Elephants’. The subject, although it is very sensitive and tough to handle, was made easy through the manual developed by ZOO. In June 2009, I took part as a trainer in Getting along with Elephants workshops at Bangladesh. This was my first programme outside India which I could do without any hitch.

This time I was taken by surprise when ZOO subscribed for me to become a member of International Zoo Educators. After all these, Sally Walker asked my interest to apply for an individual project and thus with the guidance and support of ZOO I got the Chester Zoo Richard Hughes Scholarship Award 2009. I preferred to address the issue of human-elephant conflict since my state, Karnataka, is experiencing severe human animal conflicts. In this project, utilizing the resources of ZOO I promoted human elephant coexistence, which we call HECx, and thus reached about 40 community leaders through community programmes on human elephant coexistence, 50 teachers by providing trainers training on HECx and 1500 children all live in elephant range areas. Now very recently I received a communication from the President of IZE announcing my success in the application for sponsorshi to attend the IZE annual meeting in Disney World, Florida.

I was a regular teacher when I met Sally and entered ZOO. Now, I could grow up to the level to present before an international audience of experts on Zoo Education. It is very obvious that I grew with ZOO. Iam also thankful to my school authorities, particularly Dr. Jose Aikara for his constant support.

My words are simple to express my gratitude to ZOO crew. I have built a homey attachment with ZOO and I thank each and every one who is working behind the scenes and contributing their valuable service to promote conservation education. I should thank for the hospitality of Sarojamma and for her pretty smile and delicious food which served me whenever I halted at Zoo... she is my Tamil teacher too. I remember how hard it will be to pack up all the thousands of pieces of education material and dispatch them to all requests including me! I thank Arul and Raveendran for their support. I should thank Radhika and Geetha for making my communication smooth. I thank Pravin for doing all graphic works, I thank Latha Ravikumar for right time decisions, I thank Sanjay for his brilliant photographs, I thank Marimuthu for his kind guidelines in my education programs and finally I thank B.A. Daniel who has been instrumental in all events and a superb guide. Dear Sally jee you are the Captain of this crew and my hat is off to you. I hope in the following days Zoo shelters many more educators to spread the conservation message across the globe and make earth a better place to live. On this Silver Jubilee occasion I feel as if I am part of ZOO team.

S. Mamatha

This month-That age. ZOOS’ PRINT 25 years ago - July 1986

Advertisement in ZOOS' PRINT, August 1986

Wanted: Saints to Assist with Indian Zookeepers own bulletin

Zoo Outreach Organisation intends bringing out an occasional publication for zookeepers. This will consist of basic articles on animal care by zookeepers from around the translated into Hindi.

If there is anyone up North who is really good in translating English into Hindi and preferably with a zoo background who would volunteer to translate some articles you would be doing a great service!

And anyone with access to a good Hindi typewriter who could volunteer to type the articles would be doing an equally great service.

Zoo people who want to write simple articles in Hindi for zookeepers will also be designated as saints. People of any background who want to contribute money toward this worthy cause will be conferred super-sainthood.

Unfortunately this winning advert got no volunteers, hence, no Hindi newsletter for zookeepers till date.
S.Walker
This month-That age.  ZOOS' PRINT 25 years ago - July 1986

Interview of Y.D. Singh, Director, Jodhpur Zoo ... a Zoo-man's Zooman
G. S. Bidawat, Secretary, Godawan Society, Jodhpur

Y.D. Singh is probably the only zoo-man in India who was actually born in a zoo. In zoo terminology we would call him "zoo-born" or "captive-born" as opposed to "wild-caught" individual. G. S. Bidawat was his great friend, colleague and fellow in the Godawan (Great Indian Bustard) Society. Editor

Y. D. Singh’s father was Superintendent of the Bikaner Zoo and resided on the premises of the Zoo when his son was born. Y.D. Singh spent his boyhood exploring the jungles of Kikar, Akra and Khejri and trudging the sand dunes of the Thar Desert. Thus he became intimate with the characteristics and nuances of desert wildlife.

He joined the forest service and became Superintendent of the Bikaner Zoo where he was born, and later of the Jodhpur Zoo. He was the first man to take genuine interest in the captive breeding of the Great Indian Bustard and succeeded in mating although not hatching this rare bird. He was also the first to introduce the walk-through aviary in India at Jodhpur Zoo. Singh’s work made Jodhpur Zoo into the best small zoo in the country. Singh’s work in the desert is also interesting. He was the tireless worker who helped create the Dhawa-Doli Black-buck Reserve about 40 km from Jodhpur, erecting several water tanks and a luxurious (for desert standard at least) rest area for tourists. Only if you visit the area (which requires a rough journey by jeep) can you appreciate the effort involved to bring cement and all other supplies required for those constructions.

Singh’s whole family has been devoted to wildlife—his father served the State’s game reserves and zoos. Singh’s elder brother is Kailash Sankhala who needs no introduction. Just before his retirement from the Jodhpur Zoo, Singh started the Desert Wildlife Protection Society (Godawan) which has been featured in an earlier issue. He continues to be an inspiration to those who are interested in the desert wildlife. Mr. G. S. Bidawat, Secretary of the Godawan Society and Jodhpur correspondent of Zoo’s Print has contributed this very interesting and informative interview. Editor

G.S.B. Mr. Singh, as you are involved in Zoo Management since 1958, even after your retirement from the post of Zoo Superintendent of Jodhpur Zoo in 1983 you have devoted much of your time for zoo keeping. I would like to ask you some questions regarding zoo management. You know well that in past times the main aim of a zoo was only to exhibit the wildlife among masses for entertainment. What are the main aims of a zoo today? Y.D.S. Today breeding and research are the important aims. Also exhibition of wild animals in a simulated natural environment can provide an education programme among masses so they may know the importance of wildlife in an ecosystem. But exhibition of animals for the public should not overwhelm the breeding programme. Perhaps animals should not even be exhibited during their breeding season.

G.S.B. Today the Government wants to undertake the captive breeding of the rare species prior to their rehabilitation in natural habitats. But there are opinions that captive breeding will change their behavior pattern such that they cannot be rehabilitated. What are your comments in this matter?

Y.D.S. It is better that only the rare species found in close vicinity of the zoo locality - in the same climatic zone - should be selected for captive breeding purpose in that zoo. Also the director or in-charge, supervisors and keepers should be carefully chosen so that they can take the necessary steps to emulate nature and stimulate normal behaviour as far as possible in the zoo.

G.S.B. As you know we can’t give 100% natural conditions to the animal in zoo. Will it not adversely affect the behaviour of the animal?

Y.D.S. We can moderate the cages in which semi-natural conditions could be provided and after successful breeding in captivity we can release the young ones first in semi-natural closed areas for their adaptation, than the same may be released in their natural habitat. This will not
adversely effect the behaviour of the animal if it is properly researched and very, very carefully done. **G.S.B.** Mr. Singh, just now you said that interested zoo in-charge and keepers should be selected. What do you mean by that?
**Y.D.S.** I mean they should have love and affection for the animals. They should treat the animals like their own children. They should be devoted and committed.

**G.S.B.** Mr. Singh, some of the Indian Zoos are not up to standard. Why do you think this is so?
**Y.D.S.** There are many reasons: lack of funds, lack of powers to zoo in-charge. For example, the in-charge cannot take any decision on the spot. He has to take orders from higher officials who may be located in another town and may not be so conversant with zoo matters. Sometimes zoo in-charge's recommendations are not carried out due to red tape. This has an adverse effect on ideal zoo management. Another reason of poor management of a zoo is favoritism at the time of selection of zoo in-charge. Instead of appointing an interested, well-motivated and experienced person, the department sometimes selects an inappropriate person due to vested interests. This is not good for the zoo.

**G.S.B.** What would be the procedure for the selection of zoo in-charge?
**Y.D.S.** It may be in two ways. One, through Public Service Commission, should be a Master of Animal Science. Training and diploma in zoo keeping from institutes like Jersey Wildlife Preservation Trust should be considered additional desirable qualification. Another mode of selection for the post of zoo in-charge should be on the basis of experience cum seniority in the rearing of animals in captivity among the employees of the forest department itself.

**G.S.B.** Then do you think all zoos should be under the forest department?
**Y.D.S.** No, zoos should be managed in co-operation and collaboration with the Department of Forest because these officers may have specialized interest in investigating and rearing the rare species in zoos.

**G. S. B.** Mr. Singh, you have devoted your services to Indian Zoos (Bikaner & Jodhpur zoos). What precautions should be taken while trapping the animals in the field? Let me know your experiences.

**Y.D.S.** Only experienced and expert zoos and wildlife authorities should trap the animals from wilderness. There are some private agencies also engaged in this field, but they do not bother about injury and mortality of the animal at the time of trapping. Khata, used as loop or charging the animals should be avoided at the time of trapping. Young animals are preferred for trapping as they adjust much better to captivity. After trapping the animal should not be kept in the cage for public exhibition, he should be kept for at least 20-25 days in semi-natural conditions in the zoo. For this special cages should be constructed in zoos. During these days the animal may refuse food because of shock. Forced feeding should be avoided. Some-times the shock to animal was observed to be present for months.

Initially a natural diet should be given to the newcomer. One should avoid sudden change in the diet. The substitute diet which would have to be given to the newcomer in the zoo can be initiated in small quantities mixed with the natural diet. This quantity may be increased gradually. Carnivorous animals should be given small living prey for some days.

**G.S.B.** What should be the time of feeding for animals in the zoo?
**Y.D.S.** Early in the morning is the best time for feeding the animals in zoos. Remaining food should be removed from the cages to prevent disease. All the animals should 'fast' once a week to keep them fit from health point of view. The keeper should watch over feeding.

**G.S.B.** How can we keep a cage free of rodents? It is a major problem in zoos.
**Y.D.S.** Storage of the food material should be rodent proof. It should be away from the cages, in one corner of the zoo premise. Animal should be removed immediately from a rodent infested cage. After this the rodents should be given their favourite diet for 2-3 days and then according to instructions rodenticide may be mixed up with this diet to kill the rodents. In bird cages rodenticide should be given at night only. Dead rodents should be burnt. Water should not be near infested cage. After treatment the cage should be kept empty for 3-4 days. It should be washed before releasing the animal.

**G.S.B.** Mr. Singh how would you define an ideal zoo?
**Y.D.S.** Numbers of animals in a zoo do not make it ideal. Now an ideal zoo is that in which "maximum breeding" of the right kind with systematic management takes place. It can be possible with proper management only. Special and clean cages with almost natural conditions, protein rich diet, and flowing water through each cage of a zoo, interzoo exchange programmes, trained zoo in-charge and keepers with devotion are some of the aspects which are responsible to make a zoo ideal through its management.

![Y.D. Singh and Sally Walker in the Rajasthan Desert in dead summer. Photo: Anon.](image)