

Newsletter of the Asian Regional Network
of the Association of International Zoo Educators -- ARNIZE

New Members

Ms. Tran Thanh Huong
Education for Nature-Vietnam (ENV)
A14/25 Lang Ha, Ba Dinh, Hanoi,
Vietnam
P.O. Box 222, Hanoi GPO, Vietnam

Mr. Sunarto
Program Head
Gelanggang Samudra Jaya Ancol
Jl. Lodan Timur No.7
Jakarta, Indonesia

Mr. Alexander Ignatious Sajee
General Secretary
We Care Society
H Pocket, 24-A, Maroda Sector
Bhilai 490 006, Chhattisgarh

Mr. Raajkaran Aravind
Member
ZOO WATCH
Harshini, Voltas Lane
Vazhuthacaud
Trivandrum 695 014, Kerala

Mr. G. Kamaraj
Biologist
Guindy National (Childrens) Park
Childrens Park
Rajbhavan
Chennai 600 022, T.N.

Mr. G. Sivagurunathan
Ph.D. Scholar
78, Thumbavanam Street
Kancheepuram 631 501
Tamil Nadu

Dr. T. Kalaichelvan
Zoo Supervisor
Maitri Baag Zoo
Qr. No. 4C, Street – 8
Sector 8, Bhilai 490 008, Chhattisgarh

Ms. Madhuri Ramesh
Student
Madras Crocodile Bank Trust
Post Bag 4, Mamallapuram 603 104

Wild Animal Welfare and Ethics in Zoo Education

Zoological gardens and parks often come under attack by animal welfare and animal rights organizations. Over the long history of zoos in the world, there has been good reason for such criticism but in the last two decades there has been a growing awareness of the need for reform *in* zoos *by* zoos themselves. Zoos all over the world have begun focusing more on the need for better care of animals – not only physical, nutritional and general health care but better care of the animals' emotional well being.

This concern with animal welfare should carry over into zoo education. Zoos should use their unique situation of holding living animals which charm and amaze millions of visitors to create empathy as well as interest in wildlife. Zoos should do this by setting a good example for treatment of animals in their institution and for abiding by both the letter and spirit of wildlife legislation. This includes making sure that visitors themselves do not mistreat animals, particularly when they come to the zoo. Wildlife welfare education in zoos also includes teaching visitors to change their behaviour towards wild (and even other) animals in their community ... to avoid indulging in purchase of animals or their products, to avoid patronizing institutions and projects which survive by a wrongful use of wild animals and to treat all animals kindly.

Behavioural and environmental enrichment have evolved as scientific disciplines just in the last 15 years and now are concerns in all but the most primitive and backward zoos.

The growth and evolution of animal welfare in zoos has gone hand in hand with the evolution of zoos as genuine conservation organizations. Animals which are fit for conservation have to be treated well – physically and psychologically. The importance a zoo gives to conservation can be measured to a great extent by the importance it gives to animal welfare and ethics.

Zoos can use so many of these developments to answer critics and also to educate visitors about how very careful and conscious zoos are today, yet most of them do not. Perhaps zoo personnel are so close to their subject that they get "occupational blindness". They do not even see the opportunities they have to defend themselves against their critics.

The zoo educator can be an immense support to their zoo by developing some of these ideas. Zoo Education is not just zoology or biological diversity or conservation. The zoo educator can help their zoo overcome the threats to its own existence as well as educating the public about the threats to wild animals !



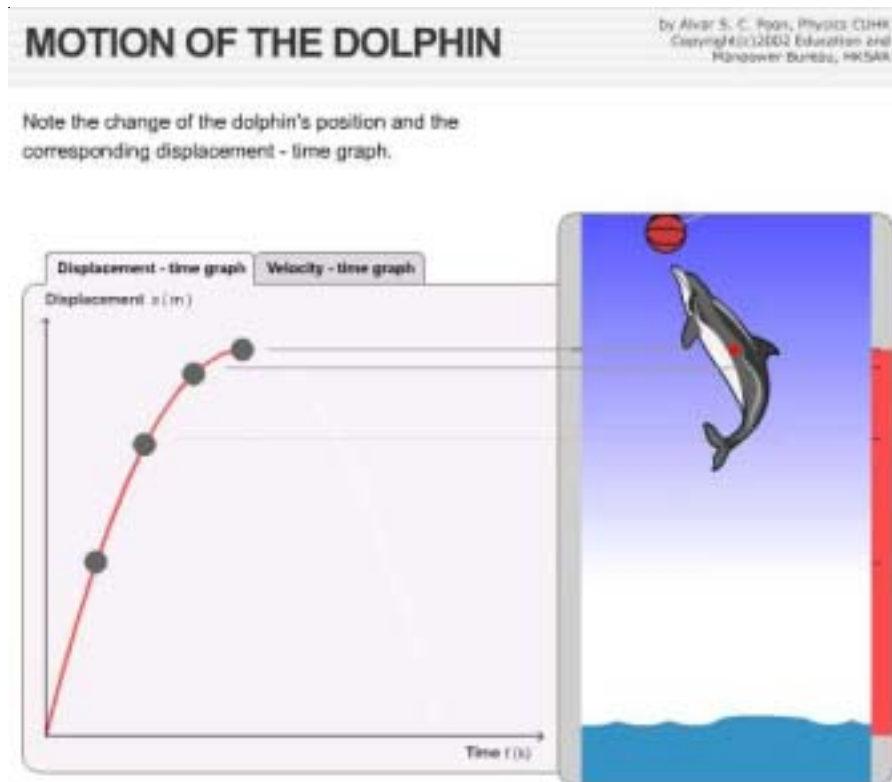
Physics tour at Ocean Park

Shirley Wong*

To many people, other than visiting our lovely animals, the reason for going to Ocean Park is – the roller coaster. But how many of us realize “How does the roller coaster work?”.

Ocean Park's Education Department proudly presents our newly developed physics tour for senior secondary students (Age 15–17) – “Learning Physics in Motion”. This physics programme was jointly organized by Education and Manpower Bureau (EMB), Chinese University of Hong Kong (CUHK), and Ocean Park (OP). A website “Contextual Physics in Ocean Park” was launched in mid 2002. Examples of teaching materials, video, and simulation software for OP mechanical rides are on the web, inviting teachers to use the materials pre- and post- tour. (web-link: <http://www.phy.cuhk.edu.hk/oceanpark/>)

Students will experience our rides, The Dragon (roller coaster) and Abyss Turbo Drop (vertical ascent) to learn the mystery of these thrilling rides. By watching the dolphin show at our Ocean Theatre and videotapes of our Bottle-nose Dolphins and California Sea Lions leaping to reach the suspended ball, students will discover the secret of gravity. There is more



physics on our Cable Car and Ocean Tower, providing a valuable educational experience for students. It will be a lot of fun and provide incentive for students to develop an interest in physics.

* Assistant Education Manager,
Education Department
Ocean Park Corporation, Hong Kong

Wildlife Week at Kamala Nehru Zoo, Ahmedabad

R. K. Sahu*

The Kamala Nehru Zoo celebrated Wildlife Week and allowed children free entry for a week. A total of 2852 children enjoyed their zoo visit during this period. Wildlife Week materials on bat, primate, bear, etc. provided by Z.O.O. were distributed to some of these children. We organized a drawing competition on 2nd October and gave 15 prizes to different categories of children. We also provided a Magic Show for children which was also a great attraction to them. We have given conservation messages through the magician. We are thankful to ZOO for sending a lot of literature, materials, T. shirts etc.

* Zoo Superintendent, Kamla Nehru
Zoological Garden, Kankaria
Ahmedabad 380 008, Gujarat



Children hard at work on their drawing of wildlife in the drawing competition organised by Kamla Nehru Zoo, Ahmedabad. Photo courtesy of the Zoo.



First Teachers Training Workshop at Central Zoo Nepal : Wildlife Conservation and Wildlife Welfare

Geetha Shreshta*

For the first time, the Central Zoo conducted a Teacher's Training Workshop for participants were from different schools with more than half from Kathmandu and others from rural areas. Ms. Sally Walker, Founder of Zoo Outreach Organisation and Asian Regional Representative of I.Z.E. was invited to lead the workshop as primary resource person.

She started the workshop with introductions, asking participants to write down the name of an animal on a piece of paper. The animal should be one they would like to be or which they thought they looked like, or acted like, admired, or otherwise identified with. She introduced herself and called on the next participant, who had to give his name and institution and then guess what animal she was ... and pass it on. This created much amusement as some participants really did look like the animals they selected and were easy to guess. She used the most commonly selected animals to form working groups later, e.g. "tiger group, monkey group, deer group, etc.

Sally Walker gave an introductory presentation on both conservation and welfare and how to use the zoo to teach these concepts. She used a diagram to explain how zoos had evolved to try and do more than just entertain visitors, and even more than just educate them. Instead of simply teaching biological facts, zoos should appeal to visitors' emotions and attempt to change attitudes toward the natural world. She appealed to the teachers, who were all from different schools, to try and arrange to give other teachers in the school a short review of the material covered in this workshop and convey this concept of using education to help people change their attitudes and behaviour.

She also used the Concept Map we learned in the T4T training but in a different way. She introduced the term "animal welfare" as the theme, which was harder than tiger or food, etc. and gave participants 10 minutes.

Sally then gave a 30-minute presentation on Wildlife Welfare which covered the importance of teaching students to be kind to animals as values for later life. The importance of teaching values rather than just information, how to use the zoo to teach wildlife welfare, teaching wildlife welfare in daily life. She also covered dissection or wild animals in class and lab, relating to teachers that there were computer programmes with which they could teach about anatomy. Many teachers were interested in this. She also explained by we should not keep wild animals at home as pets and wild animals in trade from an animal welfare perspective. She explained how bad behaviour in the zoo with children teasing and feeding animals were very destructive to the animals. Teachers made many comments and asked questions.

We gave out packets of small items dealing with Wildlife Welfare and Zoo Behaviour contributed by Zoo Outreach

Organisation and explained how to use the materials in the packets. Both of these packets were funded by the Universities Federation for Animal Welfare or "UFAW", an organisation in the United Kingdom.



Planned exercises were done to demonstrate to teachers how to lead students effectively through rakhi-tying, placard parade, a "teasing animals" drama, Zoo Patrol demonstration and a play on "What to do and what not to do in the zoo".

After lunch, we had participants divide into the groups mentioned earlier and go around the zoo to collect ideas for a project and also to practice asking people to stop teasing and feeding animals using their badge, so they could tell



*Conservation Educator, 138, Baniya Marga, Bijuli Bazar, New Baneshwor, P.Box 20543, Kathmandu, Nepal



their students how to do it. Each group was accompanied by a member of the Central Zoo Education team to answer questions and guide them.

The teachers took the zoo patrol exercise very seriously and could be observed approaching visitors who were teasing animals and asking them to stop. After the zoo visit, they returned and sat in groups to plan a "zoo visit" combining elements of what they had learned. All the groups planned systematic visits and adapted some of the ideas suggested for other topics (!) and they were stimulated and clearly enjoyed the day.



dancing without stepping out. This exercise produced much raucous laughter and fun among teachers and was thought a sure success with kids !

The following day began with a presentation by Sally on Conservation and Biodiversity that focused on the utility of some of the small animals which are understudied and underprotected, using bats as a case study. The main focus was on how useful bats are and how generally people have wrong ideas about bats and try to exterminate them. This was followed by handing out bat packets. Sally had participants put on masks and divided them into fruit bats and insectivorous bats on each side of the room. Using materials, presentation, the bat book and bat brochure, she conducted a dialogue and debate session as to which group of bats were better ! Participants enjoyed this immensely. We ended the exercise by giving each group just a few minutes to come up with a rhyming slogan which they could teach to others and all participants chanted them.

Another exercise related to welfare was conducted which covered the use of sloth bears by mendicants. The exercise was called "Dancing Bears". Participants get partners and stand on a folded out sheet of newsprint. Playing music is best but in absence of music, the leader and observers can clap and chant. We clapped and chanted "bears, bears, bears ..." and about 1/3 participants observed and joined in this as the "orchestra". Pairs of "bears" had to wear their bear masks and get in a dancing pose with hands on shoulders, or holding hands. They should "dance" while clapping and chanting goes on. When the "musicians" stop clapping and chanting the bears should stop dancing and fold the newspaper in half. Then they should continue

Dr. Mukesh Chalise, a primate field biologist, gave a presentation on primates in Nepal. Dr. Ravi Sharma Aryal, an Environmental Lawyer with the Ministry of Law, etc. gave a talk on CITES containing some basic facts about CITES legislation.

Then, we led participants in several tiger exercises, including the 'Tiger Parcel Game'. The teachers were interested in bringing their classes to the zoo and to try some of the things that were taught. We consider the workshop a great success.



One-day Zoo Educator Training Workshop for Indonesian Zoos

Sally Walker*

In March 2001, a two-week South East Asian region course in Zoo Education was conducted at Singapore Zoo, funded by the Ministry of Foreign Affairs, Singapore. Six participants from Indonesia had attended the course, following which they went home to their country and organised a national course for all their zoos. I was fortunate to have been much involved in the Singapore course so I was delighted to be invited to Taman Safari, Bogor to represent the Conservation Breeding Specialist Group (IUCN SSC CBSG) at a meeting and stay another day to conduct a one-day refresher course for 8 zoo educators of Indonesia.

There were all the major zoos in Indonesia, a wonderful turn out. Taman Safari people turned out in good numbers and some zoos sent two people such as Bandung. Two people from the Singapore course attended, from the Taman Mini Bird Park in Jakarta and from Taman Safari itself. Titisari from Ragunan Zoo who I met when I visited Mr. Matani from the first Jersey International Educator Course was there. Others were from new facilities I had not visited. Some I knew from SEAZA, so it was a double pleasure.

First I gave a presentation on education and conservation lecture in which I stopped several times and asked for interaction. They were very shy but I managed to get everyone to speak up by teasing them unmercifully and there were many good questions which led to a good understanding of the lecture. Many participants were not able to understand so much English and my Bahasa is abysmal !

I named several presentations and exercises I had prepared and let them select what we should do in the afternoon. Then I showed the packets that we make in India, distributed what I brought, and explained why we developed them and why they worked in India etc. The rakhi (wrist bracelet) and commitments which went along with it was much appreciated. Due to insufficiency of the same numbers of



Participants wear animal masks and chant a very simple slogan about wildlife trade. Photo courtesy of the Taman Safari, Bogor.

tiger and bat we divided the group into tigers and bats and got them to “demonstrate” things they would do and also a chant about tigers and bats which was much enjoyed.

We spoke a bit about funding agencies for education and I told them about the Teachers for Tigers Training with WCS, and the possibility of organizing a workshop in Indonesia in future and also the international zoo educator course which Tom Naiman and I are trying to resuscitate.

After lunch I gave a presentation suggesting that zoos try and raise some funds to contribute to *in situ* conservation using the EAZA tiger project as a case study. The discussion which followed led to an excellent “recommendation” by the group, that PKBSI (their zoo association) organize and endorse an activity to set out a protocol or guidelines for zoo educators for their 7 flagship species. They also felt the need for ways to answer complaints from visitors who see gorillas etc. on discovery channel and wanted to see only those kinds of animals without being interested in Indonesian animals !

I gave a presentation on how to use CBSG CAMP and PHVA workshop briefing material and reports as resource material for zoo education, using the bat camp as a case study. Their Director, Mr. Jansen Manansang, who initiates and hosts many of the CAMPs and PHVAs in Indonesia had sent across examples of briefing material and reports of several workshops conducted by Taman Safari and CBSG to pass around. Many of the participants among them were familiar with the reports but nobody had utilized them for research or for developing education programmes. This is a resource that is being ignored at great peril by zoo educators almost everywhere in the world.

After my return I sent a batch of material to everyone who attended and made them members of ARNIZE. It was a great reunion and a useful training, for me as well as the participants.

* Founder/Hon. Director, Zoo Outreach Organisation, PB 1683, Coimbatore 641004, Tamil Nadu, India



Karachi Zoo Education

M.M. Qazi*

Karachi Zoo conducted education programmes for school children on 18 September 2003. The children of the "Progressive Children Academy" participated in the programme entitled "Information and awareness about indigenous species" which lasted from 11:30 am to 1:00 pm.

The programme covered information regarding Himalayan Black Bear (*Ursus thibetanus*) which is found in Pakistan. Nearly 100 students were present.

A poster competition and speeches about the Himalayan Black Bear was held by the students.

ADO Zoologist, Mrs. Abida Raees, covered many biological aspects of the Himalayan Black Bear including taxonomy, physiology, breeding, feeding, care management, threats and conservation. The children showed deep interest in the lecture.



Karachi Zoo painting competition,
Photo courtesy Karachi Zoo



Feed ingredients comprising of fruits, milk, bread, fruit ice block were served to the Black Bear in the presence of students and they were much fascinated.

The competitions were judged and prizes given to students. On the very next day the print media gave wide coverage to the event

In continuation of this series of educational programme, Karachi Zoo also conducted a poster competition and informative lecture on the Python. This programme was attended by the students of Sir Syed Secondary School Gulshan-e-Maymar, Karachi. The children were briefed about the python: its physiology, behaviour, morphology, feeding habitats, commerce and conservation. The children were also told about the causes of their extinction. A Python was fed in front of the children to show them its feeding mechanism and how they capture their prey.

*Director, Karachi Zoo, Nishtar Road, Karachi 3, Pakistan



Bat Biologists use Bat Clubs and Bat Education Kits to make Kids “Bats about Bats”

Dr. C. Srinivasulu and his wife, Bhargavi Srinivasulu, both lecturers and field biologists of the Wildlife Biology Section, Department of Zoology at Osmania University, Hyderabad, A.P. have adopted two schools to educate children about nature conservation in general and lesser known fauna (particularly bats).

Srinivasulu and Bhargavi conducted bat conservation education programmes targeting school children on 3 occasions, under graduate students on 1 occasion and post graduate students on 4 occasions. Collaborating with Andhra Pradesh State Forest Department, they conducted a celebration for Vanya Prani Samstah. They delivered lectures and conducted awareness games for two days targeting school children from four schools

The Srinivasulus advised municipal corporation authorities about role of insectivorous bats in controlling insects, especially mosquitoes, in urban areas to prevent the bats from being destroyed in future.

They also conducted a study on the effects of illumination in Borra Cave and while there, they conducted a conservation education programme targeting tourists visiting the cave.



“Kids” of all ages and in all levels of school enjoyed wearing the bat masks distributed by the Srinivasulus. Photo by one of the Srinivasulus.

Zoo Education at National Zoo, Sri Lanka

Hant Perera*

Our educational activities are increasing day by day. To assist us, we have an educational center with library and auditorium with audio - visual facilities. In this centre, our education officer conducts commentaries on various animals such as reptiles, elephants, primates etc. on selected days at the location of the particular animal's enclosures and at the elephant arena.

We also publish a zoo magazine, leaflet and brochures relevant to the informal education. Our education department is also responsible for the design and maintenance of name boards, descriptive labels and signature boards etc. at the Zoo. Our EO takes part in outside exhibitions with a mobile exhibition unit and provides lectures at the exhibition site on request.

We conduct lectures to school groups on request and Zoo employees on thursday. Visiting lecturers from the city - universities, institutes, forest department, etc. are invited to speak. We provide a student guide from one of the universities on request to the public as well as school groups; the guide conducts the lectures for the employees on various subjects also. Distribution of various educational articles, stickers, publications, etc. is done through the sales center.

We also assist school groups and University Groups to carry out their projects and research work. We help other government and private organizations and institutions in the country to arrange training programmes on wildlife, environment, bio diversity, etc.

* Director, Department of National Zoological Gardens, Sri Lanka



Wildlife Week organised in Kanpur Zoological Park

Pratibha Singh*

Every year, Wildlife Week is celebrated from 1-7 October in Kanpur Zoo. The idea is to inculcate a feeling of affection and care towards wild animals in young children. This year about 30 schools participated in the programme.

On the first day of Wildlife Week, inauguration was conducted by Shri. Ashwini Kumar, Conservator of Forests, Forest Research Institute. Sports activities like frog race, sack race, were organised on this day in which 153 students of 14 schools participated. In addition, a mehandi competition was also organised. 30 children won prizes in these competitions.

On the second day, a wildlife quiz competition was organised. A total of 28 teams (84 participants) took part; 30 children were prize-winners in different categories.

On the third day, a debate was organised; 62 students of 15 schools took part on a variety of topics: Class 1-4 Our behaviour towards wild animals? Class 5-8 Will zoological parks be needed in the future? Class 9-12 Is wildlife conservation necessary? A total of 11 children won prizes in all categories.

On the fourth day, a drawing and colouring competition was organised on these topics: Class 1-4 My favourite wild animal; Class 5-8 Do not tease wild animals; Class 9-12 A scene of Kanpur Zoo. About 18 schools participated enthusiastically, with a total of 160 participants; 13 children won prizes.

On the fifth day, an essay writing competition was organised in which 83 students participated on the topics : Class 1-4 A visit to Kanpur Zoo; Class 5-8 Pride of India-Indian Tiger; Class 9-12 History of wildlife conservation in India. About 10 students won prizes in various categories.

The sixth day was the cultural day of Wildlife Week. About 380 students of 18 schools participated in the various programmes like group song, group dance, mono-acting and mimicry. All themes were on wildlife and no movie songs were played.

On the seventh day, prizes were distributed by Shrimati Anita Bhatnagar Jain, IAS, Chairman, U.P. Small Scale Industries,. About 320 prizes were given in various categories. A total of 30 schools participated in the week long celebrations. The



school which won maximum prizes was awarded. The 1st prize was won by Campus School IIT. It scored the maximum points, second was children care school followed by Bright Angels School.

Press coverage was very extensive. The Press even did a special feature on the packet items we collected from Zoo Outreach Organisation to give away.

At the Bronx Zoo

Payal Bhojwani*

I started the Go Wild Workshops because I felt there was a need for Zoo Education in India and wildlife education in schools. I had a vision that one day I would open a centre for kids and families to come and learn about wildlife and meet people who are doing their utmost to conserve the living world.

The only person I knew of in India who was doing work in Zoo Education was Sally Walker. It took three years of emailing before I finally got a chance to leave my job and travel 3000kms to meet her, and since then there has been no looking back. The world of wildlife education that Sally opened for me left me breathless – and I knew that this was just the tip of the iceberg. I could hardly wait to see just how big the iceberg got.

It began with the 'Teachers for Tigers' workshops. Hosted by the Zoo Outreach Organisation in collaboration with the Wildlife Conservation Society, these workshops are designed to train teachers about tigers, and more importantly, train them in teaching tools and techniques.

There were three key elements that made a great impression on me at the workshop – the first was the systematic organization of the workshops done by Sally Walker and her staff from Zoo Outreach Organisation. The second was the clarity of teaching and the smooth interaction between the two resource persons from the Wildlife Conservation Society -- Tom Naiman (Director Curriculum Development and International Education programmes) and Nalini Mohan (International Teacher Trainer), and finally the curriculum itself - the Habitat Ecology Learning Program (HELP) and Teachers for Tigers manuals that have been developed by WCS. They were extensive and in-depth and yet simple and adaptable for almost any audience. Sally and Tom then recommended me for the C.V. Starr Fellowship Programme to be trained at the Bronx Zoo with the Wildlife Conservation Society's education department.



In the weeks that I was in New York (28th May – 14th June 2003), I was given a wide overview of the management, development and dynamics of running a unique education system. The iceberg was getting larger.

The Education Department

When I first entered the Bronx Zoo I was amazed at its size and the architectural beauty of its old buildings dating back to the early 1900s, amidst lush greenery. The education department is housed in one of the old buildings that was previously used as a museum, aptly named 'Heads and Horns'. My initial days were spent in meeting people related to education, starting with the board meeting on the first day with Annette Berkovitz, Senior Vice President, Education.

The Bronx Zoo's education department is broadly divided into three categories -- the international, national and local programmes. All the educational programmes, and the exhibits promote the use of inquiry, observation and investigation to guide people through an exploration of animals and the world around them. Each programme took



years to develop, with inputs from scientists, educators and field biologists. That is what makes it unique. Rather than trying to recreate an education system, the curricula work in tandem with the schoolbooks and the school system.

A simple example is that of the touch table outside the reptile house at the Bronx Zoo. Manned by the Friends of the Zoo Volunteers, the articles on display were things like snakeskin, turtle and snake skulls, crocodile tooth and even different stages of a tadpole. Kids would gather around and touch and feel and ask millions of questions. Even parents and teachers stopped to show their kids the items. A simple technique like this, easily adaptable in any zoo, forms a firm correlation between what is at the table and what they are to see in the reptile house. It also gives children an opportunity to better understand animal anatomy or behaviour. It was charming to watch the

*Educator, Go Wild Workshops, 16, Subrato Park, Western Air Command, New Delhi 110010



volunteers interact with the kids. The children amidst exclamations of disgust and wonder would finger the snake egg getting completely engrossed in the topic at hand.

Another was the 'Mystery Boxes'. In this game-based activity done in the classroom, the participants were given normal plastic boxes in which were 5 or 6 items. They had to find the connection between each item and what it denoted. One such box had a bullet, some money, an exotic food menu card, a shark's fin and a photograph of a man wearing a leopard skin coat. The children rummaged through the box for 10 minutes. They realised that it was dealing with poaching and killing of animals for their body parts and meat. This instigated discussions about such practices and the need for conservation. All these methods are so easily and inexpensively adaptable in any teaching situation.



Pablo Python looks at animals

I got my first experience of a local extension programme with the curriculum titled 'Pablo Python looks at Animals' at a public school in the heart of China Town. Most of the students in this school are from the ethnic minority of New York, immigrants, and the less privileged.

Using a videocassette with a puppet animated python called Pablo, the instructor described very simple concepts of sound, colour, shape, texture, height etc. The appeal of Pablo and the simplicity of the game-based activities, according to me, made it an ideal teaching tool. I couldn't wait to try them out at my own workshops in India.

Central Park Zoo

I visited the Central Park Zoo, run by WCS. Using theatre, puppets and professional actors, the Zoo has created a whole new method of teaching wildlife. I saw 3- and 4-year olds completely captivated by the bird puppet who sang about migration and the loss of watering holes along the way.

The Tour

I saw the Bronx Zoo in bits and parts – its so big and there is so much to take in that even though I saw some places twice I could go back each time and find something new

and awe-inspiring. Take for example the bear enclosures. The path around the bear enclosures wind around with patches of clear view where one can easily see the bears – in some places the green thicket give a sense of walking through a wooded area and then one can spot the bears again.

The next time I visited the bear exhibit I noticed the terrain within the bear enclosure. The landscaping is designed to cater to the rocky yet wooded areas like that of bears found in the wild. The keepers also hide some food in logs and among the rocks giving the bears an opportunity to explore with an incentive. This not just enrichment for the bears but also for the visitors who can see a bear foraging and active.

The two most magnificent exhibits and yet very different from each other were Congo World and Tiger Mountain. The Congo World had a separate entry fee with the Gorillas as the main attraction. A lot of artefacts and models give information to the visitor. From the Okapi enclosure, when one walks into a fallen down log, the whole atmosphere and temperature changes. Inside are various animals found in the Congo basin. It has pictures on conservation efforts due to poaching and deforestation.

Tiger Mountain opened this year has a lot more computer based information systems. The tigers are behind a glass wall that provided the visitor with an unhindered view of the creature. There are touch screens about the tigers and conservation efforts, and screens with videos playing about tigers in different parts of the world.

There is also a life-size poachers truck called "Evil Inc". Loudspeakers that roar when you put coins in them and even a camera trap that takes pictures as people walked past and intersect the beam. This was a great hit with the kids. As one leaves tiger mountain, there is an option to fill in an email address to keep getting updates about tigers and WCS research. This is interesting as it provides a continuous feedback between the visitors and the Zoo.

Project T.R.I.P.S

TRIPS is an anagram for 'Teaching Revitalized through Informal Programmes in Science'. Initiated by the Bronx Zoo and funded by the National Science Foundation, this was a 5-day teaching-aid course in life sciences while integrating teachers, zoo educators and school administrators. In the US and I think to some extent here in India, there is a realisation that science in schools can use zoos, botanical gardens, aquariums and museums, called ISI's (Informal Science Institutions), to teach more effectively. TRIPS brought together ISI educators, teachers and school administrators from across the country who undertake the course as a team.

Our first introductions over, we were grouped and given questions about the Bronx Zoo for which we had to go out and seek answers. The beauty of this technique was that it not only allowed us all to explore the Zoo but forced us to concentrate on little details to find the answer to our questions.



What was apparent within the first day were the similarities in the challenges faced by teachers in the US and our teachers (especially small town and rural teachers) here in India — from accepting the idea of an informal institute being used as an educative tool to finding substitute teachers, transport, funding, and of course making the field trip most effective for the kids.

Novel methods of teaching

Some of the activities that we did like the ice balloon and photosynthesis bingo were some of the most ingenious methods of teaching I have ever been exposed to. We were given balloons that had been filled with water and frozen. For 15 minutes we were instructed to do whatever we wanted to the balloon but to keep writing our queries. As investigation and questioning lies at the heart of scientific work.

The task was fun – putting it into water, putting salt or food colouring on it, hammering it and so on. At the end it demonstrated how kids could be motivated to investigate and come up with solutions themselves through selective questioning and action.

The hands-on method of learning was also very effective. Patti Anderson a participant and a guest speaker used the plants and fungi found in the Jungle World exhibit to teach about rainforest adaptations and diversity.

Terri Stern from the Peabody Museum brought specimens that could be handled by the participants. Using these exhibits such as bird study skins we could fill in taxon data sheets and create hypothetical analogies as to the habitat and behaviour of each animal. She uses this method at the natural history museum and even takes such carts to schools. With a Bio-Action manual that had simple rules on how to handle the bird skins

Practical Solutions

Over the 5 days we were taught several ways of teaching science and life sciences using curricula called Voyage from the Sun and H.E.L.P. At each stage educators were asked whether they could and would implement these techniques within the standards set. The ISI representatives gave their inputs as to how their institutes



could enhance the learning process and the school administrators discussed methods of implementation vis-à-vis transport, school schedules and funding.

Coming home

On my last day at the Bronx Zoo, Ann Robinson (Director, National Programmes) introduced us to one of the most enchanting parts of the Zoo - the Children's Zoo. Divided into zones, according to habitats, each area flows into the next seamlessly. We entered at the nesting site of water birds, which could be viewed while sitting in a man-made nest. There were tunnels through which the prairie dogs could be viewed. At the turtle exhibit, artificial shells lay vacant for kids to crawl into, and ears for kids to be deer. Simple colourful signages and pointers gave just the right amount of information.

Leaving the Bronx Zoo was heart wrenching – I was going to miss the place, the people and the animals I had come to know, but I was also fuelled with the potential of all that I had seen, heard and done and I was ready to come back to India to try it all out.

(Since coming back to India I have conducted two workshops using some of the techniques and curricula I acquired at the Bronx Zoo. We took children to the National Zoo and, with the education department and material from Zoo Outreach Organisation, used the Zoo to initiate the basics of geography and science.

At the Pelican pond, they filled in behaviour data sheets that generated a multitude of questions. Creating my own mystery boxes and touch tables on Indian animals, the kids for the first time touched a claw of a crab and felt the skin of a snake .

It all worked. The attitudinal change in the kids was perceptible. I could duplicate what I had learnt at the Bronx Zoo here in India with support of the Zoo).



Sakkarbaug Zoo Awareness Activities through the year

R.D. Katara*

Sakkarbaug zoo is a specialized zoo concentrating on local fauna typical of the Gir and Western India. The zoo has successfully bred *Asiatic Lion*, *Indian Wolf*, *Four-horned Antelope*, *Bengal Tiger*, *Chinkara*, *Manipur Brow-antlered Deer* and many other species of wild fauna in captivity.

Sakkarbaug zoo is deeply involved with the promotion of conservation education using nature education camps for school children, snake demonstrations and celebration of special events such as Wildlife Week, World Forestry Day, World Environment Day, Animal Welfare Fortnightly etc., with a variety of programmes and competitions. The zoo is also associated with special training to students of veterinary colleges, veterinarians from the field, students from forestry colleges, employees of forest department etc.

Objectives of Sakkarbaug Zoo education programme

- To create awareness to students about environment and its importance
- To create awareness to people about environment and its importance through educating the students.
- To provide knowledge about importance of wild fauna and flora to maintain balance ecology and ecosystem.
- To create sympathy and importance towards wild animals
- To educate the students about role of the zoo in environmental education

Environmental Education

One of the objectives of the zoo is to educate about environment and nature and also to create awareness and sympathy on wild animals and teach the importance of wildlife in maintaining the ecological balance and environment through organizing the following activities.

(a) Nature Education Camps

In order to encourage curiosity and affection towards nature and wildlife among youngsters, Sakkarbaug Zoo organizes nature education camps at the zoo premises for high school level students. During a 2-nights and 3-days stay at camp, the students go trekking in Girnar Hills, during which they learn about wildlife, enjoy nature, interact with one another and exchange experiences. Camps organized this year at government cost were 36 in number covering 89 schools and 2047 individual participants.

(b) Wildlife Week Celebration

Sakkarbaug Zoo organized various competitions related to wildlife, environment and ecosystem among students of different ages for Wildlife Week and other events. Competitions for drawing, quiz or debate competition with wildlife themes were organized during the year. Drawing competitions covered 84 schools and 151 participants and debates 58 participants. Essay competitions covered 66 schools and 151 participants. The snake show, which was open for all visitors, drew 3,795.

(c) World Environment Day Celebration

The importance of environment and ecology was communicated to literate people N.G.Os and students as Sakkarbaug zoo celebrated World Environment Day on 5th June. Every year the zoo organises plantation, workshop or seminar on environment.

(d) Natural History Museum

To satisfy the curiosity and encourage interest and enthusiasm among students on habitat, behaviour and physiology of wildlife, Sakkarbaug zoo has established a Natural History Museum displaying various skulls, claws, pug marks, skull, antlers, horn, birds eggs and other biological material.

Source of Materials and Literature

Food Department, Gujarat State and Zoo Outreach Organization and the Asian Regional Network of International Zoo Educators of Coimbatore provided the required materials and literature free of cost to distribute among participants for education activity. These materials were sponsored by international institutions such as the Universities Federation for Animal Welfare, Alertis of the Netherlands, Flora and Fauna International, Bat Conservation International, Chester Zoo, Columbus Zoo and other zoos of three continents which exhibit primates, The materials and literatures have been proved useful to encourage the interest toward environment activity.



Students being taught about environmental Activity during Nature education Camp at Sakkarbaugh Zoo, Junagadh



Students see difference between deer and antelope at Nature Education Camp at Sakkarbaugh Zoo, Junagadh

* Zoo Officer, Sakkarbaug Zoo, Outside Majejadi Gate, Junagadh-362 003, Gujarat



Kathmandu, Nepal -- T4T techniques adapted for use in Winter Day Camp programme in Central Zoo

Geetha Shreshta *

After returning from a zoo educator training workshop held in Chennai by Arignar Anna Zoo, Zoo Outreach Organisation and Wildlife Conservation Society, I was really looking forward to use the Tiger Tool Kits with our students and I got a chance soon. We had a 'Winter Day Camp' at the Central Zoo from 5 to 7 March 2003 with 35 students from class 6 to 10 participating in the program.

During the three days of the workshop, the first day was focused on Tiger activities using tool kits and the "Teachers for Tigers" training manual. First brain storm and tiger pre concept map was done as directed in the Manual. After collecting the first concept map, tiger packets entitled "Tiger Tool Kit" were distributed and participants took turns reading out some of the points in the booklet; we translated it into Nepali language.

After that a 15 minutes video film about tiger "Land of the Tiger" in which all general behavior of tiger was shown which helped participants to understand the plight of tiger.

We played a 'Tiger Parcel Game' designed by CE section of Central Zoo but utilized the tool kit to play this game. All participants wore tiger mask and tiger friendship band while playing the tiger parcel game which made the game even more fun.

How to run the tiger parcel game

-- Put all general information about tiger in a box, one information/sentence in one card (all together 25 to 30 tiger facts).

-- Make a circle of 30 to 35 students.

-- Pass the information box along with the music/bell, and when the music stops, just stop passing the box and the person who has hold the box should take out a information card and read it aloud.

-- After reading the sentence he has to



Central Zoo Staff coordinate "passing the information box"

hang the card at his neck and the music starts again and same process continues until the last card. Whoever picks up the last card is the winner of the game. We claim that the winner has great contribution in tiger conservation, so is given much respect and a prize.

Among the information cards some cards with the message like "you are out" and "have a gift" is also included to make the message more entertaining. When a participant picks up the message such as 'you are out' we explain he was a hunter so he is out from the tiger conservation circle; this leads to much good-natured derision.

When a participant picks up the card 'have a gift' we say he has helped to conserve the tiger so he is being honoured with a gift. Even teachers become excited with the anticipation of being thrown out or getting a prize.

The tiger mask and tiger friendship band made the game more interesting and enthusiastic.

After the game all the participants held up the small placard from the Tiger Tool Kit and shouted "SAVE THE TIGER" while walking around the ground.

At the end of tiger program, another concept map was done. We found tremendous change in pre and post concept map results and we were satisfied with what the participants learned.

We found the method of pre- and post-concept maps very easy, effective and a quick method of evaluation.



Tying tiger rakhi's

*Conservation Educator, 138, Baniya Marga, Bijuli Bazar, New Baneshwor, P. Box 20543, Kathmandu, Nepal
Email: <rabigeeta@hotmail.com>



Activities at the Children's Resource Centre at CEE Tirupur Field Office

B.G. Mridula*



The Children's Resource Centre at CEE Tirupur Field Office has been conducting activities for school children. A two day workshop titled "Students for Tigers" was conducted on 12th and 13th of July with 22 students from 4 schools attending. The age group was from 14-16 years.

The writer conducted the workshop as primary resource person with Patrick David, Project Associate CEE. The writer had attended the workshop "Teachers for Tigers" organised by Zoo Outreach Organisation (ZOO), Chennai in February. The workshop and a manual, "Teachers for Tigers" was designed by Dr. Tom Naiman and Nalini Mohan of the Education Department Wildlife Conservation Society (WCS) New York, who also served as resource persons.

The activities were divided for two days as shield making, concept maps, attitude assessment, content survey, mini dramas and tiger ranges on the first day and on the following day, tiger timeline, role-play, feeding ecology of tigers, censusing, resource roundup and evaluation activities. Zoo Outreach Organisation sent tiger toolkit packets consisting of a raki, flash card, tiger sticker, tiger mask and booklet on tigers, all designed with graphics from the WCS Manual, and these were distributed to the students.

The students came through well. They had an enthusiastic attitude and were jumping with questions on the sessions conducted. They were asked to make shields by drawing an animal or plant that they thought represented them and their hobbies. Many participants selected butterfly or lotus, fish, frog, elephant and others. One chose *Ascaris* as it could not be destroyed so easily, represented her aims.

Concept maps were introduced to the participants to assemble information of the given topic and the inter-links it made. The maps helped participants reinforce what they learnt about tigers in introduction as they put that into the

map. Attitude assessment and Content survey were used to learn how much the students knew about tigers.

The students then were divided into groups giving them colour codes and asking them to name the plant or animal that had the colours they were assigned. The groups were tiger, zebra, parrot, and lantana. "Mini-dramas" exposed the talents of these students. They were asked to perform dramas on hunting, parental care and poaching topics. The script was from the manual and students performed well using mimicry and enacted different animals with ease. They brought some sticks, threads and props to make the sets attractive. They commented that they could learn things better if material was always to be taught in this manner.

"Tiger Ranges" activity was a jigsaw puzzle wherein groups were asked to make complete maps and answer questions after the maps were assembled. They were to list out the current and historic ranges of tigers and the habitats they inhabit. They listed out 25 countries (historic range), 12 (current range) and different habitats. They found some Russian Commonwealth names difficult to pronounce but enjoyed the whole act of assembling to listing.

"Tiger timeline" focused on the important dates in tiger history. An exhibition was done. Each student was given a date and a text that tells the student what happened in that year for the tigers around the world. They were asked to write the date and text and draw what best summarised the text. Each had a unique way to do the activity and all felt that learning history could be made fun.

In "role-play", students were assigned roles of advertisers, farmers, songwriters, newspaper reporters and politicians. Each was to come up with measures to conserve tigers. Tiger Biscuits, a petition to Government, composing a song on tigers, reporting the recent killing of men by tiger and establishment of education centres to create awareness and education were what the students came up with.

Enacting the petition by farmers, political policy formation, reporting and others brought much amusement for the way it was performed.

"Feeding ecology" explored the feeding of tigers and the prey base required for its survival. Maths was difficult but they enjoyed doing it because of the way it was presented. "Censusing tigers" explored the scientific methods: pugmarks, camera traps and radio collaring used around the world to count tiger numbers. They all wondered whether they could also participate in such exercises and felt sad when they learnt that they could not immediately become a field biologist. They were happy that they had learnt about this kind of counting and would tell their friends.

"Resource round-up" explored the reasons for the threatened status of the animals and also helped students understand that only with proper resource management, animals could survive and that the current trend of growing population and greed of humans are depleting the resources at a very fast rate. An evaluation to check how much the students had grasped was done at the end. They were asked to make the concept maps and go through the content survey. This helped us to understand how much the students had understood. It was refreshing to know that they had better knowledge than before the workshop, and had put it in the maps.

When asked which activities they liked most they said: "Mini Dramas", "Tiger Ranges", "Role-play", "Censusing tigers" and "Resource round-up". This is a good sign that the students are taking interest in conservation and this method of teaching has been able to give them more information than theoretical or didactic learning. The successful completion of this 2-day workshop gave us much satisfaction as the students wanted the activities to last for 5 days.

*CEE Tamil Nadu, Centre for Environmental Education, Tamil Nadu State Office, Avinashi Road, Coimbatore. Email: ceetamilnadu@ceeindia.org



BNHS Mumbai conducts WL Education Camps at Conservation Ed Centre

Amit Chavan



Concept map exercise. Photos by Amit Chavan.

Amit Chavan was a participant in the Teachers for Tigers training workshops organised by ZOO and WCS with funding from Starr Foundation and US Fish and Wildlife Service. Amit recently coordinated a series of Wildlife Exploration Camps using the Teachers for Tigers Manual and How Nature Works book. Some of the activities are reviewed and illustrated in this report.

Camp: Wildlife Exploration Camp, at Conservation Education Centre, BNHS, Goregaon
Dates : 1-5 June 2003, Main Theme: Wild Mumbai (Forest, Mangrove, Shoreline Habitat)

Activities on June 1, 2003

Concept Mapping: On the first day after introduction, the participants were asked to note down everything whatever they knew about the main theme "Wild Mumbai". The same charts were given to the participants on the last day and they found that the entire chart paper was not sufficient for their lists.

Comments: The activity turned out to be very good, result oriented as it shows the results immediately, not only to the instructors but also to the participants themselves.

How Nature Works: Elements of Survival: The students were divided in smaller groups and each of the groups was assigned a living thing. The groups selected some of the natural elements required for the assigned living creature from the list of physical, biological elements displayed on the board. The groups were asked to make a list of both

required as well as not required elements. Each group was led by one representative who justified the groups' decisions when questioned by other groups.

Addition to the exercise: The groups were then asked to list the elements for their own (human) survival and all of them pounced on all the elements immediately. At this time they were given to understand how selfish man is and also that we have no right to decide for the animals' needs. They were given an introduction of the concept of habitat and how creatures are adapted for their habitat.

Comment: The activity is very good to induce a discussion among the participants, but it should also be moderated by one of the instructors, so that there won't be any fights for the natural elements among the living creatures (participants). Because of all these things the participants understand many more concepts as they experience themselves how difficult it is to find and obtain these elements.

Definitions: In continuation with the discussion on habitats, ecology, adaptations the participants were made to read and understand the definitions.

Adept adaptation: Finger Challenge: Participants were asked to find partners and sit facing each other. All the pairs were given small stones/marbles/seeds. They were asked to refer to the Finger Challenge. Work sheet in their activity booklet. On this worksheet participants wrote all the

* Educational Assistant, Conservation Education Centre, Bombay Natural History Society, Mumbai.



possible finger combinations and selected 3 out of it. They were asked to count the successful passes within one minute. Referring to all the results a graph was plotted. A discussion revealed the importance of adaptation in an animal's life.

Comment: Very good activity to experience and understand the significance of any adaptation in an animal's life.

Addition: Just to demonstrate how human is dependent on his eyesight (an adaptation), one of the participants was asked to travel five times on stage from one end to the other. He was asked to cover the same distance only once but with closed eyes. His movements revealed other participants what it meant to be 'GOING BLIND'. It helped participants to better understand creatures which have developed adaptations for a particular habitat.

These activities were conducted on the first day and helped in orienting the participants towards various concepts of 'How Nature Works'.

Food web scramble: Each group of the participants was provided with a food web scramble sheet, which they solved and learnt various terms used in ecology.

Addition: Oh deer nature game: Once they had understood the terminology, they were assigned the jobs of Herbivores, Carnivores etc. or elements like water, shelter etc. In the first round the deers had to find for food, water, shelter. Tigers were then added to the ecosystem, which caught deer. With few more rounds it was demonstrated how nature balances the population of each living creature. In the last round when human was introduced the ecosystem lost its balance, and participants understood the concept of food chain, food web and its balance.

Food web: Participants were given chart papers and photocopies of the food web and elements. The students learnt the role of each elements by the text at the back of each element, and prepared charts to show food web.

Addition: Instead of asking participants to only write down names and complete food web, they enjoyed learning food web by drawing, painting, cutting and pasting.

Comment: It turned out to be a very good activity with this alteration.

Census techniques: The participants visited core areas of the Sanjay Gandhi National Park and observed wildlife in its natural surroundings. Census techniques with help of displays in the tiger orientation centre and also tiger manual were explained.

Stalking: The participants were divided in groups such as deers and tigers. The tigers were asked to kill the deers very patiently.

Addition: In the first round the deers were allowed to look behind for tigers only 5 times. One of the 3 tigers could catch one deer successfully. In the next round there was no limitation on the deers to see tigers and there was limitation on tigers that they should catch a deer within one minute. None of the tigers could catch a single deer. They were made to understand that in nature tigers cannot tell deers that do not look here.

Comment: Children enjoyed this game a lot.

The last day of the camp was June 5 (World Environment Day) and was dedicated to our National Animal TIGER. Participants prepared an exhibition named 'Tiger Time line'

to celebrate World Environment Day.

Tiger Time Line: 30 Events from the tiger time line list in the manual were selected and made into different cards. The participants were provided with chart papers and sketch pens and asked to interpret the message on the card. Reference material such as photocopies of tiger range maps etc. were provided to them.

Comment: Participants designed a wonderful Exhibition which told the story of the TIGER right from the 1700's to 2003. It was wonderful to see the skills of children.

Membership Camp: BNHS had organized a camp for its members in the Bhimashankar Wildlife Sanctuary. About 25 members enjoyed the eye opener 'elements of survival' as well as Finger Challenge. The activities worked as well with the adults as with kids.

Nisarga Shodh: Nehru Centre, Worli organized Nisarga Shodh Workshop for 60 students of different age groups. In the last 3 workshops we opened the workshop with "Elements of Survival" which clarified many concepts and then



Tiger Time line. Photo by Amit Chavan



Pugmarks. Photo by Amit Chavan

proceeded to next activities. The feedback (about these 3 workshops) from students, teachers and the organizers was excellent.

Internal BNHS CEC workshop: I conducted many of the activities in the internal workshop held for the CEC staff, in which my colleagues were explained the same activities so that they also conduct the activities in the events designed by them.



Headmasters for Tigers at Periyar Tiger Reserve

Gigi K. Joseph*

Teachers for Tigers workshop organized jointly by Periyar Tiger Reserve, Zoo Outreach Organization and Wildlife Conservation Society at Thekkady between 25th to 27th June 2003 was a great event in the history of environmental education activities of the Reserve. A group of 34 teachers from three neighboring districts of the Reserve actively participated in the workshop. The teachers who attended the workshop motivated their headmasters to experience the essence of Teachers for Tigers at Periyar. The idea materialized between 7th and 8th August 2003 in Periyar Tiger Reserve and named as 'Headmasters for Tigers.'

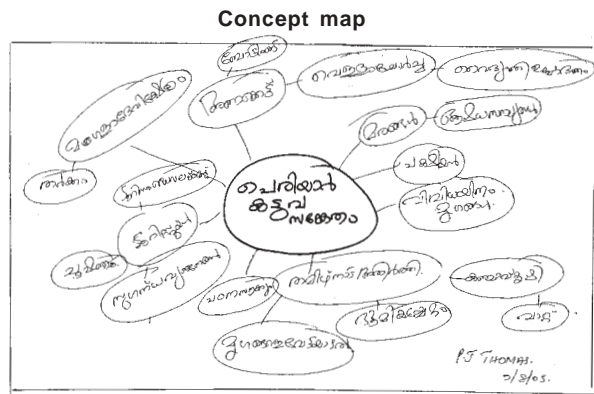
The workshop was inaugurated by Sri. S. Gopalakrishnan IFS, Deputy Director, Periyar Tiger Reserve and the inaugural meeting was presided over by Mr. Tomy Koothrappallil, Assistant Education Officer, Kattappana Education District. Mr. S. Sivadas, Assistant Field Director and Dr. Gigi K. Joseph, Extension Education Officer, Periyar Tiger Reserve (both are interim trainees of Teachers for Tigers Workshop) were the trainers of the workshop. A total of thirty three headmasters of Kattappana Education District participated in the programme. Tiger tool kit, techniques for knowing and loving the World's Greatest cat, prepared by Zoo Outreach Organization, Coimbatore was given to all the participants. The materials in the tiger tool kit provided knowledge and occasions of fun among the participants. Different techniques of Teachers of Tigers Workshop like 'shield preparation' for self introduction, 'concept map' for evaluation mini dramas etc. were practiced. The participants also enjoyed jungle trekking and interpretive boat cruise through Periyar lake. Analyzing the feedback and evaluation of the participants, it was very clear that the workshop was much useful to create conservation awareness and motivation among the headmasters. They assured that they would take further steps for spreading the idea conserving the tiger and its habitat among thousands of students.



Group photograph



Inaugural session



*Extension Education Officer, Periyar Tiger Reserve, Thekkady, Kerala



National Zoo hosts Go Wild Workshops about Tigers

Payal Bhojwani*

Forty girls with an age group ranging from 10 – 16 years joined the Go Wild Workshops Crew at the National Zoological Park, New Delhi on the 28th of April to learn about tigers. This was the first workshop run by the two participants from the 'Teachers for Tigers' workshops conducted by ZOO and WCS held at Chennai in February 2003.

Dr. Khan, an education officer first addressed the girls giving them the basic history of the Zoo since its inception. He explained the purpose of zoos from research and conservation to education.

He said that they were indeed privileged to have such an opportunity to learn about so magnificent a creature like the tiger and be able to see it up close.

He hoped that they would go back home and tell their friends and family about what they learn here thereby becoming ambassadors for the tiger. The tiger packets designed and produced by Zoo Outreach Organisation were distributed to each child. Each packet had stickers, masks, tiger rakhi, a tiger booklet and a tiger placard.

The children were then taken for a small round of the Zoo before reaching the tiger enclosures to acquaint them with some of the animals. At the tiger enclosure, Dr. Manoj began with the history of the animal they were looking at – Zoo born and bred. He then got the children to notice the anatomy of the tiger. The way it walks, its teeth – he requested the kids to look at each other's teeth and compare them. This reduced them to giggles, but generated a discussion about their house cats and how sharp and pointed their teeth were. He also showed them the use of the tail. The kids were curious about white tigers and whether they were albinos or was it because of the genes. The children then played a game that demonstrated predator versus prey. The prey wore the masks provided in the tiger packets and the tigers the tiger mask.



Shika Nalin, Education Officer at National Zoo interacts with participants.



Pledging to protect tigers at National Zoo.



A tiger stretch refreshes the soul.



Puneet Kaura from the Go Wild Workshops then explained to the children why the tiger is endangered. Payal Bhojwani guided the children to make a pledge to spread the word of conserving the tiger – the children held up the placards and took a solemn oath never to aid, buy or promote any animal products. They then tied 'tiger rakhi's' on one another as a sign of their commitment .

Dr. Bonal the Zoo Director then addressed the girls. He said that he was impressed with the enthusiasm and intelligence of the girls by the questions they asked and the activities they did. He hoped that they would now view the Zoo as not just a

place where animals are kept but as a conservation, education centre.

Ms. Deepmala, a participant thanked Zoo Outreach Organisation for providing the material, Go Wild Workshops for giving them three days of wildlife education and the National Zoo for showing them the animals and giving invaluable advise and information about the tiger. She said that before the workshops they had no idea that there were such problems and so much to learn about the tiger.

***Educator, Go Wild Workshops, 16, Subrato Park, Western Air Command, New Delhi 110010**



How to make perfectly charming masks at home for nothing !

Payal Bhojwani

The mask idea was the creation of my partner Nafeesah actually who got the idea from one of the "make and do" craft books – the main difference was that in the book they had used paper bags instead of chart paper and they had only described the elephant which was made out of crepe paper and rope and construction paper and clotheslines etc. – we simplified it and added many more animals such as the rabbit, bear, owl, lion, tiger and the deer.

It takes a 12-year old child about 20 minutes to make the mask if all the materials (specifically a pair of scissors) are provided.

Basic steps:

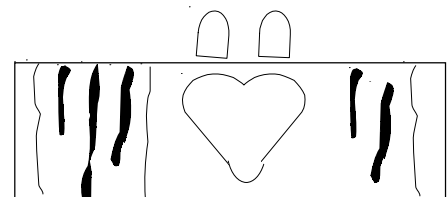
1. Take thick chart paper of the appropriate colour (yellow for the lion and tiger, white for the rabbit, blue-gray for the elephant, black or brown for the owl, bear and deer)
2. Cut the chart paper in half lengthwise and measure it around the head for the size.
3. Cut out a heart shape with a rounded end in the middle (where the face will be).
4. Remember to keep the chin closed.



5. Using the cut out paper, make the ears (For the elephant, a fresh sheet will be needed for the trunk and ears) and stick them on the mask.

6. Colour stripes with a black marker for the tiger, use orange crepe cut in strips for the lion.

7. Join the ends to slide smoothly over head.



Clubbing for Conservation

Three organisations—publishing house Orient Longman Pvt. Ltd., the Madras Crocodile Bank Trust, and Trust for Environmental Education (TREE)—launched 'Nature Quest', a programme to raise awareness about wildlife and conservation, on 14 June 2003 in Chennai.



Apart from raising awareness, the programme also aims to create a common meeting ground for people interested in conservation and wildlife so as to

channel this positive energy in the right direction. *Nature Quest* programmes will include talks, discussions, photo exhibitions, slide shows, documentary screenings, and interactive sessions with filmmakers, researchers, and conservationists. Keeping the younger audience in mind, activities integrating wildlife and nature with arts, crafts, music and theatre will also be organised. Wildlife film makers, researchers, photographers, indigenous craftspeople, musicians and theatre artistes will be associated with these programmes. The venue for these events is The Bookpoint auditorium at Anna Salai, located very conveniently in the heart of the city.

A Resource Centre, with a large-screen television, an extensive library of wildlife documentaries, reference books and updated information on the Indian wildlife scenario is being planned.

The *Sea Turtle Manual* produced by the Madras Crocodile Bank funded by the GOI/UNDP, was released on the same evening. The Madras Crocodile Bank also released *Herpinstance*, a MCBT newsletter to keep herp-enthusiasts informed about happenings on the reptile and amphibian front in Asia.

The Madras Crocodile Bank also initiated the *Friends of the Croc Bank Club*. Members of this club will be

contributing to the Madras Crocodile Bank's conservation efforts. They will receive free entry into Madras Crocodile Bank, free entry to some of the activities and programmes of *Nature Quest*, discounts on camps and programmes conducted at the Madras Crocodile Bank, free subscriptions to *Herpinstance* and the *Croc Bank Newsletter*, along with a t-shirt, stickers and an ID card.

To know more about the *Friends of the Croc Bank Club* email: mcbtindia@vsnl.net
For more information on *Nature Quest*, email: naturequest2003@yahoo.co.in

Getting close and personal with crocs, snakes, lizards...

CHENNAI: Does the thought of having a six-foot long fully grown boa constrictor wrapped tight around you send shivers down your spine? For those of you who have never ever heard about or seen a Boa Constrictor, let's just say the Anaconda is a close cousin.

For five-year-old Satwik though, the boa-wrap was the denouement of a five-hour demonstration tour around the Madras Crocodile Bank on Sunday.

As zoo expert and wildlife expert Bharat Kanda from the Little Rays Reptile Zoo, Toronto, Canada, wrapped the boa around the pint-sized Satwik, he immediately became the object of envy of 10 other kids who accompanied him on the tour.

"Do you know how a boa kills its prey? First, it coils itself tightly around you, and then with every breath you exhale, it tightens the coil even more so that you can't suck back the air you exhaled. After all the air has gone out and your heart stops beating, it goes for your head and starts swallowing," Kanda told the boy who did not appear in the least fazed. "It's super," he exclaimed, fondling the giant snake as he would a puppy, "I will come back again and

again to see him." That, in effect, is the kind of success the tour, organised by the Friends of the CrocBank Club, met with.



Apart from Kanda, there were also Ashley Kirk and Jen Roswell from the Jungle Cat World, Orono, Ottawa, Canada, to teach the kids how to handle baby crocs,

turtles, snakes and gharials, in what is perhaps the first of its kind experiment anywhere in the country in giving children a hands-on experience in wildlife conservation.

Bharat, Jen and Ashley are on a 20-day stint at the CrocBank as part of their study-cum-teaching tour and their students for the day were 10 noisy kids from various city schools, all of them the benefactors of the initiative thought up by *NatureQuest*, a recently-launched forum for awareness in conservation.

Finally, as night fell and the trees became alive with birdcalls, the group trundled along for the climax — the recently-launched night safari called Night Shine — an unbelievably exciting trek, with only flashlights to illuminate the way.

The safari works on the principle that croc eyes reflect light in the night and so if you shine a beam of light at them through the inky blackness, the eyes catch the light and gleam back at you with all the brilliance of gemstones.

The kids chortled in delight and the night was punctured by shrieks of "Look, that one has blue eyes," and "Hey, I counted eighty in five minutes." The luminescence left one spell-bound and humbled by the wild beauty and sensory thrills on offer.

The safari is on every weekend and starts from 7 pm. Fee for adults is Rs 60 and for kids, it is Rs 20. More details can be had by calling Seema Mundoli at 98410 66640 or Anuja Sharma at 98410 06842 or by e-mailing [<mcbtindia@vsnl.net>](mailto:mcbtindia@vsnl.net)



Maitri Baag Zoo's Education Unit - something happening every day !

Ganesh Kumar Dubey* & T. Kalaichelvan**

Sports Association students enjoy zoo education

A total of 68 students of the Sports Association along with staff of Rajnandgaon, Kanker, Ambikapur, and Dharmjaygarh Districts of Chhattisgarh State visited the Maitri Baag Zoo on 31 August 03, conducted by the Scheduled Tribes Welfare Department. The students belong to different villages and towns adjoining the forest area where chances of working for protection and conservation of wild animals are practically unlimited. These students visited the zoo and learned many things about the zoo animals by the Zoo Education Unit, Maitri Baag Zoo.



Dr. G.K. Dubey included many topics in his presentation to the students: -conservation; importance of wildlife in maintaining eco-systems; bat conservation in the natural habitat of bats roosting at the Zoo; wild animals native to Chhattisgarh State (Tiger, Leopard, Sloth Bear, different species of deer and varieties of birds); conservation of endangered species; importance of Zoo Education in conserving wildlife; role of young people in conserving wildlife; breeding behaviour, roosting behaviour, biology and ecology, parental care, nest building of Cattle Egret and Little Egret; Cormorant and Pond Heron breeding in a natural habitat inside the Maitri Baag Zoo.

Dr. N.K. Jain spoke to the students about breeding and prevention of diseases in zoo animals. Dr. T. Kalaichelvan of Zoo Education Unit spoke about Asian Bears and their conservation.

Zoo Educational material packets "Dare to Care for Bears" provided by the Zoo Outreach Organisation, Coimbatore were distributed by Mr. T. Kalaichelvan to the students to illustrate his presentation. The packets contained a mask, rakhi, stickers, and a booklet on bear conservation.



Students enjoyed wearing the masks. They tied the "Bear" rakhis to one another and took an oath that they dedicate themselves for the conservation of bears, will create awareness about bears and will never involve in any kind of wildlife trade in their life. Participation certificates provided by Zoo Outreach Organisation, Coimbatore were distributed by Dr. G.K. Dubey.

Zoo Education Programme for forest Officials Ranger College, Jagdelpur, Chhattisgarh State

A zoo education programme was organized by zoo education unit, Maitri Baag Zoo, Bhillai for forest Officials, Ranger College, Jagdelpur. About 92 forest officials participated in this programme held at Maitri Baag Zoo. A visit and training was organized. During the visit, they were given information against wildlife trade, bat conservation, Invertebrate conservation, bio-diversity conservation, about up keeping of animals, cage design, role of zoo, importance of wildlife, role of zoo education, research, husbandary, squeeze cage function, habit and habitat information.

They noted interesting information regarding the Zoo animals and interacted with the zoo staffs. We gave vital information / role of zoo education; the participants came from various small villages of Chhattisgarh state which has high biodiversity and have been posted in different places.

The education materials/ packets containing "Against Wildlife Trade" and Bats information provided by Zoo Outreach Organization, Coimbatore were distributed to them. So that they can start Zoo educational activities in their respective working places. In addition to that, different educational materials related to zoo animals were also given to them for the library of Van Vidhyalaya, Jagdelpur, Chattisgarh.

* Veterinary Officer and ** Curator, Maitri Baag Zoo, 7A, South Park Ave, Sector 9, Bhillai 490 006, M.P



Discussion session was also conducted and they discussed different topics of wildlife and their conservation and queries were raised. Most of questions were about old animals in nature and in zoo, their care, exchange of animals between zoo, Indian wildlife Act, Central Zoo Policy, and role of NGO's especially Zoo Outreach Organisation. Detailed discussions were conducted on parrot trading from different places to market and what can be done. Detailed information was provided to avoid various myths and conduct various zoo educational programme to prevent killing of the bats.

Finally, a lecture was given by Mr. T. Kalaichelvan, Maitri Baag Zoo, Education Unit regarding biodiversity conservation importance of invertebrate especially phyto phaga in maintaining ecological balance, importance of wild life etc.

The participants / trainees were distributed with participants certificate provided by Zoo Outreach Organisation.

Wildlife Week at Maitri Baag Zoo, Bhilai

Wildlife Week is celebrated in India every year in the first week of October. This week is observed mainly for conservation of wildlife and creating awareness among the students and public. The Maitri Baag Zoo, Bhilai celebrated Wildlife Week in a big way. This report includes two programmes, one for Scouts with zoo behaviour as the theme and another for teachers with a tiger theme.

Programme for Scouts: "A Scout is a friend of animals"

On the occasion of 2nd October, Gandhi Jayanthi, an exclusive programme had been organized by the Zoo's Education Unit, for Scout students of B.S.P. Higher Secondary School, Risali, Bhilai. One of the oaths taken by scouts was "A Scout is a friend of animals for betterment of wildlife, their habitat and the environment".

During this programme, the students were also taught to:

- Create awareness among the public
- Protect our valuable wildlife
- Keep or help to keep the zoo clean
- Be a friend of animals and help save them
- Teach visitors about wildlife conservation
- Learn about and follow the Wildlife Protection Act.



Students holding placards. Photo courtesy Maitri Baag Zoo.

The "Don't's" that were taught were:

- Don't make noise inside the zoo
- Don't tease the animals
- Don't feed the zoo animals
- Don't hurt or injure any animals
- Don't buy any wild animals products
- Don't pollute the zoo
- Don't violate the Wildlife Protection Act ("when the buying stops, the killing can too".)
- Don't touch the zoo animals



Painting competition. Photo courtesy Maitri Baag Zoo

In addition to the above, the students were given information about the importance of animals and the Zoo, wildlife and their conservation, their breeding, feeding habits, behaviour etc. The students took an oath to obey these rules to conserve wildlife and their heritage. The students were provided a Zoo Patrol Kit containing stickers, a handout on the Wildlife Protection Act, an identify card, rakhi on wildlife, and other hand outs provided by the Zoo Outreach Organisation, Coimbatore. They also vowed never to buy and wild animal products and to protect wildlife during their lifetime by tying the rakhi to one another. The students were taken around the Zoo to interact with visitors. The students went around telling visitors not to feed or tease animals, not to make noise and help keep the Zoo clean. They went around the Zoo with a handout on the Wildlife Protection Act in their hands and a card saying "Zoo Patrol" on their shirts and interacted with visitors.

"Wildlife Conservation and Awareness with Teachers for Tigers" during Wildlife Week

Maitri Baag Zoo is well-known for Royal Bengal Tiger both normal and white in Chhattisgarh State and border towns and villages of adjoining states. So, we organised a workshop on "Wild Conservation and Teachers for Tigers" on 04/10/03 at Maitri Baag Zoo for the members of "Bhilai Jeevan Vidhya Samiti", a cross section of the Bhilai community. The participants were Bhilai Steel plant's officers and others.

During this programme the participants visited the zoo along with zoo education unit and got information about the zoo animals, importance of habitat and feeding of wild animals. They were also enriched with the information regarding "increasing the activities of Zoo animals by providing environmental enrichment in the zoo.





**Participants around tiger enclosure.
Photo courtesy Maitri Baag Zoo.**

The workshop was organised mainly to teach innovative teaching about tigers. We told the participants how we use the studbook to avoid inbreeding of tigers. We also discussed about habitat, feeding behaviour, cub rear-ing, parental care, hunting behaviour of tigers, old age care and treatment. We expect that the participants do not buy any body parts of tigers. They were told that if they don't care about tiger and its habitat, tiger population will decline. The role of zoo in conserving tiger was also emphasized.

Dr. K.K. Verma, Entomologist spoke on biodiversity and emphasized the role of zoos in protecting species from extinction. Dr. S.P. Sharma, AGM, Ph.D and Dr. Harti, B.S.P

as Chief Guests spoke on the importance of utilizing the zoo as a tool for zoo education effectively for well being of wildlife. Mr. T. Kalaichelvan gave a lecture on the behaviour and habitat of wildlife.

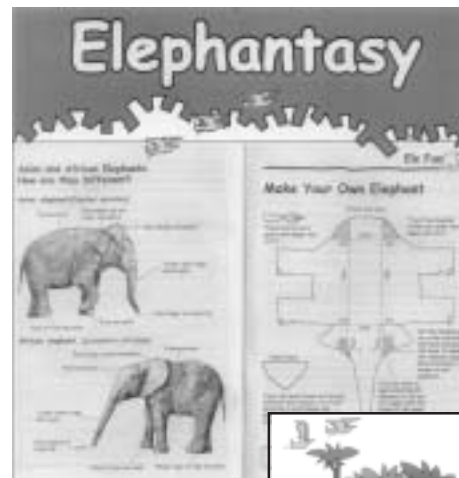


Participants committing to tiger conservation by tying rakhi's. Photo courtesy Maitri Baag Zoo.

The participants took an oath by tying rakhi that "they never involve in wildlife trade in their life time, will help to conserve and protect wildlife and create awareness among people about tiger habitat and its conservation. The packets containing "Tiger tool kit", stickers, mask, rakhi, study material was distributed to the participants provided by Zoo Outreach Organisation, Coimbatore.

School Education to Support Asian Elephant Conservation with CEE, Ahmedabad and U.S. Fish and Wildlife Service

Targeting the attitudes of schoolchildren in India today will make difference 10-20 years from now, so the Centre for Environment Education (CEE) in Ahmedabad, India, has designed a comprehensive education program aimed at 10-14 years old school children as one way to ensure the long-term survival of the Asian Elephant. The first phase of this project developed an education package consisting of a teacher's manual, student's workbook, and posters. These excellent materials covered many aspects of Asian Elephant ecology, natural history, and threats. Subsequently, teachers at a network of more than 900 schools throughout India received training in the use of these materials. In addition, this network of schools was paired with a national network of non-governmental organizations to ensure simultaneous outreach to the local communities in each school district. The second phase of this project will train 700 additional teachers to implement the Asian Elephant conservation education programme in the 12 Indian states where elephants are most abundant. This phase will also see the translation of project materials into nine Indian languages and collaboration with partners in Sri Lanka and Bangladesh.



- from U.S. Fish & Wildlife Service, Asian Elephant Conservation Act Summary Report, 1999- 2001



Conservation Education at Mysore Zoo, Summer Camps, Zoo Clubs and Volunteers

Kumar Pushkar* and Sapta Girish M.K.**

Mysore Zoo Summer Camp programme

Summer Camp Programme – 2003: Mysore Zoo organised the Summer Camp Programme for the 2nd year successfully. The camp conducted for children aged 10-15 years was held from 4th May to 10th May 2003. 25 students were enrolled for the camp. The participants were given schedule, sun cap, printouts, stickers and brochures on wildlife.

After the inaugural, Sri. Kumar Pushkar also spoke and gave useful tips on observation of animals. In the afternoon, the participants were taken for rounds in the zoo.

On the second day of the camp, Sri. K.B. Sadananda gave an interesting lecture on plants identifying 32 trees to the participants. Later participants cleaned the cages of birds with enthusiasm and also fed fish to the birds.

On another day, summer campers visited Regional Museum of Natural History and were introduced to the exhibits; films on wildlife were screened. In the afternoon, the participants visited Karanji Tank where migratory birds were watched. A drawing competition was also organized for the participants in the afternoon.

Mr. Karthikeyan, Education Officer, WWF-India, Bangalore presented a slide show on butterflies. The most enjoyable session for the children was elephant bathing. The children were allowed near the elephant calf to touch and wash the calf. Another interesting session was Snake Show by Mr. Balasubramanyam (Snake Shyam) who gave useful information about snakes. The last session of the day was to fill-up the informative worksheet on animals given to the participants.

A few days later the participants learned about problems being faced by littering plastics, and plastic covers with food fed to the animals, resulting in death of the animals. The participants collected plastic covers in the zoo premises and made an attempt to educate the visitors not to bring plastic covers and feed the animals with food they bring. The children also did visitors survey based on the information given to them on a printed sheet. Another day all participants conducted a census of captive animals in zoo.

On the last day of the camp, participants were taken to Ranganathittu Bird Sanctuary on a field trip where they enjoyed watching birds and boating.

In the valedictory function, parents, zoo staff and others were present to witness all participants as they were honoured with a certificate of participation. The programme concluded with vote of thanks.

* Executive Director, Mysore Zoo, Mysore 570 010. Revised from Mysore Zoo Newsletter Vol.1 No.2 June 2003 pp.4

Volunteers at Mysore Zoo

Volunteers can play an important role in any organisation. Mysore zoo has the luxury in having a group of 9 volunteers called 'Volunteers of Mysore Zoo' who come from various walks of life, from a house wife to a journalist to a Government servant & students. And one of our volunteer is now an officially appointed Zoo Guide. This group helps the zoo in conducting educational activities. Some activities taken up by volunteers at the zoo have been described.

Zoo Outreach Programmes -- Zoo outreach is a programme where in we reach out to various schools, institutions, rural communities & slums to create awareness. We concentrate on Environmental issues, wildlife & Zoo's role in protecting the wild stock. Slide shows in local language are organised to help the audience understand various issues. After the slide show we interact with them & invite them to the Zoo.

Youth Club Activities -- Mysore Zoo conducts the Youth Club Programme on Sundays for a period of five months (Aug-Jan) every year, 60 students from various schools in the age group of 8-16 years participate in this programme on a first come first serve basis. The volunteers take initiation in bringing the resource persons to deliver talks & slide shows.

Summer Camp -- Summer camps were initiated in 2002. It is an annual event conducted during the summer holidays i.e. in May for a period of one week. A press release about the camp is given & a maximum of 25 students between 12 to 16 are chosen. The students spend the entire day at the zoo. The students are exposed to animal behaviour studies, slide shows regarding wilderness & its importance, identification of medicinal plants by experts, cleaning of cages & drama.

Competitions -- As part of the Wildlife week we help the Zoo conduct drawing & quiz competitions at the Zoo premises for various age groups. Essay writing competition and debate for college students. Drawing and painting competitions for physically challenged is also organised. In addition to this photography exhibition and competition have become an annual event of our zoo now.

Visits to other zoos -- As part of the Animal Keepers training programme this year, we had an opportunity to visit other Zoos along with 5 animal keepers & an Official.

Teachers Training Programme & Workshops

We represent the Zoo by attending workshops like the 'Teachers for Tigers' conducted by the ZOO & WCS at Regional Natural History Museum & one at Ahmedabad organised by CEE & Asian Common Wealth Society.

Our volunteer group is really happy to work with this institution & do our little bit in joining hands with the efforts of Mysore Zoo in conserving the wildlife.

** Volunteer, Chamarajendra Zoological Gardens, Mysore



Chennai Snake Park conducts programmes in Kancheepuram schools

V. Kalaiarasan*

The Against Wildlife Trade and Wildlife Welfare Teacher Training Programmes have been conducted in two schools of Kancheepuram. (1) K.M. Subburayan Mudhaliyar Elementary School, Kancheepuram, (2) Municipal Middle School (Vaigundam B), Kancheepuram on 15.11.2002 wherein 20 teachers and 200 students participated. The Director explained the need for such programmes and the role of various NGOs in animal welfare activities. The Environmental Education Officer explained to the teachers and students on how to use the package provided by Zoo Outreach Organisation. The students programme was conducted by Environmental Education Officer. Participation certificates were given to Teacher participants.



Kanchipuram Municipal School-students with "Against Wildlife Trade" packets

* Chennai Snake Park Trust, Rajbhavan Post, Chennai 600 022, Tamil Nadu.

WWF – India, Tamil Nadu State Office in Chennai educates schools

J. Murali*

WWF, India office in Chennai has been using the manual and resource packets supplied by ZOO in all its programmes. Each school under its Nature Clubs of India movement is given five resource packets.

WWF, Chennai conducted a demonstration on the subject in ten schools. 11 schools and 611 students participated in our programmes.

List of Schools

Abacus Montessori School, Perungudi, Chennai – 96.
Vidya Mandir, Mylapore, Chennai – 4.
Naval Public School, Arakkonam – 631 006.
St. Dominic's A.I Higher Secondary School, St. Thomas Mount, Chennai.
Sir Sivasamy Kalalaya Senior Secondary School
No.5 Sundareswarar Street.
Sri Natesan Vidyalaya Matriculation Higher Secondary School
Mannivakkam, Chennai – 48.
Sethu Baskara Matriculation School, Ambattur, Chennai – 53.
Arsha Vidya Mandir, Guindy, Chennai – 32.
C. S. I. Goudie Hr. Sec. School, Thiruvallur – 602 001
Bishop Corrie A.I. Hr. Sec. School, George town, Chennai - 1



Children holding up education materials during the programme

* Education Officer,, World Wide Fund For Nature – India, Tamil Nadu State Office, 123/5 (New No.297), TTK Road, Alwarpet, Chennai – 600 018.



Arignar Anna Zoological Park- Leading in Zoo Eco Education Programme - A Pilot report

N. Baskar* , A. Manimozhi* and M. Sekar*

Arignar Anna Zoological Park is one of the biggest zoos in South East Asia and is a modern *ex-situ* conservation facility for the endangered species of western and eastern ghats. It is one of the nature education centre in the outskirts of Chennai City, where seven to 8 lakh people visit the zoo annually. The education and research wing under the able guidance of the Director and Deputy Director has been conducting several regular eco education programmes to the target groups like school students, teachers and general public to create awareness and understanding of conservation of forests and Wildlife.

The various education programmes are as follows:

1. Zoo school programme
2. Zoo outreach programme
3. Teachers training programme
4. Zoo volunteers programme
5. Summer zoo school programme

Apart from the regular programme, several special programmes are being conducted from Nov 2002 to Jan 2003. They are summarized as follows

I. Against Wildlife Trade

Arignar Anna Zoological Park education and research wing has a calendar of activities for school students and teachers for every year.

"Against Wildlife Trade" activity was also included in the schedule to disseminate the message about illegal wildlife trade to large number of students and teachers. School and college students of Chennai and adjoining districts participated in the programme.

Catch the trader, finish it off, paper dance, match-making and rakhi friends were conducted for the students. Printed materials like crossword, puzzle, mask of *Otomops wroughtoni*, stickers, participation certificates developed and provided free of cost by Zoo Outreach Organisation and sponsored by the Universities Federation for Animal Welfare UFAW, were distributed to the peer group. School

teachers were requested to impart the message to other students of their school.

The wildlife awareness activity was conducted for teachers on 20 Dec 2002 and 28 Dec 2002 at zoo premises. In fact, the activities, games, resource materials provided by Z.O.O. and funded by zoos and animal welfare organisations all over the world were highly useful to enrich the students on cause of wildlife conservation.

II. World biodiversity day

The Education and research wing of Arignar Anna Zoological Park celebrated the World Biodiversity Day in a grand manner on 24 Nov 2002. The Zoo auditorium was vividly busy that particular day conducting various eco-education programmes for school students of different schools in and around Chennai. The main activities were classroom session, resource material distribution, tree planting finally followed by prize distribution. Sixty students and ten teachers of the following schools have attended the one-day programme.

1. Sri Sankara Vidyalaya Matric. Hr. Sec. School, Pammal
2. Sri Sankara Vidyalaya Matriculation School, Kilampakkam
3. Christ King Girls Hr. Sec. School, Tambaram
4. Ananthavalli Matric. Hr. Sec. School, Urappakam
5. Government Girls Hr. Sec. School, Guduvanchery

Large scale tree planting at Rescue Centre World Biodiversity Day

Classroom activities were conducted in the Park for the participants after the inaugural function and tree planting was over. At the end of closing ceremony prizes were distributed for the winners who have participated in painting, elocution and quiz programmes, which were conducted earlier in this park.

First time in zoo premises especially at rescue and rehabilitation center large scale tree planting was organized with active cooperation of students and

teachers on the occasion of world bio diversity day. Around 100 tree seedlings were planted.

III. Indian Zoo Week: -

Arignar Anna Zoological Park education and research wing celebrated, "Indian Zoo Week" from 1-7 Dec 2002. Indian Zoo Week banner was placed at the main entrance of the zoo to educate the visitors on the role of zoos on wildlife conservation. In addition, large number of zoo publications were distributed to the visitors for the entire week to emphasize the role of zoos in conservation education. A special zoo school programme was organized for 50 students from Sri Sankara Vidyalaya Matriculation School, Kilampakkam on 02.12.2002. The brochures on wildlife were given to the participants apart from this, the role and activities of Zoo Outreach Organization on wildlife conservation and education awareness programme on zoo management was explained.

Subsequently a Wildlife Awareness Programme was organized at zoo school on 5 Dec 2002 for Forestry College students, Mettupalayam, Coimbatore. Fifteen Students actively participated in the special programme under the guidance of Dr. K. P. Divya and Mr. M. Murugesan Asst. Professors of the same college. The participants were given hand outs like "Just Bats - About Bats" and "Against Wildlife Trade" provided by the Zoo Outreach Organisation.

IV. World Conservation Day:

Arignar Anna Zoological Park decided to celebrate the World Conservation Day, outside the zoo. A Zoo outreach programme was conducted at Sri Sankara Vidyalaya Mat. Hr. Sec. School, Pammal on 3 Dec 2002. Around 100 students of VIII and IX standard and 5 teachers benefited from the eco-education programme.

* Biologists, Arignar Anna Zoological Park, Chennai, Tamil Nadu



Slide presentation cum lecture followed by screening a video film for the target group from 11A.M to 2 P.M. The role of zoos (*ex situ-in situ*) in conservation of endangered fauna and threats to wildlife were focused to younger generations. The printed resource materials of Arignar Anna Zoological Park and Zoo Outreach Organization on wildlife conservation were distributed to the participants. The school requested the Zoo to conduct similar programmes in future to strengthen the linkage between the zoo and school.

Animal Welfare Fortnightly -2003

Arignar Anna Zoological Park has been conducting Animal Welfare Fortnightly every year since 2000. This year Animal Fortnightly was celebrated at Arignar Zoological Park during 14-28 Jan 2003. The education and research wing of Arignar Anna Zoological Park conducted several eco education programme on the role of zoos on conservation education, during the Animal Welfare Fortnight, which generated wildlife awareness among the public. Three class room

programmes were conducted for volunteers and students. Educational materials of Zoo Outreach Organization were distributed to the interested public, zoo club members and volunteers were involved in handling the huge crowd on Kanum Pongal day and subsequent days till Jan 31st. The volunteers about 150 numbers from different schools and colleges were specially invited to assist the zoo managers during, the pongal festival to regulate surging crowd. They were actively involved in preventing poly bags, matchbox, cigarettes, alcohol sugarcane etc., at the entrance. Most of them were deputed at animal enclosure of each species to prevent untoward incidents by educating the public on Dos and Don'ts inside the Park and ensured proper guidance.

Acknowledgements:

We are very thankful to Thiru. P. C. Tyagi I.F.S., Director, Mrs. V. Karunapriya, I.F.S., Deputy Director of Arignar Anna Zoological Park for their continuous and constant encouragements for the eco education activities.

A brief note on the programmes organized during the Wildlife Week 2002

Ranvir Singh*

A number of programmes were organized during Wildlife Week 2002 in Sanjay Gandhi Biological Park, Patna. Main programmes of the Department of Environment and Forests were organized in the Park.

The week-long programmes were inaugurated on 2nd October 2002 by the Minister of Environment and Forests, Bihar, Shri. Jagadanand. The main programmes included spot photography competition on wild animals and the winners of the competition were given prizes on the concluding day. A photo-exhibition on wildlife and wildlife film shows were organized during the whole week. Special feature of the week was zoo education programmes organized everyday. Special zoo education programmes were covered for different segments like school children; slum children; regular visitors to the park; intelligentsia class etc. Educational materials supplied by Zoo Outreach Organisation were very useful for this programme.

Students from five schools of Patna presented cultural programmes with wildlife themes. Besides, a drama club 'Prayas' also presented a cultural programme on wildlife. These cultural programmes were organized on the concluding day in the presence of Chief Minister of Bihar, Smt. Rabri Devi. Concluding day programmes were inaugurated by the Chief Minister and the Chief Guest was Shri. Laloo Prasad, former Chief Minister. The programmes were presided over by the Minister of Environment and Forests, Shri. Jagdanand, and the Guest of Honour was Education Minister, Bihar, Dr. Ram Chandre Purbey.

A competition to name the new born babies of Rhino and Leopard was organized amongst school students. A total of 861 students belonging to 23 schools participated in the competition. The winners of wildlife naming competition, spot photography competition and cultural programme, were awarded prizes by the Chief Minister.



Chief Minister of Bihar graces the programme and awards prizes

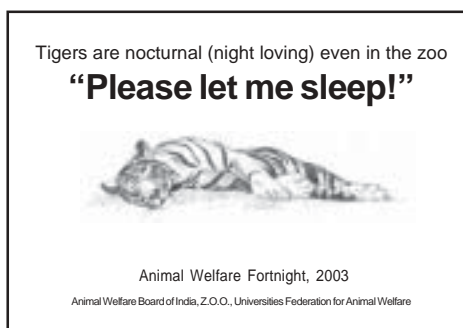
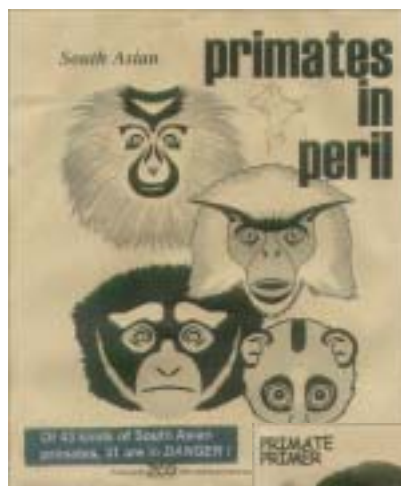


Students wearing bear masks for the programme.

* I.F.S., Director, Sanjay Gandhi Biological Park, Patna



NEW SAMPLE PACKETS AVAILABLE FOR ARNIZE MEMBERS



Samples of these packets are being distributed to all ARNIZE members free of cost. Thanks to a grant from the Coumbus Zoo Conservation Fund, which has also funded this Newsletter.



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Write to : **ARNIZE, c/o ZOO,**
Box 1683, Peelamedu, Coimbatore 641 004, TN, India
Email zooreach@vsnl.com; Website: www.zooreach.org

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