

# Zoo Outreach Organization Trust Wildlife Information Liaison Development Society

## 2013 Activity Report



ZOO OUTREACH ORGANIZATION



WILDLIFE INFORMATION LIAISON DEVELOPMENT

## **CEPF/IUCN workshop on freshwater Key Biodiversity Areas in Kerala & Tamil Nadu**

Freshwater Key Biodiversity Areas workshop is on the delineation and validation of sites (known as Key Biodiversity Areas – KBAs) in Tamil Nadu that are important for the conservation of freshwater biodiversity. This three day workshop is funded by the Critical Ecosystem Partnership Fund (CEPF), is being led by the International Union for Conservation of Nature (IUCN) and will be hosted by the Keystone Foundation in Kotagiri, Tamil Nadu, 7-9 March 2014 (arrival on Thursday the 6th and departure on Monday 10th March).

Through a previous CEPF funded project (2010-2011 led by IUCN and Zoo Outreach Organization) all species of freshwater fish, mollusc, dragonfly & damselfly and aquatic plants in Tamil Nadu were assessed using the IUCN Red List Categories and Criteria (and can be found [www.iucnredlist.org](http://www.iucnredlist.org)). This new project is building on these Red List assessments though the identification of sites (KBAs) that are important for the conservation of freshwater species. The aim of this workshop is to ensure engagement by relevant stakeholders in the KBA delineation, validation and the development of key management recommendations.

At the workshop the species composition at each KBA site in Tamil Nadu, identify threats, potential conservation actions/management that are needed (and already in place), and identify potential stakeholders ('site champions') who could undertake any conservation work or monitoring at the site will be discussed.



**During a group discussion**



**Tamil Nadu workshop participants**



**End user workshop participants**



**Kerala workshop participants**

## **Chiroptera Research Techniques and Conservation in Bangladesh - Report Nurul Islam\***

On 23-25 January, 2014 Chittagong Veterinary and Animal Sciences University (CVASU) hosted the second workshop on bat research techniques and conservation in Bangladesh at the University itself initiated by the Group for Conservation & Research of Bats, One Health Young Voice Bangladesh (OHYVB) and CVASU, in collaboration with the Zoo Outreach Organization, Chiroptera Conservation & Information Network of South Asia (CCINSA) and the Conservation Breeding Specialist Group. Funding was generously provided by Bat Conservation International, Chester Zoo and the Food & Agricultural Organization (FAO) and CCINSA. Dr. Neil M. Furey from Fauna & Flora International (Cambodia) was key resource person for the workshop. A total of 25 participants and 5 volunteers with backgrounds in biological and environmental sciences attended the three-day event.

The objectives of the workshops were:

- Educate 25 science students on basic bat biology and their conservation importance
- Provide hands-on training in field research methods through field practicals
- Review the status of bat research and identify key gaps and needs in Bangladesh
- Promote bat research and conservation in Bangladesh through future collaborations

[Click here for detailed report](#)



## Red Panda PHVA

26-29 November held at Siliguri, West Bengal

A Population and Habitat Viability Assessment (PHVA) Workshop for the Red Panda (*Ailurus fulgens*) in India was held from 26-29 November 2013 at Siliguri, West Bengal. This PHVA incorporated elements of the IUCN Species Conservation Strategy approach into the workshop process developed by the Conservation Breeding Specialist Group (CBSG). The workshop was organized by Rotterdam Zoo of The Netherlands, the Central Zoo Authority, and Zoo Outreach Organization of Coimbatore, India. It was hosted by Darjeeling Zoo, West Bengal.

The PHVA was facilitated by a joint team of CBSG South Asia (Dr. Sanjay Molur) and CBSG Europe (Dr. Kristin Leus). Funding was provided by the Central Zoo Authority, the Rotterdam Zoo Conservation Fund and WWF Germany. Workshop participants included representatives of three range countries – India, Nepal and Bhutan as well as from Europe. The vision expressed by the participants was to “Secure, viable populations of Red Panda thriving in contiguous natural habitats across the eastern Himalayan sacred landscape; a valued flagship species for the region living in harmony with and benefitting the people”.



In India, Red Pandas are found in Darjeeling, Sikkim and Arunachal Pradesh. The aim of the workshop was to identify habitats, distribution ranges, degree of fragmentation and threats to Red Pandas in India and the border areas of Nepal and Bhutan and to develop a strategy to conserve them in natural habitats in these areas. The participants utilized information on habitat characteristics, identified and ranked threats, used simulation models conducted in an earlier Red Panda PHVA in Nepal in 2010, and reviewed methods and strategies for Red Panda conservation.

The report is being finalized and a team of editors from the range states will be finalizing the results within the next three months. The results of the Red Panda PHVA is expected to form the action plan for conservation action on the ground involving predominantly in situ conservation strategies and employing, where necessary and appropriate, ex situ expertise and strategies.



## South Asian Zoo Association for Regional Cooperation (SAZARC)



### ZOO & SAZARC Director attends Arabian Zoo and Aquarium meeting in Al Ain

On 12-14 December, Sally Walker had the honour of joining delegates from throughout the Arab world and Executive Directors, Dr. Gerald Dick from WAZA (World Association of Zoos and Aquariums) and Dr. Stephen van der Spuy from PAAZAB (South African Zoo Association) in discussions to set up a Regional Zoo Association for the Arabian world. There were over 30 zoo and aquarium personnel from different parts of Arabia, UAE, Qatar, Morocco, Saudi Arabia, Kuwait, Jordan and Bahrain. On the first full day of the meeting, guests and zoo directors from throughout the Middle East delivered presentations about their associations and zoos. We guests delivered presentations about our associations and on the second meeting day participated in working groups to discuss if, when and how the Arabian zoos would establish an association. The meeting ended with an enthusiastic agreement to start an Arabian Zoo and Aquarium Association.



### National Associations to be linked with CBSG South Asia

SAZARC, the South Asian Zoo Association for Regional Cooperation, has been in existence for nearly 13 years. Sally Walker proposing to encourage formation of national zoo associations within these South Asian countries, with a hope that they may be able to meet their country colleagues annually and follow principles associated with the zoo associations. Instead of a workshop on creating national zoo associations we have decided to visit the countries in South Asia region for which a national association would be appropriate. The purpose of these is to establish, strengthen and energise local zoo networks, which should ultimately result in greater regional cooperation and activity under the SAZARC umbrella.

### Pakistan Visit by Ms. Sally Walker, 28 July through 03 August 2013

World Wide Fund for Nature – Pakistan invited Ms. Sally Walker to Pakistan to discuss about the formulation of a National Zoo Association in Pakistan. World Wide Fund for Nature-Pakistan (WWF-P) has organised a workshop to support the formulation of a National Zoo Association in Pakistan on 30 July 2013. The workshops were attended by representatives of National Zoos, including Lahore Zoo, Lahore Zoo Safari, Karachi Zoo and Lalazar Wildlife Park (KP), Climate Change Division and WWF-P. The workshop provided an opportunity to the representatives of National level zoos and relevant stakeholders to share views regarding the formulation of National Zoo Association in Pakistan.





**Participants pay keen attention to the opening remarks of the meeting. Photo: Zahoor Salmi**

The participants observed that establishment of a zoo association is critical in order to improve animal welfare standards, improve animal gene pool, and enhance technical expertise and conservation education programmes. Sally was going around the region introducing this idea. Pakistan was the first country visited and the response was very good. Hopefully a national association can be

created this time around. Detailed report can be viewed at [www.zoosprint.org](http://www.zoosprint.org) \2013\August\6-7.pdf

### **Kathmandu, Nepal Visit (August 8-11, 2013) by Ms. Sally Walker and Dr. Caroline Lees**

The Kathmandu Zoo Director, Sarita Jnawali, have invited Ms. Sally Walker to discuss with her government people and explain something about the activities of a zoo network and also talk about zoo legislation. Dr. Caroline Lees who has been the chair of the Australian Zoo Association for some years and is now the regional convenor of CBSG Australia to accompanied Sally Walker. During the three days, both worked through a number of topics with Sarita Jnawali, and met also with her colleagues at the National Trust for Nature Conservation, and with government representatives. Discussions were varied and topics re-visited with different people at various times.

Detailed report can be viewed at [www.zoosprint.org](http://www.zoosprint.org) \2013\August\1-5.pdf



**Sarita arranged for National Trust for Nature Conservation senior staff to meet with Caroline and Sally to discuss various zoo issues. Photo by Sally Walker.**

## **Jamshid Noory, Veterinarian, Kabul Zoo visits India for advanced veterinary study**

Zoo Outreach Organisation organized a training for a month in August 2013 for a veterinary doctor in Kabul Zoo, **Dr. Jamshid Noori**, to participate in a veterinary training programme at the Arignar Anna Zoo based in Vandalur, Chennai, Tamil Nadu which is one of the largest and most highly regarded zoos in India. The training programme is under the supervision of the zoo's senior veterinarian and his assistants. ZOO also organized and sent his education officer along with him for a visit to other zoos in Coimbatore, Chennai, Mysore, Bannerghatta. Detailed report can be viewed at [www.zoosprint.org\2013\August\8-11.pdf](http://www.zoosprint.org\2013\August\8-11.pdf)



**Kabul Zoo Veterinarian Training at Arignar Anna Zoological Park and selected some other zoos in South India**

## UN Decade on Biodiversity

As part of the UN Decade on Biodiversity, WAZA has set up a 3-year multi-institution project *to understand more about what visitors to zoos and aquariums worldwide understand and appreciate by the term 'biodiversity'*. Dr. B.A. Daniel has been selected to run the project in South India. The objective of the project is to raise public awareness: The importance of biodiversity and actions they can take. The project's focus is on wild animal species, also the strength of the World Association of Zoos and Aquariums zoo community. Throughout this project a tagline "*Biodiversity is us*" is being used as the signature of the communication part of the project. The WAZA project has two parts: 1. Educational tools to be developed by WAZA teams and 2. a survey to understand awareness about biodiversity on a global scale and also to understand whether the tools that we will offer are recognized by the visitors. Survey: Chester Zoo, UK together with some external experts of the US and Europe have designed a set of questionnaires. The survey using these questionnaires is done both before and after (2012/2013 and 2014/2015) the tools are used in the zoo. The first survey for India was initiated at Mysore Zoo in October 2012 and ended at April 2013. The educational tools developed by WAZA such as 6 different visuals, promotional materials, mobile applications and 3 different films launched in May 2014 will be used at Mysore zoo to educate the zoo visitors. The expected final result of the survey carried out in November 2014 - April 2015 can be expected in September 2015. WAZA will be launching the tools in May 2013 at Bristol Zoo.



## ZOO's Climate change network

Climate Change network run by Zoo Outreach Organisation and it continues sending climate change news to members.

## South Asian Butterfly Assessment

**B.A. Daniel**

This Mohamed Bin Zayed Species Conservation Fund project covers seven South Asian countries, viz., Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka was started on June 2012 with the objectives of creating 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.



This MBZ project helped to identify serious Lepidoptera researchers and likeminded committed scientists willing to support the assessment of butterflies of this region. With the support of the identified experts a checklist of South Asian butterflies was developed. The checklist has about 1905 comprising of 109 species of Papilionidae, 117 species of Pieridae, 585 species of Nymphalidae, 22 species of Riodinidae, 516 species of Lycaenidae and 556 species of Hesperidae. As on October 2013 species information for about 650 species has been collected. The project is ongoing.



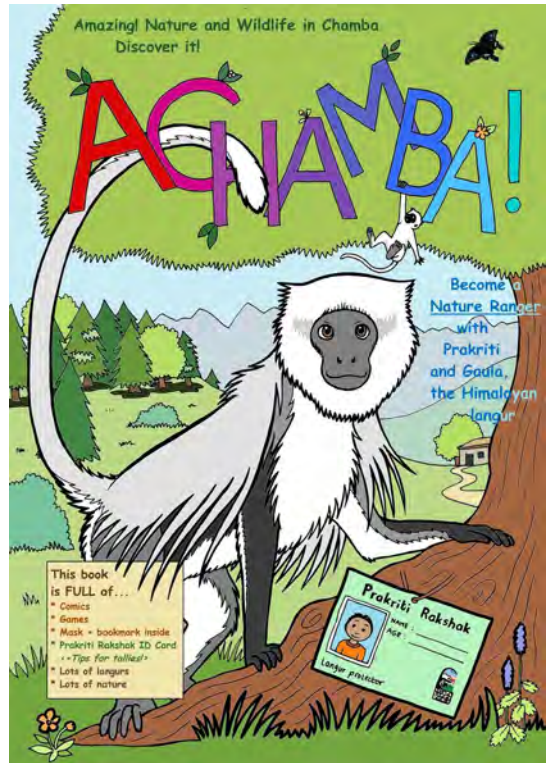


**Indian Alliance for Zero Extinction  
Sanjay Molur**

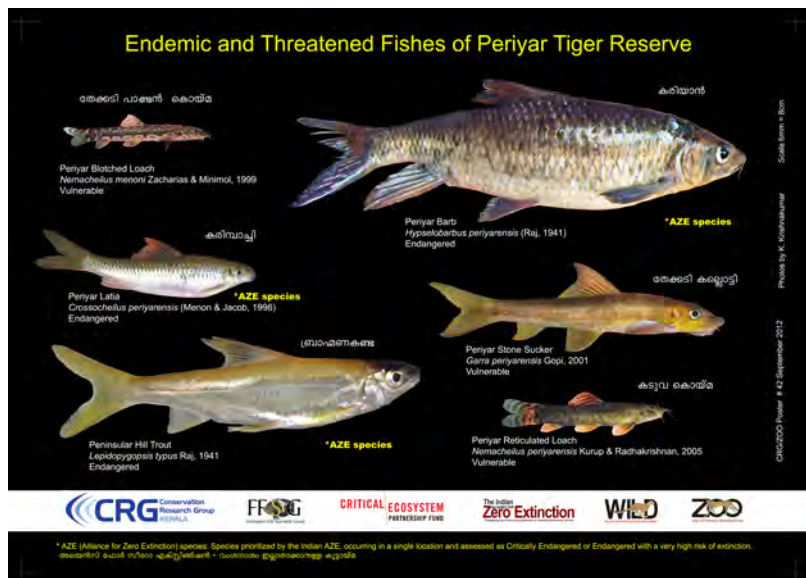


Zoo Outreach Organisation is hosting/helping 4 projects currently funded by the Conservation Leadership Programme, the Rufford Small Grants, Md. Bin Zayed Conservation Fund and World Wildlife Fund, India. The Chester Zoo, UK is supporting the Indian AZE administration to help promoting more projects.

- Conserving the Himalayan Grey Langur, *Semnopithecus ajax*, an Endangered, endemic species of primate. The identity of the species has been established for the first time with photographs since its description; Distribution range and human langur conflict zones mapped; Scat collected for genetic analysis. Developed educational items on Grey Langur.
- 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. The project sites are Periyar National Park and Tiger Reserve and Santhampara Hills in Kerala in Collaboration with Conservation Research Group, Kerala. Working with the Periyar Tiger Reserve in collaboration with the Conservation Research Group and FFSG South Asia in conserving three AZE fishes in Periyar; Removal of the exotic African Cat Fish in one preliminary exercise; Engagement with the forest department for active and holistic conservation of AZE species.



- Conservation of Kerala Indian Frog (*Indirana phrynoderma*) through intensive field surveys and community participation (Project Location Tamil Nadu and Kerala) in Collaboration with Conservation Research Group, Kerala.



**A Poster on Alliance for Zero Extinction (AZE)**

- Evaluation of conservation status of the Critically Endangered Large Rock Rat *Cremnomys elvira*, Kurumbapatti, Salem, Tamil Nadu

## **HECx workshops for Tamil Nadu**

**B.A. Daniel and R. Marimuthu**

ZOO's popular educators' training workshop, 'Getting along with elephants' to promote Human elephant Coexistence HECx has been organised to reach HEC areas of Tamil Nadu. USFWS sponsored project has so far organized in India (West Bengal, Tamil Nadu), Bhutan, Bangladesh, Nepal, Indonesia and Thailand. With an intention to reach HEC areas of South India, a series of workshops has been organised in selected areas of Rajapalayam (18-20 August 2012), Nilgiris (26-28 September 2012) and in the current year the last workshop in the series held in Krishnagiri and Dharmapuri districts of Tamil Nadu with funding from USFWS. Education materials (Human Elephant Co-existence (HECx) Teaching Guide, HECx packet, drama kit along with a guideline, participants hand over materials etc) in local language were developed.

The project objective is reduction of death and injury by the simplest approach ... convincing local people that they must be careful! The workshops train teachers, NGOs, forest and wildlife staffers, volunteers, wildlife researchers and selected others who live and work in or near HEC areas. This program is preceded by a survey of local residents to document their state of mind, fine tune materials and assess the effectiveness of the approach. A 2-day refresher training to reinforce what they learned and provide additional teaching techniques followed after that.

**The Third workshop** was conducted at Krishnagiri, Tamil Nadu from 11-13 April 2013. This workshop covered Dharmapuri and Krishnagiri Districts of Northern Tamil Nadu. The three-day trainers training programme was conducted with the support of SWORD, a NGO at Krishnagiri. About 50 members of NGOs staff and self-help group leaders including 15 women took part in this. The primary purpose of this training is to reduce incidents leading to death or injury to both human being and animals. The trainees took part in this with much involvement as most of them were from Human-elephant conflict area. They were explained that after the training they should spread the word of coexistence with elephants by following some do's and don'ts that has to be followed in the presence of elephants.



**Historical and present distribution of Asian elephants**

## Refresher Course on Getting along with Elephants *HECx* Karunya University, Coimbatore, 14-15 June 2013

Two days refresher course for the USFWS sponsored *HECx* workshops, selected participants of Rajapalayam, Ooty and Krishnagiri was held at Karunya Guest House, Coimbatore on 14-15 June. Nineteen participants attended the course. The agenda of the course included the feedback from the participants concerning utilization of Elephant Teaching Guide and Ele-kit education packets; sharing their *HECx* education programme experiences; behavioural changes observed with their audiences; constraints in carrying out education programmes and solutions to overcome it by SWOT analysis.



**Fishing Game to understand sustainable utilisation**

We also taught them few new games on habitat loss, elements of survival, sustainable consumption, adaptations and team spirit. The adaptability of manual to other species and issues were dealt with. Discussed on developing mini drama. Gave a presentation on how to link the manual to school curricula. How to plan an education programme for short as well as long duration, reporting and evaluation was also taught. ZOO's Educator Network (ZEN), its activities and membership details were given to them.



## **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 (CEPF grant)**

**B.A. Daniel**

This project is a follow-up activity of Critical Ecosystem Partnership Fund CEPF funded status assessments of freshwater ecosystems in Western Ghats, India in the year 2011. Awareness and education outreach – one of the 8 major recommendations out of the above report.

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 will teach positive attitudes and bring 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.

### **Western Ghats Freshwater Biodiversity Conservation Teaching workshop Karl Kubel Institute, Anaikatty, Coimbatore, 25-27 February 2013**

As part of this, a three-day trainers training on Freshwater Biodiversity Conservation Education Training was conducted by WILD/ZOO at Coimbatore inviting selected educators from five States (Kerala, Tamil Nadu, Karnataka, Goa and Maharashtra) of the Western Ghats. The objective of this three-day training is to disseminate results of the assessment to create awareness among local communities involving a range of stakeholders such as local

people, students, community and also journalists living in peninsular India. The aim of the training is to empower educators to teach about freshwater biodiversity and its conservation that can be practiced with their local audience in the Western Ghats area and to demonstrate innovative teaching and learning techniques designed to change human behaviour for the better. As part of this project a teaching manual has been developed along with a variety of education materials that was used throughout the training. About 17 educators took part in this training and utilizing the resource materials used during the training, they will be reaching out to a wider audience involving journalists.



**Understanding Western Ghats and freshwater systems through map reading**

This training is a collaborative effort of Conservation Breeding Specialist Group, Conservation Research Group, Kerala, Freshwater Fish SG – South Asia region, South Asian Invertebrate Specialist Group and ZOO's Educator Network.

**Some of the outcomes of the project as on March 2014 are:**

- Developed 'The Sahyadri Freshwater Biodiversity Conservation Teaching Guide' in English for educators.
- Designed a variety of education materials utilizing the expertise of ZEN network members and species experts.
- Developed and printed education materials -- manual, packets, posters, handlist etc
- Conducted trial run of the training materials inviting species experts.
- Identified 10 educators (5 focal points and 5 assistants) from each state and
- Provided educators skills training and created a network of educators.
- Designed and provided education program plans for the trainees and identified target groups for them to do programs
- Developed a database of journalists with the support of point persons.
- 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.

**Invertebrate Pollinator Conservation and Education Training Workshop  
B.A. Daniel**

The IUCN SSC South Asian Invertebrate Specialist Group SAsISG and Zoo Outreach Organization in partnership with the Department of Agricultural Entomology, Tamil Nadu Agricultural University, Coimbatore and The Xerces Society for Invertebrate Conservation, USA organized a three-day training workshop to promote pollinator conservation in India. Thirty-one participants from different states of India took part in this event, conducted at the TNAU campus from 3-5 June 2013. Participants for this workshop were selected based on their contribution for pollinator research and through invitation. Dr. B.A. Daniel, Chair, South Asian Invertebrate Specialist Group and Dr. M.R. Srinivasan, Professor, Department of Agricultural Entomology, TNAU organized the programme. The entire programme was sponsored by Chester Zoo, Columbus Zoo and Conservation Breeding Specialist Group.

The main objectives of the workshop are i) to convey practical field techniques for use



for pollinator studies; ii) to highlight what has become a crisis of pollinators and the role of invertebrate as pollinators; iii) to teach current best practice in survey, identification, land use management etc. and to reinforce their commitment; iv) to imbibe a short training in education of laypersons about the need to conserve invertebrate pollinators and; v) to create a network of committed pollinator conservation researchers in India for future conservation action.

**Eric introducing Pollinator Habitat Assessment Guideline**

The main resource person Dr. Eric Mader, The Xerces Society for Invertebrate Conservation, delivered a series of talks and demonstrations. Some topics include habitat evaluation: Field observation and land-use discussion; Rapid field habitat assessment and pollinator monitoring techniques; Applied Habitat Restoration for Pollinators; Wild (non-Apis) Bee Ecology. Role of solitary bees, bumble bees and carpenter bees; Managing Stem and Wood Nesting Bees for Crop Pollination; Selection, development, and propagation of native plants for the restoration of pollinator habitat; Bee-Friendly Farming Practices.



**Sajan Jose handling bee colonies while Dr Srinivasn explaining the details**

Dr. M.R. Srinivasan delivered talks on National pollinator trend and status; honey bee diversity, visit to Sun flower field and pollinator visitation observation and analysis, Demo on apiculture; Basics of identification - Bee identification; Insect pollinators in selected crops – sunflower, cotton, ornamentals, trees and weed plants - pollinators on crop yield and quality increase in different crops; Bee diseases and bee enemies.



**Participants observing bee visitation in Sun flower**

Dr. Sanjay Molur gave a detailed talk on the Status of Indian Invertebrate Pollinators: Checklist, Status of pollinators: Species assessment process; IUCN Red List Criteria. Followed by this B.A. Daniel and Sanjay Molur conducted a discussion to develop a short list to prioritize pollinator groups that can be considered for rapid species assessments in the near future.

**IUCN SSC South Asian Invertebrate Specialist Group  
Co Chairs: B.A. Daniel and Md. Ather Rafi**

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 focus more on fulfilling the IUCN species conservation strategic plan 2013-16.

## **Freshwater biodiversity conservation policy project**

**Sanjay Molur and Priyanka Iyer**

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 CEPPF.

### **Objectives**

Identification and networking with various stakeholders like State Forest Departments, State Biodiversity Boards, local communities; prioritizing methods for inclusion of select freshwater fish and other species on the Indian Wildlife (Protection) Act, 1972; detailed analyses of data generated from the freshwater assessments by the respective IUCN units to understand the current effectiveness of the Indian protected area system; workshops with renowned subject experts and stakeholders to get a holistic viewpoint from all the five states involved in conservation of Western Ghats freshwater biodiversity; and develop illustrative posters and projections in simple language for conservationists, foresters and policy makers to disseminate results at the ground level as well as the state and central government levels.

### **Updates**

- Met with WG State Forest Departments, State Biodiversity Boards, Universities and major Institutes, Communities – EDCs.
- Wildlife (Protection) Act, 1972 analysis and a brief overview of Indian Fisheries Act, Wetland rules, National Water Policy and Biodiversity Act.
- Communication with MoEF: WPA, Import & Export; Outreach to Protected Areas, Management Plans
- Publications and policy analysis relating to freshwater fish species and aquarium trade.
- Work with Tiger Reserves to protect Freshwater taxa, case study: Periyar Tiger Reserve
- Inclusion of state-specific freshwater taxa information into the management plans and working plans of the Forest Department.
- Preparation of educational material for policy makers and stakeholders
- Policy brief analysing some of the national policies relating to freshwater and recommendations.
- Peer-reviewed publications and articles



## Alliance for Zero Extinction Freshwater Fish

Visited three freshwater fish AZE sites (Recci trip report) – Periyar, Kalakkad-Mundanthurai and Valparai

- 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
- Met with the communities at Pachaiar that falls within the Kalakkad-Mundanthurai Tiger 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.
- Visited the streams where the AZE fish have been recorded.
- A questionnaire has been formulated for community surveys and has been tested and is being finalised.



## South Asia Office of the IUCN Freshwater Fish Specialist Group (IUCN-FFSG) & Freshwater Fish Conservation Network of South Asia (FFCNSA)

The IUCN-FFSG is based at Chester Zoo, North of England Zoological Society in Chester, United Kingdom, with Prof. Gordon McGregor Reid as the Chair and Dr. Katalin Csatadi as the Program Officer. FFSG has 19 regions world wide, with the activities of each region being coordinated by a Chair or Co-Chairs. K. Remadevi, Retired Scientist of the Zoological Survey of India (ZSI) served as the First Chair of the South Asia region from 2004 to 2012. As a result of the growing interest and increased need



for awareness, capacity building and research concerning freshwater biodiversity in the South Asia region, a regional office of the IUCN-FFSG was set up at the Zoo Outreach (ZOO) in Coimbatore in October 2012. The South Asia Office has also initiated the Freshwater Fish Conservation Network of South Asia (FFCNSA).



## Conserving the Himalayan Grey Langur in the Chamba Valley of Western Himalaya

Martina Anandam & Vishal Ahuja

The first of its kind in Himachal Pradesh, the project focuses exclusively on the conservation of *Semnopithecus ajax*, commonly known as the Himalayan Grey Langur or the Chamba Sacred Langur. Endemic to the moist alpine and cedar forests of the Western Himalayas, the Himalayan Grey Langur is threatened with a number of serious conservation issues. Reginald Innes Pocock then, in 1928, described the species from a skin specimen from Chamba Valley and from thence the Langur has virtually remained unknown to the wildlife sciences. The project seeks to establish a holistic conservation program in Chamba, Himachal Pradesh through a participatory stakeholder initiative for the Endangered Himalayan Langur, wholly managed and monitored by local collaborators and stakeholders.



Adult *Semnopithecus ajax* male sports his characteristic and unique side swaying shoulder mane or *serape* as he oversees the feeding group.

### The project so far:

- Field surveys were carried out in 231 sites across six of the seven blocks of Chamba District. This activity was pursued to establish credible understanding of the langur's distribution and to map their distribution.
- Community surveys were carried out in 105 field survey sites. Community surveys helped establish an understanding of human induced threats in the site such as conflict repercussions and potential threats such as antagonistic attitudes.
- Local records of people, community and culture such as gazettes and historical records of western Himalaya were collected to gain an historical perspective of people-primate relationship and people-wildlife relationship.
- Background research on the education system in Chamba was completed in the first year after comprehensive discussion and research in collaboration with the school.
- Potential stakeholders were identified over the past year: Panchayat Heads (Village Heads), Local Revenue Officers, Local Education Officers, Local Administrative Head, Local journalists, and Forest officers.
- Other interested young conservation enthusiasts from around the country were invited for a month-long internship program and this saw the participants participate in various aspects of the project.
- Education programs are underway in three schools in Chamba. An animation program on *Semnopithecus ajax* conservation is under production and a magazine, "Achamba" emphasizing the uniqueness of *Semnopithecus ajax* and the conservation issues confronting the primate was produced.

### Future:

The Himalayan Langur Project is now planning to focus on resolving human-langur relationship through proper science and mitigation strategies in Khajjiar Kalatop Wildlife Sanctuary in Chamba. Collaborations are underway with conflict study experts for the same.

## **Evaluation and Impact of the Amphibian Chytrid fungus on the threatened and endemic amphibian species of the Western Ghats**

**Sanjay Molur and Keerthi Krutha**

### **Project Objectives**

Identify populations of amphibians affected by Chytridiomycosis.

Standardize a non-destructive sampling protocol to aid long term monitoring of affected amphibian populations.

Understand the spread and occurrence of the Chytrid fungus (*Batrachochytrium dendrobatidis*).

Formulate population monitoring programs for understanding the disease dynamics of Chytrid.

Formulate a policy document to aid the control of trade in exotic amphibians.

Formulate a Conservation Action Plan to save affected populations using population monitoring programs.

Formulate maps of affected populations of amphibians.



### **Update**

- Sampling and testing of 500 individuals for the presence of fungus completed
- In the first phase of sampling 529 samples have been analysed of which eight individuals are positive for the disease. The results have been published in the journal Plos One (Probably screen shot of the paper could be incorporated). A total of 1200 samples from the protected areas of Kerala and Karnataka have been collected through preliminary surveys.
- 36 locations across four states in the Western Ghats completed
- In-field sample collection protocol standardized
- DNA extraction, PCR and qPCR protocols standardized at IISER, Pune

### **Future Goals**

Develop In situ and Ex situ strategies for conservation of affected populations.

Conduct outreach programs on the ill-effects of exotic pet trade to the commons.

Establish population monitoring programs within sites which are positive for the chytrid fungal disease within the Western Ghats, at least within five sites.

## **Indian Theraphosid Project**

**Manju Siliwal**

The Mohamed bin Zayed Species Conservation Fund sponsored a project for Documenting the diversity, distribution and status of primitive spiders (Mygalomorph) in north-east India. Surveys were conducted in Mizoram, Tripura, Nagaland, Manipur, West Bengal and Assam. High diversity of mygalomorphs was found in Mizoram and Tripura. Many interesting new records and new species have been recorded from these areas. Soon these species records will be published in international peer-reviewed journal.



***Chilobrachys* sp. (Theraphosidae) from Mizoram**

## **Western Ghats Biodiversity Open Collaborative Information System**

Last year we had compiled the distribution and maps details of Bats, Non-Volant Mammals, Primates and Freshwater species (Aquatic plants, Fishes, Molluscs and Dragaonfly) of Western Ghats.

Current year, We have compiled the distribution and maps details for 129 species of Endemic and Non-endemic species of Amphibians in Western GhCriticats

### **Evaluation of conservation status of the Critically Endangered Large Rock Rat *Cremnomys Elvira***

Brawin Kumar

Grant term: Dec 2013-Aug 2014.

Project Location: Kurumbapatti, Salem, Tamil Nadu

Donor: World Wildlife Fund, India

In the many species of lesser-studied rodent, the Large Rock Rat *Cremnomys elvira* is one, which is not studied for the past 66 years. This rodent is endemic to India, and it is known only from the type Kurumbapatti region of Salem in Tamil Nadu. IUCN Red List classifies it as Critically Endangered species due to the restricted range and the severely threatened habitat from human interference. The present study will help



in establishing the presence/absence of this species in the type locality, its status, and distribution, and current threats and provide critical ecological details to support the removal of threatened rodents from the Vermin category of the Indian Wildlife Protection Act. This project will establish a long-term goal to conserve the species and habitats in the Eastern Ghats.

- Preliminary questionnaire survey in Kurumbapatti, Salem.
- Studying the type locality details to do the field surveys

### **Madras Hedgehog (*Paraechinus nudiventris*) distribution and status** **Brawin Kumar**

The bare-bellied hedgehog (*Paraechinus nudiventris*), also known as the Madras hedgehog, is a species of [hedgehog](#) that is [endemic](#) to dry scrubby areas in south-eastern [India](#). It is not known from any protected areas in its range. Detailed surveys are recommended by the IUCN to better determine its distribution, population abundance and ecological requirements. This project started collecting the past distributional records via questionnaire survey and museum studies. Field studies are planned in future.



## Enhancing the knowledge and awareness for the conservation of the Kerala Indian Frog (*Indirana phrynoderma*) at Anamalai Tiger Reserve- (ZSL EDGE Fellowship; 2013-ongoing)

Arun Kanagavel

This project aims to develop a species-based conservation strategy for a Critically Endangered amphibian restricted to the Anamalai Tiger Reserve of the Western Ghats through an assessment of status, habitat requirements, life history, threats and exploring the potential for habitat conservation with the assistance of local communities.

1. Field transects have been completed at Anamalai Tiger Reserve and Munnar to determine species occurrence.
2. The morphometrics and habitat characteristics of the species has been collected
3. A workshop has been conducted at Topslip, Anamalai Tiger Reserve to build capacity and support for amphibian conservation among the front-line staff of the Forest Department.
4. Interview surveys are being undertaken with the stakeholders in the Project area.

## Roots of a Green Economy: Enhancing biodiversity conservation and local livelihoods in the Anamalai Corridor (CEPF Western Ghats Large Grants; 2013-ongoing)

Arun Kanagavel

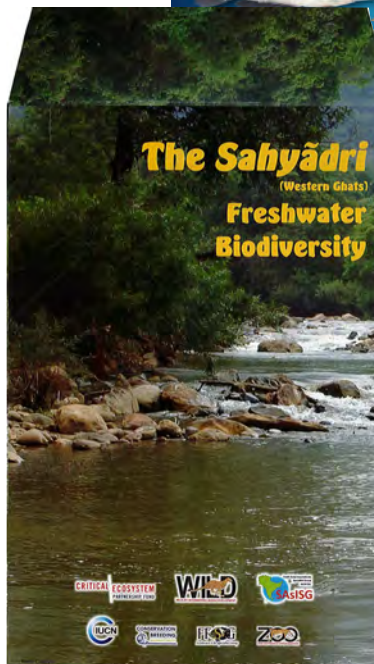
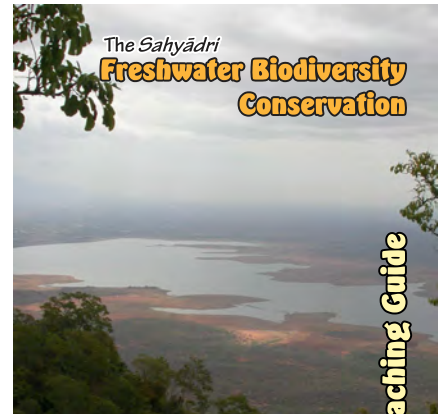
This project aims to initiate/develop local livelihoods appropriate for each site and continue to promote interaction among the stakeholders at Theni and Kodaikanal. Furthermore, the project also aims to build an effective system to inform and ensure the functioning of the Protected Area, its economic viability and that for its people.

1. Training workshops for local guides active at the proposed Theni Conservation Reserve have been initiated to promote eco-tourism.
2. Discussions were ensued with the local communities of the Kottagudi Panchayat, Tourism Department, Collectorate, Police Department and Forest Department to form a dedicated group for eco-tourism
3. Discussions have been ensued with the Theni Forest Department towards setting up the proposed Theni Conservation Reserve
4. Focus group discussions and interview surveys have been completed at 11 indigenous settlements in Theni and Kodaikanal.
3. The three tenders at the proposed Theni Conservation Reserve to improve biodiversity conservation and local livelihoods have been initiated.



## Education

- Animal Welfare Fortnightly AWF celebration 2013
- Human Elephant Coexistence HECx educator workshop – Krishnagiri, Tamil Nadu
- HECx-Refresher Course for Rajapalayam, Ooty and Krishnagiri participants held at Coimbatore, TN
- World Environment Day 2013
- 59th Wildlife Week Celebration
- Western Ghats Freshwater Biodiversity Conservation Education training
- Workshop held at Coimbatore, TN
- Western Ghats Freshwater Biodiversity Assessment follow up education project -- Developed a manual, posters, hand-lists, and packets. Conducted 17 programmes in Western Ghats areas.
- Sixteen Wildlife Conservation education programs on various themes in Southern Tamil Nadu schools
- Conducted WAZA survey on Biodiversity literacy network members at Mysore Zoo, Karnataka.



## ZOO and WILD Publications

### Zoo's Print — [www.zoosprint.org](http://www.zoosprint.org)

April – March 2014 (12 issues)

### Journal of Threatened Taxa – [www.threatenedtaxa.org](http://www.threatenedtaxa.org)

April – March 2014 (16 issues)

### Newsletters

#### Small Mammal Newsletter – Vol.5 No. 1 June 2013, Vol.5, No. 2, January 2014

[http://www.zoosprint.org/ZoosPrintNewsLetter/SMM\\_June2013.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/SMM_June2013.pdf)

[http://www.zoosprint.org/ZoosPrintNewsLetter/2014\\_Vol.5\\_No.2\\_SMM.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/2014_Vol.5_No.2_SMM.pdf)

#### Reptile Rap Newsletter – No. 15, January 2013, No. 16, March 2014

<http://www.zoosprint.org/ZoosPrintNewsLetter/Reptile>

[%20Rap\\_15\\_Jan\\_13.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/%20Rap_15_Jan_13.pdf)

[http://www.zoosprint.org/ZoosPrintNewsLetter/](http://www.zoosprint.org/ZoosPrintNewsLetter/Reptile_Rap_16_Mar_14.pdf)

[Reptile\\_Rap\\_16\\_Mar\\_14.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/Reptile_Rap_16_Mar_14.pdf)

#### Bugs R All Newsletter – No. 19, January 2013, No. 20, September 2013

[http://www.zoosprint.org/ZoosPrintNewsLetter/](http://www.zoosprint.org/ZoosPrintNewsLetter/BugsRall_No_20_Sep_13.pdf)

[BugsRall\\_No\\_20\\_Sep\\_13.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/BugsRall_No_20_Sep_13.pdf)

#### Frogs Leg Newsletter – No. 18, January 2013, No. 19 August 2013

<http://www.zoosprint.org/ZoosPrintNewsLetter/Frog>

[%20leg\\_19\\_2013.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/Frog%20leg_19_2013.pdf)

#### MIN Newsletter – No. 1, August 2013, No. 2, January 2014

[http://www.zoosprint.org/ZoosPrintNewsLetter/MIN\\_August\\_2013.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/MIN_August_2013.pdf)

[http://www.zoosprint.org/ZoosPrintNewsLetter/MIN\\_January\\_2014.pdf](http://www.zoosprint.org/ZoosPrintNewsLetter/MIN_January_2014.pdf)

### Network members directories

[http://www.zooreach.org/Networks/Chiroptera/CCINSA\\_directory.pdf](http://www.zooreach.org/Networks/Chiroptera/CCINSA_directory.pdf)

[http://www.zooreach.org/Networks/Rodent/RISCINSA\\_directory.pdf](http://www.zooreach.org/Networks/Rodent/RISCINSA_directory.pdf)

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[http://www.zooreach.org/Networks/CBSG/CBSG\\_SA\\_Directory.pdf](http://www.zooreach.org/Networks/CBSG/CBSG_SA_Directory.pdf)

### Manual

Sahyadri Freshwater Biodiversity Conservation Teaching Guide

### Posters

The Sahyadri Freshwater Fish

Philautus 8 new species from Sri Lanka

The Amphibian Chytrid Life Cycle

Techniques for Chytrid Detection

The Long Reach of Chytrid

Pollinators! Not just bees!

Pollinators come in all species, sizes, shapes and Shades

The Himalayan Threatened Primate

Achamba Magazine (The Himalayan Grey Langur)

### Education Packets

The Sahyadri (Western Ghats) Freshwater Biodiversity

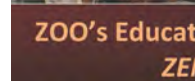
(English, Tamil, Kannada & Malayalam) Pkt

Save Biodiversity! & beat the heat! Live More simply Pkt

(Revised) made for WLW 2013

Pollinators! Not just bees! Pollinators come in all species, sizes, shapes and

shades (Revised) made for WLW 2013



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