# ZOO MANAGEMENT IN SOME EUROPEAN ZOOS - A STUDY TRIP EXPERIENCE

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Very recently with the support of Government and the Director, Budapest Zoo, I visited a few zoos in Eastern and Central Europe. The zoo's I visited include

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| Hungary : | Budapest Zoo ; Seged Zoo |
| Slovakia : | Zoological Park Bojnice |
| Paris : | Zoological Park and Menagerie |
| Germany : | Munich Zoo |
| Austria : | Salzburg Zoo and Schonbrun Tiergarten |

I did not find much time for a very detailed study of each enclosure, but neither was my study cosmetic. I discussed with Zoo Directors, Zoo Vets, Zoo Curators, Education Officers and many Animal Keepers to gauge and analyze zoo development and management issues in the zoos.

**Conservation** : Conservation is not a subject that finds a mere mention in the zoo management plans in European zoos, but is a systematic and scientific effort guided by EAZA (European Association of Zoos and Aquariums). The EEP (European Endangered Species Programme) is well coordinated between European Zoo and cooperates with other regional programmes.

All the zoos I visited, though small in area, are involved in a captive breeding programme for some endangered mammal, bird or reptile. Many of the zoos keep European Studbooks and even International Studbooks for some species.

Europe does not have a large biodiversity as do tropical countries and continental areas, so while their Zoos exhibit European biodiversity, they also exhibit and breed African and South American fauna. Their Zoos do not boost about large collections; instead they are proud of their few rich collections and ensure that all the animals get the best of management. They also do not exhibit large numbers. Mini-populations with two or three breeding groups are often exhibited. All the zoos establish excellent links with *in situ* centres. The Directors, Biologists and Veterinarians in many zoos are involved in many *in situ* studies and reintroduction programme for endangered species. Zoo's not only contribute animal stock to release sites but are involved in the A to Z of reintroduction programmes.

I was particularly impressed with ARKS, MEDARKS and SPARKS programmes which are computerised data bases for captive animals being used throughout the world and their significance in linking conservation initiatives amidst zoos and even other facilities.

Most of the zoos are small with areas of less than 20 ha. and space constrains, yet managed efficiently. The zoos are clean, though there are far behind many high-tech zoos and wildlife parks of USA. Fund alone is not everything is what I learnt seeing small zoos like the one in Salzburg in Austria. Good zoo maintenance is more of team work and represents the involvement of all working in a zoo.

**Exhibit Designs:** Though the winter houses are big and the zoos spend huge funds on fancy houses, particularly for elephants with internal,heating arrangements, the summer houses are very simple and close to nature. The stand-off barricades are simple and imaginative, using all materials, stones, poles, ropes and wires to keep animals out. Wet moats are naturalistic. Animal visitor contacts are made close with glass barriers for viewing. Most of the zoos have used electric hot wries for confining animals within the enclosures. This seems to be a good and cheap solution. Species of a particular biome or biogeographic zone are mixed, which makes the enclosure biologically rich.

**Animal Exchanges** : Animal exchanges are easy and procedures simple. The species co-ordinator for a particular endangered species decides where animals are to be placed and animals are shifted. The procedure for general exchange of animal and acquiring animals are also simple, as the exchange offer requires only documents of health from veterinarians and CITES clearance and need not wait for clearance from many Ministries and departments. Zoos however are not anxious to exhibit large numbers of species even if they are unisex and every zoo is clear about the animals which they should exhibit and prioritize in breeding. Zoos have no constraints in exchanging wanted and surplus animals freely. The EAZA list of wanted and surplus list is made available on quarterly basis, with appropriate revisions to enable exchange of animals. The EAZA "Available and Wanted List of Animals is exclusively compiled for EAZA members by the EAZA exeutive office.

**Zoo Management** : Most of the zoos I visited have been privatised and are city zoos. Most of their funds are from gate collections which amounts to 80%; 10% is from sponsorship and leases, and 10% from city allocations.

**Animal Adoption** : The sponsorship programmes are innovative and offer many attractions for an animal adopter. There are animal adoption programmes for individuals, family adoptions and corporate adoptions. Zoos offer scope for celebrating every event in ones life, like birthdays, marriages etc and also permit donors to celebrate Christemas and other festivals at the zoo. The sponsors are duly recognized. Enclosures funded by sponsors have their names on it. However, sponsors and donors have no right over the animals and are not involved in decision-making within the zoo.

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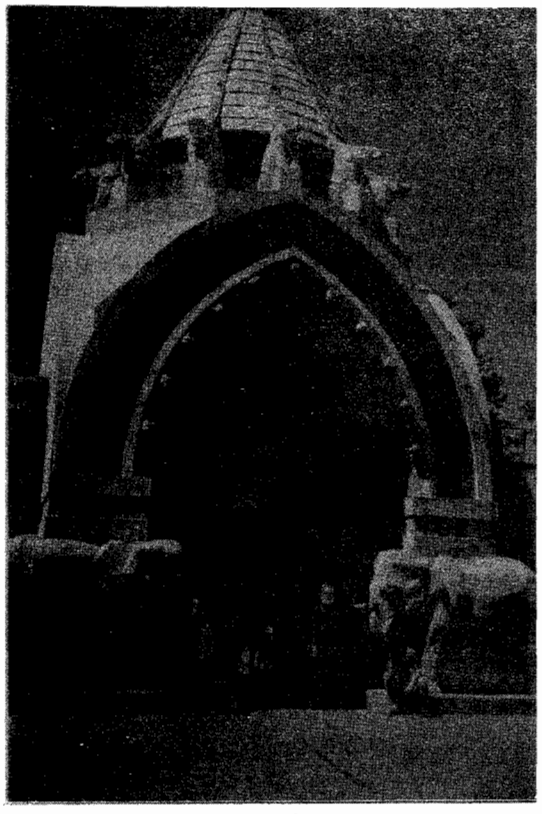

**Budapest Zoo,**
**(photo credit Conservation Breeding Specialist Group)**

establishment and winter management. The zoos also host dinner for the sponsors. The zoo directors are ably supported by their secretaries and are not bogged down nor immersed in infructuous correspondence. Many zoos are supported by foundations which are non-profit organisations, assisting the zoo in fund collections. Sponsors and donors to zoos get due income tax concessions and reliefs. Animal adoption certificates are given to donors and sponsors, which have validity, for 1 to 5 years.

**Education:** The education strategies adopted in zoos need special mention. Every zoo has a zoo school. The Education department has 3 or more permanent staff besides being supported by part and full-time volunteers, who render free service. The Vienna Zoo for instance offers education for 50,000 students every year and provides education in the form of at least kits for students, teachers and parents. Children of all age classes are offered, many zoo education modules. There are many children's play points within the zoo besides a petting zoo. The education department organises parties, competitions, exhibitions and concerts for children and are involved in zoo graphics, zoo informationand maintenance of the zoo library. The zoo school also runs biology courses. Many attractions are made to increase the student out turn to the zoo schools. Their are many discovery games and classes for students which include preparation of food for animals, studying behaviour of animals interactions with zoo keepers and so on. Most of the education programme are supported by sponsors.

**Zoo Research** : European zoos are not directly involved in mega-research programmes. Zoos are open for study to students from various faculties of science. Zoo research is supported by universities. Zoos are involved in captive

**Zoo Departments:** The Director of the zoo is the fund-raiser or is ably supported by a fund-raiser. There are well defined Curatorial departments handling Mammals, Reptiles, Birds and other animals. There are other department as well to handle legal issues, Zoo marketing, zoo education, graphics, zoo maintenance, zoo landscaping and gardening. The animal keepers are mostly educated and have completed an animal keeper course. Most of them have good infra-structure like walkie-talkie, animal keepers room within the animal house they manage, good working dress and facilities. Most of the departments are provided computers. The animal keeper also make use of the zoo library to update their knowledge in their subjects.

A major chunk of the zoo expenditure is towards food,

**New carnivore enclosure in Tiergarten Schonbrunn (photo credit Schonbrunn Tiergarten)**

breeding programmes. The zoo vets and biologists devote their energy for linking *in situ* and *ex situ* conservation issues. The curators of all the departments are well-informed and have sufficient knowledge on the animals they care for.

**Animal Health** :The zoos are supported by 2 or 3 Veterinarians. One or two full time and part time Vets. Veterinary students have free access to zoos and are allowed to take up projects and work within zoo rules. Zoos have a very good link with Veterinary Universities and have many collaborative studies. Some zoos have good postmortem rooms and operation theaters. The zoo garbage and waste disposal systems are rapid and efficient. The water drainage systems are also efficient with zoo drainage emptying into the city drainages and the zoos also having to pay for the sewage removal. Some veterinary departments are supported by taxidermy units. The zoos are clean in spite of the innumerable eating joints, as the zoo cleaning staff do a thorough job of zoo cleaning. Zoo hospitals have pulse examinators, blood analysers, endoscopy, sonography systems, blood analysers portable X-ray units and are sufficiently equipped.

**Animal Management** : Zoos do not allow breeding of animals in excess, particularly ungulates. Surplus herbivore in some zoos are fed to carnivores, contraceptives are used to check and control populations.

**Entrance Fees** : Entrance fees to zoos are kept high. Only students visiting the zoo for education programmes are given concessions. One million people visit Budapest Zoo annually and the population of Hungary is 10 millions, demonstrating the popularity of the zoo.

In short my travel experience was rich. I fail to understand why zoos in Asia and South East Asia do not co-ordinate and exchange ideas. Why are animal exchange programmes so difficult?. There are many puzzling problems for which we need to work out early solutions. Zoo management in India needs to improve on scientific lines. I do know that funds are a constraint, but many issues can be solved through communication and networking Indian zoos have to work a lot to catch up will zoos in the west, in the field of conservation, education, research, vet. care and visitor happiness.

Zoo Directors and all connected with zoo administration should realize that zoos are nature education and wildlife conservation centres which should be run on scientific lines and not merely be treated as a animal exhibit facility.

**Acknowledgement**

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**Some suggestion to improve conditions of Indian zoos**

- Zoos should be specialized in animal collection and breeding programmes. Zoos to reduce animal diversity and numbers and keep selected species with only two or 3 pairs of good breeding animals.
- Zoos should have a master plan and a clear projection for future, highlighting policies, programmes.
- Zoos should have an definite animal collection policy.
- Zoo Directors should have some continuity and adequate powers to decide many issues without delay. The Director should have the option to select curators of intrest and should be delegated enough powers to handle policy issues, instead of getting them referred to senior levels too often.
- Zoos should have a "Zoo School" and clear cut education programmes. There should be frequent interaction between zoo education officers of different zoos in India.
- Zoos to be made more autonomous and privatised, with necessary Govrnment control and full support. Zoos should go in for animal adoption and sponsorship programme for improving the financial position.
- Zoos to have a clear cut research policy. Every zoo should be involved in some research programme for some endangered species and should be involved in endangered species conservation programme. Zoos should not merely confine to zoo management but should be seriously involved in *in situ* conservation programmes.
- Indian zoos should maintain very good rapport with Sanctuaries, National Parks and run reintroduction trials and research programme for endangered species. There should be frequent exchange of views and ideas amidst. Zoo staff at all levels through training programmes and meetings.
- Zoos should have good computer facilities and maintain relationship amidst themselves, zoos should readily and boldly give up single sex species by tranfering it to neighboring zoos to maintain viable populations.
- Animal exchange policy need many changes. Animal exchange within Indian zoo may be decided at zoo directors level, after keeping Central Zoo Authority informed, to speed up captive breeding programmes for endangered species. Species exchange within zoos in India should not exceed more than a month. For exotic species, procedures for exchange should be simplified and animal exchange with reputed international zoos should be completed atleast within six months.
- Zoos should have a definite man power improvement and development plan through training.
- Zoos should develop close relationshiop and support with Veterinary Universities, academic education institutions to improve animal care an health. The business of Veterinary care and animal treatment should be taken seriously, with opportunities provided to zoo veterinarians to interact frequently.
- There should be good zoo marketing and publicity wing for each zoo.
- Zoos should have an animal enclosure enrichment policy, to keep the animals active, supported by good zoo gardening and landscapping initiatives.
- Zoos should have minimum visitors amenities with appropriate graphics and signage boards.
- Every zoo should have some education publication or newsletter for circulation, beside the brochures, posters etc.
- The in-house knowledge in zoo management enclosure designing, landscapping should be taken into account and respected.
- Zoo staff should have frequent exposures *in situ* situations, to study the animal they handle in wild. Many zoo veterinarians, keepers and biologist have no access to the animal habitats in wild and do not know the wild behaviour of animals.