

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	Ruth Leeney
Project title	Are endangered sawfish still present in Mozambique? A
Project title	baseline ethno-ecological survey.
RSG reference	13749-2
Reporting period	12 months
Amount of grant	£5995
Your email address	ruth.leeney@gmail.com / ruleeney@yahoo.co.uk
Date of this report	19 August 2014



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	ם פ	ם ע	ם ע	Comments
	Not achieved	Partially achieved	Fully achieved	
Training of local			х	At least one fisheries staff member was trained in each
staff in interview				coastal province of Mozambique and assisted with data
techniques				collection.
Conducting			х	204 interviews were conducted over 3 months, with
interviews in all				fishermen, fish traders, tourist operators conducting
coastal provinces of				sport fishing and fisheries observers.
Mozambique				
Sensitisation of			х	In each province visited by RHL, the regional fisheries
fisheries inspectors				office was visited and the background and aims of the
and staff regarding				research project were discussed. The importance of
collection of data				collecting basic information on any sawfishes observed
on sawfish landings				in the future was also highlighted.
Provision of			х	In each province, between one and four plastic folders
materials to				were provided to fisheries and NGO staff. These folders
fisheries staff for				contained a leaflet, produced by the IUCN, on sawfish
sawfish data				conservation; a sawfish identification guide, forms for
collection				recording data on sawfish landings, a pencil, a tape
				measure and a Protect Africa's Sawfishes sticker. In
				Sofala province, a digital camera was provided to one
				of the observers working on prawn trawlers.
Raising awareness		х		A full-scale educational programme was not feasible
and educating local				during this study due to the limit on resources
communities about				available, and the limited time I could spend in any one
sawfishes				area. However, in Zambezia and Nampula provinces,
				posters were produced and distributed in villages,
				providing contact numbers for the local fisheries
				representatives and requesting that any sawfish
				catches be reported. In other regions, fishermen were
				informed during interviews that any future catches of
				sawfishes should be reported to their local fisheries
				officer. More comprehensive education and
				sensitisation activities will be planned for the next
				phase of the project, in 2015.
Development of a	х			A meeting was held with staff at the head office of the
national	^			Fisheries Research Institute, in Maputo, to discuss the
conservation action				development of a national conservation strategy for
plan for sawfishes				sawfishes. However, RHL was informed that such a
pian for sawnsnes				
				strategy should be proposed by ADNAP, the
				government department dealing with wildlife
				conservation, and not by foreigners, and that it was not
				within the remit of the Fisheries Research Institute to



	oversee the development of such a strategy. A meeting was then proposed to ADNAP, but no response was received. The findings of the research conducted so far will therefore be presented in report form to all relevant government staff, and a workshop will then be proposed for early 2015, to bring together fisheries and conservation staff with relevant NGO representatives, in order to discuss the findings and to develop a conservation strategy.
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Travel from Inhambane province to Sofala province by road was not advised during the first month of fieldwork (May-June 2014), due to political instability and violence along the Save River. Therefore, I chose to fly to the more northerly provinces. This prevented the use of a single team for all interviews, and I eventually worked with one or two representatives from each regional fisheries office. I believe that this was in fact a more effective strategy, as it has resulted in individuals in all coastal fisheries offices having been engaged in sawfish research.

Travel in the Northern provinces was perhaps the biggest challenge and most limiting factor for this project. Many parts of the coastline of northern Mozambique can only be accessed on unsurfaced tracks. Public transport is either non-existent or extremely infrequent and uncomfortable. This limited to some extent the number of communities that I was able to visit. However, thanks to collaboration with the regional fisheries offices in Cabo Delgado and Zambezia provinces, I was able to take part in other activities which allowed me to travel by 4WD with fisheries staff and to visit some of the more remote communities in these regions.

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

- 1. Up-to-date information on sawfish presence and key habitats in Mozambican waters
- 2. Significant increase in awareness amongst both staff of the Fisheries Research Institute and local conservation groups (primarily WWF-CARE, working in the Primeiras and Segundas Reserve) regarding the conservation status of sawfishes, the importance of collecting data on sawfishes in Mozambique and the need for a national conservation action plan.
- 3. I have made contact with, and built working relationships with fisheries staff throughout the country, and with several NGOs WWF-CARE, TRAFFIC and the staff of the Bazaruto Archipelago National Park. This will greatly ease the process of identifying partners for a workshop to develop a National Conservation Strategy for Sawfishes. It has also, I believe, fostered a sense of inclusion in the research project so far, and has brought the issue of sawfish conservation alive for fisheries staff through the stories of past sawfish catches and recent declines told by the communities in which they work.

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

Staff from each regional office of the Mozambican Fisheries Research Institute (Instituto Nacional de Investigação Pesceira) either conducted interviews themselves or assisted with interviews. In



Nampula province, staff from WWF-CARE who work in the Primeiras and Segundas Reserve also took part in interviews. All those who took part in interview surveys gained experience in interview techniques and more importantly, gained an understanding of the importance of sawfish conservation and of data collection on sawfishes in Mozambique.

Within local fishing communities, fishermen were asked about the frequency with which they caught sawfishes and the economical and cultural importance of sawfishes to them and their families. In this way, the livelihoods of fishing communities have been taken into account and can be factored into any future conservation plan. Greater importance must be placed on the involvement of local community members in the future phases of the project, to ensure that they benefit from and are themselves committed to sawfish conservation activities.

5. Are there any plans to continue this work?

Yes – it is absolutely essential to continue this work. Having collected information from fishermen on areas where sawfishes are most likely to be encountered, sampling in these highlighted areas is now of utmost importance, in order to confirm the presence of sawfishes as well as the species and age classes present, and to better understand which key sawfish habitats require protection, and what the threats are in those areas. Education and sensitisation of communities where sawfishes are found will also form an important part of the next phase of this work. Finally, once the findings of this first phase have been provided to government and NGOs in Mozambique, a workshop will be planned in order to facilitate the development of a national sawfish conservation strategy, following guidelines set out in the IUCN's Global Sawfish Conservation (http://www.dulvy.com/global-sawfish-conservation-strategy.html).

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

Updates were made regularly on the Protect Africa's Sawfishes Facebook page (https://www.facebook.com/ProtectAfricasSawfishes) throughout the fieldwork. Many of these updates were also shared with a larger audience via the Sawfish Conservation Society Facebook page. In June 2014, I gave an oral presentation on my sawfish research at the Sharks International conference in Durban, South Africa. Whilst the main focus of my presentation was on my previous work in Guinea-Bissau and The Gambia (as my fieldwork in Mozambique had only just started at that point), the Mozambique project was mentioned and the Rufford Foundation was acknowledged as a sponsor of this research. A video of this presentation should be available shortly on the sawfish Conservation Society's YouTube channel (https://www.youtube.com/user/SawfishConservation).

Once the data are analysed and the final report has been sent to funders and key contacts in Mozambique and the sawfish research community, some key findings will also be posted on the Facebook page. The findings will then be written up as a scientific publication, most probably for publication in the sawfish virtual volume of *Aquatic Conservation: Marine and Freshwater Research*.

I am due to be interviewed about my sawfish research by the Irish radio station RTE in late August. I hope to also produce an article for the popular press, possibly BBC Wildlife magazine, on sawfishes in Mozambique. I will also share the results via a post on my blog, www.westafricacetaceans.blogspot.com.



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 grant was approved on the 30th August 2013 and funding was received on the 27th September. Fieldwork began on the 18th May and was completed on the 6th August 2014. The field period was thus considerably longer than planned, due to the size of the Mozambican coast, my decision to conduct interviews in all coastal provinces and the difficulties involved in reaching some of the more remote parts of northern Mozambique. The data are now being analysed and the final report is anticipated to be available by September 30th, 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	Actual Amount	Difference	Comments
	Amount			
Return flight, Namibia	750	GBP 600.75 ¹	+149.25	
to Maputo				
Travel within Mozambique	1500	GBP 2398.50 ²	-898.50	The cost of travelling the length of the Mozambican coastline was underestimated. Several domestic flights were taken to facilitate travel to the far north of the country.
Food & accommodation for a team of 5, 40 nights	1255 (4255 totals, of which Rufford provided 1255)	ZAR 190 + MTC 119,400.40 = GBP 10.73 + 2383.58 = 2394.31 For purposes of this budget, 1255 considered to be spent	0	Local fisheries staff were employed; thus, accommodation costs were reduced. However, RHL's stay was extended to 3 months.
Per diem for interviewers	1200	GBP 532.90	+667.10	
Translator salary	640	GBP 500	+140	No translator was hired as fisheries staff were in most cases able to act as translators. However, the final report will be translated into Portuguese prior to its distribution to

¹ Flight cost NAD 10486. Conversion rate for 10th April: GBP 1.00 = NAD 17.45.

² 1 GBP = 50.1013 MZN, 19th August 2014.



				government officials.
Sampling costs (boat hire, boat fuel)	500	0	+500	No sampling was conducted
Printing costs for questionnaires & posters	150	4082 MTC +690.15 NAD = GBP 81.48 + 38.95 = 120.43	+29.57	Included costs of tape measures. Stickers and plastic folders for 'sawfish kits', provided to fisheries observers
Unanticipated cost: visas for Mozambique (issued for one month each time only) Unanticipated cost: sim cards for local mobile phone networks,		632 ZAR + 500 ZAR + 500 MTC = GBP 63.95 + 9.98 = 73.93 5314 MTC = GBP 106.60	-73.93 -106.60	
internet dongle, phone & internet credit				
Unanticipated cost: additional anti-malarial medicine for extra field time		4188 MTC = GBP 84.01	-84.01	
Total	GBP 5995	GBP 5672.12	+ GBP 322.88*	

^{*}With the permission of the Rufford Foundation, I hope to use the remaining funds towards the organisation of a workshop for the development of a National Sawfish Conservation Strategy, in December 2014 or January 2015.

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

In the immediate future, the findings of this study will be disseminated to the Mozambican Ministry of Fisheries, Institute of Fisheries Research and the Department of Wildlife Conservation, to highlight amongst the relevant governmental departments that these endangered species are present in Mozambican waters and that the IUCN has called for countries where sawfishes are found to develop national conservation strategies as a matter of urgency. The final report will be translated into Portuguese to ensure that it is accessible to as many government officials and employees as possible. The next step will then be to organise a workshop in Maputo, in collaboration with these government partners and other stakeholders, to develop a conservation strategy for sawfishes in Mozambique. As funding becomes available, it will be important also to continue the research elements of this project, particularly to confirm key habitats for sawfishes in Mozambique, as this information will feed directly into the conservation strategy. Education of local communities in the vicinity of these habitats, and their involvement in and contribution to conservation plans, will be essential for the long-term success of these activities. I hope to apply for another Rufford grant in 2015 to support the continuation of this work.



10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The Rufford logo was used on my presentation at the Sharks International conference in Durban, June 2014. The logo also appeared on the Protect Africa's Sawfishes facebook page when I posted an acknowledgement to the funders of the project. The Rufford Foundation will be acknowledged in the final report and any publication resulting from this work.

11. Any other comments?

I am grateful to the Rufford Foundation for funding this work, which has provided exciting and novel data confirming sawfish presence in Mozambique. These data suggest that Mozambique may be one of the last refuges of sawfish in African waters. We must now act quickly to protect sawfishes and their habitats, to ensure that these unique fishes are not lost completely from Africa's coastline.