

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	Rabten
Project title	Conservation of critically endangered White-bellied Heron and fostering community livelihood in Jigme Dorji National Park under Punakha district, Bhutan
RSG reference	19263-1
Reporting period	April 15, 2016 to March 22, 2017
Amount of grant	£5000
Your email address	rabtenla@gmail.com
Date of this report	March 22, 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
To assess the species composition and structure of vegetation preferred by WBH for nesting and roosting in order to assist in improving its conservation status and habitats.				Vegetation surveys were done to answer the questions that are related to this objective
To assess the conservation threats and disturbances towards WBH and its habitats including the people's degree of awareness and perception towards conservation of species.				It was understood from the social survey, and field visit and observations

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

First of all, the project was proposed to conduct along the stretches of Mochu and Phochu rivers under the Jigme Dorji National Park (JDNP). However, there has been no sighting of bird since long time back along the Mochu river as said by the local communities. There was no nesting site along the Mochu river and there was limited information of roosting habitat as well. For this reason, the study had to be done only along the stretch of Phochu river in order to gather more appropriate data and information. Still then the project resulted well as I managed to gather desired data for analysis from the study area. Another factor that often limited during the data collection was rugged geographical landscapes. In this regard, I had to change a sampling method slightly according to the field situations. Systematic sampling method with sampling plot sizes of 10 x 10 m for trees, 5 x 5 m for sapling and shrubs, and 2 x 2 m for herbs and ground flora were used for vegetation data instead of circular plot of 50m, 5m and 2m radius for trees, saplings and shrubs, and herbs and ground flora respectively.

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

3.1. Generation of baseline data

The detail study on the nesting and roosting habitats, and the perception of local communities towards WBH conservation was felt necessary to understand their natural ecosystem and protect them from the extinction. In this regard, this project formed one of the baseline data and will provide information on species composition and structure of vegetation in roosting and nesting habitat of WBH in the study area. The study showed that major life forms of tree species in the entire study area constituted conifer trees, evergreen broad-leaved trees and deciduous broad-leaved trees. Monodominant forest type with *Pinus roxburghii* was found preferred by WBH for nesting and roosting habitats. Therefore, this study concludes that removal and changes in the amount of vegetation cover (*P. roxburghii*) will have the greatest influence on birds. The researchers hereafter can continue with further study based on this data regarding the habitat ecology of the species.

3.2. Education and awareness for conservation

It was obvious that human access to the study area was high and increasing, and perceptions of the local community about critically endangered species and their management were found important to promote social and political support in the field of conservation. Moreover, the education and awareness programs have to be continued in order to gain knowledge and change the behaviours of the people. People cannot be expected to support the conservation strategies unless they understand why WBH to be protected and how WBH are relevant to their lives. For this reason, I have conducted an education and awareness campaign with the help of this project. General information, the conservation status and the research activities carrying on the field about the species was provided for the participants. This project helped the local community and other relevant stakeholders understand more about the WBH and its habitats. As a result they were willing to support any policy geared towards conservation of WBH and habitats, and mitigation of conservation threats from the local communities.

3.3. Built strong relationship among the relevant stakeholders

This project has helped in bringing together enhancing strong networks and partnerships among the researchers, funders, readers, local communities, forestry officials, government agencies, and non-governmental organisation to achieve more effective conservation targets. This will not only result in promising collaborative relationships among the relevant stakeholders, but will also definitely contribute great in the formation of conservation strategies with their joint efforts.

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

This project provided great benefits to both the researchers and local communities. The support and participation of local communities is very important to the success of conservation targets. The people needed to be informed of research findings and be involved actively in the implementation of their opinions. Accordingly, local communities have been involved in the project right from the preliminary survey till the awareness and sensitization programmes. They have received direct monetary benefits for involvement of those activities and also have developed and promoted positive attitudes towards conservation of the species. Local communities knew the more bird they have, the more tourists they can attract, and the long-term ecological benefits and sustainability of local resources. Undergraduate students of Forestry Department from College of Natural Resources and heads of the local government of the localities were involved in the collection of data, awareness and sensitisation programs. They were also provided with daily subsistence, travel allowances, stationeries and materials out of this project.

5. Are there any plans to continue this work?

Unfortunately we have discovered some carcasses of WBH from the study area during the time of field visit and data collection. However, the actual cause of mortality did not know at the time. It may be due the scarcity of food resources or the predators. Therefore, if given the opportunity I would propose to continue the project on predators to bird in order to understand more about the direct threats and disturbances to the species in question.

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

Making information available to the appropriate stakeholders is very important in the field of conservation. To achieve this, I will try to share the information or findings and recommendations of this project to the maximum people. The results and findings of this study will be published and shared to the public both at local and national level to equip them with information enabling them to make smarter decisions.

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

As per the activities and timescale of the project, The Rufford Foundation grant was used for the period of 12 months, i.e. April 15, 2016 to March 22, 2017.

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
Preliminary survey	70	70	0	
Field survey & data collection	840	840	0	
Community sensitization and Awareness campaign	1500	1470	30	3 participants less against the targets
Potter charges	200	200	0	
Educational campaign to colleges and schools children	1050	1050	0	
Training and sharing filed experiences to the heads of local communities and institutions	150	172.5	-22.5	
Transportation charges	250	275	-25	Cost of the social survey has to be made up from here
Print scripts and erection of banners	350	330	20	
Procurement of research equipments and materials	300	300	0	
Mass media awareness	190	190	0	
Cost for printing reports	100	100	0	
Total	£5000	£4997.50	£2.50	

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

The sign of declining WBH population is the main concern among the conservationists. There are several uncertain factors, chief among them being the uncertainty about the cause of mortality. Now in the next step, a continuous and in-depth research regarding the direct threats and disturbances like predators and food scarcity will go a long way in building up confidence in the cause of species mortality and in turn, would contribute to achieve the necessary species conservation targets.

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, the logo of The Rufford Foundation was used in all the educational outreach banners, presentations, posters and distributed materials. The images containing The Rufford Foundation logo that were used during educational and awareness campaign have been sent earlier for report updates as well.

11. Any other comments?

White-bellied Heron is a species on the edge of extinction with a small and rapidly declining population. White-bellied Heron workshop, Bhutan, 1st-4th December 2015 confirmed only 60 individuals left in its range countries. This project was intended to work toward a better future for the bird and the local communities around its habitats. Thus, this research provides information on species composition and structure of vegetation in roosting and nesting habitat of WBH, and the general conservation threats and disturbances towards WBH and its habitats. In effect, this research will definitely contribute towards the conservation of birds and their habitats. In deed I am extremely excited to carry out this project. However, it would not have been possible without financial assistance and precious support from the Rufford Foundation. Lastly, I would kindly acknowledge and thank the Rufford Small Grants Programme for providing funding for the project and look forward to receive same in the near future.