



Zoo Outreach Organisation

Wildlife Information Liaison Development

Activity report for the period April 2009 to March 2010

25th Year Celebrations - ZOO Publications

ZOO, ZOOS' PRINT & ZOO ZEN enter 25th year in 2010

Zoo Outreach Organisation celebrates its 25th year. The Founder/ Hon. Director Sally R. Walker is an American who has lived and worked in wildlife and zoos in India since 1981, 30 years. From the first organisation she founded, the Friends of Mysore Zoo, conservation education has been a priority and training actual and potential educators one of the means. In the early and mid '80's she received several government grants from the Department of Environment, Government of Karnataka and Department of Environment, Government of India for organizing teacher training workshops in Mysore Zoo. As a result of the publications and activities of this organisation, Sally Walker was invited by Secretary, Environment Department, Dr. T. N. Khoshoo to apply for funds and to start another organisation for the whole of India which focused on using zoos to teach conservation and upgrading the image and quality of zoos. The Department of Environment awarded a unique grant for starting a new society, the Zoo Outreach Organisation. In Zoo Outreach Organisation Sally Walker broadened the scope of her activities while under the auspices of the Department of Environment, Government of India to the entire country. When the Department became a Ministry, the arrangement for organizational infrastructure with Zoo Outreach Organisation ceased, although ZOO continued to get large grants from the Ministry for producing educational materials. At the end of this period, Sally founded CBSG, India which established and set a high standard for activity for the IUCN SSC Conservation Breeding Specialist Group's Network programme.

ZOO promoted two major ideas which might improve zoos and those were zoo associations and zoo legislation. We promoted zoo associations primarily by singing the praises of the (then) American Association of Zoological Parks and Aquaria (AAZPA) and spreading around their printed material (no email; no internet then). The idea was already there and acted upon by Dr. J.H. Desai, Director of National Zoo, who had already organised a first meeting in about 1985. Kamal Naidu followed and pushed it through but the Indian Zoo Association never had the clout of AAZPA, primarily because the directors had no power or decision making ability, not where it counted and not much interest in cooperating and no budget for improvement. The suggestion of official zoo regulation and official help followed a visit by a group of directors from AAZPA who commented on the need for empowerment and financing of the zoos. First there was a suggestion of a Zoo Grants Commission, then a Zoo Policy and finally legislation. ZOO helped by keeping up a stream of feature articles to the national press about zoos and their problems. Sally Walker wrote more than 300 such articles about every aspect of zoos and why they couldn't improve themselves. ZOO fully supported the Zoo Act in every way that an NGO could. After the passage of the Zoo Act and formation of Central Zoo Authority, Sally Walker was made a Member of the Central Zoo Authority as an expert in conservation education, a rare confirmation as she retained her U.S. citizenship. She initiated and served on Zoo Education subcommittees for Central Zoo Authority as well as on the Technical Committee and on the Inspection Committee. She taught several conservation subjects at the Wildlife Institute of India's CZA Director level training.



After serving six years with CZA, Sally turned her attention to the region of South Asia. She replaced CBSG, India with CBSG, South Asia. Through CBSG SA network ZOO organized 11 PHVAs and > 25 CAMPs workshops for a wide variety of species and also started "networks" for neglected taxa, such as bat, rodents, amphibians, invertebrates, designed to act as regional networks for IUCN SSC specialist groups. Also founded a South Asian Zoo Association, She became active in the World Association of Zoos and Aquariums (WAZA) first as regional representative of International Zoo Educators for Asia, later representing Zoo Outreach Organisation which became an Affiliate Member, and more recently representing the South Asian Zoo Association which became an Associate Member (SAZARC). ZOO plans and conducts an Annual Conference of SAZARC, in the same manner that other Associations have conferences. Every other year, when we had meetings in South Asia we have featured a training in some important zoo topic. The first year it was zoo education in Nepal, then SEAZA where the theme was animal welfare, then Zoo Standards, Welfare, Legislation in Bangladesh, Nutrition in Sri Lanka, Population Management in Pakistan, ISIS/ARKS/ZIMS in Coimbatore, Zoo Legislation I in Ahmedabad, Zoo Legislation II in Sri Lanka and will be Zoo Safety : Emergency Response Protocol and 21st Century Crises again in Nepal coming full circle. It is a great satisfaction to know that three countries are actively going for zoo legislation as a result of these meetings. SAZARC is celebrating its 10th year now.

Another major contribution of ZOO were our "status and management surveys" of captive animals in zoos. We got them funded by zoos abroad and covered a variety of threatened taxa such as Manipur Brow-antlered deer, Musk deer, Indian cats, Vultures (yes, 15 years before the vulture crisis) and others, and brought out reports, studbooks, and studbook-like listings.

Zoo Outreach Organisation was never only about zoos but focused on linking zoos and wild and expanded its mandate by associating closely with IUCN SSC thematic and taxon based specialist groups. Now with ZOO there is a sister organisation called WILD working in both *in situ* and *ex situ* conservation with over 1000 South Asian academics. Sally Walker has received awards for her work in animal welfare and wildlife science. She is a fellow of the Linnean Society of London, have been awarded the prestigious Heini Heidiger Award of the World Association of Zoos and Aquariums and the Ulysses S. Seal Award for Innovation in Conservation from Conservation Breeding Specialist Group, USA.

The other major contribution of ZOO for wildlife is publishing the monthly magazine ZOOS' PRINT and ZOO ZEN continuously for the last 25 years. ZOOS' PRINT was not meant to be an academic publication ... it was meant to be a feature magazine with practical and "do-able" technical articles in it. ZOOS' PRINT was meant for practice and growth of "freshers" in zoos and wildlife and to provide information enabling improvement of aspects of zoo management and to promote communication and cooperation between zoos. ZOO has started another magazine ZOO ZEN in 1985 strictly as a compilation of instructional and technical materials that were difficult or impossible for people to obtain here in India. We are really proud to say that we distributed a massive amount of material for zoo personnel with this modest xeroxed publication.



Current year events

Advanced Technique Refresher Course *Getting Along with Elephants* – HECx- 07-10 June 2009 held in North Bengal

The first series of three workshops of educator skills training programme on HECx – Getting along with Elephants was held in November 2008 at North Bengal, India. As a follow up of this, a Refresher course was organized at Green Lagoon Resort Lataguri near Gourmara National Park on 8-9 June 2009. This refresher course was organised with the financial support of U.S. Fish and Wildlife Service. A total of 25 selected participants from previous three workshop locations were selected in which 5 of them represented the forest department. The participants of the refresher course were selected on the basis of their performance and reports after the November training programme in 2008.

The objective of the course was to understand the effectiveness of the HECx training programme towards changing the behaviour and attitude of the people who live in HEC areas, to evaluate the educators after 6 months to understand the utilization of the training, their education activities on HECx and also to teach additional active teaching/learning tools.

In this refresher course participants were also evaluated through a questionnaire to find out whether they could change their own behavior whoever lives in the HEC areas and also they could convince the people through education to change their attitude in order to promote human-elephant coexistence. They were also assessed if they could fulfill the commitments that they made during November workshops, also assessed for those educators who live in HEC areas if they could apply the tips that they learned during the training and they could changed their behavior or daily routine to avoid danger or safeguard their life etc.,

Out of the 25 participants 17 were either from the HEC area or they conducted programmes in HEC areas. They were given a chance to share their education experience with other fellow educators of North Bengal. There was a discussion among the participants about linking educators of North Bengal so that they can help each other and cover the entire region to promote HECx. It was decided after the discussion that they form a North Bengal educator's network in order to share their work with each other while ZOO help them in all aspects of technical support.



HECx village visit-Takimari villager sharing his experiences on elephant confrontation



HECx village visit-Manas introducing Bengali ele-kit packets to the Takimari villagers

Also we heard true stories from the participants themselves who narrated how the training programme changed their attitude and behaviour. Many of our participants changed



Participants and Resource persons



their behaviour and also they helped to change the behaviour of the people who live in the elephant areas. Here are few examples: Two women saved their live by following the instructions of Dos and dont's given by the one of the educators. Some people stopped harassing the elephants whenever it enters into tea gardens, now they stopped harassing the elephants instead they approach forest department for help to drive the elephants away.

Before the refresher course, BA Daniel and R. Marimuthu visited one of the villages near Lataguri, a location identified by Mr. Manas Manjumdar as one of the village as the target group. ZOO supplied with 50-100 Bengali Ele-kit education packets which are very much needed in their working field. They commented that vernacular education materials will be very useful for them to teach the rural pupil and people.

HECx – Promoting Human Elephant Coexistence in Bangladesh - Educator Skills Training Programme, 22 June – 2 July, 2009

In Bangladesh, the people who live in the elephant range areas experience frequent human-elephant conflict in the past 20 years and the situation is becoming worst day by day. In order to address this emerging problem in Bangladesh, a series of educator skills training programme was organized in three locations namely Rangunia which is in southeastern Bangladesh, Sherpur, and Durgapur, Northern Bangladesh. The objective of the three day programme is 1). to empower teachers of all kinds to introduce and teach about the vexed topic of human-elephant conflict and a partial solution human-elephant coexistence HECX and 2). to demonstrate innovative teaching and learning techniques designed to change human attitudes and behaviour for the better.

At Rangunia about 45 participants took part in the programme. It was attended by teachers, forest department personnel, village heads, college teachers, NGO members, journalists, farmers and individuals who live in elephant area who are involved in education. The Sherpur participants were all from the HEC localities from Sherpur District and the group also had a set of officials from the forest department apart from agriculturalists. The group had a total of 33 participants. At Durgapur about 36 participants took part in the training programme. This group will include majority of teachers, journalists, lawyers, NGOs, village heads and agriculturalists. During the programme 12,000 ele-kit packets, 130 drama kits, were distributed. A teaching manual "Getting along with Elephants" developed exclusively for Bangladesh audience was used throughout the conduct of the training programme. The nine day programme also included 7 trainees who attended all three workshops as intern. The intern will include five educators from Wildlife Trust of Bangladesh and also two educators from Fauna & Flora International - Sumatran Elephant Conservation Programme, Indonesia. The



Participants on procession during workshop



A participant from HEC area trying to understand elephant history through drawing



resource people from ZOO, WTB and Elephant Sanctuary handled the sessions. The programme was conducted by Zoo Outreach Organisation and Wildlife Trust of Bangladesh in association with the Forest Department of Bangladesh. The entire programme was sponsored by US Fish and Wildlife Service, USA. Other funding partners are Elephant family, Twycross Zoo, Columbus Zoo and Schonbrunn Zoo.

Bats Taxonomy & Echolocation Course, Madurai, 10-14 Aug 2009, (Chester Zoo Project)

<http://www.zooreach.org/2009%20projects/Madurai%20FTW%20workshop%20report.pdf>

A five day hands-on training workshop on bat taxonomy and call recording was organised by CCINSA/ZOO and WILD in collaboration with the School of Biological Sciences, Madurai-Kamaraj University, Madurai, Tamil Nadu from 10-14th August 2009. Dr. Neil Furey, resource person from Aberdeen University, UK, currently working in Vietnam, was the principle resource person for call recording and some aspects of taxonomy. Dr. C. Srinivasulu of Osmania University, Hyderabad, helped with the identification of bats in the region with his compilation on the dichotomous keys to bats of South Asia. The entire training was attended by 18 participants. The training programme was sponsored by Bat Conservation International and Chester Zoo.

Lessons taught during the workshop:

- 1) Information on different techniques of Echolocation call recording from bats
- 2) Information of different varieties of Bat Detectors and their efficiency in echolocation call recording.
- 3) Bat Taxonomical identification
- 4) Bat Species identification on the basis of dental and morphological measurements
- 5) Identification of bats by using bacula
- 6) Basic to specific information on different aspects of bats, their characters, their shape and size, morphological structures, etc
- 7) Identifying species of bats with the help of keys developed by Dr. Srinivasulu.
- 8) Extracting skulls from preserved bats and processing them for species identification on the basis of measurements taken from skull.
- 9) Diversity of bats on Vietnam and different techniques used to identify bats in that region by Dr. Neil Furey.
- 10) The training offered a nice place to have interaction with different leading personalities of India and Abroad.



Participants learning to extract skulls from preserved specimens



Identifying bat species using dental characteristics



Training in Field Techniques for Research & Conservation of Volant & Non-Volant Small Mammals, Bhutan 07-11 Sep 2009,

The training on small mammals in Bhutan was organized by the **Chiroptera Conservation and Information Network of South Asia** (CCINSA) representing IUCN SSC Chiroptera Specialist Group in South Asia, and **Rodentia, Insectivora, and Scandentia Conservation & Information Network of South Asia** (RISCINSA) representing the Rodent, & Insectivore Specialist Groups in South Asia, Conservation Breeding Specialist Group, South Asia, Reintroduction Specialist Group, S & E Asia, Zoo Outreach Organization (ZOO), Wildlife Information Liaison Development Society (WILD) in collaboration with Nature Conservation Division, Department of Forest, Bhutan. This training was sponsored by the **Chester Zoological Gardens, UK** and **Bat Conservation International, USA**.

This is the first such training on small mammals organized in Bhutan and the training was focused on ecological field techniques and species identification. There are 65 species of bats recorded in Bhutan which constitute 33 percent of all mammal species of Bhutan and 40 species of rodents are recorded in Bhutan and more are expected. There is lack of ecological information on many mammal species including small mammals in Bhutan. Their population, status, distribution and threats are largely unknown. This intensive five day training program on small mammals facilitated by experts and Zoo Outreach Organization, India would help equip forestry staff with the required knowledge, skills and techniques to initiate surveys to document small mammals in Bhutan. This might even lead to discovery of new species record for Bhutan. A total of 30 participants were attended the training at CNR Lobesa from 7-11 September 2009. The participants were from ten national parks, territorial forest divisions, institutes and Nature Conservation Division.

Resource persons were: 1. Dr. Paul A. Racey, Chair, IUCN SSC Chiroptera Specialist Group based in UK; 2. Dr. Mike Jordan, Chair (Europe & North Asia) IUCN SSC Reintroduction Specialist Group based in UK; 3. Dr. B.A. Daniel, Scientist and Educator, Zoo Outreach Organization, India; 4. Mr. R. Marimuthu, Education Officer, Zoo Outreach Organization, India.

The main objectives of the training were to train the forestry staff working in national parks, divisions and institutions in the following areas:

To impart practical field techniques for ecological studies

To reinforce and improve handling, field and lab techniques for scientific studies

To teach captive management and welfare of bats and rodents as well as educational techniques for public education

To discuss future directions and activities of the network in collaboration with the Specialist Groups.



Learning sexing of Rodents



Practising to use mistnet



Getting along with Elephants HECx Refresher course: Central Zoo, Nepal, 3-4 November 2009, Central Zoo/NTNC, Kathmandu

A follow-up refresher course for the Getting Along with Elephants-Human Elephant Coexistence *HECx* workshop Nepal participants was held at Central Zoo/NTNC, Kathmandu from 3-4 November 2009. The main workshops were held in February and March 2009 at Chitwan National Park and Mahendra Nagar. A total number of 106 participants attended in the three workshops. Based on the performance in imparting the training contents to others 21 participants were selected for this course. Eight participants were from Bardia, 6 from Sukhla Phanta and 7 from Chitwan in addition veterinary officer of the Central Zoo attended as an observer. The course was inaugurated by Ms. Sarita Jnawali, Project Manager of Central Zoo/NTNC.

As per the objectives of the workshops the following activities were carried out. To understand the utilization of teaching techniques which they learnt in the *HECx* workshops a questionnaire survey was done.

To know their education activities on *HECx* each one was given time to share their education activities with others. All of them carried out one or several programmes and they did this for students, buffer zone committee members, army personnel and woman groups. One of the participants carried out 14 programmes within 8 months and reached thousands of people. To understand the effectiveness of the *HECx* training programme towards changing their or audience behaviour another presentation session was held to hear their real stories. Most of the participants shared their experiences how *HECx* programme changed his own behavior or else his audience behavior towards elephants or other animals in general.

The Nepali version of Elephant teaching guide and Ele-kit packets were introduced and each supplied with one copy of the manual and 50 packets.

In between many new teaching tools such as new games in the venue as well as inside the zoo were taught, they were asked to create their own drama ideas pertaining to elephant welfare and conservation. They developed two scripts and made their own properties and acted. Besides they were asked about the constraints they had during carrying out education programmes. They came up with some petty issues and the solutions were given to all. They were taught how to develop an education programme for short period as well as for long time by dividing them into different groups, how best they could write a report of their programme and evaluate their programme. This was explained by using ZOO's climate change packet as a sample.



Participants



Adaptation match activity at the zoo



Planning an education prog



Participants own drama ideas

Getting along with Elephants – Educator Skills training programme held in Sumatra, Indonesia from 1-12 December, 2009,

'Getting Along With Elephants- HECx' was conducted by ZOO in Sumatra ...first time outside of South in 1-12 December 2009. The objective of these workshops is to train local community leaders (teacher, ngo, forester, ranger, local official, etc.) in HEC localities to lead local people into changing behaviour that puts them in harm's way, into behaviour that avoids confrontation altogether if possible and therefore avoids conflict. The method promotes coexistence with elephants by teaching behavioural and biological facts which aid their understanding of elephant psychology, intrinsic worth and unbeatable strength (DON'T IRRITATE ELEPHANTS!). HECx stresses wildlife conservation and habitat protection by teaching about elephant decline and ecosystem degradation and theft which instill a more sensible attitude in the youngsters who are taught by trainees. It also conveys old methods used by villagers when they had no help at all, which promote coexistence. The hoped for result is less conflict and therefore less death, injury and destruction for elephant, habitat and homo sapien.

These workshop were hosted by Flora and Fauna International - Sumatran Elephant Conservation Programme (FFI-SECP). For a full report by Desmerry Hamita and Kaniwa Berliani, and more photos, please click [here](#). Also a detailed reports can be viewed in our February Zoos' Print at www.zoosprint.org

Sponsors for this series of workshop are U.S. Fish and Wildlife Service - Asian Elephant Conservation Fund, AG Zoologischer Garten Cologne Zoo, Universities Federation for Animal Welfare, and Columbus Zoo Conservation Fund.



Participants looking at poster of elephant history



Understanding elephant behaviour through active learning



Debate on mitigating HECx



Mini drama on why my village attract elephants



Training for Senior Staff of Kabul Zoo organized training activities in CBE-Mysore-Chennai, 20-31 Dec 2009

An informal but loyal Kabul Zoo Email Group, e.g. David Jones Director of North Carolina Zoo, USA, James Hogan of Mayhew Animal Home, UK, Brendan Whittington-Jones, Wildlife Manager, South Africa and Nick Lindsay, International Liaison, Zoological Society of London and Zoo Outreach Organisation have been providing occasional external support to the Kabul Zoo, primarily training and some other necessities such as equipment, veterinary materials, etc. In December, ZOO arranged a training tour for three senior officers of the Kabul Zoo: Mr. Aziz Gul Saqib, Director, Dr. Abdul Qadir Bahawi, Veterinarian and Mr. Najibullah Nazary, Zoo Educator.

Local experts and institutions in Coimbatore assisted the first three days and then R. Marimuthu, ZOO Education Officer accompanied the on a whirlwind tour and training involving the following institutions. The Kabul Zoo Email Group thanks the following participating institutions : Peace Institute, New Delhi; Tamil Nadu Forest Department; Nilgiri Biosphere Nature Park, Anaikatti, Coimbatore; VOC Park Mini Zoo, Coimbatore; Sri Chamarajendra Zoological Gardens, Mysore; Zoo Authority of Karnataka; Bannerghatta Biological Park, Bangalore; Wildlife S.O.S Bear Rescue Centre, Bangalore; Arignar Anna Zoological Park, Vandalur, Chennai; Madras Crocodile Bank Trust.

For a full summary of their training tour please click [here](#) and also a detailed report with all the photos can be viewed in our February Zoos' Print at www.zoosprint.org.



Observing records maintained for hatchlings



Education session at the ZOO HQ



Romulus Whitaker chatting with the guests



Kabul zoo vet practising blow-pipe



Kabul Zoo Vet giving injection to the tiger at the rescue centre



Watching the operation of amputation of lion tail at the rescue centre



At the Zoo Authority of Karnataka meeting



Eastern Himalayas and Western Ghats Freshwater Biodiversity Assessments

The IUCN Species Programme and Zoo Outreach Organisation, with other partners, are undertaking two projects to assess the conservation status of selected freshwater taxa and to map their distribution. The aim is to submit the conservation assessments to the IUCN Red List, and to make the data freely available to promote the conservation of freshwater biodiversity.

A training workshop for the Eastern Himalayas freshwater biodiversity assessment project was held from 22 to 26 July, 2009, in Kathmandu, Nepal for the selected experts working on Eastern Himalayas freshwater fishes, molluscs and odonata. A total of 18 participants attended and 14 experts agreed to compile information and assess the status of species in the three groups. Two evaluation workshops were organised in Kolkata and Coimbatore in March and June 2010 respectively to evaluate the information compiled and to review the assessments made by the experts. The evaluation workshop was attended by 26 experts in the field who also contributed to the review of assessments of species in HighARCS areas of western India, northern West Bengal, and selected areas of China and Vietnam. Species assessments were done for ~ 500 freshwater fishes, 230 molluscs, and 280 odonates. This project is supported by the MacArthur Foundation and European Commission.

A training workshop for the Western Ghats freshwater biodiversity assessment project was held from 11 to 15 January 2010, in Coimbatore, Tamil Nadu for selected experts working on freshwater fishes, molluscs, odonates and aquatic plants. The objectives of the training were: to learn about IUCN Red List assessment, use of the Species Information Service (SIS), species distribution mapping, threat mapping, etc. in assessing the conservation status of the above groups. In addition, as part of another CEPF grant project to assess reptiles of the Western Ghats, three experts were invited to take part in the training workshop. Currently, all experts are compiling data into the Species Information Service database developed by the SSC IUCN. The review workshop for Western Ghats freshwater ecosystem assessment is planned for October 2010 and the Western Ghats reptile CAMP workshop in February or March 2011. The Western Ghats assessments are funded by the Critical Ecosystem Partnership Fund of Conservation International.



Experts marking species distribution on map



Participants and Resource persons



Species mapping exercise in process



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

Regional conservation management plans are often developed with the needs of charismatic species such as elephants, tigers or birds in mind. Other important species groups can sometimes be overlooked when identifying the sites for biodiversity conservation. The CEPF Western Ghats Ecosystem Profile highlights the gaps in conservation knowledge for several important taxonomic groups, especially reptiles and freshwater ecosystem. WILD got a grant from CEPF to Enhance the knowledge about the conservation status of globally threatened species in the Western Ghats, with a particular emphasis on reptiles and the project includes the following two components.

- i) The Conservation Assessment & Management Plan / Global Reptile Assessment for Western Ghats Reptiles &
- ii) Journal of Threatened Taxa: The intention is to encourage, over the next 2-4 years all scientific results emanating from the Western Ghats region, be it from the CEPF grants or otherwise, to be published at a rapid rate in the journal.

The project carried out in the current year

1. Work plans discussed with collaborators. Discussions included gaps in taxonomy, geographic coverage with respect to groups.
2. Three reptile data compilers identified C. Srinivasulu, N.M. Ishwar and Manju Siliwal. The first two have maintained databases on reptiles and their expertise in the group will help data compilation, assessments as well as identify gaps for conveying to other stakeholders.
3. A training workshop was held from 11 to 15 January 2010, in Coimbatore, Tamil Nadu for selected experts to learn about IUCN Red List assessment, use of the Species Information Service (SIS), species distribution mapping, threat mapping, etc. in assessing the conservation status of the reptiles. Currently, all experts are compiling data into the Species Information Service database developed by the SSC IUCN.
4. Compilation of reptile species checklist initiated based on tentative lists available as well as the IUCNs database.
5. Reptile assessment project announced.
6. Initial circular sent to all CEPF grantees to encourage and publish articles pertaining to Western Ghats biodiversity, assessments, inventories, checklists, habitat and ecological status, veterinary issues, diseases, conservation actions, priority settings, etc. in the monthly Journal of Threatened Taxa at <http://www.threatenedtaxa.org>.
7. DOI registration requested for JoTT to make all publications available on Cross Ref service by obtaining Digital Object Identifier number for wide distribution and dissemination of the scientific and technical outcomes in the Journal of Threatened Taxa.
8. Initial circulars sent to establish a theme Western Ghats Biodiversity Hotspot which will be a special section in each issue to publish rapidly manuscripts within one month of final acceptance.
9. Some individuals identified from stakeholder organizations to make them familiar with the results and potential applications of the biodiversity assessments and the availability of a efficient scientific peer-reviewed journal.



Indian Theraphosid Project

The only grant for spiders this year was from CEPF-WG Small Grant Program (CEPF-ATREE) to understand Tarantula (Araneae: Theraphosidae) spider diversity, distribution and habitat-use: A study on Protected Area adequacy and conservation planning at a landscape level in the Western Ghats of Uttara Kannada district, Karnataka.

1. Surveys were conducted in different parts of Uttara Kannada district in Karnataka to understand distribution and population status of different species of Theraphosid spiders
2. Interesting species of mygalomorph spiders were found in the Uttara Kannada during the field surveys.
3. Ecological and Biological information on *Chilobrachys fimbriatus*, *Thrigmopoeus* spp., *Plesiophrictus* sp. *Idiops* spp. were collected from Uttara Kannada district, Karnataka
4. Trade related information was collected from study areas in Karnataka.
5. Awareness programme about theraphosid spiders in field sites amongst the foresters and local people were conducted.
6. Updated country wide checklist of spiders of South Asia will be uploaded shortly on the official website.
7. Continuation of taxonomic identification of spiders collected during various surveys.
8. Seven papers have been published in 2009-2010 and four papers are accepted for publication.



Chilobrachys fimbriatus



Thrigmopoeus insignis

Preliminary Survey of Distribution, Population Status and Anthropogenic Threats of Red Panda (*Ailurus fulgens*) in Arunachal Pradesh, India

A preliminary survey has been done at East Kameng, West Kameng and Upper Siang of Arunachal Pradesh to know the current status of distribution, population status and anthropogenic threats to Red Panda. Principal Investigator of the project is Dr. Awadhesh Kumar, Arunachal Pradesh. Based on the past distributional pattern of red panda through literatures and information gathered from Forest Department of Arunachal Pradesh, survey was made through interview by well designed questionnaires, observations and discussion with local people inhabiting the villages in East and West Kameng and Upper Siang districts of Arunachal Pradesh.



Prime forest area degraded to practice of Jhum-cultivation



Local people stored firewood for consumption as well local trading.



JoTT -- Journal of Threatened Taxa (on-line Journal)

The *Journal of Threatened Taxa (JoTT)* is a monthly (aiming to be more frequent), online, open access, free access, peer-reviewed journal on wildlife, conservation, taxonomy, ecology and all aspects contributing to the science and action thereof. The objective of *JoTT* is to publish timely, articles of importance for promoting conservation and encouraging wildlife studies in the biodiversity-rich countries of the world. The lag time after final acceptance of manuscripts from January 2009 will be two months or less depending on the completeness (in content and format) of submissions by authors and timely returns of the galley proofs.

JoTT is not restricted to taxa (phyla, groups, families, orders, species, subspecies, varieties, forms or populations) that are threatened with extinction as defined by the IUCN Red List. The term "threatened" is used broadly to include all forms of taxa and their ecosystems, with the premise that the natural world today is threatened and therefore its taxa. Taxa could be threatened in several different ways and not only in their status in the wild. Lack of knowledge about a species or subspecies or a population is a threat as priorities could be compromised due to deficiency in data. Taxa scientifically described for the first time are under threat from data deficiency in their distribution, status, ecological needs, etc. Any taxon could be under threat in a location due to the changes in habitat or quality. Ecological changes, changes in land use, socio-economic changes, human influenced changes, alien introduced species, wrong reintroduction practices, new emerging diseases, social and political unrest, improperly planned national and international wildlife and conservation legislations, constant changes in taxonomy, global climate change, and other factors that keep our environment and ecosystems in a constant flux can have widespread or localized impacts on taxa. In some instances even the so-called "Least Concern" species could be impacted locally or widely due to the above factors.

The *Journal of Threatened Taxa* is global in its coverage and is a direct progression from eight years of experience with *Zoos' Print Journal (ZPJ)*, whose coverage was South Asia. The objectives of *JoTT* are very similar to that of ZPJ with respect to the subject areas covered. Once manuscripts are reviewed and finally accepted and the authors have submitted all relevant files, attachments and documents, including the final galley proof, publication lag time will be kept to a maximum of two months.

The categories of articles published in *JoTT* include Papers, Communications, Reviews, Notes, Opinions, Book Reviews and Comments. Contents include: Conservation, Wildlife, Taxonomy, Zoo, Botanic Gardens, Veterinary, Ecology, Biology, Biogeography, Ethology, Natural History, History of Natural History, Biography, Bibliography on fauna, flora and fungi.

The following contents are desirable, but not exclusive:

1. Conservation of wild flora, fauna or fungi, issues, techniques, tools, legislation, assessments.
2. Population studies, management, genetics, biology.
3. Threats to wild populations or habitats, factors, management.
4. Conservation actions, management actions, reviews.
5. Biodiversity inventories, range extensions, new records, checklists.
6. Taxonomy, new descriptions, taxonomic reviews.
7. Behaviour (wild or zoo), plant-animal interactions.
8. Ecological research on wild flora, fauna and fungi.
9. Veterinary research in zoo and wild, findings, reviews.
10. Welfare issues of scientific nature
11. Trade, effects, legislation, issues, economics.
12. Observation studies, informal sightings
13. History of natural history, zoo and botanic garden history, biography.
14. Education techniques, comparative tools of education, education as related to conservation, zoos, botanic gardens, aquaria
15. Letters, short communications on current conservation, welfare, trade, legislation issues.
16. Scientific contributions from zoos and botanic gardens.

Getting along with Elephant- Educator Training workshop, Bhutan, 01-12 March 2010

When we planned the HECx workshops a couple of years ago, we didn't know that Bhutan had problems with elephants and had not originally included them. In fact, although they don't have nearly as many elephants as India or Sri Lanka, in fact, they have many migrating elephants FROM India (mostly Assam and W. Bengal). Nonetheless, any death or injury from elephant conflict and any crop spoiled is serious. Bhutan is a small country so any human animal conflict makes an impact. A number of species have caused distress, such as leopard or panther coming after livestock and sometimes injuring human beings, black bears, leaf and grain eating ungulates, etc. It is a major policy of the Bhutan government to address these issues effectively. When we learned of this some months ago, we offered the Nature Conservation Division the workshops and they enthusiastically agreed.

Two educator skills training workshops on human elephant coexistence were conducted in Bhutan at College of Natural Resources from 4-6 March 2010, Lobesa and the second workshop at College of Business studies in Gedu from 9-11 March 2010. A total of 59 educators from elephant range areas were trained. The group included forest personnel, school teachers, village headman and non-governmental organization. Every workshop begins with the first part of a lesson or technique to evaluate or assess what the participants have learned. Every activity in the workshop carries a lesson relevant to the theme. We rely a great deal on drama, which carries a powerful emotional impact, despite the humorous manner in which it is carried out. It is truly one country, which has prospered in the right ways by following a right way of life and of thinking characterized by good values and simplicity.

These workshop were hosted by Nature Conservation Division , Department of Forest, Ministry of Agriculture Thimphu, Bhutan. Sponsors for this series of workshop are U.S. Fish and Wildlife Service - Asian Elephant Conservation Fund, USA; Elephant Family, UK; Twycross Zoological Garden, UK; Columbus Zoo Conservation Fund, USA, and Schornbrunn Zoo, Vienna.



A drama about villagers and elephants



Learning past and present elephant distribution through active learning



Participants draw the History of elephants, learning much about the dynamics between humans and pachyderms in the process



The Chester Zoo Richard Hughes Scholarship 2009 was awarded on June 2009 and the project entitled "Learning to live with elephants: A novel education programme for local people who live in and around HEC areas in Karnataka, South India" was started in the month of August 2009. The active learning teaching tools has been tried in HEC areas in Karnataka such as Rajiv Gandhi national park, Hassan, coorg and around Mysore district to bring in change in the behavior of human people and to learn to live with elephants. The active teaching methodology will include academic teaching activities through games, drama, songs, stories, debate, maps, history, politics, personalities, art and mock conferences. At all level of learning assessments will be carried out. Understanding of all these will help them to change the behavior with the problem elephants. A total of 1066 children, 60 educators were covered so far and before the end of the project 60 number of community people will be covered. The manual developed by ZOO has been translated in to Kannada and the new country chapter has been incorporated in to it. The final report of the project will be sent to Chester towards the end of the project closing time in June 2010.

Taxon Network Activities

CBSG Taxon Networks working from ZOO office are based on the processes and principles of CBSG and all works done with aim of conducting Training, PHVAs, CAMPs, Education, Conservation, Conservation Planning, etc., using the CBSG tools to promote and deliver effective conservation in the region. All the networks circulate current news, announcements, opportunities and articles of interest to all the members via email. • During CBSG WAZA Annual meeting held in St. Louis, Sally Walker has been appointed WAZA/ CBSG Steering committee Member for the Climate Change Task Force and also got a Chair position for the Associations Committee in WAZA. She is very happy to get the post as she can take up for the developing country associations. The networks and some of their activities follow :

- **CCINSA/RILSCINSA may join to become Small Mammal Network**– The two newsletters of CCINSA and RILSCINSA have merged into one newsletter called Small Mammal Mail. July & December 2009 issue can be found at www.zoosprint.org under newsletters. Chiroptera Conservation and Information Network of South Asia conducted a **bat taxonomy and ecolation training** at Madurai Kamaraj University, Madurai, India and a **field techniques training workshop for bats and rodents** on 5-11 September in Wangdue, Bhutan. (All sponsored by Chester Zoo and Bat Conservation Int'l). Members directory updated and uploaded on the web.

- **Amphibian Network of S. Asia:** In 2009 ANSA continued participation in the AArk education programme distributing educational materials for IZE and IZE South Asia member and other educators. Fresh materials including hundreds of AArk caps, tshirts and literature were brought out for use in special global and national amphibian oriented events for 08/09. Sponsored by Sea World Conservation Fund.

- **South Asian Reptile Network:** will take the lead in a project under ZOO & WILD of the CEPF Critical Ecosystems Partnership Fund to conduct the IUCN SSC Red List Global Assessment for Reptiles in South Asia in 2010. Sponsored by CEPF. The 2009 on-line newsletter of Reptile network "reptile Rap" can be found at www.zoosprint.org under newsletters.

- **South Asian Primate Network** - PSG SAPN representing IUCN SSC Primate SG. Training in Wild to Wild Translocation as mentioned above. Developed and distributing primate education materials. Members directory updated and uploaded on the web.

- **Invertebrate Network (ICINSA) and Sub-networks (Pollinator Network and Aquaric Invertebrates:** ICINSA supplies members of the greater network and its sub-networks support of literature on their specialty, opportunity for rapid publication in **Journal of Threatened Taxa**. Also a project from the Invertebrate Conservation Centre, ZSL to develop a teaching manual on climate change with strong focus on challenges for invertebrates. The membership of ICINSA was revised in order to identify active members and to filter out non active members. As the follow up activity of the guest talk given by Daniel during the workshop on "Nocturnal Pollination: Patterns and Processes" Indian Institute of Science, Bangalore in late March 2009 at JNC Seminar Hall, IISc Campus, new members were inducted for IPNSA. ICINSA provided consultancy to Coimbatore Zoological Park in order to install education boards related to invertebrates and other faunal groups. As part of the activity of ICINSA assistance was extended for the Fresh water Species assessment training workshop for Molluscs and Odonates of Eastern Himalayas and Western Ghats. Specialists of these Fresh water groups were identified and Species assessment for 216 molluscs and 320 odonates were done in association with the IUCN SSC Freshwater Biodiversity Unit which will be completed in June 2010. Review of the species information provided in the SIS was done with the help of the network members. The South Asian Invertebrate Specialist Group has been reinstated in late February 2010 and new members of the SG were identified. BA Daniel and Ather



Rafi, Pakistan is the Chair and Co chair respectively. Received support from Chester Zoo in order to take up projects related to pollinators. Development of pollinator education materials are in process. All invertebrate networks and salary of B.A. Daniel, network convenor are supported by the Invertebrate Conservation Centre, London Zoo. ZOO continues to fundraise for field work on distribution of Theraphosid spiders in India sponsored last two years by **Oregon Zoo**. Also Critical Ecosystems Partnership Fund CEPF has approved a grant for studies on Theraphosid spider diversity, distribution and habitat-use in PA landscape level in a portion of Western Ghats, Karnataka, India.

• **South Asian Reintroduction Specialist Group Network:** Sanjay Molur attended a meeting in Gauhati of Hoolock Gibbon specialists and enthusiasts to discuss next action steps after the two translocation training workshop conducted in Guwahati for conservation of Hoolock Gibbon. Selecting an “activer” for Hoolock Gibbon and approaching government for a Project Hoolock Gibbon were some of the major topics. Sally Walker gave a presentation at the Annual Conference of Society for Conservation Biology SCB on precisely how to save Hoolock Gibbon from extinction with Project Gibbon and translocation. Sally Walker visited Bhutan to deliver workshops themed on HECx, Human Elephant Coexistence. While in the country she was invited to comment and advise a Takin Preserve holding a small group of animals for public viewing as well as a somewhat larger group for breeding and potential release in situ. RSG South Asia section also has circulated a large number of documents and reports to the network of 45 experts and interested persons. A directory of these regional network members is in process and uploaded on the website www.zooreach.org.

• **Educator Network SAN-IZE** — A total of 9 workshops and 3 refresher courses on Human Elephant Coexistence HECx have been conducted in West Bengal, Nepal, Bhutan, Bangladesh and Sumatra. ZOO paid IZE membership for 18 SANIZE members from Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. SANIZE office is providing consultancy to Nilgiri Biosphere Conservation Park for design of signage, interpretation, and other educational products for its opening. Three senior officers of Kabul Zoo, Afghanistan including the Education Officer underwent 10 day training on a wide range of topics in zoo management from 20-30 December in some South Indian Zoos. South Asian Network of International Zoo Educators network directory is updated and uploaded in our website www.zooreach.org.

Some Education materials developed in the current year were:

Teaching Manual on Getting along with Elephants (for India, Nepal, Bangladesh, Bhutan and Sumatra) Education Packets and other items on Climate Change, South Asian Primate Pocket Guide, Elephants (Human Elephant Coexistence) [in English, Bengali, Sumatra, Nepali] Amphibians and common wild creatures.

Travel

- **IUCN SSC Conservation Planning Meeting** held at Bristol, June 09 attended by Sally Walker
- **IUCN SSC AESG - Human-Asian Elephant Conflict Workshop, Beijing, China** 10–11th July 2009, attended by Sally Walker and Sanjay Molur (*Travel sponsored by USFWS*)
- **Refresher workshop of “Getting along with Elephants HECx Education” held in West Bengal,** 07-10 June 2009, BA Daniel and R Marimuthu
- **Society of Conservation Biology SCB** Annual Conference 09 and special Symposium on South Asian Primates, 12-18 July 2009, Beijing, China SW & SM (*Travel sponsored by USFWS*)
- **Getting along with Elephants - Educators skills training programme, Bangladesh,** 22 June - 03 July 09, (USFWS Elephant Project) BA Daniel & R. Marimuthu
- **Eastern Himalayas Freshwater Biodiversity Assessment IUCN Red List Training Workshop,** 22-26 July 2009, Kathmandu, Nepal, by Sally Walker, Sanjay Molur and BA Daniel (IUCN Eastern Himalayas FWB project)
- **Annual SEAZA Conference,** Seoul, South Korea, 5 – 9 August 09, attended by SW (*Chester*)
- **Bats Taxonomy & Echolocation Course,** Madurai, 10-14 Aug 2009, by Sanjay Molur and BA Daniel (*sponsored by Chester Zoo and Bat Conservation International*)
- **Training in Field Techniques for Research & Conservation of Volant & Non-Volant Small Mammals,** Bhutan 07-11 Sep 2009 by Daniel and Marimuthu (*sponsored by Chester Zoo and Bat Conservation International*)
- **Hoolock Gibbon Translocation and Human Elephant Coexistence projects discussion** with Dr. Anwarul Islam, Wildlife Trust of Bangladesh by SW, Aug-Sep’09 (*Travel sponsored by USFWS*)
- **UFAW Council members meeting,** UK (17Sep 2009), **International Zoo Keepers Association Conference,** Seattle (26-27 Sep’ 09) & **CBSG, WAZA annual meeting,** Saint Louis, 30 Sep-08 Oct 2009, (CBSG SA), attended by Sally Walker (Travel sponsored by Chester, UFAW, Woodland Park Zoo and CBSG)
- **IUCN SSC Red List Steering Committee,** 15-16 Sept.09, Zoological Society of London, London, attended by SM, Member (*Travel sponsored by IUCN*)



- **Alliance for Zero Extinctions (AZE) Steering Committee**, 30 Sept, Washington, D.C. attended by SM (*Travel sponsored by AZE*)
 - **2nd Asian Zoo Educator's Conference**, 11-16 October 2009, Hong Kong (Sponsored by Ocean Park, Hong Kong), attended by BA Daniel
 - **Strategic future planning workshop on Hoolock Gibbon**, Assam, 3-4 November, attended by Sanjay Molur (Travel sponsored by USFWS Hoolock Translocation Project)
 - **Refresher workshop of "Getting along with Elephants HECx Education" held in Nepal** 01-06 November 2009, R Marimuthu
 - **Getting along with Elephants – Educator Skills training programme, Sumatra, Indonesia** from 1-12 December, 2009, Sally Walker, BA Daniel and R. Marimuthu (USFWS Elephant project)
 - **UNESCO IYB Biodiversity Science Policy Conference**, Paris dated on 25-29 January 2010, attended by Sanjay Molur (*Sponsored by UNESCO*)
 - **Getting along with Elephant- Educator Training workshop, Bhutan**, 01-12 March 2010, Sally Walker, BA Daniel and R. Marimuthu (USFWS Elephant Project)
 - **IUCN - Eastern Himalaya Freshwater Biodiversity Assessment and High ARCS Evaluation workshop**, 22-26 March 2010, Kolkata, WB, by Sanjay Molur and BA Daniel
 - **CBSG and WAZA mid-year meeting**, Colombo, Sri Lanka, 26-30 Mar.10 (Travel sponsored by Chester, UFAW and CBSG)
- **SCB Membership Project** : Society for Conservation Biology has a special rate for membership for academics from developing countries. This rate, \$10.00, includes web access to four important conservation journals. In most South Asian countries the effort required to exchange local currency plus send it to a foreign organization is immense, although the amount is not much. Our office has made a widely publicised offer to do the paperwork for anyone who wants to join and will reimburse the \$10.00 payment in local currency.

Some Projects for future 2010 with funding status

- IUCN Red List assessment in Western Ghats Freshwater Biodiversity Evaluation workshop, South Asia, venue to be announced (funded by IUCN)
- IUCN SSC Global Assessment Programme, South Asian Reptile Assessments (funded by CEPF).
- PHVA for Red Panda, Red Panda Management Group & National Trust for Nature Conservation, Nepal, September 2010
- Three sets training workshops in Human Elephant Coexistence, Thailand (funded by USFWS and partners) 2010
- Two refresher workshops (follow up) on Human Elephant Coexistence HECx to be held in Bhutan and Sumatra (*funded by USFWS and partners*) 2010
- Annual CBSG RSG South Asian and SAZARC Feb/March 2010 in Nepal

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