Conservation Education and Zoos: a CZA Workshop
R. Marimuthu

A workshop entitled “Conservation Education and Zoos” was conducted at Patna, Bihar from 6–9 April 2010, organized by Sanjay Gandhi Biological Park, Patna in collaboration with and sponsored by Central Zoo Authority. It was the first such workshop held in India. Twenty-six participants looking after education in 25 zoos took part in the workshop. India may be unique with such a diversity of personnel in charge of zoo education, e.g. Education Officer, Park Supervisor, Bock Officer, Asst. Conservator of Forests, Curator, Asst. Curator, Asst Curator (Education), Biologists, Head Animal Keeper, Deputy Director, Forestry Extension Officer, Zoo Inspector, Hony. Wildlife Wardens, Forest Range Officer/Deputy Range Officer/Forester/Guard, Garden Superintendent, Livestock Officer and Director! Whatever their title, their intention was to learn the new directives about conservation education and how it could be implemented in their institutions.

Day 1
During the Inaugural function on 4 April, CZA Member Secretary, B.S. Bonal spoke about the meaning of different kinds of zoos, objectives and functions of CZA, how the zoo legislation of the 1990’s emphasized the importance of conservation education in zoos. CZA’s guidelines on educational signage and interpretation centres, 50:50 financial assistance for educational signage and necessity of understanding visitors and their needs, interpretation of information, training and capacity building and networking and partnerships. Zoo master plans should be elaborated when zoos preparing their master plan, he said.

Participants became acquainted with one another by playing an activity “Sound-off”, which could be used with certain kinds of visitor groups, and seemed to be much enjoyed.

Bitapi Sinha, WII gave a presentation on “Role of Zoos in Conservation Education, explaining that conservation education is a process by which learners of any age acquire and develop awareness. It helps visitors develop appreciation of the value of natural resources, recognize threats and improve environmental management.

B.C. Choudhury, WII gave a presentation on visitor characteristics and motivations for zoo visitation. In his talk he talked about profile of zoo visitors, their motivations, what influences them, and what zoo managers should do to analyze visitors knowledge and motivations. In another presentation B.C. talked about vandalism and manage-
ment of zoos. He explained ways for controlling or reducing vandal-
ism and also showed a format for visitor facilities, education aware-
ness, vandalism control assess-
ment and how to record kinds of vandal-
ism in a particular zoo.

**May Lok of Singapore Zoo** gave
a presentation about Wildlife
Reserves of Singapore which are
Singapore Zoo, Night Safari and
Jurong Bird Park and also the
upcoming facility, River Safari,
opening March 2012. She de-
described these facilities as home to
10,000 animals and 3.6 million
visitors annually. She talked
about their shareholders, mission,
philosophy and 5-year strategic
plan of the education department.
She also shared the 3 steps of
conservation education:
1. Change unaware to aware,
from aware to concern
2. Empower individuals to contribute
positively and
3. Excite and evoke five senses in
all activities.
She related WRS’s education
goals: what, who, how to edu-
cate, programme for active
learning (PAL), communication
(outreach programmes), postur-
ing (children’s TV series, videos)
and resources needed.

Next **Bitapi Sinha** explained how
to profile zoo visitors in order to
find out who and why they visit
and how to design programmes
for them. Visitor surveys, feed-
back forms and complaint regis-
ters are some of the ways to
profile visitors. Participants
divided into groups and each
developed a survey form for
general visitors, school children,
local people/community and zoo
staff respectively. The groups
presented their assignment the
next day.

**B.C. Choudhury** in “Zoos beyond
boundaries” explained why it is
necessary to involve people
outside the zoo in zoo activities.
It is because they are stakehold-
ers, your target audience, which
may support or oppose the zoos’
activity and publicize it. Zoos can
develop their outreach programs
to change negative opinions to a
more positive and Zoo friendly
attitude.
Day 2
Meena Nareshwar, CEE presented on CZA/CEE’s Master Education Plan for Zoos of India, including the need for it under CZA zoo legislation. She described developing the master plan and their methodology and process, by questionnaire surveys, zoo visits and the main areas of focus during the visits. They also conducted visitor surveys and regional workshops for zoo directors and others involved with zoo education to share their views.

May Lok gave a presentation on Singapore Zoo facilities as the best classrooms, explaining when and why teachers visit their zoos and what they do for them. She described different trails using English, Maths, and Science in the activity sheets. They use animals to capture students’ attention to learn their mother tongue, such as Tamil, Chinese and Malay. She explained their teacher training programmes, behind the scene tours to kitchen, invertebrate, reptile sections, wildlife health care and research centre, special tours, camps, and partnership with the community in the form of volunteers and outreach programmes.

R. Marimuthu, ZOO, Coimbatore presented on the “Role of Zoo Outreach Organisation in Conservation Education”, briefing about ZOO’s founding and works for the past 25 years and its’ Silver Jubilee this year. He related ZOO’s education activities since inception and it focus on non-charismatic animals such as invertebrates, bats, rodents etc., collaboration with international NGO’s and association with IUCN SSC taxon groups including various training workshops. He briefed on various networks, workshops, training, CAMP and PHVA exercises, and publications, with special emphasis on the education network, SANIZE. He touched on zoo education for practical day to day problems such as vandalism. He explained ZOO’s conservation Action Model, e.g., how ZOO gets accurate information from PHVA and CAMP workshops for use in education materials in a three tiered programme, using Bats as an example. Materials are prepared for three levels of audience - policy makers, layman and students. He reviewed some of the educational materials and educator training programmes. Then he demonstrated the climate change education packet. Evening participants visited the Patna Zoo. They were divided into 4 groups and given an assignment to assess interpretation, visitor amenities, animal enclosures, hygiene and care of animals.

One of the Group looking at the Tiger Enclosure for their assignment on evaluation signages and interpretation
Day 3
A. Manimozhi, Biologist of Arignar Anna Zoo presented on educational activities of his zoo. Afterwards, May Lok instructed on branding and marketing of zoos, e.g., how to build a brand, deliver what it promises, create brand awareness via marketing and their zoo’s marketing strategy using spectacular animal species. Akanksha Mukherjee, Education Officer of MCBT presented their education activities. Meena Nareshwar talked about “Zoos and Outreach Programmes”. In which she explained about in house programmes celebrating environment related events at the zoo.

Marimuthu presented on “Active Learning methods for Conservation Educators” describing active learning method in detail and explain about various active learning methods ZOO used in teacher training programmes - mini drama, role-play, debate, activities related to animal behavior, games etc., He explained in detail about mini dramas and various learning evaluation tools very useful for educators.

Sundaramoorthy of CPR EE Centre, Chennai presented “Role of CPR EE Centre in conservation education with special reference to zoos describing also CPR’s history, mission, the objectives of the environmental education, networking, target audience, training programmes, resource materials and other activities. In the evening participants were taken on ferry ride on the river Ganges.

Day 4
Mr. Riaz Ahmad Khan, Asst. Curator (Education) of National Zoological Park, New Delhi presented his zoo’s education activities. Marimuthu presented “Developing Education Materials on Conservation Education” using ZOO education materials as examples and giving simple tips on how to develop skill in creativity. Meena Nareshwar spoke on “Zoo Signage”, its importance, how it should be displayed, organising information for differ-
ent levels, writing texts for signage. She explained how to design signage with examples from different zoos.

**Sundaramoorthy** presented ‘Strategies for Catering Conservation Education and Developing Educational material’ and Conservation Education on Reptiles in Chennai Snake Park.

**Brij Kishor Gupta, Monitoring and Evaluation Officer of CZA** gave a presentation entitled “Zoos Sustaining Nature”, describing how the plan, design and construction in a zoo can be eco-friendly and sustainable. Zoos can adopt eco-friendly methods in many aspects, e.g. architecture, natural cooling sources, eco-efficient tropical house, passive climate control, eco-landscape, organic pest control, water conservation, zoo wetlands, compost toilets, waterless urinals, alternative energy systems, battery operated vehicles, hydropower, biogas/bio-fuels and wind systems.

**Gargi Verma, ISIS Business System Analyst** of Indian Office introduced the ISIS record keeping system.

**May Lok** presented “Interpretive Planning and Execution” explaining how interpretation should be an integral part of an exhibit and 4-5% cost of exhibit should be allocated for interpretation. She described several interpretative platforms maintaining that the message therein should be only one simple message. She covered how to craft and execute a message and install interpretive boards.

Afternoon, **Marimuthu** created four groups for mini drama session and distributed drama scripts from the Teaching Guide Human Elephant Co-Existence. Participants were given time for preparation and rehearsal. Then each group performed their drama. All the groups carried out their drama in an excellent manner and everybody enjoyed. The participants were given a questionnaire to find out their impressions about the workshop. Afterwards

---

**Zoo Assignment: Animal enclosures, hygiene and upkeep inspection team presents their findings and suggestions**

**Social outings in the evening-Ferry ride on the river Ganges**

**Mini drama preparation: one of the group in action making properties**
they were presented with a course certificate and a nice memento of Ashoka Pillar made of wood. Mr. Khan, Addl. PCCF, Bihar presented these personally at the valedictory.

This was a very comprehensive and professional training. Hats off to CZA, WII and resource persons.

*Mini dramas performance on Human Elephant Co-existence (HECx)*
Resource Persons: Dr. B.C. Choudhury, WII, Dr. Bitapi Sinha, WII, Ms. Meena Nareshwar, CEE, Ahmedabad, Ms. May Lok, Singapore Zoological Gardens, Ms. Gargi Verma, ISIS-India, Dr. Brij Kishor Gupta, CZA, R. Marimuthu, Zoo Outreach Organisation, Coimbatore and Dr. Sundaramoorthy, CPR EE Centre, Chennai.

Participant’s presentation: Akanksha Mukherjee of MCBT, Manimozhi of AAZP & Riaz Ahmad Khan of Delhi Zoo presenting their EE work

Participants with Mr. B.A. Khan, Addl. PCCF & Mr. Abhay Kumar, Director, Sanjay Gandhi Biological Park, Patna

ZOOS’ PRINT, Volume XXV, Number 5, May 2010, (RNI 11:8)