Reporting from Godawari

In support from Rufford Small Grants, UK, Small Mammals Conservation and Research Foundation, SMCRF, Kathmandu, Nepal started its project: Detailed monitoring survey of bats and their conservation through radio awareness programme and outreach programme to school children in Kathmandu Valley from Godawari-Phulchowki, one of the project sites among twenty sites during 1-3 November, 2009. A team of five was led by Sanjan Thapa.

Schedule Survey at Tamang Community

Day1. Two hours drive from the Lagankhel, Lalitpur we reached Godawari in the late morning. We conducted schedule survey to the two communities namely; Tamang and Bahun-Chettri with an objective to find the local perception and knowledge about bats. We found they were aware of them but no effort was processed for their conservation hitherto. In the afternoon we visited two schools and asked permission and their cooperation to conduct awareness lectures to the schoolchildrens. Following this we searched and pointed out the area and sites for mistnettings.

Mist net opened

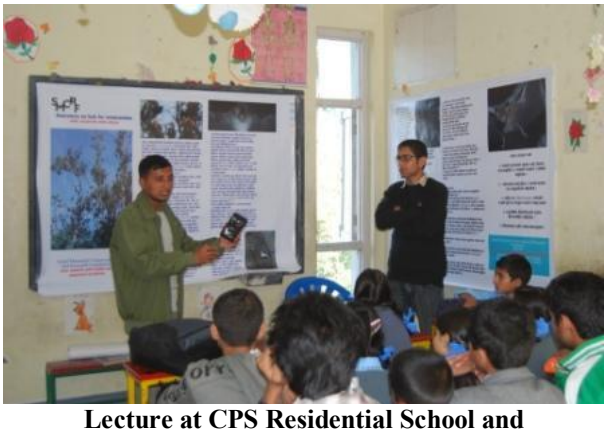
***Hipposideros armiger* inside the cave**

Before the sunset we arranged three mistnets and stretched them in bamboo poles along the small pool and stream in Janajagaran community forest. At 5:45 PM we noted the first flight appearance. Bat detector recorded 35-60 kHz frequencies. We estimated three species from the flight observation which last for 6:59 PM.

Day2. The morning started with hiking to the nearby bat cave. The mouth of which was bounded by large rocks lying on side and below. The entrance was a difficult slit and we dropped down hanging on a large root. The 100 meter was a broad passage which ended with a large dome like area with a lot of small short routes very difficult to go through. A small colony of *Hipposideros armiger* about 6 individuals were hanging upside down at the dome shaped space.

Schoolchildrens with banner

Using bat detector at mistnetting site



Lecture at CPS Residential School and demonstrating bat detector application

Few small bats were escaping from the difficult small and short routes. We were successful to get few individuals scoop netted.

We took Morphometric measurements and photographs and immediately released four individuals of bats without any stress. We identified them in the spot as *Rhinolophus affinis* and *Myotis nipalensis*.

Up: Bat guano on the Shiva-Linga inside the temple
Left below: Temples near by water pool

After the lunch we organized outreach programme to schoolchildrens in Crescent Academy. We delivered 45 minutes lecture on awareness and conservation of bats to 100 students of standard 6, 7 and 8. The lecture was focused on introduction, habit, habitat, ecology, importance and need of conservation. We displayed flex regarding the matter, distributed brochure with the regarding matter; demonstrated application of bat detector and finally took group photo.

Before sunset we deployed mistnettings at the open field near by a narrow stream in the bus stand. We noted the bats emergence at 6:00 PM. Bat detector recorded the echolocation call 45-60 kHz. However the night was empty hand.

Advertisement on notice board at school 1

Day3. Again we organized outreach programme in the next school; CPS Residential English Boarding School. We delivered lectures to 60 students of class 5, 6 and 7. We advertised the radio awareness programme for the conservation of bats through the poster. They were attached to the notice boards of Schools, offices, local NGOs etc. We announced the same to schoolchildrens also.

In the evening once again we deployed mistnettings at the picnic spot, behind the Botanical garden. It was interesting to find bat guano of few days ago in the statue of Shiva Linga of the temples which indicate that bats used to rest there. We placed the mistnets nearby a stream and a medium water pool. There we noted emergence of bats flight at 5: 41 PM. Magenta Bat Mkllb bat detector recorded 45-60 kHz. We keenly observed continuous flight just 1 foot to10 feet, over swinging and circling and sometimes dipping into the water surface. The interesting behavior observation came to an end after the bats disappeared at 7:20 PM and the unsuccessful netting continued when mistnets were brought down at 9 PM.

Project team on the way after closing mistnetting

Rhinolophus affinis

Myotis nipalensis

Table 1: Bats captured/collected at the site and their characters

Species netted	Date of Roost Survey	No. of indivi-duals netted	Sex	Age	Repro-status	Ectopar asite
Rhinolophus affinis	November 2, 2009	3	M (All)	A (Ra1 and Ra2) Y (Ra3)	NR (All)	P (numer ous)
Myotis nipalensis		1		A		Ab

Note: M=Male; A=Adult; Y=Young, NR=Non-Reproducing, P=Present, Ab=Absent.

Table.2: Measurements of bats captured in the study area.

Bat Species	***Myotis nipalensis***	***Rhinolophus affinis* (Ra)**		
External Measurements (mm)		Ra1	Ra2	Ra3
HB	44	65	55	51
T	33	25		24
TIB	17	25	25	24
FA	36	55	55	54
3mt	34	38	45	36
4mt	31	41	41	39
5mt	31	44	43	41
1ph3mt	11	14	15	11
1ph4mt	9	10	11	8
1ph5mt	9	13	12	10
2ph3mt	17	30	32	28
2ph4mt	10	17	19	17
2ph5mt	9	15	15	16
E	13	19	15	15
HF	8	10	9	8
Thumb	7	13	15	13
Noseleaf height		13	15	12
Noseleaf breadth		9	9	8
Tragus height	6			
Wt. (gm)	7	20	15	11

Note:
HB=Head Body; T=Tail;
TIB=Length of Tibia;
HF=Hind Foot;
FA=Forearm;
3mt=Third Metacarpal;
4mt=Fourth Metacarpal;
5mt=Fifth Metacarpal;

1ph3mt=First Phalange Third Metacarpal;

1ph4mt= First Phalange Fourth Metacarpal;

1ph5mt= First Phalange Fifth Metacarpal;

2ph3mt=Second Phalange Third Metacarpal;

2ph4mt= Second Phalange Fourth Metacarpal;

2ph5mt= Second Phalange Fifth Metacarpal;

E=Ear (Pinna from base to tip); Wt. =Weight.