

Birth of White Tigers (*Panthera tigris*) in Lucknow Zoo

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On 3rd July, 2001 at 8.15 am Reema, a white-coloured tiger in Lucknow Zoo gave birth to three white-coloured cubs while the white-coloured father, Rupesh, watched curiously. This is Reema's first pregnancy and delivery and due to her inexperience, she crushed one cub with her foot. After the death of this cub, Reema moved more cautiously in her enclosure and there were no more incidents.

This birth is the first time for a white - coloured tiger in the history of Lucknow Zoo, although many normal-coloured cubs were born and reared over the years. Last year normal-coloured tigress Shefali gave birth to three normal-coloured cubs but none survived. There were a variety of opinions as to why these cubs did not survive. The media charged "mishandling"; conservationists charged that the mother was not allowed to rear them and others said that the father was diseased which passed on to the cubs! Whatever the reason, the Zoo lost these tiger cubs so from day one of Reema's pregnancy it was decided not to announce it to the public. Both Zoo Vets and Keepers were asked to take extra care of the mother and see that she was undisturbed.

After the birth of the cubs no one was permitted to see them except the Zoo Vets Dr. Utkarsh Shukia and Dr. Ashok Kashyap and Zookeeper, Mubarak Ali. After consultation with Zoo Vets it was decided to leave the new born cubs completely to the mother for post-natal care and Reema turned out to be a good and caring mother, devoted and loving.

History of White Tigers

The Indian forests are the homeland of the white tigers. The earliest known record of occurrence of white tiger in India was recorded in the Akbar Nama, dating back to 1561 AD. After that, sporadic reports of white tigers have been recorded in different parts of the country from time to time.

The Bombay Natural History Society has recorded seventeen cases of white tigers shot in India during the period from 1907 to 1933 mostly in the



Reema, in her cubbing den, with a cub underneath.
Photo compliments Lucknow Zoo.

forests of Madhya Pradesh, Bihar, Orissa and Assam. During a period of 55 years ending in 1964, there were only nine reported cases of white tigers in the forests of old Rewa state and the last white tiger shot in that area was in 1947. There were about forty white tigers living in the forests of Bihar during the 1930s, but today one hears of none. Records of big game hunting during the forty years ending in 1986 indicate that more than twenty white tigers were shot in the jungles of Bihar. The last record of white tiger shooting in India was in 1958 from Satganwa Forest Range of Hazaribagh, in Bihar.

Besides India, there is only one record of white tiger shooting in Terai area of Nepal in 1939 by the then Prime Minister of Nepal. Although it is said that a white tiger was exhibited at the Calcutta Zoo in 1920, the credit for

bringing the white tiger to the limelight goes to the then Maharaja of Rewa, Sri Martand Deo Singh. A nine month old male white tiger cub from a group of four cubs (three cubs being of normal colour) was trapped alive from the forests of Rewa on 27 May 1951 and shifted to the Maharaja's summer palace at Govindgarh, about twenty kilometers from Rewa. This male white tiger cub was successfully reared to adulthood at the summer place and was named 'Mohan'.

Mating of this white male with a normal coloured tigress 'Begum' procured from the same Rewa forests resulted in the birth of ten coloured cubs only. There were no white in the three litters between 1953 and 1956.

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Disappointed with the results of his mating, the Maharaja then arranged the pairing of a female offspring of the second litter named 'Radha' with 'Mohan'. Mating of this father-daughter pair resulted in the birth of four white cubs (one male and three females) on 30 October 1958. This was the first birth of white tigers in captivity and afterwards, several white tigers were bred with this pair and their offspring.

One of the female white tigers of the first litter was sold to National Zoological Park, Washington D.C., U.S.A. at the end of 1960. After that the Government of India imposed a ban in 1960 on export of white tigers and made an agreement with the Maharaja of Rewa in 1963 that he could sell a pair of white tigers to Bristol Zoo in England in 1963. Two white tigers (1.1) of the first litter were sent to Delhi Zoo in 1963 and all the three cubs (one normal-coloured female and two white) of the second litter were sent to Alipore Zoological Garden, Calcutta in 1963. All these white tigers and their offsprings are the descendants of the white tiger 'Mohan' and the coloured tigress 'Begum' and they may be referred to as white tigers of Rewa origin.

Genetics of Newborn White Tiger Cubs

Reema was born on 19th December 1995 to Sukant, a white-coloured male and Durga, a white coloured female. Rupesh, recent father to our cubs was born on 18th March 1996 to Debashis, a normal-coloured tiger and Jamuna, a white-coloured female. Both were born in Nandankanan Biological Park, Bhubaneswar. They were brought to Lucknow Zoo on 27th November 1997 from Nandankanan Zoo in exchange of six Swamp Deers.

Both the parents are chalky white-coloured felines marked with black stripes, with pink nose and palm pads and icy blue eyes. Rupesh is a little larger than Reema.

The body colour of the cubs is white with icy blue eyes, pink nose and palm pads. Like the parents, their skin is chalky white mixed with light black and black stripes.

Since Reema, the white female tigress is born to homozygous recessive white male and homozygous recessive white female tiger it must be homozygous recessive for the white coat colour genes. On the other hand Rupesh is born to heterozygous normal male and homozygous recessive white female it must be homozygous recessive for white coat colour. Finally when both homozygous recessive for white coat colour parents Rupesh and Reema were mated they produced all white coat colour litter.

Successful Rearing of Indian Sarus Crane (*Grus antigone antigone*, Linnaeus) in Captivity in Lucknow Zoo

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On August 10, 2000 an egg of Sarus Crane (*Grus antigone antigone*, Linnaeus) hatched a yellowish coloured chick about the size of an ordinary, newly hatched chicken. The news of this hatching created much interest in the Zoo, the press and general public.

The birth of a Sarus Crane chick in the Lucknow Zoo is significant for several reasons, e.g., i) siblings of Nal and Dhamyanti had not survived in any earlier attempt, ii) there was a notion that no captive born Sarus Crane had survived in any zoo, and iii) declining population of the species in the wild.

Dr. R.L.Singh, Chief Wildlife Warden, Uttar Pradesh and Administrator of the Zoo named this chick "Happy" in order to give it a positive start in life. He congratulated Zoo Veterinarians Sri. Paramjit Singh, Zoo Veterinarians Dr Utkarsh Shukla and Dr. Ashok Kashyap and Keepers Kallu and Nandan Singh with full support for successful rearing.

Lucknow Zoo has had three pairs of Sarus Cranes, one in the Duck Pond closed enclosure; one in the Barasingha open enclosure and another in the Deer Park for more than two and half decades but without a recorded date of their arrival. The oldest keeper of the Zoo claims the parents of the new born chick had been in the Zoo as a pair for more than 27 years, sharing their habitat with Barasingha and Black-necked Storks in a 60x100 m. enclosure.

Sarus cranes are large, tall birds, gray in colour with bare red legs and naked red head and upper neck. The male is larger than the female. According to Zoo Vets and Keepers, this pair of cranes, had laid eggs on many occasions in the last 27 years but they were destroyed by rain or winds, by



Two day old Saras Crane chick at Lucknow Zoo.
Photo by Utkarsh Shukla

other birds of prey, or eaten by mongoose. On some occasions the mother did not sit on the eggs. On three occasions this pair successfully hatched eggs but survival rate was poor and accidents claimed some chicks.

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