

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	Girard Alexandre
Project title	Reducing sea turtles by-catch by artisanal fisheries along the coast of the Congo-Brazzaville
RSG reference	13812-1
Reporting period	July 2013 to July 2014
Amount of grant	£6,000
Your email address	agirard6@gmail.com
Date of this report	October, 24 2014

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
The release of hundreds of sea turtles a year			Fully achieved, maintained long term	1,992 sea turtles were released between July 2013 and July 2014: 1,978 green turtles (<i>Chelonia mydas</i>), 11 leatherback turtles (<i>Dermochelys coriacea</i>), and 3 olive Ridley turtles (<i>Lepidochelys olivacea</i>).
The collection of data useful to get a better knowledge of the non nesting population of sea turtles along the Congo's coastline.			Fully achieved, maintained long term	<p>By-catch/release data provided a big amount of information about of non nesting turtles: green turtles and some males of the nesting species (olive Ridleys and Leatherbacks).</p> <p>During the RSG period, no hawksbill was observed among by-catches.</p> <p>Most of the green turtles observed were juveniles and the data collected give a good insight into the biology of greens at early stages. The database base allows for assessing the growth rate and condition of individuals at diverse stages. It also gives very useful information about the prevalence of fibropapillomas in green turtles. This disease affecting green turtles is indeed an important factor that can impair the success of conservation strategies. It is this very important to get information about the FPs. The by-catch release programme showed that the prevalence of FPs ranged from 3 to 15% according to the month and the trend was globally steady on the study period.</p> <p>An article about by-catch in Congo has been published in a peer reviewed journal: <i>Cybium</i> (Full text in French, abstract in English).</p> <p>Another article is on the way on Fibropapillomas in green turtles from by-catch in Congo (Rufford will be part of the Acknowledgements).</p>
The conservation strategy is build with the local fishermen and exchanges and comprehension of			Fully achieved, maintained long term	A meeting was held at Pointe Indienne, the area where the artisanal fishing activities are concentrated. Results from the prototype net designed to reduce by-catch were shared with the fisherman communities. Agreement about the

<p>both parts are enhanced thanks to this program</p>				<p>release compensation scheme has been discussed and renegotiated to reduce the average cost of sea turtle releases. Fishermen finally accepted to get only wire bobbins in turn for the release of the turtles (and only exceptionally net pieces, far more expensive – in case of large damages on nets caused by the release of the entangled turtle).</p>
<p>The study work to create, test and spread the use of the prototype net is done in collaboration with a Congolese student graduating for her master degree.</p>			<p>Fully achieved, maintained long term</p>	<p>The test of the prototype nest shows the benefit to spread the use of a gillnets with mesh size around 10cm (stretched mesh size) and to adapt the fishing practices (location, season and soaking time). It also shows the interest of adding phosphorescent pieces (green light) on the upper part of the nets. Meetings with fishermen were done to show the interest of the new nest: economical benefits and reduction of the by-catches. Five prototype fishing nests were locally made and distributed to fishermen at the pointe Indienne to show them practically the interest of the enhanced fishing net and convince them to use it. The spread was only partially achieved since it was difficult to convince them to use the new fishing net.</p> <p>We will organise new meetings to convince them on the long term. A community manage marine protected area is planed at the Loango Bay, Pointe Indienne. The further spread of the enhanced fishing net will be part of the wildlife management in the framework of the Marine Protected Area creation meetings.</p>

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

The fisherman communities are always reluctant to change their fishing practice habits. During the RSG period, the dialogue has been enhanced between the NGO Renatura and fishermen, thanks to the meeting and presentation of experiment results, and thanks to the presence in the field of a trainee living in the fishing villages for a long time.

Fishermen still put into question the real interest of the prototype net and are always suspicious. The success of the spread of new fishing gears and practices will be built upon long time relationship with them, exchanges and mutual trust.

The main factor able to convince fishermen is the efficiency of the net, i.e. its ability to catch more fish with high commercial value. The study results bring evidence of such commercial interest of the prototype: nonetheless the new net catch less sea turtles meaning less troubles (less loss of energy and time releasing the turtle) for fishermen, but it also catch more valuable targeted species and bigger specimens.

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

Almost 2,000 sea turtles released from artisanal fishing gears within a year (July 2013-July 2014)
Validation of the efficiency of the prototype net: less sea turtle by-catches and more fishing (size, number and value)

Better knowledge of non-nesting sea turtle, including important results about the fibropapillomatosis epizootic emerging along Africa's coasts and threatening green population worldwide.

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

During the project, a local fisherman was hired to implement the experiment. The compensation scheme allows for repairing the damaged fishing net. Thanks to the release programme fishermen can easily comply with the Congo fishing and fauna regulation (sea turtle are fully protected since April 2011).

The mutual agreement between Renatura and the fishermen community go further than the release program: Renatura is also implementing a larger sustainable fishery programme designed to get a better enforcement of the fishing regulation in Congo. Renatura is organising joint patrols with the Congo fishery administration to enforce the industrial fishing rules (gears, practices, and zoning). Artisanal fishing is suffering from the poor enforcement of the zoning regulation since industrial fishing (partly illegal) is not respecting the zoning and is coming to fish near shore within the 3 miles reserved for artisanal fishing. So the enforcement of the zoning promoted by Renatura is favourable to artisanal fisheries. Thus artisanal community and Renatura find common interests within this larger framework.

5. Are there any plans to continue this work?

The long term goal is to spread gears and practices reducing by-catch, the experiment and discussion made during the 2013-2014 period will serve as a basis for this. Renatura and the Congolese Government are jointly working on the creation of a community managed marine protected area at the 'Pointe Indienne', the main artisanal fishing area. The 'turtle friendly' artisanal fishing practice will be spread further within the framework of the new marine protected area.

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

The results of experiments and on the innovative conservation strategies will be shared with the international conservation and scientific community through an oral presentation at the next world congress for sea turtle in Turkey (International Sea Turtle Symposium). RSG will have its name and logo within the acknowledged slide and will be quoted orally.

The results of the prototype net experiment will be published during the coming year and the RSG will be quoted at the end of the article.

Other meetings are planned with the local communities and we will share the studies' results regularly.

Results on prototype nets and innovative conservation strategies will be shared with the other NGO working on sea turtles in the Central Africa/ West Africa regions through yearly meetings of Rastoma, the network of sea turtle conservation professionals in Africa, and through the network Facebook page and discussion list.

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 within the period planned July 2013-July 2014.

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
	£	£	£	
Field staff salaries	1 151	1 182	+31	Globally the difference between planned and actual budgets is due to the limited spread of the improved net
Running cost	103	105	+3	
Materials to fix the fishing gear (compensation scheme)	1 924	2 071	+147	
Transportation cost	257	263	+7	
Coordination	641	790	+149	
Office supplies and small materials	0	271	+271	
Improved fishing net experiment and spread of the improved net	1 924	1 317	-608	
TOTAL	6 000	6 000	0	

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

The important next step is the project of Community Managed Marine Protected Area centred on the area where artisanal fishing activities and sea turtle by-catches are concentrated.

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?

RSGF Logo is inserted:

- in the Renatura internet page : www.renatura.org/index.php/nos-partenaires
- in the paper and PDF newsletter 'Natur'info' (attached).

Will be inserted:

- In oral presentation related to the study work (ISTS April 2015, Turkey)
- In future peer reviewed papers presenting the results of the experiments and the results on fibropapillomas in link with the release program.

11. Any other comments?

I add some pictures showing the sewing work done locally to make the enhance fishing net (Pics 1 to 4). Stretched mesh size is 10cm and you will notice the presence of phosphorescent plates on the float line (one plate every meter).