 rather than £30) for 52-days of fieldwork
Cost of 3gal. of fuel /day @ 4.5 for 60-days (field surveys)	810	790	20	
Living cost for 3 team members @ 10 /day for 60-days (field surveys)	1800	1560	240	Field work was reduced to 52-days rather than proposed 60-days
Cost of 10 boxes of disposable gloves (field surveys)	65	50	10	



Cost of tissue sample tubes	81	0		We received a donation from Adam Leache
Cost of 2.5 litres of ethanol	42	84	42	5 litres of ethanol were purchased
Cost of printing and photocopying training manuals	55	60	5	
Cost of light refreshment for 30 course participants @5/person (capacity building short course)	150	225	75	£7.5 was spent per person
Cost of renting a projector for 25days @ 7.5/day (conservation education	188	340	152	We paid £17 for a projector for 20-days
Cost of 100 RSG project T-shirts@ 4/shirt	400	400	0	
Cost of shipping tissue samples	72	0	72	This was paid for by the University of Washington, Seattle
Cost of DNA extraction @ 5.5/sample for 70 samples	385	800	415	We analysed only 20 samples for £40
Cost of printing and photocopying of status review report	150	50	100	
TOTAL	5998	6439	1417	

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

An important next step is to secure the population of the target species in the town of Amedzofe. This population seems to be the largest and thus important known in this region. It however faces impact from the depletion of native vegetation cover in its riverine habitat. Also, throughout this region, human consumption of this critically endangered species is widespread and sustained behaviour change education is urgently needed.

## 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?

The RSG logo was widely used and publicized during presentations at International conferences, project technical reports and t-shirts. The RSG is also acknowledged in recently submitted journal articles.