

### 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
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Grant Recipient Details	
Your name	Aditya Roy
Project title	Conservation of <i>Gyps</i> vultures in Gujarat: an integrated approach of ecology, advocacy and awareness
RSG reference	18170-2
Reporting period	1 year
Amount of grant	£5000
Your email address	feathered.bipeds@gmail.com
Date of this report	18 <sup>th</sup> June 2016



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

Objective	Not	Partially	Fully	Comments
	achieved	achieved	achieved	
Nest Monitoring of			$\checkmark$	Detailed results are given
Gyps bengalensis				as separate presentation
colonies			1	
Awareness and				
advocacy				
Documentation			V	Documentary film created using this grant and other support has been attached separately. This is the English version of the film. We plan to translate it in vernacular language and use it intensively for awareness work in the next phase
Toxicological Analysis of samples of vultures and domestic livestock collected during previous grant		$\checkmark$		This was part on my previous Rufford project. Due to insufficient funding the objective has not been able to complete entirely but the results are really shocking. Therefore it is very important to complete the analysis of all the collected samples on priority basis

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

During the project the most serious problem we faced was that our master hard drive crashed completely. It had all the footage related to the vulture documentary that we were making. We tried our level best to retrieve the data but it failed. The budget for guaranteed retrieval was too high and we could not afford that. We could reshoot most of the activities, especially the vulture shots due to the intensive volunteer network and grip on the subject that we have been able to create in last few years. The documentary attached here has been shot within 1 month time only.



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

#### Vulture Documentary:

With help of this project and some other funding we have been able to make a short documentary of 10 minutes which is specially made to target a wide audience starting from local villagers to veterinary doctors. The film is currently in English and very soon we plan to translate it into Gujarati (local language) and Hindi (national language). This film is the most important achievement after facing the hard drive crash. It will be of great use in doing all future awareness activities.

#### Toxicological analysis:

We had collected over 45 tissue samples of *Gyps bengalensis* and around 500 liver samples from dead domestic livestock. These samples were supposed to be tested for presence of various NSAIDs (non-steroidal anti-inflammatory drugs). Though the samples were collected during the previous Rufford project the analysis could not be completed due to time and budget constraints. In the current project there wasn't any special budget for the analysis however we were able to conduct analysis of 25% of livestock samples and 11vulture samples from a single mass mortality case. The results were really alarming. Eight out of 11 vulture samples showed presence of diclofenac and all 11 showed high levels of DDT. This is of great concern as DDT can lead to reproductive failures which can further threaten the already declined population of vultures. In comparison to all previous studies we also found much higher prevalence of diclofenac in liver samples of domestic livestock carcasses. Though we need to analyse all the samples to conclude the results. We could not complete this due to lack of funding and plan to complete this work in next phase.

#### Nest monitoring in Central Gujarat and Saurshtra region and Local awareness:

We monitored around 75 nests of Gyps bengalensis spread across 30,000 sq. km. This was the 4th year since we have been regularly monitoring the nests in this region. We have found some very interesting trends. Due to intensive conservation efforts being made by us and other organizations the nest numbers have overall become quite stable. There are major changes between the colonies and we suspect that due to availability of resources and disturbances.

It is very crucial to continue and even do a more intensive monitoring in future. This will be one of the major objectives of our future work. The nest and colony monitoring activities are always combined with awareness activities in the villages where vultures nest. This has proven a great value. Now we have local villages who are so enthusiastic and active that we get daily updates with photographs of vultures on social media like WhatsApp. We wish to encourage more youth and try



to also support them with better camera equipment and some basic financial support to strengthen their involvement in conserving these birds.

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

Local community involvement has always been our major focus and we have achieved it in very successful manner. In our previous work distribution of meloxicam at subsidised rate was very instrumental in creating a friendly repo with the most hard to interact community of veterinary doctors and quacks. Generally they are not much interested in awareness material, but the moment we started providing economic benefit by giving the vulture safe drug at one third cost of the market price they became very friendly and started participation in our work also. We could create a strong network of veterinary doctors working in these rural areas and they also call when they see vultures on field. Now they have also understood the importance of these birds and actively participating in their conservation.

The vulture nesting and feeding site monitoring activities conducted during present work were always combined with awareness activities in the villages where vultures nest/feed/roost. This has proven a great value. Now we have local villages who are so enthusiastic and active that we get daily updates with photographs of vultures on social media like WhatsApp. We wish to encourage more youth and try to also support them with better camera equipment and some basic financial support to strengthen their involvement in conserving these birds.

Another important local community was the skinners, considered to be the lowest caste according to the Hindu belief and most of the time very poor and neglected people. Our regular interactions with skinners created a deep interest about vultures in them and they have started keeping regular watch on vulture numbers in the carcass dumps. They regularly send us the updates from the field also.

### 5. Are there any plans to continue this work?

Yes, we strongly wish to continue our work and we will be very happy if we receive support from RSGF for this.

The major aspects for next phase of work will be:

• To translate the vulture documentary film into Gujarati (local language) and Hindi (national language) and carryout intensive awareness activities using this film in vulture rich areas. The target groups will be villagers (farmers and livestock owners), students, veterinary doctors, skinners, etc.



- To complete the toxicological analysis of all vulture samples and domestic livestock liver samples
- To do a more intensive search and monitoring of vulture nesting, feeding and roosting areas and generate a more systematic way of data collection and documentation involving locals

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

The documentary will be shown in villages, schools and to veterinary doctors. It will also be available on social media like YouTube and Facebook. The results of nest monitoring and toxicological analysis will be published in scientific journal as well in popular nature/science magazines.

# 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 over a period of 1 year which was the anticipated actual length of the project.

Project proposal Submitted:	17/06/2015
Project Approved:	13/08/2015
Project Completed:	18/06/2016

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
Project co-ordinator	600	600	0	
Field staff (2 people)	1200	1200	0	
Travelling	1200	4200	-3000	Supported by SoAR (Society for Action & Research), Soar Excursions ( <u>www.soarexcursions.com</u> ) and Rann Riders ( <u>www.rannriders.com</u> )
Documentation	1200	3200	-2000	Supported by Idea Wild, SoAR (Society for Action & Research), Soar Excursions (www.soarexcursions.com)



					and	Rann	Riders
					( <u>www.rannriders.com</u> )		<u>om)</u>
Advocacy	and	800	1000	-200	Supported by SoAR (Society		
awareness					for Action & Research)		
Toxicological		000	500	-500	Supported by SACON and		
Analysis					Soar (S	Society for A	Action &
					Researc	ch)	
Total		5,000	10,700	-5,700			

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

Implementation on complete ban of all multidose diclofenac injectable formulations using intensive awareness, intensive monitoring of vulture population, breeding and feeding sites involving local villagers and continued toxicological monitoring of food sources (livestock carcasses) to understand the changing trends of various drugs and chemicals in the food source of vultures are the most important steps to ensure that these magnificent birds soar in the sky like before.

## 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?

Yes, we used the RSGF logo in all the printed awareness material that we used in the villages. We also used it in the documentary film with special thanks to RSGF. We have also used the logo in all the scientific presentations that we have made based on the project results, most notable being the presentation made at Annual Research Seminar, Salim Ali Centre for Ornithology and Natural History, on 29/05/2016.

#### 11. Any other comments?

Following documents are attached separately:

- The vulture documentary film in English.
- The presentation showing the results of the project.





