



**SMALL MAMMALS CONSERVATION AND
RESEARCH FOUNDATION (SMCRF)**

Annual Report 2015



**Small Mammals Conservation and
Research Foundation (SMCRF)
Annual Report 2015**

Publication Team:

Sabina Koirala, Hari Basnet

Cover Photo:

Irrawady Squirrelrel by Sabina Koirala

Photographs by: Hari Basnet, Sanjan
Thapa, Sabina Koirala, Hem katuwal,
Sagar Dahal

Design by: Hari Basnet

Published by:

Small Mammals Conservation and
Research Foundation (SMCRF)

Kathmandu, Nepal

Email: info@smcrf.org

Web: www.smcrf.org



CONTENTS

Message from Chair

Acknowledgements

Background

Table of Contents



1. RESEARCH ACTIVITIES

- 1.1 Functionality study of North-South Linkage in Chitwan-Annapurna Landscape with Biodiversity Survey of Biodiversity Important Areas (BIAs)
- 1.2 Study Supported by CHAL project
- 1.3 Population status, Occupancy and Distribution Modelling of Cheer Pheasant (*Catreus wallichii*) in Dhorpatan Hunting Reserve, Nepal.
- 1.4 Distribution and abundance of Satyr Tragopan (*Tragopan satyra*) in Manaslu Conservation Area, Nepal.
- 1.5 Study of Fishing Cat
- 1.6 Biodiversity survey of Chandragiri Hill, Kathmandu, Nepal
- 1.7 Pteropus Colony Monitoring
- 1.8 Study of Reproductive Behavior of Assamese macaque in Nagarjun Forest
- 1.9 Strengthening Community Participatory Red Panda Conservation and Monitoring Program in Gaurishankar Conservation Area, Central Nepal
- 1.10 Living with Villagers for Bat Conservation at Triyuga Municipality, Udayapur, Nepal

2. Trainings, Seminars, Symposium and Conferences

- 2.1 First International Symposium on Fishing cat
- 2.2 Participation in First Graduate Conference on Environment and Sustainable Development
- 2.3 Participation in AuthorAID Workshop
- 2.4 Participation in National Workshop on Red list for Birds of Nepal
- 2.5 Participation in the Student Conference on Conservation Science (SCCS), University of Cambridge, Cambridge, U.K.

MESSAGE FROM CHAIR

With the aim of conservation of small mammals, Small Mammal Conservation and Research Foundation (SMCRF) had been established and has made considerable achievement. It has already started the research and conservation work on Bats, Red Panda, Pangolin, Squirrels, Himalayan Marmots, Martins, Pika and other ecological interaction of small mammals and community.



The conservation works do not sustain unless local community is aware about the importance of the small mammals. SMCRF successfully conducted various awareness raising activities such as school children lectures classes, and different research training on small mammal handling, basic statistics training etc. Our objectives are being fulfilled with the support and collaboration of National and International organizations; 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) deserve special thanks for their continuous support and enthusiasm.

For the successful completion of fourth year, major contribution goes to 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

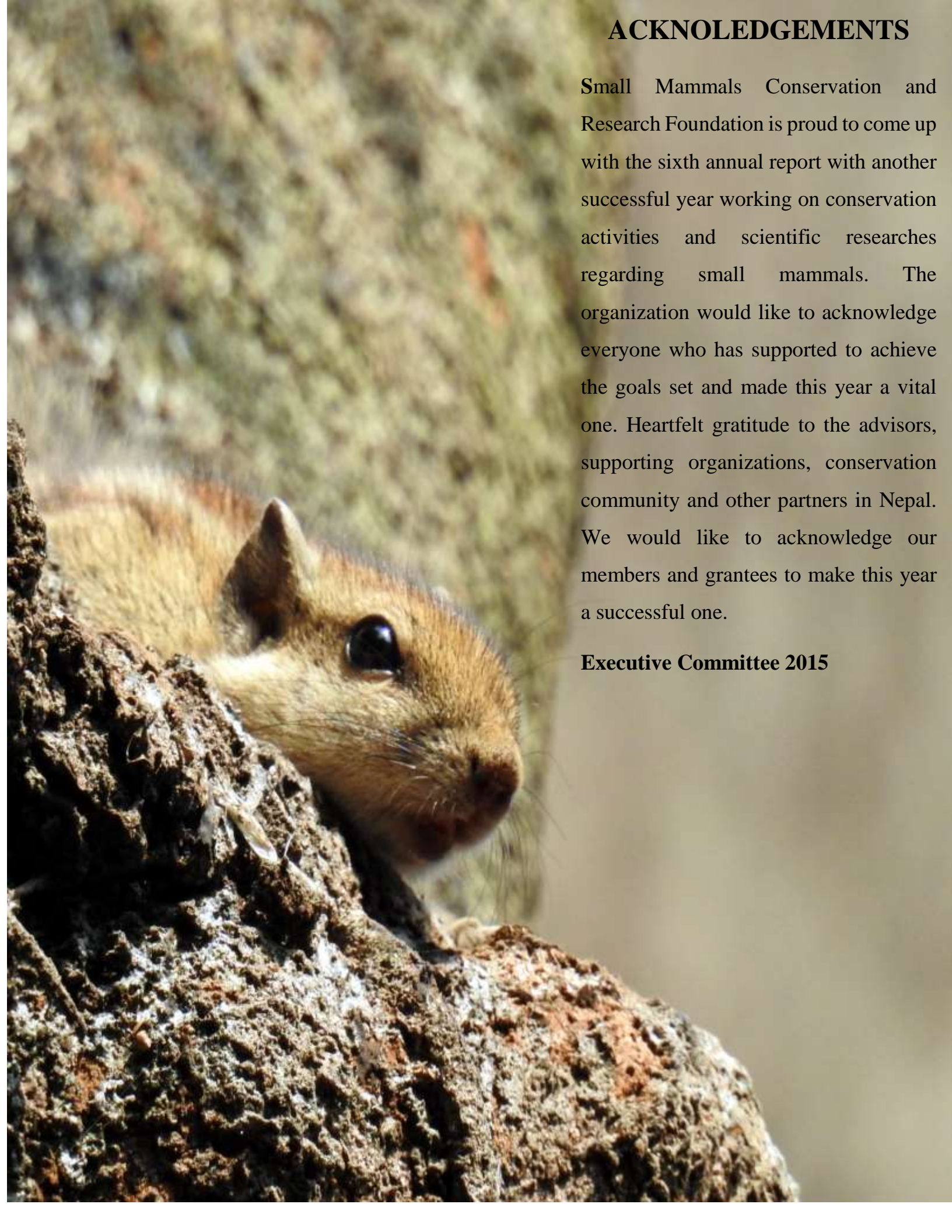


Sabina Koirala
Chairperson

ACKNOWLEDGEMENTS

Small Mammals Conservation and Research Foundation is proud to come up with the sixth 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.

Executive Committee 2015



BACKGROUND

Small Mammals Conservation and Research Foundation is a non-profit making, nongovernmental organization based at Kathmandu, Nepal. It is registered charity 903/065/066 with Government of Nepal and is also registered at Social Welfare Council (29919). It is dedicated to the conservation and research of small mammals within its priority areas and other potential sites throughout Nepal. Small mammals comprise major proportion (60%) in mammalian diversity of Nepal. But it is still among the least concerned taxa. The research on small mammals is hard to find, so their conservation status are not assessed scientifically on time being. So, the conservation initiative is being made by this organization.



Objectives:

- Fundraising and undertaking projects for conservation initiatives and researches of small mammals
- Organizing workshops /trainings/ seminars/ community awareness program 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.

1. RESEARCH ACTIVITIES

a. Functionality study of North-South Linkage in Chitwan-Annapurna Landscape with Biodiversity Survey of Biodiversity Important Areas (BIAs)

Chitwan-Annapurna Landscape (CHAL) with an area of 32,057 km² is a major biodiversity hotspot in central Nepal. It acts as a biological corridor that links Chitwan National Park to Annapurna Conservation Area (ACA). Four potential north south corridors were identified along CHAL but the functionality of these corridors was not clear. We study to assess the validity of two major corridors: i) Barandabhar Forest – Gaighat –Seti River Valley – Madi River Valley – ACA and ii) Nawalparasi Forest–Palpa – Syangja – Panchase – ACA. Mammals, birds, fishes, plants and major infrastructure development were studied using direct and indirect methods (field observation, transects and plots, camera trapping, sign surveys, mist-netting, and questionnaire survey) in summer and winter seasons. Besides, potential corridors, biodiversity of eight Biodiversity Important Areas (Madi River valley, Eastern Himalayan Broadleaf Forest, Daraundi River Valley, Eastern Himalayan Alpine Meadows, Bhimtang Forest, Resunga Forest, Ganesh Himal Base Camp, and Simbhanjhyang Forest) were also explored for their baseline information. The field survey identified 28 species of mammals (herbivores, carnivores, primates, rodents and bats), 283 species of birds, 44 species of fish, 125 species of trees, 129 species of shrubs, and 234 species of herbs from the study sites. Mini corridors in different study sites supporting north-south linkage for wildlife movement have been identified as

- i. Panchase-Putalibazar-Tikhedunga, Jhyankatta-Khudi, Raipur-Saranghat, Sukaura-Aahaldanda with their interlinkages
- ii. Chakchake – Sildjure, Devghat- Sikles, Majthana- Raniban, Gajarkot- Rhinoblock with their interlinkages



The project was WWF/Hariyo Ban funded project with its partner organizations USAID, WWF, CARE, FECOFUN and NTNC.



Different activities in field: a. Setting camera trap b. Bird Watching c. Sign Survey d. Questionnaire Survey e. Field Orientation Training at Chitwan, Rhino Tal to all field biologists prior to first phase field visit.

1.2 Study Supported by CHAL project

We supported two University students (Hari Basnet and Min Bahadur Gurung) from Central Department of Zoology for their masters Thesis by providing partial funding for their study. The funding was via the CHAL project which was funded by WWF/Hariyo Ban with its partner organizations USAID, WWF, CARE, FECOFUN and NTNC. The details of the partially funded study are given below.

1.2.1 Population status, Occupancy and Distribution

Modelling of Cheer Pheasant (*Catreus wallichii*) in Dhorpatan hunting Reserve, Nepal.

The Cheer pheasant (*Catreus wallichii*) is a threatened species listed as vulnerable in IUCN Red list and legally protected by the Government of Nepal. The conservation of this species is of great importance worldwide and regular monitoring of its status and distribution are necessary. This study was done by Mr. Hari Basnet to assess the population status and estimate occupancy patterns in Dhorpatan Hunting Reserve, as well as to identify potentially suitable habitat of Cheer in Nepal. Population data revealed that Dhorpatan valley still supports significant population of Cheer with overall density of 7.08 pairs/ Km², but the population is in declining trend. Total population size of the species was found to be 143-156 pairs. Occupancy modelling revealed that the distance to water had greater weight in determining occupancy. Distribution modeling indicated smaller area (1.20%) was most suitable for the species occurrence in Nepal.



1.2.2 Distribution and abundance of Satyr Tragopan (*Tragopan satyra*) in Manaslu Conservation Area, Nepal.

Manaslu Conservation Area is biodiversity spot which harbors wide range of flora and fauna, thus avian diversity falls no apart to diversity. This is why MCA is proposed for upgrading of the area from 'Potential Important Bird Area' to the 'Bird Important Area'. The study is the first ever scientific research on Satyr Tragopan in Manaslu Conservation Area, Nepal and overall Nepal. Field study was carried on 10th February to 18th February and 30 May to 10 June, 2015 to explore the distribution and abundance of the species along with conservation threats in the study area by Min Bahadur Gurung



Study of Fishing Cat

Small Cat Conservation and Research Team leader, Sagar Dahal received the research grant from Mohamed bin Zayed Species Conservation fund for the exploration of small cats of Jagadishpur Reservoir of Kapilvastu district and Ghodaghodi Lake Complex of Kailali district. He recorded Fishing Cat for the first time from Jagadisapur Reservoir and Jungle cat and Leopard Cat was also recorded from Ghodaghodi Lake. His research team also conducted conservation awareness program at both of these wetlands and published a booklet for introducing Fishing Cat to local community.



Photo 2: Fishing cat recorded in Jagadisapur Reservoir via Camera Trap.

1.4 Biodiversity survey of Chandragiri Hill, Kathmandu, Nepal

Two Important Bird Areas lie in Kathmandu valley, but even having potentiality, Chandragiri hill is not explored. It lies in the south of Kathmandu Valley representing the true mid hills of Nepal which is rich in biodiversity, but constantly being threatened due to habitat distribution.

We explored the biodiversity of Chandragiri hill with species focus to birds and mammals along with the butterfly and herpetofauna. The study was carried out in July 2015 in six adjoining Community Forests (CFs) of Chandragiri hill within the elevation of 1400-2550 m a.s.l. We used both direct and indirect method (camera trapping, sign survey) for mammals, transect survey for birds and opportunistically recorded all the butterfly and herpetofauna seen during the field work.

We recorded 13 species of mammals, 137 species of birds, 53 species of butterfly and nine species of herpetofauna in entire field survey. Large Indian Civet was most camera trapped species and we also camera trapped the Critically Endangered Chinese Pangolin while many of its burrows were distributed throughout the Chandragiri hill. We recorded three globally, five nationally threatened and two protected mammal species of Nepal. Chandragiri hill was found to be suitable habitat for the summer visitor birds.

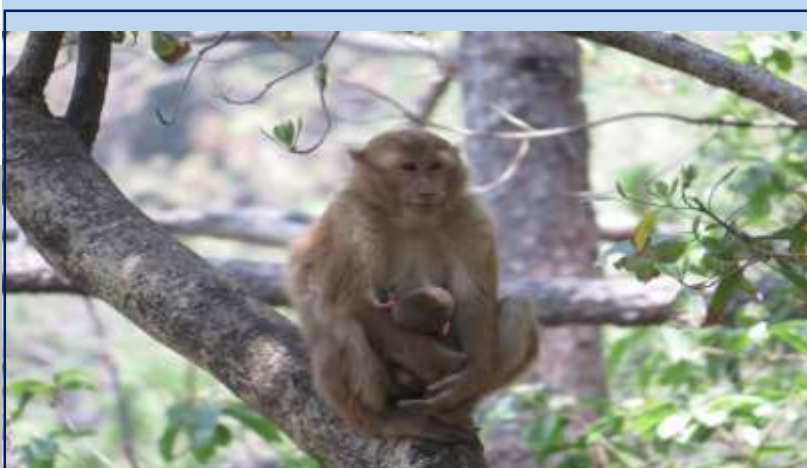
Additionally we disseminated the result of this study to the Community forest user groups of the study area and conservation and awareness activities for them were also done. The study was supported by HIMAWANTI-Nepal financially.



Photo 3: (Left to Right) Nature lovers involving in one day birding program; Setting camera trap during field work and critically endangered mammal Pangolin trapped in Camera Trap.

1.5 Pteropus Colony Monitoring

SMCRF has been conducting “Monthly Pteropus Colony Monitoring” since June 30, 2013 in Kathmandu valley regularly monthly. We have been monitoring the *Pteropus* colony of Sallaghari, Bhaktapur and Kesharmahal, Durbarmarg, Kathmandu. Students of natural science of different faculty and local people are being involved in the monitoring program. This program has awared the local people about the importance of bat species and they are encouraged to save them.



1.6 Study of Reproductive Behavior of Assamese macaque in Nagarjun Forest

Reproductive behavior of Assamese macaque (*Macaca assamensis*) was studied in Nagarjun Forest of Shivapuri Nagarjun National Park. The fund needed for this study was provided by Dr. Hideshi Ogawa, Professor, School of International Liberal Studies, Chukyo University, Japan



Photo 4: Female Assamese macaque with her baby and Observer observing macaques.

1.7 Strengthening Community Participatory Red Panda Conservation and Monitoring Program in Gaurishankar Conservation Area, Central Nepal.

Project “Strengthening Community Participatory Red Panda Conservation and Monitoring Program), Central Nepal” is ongoing red panda conservation project at Gaurishakar Conservation Area which is financial supported by Rufford Small Grant Program UK in mid of December 2014. We are accelerating red panda conservation efforts in GCA from 2012 through ground based habitat survey as well as community conservation awareness. Prior project in GCA had recognized nine isolated prime habitats of red panda within this conservation area. At currently we are focusing toward community participatory conservation through such conservation practices had started in Easter Nepal. Recently, Community-based red panda monitoring protocol (CBRPM) was drafted in Nepali version based on review of literature and further suggestions and feedback was gleaned through consultation workshop. On the occasion of celebrating "International Red Panda Day" in 19th September 2015, a consultation workshop was carried out where more than 30 participants took part in discussion session representing from protected areas governing body, local communities, conservation concern non-governmental, wildlife biologist, and professors and university graduates' students.



Photo 5: Overview of Program activities in workshop



1.7 Living with Villagers for Bat Conservation at Triyuga Municipality, Udayapur, Nepal.

After the initiation of “Living with Villagers”, by a volunteer project without any financial support from funding agencies, from Madi, Sankhuwasabha District, eastern Nepal during 2012-13, Second Part of the project continued at Triyuga Municipality, Udayapur District in South eastern Nepal. Conservation awareness was targeted to school children of lower secondary level. Documentary show and poster dissemination was conducted in nine schools and an Agriculture Junior technical assistance (J.T.A.) training centre (institution) during August 3-25, 2015. The equipments needed for this study was supported by IDEA WILD.



2. Trainings, Seminars, Symposium and Conferences

2.1 First International Symposium on Fishing cat:

In November 2015, the First International Fishing Cat Conservation Symposium was hosted by Fishing Cat Working Group in association with the NGOs Small Mammals Conservation and Research Foundation and Himalayan Nature. Participants included representatives from Fishing Cat range countries like Nepal, India, Sri Lanka, Cambodia and Bangladesh, as well as conservationists from USA, UK, Spain and Germany. In Nepal, The endangered Fishing Cat (*Prionailurus viverrinus*) have been recorded in protected areas in the Terai and recently also in human dominated landscapes elsewhere. They may have declined dramatically over the last decades from its range. The objectives of the first Conservation Strategy Plan revolve around three major themes, namely ecological, socio-cultural and policy issues. Participants pledged to implement planned activities within the next five years. They will collaborate in developing manuals for policy makers and researchers as well as comprehensive habitat and distribution maps. They will continue to work with local communities and address Fishing Cat conservation needs through advocacy networks. Information material will be created to raise awareness amongst global stakeholders, both young and old. The symposium was supported by the Mohamed bin Zayed Species Conservation Fund, the Cincinnati Zoo & Botanical Garden, the Fishing Cat Fund and the Department of National Parks and Wildlife Conservation, Nepal. It was held at Park River View Resort in Nawalnarasi close to Chitwan National Park.

संकटापन्न
मलाहा बिरालोको
संरक्षण गरौं ।



2.2 Participation in First Graduate Conference on Environment and Sustainable Development

Mr. Dipendra Adhikari, Mr. Suraj Baral and Mrs. Sabina Koirala successfully participated on the first Graduate Conference on Environment and Sustainable Development in Kathmandu on 29 and 30 March 2015 as a presenter organized by TU- Institute of Science and Technology with the cooperation of Government of Nepal (MoSTE).





2.3 Participation in AuthorAID Workshop

Mr. Hari Basnet and Mrs. Sabina Koirala participated in “Three day AuthorAID Workshop on Scientific Writing and Publishing 2015” organized by Progressive Sustainable Developers Nepal (PSD-Nepal) during 25th- 27th November 2015.

2.4 Participation in the Student Conference on Conservation Science (SCCS), University of Cambridge, Cambridge, U.K.

Mr. Hem Bahadur Katuwal had presented his poster “*Plight of the Chinese pangolin*” in The Student Conference on Conservation Science (SCCS) held at the Department of Zoology, University of Cambridge, Cambridge, U.K. from 24th to 26th March 2015. He had also attended a short course “Camera traps in Animal Population Sampling”, which was held in Cambridge on 30 – 31 March after the student conference. All the cost (travel and accommodation) for the conference was supported by SCCS.



2.5 Participation in National Workshop on Red list for Birds of Nepal:

Mr. Hari Basnet, Ms. Sabita Gurung, and Mrs. Sabina Koirala successfully participated in “National Workshop on Red List for Birds of Nepal” held at Chitwan National Park, National Trust for Nature Conservation-Biodiversity Conservation Center in Sauraha 1-5 October, 2015.

LIST OF FOUNDERS

EXECUTIVE BOARD

Chairperson: Sabina Koirala

Treasurer: Rama Karki

Members:

1. Rameshor Ghimire
2. Narayan Lamichhane
3. Hari Basnet
4. Suraj Baral
5. Sangita Pant
6. Dipendra Adhikari
7. Kabita Karki
8. Hemanta Dhakal

1. Arjun Thapa
2. Tulsi Laxmi Suwal
3. Bishnu Timilshina
4. Anita Shrestha
5. Suchita Shretha
6. Sanjan Bahadur Thapa
7. Sagar Dahal

LIST OF LIFE MEMBERS

1. Rajesh Goit
2. Rameshor Ghimire
3. Sunil Thapa
4. Divya Raj Dahal
5. Narayan Lamichhane
6. Kaustuv Raj Neupane
7. Hem Bahadur Katuwal
8. Rama Karki
9. Punya Prasad Sapkota
10. Sangita Pant
11. Sabina Koirala

12. Rama Mishra
13. Dipendra Adhikari
14. Hemanta Dhakal
15. Suraj Baral
16. Saroj Kumar Khadka
17. Baburam Lamichhane
18. Kabita Karki
19. Rajendra Gurung
20. Nelish Pradhan
21. Amar Kunwar
22. Hari Basnet
23. Sabita Gurung
24. Prakash Chandra Aryal

For more activities please follow us in facebook :

SMCRF Concern