

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	Aristide Takoukam
Project title	Baseline study and conservation of sea turtles in the northern coastline of Cameroon
RSG reference	20768-1
Reporting period	December 2016 – November 2017
Amount of grant	£5000
Your email address	akamla@ammco.org
Date of this report	11/20/2017

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
Build local capacity in beach monitoring, bycatch reporting, improving nesting success and in raising awareness.				Two technicians of AMMCO were trained by a sea turtle specialist from France. The two technicians trained 10 fishermen. The training was focused on sea turtle beach monitoring. The technicians also participated in a workshop organised by the RASTOMA in Kribi on how to make a successful artificial hatching.
Collect baseline scientific data to evaluate the population status of sea turtle in northern shoreline of Cameroon				Fifty-one beach patrols were conducted repetitively on five selected sites of the study area, which accounted for a cumulative distance of 460 km. A total of only 12 sea turtle signs of presence were recorded along the surveyed beaches, suggesting that only very few sea turtle nesting activities exist in the northern coast of Cameroon. The team further established a sea turtle sighting network of 10 trained fishermen. Between March and August 2017, the network reported 39 sightings of sea turtles and also three sightings of dolphins and one sighting of shark. All sea turtle sightings were at sea and picked during May. Our partial conclusion at this level of knowledge suggests that the northern coast of Cameroon does not sustain beach nesting activity but may rather provide a feeding ground for the species.
Evaluate and raise the level of local awareness on the protection status of sea turtles by				The team conducted an interview survey with 127 people in the local communities including 115 men and 12 females, aged between 17 and 78. Sea turtle is locally called

<p>sensitizing at least 50% of the people living around critical nesting area</p>				<p>"troky" or "ndia". Most respondents (60%) said sea turtles are more frequently observed in the sea rather than on the beach, especially during the dry season. Respondents reported little sea turtle hunting, bycatch and trafficking in the area. Five sensitisation campaigns were organised in five sites in the project areas. About 120 sea turtle sensitisation brochures were printed and shared with local fishermen. Educative talks were initiated with groups of fishermen in the community. About 200 people were reached through our sensitisation campaign.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We were not expecting to see minimal signs of sea turtle nesting activities on the northern coast of Cameroon. During the questionnaire survey, many fishermen reported seeing sea turtles at sea and on the beach. Therefore, because we encountered only a few old sea turtle nests during our patrols, we then decided to verify if sea turtles were present in the coastal waters of the northern coast of Cameroon. Thus, we set up a fishermen reporting network in the area. Ten fishermen distributed across the study area were contacted every week to enquire if they had seen sea turtles at sea or on the beach recently or in the past weeks. The data provided by the fishermen sea turtle network complemented data from the patrols and the interview survey.

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

- The most important outcome of this project is the knowledge on the sea turtle beach nesting status along the northern coast of Cameroon. There was no available information regarding sea turtle nesting activities there before.
- The second important outcome is the establishment of the first fishermen sea turtle monitoring network along the northern coast of Cameroon. This network will continue to be effective even after the support of the RSG.
- The third second outcome is that this project was able to unveil the perception of the local community regarding sea turtles. We are looking forward to confront this perception with additional observational data.

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

Five fishermen were involved in our weekly beach nesting monitoring and they received free training on how to conduct sea turtle monitoring. These fishermen received about 5.5GBP each time they accompanied the team in the beach nesting patrolling.

Fishermen who integrated our fishing network, provided valuable information to us every weekly regarding their observation of sea turtles.

5. Are there any plans to continue this work?

Yes, we are continuing the work we started through the Rufford grant (see section 1).

Through this project we were able to secure additional Funding for PPI-IUCN to continue conducting the beach nesting monitoring but also to collect baseline data on other aquatic megafauna and on the fisheries that will guide on the creation of marine protected areas on the northern coast of Cameroon.

We have also created a mobile application called "SIREN-Sea-Turtles" that will facilitate sea turtle beach nesting monitoring in the central Africa region.

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

Parts of the results of this study were shared with the local community through community talk and brochure distribution.

Once we complete the second year beach monitoring survey, we will publish a paper on the status of sea turtles on the northern coast of Cameroon.

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

The Rufford Foundation grant was used from November 2016 to November 2017, which is equal to the anticipated length of the project.

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
Training: 5 on-the-field trainings of 2	180	210	-30	Snacks were slightly more

fishers in each of the 5 sites. 2 days training/each of the 5 site (10 days*site @ 30)				expensive
Equipment: 4 tents @ 80; 12 backpacks @ 25; 10 smartphones @ 120; 24 notebooks @ 2; 2 digital cameras@200, 12 tapes @ 2; 1 necropsy kits @ 150; 2 GPS @130	800	1000	-200	The digital cameras were more expensive as we both waterproof cameras.
patrols: 3 days-patrols *4wks *8 months *5 fishers (either one of the two fisher trained in each site)@4	1920	2440	-220	A total of 51 patrols were conducted. Each daily patrol were costly than expected.
Transportation: 4 days-patrols *4 wks *10 months *2 staff @ 4	250	500	-250	The transportation was double fold more expensive than expected because in some areas like Bamusso there is no ground transportation and the team had to rent boat.
10 meetings, rent meeting rooms and chairs	600	400	200	We did not have to rent chairs for the meetings with the local community. We organized fewer meetings than planned.
500 Flyers @ 0.5	250	400	-150	Because we did not identify nesting hotspots, we decided not to make sign boards and T-shirts anymore and instead good quality brochures. Brochure were more expensive than expected as they were printed in colour and on a thick paper sheet so they could last longer.
10 sign board @ 30	300	0	300	
100 t-shirts @5	500	0	500	
internet @ 15; phone calls @ 20/month	200	550	-350	Because we established the fishermen sea turtle nesting network, we needed money for airtime to call each of the fishers at least once every week to inquire about what they have observed in the sea regarding sea turtles.

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

This year, we are pursuing the sea turtle beach nesting monitoring on the northern coast of Cameroon in order to confirm the presence or absence of nesting activities. Because, most sea turtles reported by fishermen were sea turtles in the sea, we suspect that the northern coast of Cameroon is instead a feeding ground that it is a nesting site. Therefore, for this year, we are planning to conduct bottom mapping of some sites to identify areas with sea grasses and other potential sea turtle feeding habitat.

We are looking forward this to emphasise our efforts on fishery monitoring to estimate the number of sea turtles bycaught.

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 Rufford Foundation logo was used:

- In the PPT presentation during the launching meeting of the project.
- In the sensitisation brochures we designed a distributed to the local community.
- During AMMCO oral presentation at the International Sea Turtles Symposium (ISTS) 2017 in Las Vegas.
- In a post on our Facebook page (<https://web.facebook.com/ammco.org/>). The post of the 28th February 2017.
- Rufford logo appears on our website. It appears at the bottom of this page: <http://www.ammco.org/apropos#Team>

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

Aristide Takoukam: Principal Investigator

His role was to provide guidelines on how the project should be implemented.

Rodrigue Ngafack: The project supervisor

He coordinated with the field team to ensure data quality and resource usage.

Lionel Yamb and Eddy Nnanga: Field technicians

Their roles were crucial for this study. They trained the local fishermen in beach nesting and opportunistic sighting report. They conducted the beach nesting patrols as well as sensitization campaigns with the local community.

12. Any other comments?

The RSG has been a seed grant for our marine conservation initiative on the northern coast of Cameroon. Through this funding we were able to secure additional funding from PPI-IUCN to build upon what we have achieved so far through the RSG. I would like to express all my gratitude to the Rufford Foundation for have believed in our initiative. We are looking forward to make the northern coast of Cameroon a no-threat habitat for sea turtles and other marine megafauna.

Observation ID	Date	Time	Animal type	Exact scientific name	species confirmation	Number of Individuals	If dead, probable cause of	Place of observation	Closest city or Known village	Place description	Longitude	Latitude	Name Observer	Pictures	Samples collected
MT001	03/14/2017	9h30	Marine Turtle	NA	NA	2	NA	High sea	Sandje	NA	NA	NA	Ernest	NO	NO
MT002	03/18/2017	15h00	Marine Turtle	NA	NA	1	Bycatch	Beach	Bekumu	Farm	NA	NA	Joe	NO	NO
MT003	03/24/2017	18h30	Marine Turtle	NA	NA	3	NA	High sea	Bakinguili	NA	NA	NA	William Achu	NO	NO
MT004	03/26/2017	16h15	Marine Turtle	<i>Lepidochelys olivacea</i>	7 pairs of costal	1	Poaching	Village	Known village	Behind houses	NA	NA	Eddy Nnanga	DSCN0396	NO
MT005	03/26/2017	11h00	Marine Turtle	NA	NA	1	NA	High sea	Known village	NA	NA	NA	Georges	NO	NO
MT006	03/27/2017	1h	Marine Turtle	NA	NA	1	Bycatch	Beach	Idenau	NA	NA	NA	Katika	NO	NO
MT007	03/29/2017	19h45	Marine Turtle	NA	NA	2	Bycatch	Beach	Limbe	NA	NA	NA	Etondji	NO	NO
MT008	03/30/2017	13h00	Marine Turtle	NA	NA	1	NA	High sea	Known village	NA	NA	NA	William Achu	NO	NO
MT009	03/30/2017	14h30	Marine Turtle	NA	NA	1	NA	High sea	Batoke	NA	NA	NA	Collins	NO	NO
MT010	04/02/2017	17h00	Marine Turtle	NA	NA	2	NA	High sea	Batoke	NA	NA	NA	Collins	NO	NO
MT011	04/16/2017	16H00	Marine Turtle	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Etondji	NO	NO
MT012	04/23/2017	18H00	Marine Turtle	NA	NA	1	NA	High sea	NA	NA	NA	NA	Georges	NO	NO
MT013	05/03/2017	16H	Marine Turtle/Shark	NA	NA	Many	NA	High sea	Batoke	NA	NA	NA	Collins	NO	NO
MT014	05/02/2017	NA	Shark	NA	NA	3	NA	High sea	Bakinguili	NA	NA	NA	Georges	NO	NO
MT015	05/02/2017	NA	Dolphins	NA	NA	More than 3	NA	High sea	NA	NA	NA	NA	Collins	NO	NO
MT016	05/04/2017	14H	Marine Turtle	NA	NA	1	NA	High sea	Batoke	NA	NA	NA	Collins	NO	NO
MT017	05/05/2017	14H30	Dolphins	NA	NA	2	NA	High sea	NA	NA	NA	NA	Collins	NO	NO
MT018	05/20/2017	11H00	Dolphins/Marines Turtles	NA	NA	NA	NA	High sea	Bakinguili	NA	NA	NA	Georges	NO	NO

MT019	05/16/2017	13h00	Marines Turtles	NA	NA	3	NA	High sea	Batoke	NA	NA	NA	Collins	NO	NO
MT020	05/26/2017	17H	Marines Turtles	NA	NA	1	Bycatch	Village	Debunscha	NA	NA	NA	Joe	NO	NO
MT021	05/17/2017	11H00	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT022	05/16/2017	17H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT023	05/19/2017	12H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT024	05/22/2017	11H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT025	05/24/2017	16H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT026	05/27/2017	12H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT027	05/16/2017	10H	Marines Turtles	NA	NA	1	NA	High sea	Idenau	NA	NA	NA	Issac	NO	NO
MT028	05/19/2017	11H	Marines Turtles	NA	NA	1	NA	High sea	Idenau	NA	NA	NA	Issac	NO	NO
MT029	05/31/2017	10H	Marines Turtles	NA	NA	1	NA	High sea	Idenau	NA	NA	NA	Issac	NO	NO
MT030	06/14/2017	07H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT031	06/17/2017	08H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT032	06/21/2017	08H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT033	06/24/2017	09H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT034	06/27/2017	15H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT035	06/29/2017	07H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT036	07/17/2017	08H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT037	07/21/2017	09H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT038	07/25/2017	06H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT039	07/26/2017	07H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT040	07/17/2017	10H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT041	07/28/2017	11H	Marines Turtles	NA	NA	1	NA	High sea	Mobangue	NA	NA	NA	Georges	NO	NO
MT042	08/17/2017	08H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT043	09/04/2017	07H	Whales	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT044	09/05/2017	08H	Whales	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT045	09/06/2017	09H	Whales	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT046	09/07/2017	08H	Whales	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT047	09/08/2017	10H	Whales	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO

MT048	09/13/2017	10H	Whales	NA	NA	2	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT049	10/05/2017	08H	Marines Turtles	NA	NA	1	NA	High sea	Idenau	NA	NA	NA	Issac	NO	NO
MT050	10/06/2017	10H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT051	10/31/2017	08H	Dolphins	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO
MT052	11/06/2017	07H	Marines Turtles	NA	NA	1	NA	High sea	Batoke	NA	NA	NA	Mennsa	NO	NO
MT053	11/06/2017	16H	Marines Turtles	NA	NA	1	NA	High sea	Limbe	NA	NA	NA	Alfred	NO	NO