

## 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Gopal Khanal
<b>Project title</b>	Distribution, Habitat Suitability and Wild Prey Base of Snow Leopard in the Api Nampa Conservation Area (ANCA), Nepal
<b>RSG reference</b>	11901-1
<b>Reporting period</b>	April 2014-December 2015
<b>Amount of grant</b>	£5600
<b>Your email address</b>	<a href="mailto:Khanal.joshiipur@gmail.com">Khanal.joshiipur@gmail.com</a>
<b>Date of this report</b>	19 <sup>th</sup> December, 2015

**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
Assess the distribution and habitat suitability of snow leopard in Api Nampa Conservation Area (ANCA), Nepal			✓	Byas, Ghusa, Khandeswori, Rapla and Sitaula Village Development Committees (VDC) have been found as suitable habitats for snow leopards in the study area based on snow leopard sign surveys, prey availability and overall habitat requirements for snow leopards. Habitat suitability map preparation is underway.
Assess the population status of blue sheep ( <i>Pseudois nayur</i> ), a principal prey of snow leopard in ANCA, Nepal			✓	We used a direct count method from different appropriate vantage points (fixed-point count) to determine the population status of blue sheep ( <i>Pseudois nayur</i> ). We recorded total number of herds seen along with classification of their habitat feature, sex composition and age classes and subsequent data analysis is currently underway.
Assess herder's perception towards snow leopard conservation and livestock depredation			✓	We interviewed 62 herders or local community people to assess the extent of livestock depredation by snow leopard in the study area and their perceptions towards snow leopard conservation. Data analysis is currently underway to examine the socio-economic correlates of herder perceptions towards snow leopard conservation.

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

Since the study area was totally new for us, we had difficulty in completing the field work as per schedule. Also, we had to postpone our field work due to the bad weather during our first phase of field work in September 2014. However, we completed the remaining field work during October-December 2015.

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

The three most important outcomes are:

1. Thanks to the Rufford Foundation's support, we have been able to confirm the presence of snow leopard in the Api Nampa Conservation Area, Nepal. Moreover, we have been able to collect the sufficient data to model the habitat suitability of the study area for snow leopards. Presence of snow leopard has been confirmed in Byas and Ghusa VDCs and including these two, Khandeswori, Rapla and Sitaula VDCs were found as suitable area for snow leopard. Our results can serve as a baseline information to monitor the occurrence of snow leopard in the future and also to plan conservation strategies for snow leopards and their habitats.
2. We have also been able to estimate the population status of blue sheep (*Pseudois nayur*), a principal prey of snow leopard. This information has allowed us to assess the suitability of the study area for snow leopards and potential for long term survival of the endangered snow leopard population in the study area.
3. Similarly, through this project we have been able to document the herder's and local community perceptions towards snow leopard conservation and the extent of livestock depredation by snow leopard in the study area. This information will help conservation authorities plan community involvement in conservation activities and initiate livestock insurance schemes to help herders offset the loss from livestock loss to snow leopards.

Overall, this project improved our understanding of the habitat suitability of the study area for snow leopard by collecting critical scientific evidence on its distribution and principal wild prey availability. This scientific evidence will help the ANCA authority to plan appropriate research and conservation activities.

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

During the fieldwork, we interacted and closely worked with livestock herders and local communities. We also had two focus group discussions during our two phase field work and several informal meetings with key informants and village leaders during social survey. Similarly, local herders and youths of the Tinkar valley actively participated in the field work, which allowed us to train them on snow leopard population monitoring techniques. Moreover, we trained and assisted frontline staffs of the Api Nampa Conservation Area and local youths of Byas VDC on snow leopard sign and camera traps surveys in Tinkar area in October, 2015. Overall, we have been able to develop good working relationship with local communities and foster conservation awareness among them during our focus group discussions and informal meetings.

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

As mentioned earlier, we have been able to collect baseline information on snow leopard distribution, blue sheep population and local people's perception towards snow leopard conservation. Building upon the results of this project, we aim to continue monitoring of snow leopard population using camera trapping survey. We also plan to continue building capacity of local youths and frontline staffs of the Api Nampa Conservation Area (ANCA) on snow leopard monitoring techniques, which will enable the ANCA authority to collaborate with local community and initiate community based citizen science approach to long term monitoring and conservation of snow leopards and other wildlife in the study area. Most importantly, we plan to establish a research station (to be run by a trained team of citizen scientists) in collaboration with the ANCA authority for long term monitoring of snow leopard population, its prey and associated ecosystem.

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

We have shared our preliminary results with the different stakeholders including the Department of National Park and Wildlife Conservation, Nepal during the meetings and workshops. We have duly acknowledged the funding support provided by the Rufford Foundation during such information sharing and dissemination meetings. Currently, we are working on data analysis and preparation of a research manuscript for publication of our results in a peer reviewed scientific journal. Upon publication of the article we will share it with the wildlife department, local protected area authority, representatives of other stakeholder groups and the conservation scientists, scholars, practitioners and organizations working for snow leopard conservation.

**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 Rufford Foundation grant was used over a period of 20 months, between April 2014 and December, 2015. Though this time period is not consistent with the approved length of the project, we had requested for the extension of report deadline, and hopefully our request had been approved. We are very much thankful to the Rufford Foundation for extending our reporting period, which enabled us to complete our fieldwork.

**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
Transportation for researcher local travel	550	400	- 150	We didn't hire horse during field work.
Filed gears (sleeping bags, tents etc)	400	400		
Wages to 2 porters, 2 helper and 1 guide	500	650	+150	We did field work in two phases it incurred more costs than expected.
Maps, satellite images and GIS service	150	150		
Stipends to research assistants	500	500		
Food and lodging	600	600		
Capacity building	300	300		
Outreach materials	250	250		
Research equipment	1400	1400		
Communications- Phone/Email/ Internet	400	400		
Results presentation, disseminations	300	300		
Publications (reports, questionnaire forms) and administrations	250	250		
<b>Total</b>	<b>5600</b>	<b>5600</b>		

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

Although our work has been successful in assessing the habitat suitability of the study area for snow leopards, there is an urgent need to establish credible abundance estimate of snow leopard population in the study area for effective conservation and management. Abundance estimates are better population monitoring indicator than the population distribution, albeit costly to establish. So, the next important step should be to conduct camera trapping survey to estimate population abundance because the camera trapping information has the potential to better facilitate the effective conservation planning.

**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, we did. We used the Rufford Foundation logo in our reports to the wildlife department and also during our PowerPoint presentations for conservation awareness activities and preliminary results sharing workshops. We promise to acknowledge the Rufford Foundation funding support in our all future publication outputs.

**11. Any other comments?**

We are very much very grateful to the Rufford Foundation for supporting our work. We aim to continue working towards conservation of snow leopards in the region. We do hope that the Rufford Foundation will continue to support our efforts to develop evidence-based conservation tools and practices in the region.