

**Zoo Outreach Organization Trust
Wildlife Information Liaison Development Society**

2014 Activity Report



Zoo Outreach Organization and Wildlife Information Liaison Development Society

Activitiy Report 2014

Training Workshop on Building National Capacity in Research and Monitoring of Small Mammal in Nepal, 10-17th May 2014

A seven days Training Workshop on Building National Capacity in Research and Monitoring of Small Mammals was conducted at the premise of Biodiversity Conservation Center, National Trust for Nature Conservation, Sauraha, Chitwan. Training included the theoretical classes followed by practicals in the buffer zone of Chitwan National Park. Trainees were introduced with the general concept of small mammal's species of Nepal which included bats, rodents, shrews, small cats, small carnivores, pangolins and red panda and their practical research techniques. Trainees were also made familiar with GIS technology, First aid methods during the field wildlife photography and data analysis using open software R. The training practical included the bat survey using mist nets and bat detectors. Trainees were shown the methods to handle the bats in the field and take necessary morphometric measurement needed for the identification of bats. Sponsor: Chester Zoological Garden, UK.



Assessment of Freshwater fish and Mayflies, May 2014

The meeting for the freshwater IUCN RedList assessments and re-assessments of freshwater fish and mayflies were conducted between 16-30 May 2014 at Zoo Outreach Organization in collaboration with subject experts from Conservation Research Group, Indian Institute of Science, Education and Research and other independent experts including Dr. K.G.

Sivaramakrishnan (Mayflies expert) and Mr. Nikhil Sood (Aquarium trader and hobbyist) among others. The team aims to assess all the freshwater fish and mayflies of the Western Ghats. The assessments are being conducted to update information on freshwater fish and add information on Indian Mayflies to the IUCN Redlist and in the 50th year of the IUCN RedList. The meeting was attended by Dr. Rajeev Raghavan Co-chair, Freshwater Fish Specialist Group - South Asia, Dr. B.A. Daniel, Co-chair, South Asian Invertebrate Specialist Group, Dr. Sanjay Molur, RedList Focal Point, Invertebrates. The assessment process is ongoing and results will be disseminated on completion. A total of 60 Mayfly species were listed and assessed. The assessment process is ongoing and results will be disseminated on completion. Thanks to MBZ for the financial support.



Sensitizing local communities in India for conservation of the declining Greater one horned Rhino (*Rhinoceros unicornis*) with training and education, 25-30 July 2014

Human beings sharing space with wild animals need to develop a very strong appreciation of wildlife in order to develop the level of behavioural and attitudinal changes needed to protect Rhinos. The project objective is to conduct training/awareness programmes for conservation educators for teachers, NGO educators, and other trainers in or nearby Rhino range areas India; to promote rhino conservation involving people and to address local issues related to rhino conservation. Other objective is to create a network of conservation educators in Northeastern India that will help promote species conservation for Rhino and other threatened species in this region for the long term. As part of the project the a teaching guide on Rhino Conservation Teaching tool kit & education packet targeting children and rural people who live in Rhino range areas are developed with the financial support of Ocean Park Conservation Foundation, Hong Kong. In collaboration with the West Bengal Forest Department and local



NGOs, about 40 educators were given training. In addition to it five school programmes were conducted involving the trained teachers.

35th Annual meeting of the Conservation Breeding Specialist Group (CBSG), 30 Oct-2 Nov 2014

The 35th Annual meeting of the Conservation Breeding Specialist Group (CBSG) hosted by the Central Zoo Authority was held at New Delhi, India. The theme of the meeting was 'Application of the one plan approach in India and beyond'. The One Plan approach is to enhance global collaboration and communication in all aspects of species conservation planning and implementation, to accelerate the evolution of species conservation planning tools, and to contribute significantly to achievement of the Aichi Biodiversity Targets. The three days contained many examples of conservation in action around the world, including conservation of *Gyps* vultures in India, linking in situ and ex situ efforts in greater one-horned rhino conservation, and the focus on integrated conservation in Indian zoos. The participants met in working groups to discuss some of the key issues facing zoo community and the wildlife. As South Asian regional network of CBSG, seven of our staff participated and got the opportunity to meet up with experts, scientists and managers from 26 countries at one place. Sally Walker and Zoo Outreach Organisation assisted Central Zoo Authority in organizing the Annual Conference of World Association of Zoo Aquariums and Conservation Breeding Specialist Group. Thanks to Conservation Breeding Specialist Group, USA, Chester Zoo, UK and the Universities Federation for Animal Welfare, UK for their financial support to ZOO and WILD technical staff and selected CBSG SA members participation in the conference.



Indian Alliance for Zero Extinction Project – 1) Conserving the Himalayan Langur, *Semnopithecus ajax*, an Endangered, endemic species of primate. 2) Developing and implementing conservation actions in two most critical fish AZE sites in the Western Ghats through an integrated approach of awareness, capacity building, monitoring and policy interventions. 3) Evaluation of conservation status of the Critically Endangered Large Rock Rat *Cremnomys Elvira*, Kurumbapatti, Salem Tamil Nadu, India.

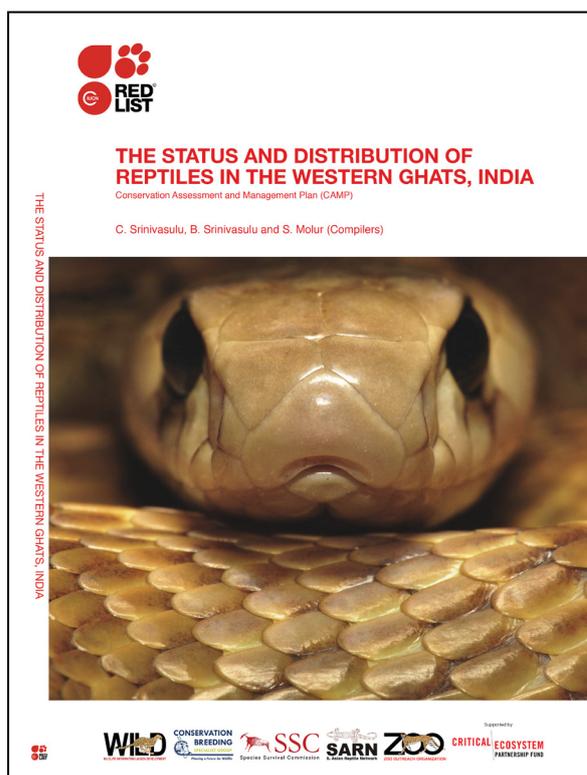
Enhancing knowledge about the conservation status of globally threatened species in the Western Ghats, with a particular emphasis on reptiles

The CEPF funded project was over successfully in increasing the knowledge base for conservation in the Western Ghats, with a particular emphasis on a hitherto overlooked group. The project led to a number of follow-on initiatives, to more broadly disseminate the results and ensure they are used to information conservation action.

Project Activities

1. Assessment and mapping of all Western Ghats reptiles.
2. Identification and networking of reptile researchers.
3. Inclusion of threat status assessments for several species of Western Ghats reptiles on the IUCN Red List of Threatened Species for the very first time. Of the 227 species assessed in total, 185 were assessed for the first time; a total of 108 Western Ghats endemics of which 92 were assessed for the first time; 47 peninsular endemics of which 35 assessed for the first time; 68 South Asian species assessed of which 54 for the first time.
4. Encouraging and mentoring young conservation and research professionals in publishing high quality and relevant peer-reviewed papers in the Journal of Threatened Taxa.
5. Increased exposure of activities and publications on the Western Ghats internationally. Rapidly published peer reviewed findings from the CEPF Western Ghats projects (69 articles and 821 pages
6. The results of the CAMP assessments can be used for prioritization of critical habitats, KBAs and inform any action to be taken under NBSAP.
7. The CAMP assessments inform no Alliance for Zero Extinction reptiles species as per current taxonomic knowledge.
8. Inputs on reptiles in Western Ghats provided to the UN World Heritage Site Committee.

Sponsor: Critical Ecosystem Partnership Fund, USA.



Freshwater Biodiversity Conservation Policy

To conserve freshwater taxa by developing a policy and listing select freshwater taxa into the Indian Wildlife (Protection) Act, 1972 from the Western Ghats. A follow up to a comprehensive assessment concluded recently by the Zoo Outreach Organization and the IUCN Freshwater Biodiversity Unit funded by the Critical Ecosystem Partnership Fund, USA.

Outcomes of the project:

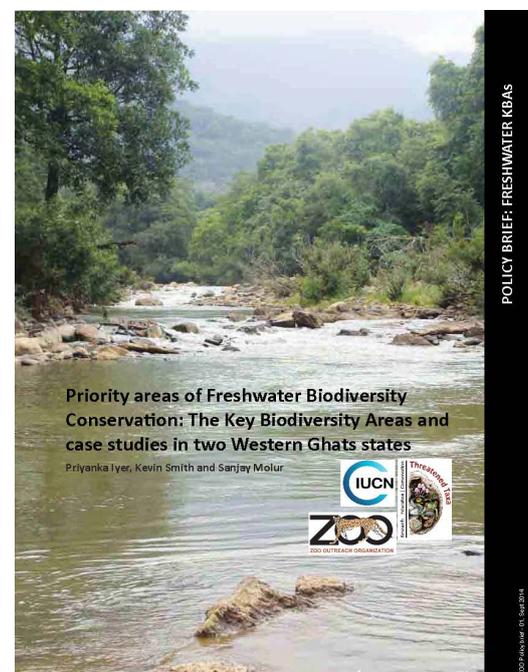
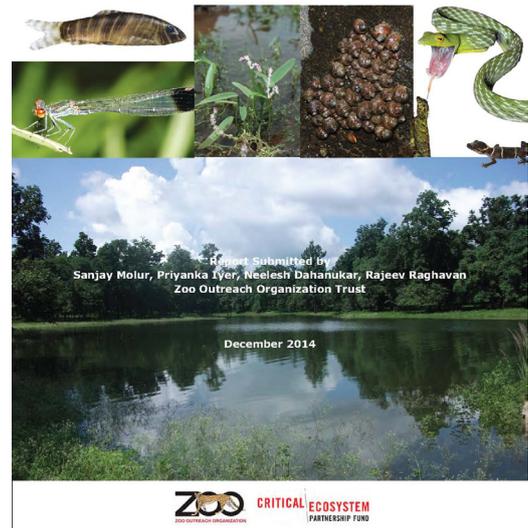
1. Networked with policy makers and relevant stakeholders involved in protection and management of freshwater fish, fisheries and ecosystems.
2. Prioritised a list of 30 freshwater fish species to be protected under the schedules of the Wildlife (Protection) Act (WPA), 1972 and provided rationale for the same
3. Analysed mammals listed within the WPA based on conservation, use, aesthetic, commercial and livelihood values in relation to their position in the WPA schedules
4. Analysed Wildlife (Protection) Act, Biological Diversity Act, Water (Prevention and Control of Pollution) Act, Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, Indian Fisheries Act, National Water Policy and Green Certification guidelines for conservation, research, livelihood and implementation values.
5. Provided inputs in to working plan and management plan of one protected and one non-protected area respectively.
6. Protected area effectiveness in reference to freshwater biodiversity has been understood and the results of the analyses will be published in a peer-reviewed publication shortly.
7. A complete technical report has been submitted to the funding agency and is available for download on the website.
8. Three publications are under preparation to be submitted to peer-reviewed journals.

Alliance for Zero Extinction Freshwater Fish

1. Visited six freshwater fish AZE sites in the Western Ghats (Recci trip report prepared) – Periyar Tiger Reserve (Kerala), Kalakkad-Mundanthurai Tiger Reserve (Tamil Nadu), Valparai – Anamalai Tiger Reserve (Tamil Nadu), Kudremukh National Park (Karnataka) , Mookambika Wildlife Sanctuary (Karnataka) and Rajiv Gandhi Zoological Park (Maharashtra).
2. Met with the social scientist at Periyar Foundation and the Eco-Development Committee Chairman to understand the community working and to enable conducting community surveys and to understand ground realities regarding the three AZE fish species.
3. Met with the communities at Pachaiar that falls within the Kalakad-Mundanthurai Tiger

Protected Area Analysis with respect to Freshwater Biodiversity and Reptile Assessments, and Development of National Policy for inclusion in legislation

Project # 60073
Start Date: 1/1/2012; End Date : 30/09/2014



Reserve. There are about six villages in Pachaiar using the water for extensive agriculture. Also visited the dam. Visited the Nambiar temple to understand the ground realities.

4. Met with forest department officials and communities to understand the impacts of tea & coffee plantation pesticide run off on freshwater biodiversity at Valparai and if there are any impacts of mining done in the past at Kudremukh.
5. Met with the staff of the Rajiv Gandhi Zoological Park and the Municipal Corporation to inform regarding the need to conserve Katraj Lake and clear the Water Hyacinth that has taken over the lake.
6. Visited the streams where the AZE fish have been recorded to understand habitat and various threats.
7. An open-ended questionnaire has been tested and finalised. The questionnaire focuses on habitat and threat aspects as opposed to the specific species as all the sites do not have strong fishing communities, which may be able to identify the species.
8. Out of the five sites, two sites have been prioritized for a more detailed approach, due the paucity of funds and those sites needing utmost attention due to the threats faced.

Sponsor: Mohammed Bin Zayed Species Conservation Fund, USA



Involving Community, stakeholders and Journalists for the Conservation of Freshwater Biodiversity and Reptiles of Western Ghats through Education, Training and Follow up of the Assessment projects

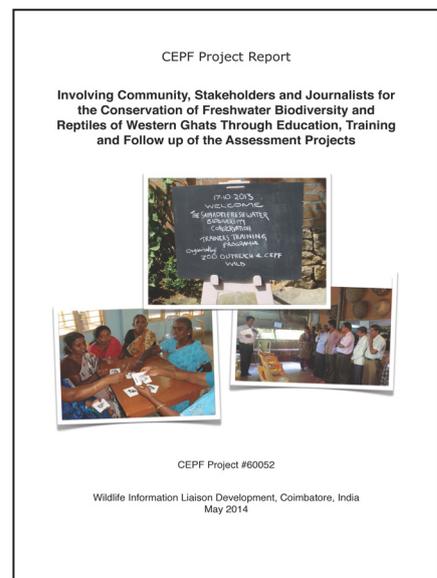
The goal of this project is to create a momentum and freshwater biodiversity conservation which would continue and build upon itself long after the project; to bring in attitudinal change among the people who live at the vicinity of Western Ghats and to create a positive attitude among the people towards flora and fauna with particular reference to freshwater biodiversity and its conservation. Four animal groups viz., Dragonflies & Damselflies, Molluscs, Fish and Aquatic Plants were selected. The project teaches positive attitudes and brings about behavioral change of human beings in relation to threatened species; springboard effect for organization in Western Ghats, of other activities on Freshwater biodiversity conservation topics at the local level including training programs, discussions, meetings etc. and; a model project to introduce species conservation concepts that can be replicated in other areas. Sponsor: Critical Ecosystem Partnership Fund, USA.

Outcomes of the project as on June 2013 are:

1. Developed 'The Sahyadri Freshwater Biodiversity Conservation Teaching Guide' in English for educators.
2. Designed a variety of education materials utilizing the expertise of ZEN network members and



- species experts.
3. Conducted trial run of the training materials inviting species experts.
 4. Identified 10 educators (5 focal points and 5 assistants) from each state and
 5. Provided educators skills training and created a network of educators.
 6. Designed and provided education program plans for the trainees and identified target groups for them to do programs
 7. Developed a database of journalists with the support of point persons.
 8. Coordinated and conducted 17 Conservation educator skills program in 4 states of Western Ghats Ecoregion (Tamil Nadu, Kerala, Karnataka and Goa). Trained about 560 educators.



The project produced 13 kinds of education tools available for the educators targeting children, students, elders, community people and elders. The project intended to cover five Western Ghats states, however, the project reached eight additional states namely Assam, Andhra Pradesh, Delhi, Odisha, puducherry, Madhya Pradesh, Uttar Pradesh and West Bengal. To reach the stakeholders directly a total of 17 programs were conducted throughout the Western Ghats states. The *Sahyādrī* Freshwater Biodiversity Teaching Guide and other education materials were used throughout the trainings.

MOSI Project Initiated:

Mosquito Onset Surveillance Initiative (MOSI): initiatives to monitor the effects of climate change on mosquitoes – Project coordinator in India: B.A. Daniel

Zoological Society of London approached the chair of the IUCN SSC South Asian Invertebrate Specialist Group/Zoo to set up one monitoring station in India. Coimbatore, which is at the foothills of the Western Ghats is a suitable place to do this as it is located on a critical ecological location.



Mosquito Onset Surveillance Initiative (MOSI) project is a permanent international mosquito monitoring programme initiated in 2010 by the World Association of Zoos and Aquariums (WAZA) and the Institute for Zoo and Wildlife Research (ISW), in concert with the Zoological Society of London (ZSL) and Imperial College. Principle objectives of Project MOSI: 1. Establish an international network of 60 permanent mosquito monitoring sites, 2. Confirm baseline species composition, abundance and activity profiles, 3. Continually monitor for changes in species composition, abundance & activity profiles, 4. Help clarify the impact of climate change on a large number of mosquito species, 5. Provide an early warning network for detecting movement of disease vector species, 6. Help efforts to evaluate and better control mosquito vector disease threats and 7. Help develop improved mosquito attractants and trapping methods.

The Mosquito traps were used in 23 locations within the city limit and three locations namely VOC Park Zoo, Ukkadam LIC campus and Ganapathy were found to be more suitable to do the Surveillance project. Project will be continued after obtaining permission from the Commissioner of the city.

Climate change Awareness campaign. 27-29 October 2014

ZOO is running a network named ZOO's Climate Change Network at south Asian level to bring researchers and individuals interested in Climate change work in the region. ZOO in association with the CBSG Climate change Focal Point Dr. Paul Pearce-Kelly gave lectures at Wildlife Institute of India Dehra Dun and GP Pant Institute, Almora. This was attended by more than 250 people and a follow up of activities has been planned.

Understanding the intensity of the new 'game' of wild elephant taunting in Coimbatore forests

Coimbatore Forest Division having a total area of 694 km², is situated in the South-east of the Nilgiri Biosphere Reserve, Tamil Nadu, South India. It shares the eastern boundary at the length of about more than 350 km with human habitations and farm lands, the villages adjoining to the reserve forest boundary are highly prone to elephant depredation. In the past 16 years (1999-2014) the Coimbatore Forest Division has recorded 96 human casualties and 133 elephant death. Though there are many reasons for Human elephant conflict, the cause for certain human casualties remained as mystery. In early 2013 a group of researchers reported about a new 'game' of 'wild elephant-taunting' in Coimbatore forest division. In this 'game' elephants are harassed badly by onlookers, leading to retaliation. This was found to be

the cause of human casualty and a dangerous animal welfare issue which has to be stopped.



A project was designed to investigate the process involved in the mass gathering and the evil act of taunting wild elephants. The objectives of the project: 1. to explore the process and ways in elephant-taunting, who does this & why? 2. to come up with recommendations to stop this practice and 3. to create a network of stakeholders to monitor and discourage this activity. (Project Initiated on January 2015). Sponsor: Universities Federation for Animal Welfare, UK

South Asian Butterfly Assessment

Create a network of serious butterfly researchers in South Asia; create a checklist of butterflies of South Asia; collate all of butterflies, to start with south Asian endemics and the rest of the south Asian species and; collect the distribution details of the butterflies with coordinates so as to work on the mapping of butterflies. Sponsor: Mohamed bin Zayed Conservation Fund.



South Asian invertebrate Specialist Group

The aim of this SG is to influence, encourage, and assist societies in South Asia to conserve invertebrate diversity; to achieve it through knowledge, empowerment, governance and operations. The SG renewed its members and as on November it has 26 members in it. It focuses more on fulfilling the IUCN species conservation strategic plan 2013-16.

ZOO's Climate change network – continues to sending climate change news to network members.

Evaluation and Impact of the Amphibian Chytrid fungus on the threatened and endemic species in WG.

This pioneering and first of its kind project was initiated in the year 2012 with the key objective to understand the presence, distribution and effect of the amphibian chytrid fungus, *Batrachochytrium dendrobatidis* (Bd) on the amphibians of the Western Ghats biodiversity hotspot.

Within three years of work:

1. We have collected samples from over 60 sites distributed across the six states in the Western Ghats using a non-destructive swab collection technique.
2. Standardized protocols for field sample collection using a non-destructive swab collection technique.
3. Standardized protocols to carry out laboratory work in India.
4. Have allowed for the voluntary participation of 15 youth to assist in fieldwork.



The preliminary results of the study conducted by WILD are:

1. That the fungus is widely distributed in the Western Ghats and occurs on seven species of endemic anurans namely *Micrixalus saxicola* (VU), *Hylarana montanus* (NE), *Nyctibatrachus humayuni* (VU), *Indirana leithii* (VU), *Raorchestes ghatei* (NE), *Pseudophilautus amboli* (CR) and *Raorchestes beddomii* (NT)
2. That the strain of *Batrachochytrium dendrobatidis* (Bd) occurring within the Western Ghats on these endemic anurans is endemic to Asia.
3. An ecological prediction model created using DIVA-GIS has predicted the region between 11-16°N latitude for higher Bd occurrence.

These findings have been published in the journals PloSOne and Diseases of Aquatic organisms.



Presently, the project aims to setup population monitoring at sites affected with the fungus with the involvement of local stakeholder groups. The establishment of a population monitoring program would allow for initiation of on-ground suitable conservation action.

Sponsor: Mohamed bin Zayed Conservation Fund.

Conserving Livelihood and the Himalayan Grey Langur in the Chamba Valley of Western Himalaya

The Chamba Sacred Langur (*Semnopithecus ajax*) is one of the little known and highly threatened primate of the Indian subcontinent. Described in 1928 by the famed British Arachnologist and Naturalist, Reginald Innes Pocock, in his article to the Journal of Bombay Natural History Society titled 'The Langurs, or Leaf monkeys, of British India'. Little was known of the species, its ecology and conservation status, warranting immediate research and conservation action (CAMP, 2003). The Himalayan Langur Project was thus established in 2012 to implement field research and conservation for the little known Chamba Sacred Langur.

Semnopithecus ajax is a sexually-dimorphic, leaf-eating, long-tailed monkey with a silvery, greyish brown coat. Baseline studies showed the species' distribution in 124 sites across the Chamba district. Of the 124 sites, 76 reported conflict with langurs, primarily due to crop raiding. Other wildlife such as Asiatic black bears (*Ursus thibetanus*), Rhesus macaques (*Macaca mulatta*) and Himalayan porcupine (*Hystrix brachyuran*) are also known to raid crops. Many farmers interviewed expressed the need for a suitable raid deterrent to protect their crops. However, crop raiding, crop loss and raid deterrents in Himalaya were largely unexplored and presented a huge impediment to any conservation action in the region.



The Himalayan Langur Project thus launched the second phase of its research activities to innovate and evaluate raid deterrents that are non-lethal and adaptive of the Himalayan terrain. The project commenced in May 2014 and has now completed its first year of field studies. Sixteen villages were chosen around the Khajjiar-Kalatop Wildlife Sanctuary of which four villages have agreed to participate in the project. Potential stakeholders were identified in communities around the village and briefed of the project.



Apart from field research, the project works towards holistic conservation through its many outreach wings. The Himalayan Langur Research & Volunteer program invites volunteers from across the country and the world to participate and train in primate conservation, conservation education and the various other aspects of conservation. The Himalayan Langur Conservation Education Program runs outreach programs in schools in Chamba and seeks to involve more schools to participate and benefit of the program.

Project Purpose:

Mitigate human-langur conflict due to crop raiding in Chamba by methodological study of conflict situation, implementation and evaluation of site-specific crop raid deterrents to control and/or reduce crop loss due to crop raiding—through concerted stakeholder run Conflict Mitigation and Conservation Monitoring System.

Activities:

1. Questionnaire survey/Informal interviews in 12 villages in and around the Khajjiar-Kalatop Wildlife Sanctuary.
2. Reconnaissance Survey in villages (Same as for Objective 1).
3. Identify potential stakeholders in the community such as immigrants or nomads.
4. Meet with the village heads and other village representatives at the *Panchayat Sabha** gathering.
5. Collaboration with local community development NGO Arpana Research and Charities Trust - facilitate activities and help build partnership with communities.
6. Ensure participation of women in every phase of the project: through questionnaire interviews, workshops and ensure accounting of their perceptions and knowledge.
7. Analyze gender difference in perceptions and inculcate in establishing the Conflict Mitigation and Conservation Monitoring System.

Output:

1. Surveys were conducted between May 2014 and September 2014 in 12 villages around Khajjiar-Kalatop Wildlife Sanctuary.
2. Potential stakeholders identified and were briefed about the project and their participation sought. (May through September, 2014)
3. Project presentation at the Village Leader's Gathering (*Panchayat Sabha*) and interested villages were invited to participate in the project-the first step towards building the CM² platform. (November 2014)
4. Village heads requested to nominate volunteers from their villages to participate in the project (November 2014)
5. Meeting with four volunteer participants from Jikli Dugi, Jhille Nali, Khajjiar and Myari Gala (January-February 2015)
6. We have been successful in identifying potential female stakeholders in mid-wives through our local associate, Arpana Research & Charities Trust, an NGO dedicated to community welfare and development.
7. We also met with women holding positions in local *Panchayats* and briefed them about the project and its objectives.

Forthcoming activities:

1. To understand the people-crop land-wildlife interaction, it is essential to build an understanding and rapport with community and get their informed consent to be around. The platform for such interaction is underway and is explained below. The platform will provide the required environment to study raider behaviour, quantify damage and therefore will follow after establishing formal partnership with communities.
2. Visit to villages to record farm parameters.
3. Raider behaviour study.
4. Meeting with villagers to design raid deterrents, implement and evaluate.
5. Establish the Conflict Mitigation and Conservation Monitoring (CM²) Platform.
6. Identify leaders from the community to carry the program through and engage in knowledge sharing with other affected communities.

Sponsors: Conservation Leadership Fund Programme, USA, Prince Bernard Nature Fund, Netherland

Upcoming Projects

Asian Primate Red-Listing Workshop

The objective of the proposed workshop is to re-assess all Asian primate taxa against the IUCN Red List criteria, and newly assess those that have not been assessed to date. The workshop will be part of the Global Mammal Assessment process that requires re-assessment of all mammals by 2015. Emphasis will be placed on collating all data that have become newly available on currently Data Deficient species in order to remove as many species as possible from that category and update threatened species categories to understand trends and revise status. The four-day workshop will be organised in summer 2015 by the IUCN SSC Primate Specialist Group's Red List Authority Coordinators, Sanjay Molur and Christoph Schwitzer, and the regional coordinators for Asia.

Received a grant from Margot Marsh Biodiversity Foundation and requested with Mohammed Bin Zayed Species Conservation Fund, UAE

Augmenting stakeholder awareness on Asian elephant conservation in Human Elephant Conflict areas of Tamil Nadu, India

The proposed project is to conduct Human Elephant Conflict HEC capacity building training and awareness programmes in selected sensitive human elephant conflict villages of Coimbatore and Hosur Forest Divisions of Tamil Nadu, India in collaboration with the Tamil Nadu Forest Department and a consortium of institutions. The programme includes capacity building training for forest frontline staff such as Elephant anti-poaching watchers, anti-depredation squad, guards and foresters and Human Elephant Conflict sensitization programme for journalists and follow-up evaluation activities. Sponsor: U.S. Fish Wildlife Service, USA.

Survey on species threats and Conservation Outreach Programmes for Indian Pangolin (*Manis crassicaudata*) in Western Ghats of Tamil Nadu, India

There are eight pangolin species in which four of them occur across Asia. This species is included in Schedule I of the Indian Wildlife Protection Act 1972. Pangolins' large appetite for insects gives them an important role within their ecosystems: pest control. The illegal trade in Asian pangolins and the destruction of their habitat has made these remarkable scaled animals one of the most endangered mammal groups in the world. In Tamil Nadu, it is reported in media as well as personal communication revealed that this species is already in trade as well as its body parts are in ethnic use.

Objectives: 1. To conduct random survey to understand species distribution and map them. 2. To understand the ongoing threats such as poaching for trade or consumption or ethnic use through a detailed survey. A survey questionnaire will be developed and survey will be conducted randomly in selected areas in 9 districts of Tamil Nadu part of the Western Ghats region. To photo document the threats wherever possible. 3. To analyze the results and to develop a database. This will be shared with the Forest Department and other conservation agencies to promote species conservation. 4. To develop education materials and to distribute outreach materials (booklet, brochure, poster, stickers and placards) to local communities and the forest department staff during World Pangolin Day (third Saturday of February) and later on; to create awareness on the benefits of Pangolin Conservation and encourage local communities involve in species conservation.

Sponsor: Mohammed Bin Zayed Species Conservation Fund, UAE

Promoting zoo animal collection planning and improving zoo animal welfare in South Asian zoos for better conservation through training.

Primary goals and objectives:

Primary goal of the project is to introduce, develop and/or improve animal collection plans for the zoos in South Asia through training.

Objectives:

To conduct training programmes featuring collection planning and captive wild animal care and welfare

To instruct the zoos how to maintain healthy and self-sustaining population so there need be no taking animals from the wild, except under certain dire conditions.

To instruct the zoos how to improve breeding results and avoid depletion of species

To enable the zoos to seriously conduct both *in situ* and *ex situ* conservation work

To enable the zoos to undertake correct planning and development of their animal programmes.

To augment cooperation among zoos particularly with regard to rational and ethical animal exchange.

Sponsor: World Association for Zoo Aquarium, USA

Human Elephant Conflict impact assessment and awareness on Human Elephant Coexistence, Coimbatore, India

The Human Elephant Conflict HEC is a very complex issue across India, Tamil Nadu records a high rate of Human Elephant Conflict. The State Government has initiated several HEC mitigation measures but the problem is increasing. In this project, in order to identify the core cause of HEC, a survey to understand the socio economic issues such as crop and property damage, human and elephant deaths and people's tolerance towards the problem elephants in selected human elephant conflict areas of Coimbatore division will be conducted and followed by Elephant Coexistence awareness programmes will be conducted.

Sponsor: Rufford Small Grants for Nature Conservation, UK

Integrating teaching and folklore theatre to promote HECx in Tamil Nadu, India

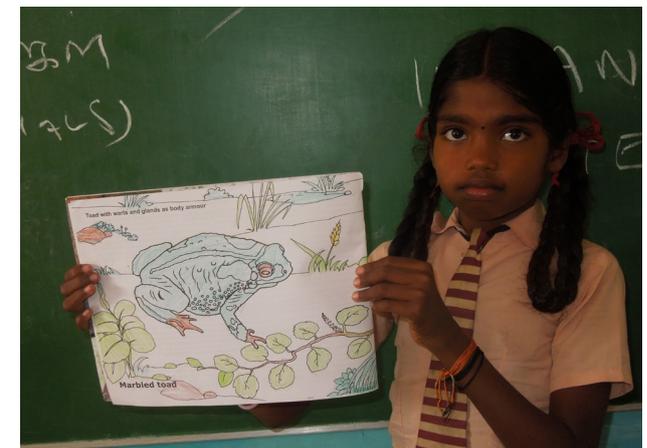
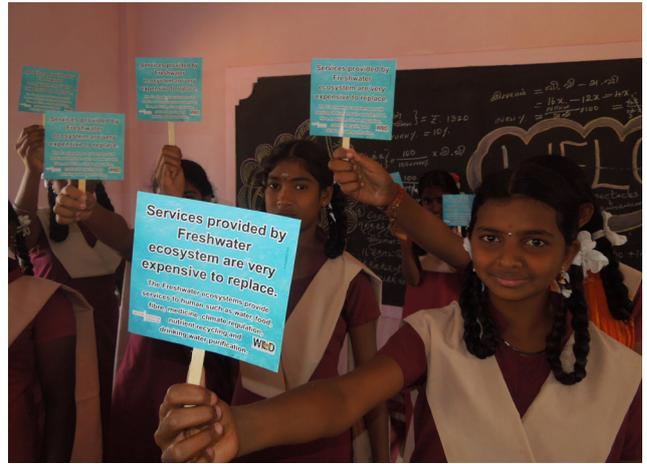
The Erode district, Tamil Nadu forms the meeting point of Western Ghats and Eastern Ghats separated by Bhavani River, which include the Sathyamangalam Wildlife Sanctuary and Tiger Reserve. The human-elephant conflict has intensified in this district as the number of crop raids has witnessed a sharp rise (The Hindu, 2012). The human settlement bordering the Western Ghats foothills seeing severe human elephant conflict due to expanding human population that results to industrial and agriculture growth fragmenting elephant habitat in this area. Creating awareness to increase the tolerance of the people towards the animal is very important for both human and elephants well being. So it is the need of the hour to conduct awareness programmes for the community who live in the conflict areas through different ways of teaching how to save their own life by following some simple do's and don't's.

We propose to organize a 2-days teacher training workshop, two school awareness programmes and 10 street plays for community people promoting human elephant coexistence. Zoo Outreach Organization has developed a methodology to introduce and teach about human elephant coexistence by the new active learning / teaching tool. This aims at reaching a wide range of audience from children to adult of both literate and non-literate audience.

Sponsor: International Elephant Foundation, USA

Education Programme 2014

Forty (40) conservation education awareness programmes were conducted during this period and a total of 3401 persons were reached. The target audiences were school children, college students, wildlife educators, teachers and community people. The themes of the programmes were Western Ghats Freshwater Biodiversity, human elephant coexistence, climate change, wildlife conservation, Ocean conservation, and importance of tree planting, wetland conservation and Animal welfare. These programmes were held on both UN designated and Indian environmental days Such as World Earth Day, International Day for Biological Diversity, World Environment Day, World Ocean Day, World Day to Combat Desertification, Van Mahotsav Week, World Elephant Day, International Vulture Awareness Day, Indian Wildlife Week, Animal Welfare Fortnightly, World Wetlands Day and World Wildlife Day. The Western Ghats Freshwater Biodiversity programmes were organized at all the states of Western Ghats.



Publications

Zoo's Print Magazine, Vol. 29, Nos. 4-12 & Vol. 30, Nos. 1-3
ZOO's Print Magazine - 12 issues (April 2014 – March 2015) www.zoosprint.org

Journal of Threatened Taxa, Vol. 6, Nos. 4-14 & Vol. 7, Nos. 1-3
Journal of Threatened Taxa – 14 issues (April 2014 – March 2015) www.threatenedtaxa.org

Newsletters (April 2014 – March 2015)

Bugs `R All – Newsletter of the Invertebrate Conservation & Information Network of South Asia (ICINSA), April 2014
http://www.zoosprint.org/ZoosPrintNewsLetter/BugsRall_No_21_Apr_14.pdf

Small Mammal Mail: Newsletter celebrating the most useful yet most neglected Mammals for CCINSA & RISCINSA -- Chiroptera, Rodent, Insectivore, & Scandens Conservation and Information Networks of South Asia, August 2014.
http://zoosprint.org/ZoosPrintNewsLetter/SMM_Aug2014.pdf

Newsletter of the South Asian Reptile Network (SARN)
http://www.zoosprint.org/ZoosPrintNewsLetter/Reptile_Rap_16_Mar_14.pdf

Newsletter of the Freshwater Fish Specialist Group South Asia
http://www.zoosprint.org/ZoosPrintNewsLetter/MIN_January_2014.pdf

ZOO and WILD Networks Directories

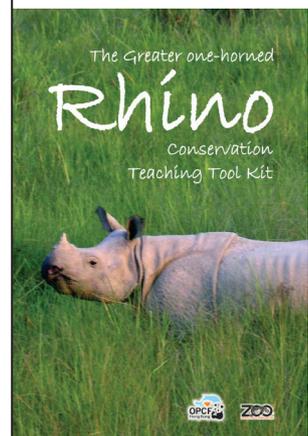
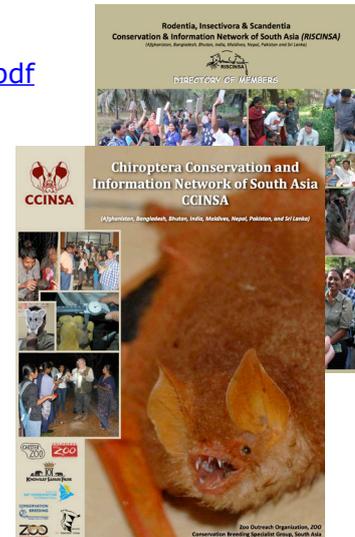
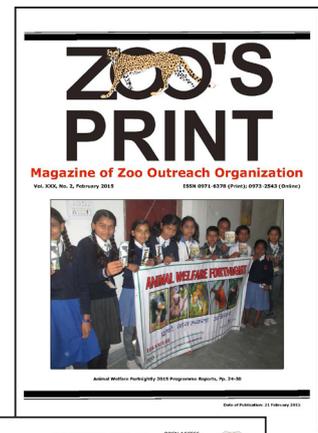
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Education Packets

2014 - The Greater one-horned rhino (*Rhinoceros unicornis*) (in Assamese lang)
2014 – Conservation Welfare items

Other Publications:

2014 – Achamba Booklet (Himalayan Langur Project).
2014 – The Greater one-horned Rhino Conservation Teaching Tool kit
2014 – Zoos' Print compendium (1986-2014)



ZOO and WILD staff Travel (excluding project travel)

Sally Walker

Sally Walker attended the 4th meeting of the core committee for the preparation of Annual Conference of WAZA 2014, 07 Mar 2014, New Delhi

Sally Walker visited Bangladesh towards National Zoo Association, date March 2014

Sally Walker attended World Zoo & Aquarium Conservation Strategy Workshop, Leipzig, 05-06 May 2014

Sally Walker attended 5th Meeting of the Core Committee members of Annual Conference of the World Association of Zoos and Aquariums and Conservation Breeding of Specialist Group, 16th Jul 2014, Delhi

Sally Walker visited Universities Federation for Animal Welfare Board Members in London, 29th July 2014

Sally Walker attended both CBSG Annual Conference and 69th WAZA Annual Conference, New Delhi (30 Oct – 06 Nov 2014)

Sanjay Molur

Sanjay Molur attended MBZ Fund Advisory Board meeting, Dubai, 08-14 April 2014

Sanjay Molur attended a Population Habitat Viability Analysis workshop and Rhino Translocation from Sanjay Gandhi Biological to Valmiki Tiger Reserve, held at Patna, 18-23 April 2014

Sanjay Molur participated in a workshop on "Consultation on Illegal Trade of Lesser Known Fauna, 09 Jun 2014 at WWF India Secretariat Office in New Delhi

Sanjay attended XVth Congress of the Intl. Primatological Society meeting, Hanoi, 11-17 Aug 2014

Sanjay Molur attended Advisory Board meeting of the Mohamed bin Zayed Species Conservation Fund, Gland, Switzerland, 03-04 September 2014

Sanjay Molur visited IUCN Redlist office during his Switzerland visit, 01-02 & 05-06 September 2014

Sanjay Molur attended CBSG Annual Conference held in New Delhi, 30 Oct – 02 Nov 2014

Sanjay Molur visited Chamba field site, 03-08 Nov 2014

Sanjay Molur attended MBZ's Advisory Board Meeting, Miami, 12-23 Dec 2014

Sanjay visited USA for Fundraising activities (23 Jan – 18 Feb 2015)

B.A. Daniel

B.A. Daniel, Co-chair, SA Invertebrate Specialist Group, attended the Invertebrate Conservation Sub Committee IUCN SSC meeting, 10-11 April 2014, held at Cambridge, UK

B.A. Daniel attended the 8th Intl. Zoo and Aqu. Marketing Conf., Bristol Zoo Gardens, 11-14 May 2014

B.A. Daniel organized Rhino Conservation Education Workshops, Lataguri, 25-30 July 2014

B.A. Daniel attended CBSG Annual Conference held in New Delhi, 30 Oct – 02 Nov 2014

B.A. Daniel attended Indian Biodiversity Western Ghats Portal meeting, Trichur, 12-13 Dec 2014

B.A. Daniel conducted WAZA Biodiversity Survey at Mysore Zoo, 02 Jan 2015

B.A. Daniel attended 5th International conference on climate change and sustainable management of Natural resources conducted by ITM University, Gwalior, MP. February 9-11, 2015.

B.A. Daniel conducted a Freshwater Biodiversity conservation workshop at St. Philomeno's college Mysore, 28-29 March 2015.

Marimuthu:

R. Marimuthu organized a World Elephant Day programme at Sadivayal Village, 12 Aug 2014

R. Marimuthu organized a Intl. Vulture Awareness Day programme at Vadivelampalayam, 06 Sep 2014

R. Marimuthu organized a Wildlife Week programme at Vidya Vanama, Anaikatti, 02 Oct 2014.

R. Marimuthu attended CBSG Annual Conference held in New Delhi, 30 Oct – 02 Nov 2014

R. Marimuthu attended Central Zoo Authority's workshop on "Master Planning for Zoo Education" held in Dehradun, 14-19 Dec 2014

Keerthi Krutha & P. Priyanka

Keerthi attended CBSG Annual Conference held in New Delhi, 30 Oct – 02 Nov 2014

Thanks to our 2014 Donors!

Central Zoo Authority, India
Chester Zoo, UK
Conservation Breeding Specialist Group, USA
Conservation International, USA (Primate Action Fund)
Conservation Leadership Fund Programme, USA
Critical Ecosystem Partnership Fund, USA
International Elephant Foundation, USA
International Union for Conservation of Nature, Switzerland
Mohammed Bin Zayed Species Conservation Fund, UAE
Ocean Park Conservation Foundation, Hong Kong
Prince Bernard Nature Fund, Netherland
Rufford Small Grant, UK
Universities Federation for Animal Welfare, UK
US Fish and Wildlife Service, USA
World Association for Zoo Aquarium, USA
Zoological Society of London, UK



