

Final Project Evaluation Report

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF 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 – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Complete the form in English and be as concise as you can. Note that the information may be edited before posting on our website.

Please email this report to jane@rufford.org.

Your Details	
Full Name	Nar Bahadur Chhetri
Project Title	Musk Deer, Latrine and Conservation in Nysheang Valley Annapurna Conservation Area, Nepal
Application ID	20257-1
Grant Amount	£4,814
Email Address	<i>narbahadurchhetri947@gmail.com</i>
Date of this Report	December 16 , 2017

1. 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
Awareness for local people				We conducted programme on conservation of musk deer in three sites.
Training to Conservation area staffs				Total 16 participants (12 Rangers and four Conservation Officers) of Annapurna Conservation Area attended in the Spatial Monitoring and Reporting Tool (SMART) patrolling, GPS and GIS training.
Establish pilot project on musk deer				Two trail cameras and one GPS were distributed to Pisang Conservation Area Management Committee. They regularly patrol the forest by using these modern technology.
Population estimation and species identification				Musk deer species was identified as <i>Moschus leucogaster</i>

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

The project was completed successfully except frequently unpredictable weather condition hamper the predetermine time schedule of project activities.

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

a) Musk deer species identification

Molecular data analysis suggested that the populations of musk deer from

Manang of ACA were genetically similar to *M. leucogaster* (Tibet, China) and clustered together in a BI tree. Therefore, the species of musk deer in Manang is *M. leucogaster*.

Order: Artiodactyla Owen, 1848 Family: Moschidae Gray, 1821 Genus: Moschus Linnaeus, 1758 Specie: Moschus leucogaster

b) Conservation training to ACA staffs

Two-day long training on SMART patrolling, GIS and GPS was successfully completed at Unit Conservation Office, Sikles. Annapurna Conservation Area staff participated in the training. They will implement SMART patrolling to other sites of musk deer habitat within Annapurna Conservation Area.

c) Conservation awareness program and training to local people

We conducted training on use of trail cameras and GPS to local people at Chame, Pisang and Humde area of Nysheang valley. During conservation awareness programme, manual was also prepared in such way that they understood habitat used by musk deer and their common behaviour. Power point was prepared and displayed on the theme of musk deer importance, legally binding documents regarding to the musk deer.

d) Establish of the pilot project in Pisang Forest

Due to local people interest, among the best suitable habitat of musk deer as well as large area coverage of the forest. We launched a pilot project of forest patrolling in Pisang. We trained them about the use of GPS and trail camera. Two trail cameras and one GPS were handed over to Conservation Area Management Committee, Pisang, and Annapurna Conservation Area. These instruments are helpful to monitor the forest systematically by local conservation area management committee.

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

We organised the conservation awareness programme and training with the aim to provide knowledge about the modern instruments and technology that is related to musk deer conservation. In the awareness programme and training, Conservation Area Management Committee members, youth club members and local key persons directly and actively participated.

We have given GPS and trail cameras to Pisang Conservation Area Management Committee. By using these modern instruments and technology, they regularly monitor the forest and will be able to catch hunters eventually

significantly reduce the poaching rate of musk deer.

Beside these, local people were involved as the supporter (porter, guides, and assistant). In this way, local people directly benefited by the project through earning daily wages.

5. Are there any plans to continue this work?

Yes, of course, we launched this project only in Nysheang valley of Manang district. This type of conservation activities as well as research work is very essential to the other area of Himalaya.

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

I am planning to publish the research outcomes from the peer review article and the result of this project will be shared through presentation on conference. Nationally, the result was already shared through Kantipur daily newspaper (Nepal's number one selling newspaper), electronic copy of this report will be distribute different stakeholders and scientific community and Rufford website itself is also a best social media to reach the people about our project.

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

Due to late decision of grant announcement from Rufford. We started project little bit late and 1 month extra was needed for project completion. The project activities started in November 2016 and completed in November, 2017. The total length of the project was 1 year, which is completed within due length of time.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
1) Preliminary visit	135	130	5	

2) Transect layout and vegetation survey	773	775	-2	Porter and guide were hired
3) Lab analysis@150 samples	1935	1895	40	The cost of purchasing DNA isolation kit (pellets) (2 stool kits), consumables (tubes /tips /glove /scalpels /petri dishes), chemicals and enzymes (Hot start master mix, Bovine Serum albumin-BSA, nuclease free water, Agarose, loading dyes, Ethidium Bromide)
4) Trainings	1488	1485	3	Food & snacks for participants Conservation area staff and Local people)
5) Instruments	483	524	-41	One GPS and two Trail cameras were purchased.
Total	4814	4809	5	

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

The pilot project for conservation of musk deer is really new approach in the field of wildlife conservation in context of Nepal. I think this type of effective conservation programme is really necessary in other part of Himalayan region of Nepal. So that I am planning to replicate this type of project to other habitat of musk deer of Nepal.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Rufford logo was used in banner, trail camera and GPS and logo was also displayed in training, workshop and conservation programs and other printed materials.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Nar Bahadur Chhetri: Latrine collection, GIS trainer Om

Gurung: Field survey and latrine collection

Bishnu Prasad Poudel: Local people awareness and training program Angel

Adhikari: GIS and GPS trainer

Nav Raj Shahi: SMART Patrolling trainer

12. Any other comments?

I am grateful to The Rufford Foundation for providing the funding to our project entitled on musk deer conservation and its identification. I would like to thank my referee Paras Bikram Singh, Dr Madhu Chhetri and Professor Dr Santosh Rayamajhi. And I am hoping for similar support in coming days. I would like to thank Director of Annapurna Conservation Area Lal Prasad Gurung, Unit Conservation Office –Manang and ACAP entire family.