

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 | Rinchen Drakpa |
| Project title | Movement and Habitat Use Study of Rufous-necked Hornbill in Thrumshingla National Park, Bhutan |
| RSG reference | 8921-1 |
| Reporting period | October 2010 to October 2011 |
| Amount of grant | £5803 |
| Your email address | rinchenheng@yahoo.com |
| Date of this report | 17 th November 2011 |

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 |
|--|--------------|--------------------|----------------|--|
| Determine home range size | | Partially achieved | | A tag battery was exhausted and unable to download required data for analysis. However, this can successfully be achieved during next study (March – August 2012). |
| Determine critical habitat requirement | Not achieved | | | Since the tag battery was exhausted, data on habitat use could not be collected on wherever bird is detected. This has hampered the analysis. With the proposed study schedule from March to August 2012, it is ensuring that it will be fully achieved. |
| Study breeding biology | | | Fully achieved | Additionally, this study was conducted at nest site during breeding season as part of the project. |

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

Through the field experience it appeared that capturing bird during the nonbreeding season is constraint for the arboreal bird. It seems best time is to capture during breeding season at nest hole. A male bird was captured at nest hole during breeding season and radio tagged. However, data on home range and habitat use could not be collected as the tag battery was exhausted. This has affected analysing data and producing report as proposed in the project. Attempt was made time and again to recapture bird and tag but unable to capture it. It is planned to capture during breeding season again at the time of next proposed study, March to August 2012.

Leeches, heavy rain, flies, allergic plants, river, steep and rocky terrain, allergic plants are another obstacle to the surveyors. However, these are not the major problem.

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

A male bird was captured, and radio tagged during breeding season. However, data could not be downloaded as the tag battery was exhausted and this has hampered collecting data on habitat use. Several attempts were made to re-capture bird even during non breeding season yet unable to capture.

Simultaneously, breeding biology of the species was conducted during breeding season at nest site. This has figure out forage species that the bird takes during breeding season.

Preliminary report was produced and submitted to the RSG as reflected in web page.

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

Experienced and knowledgeable local guides were involved during the field work and they were provided with field gears such as trekking boots. Some of the local communities residing nearby study sites were involved wherein they had shared us their beliefs of the bird. Locally, the communities have their own story. Male hornbills are jealous birds, according to local communities. During their nesting period, the male hornbill mudds his mate into a hollow tree, leaving only a small hole through which he feeds her and the chicks. "If another male bird is seen feeding the female, the male will seal the nest to imprison the female," said Communities and local guides. However, in most cases, the female is capable of breaking out.

5. Are there any plans to continue this work?

As a continuation, the project is proposed to extend till the end of August 2012 in order to fully achieve the objectives of the project. Actual field work will begin during breeding season, March to August 2012. Prior to this, additional nest sites will be identified in the field to assure easy access to capture birds during breeding season. This will enhance radio tagging birds and collecting data on home range and habitat use and produce final report.

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

At the end of project, it was planned to publish and broadcast results in the media and journal to make public and scientific community aware about the status of bird in Bhutan. It was also to provide education awareness to the communities residing in and around the park areas. This could not be done this time due to the fact that the bird tag battery was exhausted and required data could be collected and hampered producing final report/results.

However, it is to ensure that the results to be shared as proposed at the end of August 2012.

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

RSG was used for the entire project period:

- July- August 2010: Review literatures and consultation
- September-October 2010: Procure equipment
- October-November 2010: Capture birds and tag. Unable to capture although several attempts were made
- October, November, December 2010 - September 2011: Bird and habitat use data collection. A male bird was able to capture in June 2011 at nest site and radio tagged but unable to collect data on home range and habitat use as the bird tag battery was exhausted.
- October 2011: Visiting advisors to analyze data and produce report. This was not done as the data from the bird tag was unable to download and required data for analysis is not available.

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 |
|---|-----------------|---------------|------------|---|
| Principle researcher | 1058 | 1058 | 0 | |
| Research Assistant | 1058 | 1058 | 0 | |
| Local guide | 705 | 705 | 0 | |
| Vehicle hire | 176 | 176 | 0 | |
| Lodging | 47 | 47 | 0 | |
| Food in the field | 52 | 52 | 0 | |
| Receiver with antenna & earphone | 1058 | 1058 | 0 | |
| Radio transmitters | 405 | 405 | 0 | |
| Camera batteries | 11 | 11 | 0 | |
| Computer papers | 14 | 14 | 0 | |
| Trekking boots | 88 | 88 | 0 | |
| Visiting principle researcher to analyze data | 1131 | 0 | 1131 | This could not be commenced as the required data was not available. |
| Totals | 5803 | 4672 | 1131 | Note: 1 £ = 68 Rupees/Ngultrum (Local currency) |

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

To achieve objectives and produce concrete report of the project, it is crucial to extend the project period till August 2012. Capturing birds need to focus at the times of breeding season at nest sites. After fully completion of this project, I assume it is vital to form community-based hornbill conservation group to ensure safe habitat for the species. It is also critical to identify and quantify associated threats of the species.

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?

Preliminary report with related photos has been submitted to the RSGF during the course of my work. Logo was used.

11. Any other comments?

The objectives of the project are not fully achieved, and final report is unable to produce due to said affecting factors. To this, I would like to request RSGF to extend the project period till the end of August 2012.

To meet the cost of local guides and field related expenditures during this proposed study, March to August 2012, I would like to seek permission to relocate the unused budget £ 1131. Visiting principle researcher to analyze data seems not required rather I will be sending the data for analysis through e-mail. The allocated amount will be used for local guides and related field expenditures.