

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	Faith Chesire
Project title	Towards landscape connectivity enhancement for the conservation on African Clawless Otter (<i>Aonyx capensis</i>) in Nyando wetland, Kenya.
RSG reference	23340-2
Reporting period	2017 November-2018 November
Amount of grant	£5000
Your email address	faychesire@gmail.com
Date of this report	24 th November 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
Awareness creation				<p>Feedback from the awareness outreach programme was mixed. Opinions as to the importance of maintaining African clawless otter (ACOt) populations in the region varied widely between locals and households in the village. The villagers depend largely on the wetland for their very existence; it provides fish, and water for drinking and growing crops. Many families believe that the ACOt lower fish stocks in the river, thus affecting the livelihood of the local people. Other families were far more positive in their feelings about the otter and the project. Some locals seem relatively aware of the presence of ACOt on Nyando wetland and do not seem to debate its endangerment status. Consequently, it would have been legitimate to expect a significant willingness to act for its protection.</p> <p>As a matter of fact, local's perception of wildlife has been repeatedly shown to lack ecologicistic and moralistic bases in favor of dominionistic and negativistic attitudes.</p> <p>Our recommendation is therefore to continue on an environmental education campaign to inform riparian residents about ACOt. On top of usual outreach activities, this shall also possibly take the form of a better promotion of the species, which is for instance largely absent from touristic brochures. Visual attractiveness will be correlated with support for conservation of future projects, and more generally, emphasising cuteness and behaviour of the otter must be shown to be an important vector of sensitisation in</p>

				riparian communities culture under the so-called “ <i>Warit thithnia</i> ” lets protect our wetlands
Capacity Building				<p>Knowledge increased significantly for three of the four primary objectives for our project. Increases in knowledge at the project site and beyond suggest that transfer of skills and campaign messaging may have been received positively while other other activities like on-site training were improving knowledge as well.</p> <p>Thus there is urgent need for more upscaled capacity buildings to local fishermen and farmers to sympathetically manage (i.e. to reduce and avoid deliberate killing whenever possible) the ACOt species.</p>
Rehabilitation				<p>Over 2000 tree seedlings planted on three selected locations within Nyando wetland to contribute to erosion/siltation control of the lagoon and also provide habitat for otters at the site.</p> <p>Functional connectivity increased through securing and restoring of critical habitat and landscape features and the promotion of sympathetic land management in the wider area.</p>
Wetland Day				<p>Highlighting through drama, plays and talks the uses of the wetlands both from Nyando and other surrounding wetlands was well received by public and local communities.</p> <p>Wetland day helped us launched a market survey data based on the monetary value of wetlands. Nyando wetland Day emphasised the economic values and therefore importance of wetlands.</p> <p>Supported the livelihoods and resilience of more than 1,000 people in wetland communities by promoting sustainable wetland management systems.</p>

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

Illegal activities

There were a few minor activities and outcomes that did not go as expected or that was problematic during our project. At all of our field sites, we did encounter illegal activities that affected our targeted species. Usually it was hunting for game meat, ACOt included or sand harvesting, activities that we have no power to enforce or defend against.

Although these illegal activities might not be focused on the ACOt, it does show potential for illegal captures or at the least could provide potential for negative impacts to affect the ecosystem that the species relies upon. We also noticed anthropogenic land use and alteration at our field sites, mostly from illegal and over harvesting of papyrus (*Cyperus papyrus*) and other wetland vegetation that goes uncontrolled. Local communities often use the wetland for their livelihoods, so although this is difficult to comprehend in terms of conservation, it does pose problems that can impact our sites and the habitat used by our species. Alongside illegal hunting, these conservation threats did create minor problems that we needed to understand and work alongside throughout our projects' activities.

Solution-focus group discussions

We created a mechanism of working with smaller groups and/ or focus group discussions and reach out throughout the affected project areas. This we did by involving our local guide(s) and local administrations to announce our presence and intentions. Sometimes we get good reception other times we did not.

The outreach team also interviewed one hunter and one general villager to get their feedback on the campaign. The hunter used to hunt and trade illegally, but because of the campaign had stopped.

ACOt Sightings

More direct problems related to the accessibility to capture in photograph our targeted species. The ACOt was extremely difficult to find and we required much effort to feasibly track the footprints evidence we had earlier seen.

The main reason for these declines is direct human use, not habitat conversion. While parts of wetland cover remains relatively high, the wetland forest are being emptied of wildlife. Human use takes two forms; a) unsustainable local hunting/extraction for consumption or to protect crops and livestock; and b) illegal hunting by outsiders for trade in oriental medicines, meat, pets and trophies.

Solution-Past research and literature reviews

We relied and referred (R-R) to some of earlier research work from Lake Victoria Institution of Research and Development (VIRED) as a lead research and non-governmental organisation who has conducted and published researches on the socio-economic systems of Nyando wetland.

We visited once project site and other more than twice all relating to the availability of visit, accessibility, security and diversity of animal species found in it (Osumba et al., 2010)

Floods

In the earlier months of 2018, severe floods have been infrequent. These events result in large-scale loss of wetland habitat needed by riparian covered species, and erosion and severe degradation of water quality for aquatic covered species and injury or death from high water velocities.

In most instances, a flood will have a localized effect on aquatic animal's species, and management tools to help the species and habitats recover from a specific event on a given site are limited so most of the ACOt population would have disappeared.

Solution-change project schedule

Change our monitoring and survey work to July to September when rain and floods have subsided.

Conducting additional monitoring surveys. Modified monitoring protocols to align with our projects' objectives and monitoring protocols to produce the intended impacts.

Outside criticism/lack of awareness

We also found anecdotal evidence of the campaign's effectiveness in the interpersonal communication between the campaign audience and people from outside the campaign area that had not been exposed to campaign materials and activities.

These outsiders criticised the campaign slogan saying that it encouraged more hunting whereas those that had been exposed to the campaign materials and activities understood the principles of sustainable hunting practices that were represented in the slogan.

Solutions- use of fellow citizens/community members.

Through zoning, conservation management planning, implementation, community awareness and motivation techniques i.e. making the local lead the project activities such as awareness creation by giving pro-project talks, and law enforcement.

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

Training workshop

The exercise promoted the replication of adaptive management approaches and simple and appropriate tools in other wetland areas, thereby strengthening the national wetlands protected area system (NWPAS). Our project built long-term institutional and individual conservation capacity, catalysed the involvement of indigenous communities, and develop a sustainable livelihood plan and mechanism for the Nyando wetland area: i) we have no doubt that our project will serve as a national model for achieving millennium development goals; and ii) our project is thus consistent with the RSG's objectives which envisages support to individual

wildlife species listed by IUCN, conserves biodiversity of global significance that is at risk, and contributes towards maturation of the national level protected area system.

Awareness creation

Awareness creation programmes play an important role in ACOt conservation because the general public generally dislike and portends negative perception towards them. Our project had some encouraging results. First, the citizen scientists (locals) provided valuable data by recording direct human kills of otters. Second, their direct intervention reduced killing of otters species. Moreover, the awareness programme has undoubtedly helped to draw local attention and interest to preserve ACOt (in part due to highlighting their benefits as a top predator and their economic benefits) and general biodiversity among the public. The planned extension of this programme beyond its present geographical area would assist in the conservation of otters and important biodiversity areas in such human-dominated habitats.

Monitoring Survey

The project has successfully helped establish a long term monitoring programme on the African clawless otters in Kenyan wetlands. The conception of Nyando Otter Watch (NOW) will ensure that efforts to conserve the *Aonyx capensis* and other animal species in the future. The establishment of an academic link between the University of Kisii and the University of Egerton students will play a part in the future conservation of the otters, providing physical and monetary support to the Kenyan scientists. From the data gathered by our team, it is possible to draw several conclusions about the ACOt's life; what environmental conditions they require, the interplay between their environment and the health of otter populations, and how the otters behave under differing environmental conditions.

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

Yes, the project was attentive to local needs and assisted communities to develop alternative livelihood activities (ALA) that replace existing unsustainable activities and provide long-term social, economic and conservation benefits in the wetland. The existing management plans and village rules to manage wetland resources was put into agreement with local traditions, customary boundaries and land use.

The ALA initiatives such as encouraging value addition in local wetland product artifacts and sourcing markets to their produce will be closely linked to conservation outcomes (e.g., reduction of extractive pressure on wetland resources and increase to otters' population) to promote lasting changes in behavior and positive results for biodiversity conservation

5. Are there any plans to continue this work?

- Continue surveys throughout Nyando wetland to improve knowledge on distribution and status of otter species.
- Conduct further ecological and behavioural research on *A. capensis* at key

sites, provide environmental education to local communities to reduce threats.

- Develop conservation and monitoring activities for *A. capensis* in the Nyando basin in collaboration with relevant conservation stakeholders.
- Work with VIRED and various research organization in Nyando basin to formally demarcate and co-manage a proposed otter sanctuary on the along river Nyando, Wasare area.
- Help in the production national action plans for otter conservation and strengthen government capacity to manage otters in un-protected areas.

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

Projects' results will be disseminated by: 1) publishing data in peer-reviewed journals (e.g. Conservation Biology and Animal Conservation) and through presentations at national and international scientific conferences such as the Rufford conferences; 2) a written report presented to the our conservation partners, Kenya Wildlife Service.

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

We were able to make our project implementation work at 1 year under the proposed project time.

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
Awareness creation	840	800	-40	£40 hive from awareness creation to cater for equipment budget.
Field equipment	100	140	+40	Additional £40 for equipment purchase.
Report Production	100	100	0	
Capacity Building	1410	1400	-10	£10 remove to supplement the budget for communication
Guide books and Maps	100	100	0	
Stationary	100	100	0	
Monitoring & Evaluation	100	100	0	
Transportation	100	100	0	
Communication	80	130	50	Increase communication budget by £50 from organization kitty
Boat hire	40	50	+10	Increase of £10 from capacity

				building for boat Hire
Recruitment and interviews	100	100	0	
Contractors fee	350	350	0	
Rehabilitation	1500	1500	0	
Project team salary	600	600	0	
Follow up visits	100	150	+50	Additional £50 from organization kitty for follow up visits
Wetland day	1000	1000	0	
TOTAL	6,720	6,720	100	

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

- We have to continue our basic research on the otter's biology and on the reasons for its decline.
- We have to transfer the results of this research into practical conservation and restoration measures by involving local communities.
- We have to study the effects of these conservation and restoration activities, especially their influence on the development of the otter's population.

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, the RF logo was used properly in all material associated with the project such as the disclosure material that is in design, poster for training workshops, and letters to local authority.

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

Ben Nyaoke - Assistant 1

Her role in this project was to provide project supervision and advice, including aspects of the project related to project planning, reporting, field work, and lab analyses.

Joyce Anyango- Assistant 2

As the co-assistant, her work was helping in mobilization for awareness creation and rehabilitation work since she comes from the area.

Gladwel Atieno

Led the Environmental Education and Advocacy activities in the project areas.

Margret Bosibori (Msc student at Kisii University)

Her role in this project is was to plan and organize survey research and conservation

efforts focused on the targeted species of otters areas.

Anthony Pinye (Msc student at Egerton University)

His role in this project was to help to organize research and conservation efforts for the targeted species of otters.

Carolyne Maritim

Broaden connections necessary to collaborate with relevant wetland officials, local stakeholders and research organizations for *A. capensis* conservation efforts.

12. Any other comments?

We are truly grateful for RF to support our 1st and 2nd projects respectively.

Mostly importantly we are requesting for more support from RF to help us create a long lasting conservation of the ACOt in Nyando area besides replication effects in other parts of Kenya and African wetlands