

## Project Update: October 2017

1. In July-August 2017, we conducted field research in upper Humla, upper Dolpa and upper Mustang. Three different teams participated in month-long field work in the three study sites. We appointed Tshiring Lhamu Lama (TLL), Sanej Prasad Suwal (SPS) and Krishna Dev Hengaju (KDH) as field researchers for the project. SPS and KDH led the research team of upper Humla, TLL led the research team of upper Dolpa while the principal and co-principal investigators of the project led the research team of upper Mustang.

### Orientation to field researchers

We organised a 1-day orientation for the field researchers on 5th July 2017 at Resources Himalaya Foundation (RHF). Mr Prajwol Manandhar, co-investigator of the project and a research associate at Centre for Molecular Dynamics Nepal (CMDN) and Ms Jyoti Joshi, wildlife program manager at CMDN instructed on 'non-invasive genetic sampling'. Dr Kamal Adhikari, director at RHF, briefed on investigating highland flora, Ms Sabita Gurung, research officer at Small Mammals Conservation and Research Foundation (SMCRF), gave an overview on small mammal data recording and the principal investigator shed light on the overall project execution.



Left: Field researcher KDH with an old horn of wild yak in upper Humla. Right: Field research team at Dhalung valley, upper Mustang.

### Demonstration on non-invasive genetic sampling and anti-rabies vaccination

We arranged a short demonstration session on 'non-invasive genetic sampling' on July 13<sup>th</sup> 2017 at CMDN. The co-investigator facilitated the demonstration. All the field research team also took anti-rabies vaccination.

### 2. Non-invasive genetic sampling

We collected a total of 19 non-invasive genetic samples from the three study sites. The following table presents the overview of the samples:



Left: Co-investigator performing non-invasive genetic sampling of a domestic yak dung. Right: Demonstration on non-invasive genetic sampling.

Table 1: Non-invasive genetic samples of wild yak and domestic yak collected in upper Humla, upper Dolpa and upper Mustang during July-August 2017

Study site	Genetic samples					
	Wild yak			Domestic yak		
	Bone	Hair	Dung	Bone	Hair	Dung
Upper Humla	1	1	1	1	2	2
Upper Dolpa	1				3	
Upper Mustang	1			1	2	3
<b>Total</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>5</b>

### 3. Important additional findings (by products)

We made a live sighting of Eurasian lynx *Lynx lynx* in upper Mustang. We were able to obtain some photographs of the animal through our hand-held camera. This has become the first photograph of the species ever taken in its natural habitat by a hand-held camera for Nepal.

We also obtained a new locality record of Nepal argus *Paralasa nepalica* butterfly for Nepal from upper Humla. The photograph taken of the species is also the first ever taken in the natural habitat in Nepal.

### 4. Field expedition review

All the three teams made separate presentations on their expeditions on 12th September 2017. We discussed on the strengths and weaknesses and figured out appropriate improvements.

5. Lab analyses of the non-invasive genetic samples are in progress at CMDN.

6. Works on the fables and conservation booklet are on-going.