

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. 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	Hugues Adélouï AKPONA
Project title	Evaluation of factors affecting human – spotted necked otters' (<i>Lutra maculicollis</i>) conflicts for their conservation and management in wetlands of Southern Benin
RSG reference	36.07.07
Reporting period	November, 2007 – November, 2008
Amount of grant	£ 4700
Your email address	akpona@gmail.com
Date of this report	November 10, 2008

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- Analyse historical records and quantify current incidents of human-otters conflicts.			X	A survey based on questionnaires and focus groups discussions was conducted in 35 bordering villages and in 5 markets with a randomised sample of 204 interviewees of different ethnic and socio-professional groups such as fishermen (134), hunters (24), animal based medicine sellers (31) and traditional healers (15).
2- Manage conflicts between otters and fishermen			X	
2.1- Organise workshops among stakeholders fishermen			X	We organised workshops among stakeholders to share, evaluate and adopt traditional experiences related to ecological techniques developed locally for otters' control against damage. 7 villages have been investigated and 244 persons (144 fishermen, 87 farmers, 16 hunters and 24 others activities makers) have participated to the workshops: Kpomè (45), Lokoli-Koussoukpa (35), Dèmè (29), Gangban (47), Assrossa (28), Ouèdo (29) and Hon (31).
2.2- Education awrareness and sensitization			X	
2.2.1- Awareness of old people (fishermen, hunters, farmers, etc.)			X	244 persons (144 fishermen, 87 farmers, 16 hunters and 24 others activities makers) have been sensitized on the necessity to conserve otters in Benin
2.2.2- Awareness of young people in schools			X	We educated local people especially schools kids and teachers on wetlands' wildlife conservation especially on otters in 6 primary schools located at Gangban (Adjohoun district), at Assrossa (in Bonou district) and at Kpomé and Dèmè (Zogbodomey district). Because mainly children of the two last

				<p>classes of the primary school understand, speak and read relatively fluently French, awareness is focused on them. Through those education awareness processes, schools kids knew more on otters' ecology and biology, understand through a participatory approach how the current level of exploitation could extinct the species and the consequences of eventual extinction. 54 school kids have participated at Gangban, 58 at Assrossa and 67 at Kpomè and Dèmè. 16 teachers participated to the education awareness.</p>
2.2.3- Awareness via local radios				<p>We have broadcasted 5 radio awareness with the participation of fishermen and district authorities from the beginning of the dry season which corresponds to the period of high pressure on otters. Those radios broadcasts have been transmitted on each district radios one time a month during 4 months in each district concerned by the project. These experiences have to be continued because well appreciated.</p>
3- Organization of contests among schools kids				<p>We have organised in each schools, contests and gave some prizes to the 15 first winners (see photos).</p>
4- Reforestation			X	<p>We have supported some nurseries in each district concerned by the project by building their capacities. Moreover, we have participated to the national day of tree (1st June) in each district.</p>
5- Giving support to fishermen affected by otters damage			X	<p>We have listed the people affected by otters damage in 4 villages. We had trained the members of a fishermen association and offer them a boat to help them in their daily</p>

				activities as an income source.
6- Participatory establishment and restitution of a strategic conservation plan			X	We share results obtained through this project between districts concerned by the project. For example friendly mitigation strategies used in Kpomè were share with Ouémé valley fishermen. We organised in each district, restitution with authorities and other stakeholders. It was suggested by all stakeholders to test each strategy identified and measure their impact of conflicts mitigation.
7- Diffusion of results		X		A full paper has been completed and will be submitted to a peer review journal for publication. I had participated to the 2008 Student conference on conservation sciences at Cambridge where I had share my results with other scientists (Photo 1)

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

We had faced some difficulties during the project implementation. The list of fishermen affected by otters damage was very high (201) and to avoid social conflicts we were oblige to train them and offer to their association a boat instead of giving to 150 of them fishery gears as previously planned. Moreover, we had planned to proceed to reforestation but we faced land availability problems. It was difficult for us to identify a good area for reforestation and, to avoid social conflicts we supported districts for the national day of tree.

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

a) Analysis of historical records and quantification of current incidents of human–otters conflicts was one of the biggest achievements of this project. This step of the project help us to collect reliable data with the participation of local communities on the demographic structure of captured otters, the observation records of the species during the last 5 years (**Figure 1**), the interrelations between actors involved in the conflict process between fish farmers and wetland wildlife especially otters (**Figure 2**). It also allows us to evaluate otter's damage on local communities (**Photos 2 and 3**) and also to list the main options available for conflicts management. Moreover, field data collection helps us to know more about local perception of communities on the ecology, and conservation of otters.

b) We have developed an integrated approach of conflicts mitigation between fish farmers and otters in the project areas. First of all, we have identified with the participation of communities

the ecological friendly techniques which have been experienced once in the area. After this step, we have made analysis of those which could be more effective. Many education awareness had been raised among various stakeholders in order to integrate them in the conservation of otters (radios, young people: **Photos 4 and 5**, old people). We have supported some fishermen and also the reforestation. This was very appreciated by beneficiaries who suggest the continuity of the project. At least, we have identified some voluntaries who are available to help us (as conservationists) to manage conflicts and preserve their wildlife potential. They could be used to create village association of wildlife conservation at a next step of this project.

c) One of the most important is the diffusion of results via conference, scientific publication, leaflets and mini workshops of restitution. The results of this project will be used by the national forestry service to review the protection status of otters in Benin. At least, many conservation options have been discussed with all stakeholders involved in conflicts mitigation (fish farmers, village chiefs, district authorities, students at schools level, etc.) and we know what we have to do at another step of this project to be more efficient.

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

Local communities of various socioprofessional, age and sex groups were involved in every step of this project. All actions made through this project had a direct consequence on population. All of our field guides were from Ouémé valley – Hlan river complex and have benefited from the project. Through this project, district authorities, decision makers notice that one of the problems of their populations is related to otters – fishermen conflicts and are aware of this situation which could be integrated in their next development plan.

5. Are there any plans to continue this work?

It remains the publication of those results in peer reviewed journals. But there is a serious need of continuation of this project and funds have to be raised for sustainability.

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

- We had organised restitution with all stakeholders involved in the project at local level, district level and national level in order to assure the link between science, conservation needs, problems of the population and policy making.
- I had participated to two conservation workshops in Benin and conflicts between fishermen and otters have been presented and consequently mitigation approaches proposed through this project have been discussed among scientists.
- I had participated to the 9th Student conference on conservation sciences at Cambridge in March 2008 where I had share my results with other scientists on the topic entitled “Ecological, socio-economic determinants and impacts of spotted necked otters (*Lutra maculicollis*) – fish farmers’ conflicts in Southern Benin: Implications for conservation” It was a great opportunity for me to share my experiences and to know about the world experience on conflicts management.
- - A full paper has been completed and will be submitted to a peer review journal for publication. This paper is entitled “Ecological, socio-economic determinants and impacts of spotted necked otters (*Lutra maculicollis*) – fish farmers’ conflicts in Southern Benin: Implications for conservation”

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

Globally, this project had been implemented according to the timetable established during the conception. However, this project has to be continued in order to assure the sustainability of positive outcomes of this first phase.

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
Equipment and expendable supplies	£820	£795	+£25	In this item we had bought a desktop, a GPS, a digital camera, office furniture and data collection papers.
Literature and documentation	£200	£195	+£5	We bought 6 scientific books related to conservation, statistics and conflicts management during my participation to the conference at Cambridge. I had also bought online four new scientific publications related to conflicts mitigation.
Local travel, extra manpower	£1920	£1930	-£10	We have planned travel to research sites, location of small boat and research assistant and local workers salaries. Because of the number of sites involved in the project, the staff number increase and consequently increase the amount of the salary planned during the conception of the project. Moreover, the expensiveness of the life in Benin due to the world economic crisis which occurs in 2008 had had a consequence on the legal prices of boat hiring, travels to project sites and workers salaries.
Conflicts management	£1760	£1780	- £20	Many efforts have been done in the promotion of awareness, sensitization and education at different levels of the population. The organisation of contests (materials and prizes), reforestation, and support to fishermen, nurseries and restitution workshops was taken into account here.
TOTAL	£4700	£4700	£0	

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

Our results suggest that suitable issues have to be developed based on a participatory approach and otters have to be managed as a flagship species. The conservation of such flagship species usually has benefits for associated less spectacular species. This option will be successful if

strategically conservation actions are developed to assess social and environmental impacts of the conflict, to test, evaluate and promote ecologically sustainable fishing techniques on a large scale, to involve local communities in the conservation process through awareness, sensitization and restoration of wetlands with medicinal and other important plants which will further be useful for communities. Conflicts between otters and fishermen have to be co-managed efficiently by creating new opportunities to local populations bordering Hlan River and Ouémé valley in southern Benin.

Many friendly techniques of conflicts mitigation were identified from different regions and local perception of their efficiencies was collected. For a next step, it is important to test those methods in each region using a participatory approach in order to identify the most effective and to share between fish farmers.

Moreover, it is important to build capacities in conservation at local level and install in each zone a small committee to follow and monitor otters' abundance and capture.

From our data collection, we suggest that we have to investigate fish species on which otters feed and to evaluate their abundance in fishermen harvests. This will help to influence decision making and could be done for the next step of this work.

At least, all of the participants appreciated the awareness (via schools, fishermen, radios) and suggest that those kind of school education on nature being promoted. It could constitute a next step of the current project. However, it will be important to capitalize via video broadcasts indigenous knowledge of fish farmers on wetlands wildlife and to project them in villages and especially in schools.

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 RSGF logo was used on my poster in the acknowledgements session at the 9th Student Conference on Conservation Science last March 2008 in Cambridge (England), the national day of protected areas in Benin, the revision workshop of the national direction of forests and natural resources in Benin.

We have used the logo of RSG for awareness (see photos) in all level of project implementation (village, schools, and district).

11. Any other comments?

Some pictures have been taken during the project implementation.

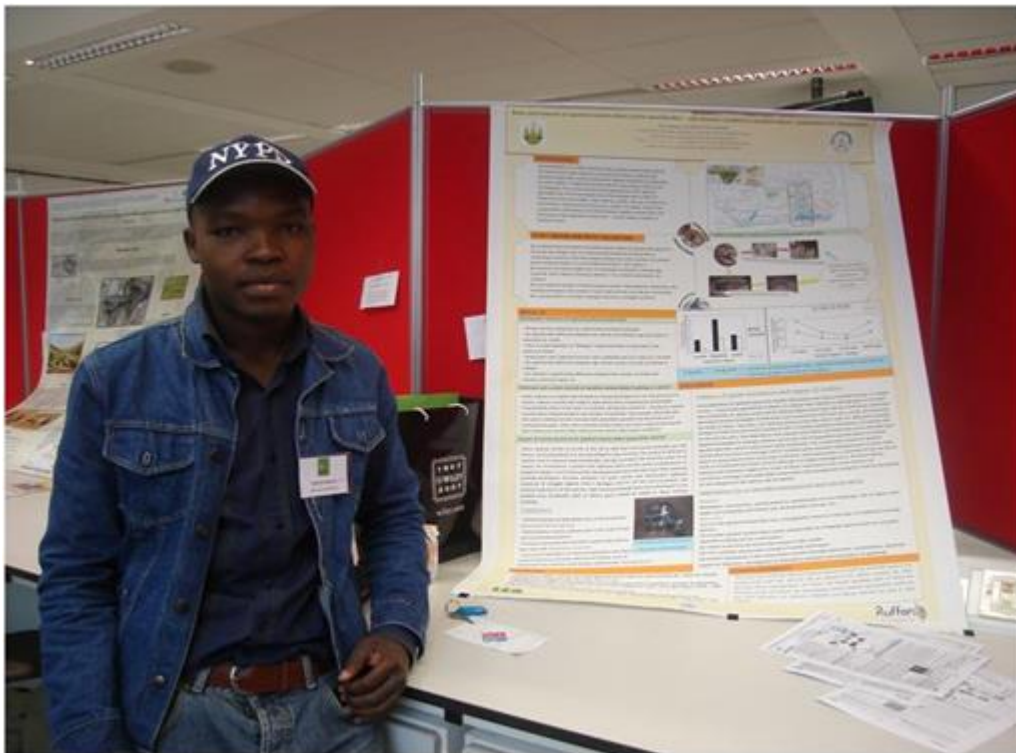


Photo 1: Presentation of my poster at the Student Conference on Conservation Science at Cambridge from 24 to 27 March 2008.



Photo 1. A fish harvest material destroyed by otters at Hon



Photo 2. Remaining of fish harvests after otters feeding.



Photo 3. Official opening of the contest



Photo 4. Four winners (one boy and 3 girls) receive their prizes after the contest at Kpomè

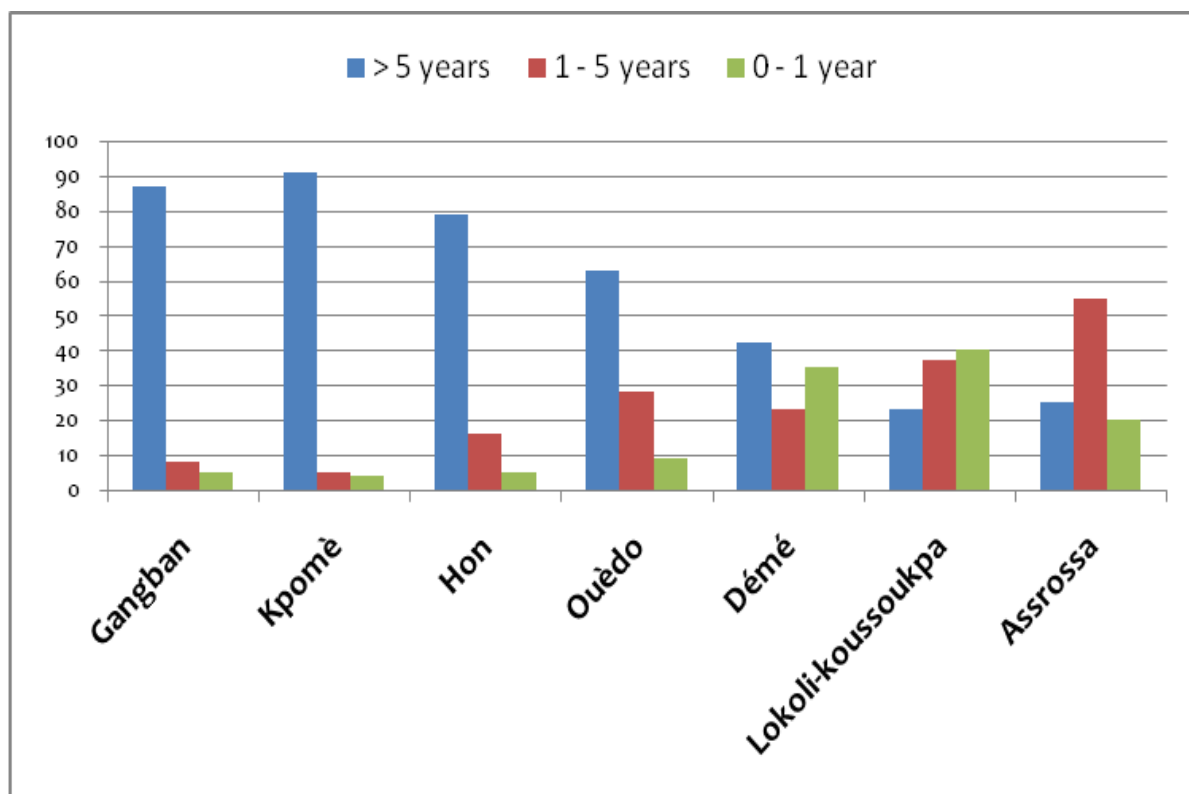


Figure 2: Interrelations between local communities and wildlife population

