

Project Update: March 2017

Setting the scene

The expedition was so successful despite being hibernation time for bats. On the morning of 25th February 2017, a team comprising of four staff with one local guide entered the wilderness of Royal Manas National Park. We visited Gomphu, Dundmang, Mamung, Pantang, Shingling toed, Goshing, Changazam, Darang dued, Rinsibee, Panbang, Sonamthang and Manas eco-camp consecutively. First expedition finished on 10th March 2017, which was for 15 days.

Objective

To study the diversity, distribution and social perspectives on a forgotten species (at least in Bhutan) - bats.

Method

1. Mist netting at every suitable places were done.
2. Visited six caves, where bats are permanently roosting as per local residents nearby.
3. Social perspectives were gathered through semi structured questionnaires.

Equipment

1. Mist net
2. GPS
3. Digital Camera
4. Vernier Caliper
5. Bat Bags
6. Specimens collection set box
7. Cap
8. Head torch
9. Hand torch
10. Mouth scarf
11. Hand glove
12. Formaldehyde
13. Alcohol
14. Three Guide books
15. Knife
16. Rope

Results and Findings

Diversity and Distribution

1. Obtained six different species of bats of four genera, comprising of two *Rhinolophus*, two *Hipposideros*, one *Pipistrellus* and one *Megaderma*. The team has measured all morphometric measurement for identification at species level. For further confirmation, we have requested the experts.
2. *Rhinolophus* and *Hipposideros* were found in caves. The other two species of *Pipistrellus* and *Megaderma* were captured through mist netting.
3. We observed two different bat species of *Rhinolophus* and *Hipposideros* sharing save cave (Shingling toed cave) but in different colony; *Rhinolophus* was near exit and *Hipposideros* in inner space of cave.
4. It is expected to have more species in second round trip as communities assured the presence of other species in the form of color and size, which is exactly synchronising with scientific findings of hibernation.
5. Coordinates of all caves and suitable places were collected.

Social Perception

1. Through semi structured questionnaires, we found few percent of people consider bats as good omen (an orthodox belief as accumulating wealth in particular house if bats resides).
2. Some local people believe bats as pet animals of local deities and consequently consider the caves as residents of the same. Such beliefs not only hamper our relation with bats but can even make the researcher in difficult situation while studying about bats.
3. Most respondents, especially the older people shared us that bats' urine is unhealthy and direct contact with our face or head will make us blind or bald.
4. In terms of magnificent ecological roles played by bats, all respondents were unaware. Therefore, the need to create awareness is highly recommended and we expect this study will play a crucial role in creating awareness amongst communities and forestry staffs as well.

Way forward: The road map of study

We will be going for another two rounds of survey in May and June 2017. After compiling the findings and results, report will be prepared and submitted accordingly to Rufford. Before exiting our study programme, our final round will be on creating awareness amongst communities and other relevant agencies as mentioned in the proposal.

Conclusion

We had little concern over hibernation of bats. Still then, it was such a successful study, though sometimes even hindered by local beliefs. Such a successful round of expedition won't have happened if a team of dedicated people were not present.

I am happy to receive a funding support from Rufford, without which, I can't even imagine of studying it. I thank Rufford for its generosity and support on time.

I won't forget to thank Dr DB Gurung, for his continuous support and thoughtful ideas. I acknowledge other two referees for their resourceful help and assistance from beginning of my study and I look forward in the near future.

Far flung, I always remember my wife and two kids. Remembering them make me more dedicated to my work and put me in higher level of confident.



Gomphu Range



Way to Darang Dued



Darang Dued Cave



Wilderness of Royal Mana National Park



Dungmang Cave



Shingling Toed Cave



Hipposideros sp.





Rhinolophus sp.



Megaderma spasma



Manas the mighty river



Semi structured interview at Pantang