

SAZARC



South Asian Zoo Association for Regional Cooperation

SAZARC NEWSLETTER Volume II,
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SAZARC discussion of a wide variety of issues facing the new association.

Report of the 2nd Meeting of SAZARC

Perak, Malaysia, 10th Annual Conference of the
South East Asian Zoo Association SEAZA, 7-11 October 2001

South Asia is the area that used to be called the Indian subcontinent. It consists of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka. The region has immense political, social and economic problems which present frequent and serious obstacles to conservation action. South Asia has approximately 300 zoos, 250 of which are in India. About 75 - 100 of these 300 zoos are "standard" zoos with a respectable area, staff, infrastructure, budget and good intentions. The remainder are deer parks, mini-zoos and small breeding centers which nonetheless are governmental institutions. There are very few private zoos in South Asia. Even these 100 South Asian zoos suffer from a multiplicity of problems.

In India the Central Zoo Authority and Indian Zoo Directors' Association are making good inroads into the problems and prospects of zoos. The zoos in the other countries - Pakistan, Nepal, Sri Lanka and Bangladesh do not have any national association and are more or less isolated from one another and from the global zoo community. It would benefit the zoos of these countries and their animals as well as their conservation activities if they could be brought into the global zoo network.

Zoo Outreach Organization and the Conservation Breeding Specialist Group, South Asia have been working together to catalyse a Regional Zoo Association for South Asia. The first step was taken in August 2000 in Kathamandu, Nepal zoo directors, veterinarians and educators from 15 zoos in 5 countries gathered for a zoo meeting, a CBSG meeting (attended by Dr. U.S. Seal) and a zoo educator training workshop, organised by ZOO/CBSG, South Asia and the Central Zoo/KMTNC. At the zoo meeting, South Asian Zoo personnel stated their desire for an association in a moving series of discussions. Many of these zoo persons had not met one another even though they were from the same country. This resulted in the initiation of the "South Asian Zoo Association for Regional Cooperation" SAZARC. The Kathmandu meeting was full of good results - significant changes by all the zoos, some of which are given in the Report from the Karachi Zoo and Safari Park elsewhere in this issue. Results from other countries were also significant. This year participants are in the process of writing reports of what they experienced in the meeting that can be applied at home.

Some of these reports are included in this issue of SAZARC News. The developments in various countries since last year are listed below.

Bangladesh -- a Government sponsored Redevelopment programme for Dhaka and Rangpur Zoos were initiated and zoo personnel sent for further training by their IUCN country office

Sri Lanka -- Lyn de Alwis, former Director of Colombo Zoo, became SAZARC advisor

India -- increase in educational activities and budget by participating zoos run by steel and municipal authorities

Nepal - the Director of the Kathmandu Zoo won an award

This year we had planned a series of workshops (SAZARC, Design Workshop, CBSG, South Asia & Sri Lankan Elephant PHVA) which were to be held in Colombo, Sri Lanka but due to administrative transfers and other problems, it could not materialise this year.

Instead, it was possible to take 10 key zoo personnel to the SEAZA meeting in Perak. They then had an opportunity to observe a functioning Asian zoo association and to interact with its members as well as one another. They could attend three days of scientific presentations on the theme of Zoo Animal Welfare and Ethics. They could visit behind the scenes of several zoos (Taiping Zoo, EcoPark Zoo, and Penang Butterfly Park and the Sumatran Rhino Conservation Centre. Some participants were able to visit the Singapore Zoo, Night Safari, Jurong Bird Park, and Underwater World in Singapore and Zoo Negara Malaysia in Kuala Lumpur. Some Reports by participants are included in this issue.

The South Asian Zoo Association met with SEAZA Council for an afternoon session of Questions and Answers which was extremely useful to the new Association. The SEAZA Council and Members went out of their way to make the SAZARC participants feel welcome. Members benefited also from the excellent presentations on zoo ethics and welfare and a variety of scientific topics. SAZARC used the working group time of SEAZA to conduct its own meetings and discuss topics of importance.

Details of decisions taken by the group on behalf of SAZARC over a series of two meetings given in Tables following.

List of SAZARC Participants :			
Name	Designation	Institution	Country
Dr. M. S. Khan	Curator (Director)	Dhaka Zoological Gardens, Dhaka	Bangladesh
Dr. G.K. Dubey	Superintendent	Bhilai Steel Plant Zoo, Bhilai, Uttaranchal	India
Dr. R.K. Sahu	Superintendent	Kamala Nehru Zoo, Ahmedabad	India
Dr. Madhav Ghimere	Curator	Central Zoo / KMTNC, Kathmandu	Nepal
Sri. R. K. Shreshta	Director	Central Zoo / KMTNC, Kathmandu	Nepal
Dr. Zohare Ali Shariff	Director	Jungle Kingdom Theme Park and Zoo	Pakistan
Dr. Mansoor Qazi	Director	Karachi Zoo and Safari Park, Karachi	Pakistan
Sri Lyn de Alwis	Retd. Director	National Zoological Gardens, Colombo	Sri Lanka
Dr. Jayanthi Alahakoon	Veterinary Officer	National Zoological Gardens, Colombo	Sri Lanka
Mrs. Dammika Malsinghe	Assistant Director	National Zoological Gardens, Colombo	Sri Lanka



A highlight of the conference was the joint meeting with SEAZA, the South East Asian Zoo Association, which acted as mentor to SAZARC.

Core Committee members replaced after transfers and advisor appointed

Bangladesh - M. S. Khan (new this year) ;
 Pakistan -- M.M. Qazi;
 Sri Lanka -- Jayanthi Alahakoon;
 Sri Lanka -- Lyn de Alwis, Advisor (new this year)
 Last year's Core Committee members still remaining
 India -- R. K. Sahu;
 Nepal -- R. K. Shreshta
Last year's attendees
 Nepal -- Madhav Ghimere;
 India -- Sally Walker, Patron (representing CBSG, South Asia);
 India -- G.K. Dubey
New persons
 Pakistan -- Zohare Ali Shariff;
 Sri Lanka -- Dammika Malasinghe

Formation of Training Committee and listing of Training Priorities

Capture, immobilization,
 Tagging / marking i.d. (Microchips) ;
 Zoo Education;
 Sexing of birds;
 Zoo / Enclosure Design /Masterplanning;
 Behavioural & environmental enrichment;
 Preventative medical care / general zoo medicine;
 Care of young; (parent reared and handrearing) to prevent neonatal death;
 Record keeping / Studbook management; MedArks ; Animal nutrition;
 Transportation / transport cages, etc. ;
 Planning;
 Crisis management;
 Marketing, Publicity, Fundraising;
 Human Resource Development;
 Collection Planning and Management

Some important decisions of SAZARC

- Venue for 2002 agreed - to be discussed with desired hosts before announcing
- Venue for 2003 decided - invitation from Sri Lanka
- Draft Constitution and By-laws vetted - further discussion required
- Formation of committees & chairs
- Training needs identified for 5-year plan sponsorship proposal (see list below)
- Transferred country reps/ Core Committee Members replaced (see list below)
- Logo, brochure and newsletter discussed and models revised

Formation of committees to forward projects

- Veterinary (for identifying new medicines and means for obtaining them) – Ghimere and Dubey
- Nutrition Handbook (New York Zoological Society) – Jayanthi Alahakoon
- Data base of species in South Asian zoos – M. M. Qazi

Conference Committee for 2002 – 2003

Sally Walker, R.K. Shreshta, M. S. Khan, R. K. Sahu

Publicity and Communication

-- Logo decided (for time being for use in promotion and fundraising – bear representing all countries)

-- Brochure

Approved with some changes which will be incorporated

-- Newsletter

Newsletter items mandatory (Zohare Ali Shariff will see to this)

Coordinated breeding programme

List of threatened species presented, errors corrected; Walker approved as Conservation Coordinator for time being. A list of threatened species held by South Asian zoos is given on this page. A more comprehensive list in which each zoo's number and sex ratio of these species was prepared for the meeting and distributed to participants of SAZARC.



South Asian Zoo Association for Regional Cooperation

Some logo choices



South Asian Zoo Association for Regional Cooperation



South Asian Zoo Association for Regional Cooperation



South Asian Zoo Association for Regional Cooperation



Bernard Harrison, President of SEAZA with SAZARC members

Threatened Animals (IUCN Red List) held by South Asian Zoos	
Mammals	
Bear, Himl. Black (<i>Selenarctus thibetanus</i>)	VU A1cd - 1996.
Bear, Sloth (<i>Melursus ursinus</i>)	VU A2cd, C1+2a -
Blackbuck (<i>Antilopa cervicapra</i>)	VU A1c, 1996
Cat, Fishing (<i>Prionailurus vivverinus</i>)	LR/nt - 1996
Deer, Swamp (<i>Cervus duvauceli</i>)	VU c1 - 1996
Elephant, Asian (<i>Elephas maximus</i>)	EN A1cd - 1996
Gibbon, Hoolock (<i>Bunipithecus hoolock</i>)	EN A1cd - 2000
Hyaena, Striped (<i>Hyaena hyaena hyaena</i>)	LRnt - 1999
Langur, Common (<i>Presbytis entellus</i>)	LR/nt - 2000
Langur, Capped (<i>Trachypithecus pileatus</i>)	EN A1cd, C2a - 2000
Leopard (<i>Panthera pardus kotiya</i>)	EN C2a - 1996
Leopard, Clouded (<i>Neofelis nebulosa</i>)	VU A1cd - 1996
Loris, Slender (<i>Loris tardigradus</i>)	VU A1cd - 2000
Macaque, Assamese (<i>Macaca assamensis</i>)	VU A1cd - 2000
Macaque, Lion-tailed (<i>Macaca silenus</i>)	EN B1+2c, C2a - 2000
Macaque, Pig-tailed (<i>Macaca nemestrina</i>)	VU A1cd - 2000
Macaque, Rhesus (<i>Macaca mulatta</i>)	LR/nt - (Undated)
Mouflon Antelope (<i>Ovis musimon</i>)	VU A2cde - 1996
Otter, Common (<i>Lutra lutra</i>)	VU A2cde - 1999
Otter, Smooth Indian (<i>Lutra perspicillata</i>)	VU A1acd - 1999
Rhino, One-horned (<i>Rhinoceros unicornis</i>)	EN B1+2cde - 1996
Squirrel, Indian Giant (<i>Ratufa indica</i>)	VU B1+2c - 1996
Squirrel, Grizzled Giant (<i>Ratufa macroura</i>)	VU A1c - 1996
Tiger, Bengal (<i>Panthera tigris tigris</i>)	EN A2cd - 1996
Reptiles	
Crocodile Mugger (<i>Crocodylus palustris</i>)	VU A1a C2a - 1996
Crocodile Gharial (<i>Gavialis gangeticus</i>)	EN C2a - 1996
Tortoise Elongated (<i>Indotestudo elongata</i>)	EN A1cd+2cd - 2000
Birds	
Crane Black-necked (<i>Grus nigricollis</i>)	VU C1
Crane Sarus (<i>Grus antigone</i>)	VU A1cde + cde
Heron White (<i>Ardea insignis</i>)	EN A2c C1
Pelican Spot-billed (<i>Pelecanus philippensis</i>)	VU A1cde C1
Pheasant Cheer (<i>Catreus wallichi</i>)	VU C1 + 2a
Pheasant Hume Bar-tailed (<i>Syrnaticus humiae</i>)	VU C1 + 2a
Stork Greater Adjutant (<i>Leptoptilos dubius</i>)	EN A2cde C1
Stork Lesser Adjutant (<i>Leptoptilos javanicus</i>)	VU C1
Vulture Bengal (<i>Gyps bengalensis</i>)	CR A1ce + 2ce

Measures taken at Karachi Zoo and Safari Park as a result of the Meeting held at Nepal in the Year 2000

Mohammad Mansoor Qazi, Director, Zoological Gardens, Karachi

Ex situ Conservation of Indigenous Species

The Karachi Zoo and Safari Park after the visit to Nepal, especially concentrated on the captive breeding of indigenous species for *ex situ* conservation such as, Black Buck, Nilgai, Gazelle, Blue Peacocks, Pheasants and Crocodiles, as it was learned in the last meeting at Nepal that *ex situ* conservation should preferably be undertaken in the country from which the biological resources and genetic materials have originated. We made correspondence with different zoos of Pakistan, namely Lahore Zoo, Bahawalpur Zoo and Islamabad Zoos regarding exchange of such indigenous as well as exotic animals which are not available with our Karachi Zoo and offered to them the species which could be readily spared to these Zoos. Besides, in order to avoid inbreeding which after about 5 years are likely to cause deformities, still - births, genetic and enzymatic diseases we took measures to exchange a number of males from males of different origin.

Records

In the past, no record of animals' origin was being maintained but after having been benefited with the experience at our last meeting at Nepal, we have started doing the same successfully in our Zoo and Safari Park, although not yet at the level of maintaining Studbooks of species like in Europe. In future we hope to achieve the goal, surely.

Habitat development

In *ex situ* conservation, habitat development is very much important. Sufficient attention was paid to ecological criteria and the requirements of communities. Took measures to grow flora related with the habitat of specific species and about 20,000 plants of different varieties were planted, which improved the shelter as well as feed requirement of the animals. In Karachi Zoo we made efforts to make the enclosures spacious so that animals could move freely and easily which is essential for the physical health.

Cooperation with other zoos

We have been able to pass our experience to Lahore Zoo as well as Islamabad Zoo regarding enclosure designing and treatment facilities. In addition, to facilitate more according to the modern concept of open enclosure design we are in touch with Lahore Zoo, especially for the design of open Lion enclosure which we want to have at our Safari Park in Karachi.

We are also in touch with private zoos in Karachi regarding improvement of ecological conditions, enclosure design, treatment facilities, procurements of our indigenous fauna and captive breeding which is considered as a national wealth. We are closely and continuously in touch with Sindh Wildlife Department of Pakistan although we have not met the desired success so far in collaboration.

Research

Like other *ex situ* conservation facilities Safari Park and Karachi Zoo provide excellent opportunities for researchers to study animals, their behaviour, habitat, habits, diet requirements, liking and disliking and also serves as center for documentation and information systems. University graduates and Post

graduate scholars pay visits from different cities of Pakistan and study these aspects.

In situ Conservation

All of our *ex situ* conservation efforts are directed at releasing our indigenous species in natural conditions so that in *ex situ* conservation the population is quickly increased and then reintroduced back to their original habitat to minimize genetic erosion.

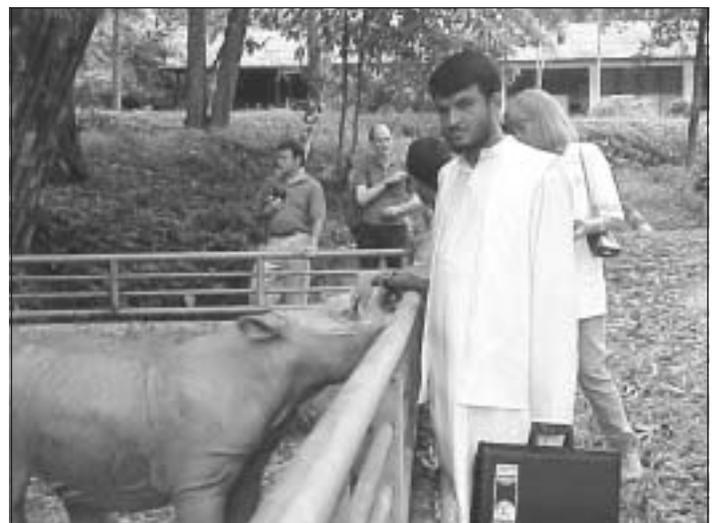
Community Awareness

We initiated a survey in our Zoo and Safari Park to determine as to which group frequently visits these places. We came to know that mostly children or school-going students aged from 12-18 years fell in this group and we scheduled different programmes to impart awareness among the children. Initially, during the last one year we have been able to organize six programmes with the participation of different schools and conveyed messages of wil life conservation, information about local species, their habitat, habits, threats to human beings and other related factors.

Messages through signage

We have also developed various signages through which we are conveying different messages to people of all age groups in favour of conservation of wild species, environmental enrichment and protection of indigenous species. We have planned a signage competition between different schools in Karachi.

We are also planning to arrange some community awareness programmes specially for students with the collaboration of WWF Pakistan, Zoological Survey of Pakistan and IUCN Pakistan in the near future.



M. M. Qazi at the Sumatran Rhino Breeding Centre, Malaysia. This was one of the more fascinating field trips.

REPORT ON PARTICIPATION IN SEAZA'S 10TH ANNUAL CONFERENCE HELD IN PERAK, MALAYSIA, OCTOBER 07 TO 12, 2001.

Submitted by Zohare Ali Shariff, Jungle Safari Pak, Islamabad

The South East Asian Zoos Association (SEAZA) held its tenth annual conference at the Bukit Merah Laketown Resort in Perak state of Malaysia from October 07 to 12, 2001. Sally Walker of Zoo Outreach Organization, India took the initiative of getting over a number of zoo professionals from South Asian countries also to this conference. The objective was to learn from the SEAZA experience for the formation of a zoos association of South Asian countries. There were delegates from Bangladesh, India, Nepal, Pakistan and Sri Lanka.

The association named SAZARC (South Asian Zoos Association for Regional Cooperation) had in fact held a first meeting a year earlier in Nepal. The get-together in Perak was the second meeting and it was intentionally coincided with the SEAZA conference in order to experience at first hand the functioning of a zoos association that has been around for a decade now.

Various aspects related to the formation and future functioning of the nascent SAZARC were discussed in detail in Perak. At the same time the SAZARC delegates were involved in most of the SEAZA activities that took place, as part of the learning experience. The utility of participation in such conferences can be classified under three broad activity based heads.

Scientific Sessions

During the conference the morning sessions each day were reserved for formal presentation of papers covering a range of wildlife management subjects. These included animal welfare and ethics, enrichment, husbandry and management, veterinary care, nutrition and zoo education.

Owing to time limitation (each speaker was allowed 10 to 15 minutes), the papers presented could not really go into an in-depth analysis of the subject chosen. The utility of the scientific sessions, though thus limited, is however undeniable. For zoo professionals an insight is made available into management practices and new techniques that are being employed by others. Hence one is able to learn from others experience. For the writer the scientific sessions served as food for thought on several different aspects of captive wildlife management. For example following my participation in the conference we are now introducing new ideas for enrichment of birds in our collection and reviewing our zoo education program to try and make it even better.

Study Tours

The afternoons during the conference were taken up by study tours to various facilities. These included the free flight aviary and the orangutan island at Bukit Merah Resort itself, the Butterfly Park in Penang, Taiping Zoo and the Sungai Dusun Sumatran Rhino Conservation Centre.

Tours to different animal facilities offer a wide-ranging learning experience that accrues both from first-hand observation and from on the spot discussions and exchange of ideas. Facility concept and design, construction of enclosures and management procedures are the principal subjects of learning during study tours.

Social Programs

The conference included daily social activities like receptions, cultural shows and dinners. These social activities bringing people from several different countries and zoos together for several days served the essential purpose of networking. Indeed the main benefit of the conference as a whole must be seen as an opportunity to network with your peers in an informal manner that encourages exchange of information and knowledge. The delegates to the conference included people who were experts in their particular field of activity. Thus there were expert veterinarians, nutritionists, animal keepers, field biologists, educationists and administrators.

The learning experience gained from interacting with all such people cannot be easily quantified. However in the opinion of this writer, this interaction or networking is of immense benefit to all in improving things at one's own facility. No one can be an expert in everything. Therefore the exchange of ideas and information and the discussion of each others experiences provide important leads for further action and for establishing cooperation between different zoos. For example this writer was able to gain specifically in terms of improved nutrition for birds from discussions with a nutrition specialist from Taipei Zoo.

Overall the participation in the SEAZA conference was extremely useful and it is hoped that in due course SAZARC will also be able to establish itself as an effective forum for regional cooperation leading to the betterment of all zoos in the South Asian region.



Zohare Ali Shariff listening intently to presentations at the Scientific sessions of SEAZA.

Report on Participation in SEAZA'S 10th Annual Conference Held in Perak, Malaysia, From 7th to 12th October, 2001

Submitted by, Dr. Ganesh Kumar Dubey, Maitry Baag Zoo, Bhilai, Chhattisgarh - India

The 10th Annual Conference of SEAZA was of a grand success, serving the purpose for which it was conducted. It paved the way to know the ways and means of improving the working conditions of the Zoos, genetic collection of animals and network. It is the result of the efforts of Zoo Outreach Organisation, India and the Central Zoo/KMTNC that the zoo directors of South Asia held their first meeting a year earlier in Nepal.

The SEAZA, in fact was formed a decade ago, and have since been running it in a very effective way fulfilling the goals set by the Zoos. At the good efforts of Sally Walker, Zoo Outreach Organisation, a number of Zoo professionals from South Asian Countries attended the conference. The chief objective was to learn from the SEAZA experience for the formation of a Zoos Association of South Asian Countries.

In Perak, the first meeting was conducted with the participation of the SAZARC to discuss the basic issues involved and the discussions were complete in all respects. During the course of discussions with SEAZA, various matters concerning to formation and future functioning of the SAZARC coming into existence were discussed at depth. Mr. Bernard Harrison had given valuable suggestions for the formation and functioning of the body, area of working, membership, finance etc. which were really felt vital to incorporate by the participants.

The SAZARC delegates were seen to be widely involved in most of the SEAZA activities that were conducted as a part of a learning experience. The conference was attended by 97 delegates representing 19 countries and territories which include Australia, Bangladesh, Botswana, Cambodia, Hongkong, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, Singapore, South Africa, Sri Lanka, Taiwan, Thailand, United States of America and Vietnam.

Scientific Sessions

This Session was held with the presentation of 31 papers covering broad topics like animal welfare and ethics, environment, conservation, education, veterinary medicine, captive breeding and husbandry. The scientific papers were of good standard, being very informative, exposing the scientific working standard of the region. They provided immense knowledge about the management practices and the new techniques in adoption. Of particular interest to me was the paper presented during the conference entitled to 'A new drug delivery formulation of GnRH analogue deslorelin for contraception in Canine'. It was a worthy one, since it helps to control the over population of the Maitry Baag Zoo and we can immediately adopt this method.

Study Tours

The study tours conducted during the said conference to various places have benefitted us from the point of their *modus-operandi* of zoos in existence in those areas. From our visit to Butterfly park in Penang, we could understand the kind of environment needed, enclosure design and tips of technology. In our visit to Sungai Dusun Sumatran Rhino Conservation, it was an opportunity to learn about the husbandry of animal, enclosure formation and detailed information about the project. Our tours to different facilities have provided wide range of learning experience, being a combination of first hand observation and on-the-spot discussions and exchange of ideas. It is of much use to our zoo working.

Singapore Zoological Gardens

Animals are reported to live in open and move freely and the gardens are natural habitat for the animals. The Zoo has been spread over an area of 28 hectares and sheltering 3000 animals of which 250 species of mammals, birds and reptiles among many endangered species. The Singapore Zoological Gardens management have showed us the inter-relationship amongst the animals, plants and the humanbeings in their

rainforest which is a unique incident. Here various species live together in ecosystem and deliver an impression to visitor on the natural habitat.

Enclosure design

Enclosures of Singapore Zoological Gardens are very well maintained to cause a natural environment to the living ones. They have a photographic appearance of wild habitat in the Zoo itself. Landscaping is really good. Signboards are very informative. This visit has given an idea as to how best we can design our Maitry Baag Zoo enclosures. The knowledge sustained can be well utilised to our Zoo in future.

Enrichment of environment

The main feature is to create a real wild appearance to the enclosures as such the design. Therefore it is but natural to enrich the environment as a natural habitat to the animals. In my zoo environmental enrichment is essential particularly for tigers and birds.

Zoo Education

By means of posters and commentaries in tram, education on zoo is imparted as they reveal mostly on animals, habitats, their behaviour etc. A glance at the animal and the simultaneous commentary on it, will certainly make anybody receive knowledge about the animal in particular.

Revenue collection

The current revenue is Rs.1/- per head in the Maitry Baag Zoo. But after my participation in the said conference and visits to various zoos, we can comfortably charge Rs.3/- per head which paves way to generate more revenue.

On a question raised by us during the question hour as to how they consider the minute things in the enclosures and zoo working, the Chief Executive Harrison clarified that lot of efforts, team work and sharing the opinions with others, the dreams could be turned to reality

Learning experience, through interaction with people from different regions have given us sufficient knowledge to improve our own facilities. Thus the participation in the SEAZA Conference was extremely useful and it is very sure that in due course the SAZARC will flourish.

Acknowledgement

I like to appreciate the efforts of Zoo Outreach Organisation and their friends, the sponsors of this useful visit. I also pay my respects to Mr. Bernard Harrison, the Chief Executive Officer, and President of SEAZA, and other Executive Board members for their valuable suggestions and for providing various arrangements at Singapore.



Dr. Dubey and Mr. Qazi at the Penang Butterfly Farm.

SAZARC Featured Zoo of South Asia : Jungle Kingdom, Rawalpindi

The only privately-owned zoo in Pakistan that is open to the public is Jungle Kingdom, a zoo attached to a Theme Park, Pakistan's first.

The Jungle Kingdom is entirely designed and built around one central theme -- wildlife, it's owner's passion, and that of his family as well.

Zohare Ali Shariff left a lucrative job with his father to set up what could only be called a risky venture. Clearly his motives were not pecuniary, or he would have stayed with his family business, built it up and inherited it. Zohare is an animal lover as such and a wild animal lover *per se* !

What might be called a "Mission Statement" tells us why JK was set up: "To provide leisure and recreation in an open-air environment; to provide education and information about wildlife and carry out conservation through scientific captive breeding of endangered species".

The Jungle Kingdom is located inside the lush green Ayub Park, on the main Grand Trunk Road, in the city of Rawalpindi. The Park is less than 4 kms from the city centre and has major residential areas all around. Almost all vehicular traffic going north or south of Rawalpindi passes on this road in front of Ayub Park which makes Jungle Kingdom easily accessible both to the residents of the twin cities of Rawalpindi and Islamabad and to visitors from other towns and cities.

The Family Amusement Park is open daily from 10 a.m. upto 7 p.m. in winters and upto 9 p.m. in summers. The Zoo Park is open daily from 10 a.m. till sunset. Entry is subject to some terms and conditions which are displayed at the entrance.

The facilities available at the Jungle Kingdom Theme Park are two interconnected sites, an animal themed Family Amusement Park and an open plan Zoological Park.

While entry to the Zoo Park is open to all, entry to the Family Amusement Park is restricted to families, couples, ladies and children.



Animal themed kiddie rides at the Family Amusement Park



Mini-golf on a Wildlife or Pakistan theme. Note the signage giving the habitat and status of the animal !

A Family Amusement Park

The Family Amusement Park was opened in September 1994, spread over five acres of landscaped garden. Priority is given to creating and sustaining a serene ambience, and to allow the visitors to enjoy rides and other attractions at their own pace. The Park has designed something for all. The wildlife theme has been followed throughout so that a warm, informal garden-party atmosphere prevails. This has been achieved as much by the extensive landscaping, as by selection of rides and attractions.

Emphasis is on involving the whole family in activities, whether it is "Wildcats Musical Chairs" or the 18 hole Mini-Golf Course or the high thrills "Ark Ride" or any other attraction. All ages are considered from one to eighty one !

Most of these rides had never been seen in Pakistan before, so were an immediate attraction. To keep the park interesting, and to insure that people keep on coming, new rides and attractions are regularly added.

Visitor amenities

Visitors to public places often suffer due to a lack of personal amenities. Jungle

Kingdom provides for everything a visitor might need or want. These include -- just to name a few : landscaped gardens, separate, clean toilets for men and women, clean drinking water, first aid, public address system, Lost and found service, Information booth, several shaded picnic spots, a place for prayers, food and beverage outlets, courteous trained staff, telephone facility, signage in 2 languages and party arrangements.

The Zoological Park

The Jungle Kingdom is also a modern zoo. Wildlife species are displayed in large, open air enclosures. Each enclosure is landscaped individually to simulate the natural habitat of the species kept in it. This dramatic method



Face painting at Jungle Kingdom.



Brown bears in simulated natural habitat enclosure

is exciting and attractive both for the visitors and for the animals, who are encouraged to indulge in their natural behaviour.

The Zoo Park is therefore both entertaining and educative. Informative signs with colour graphics are placed at each enclosure and elsewhere in the facility. Guided Tours are also available.

At Jungle Kingdom, the wildlife in captivity is not for display alone. The Jungle Kingdom is committed to wildlife conservation through scientific captive breeding. It is co-operating in this respect with several foreign zoos and wildlife conservation institutions. The ultimate aim is to reintroduce captive bred animals back into the wild, where they once existed or where their numbers have rapidly declined.

Attractive educational signage adds to the ambience as well as the educational value of the Jungle World in Rawalpindi.



Jungle Kingdom Theme Park & Zoo Inventory of Animals

Common Name	Scientific Name	Number	Total	Acquired
Tiger	Panthera tigris	1:1:0	02	Aug. 1996
European Brown Bear	Ursus arctos	2:1:0	03	Sept. 1998
Puma	Felis concolor	1:1:0	02	Sept. 1998
Chinkara	Gazella bennettii	1:2:0	03	Feb. 2001
Blackbuck	Antilopa cervicapra	1:2:0	03	Feb. 2001
Rhesus monkey	Macaca mulatta	0.1.2	03	Nov. 2000
Crested Porcupine	Hystrix cristatus	1:1:0	02	Dec. 2000
Red-eared Slider	Trachemys scripta	2:2:1	05	Sept. 1998
White peafowl	Pavo cristatus	2:3:0	05	July 1996
Black-Shouldered Peafowl	Pavo cristatus			Aug. 1995
Silver pheasant	Lophura nycthemera	1:1:0	02	Apr. 2001
Ring-necked pheasant	Phasianus colchicus	1:1:0	02	Apr. 2001
Ratites	Various		07	2000-01

SAZARC Report given at Annual Meeting of the Conservation Breeding Specialist Group

The Conservation Breeding Specialist Group is the IUCN SSC specialist group whose mandate includes captive breeding, as well as other conservation tools. CBSG has been a friend to zoos of the world and a promotor of regional associations for some years. It is because of CBSG, South Asia that SAZARC can have a temporary administrative office which has links with many important conservation organisations in the world to give SAZARC a good start. You may be interested in seeing what was presented to the CBSG plenary session about SAZARC so that part of the CBSG, South Asia regional network presentation is printed below just as given.

CBSG South Asia Report
 CBSG Annual Meeting, Perth, 2001

- Along with the “whole world” of biodiversity, South Asia has an entire universe of political, social, administrative and economic problems which present **frequent and serious obstacles to conservation action**.
- For example, all the South Asian countries’ administrative system **transfers officials frequently**, including zoo and wildlife officials, for political or personal reasons.
- Thus the creation of a **genuinely professional community** of zoo and wildlife specialists either in the *in situ* or *ex situ* institutions and agencies is exceeding difficult.
- Continued plugging away does bring some **results**, however.

South Asia is the area that used to be called the **Indian subcontinent**.
 It consists of 7 countries
 Bangladesh,
 Bhutan,
 India,
 Maldives,
 Nepal,
 Pakistan,
 Sri Lanka.

CBSG, South Asia was formed to integrate activities of CBSG national networks in S. Asia and to catalyze and facilitate CBSG workshops in other Asian countries.

This seemed like a good idea at the time.

Results ... from last year’s zoo and CBSG meeting and Zoo Education training held in Kathmandu Nepal :

This is what Karachi Zoo, Pakistan did afterwards (taken from a Report written by Director) ...

South Asia contains a “whole world” of biodiversity

At least

- 263 species of chiroptera
- 118 species of rodents, etc.
- 300 + species of other mammals
- 400 + species of amphibians
- 650 + species of reptiles
- 60,000 species of plants
- 150,000 species of invertebrates
- 2000 species of birds
- 3 internationally recognised “hot spots” -- Indo-Malayan region, Western Ghats, Andaman Islands

- Karachi Zoo & Safari Park
- ... changed their focus to **indigenous animals** suitable for *ex situ* conservation
 - ... started maintaining records of animal origin **for the first time**
 - ... habitat development of enclosures according to **ecological principles**
 - ... contact with Sindh WL department and private zoos for **improvement of cooperation for breeding of indigenous fauna**
 - ... conducted a **visitor survey** -- indicated major visitors were students 12-18 years
 - ... focused **education programme** for these students and have carried out several popular events.
 - ... got **education budget** equivalent to \$200,000 for zoo and safari park -- this was really 200,000 Pak rupees
 - ... initiated improvement / development of **signage**.
 - ... Initiated **cooperation with local experts** -- WWF, ZSP, and IUCN
- as a result of what the director learned at the Kathmandu meeting

Results from other countries . . .

SAZARC initiated – South Asian Zoo Association for Regional Cooperation

• **Bangladesh** – Government sponsored Redevelopment programme for Dakha and Rangpur Zoos initiated; personnel sent for further training by IUCN country office

- **Sri Lanka** – education pgms improvement; specific interest in training; Lyn de Alwis became SAZARC advisor
- **India** -- increase in educational activities and budget by participating zoos run by steel and municipal authorities
- **Nepal** – Director of zoo won an award
- **IUCN offices** – in all countries taking more interest
- **Pakistan** – Report of many changes



South Asian Zoo Association for Regional Cooperation -- Administrative and Technical Discussion at SEAZA



- Because of the **results** we invest heavily in events that have a high probability of "blowing up".
- We had to cancel a series of 4 events in Sri Lanka due to administrative transfers of zoo and wildlife directors. The Colombo Airport was bombed a week before the intended date, so transfer is not a bad thing always.
- To keep up the momentum – we took the South Asian zoo persons to SEAZA ... the South EAST Asian Zoo Association 10th annual conference
- Thanks to sponsors from UK, USA and European zoos.



Some important decisions

- **Venue for next year** in Bangladesh taking help of IUCN Bangladesh office
- **Draft Constitution & By-laws** vetted – further discussion required
- **Formation of committees & chairs:** Veterinary, Nutrition handbook, S. Asian zoo animal database, initiation of regional Conservation Plan for threatened species
- **Training needs identified** for 5-year plan sponsorship proposal
- Transferred country reps **replaced**
- **Logo** selected
- **Brochure** approved w minor changes
- **Newsletter** responsibility fixed



10 key zoo persons from 5 countries of South Asia (Pakistan, Bangladesh, Sri Lanka, Nepal and India) ...

- met one other and S. Asian zoo persons
- learned about regional zoo associations
- Decided SAZARC and CBSG S. Asia focus and direction
- Heard papers on Ethics, Welfare & zoo science
- Visited several Malaysian and Singapore zoos including the Sumatran rhino centre



SAZARC Meeting Sponsors

- Woburn Safari Park UK
- Thrigby Wildlife Park UK
- Wildlife Inf. Network UK
- Koln Zoo, Germany
- Appenheul Primate Park
- St. Louis Zoo USA



Thank you !

Declaration of Interest Form -- for future correspondence with and membership in SAZARC
 South Asian Zoo Association for Regional Cooperation
 Please xerox, fill in, and send to SAZARC at the address below.

Name: _____
 Name of your Zoo: _____
 Address of Zoo: _____

 Phone Number: _____
 Fax Number: _____
 Email: _____
 Website: _____

Please give your comments about a regional association and what you would like to give and get from it.

You can post this but perhaps better, you can email the SAZARC office and get the form in email format that you can just type in and send. It would not be difficult also to just send your wish to be included in SAZARC correspondence and membership consideration directly : email to <<zooreach@vsnl.com>>

Post to: Zoo Outreach Organisation,
 Box 1683, Peelamedu,
 Coimbatore 4, TN India
 Fax to: 91 422 563 269

South Asian Zoo News

Kamala Nehru Zoo, Ahmedabad

The zoo's hippo delivered one female calf on 24th October, which was a great attraction for visitors. During Deepawali vacation, zoo revenue increased significantly.

News of National Zoological Gardens, Sri Lanka

1. The old birds aviary had been demolished and reconstructed on to a new concept and it is being used to exhibit only indigenous birds. The renovation of exotic bird aviary is in progress and tenders have been called from the local and foreign bird dealers to obtain rare and attractive exotic birds.
2. The Zoo farm has been upgraded to meet the present demands of the Zoo. In addition to the supplying food the farm is used to keep excess animals and also it is going to be used as a breeding center.
3. A recreation area was built up with a app. height of 20 ft water fall using an abandoned quarry.
4. Another three storied six houses quarters complex was built for minor employees quarters.
5. A new calf was born on the pinnewela orphanage. Since its inception total number of calves born there are 23 and total number of elephants are 70.
6. A river hippo was born in the zoo .It was a special event since at the previous occasion the mother had killed the baby. This time by employees effort, planning and constant attention could save the hippo baby . It is being hand reared using mother hippos milk and supplementary milk with a new formula.
7. The breeding of small Parrots, Macaws and Penguins are being carried out successfully.
8. Some new species of animals are expected before the end of this year.

Jungle Kingdom, Rawalpindi

Jungle Kingdom plans for the Year 2002 include building new enclosures for Sindh Ibex and common otters and subject to funds availability, finishing of an island enclosure for orangutans. We started this last year when the Pingtung Rescue Center Taiwan agreed to donate 3 oranges to us, but had to halt work as our own funds ran out. On the education side we will launch a Summer Camp during school summer vacations in association with the Adventure Foundation of Pakistan. Details are still being worked out, but each Camp will be of 3 to 5 days duration, during which school going kids aged 8 to 14 will camp in the Jungle Kingdom and participate in various activities aimed at enhancing their knowledge and interest of nature and especially wildlife.

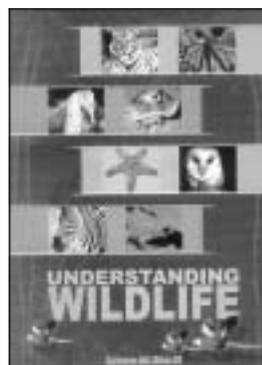
Book on Zoos and Wildlife by SAZARC member

Zohare Ali Shariff has written a wonderful book entitled Understanding Wildlife : An Introduction to the World of Wild Animals, published by Ferozsons (Pvt) Ltd, Lahore, Rawalpindi-Karachi, 150 pp. In addition to chapters on wildlife in general, there are also sections on "Wildlife in Captivity" in which zoos are explained, and "The Keeping of Exotic Pets", which gives a good overview with some detail about wild animals in captivity in a variety of situations. "Interesting Wildlife Records and Facts" covers all the groups of animals, including amphibians, reptiles, invertebrates etc. in addition to the more familiar birds and



mammals. There is a useful Table of the IUCN Red List Categories and information about IUCN and a Bibliography for further reading.

Zohare Ali Shariff was born in Karachi and grew up there. He graduated from Aitchison College in Lahore and London School of Economics. An ardent naturalist, Zohare informally educated himself on wildlife with ethology or animal behaviour as his primary interest. This is his first book on wildlife. Understanding Wildlife will be reviewed in ZOOS' PRINT. You can email Zohare <<zohare_s@hotmail.com>> to find out how to get a copy.



Understanding Wildlife cover and Zohare Ali Shariff, the author with a young leopard.

Resignation of R. K. Shreshta, Convenor

Mr. R. K. Shreshta, who hosted the first meeting of South Asian Zoo Directors, which resulted in the establishment of SAZARC has resigned as Convenor, effective January 2002. His decision was not easy but the increasing demands of the dramatic renovation of Central Zoo have prevented him from investing as much time as he felt was needed in SAZARC. In the long run, having Central Zoo completely transformed and entirely self-sufficient will be a tremendous boost to South Asian Zoos and model for others to follow. Central Zoo is an old zoo which was in very bad condition until taken over by the King Mahendra Trust for Nature Conservation with Shreshta as Director. Shreshta has coordinated a Master Plan which is to be implemented about now but in the meantime, has made many improvements to the zoo.

For the time being, the Administrative Office of SAZARC will circulate the Draft Constitution and By-Laws, provide other documentation and carry out such tasks as have to be done for potential members of SAZARC to be properly briefed for the next meeting. It is hoped that SAZARC can meet in 2002 and decide issues of its registration, Constitution and elect officers. In the meantime, many thanks to Mr. Shreshta to hosting the meeting which produced SAZARC and for serving as Convenor up to now.

Kabul Zoo, Afghanistan

Afghanistan is not part of South Asia, although it comes very close to being so. The Kabul Zoo in Afghanistan has suffered horribly in the last 10 - 15 years due to the many conflicts there. Still the zoo persists, albeit in a terribly decrepit conditions. Many of the buildings have been destroyed or damaged beyond use. The animals which were not killed by bombing and fighting over the years (the zoo was not far from the front line some years ago), have been teased and tormented literally to death in some cases. A lion was the target of a hand grenade, monkeys have been fed lit cigarettes, and all animals subjected to stone and stick throwing and general harassment.

The zoo staff, what is left of it, are very dedicated and remain largely because of their attachment to the existing animals. They have not been paid for months with little immediate relief in sight from their country's government, as it is in a delicate formative stage.

Some zoos in UK, USA, Europe and Australia have got together some funds (about \$30,000 so far) and are investigating a mechanism for sending the money so that it will go for the animals. Plans are being formulated to send a veterinary doctor and drugs to treat the wounded animals as well. Animal welfare organisations are also getting involved with WSPA pledging \$5000 immediately. There was a groundswell of support for the zoo from zoo personnel around the world.

South Asian Zoo personnel -- your attention please. Afghanistan misses being part of South Asia by a few kilometres and general opinion. Afghanistan people are more like South Asians than any other continental region. They are our brothers in the zoo profession. South Asian Zoos are not rich themselves and, even more important, are all administratively set up such that it is difficult to send money outside.

However, we can send our prayers and good wishes. It would be very good if all South Asian zoo personnel separately wrote a note to the Kabul Zoo staff expressing support and sympathy. We will try to reach a message on your behalf to the staff during this very difficult transitional period. There is no address that can be relied upon, however, so we will have to go through some persons who are going over.

Please write a message of sympathy and encouragement and appreciation and send it to the SAZARC administrative office. If you want to and can send funds, do not send to us. We will contact you separately and tell you who to send to and how to do it. *Editor*



*Kabul Zoo's lion Marjon was stoned by the soldiers in 1996. He is blind in one eye after a man threw a grenade into his enclosure in revenge for biting his brother's arm off. Prior to these attacks Marjon survived a rocket bombardment in 1989. Head zookeeper Sheer Agha says soldiers would visit the zoo and throw stones at Marjon. The zoo was also left with little money to feed or look after animals. The incoming government has promised to pay for food and wages but this will take time. Only 19 animals are left from what was once a very proud zoo. Even a zookeeper was killed some years back. **Ananova, 2001***

Newsletter of the

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SAZARC Newsletter is a temporary communications device while the new South Asian Zoo Association for Regional Cooperation settles down. It is edited, published and distributed from the offices of Zoo Outreach Organisation/CBSG, South Asia which serves as the temporary administrative and information base of SAZARC. ZOO is the host of CBSG, South Asia which is funded by Dr. Nan Schaeffer, Founder and President of SOS Rhino.

SAZARC is envisioned to represent certain captive breeding facilities which prove eligible by their ethics and standards in the region of South Asia. SAZARC was convened by a meeting of zoo directors, veterinarians, curators, and educators representing 10 zoos from five countries of South Asia. While the committee of representatives investigates and reports options for registration and drafts by-laws, constitution, ethics, standards and membership rules.

SAZARC welcomes news, notes, announcements relevant to the daily working and enhancement of conservation, education, research and animal care of the zoos of South Asia and their relationship to other regional and national zoo associations. ZOO/CBSG, South Asia will make every effort to distribute this newsletter widely among the zoo personnel of South Asia.

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