



# ex-situ

UPDATES



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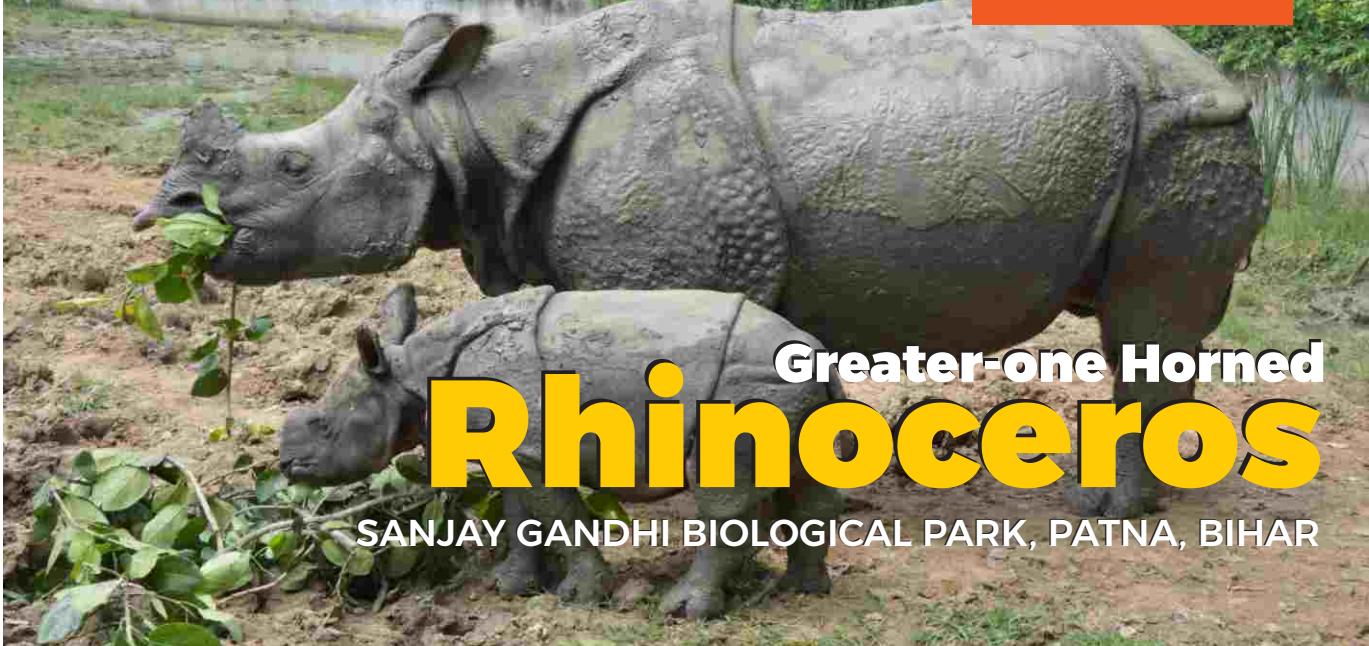
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*Cover photo credits - Left: Dr. Sanjay Kumar Shukla; Right: The Living Desert Zoo and Gardens, Palm Desert, California, USA*



# Greater-one Horned Rhinoceros

SANJAY GANDHI BIOLOGICAL PARK, PATNA, BIHAR

## TEXT & PHOTOS

Sanjay Gandhi Biological Park,  
Patna, Bihar

**S**anjay Gandhi Biological Park, Patna is famous for successful conservation breeding of one horned rhinoceros and in the number of having captive bred rhinoceros. It has 2nd position in the world after the San Diego Zoo, U.S.A. Considering the suitable climate and environment for successful breeding of Rhinos in this zoo. Captive Breeding of Greater one Horned Rhinoceros in SGBP has helped it to acquire global recognition.

In consideration of the past achievement, suitable climate, conducive environment, appropriate infrastructure facilities available for breeding of the One Horned Rhinoceros at the Patna Zoo, the Central Zoo Authority, New Delhi has selected this zoo for breeding of Rhinos and approved a scheme for construction of Rhino Conservation & Breeding Centre. The Central Zoo Authority, New Delhi sanctioned a scheme and provided necessary financial assistance for construction of separate and off-display Rhinoceros Conservation Breeding Centre in the zoo which is spread over more than 13 acres of land.

The construction work of Rhino Conservation & Breeding Centre has been completed in the western portion of the park in more than 13 acres of land. The total area of Rhino Conservation & Breeding Centre is 54117 sq.m. In each enclosure, a night house has been constructed in an area of 168.127 Sq.m. which includes the animal house of 112,350 Sq.m., feeding and drinking water facility in 11.200 Sq.m. and Keeper's veranda in 37.734 sq.m. This is a unique & modern enclosure where we can keep almost 25 rhinos at a time. The naturalistic enclosure has been planted with grasses from wild keeping in mind for restocking in wild. There is a depression amidst conservation breeding centre, more like a low-lying wetland in which marshy habitat conditions prevail throughout the year. The potent mating pair brought there and becomes conducive to each other in a natural and soft way.

The breeding centre is double layered to provide complete serenity to the inhabiting rhinos there. To monitor closely, the shelter house is designed in such a way that the zoo keepers, supporting staffs, veterinarian or experts can intervene easily when required. This is also monitored 24x7 through CCTV surveillance. There is a round the clock availability of dedicated zoo keepers for rhinos

inhabiting there. The Conservation Breeding Centre for Rhinoceros has been functional since 2019.

## BRIEF HISTORY OF CAPTIVE RHINO AT PATNA ZOO

For the first time on 28.05.1979 this park received one pair of Rhino named 'Kancha' and 'Kanchi' from State of Assam. Both Rhinos were sub-adult. Almost after 3 years, on 28.03.1982, one rescued Rhino (named Raju) from Bettiah Forest (at present Valmiki Tiger Reserve) came to this zoo, which led to start breeding of rhino in this park. In the year 1988 one female Rhino (Hartali) took birth from successful conjugation of Raju and Kanchi.

Again in 1991, same pair of Rhino bred again and one more female rhino was added in the list. The first two Rhino of this park named Kancha and Kanchi finally lead to the birth of one male Rhino in the year 1993. This showed that all Rhinos of this park are potential breeder.

Hartali the first Rhino calf of this park produced eight calves till date (Seems to be a record) and she considered to be one of the most successful breeding females as far as captive breeding in Rhino is concerned. Park management is also very sensitive towards avoiding inbreeding of Rhinos housed at Patna Zoo, So, to

improve genetic diversity one male rhino 'Ayodhya' and one female rhino 'Gairi' were brought to this park under animal exchange programme from Delhi Zoo and San Diego Zoo, U.S.A. respectively. At present we have six (6) blood lines of Rhinos. Sanjay Gandhi Biological Park, Patna has provided rhino to Delhi, Kanpur, Ranchi, Chennai, Hyderabad Zoo, Kevadia and country like U.S.A. and Indonesia (Proposed). At present Sanjay Gandhi Biological Park, have 8 male and 6 female rhinos as detailed in the table below.



| Sl. No. | Name of Rhinoceros | Dam      | Sire    | D.O.B.     | Age (approx) | Sex    |
|---------|--------------------|----------|---------|------------|--------------|--------|
| 1       | Ayodhya            | Mohini   | Dabbu   | 27.12.1992 | 30 yrs.      | Male   |
| 2       | Hartali            | Kanchi   | Raju    | 08.07.1988 | 35 yrs.      | Female |
| 3       | Ganesh             | Hartali  | Raja    | 19.09.2004 | 18 yrs.      | Male   |
| 4       | Shakti             | Election | Ayodhya | 08.07.2017 | 6 yrs.       | Male   |
| 5       | Gouri              | Hartali  | Kancha  | 08.08.2002 | 20 yrs.      | Female |
| 6       | Jumbo              | Rani     | Ayodhya | 11.11.2011 | 11 yrs.      | Male   |
| 7       | Lali               | Gairi    | Arun    | 03.12.2005 | 17 yrs.      | Female |
| 8       | Rani               | Kanchi   | Raju    | 06.07.1991 | 32 yrs.      | Female |
| 9       | Shakti Raj         | Gairi    | Arun    | 30.10.2007 | 15 yrs.      | Male   |
| 10      | Vidhut             | Gairi    | Ayodhya | 06.09.2013 | 10 yrs.      | Male   |
| 11      | Gudiya             | Gouri    | Ayodhya | 08.05.2020 | 3 yrs.       | Female |
| 12      | Yuvraj             | Rani     | Ayodhya | 16.06.2020 | 3 yrs.       | Male   |
| 13      | Prince             | -        | -       | -          | 4 yrs.       | Male   |
| 14      | Ghatongi           | -        | -       | -          | 4 yrs.       | Female |

#### **REASONS FOR SUCCESSFUL BREEDING AT PATNA ZOO**

Rich Tradition, Maintenance of multiple blood line (Purity of Bloodline), Presently Six (6) different blood lines, Scientific Record keeping, Trained Man power and rigorous Training, Experienced veterinarian with well-equipped veterinary hospital.(MoU with Patnaveterinary college) and Naturalistic enclosure with muddy moat and clean night houses.

An ambitious project for reintroduction of Rhinos in Valmiki Tiger Reserve is under process under expert team in which Rhinos from Patna Zoo may also be released after due process. Patna Zoo can play more roles with the cooperation of other zoos holding captive population of the One Horned Rhinoceros to maintain the appropriate genetic diversity among the captive population of the species in the country for long term survival of the captive population. It would ensure the availability of physical, genetically and behaviourally suitable population of the species for future use in case of necessity to supplement the in-situ conservation efforts of the species in the country. In 2021 Patna Zoo donated one female rhino (namely Election) to Kevadia Zoo & it has also shared its best practices and expertise of rhino breeding/care to Kevadia Zoo. Due to regular prescription and suggestions about rhino breeding/care from experts of Patna Zoo and Kevadia Zoo recently successfully bred that female rhino (Election) & its calf is doing well. So in a way the Patna Zoo not only breeding the rhino in its own breeding centre but also helping other zoos to breed this unique

#### **RECENT DEVELOPMENTS**

During Covid pandemic, despite all odds two births of healthy Rhino calf within a span of one month in the year 2020 is the testimony of fact

related to growing prowess of Patna Zoo managers and workforce in breeding of Greater one horned Rhinoceros, presently no other Zoo in India has such a brilliant track record in Rhino breeding.

