

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. 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	Ambika Prasad Khatiwada
Project title	Community Stewardship for Dhole Conservation in Kangchenjunga Conservation Area
RSG reference	11636-2
Reporting period	June 2012 to May 2013
Amount of grant	£6000
Your email address	ambika.pd.khatiwada@gmail.com
Date of this report	May 2013

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
Evaluate status and distribution of dhole			Fully Achieved	We deployed 1510 camera trap days in the pasturelands of Yamphudin and Tapethok Village Development Committees (VDCs). Camera trapping was conducted in four stations. 20 cameras were placed for 20 to 25 days at a station for 24 hours a day and shifted to next station. Dholes were captured in eight camera trap locations in the border of Yamphudin and Tapethok between the elevation ranges of 2500 m to 4500 m.
To know activity pattern of prey species and habitat overlap of large mammals			Fully Achieved	Along with dholes, snow leopard, red panda, clouded leopard, leopard cat, Himalayan black bear, red fox, Himalayan serow, wild pig, barking deer, ghoral, different species of birds and livestock were captured in camera traps. Human beings and domestic/feral dogs were also caught on camera traps. The timing of camera traps photos reflects more interaction of dhole with livestock and feral dogs.
To map out distribution and potential habitat of dhole		Partially Achieved		Dholes were reported from all four VDCs of Kangchenjunga Conservation Area (KCA). The herders and local knowledgeable people reported that the dholes are distributed from 1500 m to 4500 m elevation range in KCA. Based on our camera trapping and sign survey efforts--most of the dholes' signs recorded in between 2500 m to 4000 m elevation range.
Update information on human-dhole conflict			Fully Achieved	We have collected more information on human-dhole conflict. Based on the latest interview survey and the snow leopard conservation subcommittee reports, more than 70 % livestock depredation in Yamphudin was by dholes. Dhole depredation to livestock was also reported from pasturelands of Tapethok, Wolangchung Gola and Ghunsa area of Lelep. There are more cases of livestock depredation by dholes

				and other carnivores in the pasturelands but we still don't have sufficient information. Some of the neighbouring VDCs herders take their livestock into KCA pasturelands for certain periods and there is no provision of Community Managed Livestock Insurance (CMLIS) to them. The CMLIS is only focused to snow leopard and if any livestock is killed by other carnivores (other than snow leopards) the herders don't get the relief fund from CMLIS.
To investigate diet condition of dhole through scat analysis		Partially Achieved		We have collected 82 potential dhole scats from the pasturelands of KCA. The scats will be genetically tested to confirm that they are from dhole before diet analysis. Now, the scats are at Centre for Molecular Dynamics Nepal (CMDN) for the genetic test. After having the result from CMDN we will work out on diet analysis.
Conservation awareness activities		Partially Achieved		We have conducted school teaching programs, community meetings, and dhole research information sharing meetings with Kangchenjunga Conservation Area Management Council (KCAMC)/ Kangchenjunga Conservation Area Project (KCAP) and University students. We are working closely with Department of National Parks and Wildlife Conservation (DNPWC). We have updated the DNPWC about camera trapping result of KCA.

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

It was very difficult to conduct systematic camera trapping survey in KCA due to its remoteness, inaccessible terrain and heavy rainfall during our survey season. So, we were unable to conduct systematic camera trapping survey. We placed the camera traps identifying opportunistic locations in the pasturelands of KCA. The sign survey and camera trapping survey was conducted in June-September 2012. Due to the high rainfall during the survey season some camera traps did not work properly. Our project advisor Dr. Kate Jenks suggested us to add some silica desiccant inside the camera traps, which was helpful to operate the cameras properly.

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

We successfully completed our camera trapping survey. Dhole, snow leopard, red panda, Himalayan black bear, red fox, clouded leopard, Himalayan serow, ghoral, barking deer, different species of birds etc. were caught on camera traps.

This study is very much helpful to Kangchenjunga Conservation Area Management Council (KCAMC) to mainstream the dhole into Community Based Livestock Insurance Scheme (CMLIS) along with snow leopard. We have conducted a very fruitful meeting with KCAMC regarding the dhole research information sharing and future planning for dhole conservation in KCA. We obtain good output from the meeting for the future planning of dhole conservation in KCA. We have presented Nepal's dholes in different international forums (conferences) and communicated the conservation message to wider scientific audience.

We have collected 82 potential dholes scat from pasturelands of KCA. After having genetic test, we will have good information about dholes' diet in KCA which will be important to deal with livestock-dhole conflict.

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

We have conducted our activities in close coordination with KCAMC and its Yamphudin chapter. Based on the recommendation of Snow Leopard Conservation Committee, Yamphudin; two local youths were involved in this project fully for camera trapping and sign survey during the project period. They were paid fully from this project. The community people and school students were able to get more knowledge on dhole conservation and their importance in nature through conservation awareness programs. This project has supported to KCAMC for their future plan to species conservation in KCA. They are happy to collaborate with us for long term dhole conservation in KCA and seeking continuous support.

5. Are there any plans to continue this work?

Our study reveals that the human-dhole conflict is major challenge to tackle with for the long term conservation of dholes in KCA. It is important to work out more to address human-dhole conflict. We have very good foundation to continue the project for the sustainable dhole conservation in KCA. KCAMC is also expecting some more support from us to address the human-dhole conflict. KCAMC is interested to form new CMLIS focusing on dholes in lower belt of Lelep and Tapethok VDCs and are also concerned to integrate the dholes into existing snow leopard CMLIS. We are interested to see the seasonal (summer-winter) diet of dholes. For this purpose we will collect dhole seasonal scat from KCA in close collaboration with KCAMC-particularly with the herders.

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

I got opportunity to present about Nepal's dhole at Society for Conservation Biology (SCB), Biodiversity Asia, second conference, Bangalore, India in August 2012 and at Student Conference on Conservation Science (SCCS)-New York in October 2012. I also presented about the dholes in different meetings and with different group of people in Nepal. On the occasion of 18th wildlife week, I have presented the dhole research findings among the university professors and students at

Institute of Forestry, Pokhara in April 2013. We will work out to publish the dhole research article in relevant journals for wider communication.

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

The project proposal was submitted in February 2012 requesting 2nd grant and got support from Rufford in April 2012. The anticipated date of completion of the project was May 2013.

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
Dhole sign survey, camera trapping survey, community meetings and interview survey	2500	7200	4700	Local people were employed to support us during the field work. We conducted camera trapping longer time than the planned schedule.
Members accommodation	1500	3500	2000	The cost was used for accommodation and logistics for local supporters and research team
Research team and equipment transportation	550	1320	770	Round-trip transportation from Kathmandu to research site from project implementation time to completion of the project.
DNA test of scats	1000	2950	1950	Collected putative dhole scats are now at laboratory for genetic test. We will analyse the remains (hairs) of the dhole scats after genetic test to know their food sources.
Workshops	450	650	200	We have conducted meetings and workshops with KCAMC, university students and planning to hold a discussion with DNPWC and relevant organizations to disseminate dhole research findings/future plans
Total	6000	15620	9620	We received GBP 6736 from People's Trust for Endangered Species and USD 1000 from Minnesota Zoo for this project. The remaining cost was requested to AACD.

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

- Formation of Community Managed Livestock Insurance Scheme (CMLIS) focusing on dholes and integration of dholes into existing Snow Leopard CMLIS to address human-dhole conflict in KCA
- Collect seasonal dhole scat (Summer-Winter) to know more about feeding ecology of dholes in KCA



- Make a short video documentary to communicate dhole conservation message among wider audience

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?

The RSGF logo has been used in community meetings/workshops, school teaching programmes, all dhole presentations presented in USA, India and Nepal. The logo will also be used in relevant publications of this study in future too.

11. Any other comments?

I am thankful to Rufford Small Grants Foundation for 2nd grant award to dhole project in Nepal. I am thankful to People's Trust for Endangered Species-UK, Minnesota Zoo- USA, National Trust for Nature Conservation (NTNC)-Nepal, Department of National Parks and Wildlife Conservation (DNPWC)-Nepal, Kangchenjunga Conservation Area Management Council (KCAMC), WWF-Nepal/Kangchenjunga Conservation Area Project (KCAP), Alumni Association for Conservation and Development (AACD)-Nepal, community based organizations of KCA, schools of KCA, all students and local people of KCA for their support to this project. I owe my sincere gratitude to Prof. Dr. Keshav Datt Awasthi, Dr. Shant Raj Jnawali, Dr. Maheshwor Dhakal, Dr. Kate Jenks, Dr. Kyran Kunkel, Mr. Khagendra Phembo, Mr. Bibek Acharya, Mr. Abirman Rai, Mr. Ganga Ram Singh, Mr. Sujeet Shrestha, Mr. Sher Bahadur Pariyar, Mr. Rabin Kadariya, Mr. Nawa Raj Chapagain for their cooperation and valuable support. I am thankful to Mr. Resham Blon, Ms. Sushila Thing, Mr. Mohan K.C, Mr. Suman Rai, Mr. Prakash Limbu, Ms. Chungla Sherpa for their kind support to this project. I am very much thankful to all who supported directly or indirectly to accomplish this project. I sincerely acknowledge all of you and anticipate your support in future as well for the conservation endeavours.