

## The Rufford Foundation Final Report

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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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
<b>Your name</b>	Thangsuanlian Naulak
<b>Project title</b>	Documentation on the present status, distribution and habitat use for conservation of IBA trigger species at Kailam Wildlife Sanctuary (KWLS), Manipur, India
<b>RSG reference</b>	20929-1
<b>Reporting period</b>	December 2016 – November 2017
<b>Amount of grant</b>	£4999
<b>Your email address</b>	<a href="mailto:thangsuanliannaulak@gmail.com">thangsuanliannaulak@gmail.com</a>
<b>Date of this report</b>	08-11-2017

**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
Distribution, status and habitat use of IBA trigger species				<p>The primary objective of our project was to document the present distribution, status and habitat use of IBA trigger species. However, this could not be fully achieved because of the logistics problem and the undulating terrain. A large part of the study area could not be accessed as our movement is limited due to non-motorable roads within the study area.</p> <p>Grey sibia: They were found to be fairly common in the area. Sightings were recorded mostly in areas where there is a flowering tree.</p> <p>Mrs Hume's pheasant: There was no actual sighting of this during transect walks however species presence is confirmed from a hunter's specimen of tail feathers and also from questionnaire survey conducted in the villages. The site (N 24°19'15.65" E 93°23'13.35" Elevation 1048 m) where the bird was caught has been converted to cultivation area this current year.</p> <p>Rufous-necked hornbill: No actual sighting was recorded during transect walk. Species presence is confirmed during questionnaire survey and interviews with individual hunters. 18 respondents out of 129 claimed to have seen rufous-necked hornbill.</p>
Baseline information on avifauna at Kailam Wildlife Sanctuary				<p>We prepared a checklist of birds from direct observation, noting calls (for some species), by interviewing local people and through hunter's specimen. A total of 145 bird species from 36 families were recorded.</p>

<p>Assessing threats to conservation</p>			<p>Since the IBA trigger species require a diverse array of habitat their threats differ accordingly:</p> <ul style="list-style-type: none"> <li>❖ Grey sibia : Two main anthropogenic threats are:-           <ol style="list-style-type: none"> <li>1) Trapping: Traps are set up in known food tree species. This also affect other bird species.</li> <li>2) Firewood collection: Food tree species are felled for firewood and sometimes for poles.</li> </ol> </li> <li>❖ Mrs Hume's pheasant: The main threat to this is habitat destruction in the form of shifting cultivation. Hunting is opportunistic more so because of its rarity.</li> <li>❖ Rufous-necked hornbill: The main threat to this is also habitat destruction in the form of logging for timber. Nest tree species and food tree species are destroyed in the process. Hunting, however is opportunistic because the local do not go out to hunt hornbills but for larger mammals. Logging is not only detrimental to their survival but also some loggers carry guns with them and such do not miss an opportunity to kill one.</li> </ul>
<p>Create Awareness among the local people</p>			<p>Awareness campaigns were conducted in 11 schools and seven villages. Through questionnaires and personal interactions, we came to know that although the rules and regulations are in place, they feel that there is no one to enforce it. This coupled with minimal presence of Forest Department in the villages worsen the situation. They agreed that there is a decline in wildlife population over the last decade. Most respondents feel that there is lack of awareness campaigns regarding conservation of wildlife.</p>

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

The major problem we faced during this project was that we had to rely on physical strength to reach our destinations and had to walk even to get to the villages. Our team need to walk a day to reach to the nearest village inside the study area and similarly from village to village. So, we planned our journey accordingly in such a way that they can be counted as transects.

Secondly, the Forest Department has no field staff and infrastructure in place as the area is still in proposition for a Wildlife Sanctuary and also a court case in underway. So, we had to begin everything from scratch with no resources to build up on. We had to stay with the villagers which helps us to get insights into their way of life.

Thirdly, the local people were a bit sceptical about our work because they think that we are from the forest department trying to find ways to grab their land. Their doubts were expelled as they get to know more about us and the project. They are quick to change their minds and gladly assists us in our endeavour.

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

- 1) Building a baseline data on International Bird and Biodiversity Area (IBA) trigger species and preparing a checklist of birds present in the IBA.
- 2) Identifying threats to conservation of avifauna in general. The primary threats are hunting and logging. Hunting in the form of trapping for small birds and ground, kids use catapult and practice it is a form of hobby, and hunting using guns are a common practice among the villagers. Logging not only destroys habitat in a primary forests but also increase accessibility for hunters as they need to construct roads to logging sites for timber extraction. Additionally, there is a need to bridge the local people with the Forest Department and also create more awareness campaigns about the need for conservation, the ecological role of biodiversity and the impact of ecological degradation.
- 3) Creating awareness among the local people. According to our questionnaire survey 83% of respondents in the village and only 22% of student respondents knows about the proposed Kailam Wildlife Sanctuary and none knew that the area is an Important Bird and Biodiversity area. Only 35% of the students have seen a hornbill species either live or captured not to mention that they could identify one. So, in an effort to bridge this knowledge gap, we distribute bookmarks and calendars containing pictures of rare birds and mammal species found in Kailam WLS to students and villagers respectively. We also intend to put up posters and distribute brochures in the villages as well as in schools.

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

Our team had to stay in the villages for accommodation as such we had ample time to interact with the villagers and talk about our line of work and how it may benefit them in the long run. Through our stay we make new friends who say they are willing to help in conservation as long as it does not make negative impact on their livelihood. For instance, during our questionnaire survey, 91% of the respondents felt the need to protect hornbills while only 60% of the respondents felt the need to protect wildlife in general. This may be due to the fact that there is no conflict of interest with respect to hornbills but with animals such as wild boar, muntjac deer, etc. which destroys their crop.

We also had the opportunity to work together with as many as seven local people in different villages who acts as guides. We also try to involve the Forest Department especially the Divisional Forest Officer, Pu K.S. Tawmbing in all matters pertaining to awareness campaign. Our team even managed to persuade him to put a debate competition on Hunting. Ultimately, the DFO along with his colleagues decided on a topic "Hunting should be banned" for students to debate upon during the Wildlife Week, 2017.

Our local guides were trained to handle camera, GPS and binoculars in the field. They are now well acquainted with bird surveying techniques and standard observation for describing habitat use. They now have renewed interest in birds and admire them. The villagers were happy to receive the calendars we distribute and the kids especially are very happy about the pictures in the calendars. The villagers were very keen to tell us if they observe an unusual sighting of birds which they thought to be rare or might interest us. Through the help of our local guide, our team successfully convince a villager not to cut a nest tree of an Oriental Pied Hornbill which he intend to keep the chicks as a pet and sell them afterwards for the same.

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

Yes, I plan to pursue my PhD in the same study area and utilise all the knowledge gathered during this project to come up with better and improved methodology to overcome the shortcomings we faced while working on this project. The study area covers an immense 187 sq. km. which is very vast to have an actual sighting and study the habitat use of rare and elusive birds. A year is simply not enough to survey the whole area. Meanwhile, I feel that a more elaborate study on the avifauna diversity should be carried out to better understand the dynamics at work in defining spatial and temporal distribution of avifauna.

We also plan to register ourselves as a society or an NGO to promote conservation and protection of wild animals and tackle head on the prevailing hunting practices. There is a lot to be done in terms of research output to understand wildlife behaviour as well as the sentiments of the local people towards conservation. We need to explore and gather more information on every aspect of wildlife and it's habitat as well as create more and more awareness among the local people. The

robust dataset thus obtained can go a long way in persuading the local people as well as the Government of Manipur to take concrete measures in the protection of wildlife.

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

Yes. At the local level, we are planning to share our result with school authorities and villagers where we conduct awareness campaigns and to the Forest Department by distributing brochures. We will also share our work to the Delhi Paite Indongta so that they may use it to widen our reach to the public. We also plan to publish our work in relevant journals so that our work will gain a wider publicity and to reach out to the scientific community.

**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 amount cannot be utilised as anticipated i.e. from December 2016 till November 2017 according to the proposed length of the project. This is because the actual field data collection was extended till November 2017 which was to be utilised for data analysis and report writing. This shortcoming was because I had to present my dissertation at Forest Research Institute for my MSc (Forestry) Degree. As such the remaining grant amount will be utilised during December and January 2017 for preparing poster and brochures which will be distributed in schools and villages. Meanwhile, we will try to publish our findings in national and international journals.

**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
Field Equipment: (Measuring tape, Vernier Calliper, GPS, Binocular, Digital camera, Compass, Pocket calculator, Clinometer)	734	630	-104	Measuring tape @ £4; GPS etrex 20 @£ 162; Binocular Bushnell 8x42 @ £116; Camera Canon 1200D @348. We did not purchase Vernier calliper as measuring tape can also be used to measure girth. The functions of a compass and pocket calculator are found in GPS and mobile phones respectively.
Standard field kit/Stationaries (printer paper, field notebook, lead pencils, plastic bags, ruler, etc.)	53	85	+32	Three field guides were purchased two for birds and one for mammals. Other stationery goods were purchased as and when required.

Safety materials (boot, raincoat and first-aid kit)	92	105	+13	3 pairs of boot and raincoat were purchased for use by team members. Extra medical supplies were bought as a pre-caution for any emergencies which may happen during the field trip. Fortunately, no such incident occurred.
Salary/wages	1796	1430	-366	One Field Assistant @ £95*10 months One Local guide @ £4*120. For convenience, we have local guides in each village where we put up. This also maximise participation of the local people.
Education and Awareness	1829	1640	-189	Refreshments were provided during each awareness campaign in schools as well as in villages. Additionally, bookmarks were distributed to school students in 11 schools and calendars to villagers in 8 villages.
Transportation and Communication	306	245	-61	We avail public transports and since the roads to villages inside are not motor-able we had to walk to move between villages.
Food and Accommodation	189	360	+171	Food and accommodation was arranged and provided for by the villagers. Payments were made on the basis of understanding between us and our hosts.
<b>TOTAL</b>	<b>4999</b>	<b>4495</b>	<b>-504</b>	The remaining amount is to be utilized for printing and distributing posters and brochures.

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

We feel that the next important steps is to widen the scope of the study. Further surveys need to be carried out on avifauna diversity in terms of their spatial and temporal distributions. This will definitely yield hitherto unrecorded rare and endemic species. Threat level for different bird species should also be assessed. Through this, a booklet containing all bird species found in Churachandpur District should be made to promote birding among the youth and students in the district.

We also feel that we should set up a society or an NGO so that we could channelise more resources and be more vocal about the need to protect and conserve wildlife. This way we could bridge the gap between the forest department and the local people to create a better working understanding about the values each institution holds. Hunting patterns should also be studied for larger mammals to identify the socio-economic impact on the villagers and also identify trade in wildlife parts so that we may develop a mechanism to keep a check on these activities. This is important because as long as there is no mechanism in place to check these activities i.e. logging and hunting, conservation goals will never be realised.

**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 Rufford Foundation (RF) Logo prominently featured in all materials produced in relation to the project. Below is the list where the logo was used.

- a) **Caps:** A cap in which the RF logo was printed on was provided for all team members to wear during awareness campaigns and field visits. Village chiefs were also presented as token of gratitude for the services rendered during our stay in each of the villages.
- b) **Banner:** A single banner was designed for the awareness campaign.
- c) **Calendar:** A calendar for 2018 was distributed in six villages which contain pictures of rare or threatened bird species found at Kailam Wildlife Sanctuary with a story emphasizing the need for conservation,
- d) **Bookmarks:** Bookmarks were made and distributed to students where the awareness campaigns were conducted. A total of 11 schools were a part of the awareness campaigns.
- e) **Presentations/Awareness Campaigns:** The logo was used in all presentations during awareness campaigns and also while defending my thesis.

The logo will feature prominently in postures and brochures yet to be printed.

**11. Any other comments?**

I thank the Rufford Foundation for providing me the opportunity to work in a field so close to my heart. Through this grant, I have found a noble way to contribute to the society and the world at large. I thank my guides, referees, team members, family and all the villagers who had been a part of this project. They are the wheels of this project without which this project would have been a failure.

I look forward to working with the Rufford Foundation in the years to come and help them in their endeavour towards a resilient environment.