

Final Project Evaluation Report

Your Details	
Full Name	Akwasi Anokye
Project Title	Status and Conservation of <i>Mecistops cataphractus</i> in the Obuasi Municipality
Application Id	24312-1
Grant Amount	£5000
Email Address	Anokye91@Gmail.Com
Date Of This Report	2019.05.29

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 status and distribution of <i>Mecistops cataphractus</i>				<p>We recorded a total of 51 individuals both wet and dry seasons along 11.2 km stretch. The age classes includes 13 adults, seven sub-adults, 11 juveniles, nine hatchlings and 11 eye shines. The demographic is good as there were more mature individuals in the number encountered. The mean encounter rate was 0.93 km⁻¹. Although this encounter rate is generally low, it is among the highest recorded for this rare species throughout its range. Furthermore, we recorded nine nests of this rare species during the project with average clutch size of 19 eggs \pm4 , We recorded higher numbers in forest patches than heavily disturbed farm lands. GPS coordinates have been recorded for all locations where crocodiles were spotted to be used in developing a distribution map for the Obuasi Municipality.</p>
Assessment of threats to crocodiles in project areas				<p>From our study, habitat loss and human-crocodile conflicts appeared to be the major threats. The riparian forest along the Jimi River has been seriously depleted leaving just small patches of forests. These patches of forest are currently serving as critical nesting areas for <i>M. cataphractus</i>. Sadly, the already dwindled nesting areas are rapidly being cleared for cocoa and palm plantations as well as arable crops. We observed three nests that were abandoned</p>

			<p>by the nesting female at the construction stage due to human disturbances.</p> <p>On the issues of conflicts, retaliatory killing of <i>M. cataphractus</i> by fish farmers is a major contributor of the species' population decline. Subsistence fishing using traps and hook and line is common in the Jimi River. This undoubtedly has reduced the prey resources for <i>M. cataphractus</i>. Unconsciously, fish farmers provide alternative feeding source for the species by constructing fish pond just few metres away from the Jimi River. Over the years, there has been several retaliatory killings of <i>M. cataphractus</i> in fish ponds along the Jimi River. Although we recorded isolated cases of hunting during the project, it does not appear to be a major threats.</p>
<p>Awareness Campaigns and Capacity Building programs</p>			<p>We reached out to over 1500 adults and 400 schoolchildren in three fringe communities. We used various approaches including PowerPoint presentations, video shows and focal group discussions to educate locals. Additionally, we used promotional materials such as brochures, t-shirts, etc. to further raise awareness on <i>M. cataphractus</i> conservation. We also undertook local radio programmes that enabled us reach out to a larger audience even beyond the fringe communities.</p> <p>Five community volunteers were trained in crocodile handling and relocation as well as survey techniques.</p> <p>Seven fish farmers were also educated and introduced to various non-lethal measures that will prevent crocodiles from raiding their ponds.</p>

<p>Social surveys</p>			<p>Through use of focus group, semi structured interviews and ethnography we were able to gather data on the history of crocodiles in the area, local perceptions of crocodiles, population trends, human crocodile conflicts and local knowledge of existing wildlife laws. 120 local community members were interacted with, with about 80% saying the crocodiles existed when they first settled in the communities, 10% believed they have ancestral connection with crocodiles and the other 10% had no knowledge of the history or existence of crocodiles in the area. 76% of the people interacted with perceived crocodiles as threats and man eaters, where as 20% perceived them as animals who will not harm you unless they feel threatened. The remaining 4% perceived them as some sort of aesthetic animals that will help the community attract tourists in future. On population trends about 90% said the population was experiencing decline whereas 10% had no idea of the population trends. 69% of people interacted with rated instances of human crocodile conflict as high whereas 26% rated it as moderate and 5% rated it as low. Local knowledge of existing wildlife laws seems to be very low as 95% of people interacted with had no knowledge on the existing wildlife laws and the remaining 5% had a fair idea.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

One of the major difficulties encountered by the project team was the fact that some community members, mostly people engaged in illegal logging and other activities thought the project team were some sort of investigators who were there to arrest them. The project team with the help of the traditional leaders were able to introduce the project to the entire community and we gave room for questions. It was through the question and answer session that we were able to convince them and gain their support.

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

- a) During this project we recorded 51 individuals of the rare *M. cataphractus* with an average encounter rate of 0.93 km⁻¹. This is one of the highest numbers recorded for this species in a single location throughout its range. More importantly, we recorded nine nests indicating that the population at Obuasi is having active reproducing individuals. This project has discovered one of the few remaining unprotected areas in West Africa that still harbours significant population of the rare and Critically Endangered *M. cataphractus*.
- b) Through our community education programs, we have been able to mobilise community support towards the conservation of crocodiles in the Obuasi municipality. Through our capacity building for fish farmers, the project team has been able to introduce them to various non-lethal means of controlling crocodile invasions such as crocodile exclusion fences and this will help in efforts to mitigate existing human-crocodile conflicts.
- c) We were also able to train local community volunteers through this project. This gives local citizens particularly fish farmers the assurance that they have a formidable team they can rely on to address issues of crocodile invasions. Traditional leaders are also of the view that the existence of this team will help them protect their river, the crocodiles as well as their natural environment.

4. Briefly describe the involvement of local communities and how they have benefited from the project.

Local community members have been an integral part of this project. Traditional leaders were actively involved in introducing the project to the communities. It was through their efforts that people who had misconceptions about the project team were convinced.

The services of one local guide was employed to guide the team since he was much familiar with the terrain. Fish farmers who are also mostly locals were further engaged in discussions and deliberations in finding the most economically viable nonlethal methods of controlling crocodile invasions.

Local community members were selected and trained to serve as volunteers to aid in the capture and relocation of crocodiles that invade settlements and fish ponds. These people will also serve as local contacts.

5. Are there any plans to continue this work?

Yes. There are intentions to continue with the next phase of the project.

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

Preliminary results from this study has been shared with local government authorities and there are plans to further forward technical reports to the Wildlife Division of Ghana. Plans are also underway to further share the findings from this project with the IUCN/SSC Crocodile Specialist Group which will aid in future action plans for the species. Finally, we plan to publish the findings of this study in peer review journals.

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

Grants were used within the 1-year period as proposed by the project.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Equipment Component: cost of 1 Streamlight 44902 Waypoint Spotlight	55	55		
Equipment Component: cost of 1 Abdtech LCD Portable Projector	120	120		
Conservation Education Component: Cost 30 mins weekly air time @ local radio station @ £20 per week for 4 weeks	80	80		
Conservation Education Component: Travel allowance and per diem for estimated 15 non-resident workshop participants @ £5/person x 3 workshops	225	225		
Conservation Education Component: Stakeholder workshops of estimated 25 participants: cost of refreshments and lunch	150	150		

@ £2/person x 3workshops				
Conservation Education Component: DSA for 3 team members during Conservation education outreach programmes @ £4/person/day for 50 Days	600	600		
Conservation Education Component: Vehicle Fuel Cost of 3gals/day for 50 days for conservation education at local communities @ £3/gal	450	450		
Conservation Education Component: Cost of hiring 4 x 4 vehicle for conservation Education (school-outreaches, workshops, video shows) @ £20/day x 50 days	1,000	1,000		
Awareness campaign: Cost of Printing (200 posters @£0.6/poster + 100 project T-shirts@ £3/T-shirt + 200 wrist bands@£1/band)	620	620		
Awareness campaign: Cost of developing and printing of photo-guide, leaflets, training manuals and stickers	100	100		
Field Component: DSA for 3 team members@ £4/day for 50days (25days dry season + 25 days wet season)	600	600		
Fieldwork Component: Cost of hiring 4 x 4 vehicle for data collection (during the wet and dry seasons) @ £20/day x 50days	1,000	1,000		
Total	5000	5000		

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

- We to will expand our surveys areas to cover other areas along the Jimi River.
- We will create more volunteer groups in other fringe communities
- Intensify training of volunteer groups and adequately equip them for the effective execution of their mandate.
- We will continue to raise awareness on the threats of *M. cataphractus* and the need for its conservation.

We will work with local authorities to protect critical nesting areas and where necessary restore degraded areas.

10. 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 Rufford Foundation logo was used on all printed materials including t-shirts and banners. The foundation logo was further listed on our organisational website as a sponsor of the project. Rufford Foundation was also acknowledged at all times during educational programmes, focus group discussions as well as radio shows.

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

Akwasi Anokye – Team Leader (project coordinator) - Handled the day to day management of the project. He also liaised with local communities for their cooperation for the success of the project. Actively involved in education aspects and other field aspects of the project.

Emmanuel Amoah – Team Member- Handled all field surveys and was very instrumental in volunteer selection and training activities. He also served as a facilitator during stakeholder workshops.

Kwadwo Asare Gyebi – Team Member – He was in charge of organising community educations, stakeholder meetings and all the social aspects of the project.