Small Mammals Conservation and Research Foundation Annual Report 2010

Publication team

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In less than two years of its formation Small Mammal Conservation and Research Foundation (SMCRF) has a considerable achievement in conservation of small mammals diversity. It has already started the research and conservation work on Bats, Red panda, Pangolin, Squirrels and ecological interaction of Small mammals. Major achievements were to provide the essentials material and conservation status of different species of Bats in National Mammal Red list with their conservation status from the outputs of research carried on bats on different parts of country. Publication of “Bats of Nepal, A field guide” is a milestone in the conservation and status of Chiroptera. Another major achievement was organizing first national seminar on small mammal issues with slogan “Save Small Mammals Enrich the Biodiversity” on occasion of International Biodiversity Day, offered information sharing among researchers and other concern parties. This seminar was first of its kind in the sector of small mammals in Nepal. Researches on squirrels and ectoparasites of Bats have been started from this year. Not only this, SMCRF successfully conducted various awareness raising activities such as school children lectures classes, documentary show, conservation education through radio and capacity building program such as bat handing trainings etc.

SMCRF is collaborating with National and International organizations in the effort to make the journey of conservation effective and mutual. Particularly, Department of National Park and Wildlife Conservation (DNPWC), Nepal, National Trust for Nature Conservation (NTNC), World Wildlife Fund (WWF) Nepal, Critical Endangered Partnership Fund (CEPF), Himalayan Nature (HN), Zoo outreach, Bat Conservation International (BCI), Rufford Small Grants (RSG) deserves special thanks for their continuous support and enthusiasm.

The major strength of SMCRF is its team. Continuous effort for the excellence and all the hardship taken by the team members to establish SMCRF as an organization in such a small time is highly appraised. I love to say this team as a dream team in the field of conservation.
This Annual Report is summarizing few such initiatives. While efforts are put together to make this report more instructive and comprehensive however, there are always space for perfection. Valuable suggestion and comments are solicited for its continued improvements. Thanking You.

Arjun Thapa

Chairman
Small Mammals Conservation and Research Foundation, SMCRF is proud to come up with the second annual report with another successful year working on conservation activities and scientific researches regarding small mammals. The organization would like to acknowledge everyone who has supported to achieve the goals set and made this year a vital one. Heartfelt gratitude to the advisors, supporting organizations, conservation community and other partners in Nepal. We would like to acknowledge our members and grantees to make this year a successful one. Moreover, we would like to extend our sincere thanks to peer reviewer for their hard work of reviewing seminar papers.

Executive Board
Small Mammals Conservation and Research Foundation is a non-profit making, non-governmental organization based at Kathmandu, Nepal. It is dedicated to the conservation and research of small mammals within its priority areas and other potential sites throughout Nepal.

Although small mammals comprises of 60 percent of total mammalian species in Nepal, it is still among the least concerned taxa. The research on small mammals is rare and so the conservation initiative is being made by the organization.

Our Objectives:

- Fundraising and undertaking projects for conservation initiatives and researches
- Organizing workshops/trainings/seminars and conferences regarding small mammals issues
- Publishing relevant articles of different conservationists and researchers through newsletter and journal.
- Supporting freelancers, students, conservationists technically and financially for the conservation and research of the small mammals in the form of thesis/case studies/individual research.
- Respecting conservationists of this field through awards.
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Table 1

Membership
Grantees and Supporters
Acronym

BCI      Bat Conservation International
BNP      Bardia National Park
CDES     Central Department of Environmental Science
CDZ      Central Department of Zoology
CEPF     Critical Ecosystem Partnership Fund
DG       Director General
DNPWC    Department of National Park and Wildlife Conservation
DVD      Digital Video Disc
EGH      Environment Graduate of Himalayas
HN       Himalayan Nature
LDTA     Local Development Training Academy
NAST     Nepal Academy of Science and Technology
NATURE   Nepal Action Trust for Utility of Resource Education
NTNC     National Trust for Nature Conservation
PMC      Patan Multiple Campus
MoFSC    Ministry of Forest and Soil Conservation
RHF      Resources Himalaya Foundation
RPN      Red Panda Network
Conservation is one of the major objectives of the organization, which was realized through various awareness programs utilizing a range of media.

1.1. School Awareness Program

Lectures regarding the ecological importance of bats were delivered to school children of classes 6, 7 and 8 at eight schools in six project sites (except classes 4 and 5 at one school at site 4). Among the eight schools, five were government school from sites 2, 3, 4, 5 and 6 while three were private school from sites 1 and 3. The detailed about the sites are given in Annex I.

Two flexes of size 5’ x 2’ were displayed with the overall information of bats and brochures on “awareness for bat conservation” published by Small Mammals Conservation and Research Foundation (SMCRF) were distributed among the school children for additional information.

1.2. Radio Programme for Community Awareness
A radio program entitled “Mammalian World” was aired on a popular national radio station from 22nd January, 2010 for three months with an objective to aware community about small mammals in their surroundings. The program was broadcasted nationwide every Friday from 7:30 to 8:00 am in the frequency 96.1 and 101.8 MHz via Radio Kantipur. The program was funded by Rufford Small Grants, UK.

Altogether 13 episodes were aired highlighting issues of small mammals including bat, red panda, otter, pangolin and hispid hare. Expert interview, interview with the founder member of SMCRF, short report on particular small mammal, news and quizzes for the listeners were the basic outline of the radio program. The flooding response from listeners in the weekly-quizzes was the indicator of the show popularity. The winning participants were encouraged through prize i.e. T-shirt with organization logo.

1.3. Documentary Show
SMCRF and its networks: CDZ Small Mammals Club at Central Department of Zoology, and CDES Small Mammal Conservation Club at Central Department of Environmental Science, Tribhuvan University, Kirtipur jointly organized bat documentary shows. Bat Conservation International (BCI), Texas, provided the documentary DVDs. The documentary shows were especially targeted students of school as well as of university level as an awareness campaign on bats.

The documentaries entitled “Secret World of Bats” was showed on August 18, 2010 and at Basu Higher Secondary School, Byasi, Bhaktapur while “Merlin Tuttle: Guardian Angel of Bats” on August 20, 2010 at CDES. The feedbacks from the school students were positive and they opined that the show was interesting and they had an opportunity of knowing more about bats and their ecological importance. Documentary film on bats aroused interest of university students some of who were highly encouraged in the research study on small mammals.
Organising trainings and seminars regarding small mammals is yet another important objective of SMCRF. This year was also important for the organization as the first national seminar on small mammals issues was accomplished.

2.1 Training on Bat Handling

CDES Small Mammals Conservation Club and Central Department of Environment Sciences (CDES), Tribhuvan University (T.U.), Kathmandu, Nepal organized “One day training on basic bat handling techniques” on February 15 2010. The program was supported by SMCRF.

Masters level students from College of Applied Sciences, Satdobato, Lalitpur; School of Environmental Management and Sciences, Pokhara University, Maharajgunj, Kathmandu; Khowpa College, Purbanchal University, Bhaktapur; Central Department of Environmental Science and Central Department of Zoology, Tribhuvan University, Kirtipur, Kathmandu participated in the training. Chief Guest Mr. Shiva Raj Bhatta, Ecologist, Department of National Parks and Wildlife Conservation inaugurated the training. Altogether there were sixty participants. Powerpoint Presentation and illustration for measurement of bats with museum specimens were completed in the theoretical session followed by demonstration of field procedures for mistnetting and handling of bat detector.
2.2. Trainings on Proposal Writing

A-week long proposal writing training was conducted for University students with an objective of capacity building of students and supporting them. The training focused on harnessing the skills related to designing and structuring the good research proposal.

2.3 First one day National seminar on small mammal issues

Small Mammals Conservation and Research Foundation (SMCRF), Kathmandu Nepal in cooperation with Department of National Parks and Wildlife Conservation (DNPWC) organized First One day National Seminar on Small Mammals Issues on May 15, 2010 at Local Development Training Academy (LDTA) building Hall, Jawlakhel, Lalitpur. In line with the organization objectives

- to gather the researchers and conservationist as well as organizations working on field of biodiversity in Nepal in one common ground;
- disseminate the achievements, opportunities and challenges in conservation and research activities on small mammals of Nepal;
- update the resource data on small mammals of Nepal; and
- highlight the International Year of Biodiversity through media participation,
The event was supported by Himalayan Nature, Nepal Academy of Science and Technology (NAST), National Trust for Nature Conservation (NTNC) and Red Panda Network. Radio Kantipur 96.1 MHz was associated as the media partner.

Altogether 85 participants affiliated to different colleges (Students and teachers), volunteers at SMCRF, guests from different organizations participated in the program. The program commenced at 11:20 am with the introduction and status of Small Mammals in Nepal by master of ceremony Kastuv Raj Neupane. Arjun Thapa, Chairman, SMCRF, Chaired the event and welcomed delegates namely Dr. Dinesh Raj Bhuju, Chief, Science Faculty, Nepal Academy of Science and Technology (NAST); Prof. Dr. Khadga Basnet, Central Department of Zoology (CDZ), Tribhuvan University (T.U.), Kirtipur; Juddha Bdr. Gurung, Member Secretary, National Trust for Nature Conservation (NTNC); Dr. Nanda Bdr. Singh Associate Professor, CDZ, T.U., Kirtipur and Sunil Shakya, Coordinator, Red Panda Network Nepal. Rama Karki and Sagar Dahal distributed badges to the guests. Suchita Shrestha, Seminar Coordinator and Secretary, SMCRF, delivered the welcome speech.

Dr. Bhuju inaugurated the Seminar by initiating the presentation on SMCRF’s conservation activities. The Technical session was chaired by Prof. Dr. Khadga Basnet, CDZ, T.U. in the first half and by Mr. Paras Lamsal, Lecturer, Bhaktapur Campus in the second half. The session was facilitated by Hemanta Dhakal, general member, SMCRF.

The technical session included five different papers (presented) and four posters (displayed) on small mammal issues by different scholars.

Papers presented at technical session were:

“Distribution and habitat of Lutra perspicillata in Narayani River, Chitwan National Park” by Paras Mani Acharya

“Recent re-records of bats in Nepal with notes on their taxonomic and ecological characters”, by Sanjan Thapa

“Ethno zoology and Pangolin conservation awareness in human dominated landscape of Nepal” by Prativa Kaspal

“Population status, habitat utilization, distribution and conservation threats of Hispid Hare in Bardia National Park of Western Nepal” by Promod Tondon

“Legal Issues on Small Mammals Conservation and Research in Nepal” by Budhi Sagar Paudel

A poster presentation on “Do the red pandas feed upon bamboo only?” by Arjun Thapa and

First observation of Chinese Pangolin with its baby at Kavre District by Tulshi Laxmi Suwal.
Honourable guests on the Seminar

Participants concentrating on the presentation
3.1 Survey and Monitoring of bats in Kathmandu Valley

First phase report of “Detailed monitoring survey of bats and their conservation through radio awareness program and outreach programme on school children in Kathmandu Valley” was published. This is the first project of SMCRF granted by Rufford regarding the survey and conservation of Bats of Kathmandu valley, Central Nepal led by Sanjan Thapa. Altogether seven species of bats have been re-recorded from twenty sites in the Kathmandu Valley during the first phase of detailed monitoring survey. Four species were documented in addition to the preliminary survey (Thapa et al., 2009), however, eighteen species were missing to the previous records (Bates and Harrison, 1997). Lectures on bats importance and their conservation were delivered to schoolchildren at eight schools in six project sites. Community awareness radio-programme was also the part of this project.

3.2 Survey of bats in Tanahun

A report on monitoring of Chiropteran status of Tanahun District, Western Nepal was published.

A three-days monitoring of bats was carried out in Tanahun district. Western Nepal from 12th to 14th March, 2010 with an objective to monitor the chiropteran species diversity, population, and distribution in study area and update the recent information and access the species status. The study was conducted by the collaboration of Small Mammal Club of Central Department of Environmental Science, Tribhuvan University and Small Mammal Conservation and Research
Foundation (SMCRF), Nepal. The monitoring team was led by Rameshwor Ghimire, an executive member of SMCRF. According to Hutson et al. (2001), Chiropteran species of Nepal accounts for 51 species. Chiropteran study was seized for 11 years after Csorba (1999) who reported seven species from Tanahun district and in recent years bat studies in western Nepal studies had been focused to Syangja and Tanahun districts, Pokhara city and Annapurna Conservation Area (ACA) thus this study gave the continuity to the work. Mist netting and Roost survey was the methodology deployed and altogether nine species were recorded among them most were found in similar status in comparison with previous studies. However, *Ia io*, the pre-recorded species which is Critically Endangered nationally could not be retrieved. A more detailed chiroptera monitoring at Tanahun district was recommended in the report.

### 3.3 Survey of bat in Nawalparasi district

Opportunistic survey of bat in Mahabharat Ghoral Conservation Area, Nawalparasi district, Western Nepal was conducted during 14th to 19th March, 2010. The main objective of the study was to report the recent information and access the species status of the chiropteran species diversity, their population in Nawalparasi district; Western Nepal which was almost untouched. Mist netting and Roost survey were the methodology deployed and altogether two individuals of *Hipposideros armiger* and three individuals of *Rhinolophus affinis* was mistnetted while only fresh droppings of bat were observed in the Madhukot *Odar* (cave). Very few species (only two) were found from the study area. Single species occupied the separate roosts. Habitat loss (Shifting cultivation in jungles; Forest fire and Landslides), and dumping of solid wastes are the threats to the bats. A three member study team was led by the Sanjan Thapa accompanied by Arjun Thapa and Rameshwor Ghimire.

### 3.4. Report of far western region

A case study of bats in Kanchanpur district that lies in the far-western development region, Nepal was accomplished. This was the first ever attempt of bats study in Far-western Development Region of Nepal. This study was conducted from 25th Oct -30th Oct 2010. Roost Survey, Mist-netting and direct eye observation were deployed as a methodology. Altogether 36 individuals of bats were observed and 4 were Mis-netted and released from the five sites of study area. Two species *Cynopterus sphinx* and *scotophilus heathii* were
observed and identified from external morphometric measurements. About 16 individuals of *Cynopterus sphinx* were observed in single Ashok Tree (*Saraca asoca*) of Mandipur, Suda VDC. The conservation activities such as general discussion with school children, distribution of information leaflets and posters displaying the importance of bats among the locals and school children during the short study period was carried out. The detail study of bats is recommended not only in Kanchunpur district but also whole Far-western Development Region. The research team included Prasant Chaudhary and Rameshwor Ghimire.

### 3.5. Bats Study in Salyan and Dang districts: Status, Distribution, and conservation and Conservation initiative.

This was a preliminary study carried out from 31<sup>st</sup> Oct - 5<sup>th</sup> Nov 2010, with objectives of accessing status, population and distribution of bat for the first time in Salyan and monitoring at Dang district to bring out some updated information. The research was conducted by Narayan Lamichhane. Mist netting and Roost survey were the field methods deployed. Altogether six species were recorded from sixteen different study sites in two districts. Among them *Pteropus giganteus* colonies at Tulsipur, Dang, *Rousettus leschenaulti* colonies in shiddha Cave at Mulpani, Salyan were recorded and *Hipposideros fulvus* at chamere cave of Dang was an important documentation from this study. *Hipposideros fulvus* was also reported. The conservation awareness activities such as delivering short lectures to schoolchildren, distribution of information leaflets and bat poster with information about the importance of bats, among the local peoples and schools children during study period were carried out. Salyan district had been unexplored sites for bat studies, hence, many important sites in this area that probably have the presence of new species of bats in Nepal.

### 3.6. Bat of Nepal- a field guide

This is the foremost and first hand published bat literature that includes the latest update of bat related information of Nepal. The publication of book was financially supported by Critical Ecosystem Partnership Fund and World Wildlife Fund, Nepal while the designing and publishing work was handled by the organization, Small Mammals Conservation and Research Foundation (SMCRF).
The compilation and the editing was done by the effort of the team including Pushpa R. Acharya, Hari Adhikari, Sagar Dahal, Arjun Thapa and Sanjan Thapa. The book is primarily divided into two sections – general section including the historical review of bat diversity and current bat related activities as well as future possibilities in Nepal. The main section basically includes profiles of 53 bat species that sporadically reported from Nepal. Each species are profiled with their distinguishing features, general ecology, conservation status, distributional map and a clear photograph. The book is mainly targeted to the interested individuals, researchers and students.

3.7 An overview of squirrel

A report on the status of squirrel and threats for its conservation in Nepal was prepared by Sagar Dahal and Sanjan Thapa. . The study focused on the status and conservation of Squirrels of Nepal. 248 species of squirrels present in the world. Nepal harbors 11 species with different global conservation status; Belomys pearsonii (Data Defecient, DD), Callosciurus pygerythrus (Least Concern, LC), Funambulus pennantii (LC), Hyllopetes alboniger (LC), Petaurista elegans (Least LC), Petaurista magnificus (Not Threatened, NT), Petaurista nobilis (Vulnerable, VU), Petaurista petaurista (LC), Ratufa bicolor (NT) and Tamiops macclellandii (LC) (IUCN, 2010). Conservation Assessment and Management Plan (C.A.M.P) Workshop report also supports the presence of 11 species with different regional and national status: one Endangered (EN), two VU, three NT, five (LC) regionally and two EN, two VU, two NT, two NT, two LC, and three DD ( Molur et al. 2005). Hyllopetes alboniger is EN, Callosciurus pygerythrus is VU and Ratufa bicolor is enlisted in CITES list ( Verheugt et al. 1995, Baral and Shah 2008). P. nobilis is the endemic species to Bhutan, India and Nepal. Squirrels are distributed from Tarai, mid hills to Mountain region of Nepal through altitudinal range 63-3300 above sea level. Collection of specimen and study in squirrels of Nepal started from Hodgson 1822-1858. Petaurista magnificus is named as Hodgson’s Giant Flying Squirrel. Ellerman and Morrison – Scott 1951 on preparation of Checklist of Palaearctic and Indian Mammals” included Ratufa bicolor from eastern Nepal is one of the largest squirrels in the world. Weigel 1969 reported Irrawady squirrel from Rapti Valley. Mitchell 1979 published “The Sciurid Rodents ( Rodentia: Scuridae) of Nepal based upon literatures and museum specimens survey as well as information collections from field visits. This is the first literature only on squirrel of
Nepal. We went through the literature and corresponded to the locals while stating the threats to the squirrels in Nepal. The major threats found were habitat loss from the resulting from shifting (jhum) agriculture, small scale and selecting logging, clear cutting of forest, establishment of human settlements, forest fires and hunting for local consumption, fur trade and kept in captivity as pet animal (Molur et al. 2005). The skin of the animal is also used as spiritual protecting ornament against devil (Butti). Squirrels are also mistaken for Civet and considered as pest. We found the retaliatory killing in the Makalu Barun National Park area, Sankhuwasabha district.

3.8 Food habits of Red Panda

A master degree thesis conducted by Arjun Thapa in the supervision of Prof. Khadga Basnet was published by the Small Mammal Conservation and Research Foundation. The study examined diet composition, food niche breadth, and conservation threats of the Red Panda (Ailurus fulgens F. Cuvier 1825) in Langtang National Park of Nepal. The study was conducted in Gopache, Dhokachet, and Trishuli of the park, employed field survey, interview, and lab techniques. A total of 161 fecal samples and reference materials were collected from 12 line intercepts spaced by 150m at the elevations of 3000m-3600m for micro-histological analysis. Conservation threat data were generated through semi-structured questionnaire survey and interviews with local herders besides assessing the encounter rate of cattle dung and grazing intensity using the same intercepts. Data analysis showed that the red panda’s diet composed of eight different plant species including bamboo, tree, herbs, shrubs and moss. Bamboo (Thamnocalamus aristatus) (=245.08±15.74%) contributed the most followed by Moss (=5.91±1.95%), Sorbus cuspidata (=5.83±1.22%), Juniper recurva (=1.08±071.95%), Acer caudatum (=1.00±0.38%), and other species like Rhododendron campanulatum, Abies spectabilis, and Rubus sp. in low proportions. All these plants except T. aristatus, which is consumed in all seasons (c2> 0.001, df =11, P>0.05), varied seasonally in composing the red panda’s diet. Food niche breadth determination showed a low value (0.000104), which suggested highly selective foraging habit of the species. Unidentified hairs, bones and claws were also observed in few fecal samples. Livestock grazing (e.g., Yak), firewood and fodder collection were the major threats of the red panda. Dhokachet site had the highest livestock grazing intensity as evidenced by the increased encounter rate of cattle dung with decreased fecal pellets of the red panda.


SMCRF published its first annual report on 2010 summarising all the activities done throughout the year. In the short period of one year of establishment, SMCRF managed to
conduct various tasks in the conservation field of small mammals. Majors highlights of the previous year were:

1. Local from eastern Nepal was honored for the bat conservation.
2. Flex board was kept on at Nagarjuna Cave for the awareness regarding the conservation of bats.
3. As an awareness campaign for school children, bat clubs were formed on schools.
4. Bat house was installed in the Central Zoo of Nepal, Jwalakhel.
5. One-day bat handling training was held in the premise of Central Department of Zoology with the participation of university level students.
6. The preliminary survey of Bats of Kathmandu Valley and Baseline survey of Bats of Kailash Cave was conducted.
7. “First phase survey of bats in Tarai Plains of Eastern Nepal” was published.
8. Membership brochures, bat awareness brochures and printed t-shirt of the organization were printed.

3.10. Abstracts of Seminar

The compilation of abstracts of the first one day National Seminar on Small Mammal Issues which was conducted on 15th of May, 2010 was published. The seminar was an attempt to celebrate Biodiversity Year 2010. All together five papers and four posters were presented in the one day seminar.


The electronic version of proceedings of the papers of seminar was published after a month of seminar. The papers were reviewed by Prahlad Yonzon (PhD) of Resources
Himalaya Foundation (RHF), Sarala Khaling (PhD) of Critical Endangered Partnership Fund (CEPF), Dinesh Raj Bhuju (PhD) of Nepal Academy of Science and Technology (NAST), Shanta Raj Jnawali (PhD) of National Trust for Nature Conservation (NAST), Hem Sagar Baral (PhD) of Himalayan Nature (HN) and the papers were edited by Anita Shrestha, Suchita Shrestha, Sagar Dahal, Rameshwor Kafle, Arjun Thapa, Tulshi Laxmi Suwal, Bishnu Timilsina and Rameshwor Ghimire. The soft copies of proceedings were distributed to all the participants, paper presenters and reviewers.


SMCRF conducted a thirteen episodes radio programme on the conservation and awareness issues of Small Mammals from National Radio Kantipur FM, 96.1. The program was produced by SMCRF by the financial support provided by Rufford Small Grants. Awareness program on bats, red panda, pangolin, otter, hispid hare, rodents, legal issues and government policy for the conservation of small mammals were broadcasted. Ms. Suchita Shrestha, Mr. Sanjan Thapa and Mr. Sagar Dahal conducted from SMCRF conducted episodes on bat conservation and research. They also highlighted on different ecological aspects of bats. Mrs. Geeta Shrestha of NATURE also shared her experience on bat education on different schools of Kathmandu valley. Mr. Hari Prasad Sharma from CDZ and Kamal Kandel from RPN shared their experience on red panda research and conservation effort carried by them. They also highlighted different ecological importance of red panda and its possibility on tourism industry for its conservation. Mr. Juddha Gurung, member secretary of NTNC shared his research experience on pangolin and highlighted the need of its conservation. Mr. Paras Mani Acharya lecturer of patan multiple campus shared his results on otter research on Chitwan National Park (CNP). He also shared his effort on the awareness campaign conducted by him to local people and fisherman on the buffer zone of CNP regarding the conservation of otter. Mr. Pramod Tandon of environmental graduate of himalayas shared his experience on the research of hispid hare and its food habit on Bardia National Park (BNP). Yuvraj Bhushal secretary of Ministry of forest and soil conservation (MoFSC) talked about the policies and plans of Government regarding the conservation of biodiversity and small mammal. He discussed about the extension policy of Conservation Area from 23% to 27%. He also focused about the loopholes of policies, lack of manpower and technical experts working on the conservation of small mammals in Nepal. Tika Ram Adhikari, chief conservation officer of BNP shared his research work on rodents on BNP. He enlightened some of the challenges in the conservation of small mammals like uncontrolled forest fire, illegal hunting and poaching, distribution of grasses to local community every year, flooding, etc. Mr. Hem Sagar Baral, chief technical officer of Himalayan Nature shared his experience about the book written by him on mammals of Nepal and focused on the very less effort given by the conservationist regarding the research on small mammals and its importance on ecological services. He emphasized that it is the duty of organizations like SMCRF to give the right
information and database based on scientific researches regarding small mammals and in turn government should come up with the policies and programs and should update our studies learning from other part of the world. Mr. Gopal Prasad Upadhya, director general of DNPWC put his view that department is willing to encourage the young researchers to conduct their researches on small mammals so that the data generated could be helpful for the management and conservation of the small mammals. He also drew the attention that some researches are ongoing in the from Terai and Himalaya areas. Responding to the query, why small mammals are least concerned in comparison to large mammals, he answered that small mammals have their own ecological role as a prey species so they are important as large mammals for ecological services and maintenance and Nepalese young researchers are working on them and department has set fund for such researches.

The programme was hosted by Rajesh Pandey RJ of Kantipur FM and the programme aired every Friday from 7.30 to 8.00 am from January 12th to 16th April. The programme was conducted by Ms. Suchita Shrestha and Mr. Sagar Dahal of SMCRF.
4. Conservation Materials

4.1 Posters

Poster is an effective way to disseminate the message to the community level with more illustrations which is easily grasped by the common people. With the similar kind of objective of propagating the ecological importance of bats and its importance posters were published by SMCRF.

“Save Bats, Secure Life and Future” (Nepali version) is the main theme of the poster. The dimension of the poster is 25mm × 18mm and 4000 copies of them have been printed. Posters have been circulated to different rural parts of the Nepal during the field visits by the volunteers and field researchers and it has been presented to other conservation leading government and non-government organizations such as, DNPWC, NTNC, WWF and Himalayan Nature.

4.2 Greetings cards

With the aim of drawing attention of the established conservation organizations and individuals, towards small mammals, greeting cards with the picture of small mammals (red panda, pangolin, bats and squirrels) have been published. The dual purpose of sending well wishes to various organisation and simultaneously publisizing the small mammals is the main purpose behind publishing greeting cards. 2000 copies of cards were published this year.

4.3 Cap Printing

Five-hundred caps with SMCRF’s logo were also printed this year. The cap was published for multiple purpose like presenting it as a souvenir, to give it away as a prize, , to provide it to volunteers as an incentive, etc.
Annex I Table: Details of Schools of conservation awareness

<table>
<thead>
<tr>
<th>Site No:</th>
<th>Site</th>
<th>Date of lecture</th>
<th>School Name</th>
<th>No. of School children participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Godawari-Phulchowki</td>
<td>Nov. 2, 2009</td>
<td>Crescent Academy</td>
<td>108</td>
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<tr>
<td></td>
<td></td>
<td>Nov. 3, 2009</td>
<td>CPS Residential School</td>
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</tr>
<tr>
<td>2</td>
<td>Swoyambhu</td>
<td>Dec. 3, 2009</td>
<td>Shree Halchowk Secondary School</td>
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<tr>
<td>3</td>
<td>Jhor</td>
<td>Dec. 8, 2009</td>
<td>Mohan Mala English School</td>
<td>60</td>
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<td></td>
<td></td>
<td>Dec. 9, 2009</td>
<td>Shree Baundeshwor Higher Secondary School</td>
<td>150</td>
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<tr>
<td>4</td>
<td>Muhan Pokhari</td>
<td>Dec. 13, 2009</td>
<td>Shree Aatma Bikas Primary School</td>
<td>40</td>
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<td>5</td>
<td>Bajrabarahi</td>
<td>Dec. 18, 2009</td>
<td>Shree Bajrabarahi Secondary School</td>
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<td>6</td>
<td>Nagarkot</td>
<td>Dec. 23, 2009</td>
<td></td>
<td>115</td>
</tr>
</tbody>
</table>
## Annex II  Memberships

**General Members**

<table>
<thead>
<tr>
<th>Arjun KC</th>
<th>Niranjan Acharya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashish Rai</td>
<td>Niroj Timilsina</td>
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<td>Ballav Mani Koirala</td>
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<td>Bishwo Ram Tamang</td>
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<tr>
<td>Dharmendra Neupane</td>
<td>Prashant Chaudhari</td>
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<td>Dikpal Karmacharya</td>
<td>Rachana Mathema</td>
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<tr>
<td>Dinesh Ghimire</td>
<td>Rahul Ranjan</td>
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<tr>
<td>Geeta Thapa</td>
<td>Raj Kumar Gautam</td>
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<td>Hari Neupane</td>
<td>Rajan Subedi</td>
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<tr>
<td>Hem Bahadur Katuwal</td>
<td>Rama Karki</td>
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<tr>
<td>Laxmi Narayan Das</td>
<td>Rebeka Gurung</td>
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<td>Lokendra Bhatta</td>
<td>Robin Rana</td>
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<tr>
<td>Manju Joshi</td>
<td>Sagun Parajuli</td>
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<td>Mukti Ram Paudel</td>
<td>Saroj Kumar Khadka</td>
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<tr>
<td>Nabin Bhattarai</td>
<td>Sudeep Acarya</td>
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<td>Narayan Lamichanne</td>
<td>Sujipla Prajapati</td>
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### Advisory Board

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Information</th>
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</thead>
<tbody>
<tr>
<td><strong>Prof. Dr. Paul A. RACEY</strong></td>
<td>Chair</td>
<td>IUCN SSC Chiroptera Specialist Group, and Regius Professor of Natural History</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School of Biological Sciences</td>
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<tr>
<td></td>
<td></td>
<td>University of Aberdeen</td>
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<tr>
<td></td>
<td></td>
<td>Tillydrone Avenue, Aberdeen, AB242TZ, Scotland</td>
</tr>
<tr>
<td><strong>Sally WALKER</strong></td>
<td>Founder</td>
<td>Zoo Outreach Organization</td>
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<tr>
<td></td>
<td></td>
<td>Peelamedu, Coimbatore 641004, Tamil Nadu, India</td>
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<tr>
<td><strong>Prof. Dr. Thomas H. KUNZ</strong></td>
<td>Director</td>
<td>Center for Ecology and Conservation Biology</td>
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<tr>
<td></td>
<td></td>
<td>Department of Biology</td>
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<tr>
<td></td>
<td></td>
<td>Boston University, Boston, MA 02215, USA</td>
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<tr>
<td><strong>Dr. Gabor CSORBA</strong></td>
<td>Deputy Director and Curator of Mammals</td>
<td>Hungarian Natural History Museum</td>
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<tr>
<td></td>
<td></td>
<td>H-1083 Budapest, Ludovika ter 2. Hungary</td>
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<tr>
<td><strong>Dr. Pralhad YONZON</strong></td>
<td>Chair</td>
<td>Resource Himalaya</td>
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<tr>
<td></td>
<td></td>
<td>Naya Bato, Ringroad, Lalitpur, Nepal</td>
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<tr>
<td><strong>Dr. Sarala KHALING</strong></td>
<td>Regional Coordinator</td>
<td>Critical Ecosystem Partnership Fund-Eastern Himalayas</td>
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<td></td>
<td>WWF Nepal Program</td>
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<tr>
<td></td>
<td></td>
<td>PO Box 7660, Baluawatar, Kathmandu, Nepal</td>
</tr>
<tr>
<td><strong>Ang Phuri SHERPA</strong></td>
<td>Country Coordinator</td>
<td>Critical Ecosystem Partnership Fund (CEPF)-Eastern Himalayas</td>
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<td></td>
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<td>WWF Nepal Program, Baluawatar, Kathmandu, Nepal</td>
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### Founders

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Anita SHRESTHA</td>
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<tr>
<td>Arjun THAPA</td>
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<tr>
<td>Sagar DAHAL</td>
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<tr>
<td>Sanjan Thapa</td>
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<tr>
<td>Suchita SHRESTHA</td>
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### Executive Boards

<table>
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<tbody>
<tr>
<td>Arjun Thapa</td>
<td>Chairpeson</td>
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<tr>
<td>Suchita Shrestha</td>
<td>Secretary</td>
</tr>
<tr>
<td>Sagar Dahal</td>
<td>Treasurer</td>
</tr>
</tbody>
</table>

Executive members:

- Anita Shrestha
- Sanjan Thapa
- Sunil Thapa
- Rameshwor Ghimire
- Dibya Raj Dahal