

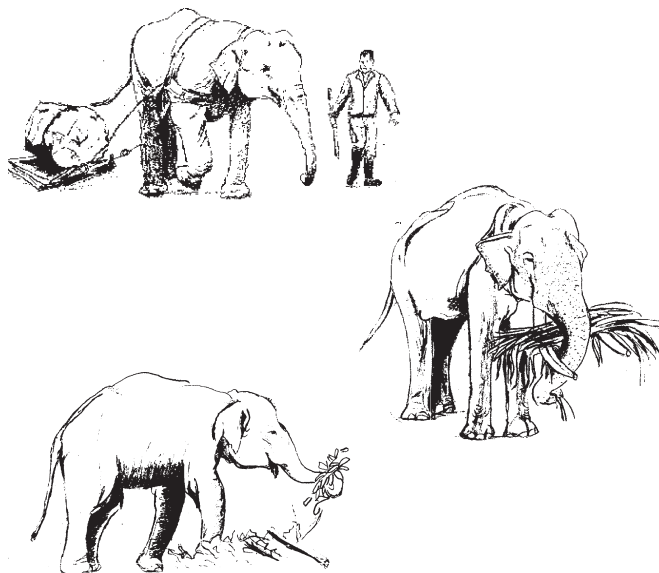
that keepers could have immediate contact with the animals at all times. Now, keepers work under "protected contact", meaning that there will be some form of barrier between them and the animals at all times. The change required that the facility be modified to add gates, a protective wall, modified posts in the barn, and a re-located water supply. The exhibit remained open to the public while modifications were underway.

Protected contact helps ensure keeper safety since keepers no longer have to assert their dominance physically over the animals because they no longer occupy the same space. This means that behavior management occurs almost entirely through positive motivation.

Research : Research is ongoing; University of Washington students enrolled in the psychology 419 course have been particularly active contributors of data.

Conservation : Between 1992 and 1998, the zoo conducted artificial insemination (AI) procedures with two of its Asian elephants. Because of a dwindling North American elephant population and unsuccessful AI efforts, the zoo opted to bolster the population's reproduction efforts by sending a female to breed naturally with a male at Dickerson Park Zoo in Springfield, Missouri. This breeding loan began in September of 1998. The pregnant female returned safely to Woodland Park Zoo, and a female calf was born on November 3, 2000.

This marked the first-ever elephant birth at the zoo and in Washington state. The calf has remained in good health in the Elephant Forest exhibit for more than three years (2004). The Woodland Park Zoo herd is entirely female * four Asian and one African. In addition, Woodland Park Zoo's Conservation Fund benefits elephant conservation programs and other conservation efforts. Conservation messages, including warnings related to the purchase of ivory, appear throughout the exhibit.



Breeding of Zebra in Sanjay Gandhi Biological Park, Patna

Samir Kumar Sinha*

With the birth of a healthy male foal on March 18, 2004, the Sanjay Gandhi Biological Park, Patna made its inclusion in captive breeding centers of Zebra in India. At present Kanpur, Lucknow, Mysore, Thiruvananthapuram, Chennai, Kolkata, Nandankanan and Patna zoos have zebras, but breeding of the species is going on in few of them.

In Patna Zoo, a pair of zebras was brought from Kanpur Zoo on 23rd April 1997, but unfortunately the female died on 1st December 1997 due to internal casualty as she dashed into the steel mesh of the enclosure. This made the male lead a solitary life for almost four years till one female was brought to the zoo on 23rd October 2001 from Lucknow Zoo. When this female was included in the Park, she was only one year old (date of birth 25th October 2000) so, the park management decided to keep her in a separate enclosure close to the enclosure of the male. "This helped in developing familiarity among the two individuals on one hand and gave enough time for the female to mature", says Ranvir Singh, Director of Sanjay Gandhi Biological Park. During first estrus, in early 2003 the female zebra was brought in contact with male and mated. The first mating became unsuccessful but both the individuals were left in the same enclosure. After twenty one days the female again came to estrus on 21st March 2003 and mating on the occasion became successful giving the park a gift of the new born foal.

As soon as it became apparent that the female had conceived, special feeding care was taken for the animal. Food was supplemented with mineral mixture, vitamins, iron, and calcium. The pair during the period was not disturbed and was left to lead a natural life. "The best part of the whole success was that the birth took place at 20:00 hrs. without any human interference", adds Mr. Singh.

Acknowledgement

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