

# Report on Western and Central Regional Zoo Directors Conference, held in Ahmedabad

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The Zoo Directors conference for the Western and Central region, the third of its series, was organized by the Kamala Nehru Zoological Gardens, Ahmedabad Municipal Corporation in association with Central Zoo Authority during 8-9th April 2005. The theme of the conference was "Coordinated captive management of endangered species". A total of 30 participants from different zoos and others representing national research institutes, universities and NGOs participated in the workshop. The organiser of the conference and the Director of the zoo Dr. R.K. Sahu while welcoming the gathering during the inaugural, pointed out that the conditions of Indian zoos have become better after the inception of Central Zoo Authority. He introduced the theme and the need for this conference so as to develop a coordinated captive management animal programmes suitable for this region with coordination and cooperation from all sectors of zoo. Mr. B.K. Gupta, Scientist, CZA who represented B.R. Sharma told that this workshop is the third of this series after the previous meetings at Trivandrum and Kolkatta for Southern and East/North Eastern India respectively. He also emphasized that Indian zoos should utilize the facilities of national institutes like CCMB and veterinary universities which receives CZA's financial assistance to set up laboratories to do wildlife studies. Smt. Aneesa Begum Mirza, Mayor, AMC remembered the good days of Mr. Reuben David and the present on-going efforts to save the threatened species with the leadership of Dr. Sahu. Shri. Manilal S. Parmar, Deputy Mayor, Shri. D.B. Makwana, Deputy Municipal Commissioner, Shri. Kishan Singh Tomar, Chairman and Shri. Vinod Chandra Modi, Leader Congress Party, Ahmedabad Municipal Corporation were also gave a talk and congratulated the participants of the meeting for the effort to save species. Dr. G.R. Patel, Deputy Superintendent, Kamala Nehru Zoological Garden, Ahmedabad Zoo gave the vote of thanks.

The first session of the conference was inaugurated by Shri. Ashok Sharma, IFS, Chief Conservator of Forests, Administration (Wildlife) Nagpur, Maharashtra. Dr. S. Shivaji, Deputy Director of CCMB, Hyderabad in his talk said that fragmentation of habitat is major problem for the wildlife that result in inbreeding depression, ultimately leading to the extinction of the species. He said species extinction can be prevented by arresting environmental degradation, maintaining the genetic diversity of the animal, by preventing inbreeding and by monitoring genetic variation. He pointed out that by monitoring the genetic variation of a fragmented population through various techniques like DNA finger printing (micro satellites) mitochondrial D-loop (mitochondrial loci) and cytochrome-b, the health of a population could be understood. Shivaji showed examples from various genetic variation studies carried out in big cats, Himalayan wolf, star tortoise, Olive Ridley turtle and other endangered animals and the need to take up such research. He also emphasized the importance of cooperation from zoos for a successful completion of a project. He discussed the methods of artificial

insemination, sperm morphology, in-vitro fertilization, cryo-preservation and cloning while talking about assisted reproduction.

After this talk a discussion for identification of candidate species for conservation breeding in West and Central Indian Zoos was initiated. As a continuation of the presentations in the afternoon, Brij K. Gupta talked on the strategy for achieving the objectives of breeding programmes. Identifying the objectives of a breeding programme was emphasized and the need for zoos to loan or pool or exchange animals that require breeding. Dr. J.H. Desai, gave a presentation about the criteria for selection of species. They are 1. Status of the species in natural habitat 2. Knowledge of biology of the species 3. Availability of specimen 4. Availability of space and resource. And also he talked about the problems when we do breeding with small populations and co-operative breeding programmes

Shri. Bharat J. Pathak, Conservator of Forests (WL) Junagadh in his presentation on Research in ex-situ wildlife conservation highlighted points from WZCS strategies 1993 in support of research in the zoos. Besides, he talked about Indian Zoo Policy and research in zoos. B.K. Gupta talked about the need for initiating scientific studies in zoos and the future support from CZA for such studies. The need for such research are to have self-sustaining population, to know species biology and for zoo education. He pointed out that the CZA has formed sub-committees to identify the area/subject of research, to invite proposals and to give suggestions for research and support.

Shri. Bharat J. Pathak, in his second presentation explained the Sakkarbaug zoo's management plan from 2002-2005. He also explained the expansion of the zoo at the Girnar Hill area.

The last presentation of the first day of the conference was delivered by Dr. R.G. Jani, Co-ordinator, wildlife Health, Western Regional Centre, College of Veterinary Science and Animal Health, Anand. While explaining the activities of his unit that provides diagnostic support and emergency help for zoo facilities, he informed that the zoos of this region could avail the service of this unit since it is supported by CZA. In the evening, after the meeting participants were taken for a tour to visit CEE facilities, Ahmedabad.

The second day of the workshop was chaired by Shri. L. K. Chaudhury, Director, Van Vihar National Park, Bhopal. Smt. Meena Nareshwar, CEE, Ahmedabad gave the first presentation on an education plan for a Zoo. She emphasized that zoo is an important place of education to learn about wildlife. She also told CEE's role to help zoos to develop education through interpretation, an approach for

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communication. Dr. A.B. Srivastava talked about the facilities at the veterinary college Jabalpur to do disease diagnosis.

Dr. C.N. Pandey, Director, Geer Foundation, Gandhi Nagar, Gujarat presided over the second half of the morning session. Dr. B.A. Daniel, Scientist, Zoo Outreach Organisation gave a presentation on South Asian regional conservation initiatives by the organisation emphasizing more on the South Asian Regional Association for Regional cooperation (SAZARC) that promote communication, cooperation and collaboration with in the region. Dr. B.C. Choudhury commented that it would help for all if this message it taken to all regional zoos of India.

Dr. R.K. Sahu opened up a discussion on "Animal Collection Plan for Western & Central Indian Zoos". Dr. M.V. Wani from VJBU, Mumbai gave a presentation looking into the stock position in the region, surplus animals, single and unpaired animals, successfully breeding animals, availability of species for collection and rehabilitation, co-ordination between the regional forest authorities and zoo authorities, relocation of captive bred endangered in to wild are to be considered, he stated. Shri. Anil M. Anjankar, Director, Rajiv Gandhi Biological Park, Pune talked about his zoo in general.

Dr. Prafull Mehta of Surat zoo has shown a video clipping of his zoo. Dr. R.K. Sahu talked about population control measures for prolifically breeding species. B.K.Gupta, CZA gave a presentation on rescue centers, He talked about the five existing rescue centers: 2 in Andhra Pradesh at Tirupati and Vizahapattinam zoos, others at Bannerghatta in Karnataka, Rajasthan and Arignar Anna Zoo, Chennai. He informed that CZA is planning for rescue centers Vanvihar National Park, Bhopal, West Bengal near Jalpaiguri and another one in Nandakanan Biological Park, Orissa. BC Choudhury reacted to this and said creating many rescue centers will not be a solution to this problem since this is not helping conservation in the long run.

This was followed by presentation from experts about zoo design about Ahmedabad zoo. They presented the preliminary future zoo plan of Ahmedabad zoo which received comments since modern zoo aspects were not covered. However, Sahu mentioned that it was just a start and it can be modified.

In the afternoon the participants divided into four groups and assigned topics to discuss on the following four issues and to come up with recommendations.

Group:1 List of Endangered species selected for conservation breeding

Group:2 List of Endangered species to be selected for biotechnological interventions.

Group:3 Research projects to be initiated in West Indian Zoos.

Group:4 Format for preparation of Master management plan.

Before the presentation of group recommendations B.C. Choudhury, WII, Chandrabani gave a talk on Conservation Breeding of Endangered species in zoos: Gharial: A case study. Shri B.C. Choudhury in his presentation talked about the gharial breeding programme in India from 1975. He told

about the whole history about the Indian Crocodile Conservation Project in his talk.

Group recommendations:

Group 1 List of endangered species selected for conservation breeding participating Zoos

Ahmedabad Zoo: White backed Vulture, Otter; Van Vihar

NP: Tiger, Barasingha: Sakkarbagh zoo

Wild Ass, Asiatic Lion, Wolf: Gwalior Zoo: Chinkara; Surat:

Four Horned Antelopes; Vadodara: Hornbill

Group:2 came up with the following species selected for biotechnological interventions:

Asiatic lion, Wild buffalo, Rusty spotted cat, Caracal,

Vultures, Barasingha, Wolf, Otter, Wild ass, Chinkara, Great

Indian Bustard, Hill Mynah

Group: 3 came up with following recommendations on research projects:

Visitor Analysis, captive breeding-biology and health aspects of lion, vultures and Barasingha., Creating inventory database-using IT in zoos, Environment friendly practices, Design and Layout, Research on forensic medicine

Group: 4 Recommendations for Formatting Management Plan

Introduction; contour plan-theme - assess statement - climate- rainfall- temperature, soil type- geographical zone.

Existing collection plan: inventory, enclosures with area & facilities, water supply, drainage, electricity supply, health care facilities, squeeze animals, equipments, full time technical staff, compounder, lab technicians, veterinary attendant, quarantine, feed store, kitchen.

Administration staff- Director- Deputy-veterinarian-Curator-trained staff-organization setup- visitors statistics-visitors amenities-population control-exchange programme-breeding policy-environmental enrichment -interpretation facilities-routine & seasonal activities-man proof boundary wall-pollution level-research-crisis /disaster management-budget-expenditure-income.

Future Development Plan: collections plan-exchange programme-health care plan-HRD, training-research-disaster/crisis management-public amenities-budget-expenditure-income.

The valedictory function was attended by the city Mayor, Smt. Aneesa Begum Mirza, Shri. Pradeep Khanna, IFS, Chief Wildlife Warden, Gujarat, Shri. D.B.Makwana, Deputy Municipal Commissioner, Smt. Mithiben Nagar, Chair person, Recreation and cultural committee, and Smt. Devikaben sonwane, Deputy Chair Person, Recreation and Cultural Committee.

