# Annual REPORT







### ——— From The Director's Desk

Dr. Manoj V. Nair, IFS Director, Nandankanan Biological Park

As its name signifies, Nandankanan is indeed a veritable Garden of Gods. With the largest animal collection of any zoo, this Zoological Park is recognized as one of the best zoos in India and is the only large zoo of the State. Established on 29th December 1960, Nandankanan over the years has witnessed significant improvements in providing the highest standards in housing, husbandry and health care to its denizens and a fascinating experience to its visitors. It enjoys a special place in the wildlife conservation annals of our country for its inimitable amalgamation of in-situ and ex-situ conservation initiatives. It is worth mentioning that the forested landscape encompassing the Zoological Park, Kanjia lake and State Botanical Garden has been declared as Nandankanan Wildlife Sanctuary, spread over an area of 4.37 sq.km on 3rd August, 1979. The sprawling zoo houses about 4100 plus individuals belonging to 162 species of mammals, reptiles, birds and amphibians. Further, the Nandankanan Sanctuary is home to a rich assemblage of wild flora and free-living wildlife. The State Botanical Garden which spreads over an area of 75 ha adjoining the Zoological Park is one of the most important plant conservation facilities in the State with more than 750 species of plants having been documented. There are two important wetlands namely Kanjia lake (66 ha) and Kiakani lake (25 ha) in Sanctuary. The former is the main water source for Nandankanan Zoological Park and State Botanical Garden. It supports a rich diversity of flora and fauna and is an ideal site for spreading awareness and education for conserving wetlands. Therefore, it has been listed



as a Wetland of National importance by the Ministry of Environment, Forests and Climate Change, Government of India in the year 2006.

As the head of Team Nandankanan, it is my pleasure to inform you that we have completed another outstanding year of biodiversity conservation, zoo management, research and education. Nandankanan has been very popular, as always, among tourists and local inhabitants and has attracted 3.8 millions visitors during the year 2022-23 and has earned a revenue of more than Twenty crores. Significant improvements were achieved in the infrastructure development, animal collection, care of rescued and infant animals, health care, fodder production and conservation research. The zoo witnessed the first ever breeding of Indian Grey Wolf in its history when female wolf Indori gave birth to six pups of which two have attained adulthood. Other notable species which were born during the current year includes Mouse deer, Blackbuck, Hog deer, Stumptailed macaque, Swamp deer, Jackal, Assamese macaque, Manipuri deer, Four-horned antelope, Indian gaur, Asiatic lion, Indian tiger, Indian pangolin, Indian grey wolf, Sambar, Bonnet macaque, Hippopotamus, Black kite, Painted stork, Grey pelican, Indian peafowl, Alexandrine parakeet, Blossom headed parakeet, Violet turaco, Openbill stork, Night heron, Barn owl, Mandarin duck, Star tortoise, Banded krait, Rat snake, Yellow anaconda, Monocellate cobra, Binocellate cobra and Water monitor lizard. Adding to its expertise in neo-natal care and hand-rearing of abandoned baby animals, the Zoo successfully reared very young babies of Indian grey wolf (2 nos), Sloth bear (1 no.), Blackbuck (1 no.), Ratel (1 no.) and Asiatic lion (2 nos.) during the period. During the financial year 2022-23, we have welcomed 09 animals of 02 species to the zoo in animal exchange programme with an objective of infusion of new blood line to the existing stock and also addition of new species to the zoo collection.

During the year, many enclosures and visitor amenities were renovated and supplemented with standoff barrier, signages and landscaping wherever necessary. Among the major developmental works carried out, Multilevel Car Parking, Zoo Laboratory, Modular Postmortem and Incinerator Complex, Carnivore Quarantine Ward, Indian fox enclosure, renovation of Children's Park, Nursery for hand rearing of animal babies and Operation Theater are worth mentioning.

As a commitment to in-situ conservation, during 2022-23, 2 male and four female gharials of 2.3m-3.8m tagged with satellite transmitters were released to the river Mahanadi under the Population Recovery of Gharial project spear-headed by Nandankanan. It was heartening that the natural breeding of Gharial occurred for the second consecutive year at Satkosia Gorge, the project implementation site. On 11th May 2022, 32 Gharial hatchlings hatched at the same nest from the same mother as the previous year. Community awareness activities were prioritized to protect gharials and their hatchlings by the field researchers in addition to daily monitoring of gharials.

Research is in the DNA of Nandankanan. Following the long-term commitment to scientific contribution, two research papers in various national and international journals and two books were published on numerous aspects of exsitu conservation and managing captive wild animals. Significant enhancements of the Zoo Laboratory have taken place. Therefore, it is

heartening that the year delivered several significant milestones.

As regards healthcare, the Zoo Hospital has witnessed a tremendous upgradation of facilities during the last year. The highest standards of health care and animal husbandry practices have resulted in a reduced annual death rate in 2022-23. This was possible due to sincere efforts by our zoo veterinarians, cooperation from the College of Veterinary Sciences and Animal Husbandry, OUAT, Bhubaneswar, and valuable advice and guidance from the Health Committee and Technical Committee on important health care issues.

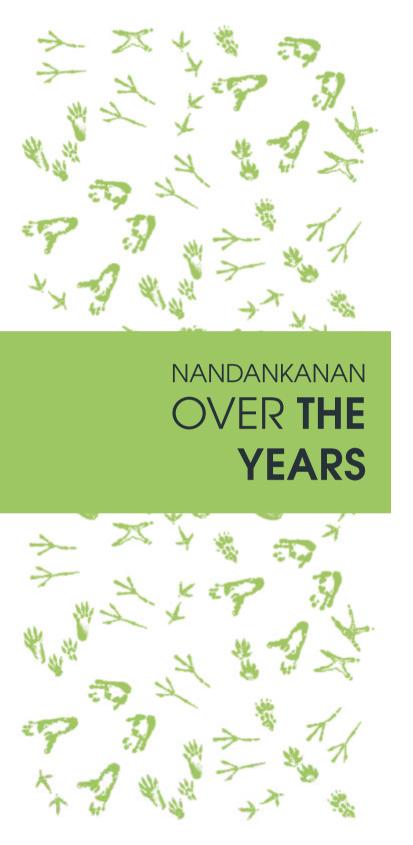
Many zoo education and citizen science programmes including Celebration of World Environment Day, International Tiger Day, Cheetah Awareness Week, World Elephant Day, Wildlife Week, World Wetland Day, World Pangolin Day and World Wildlife Day were organized during the year 2022-23. Nandankanan has started promoting Citizen Science (the voluntary involvement of the public in scientific study) in a big way. Various programs include Sunday Bird Walk, Tree Walk, Butterfly and Moth Watch, Nature Trail Walks and Herp Walks were conducted at regular intervals. Eight interns completed their internship work and submitted their thesis.

Needless to say, all this could not have been achieved but for the sincere efforts of all members of Team Nandankanan, and I would take this opportunity to thank them all – our dedicated staff, members of various technical and advisory committees and senior officers. I am optimistic that with the hard work of our staff and sound advice from our mentors, aided by the constant guidance of the Chief Wildlife Warden and ACS, Forest, Environment & Climate Change Department, we will continue to build upon our impactful legacy and forge ahead with determination towards fulfilling the vision of our Hon'ble Chief minister to transform Nandankanan into a world-class zoo.

### CONTENTS

Nandankanan over the years	01
Zoo in a snapshot	03
Human resources	13
Capacity building of zoo personnel	15
Visitors & Revenue	18
Income & Expenditure	20
	20
	21
	26
	32
Veterinary care	35
Annual animal inventory	58
Ensuring quality feed	65
Research & Education	69
State Botanical Garden	82
Constitution of society	90
Uniqueness of Nandankanan	91
Significant achievements	92
Superannuated staff during 2022-23	94
Felicitation of staff during 63rd Foundation Day	95
Animal Adoption rate chat	97
	Zoo in a snapshot Human resources Capacity building of zoo personnel Visitors & Revenue Income & Expenditure Animal exchange Developmental works Animal adoption scheme Impressions of our esteemed guest Veterinary care Annual animal inventory Ensuring quality feed Research & Education State Botanical Garden Constitution of society Uniqueness of Nandankanan Significant achievements Superannuated staff during 2022-23 Felicitation of staff during 63rd Foundation Day





For a zoo that is the envy of others now, the birth and evolution of Nandankanan is a fascinating story that needs recounting. Many people will be surprised to know that it was never planned as a zoo in the first place and came into existence purely by a curious interplay of circumstances. So here goes the interesting story:

A motley collection of animals and birds sourced from various parts of the state was put together by the Odisha government for the World Agricultural Fair organized in New Delhi in January-February, 1960. The collection included two spotted deer, two barking deer, two black bucks, a mouse deer, a leopard cat, a flying squirrel, a r-tailed drongo, a hornbill, two parrots, two hill mynahs, a peacock, a mongoose, a pangolin, two porcupines, a pair of wild boars and a python. Having played their part at the Fair, the animals and birds were brought back to the state in May and put up for public display at a temporary location near the Khandagiri-Udaygiri hills on the outskirts of Bhubaneswar. But soon, water scarcity emerged as a major problem for their continued stay in the area. It was the search for an alternative site for the animals and birds which ultimately led to the birth of what is now known as 'Nandankanan'.

Once the decision was taken to establish a zoo, the search for a suitable site with a perennial source of water began in right earnest. After several rounds of deliberations with senior officials of the Forest department, the then Chief Minister Dr Harekrushna Mahatab and Development minister Dr Radhanath Rath finally settled on a stretch of forest in the then famous Chandaka forest, which had a good natural water body called Kanjia lake. The site had the added advantage of being close to the Barang Railway Station. The present day Nandankanan zoo was established with parts of the Jujhagarh(DPF) and Krishnanagar Protected Forest

(PF). Construction activities were taken up over a very small area to house the animals.

On 29th December, 1960, Sri S.K. Patil, the then Union Minister of Food and Agriculture. inaugurated the new Biological Park named "Nandankanan", which literally means 'Heavenly Garden'. A Botanical Garden came up close to the park on the other side of Kanjia lake in 1963. The park, along with the adjoining forests, has been notified as Nandankanan Wildlife Sanctuary Notification No. 8F(WL)-160/78-20672/FFAH dated 3rd August 1979 of the erstwhile Forest, Fisheries & Animal Husbandry Department, Government of Orissa and published in the Official Gazette vide S R O No.935/79 dated 3rd August 1979. The Nandankanan Biological Park was renamed as Nandankanan Zoological Park in the 1980s as per the recommendation of the Orissa Leaislative Assembly Committee on Estimates, 1981-82.

The zoo evolved steadily with the addition of new animals and enclosures at regular intervals. The first tiger, along with a pair of African lions, a puma and a pair of muggers, was brought to the zoo from the Alipore Zoo in Calcutta during the All India Congress Committee session at Bhubaneswar in 1964. In 1967, the first open air tiger enclosure was constructed in the zoo. It surprised everybody when the last surviving tigress in the Chandaka forest was lured into this enclosure, where a male tiger "Pradeep" was already housed, on the 04th January, 1967. She was named "Kanan" by the zoo officials. Proximity to wilderness had earlier led to another interesting incident in 1964 when a courting wild tusker kidnapped a cow elephant from the zoo. The cow elephant, however, returned to its enclosure later.

Nandankanan achieved the rare distinction of the first-ever breeding of the Gharial in captivity with a full-grown male gharial brought from the Frankfurt zoo, Germany on breeding loan in a naturalistic pool created for the purpose. It was a miracle of sorts when as many as 24 hatchlings hatched in the gharial pool on 7th May, 1980. Earlier the same year, two normal coloured tigers 'Deepak' and 'Ganga' had given birth to three white

off-springs named 'Debabrata', 'Alaka' & 'Nanda' on 8th January, creating history in the process. With this, Nandankanan created its own family of white tigers and a separate gene pool.

In the years that followed, the park forged ahead in its developmental activities with the advice and guidance of the Nandankanan Development Board to become a leading zoo in the country with a wide variety of animals housed in a near natural environment. On 20th Jan 1984, a Lion safari over an area of 20 ha. was inaugurated inside the zoo premises. In 1991 came the first White Tiger safari spread over 12 ha. Two more safaris - namely Herbivore safari (21ha) and Bear safari (5 ha) - were established in 2011 and 2012 respectively.

The zoo has bred a large number of species of animals, birds and reptiles, many of them designated endangered as per the Wildlife Protection Act, 1972. They include tigers (normal colored, white and melanistic), leopards (black & normal), Asiatic lion, all the three types of Indian crocodiles, Indian tiger, elephant, lion-tailed macaque, Nilgiri langur, peafowl, Indian pangolin, thamin deer, ratel, black kite, water monitor lizard, gaur and many others.

The steady growth of the park was accompanied by a matching enhancement of facilities for the visitors. A toy train donated by the Ministry of Railways, Government of India was introduced in the park on 10th August, 1971. A ropeway linking the zoological park with the botanical garden has been in operation since the 1st of October, 1994. An aquarium was dedicated to the visitors by the Hon'ble Chief Minister, Odisha on 4th February, 2008. Several other amenities like electronic entry gate, battery operated vehicles, RO drinking water kiosk, interpretation centre, zoo museum, live feed rearing centre etc. were added or renovated for better management of animals and visitors.

In the six decades since its inception, the first zoo in the state has grown into one of the premier Zoos of the country.

### Zoo in a Snapshot



### **Vision**

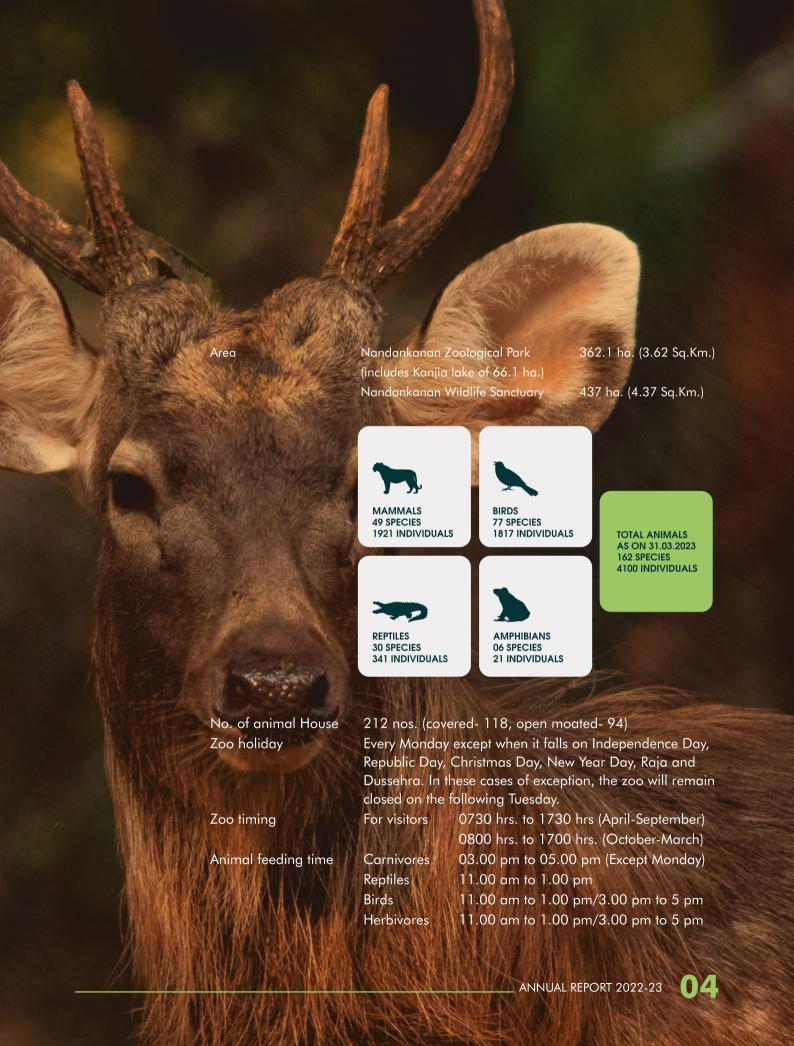
To achieve global standards in all aspects of management and become a truly word-class zoo by the next decade, and thereby to significantly contribute in conserving our country's biodiversity.

### Mission

To plan and implement bestpractices in captive animal welfare and health care, enclosure design and display, aesthetics and visitor amenities, education and outreach, research and conservation, technology and teamwork so as to foster the people-nature connect and transform the zoo to a global leader in ex-situ conservation.

### **Objectives**

- To leverage the unique juxtaposition of natural wetlands, lakes and forests as well as favourable location inside a wildlife sanctuary and make Nandankanan an unparalleled example of seamless synergy between ex-situ and in-situ conservation.
- To retain and augment the USP of being a 'Green Zoo' by increasing the forest cover so as to function as an important green lung to the fast-growing urban population of the twin cities of Bhubaneswar and Cuttack.
- To cater to the recreational needs of people and strengthen the people-wildlife connect by providing an immersive experience through large naturalistic and enriched enclosures and modern thematic exhibits.
- To build upon and consolidate the excellent reputation for animal health care, rescue and rehabilitation; cutting edge research and documentation; effective practices in conservation breeding, thereby contributing immensely to endangered species conservation in the State and the country.
- To function as a hub for nature and environmental education in Odisha, especially her young citizens and foster in them a love for Nature, Wildlife and its conservation.
- To keep innovating and add to first-of-its kind initiatives such as Captive Fodder Farm, Captive Slaughter House, Live Feed Rearing Centre etc.



The Park's sylvan setting offers several unique attractions which attract visitors in large numbers.





### Tiger safari

Tiger safari, which started on October 1, 1991, offers visitors the opportunity to observe tigers ranging freely in their natural habitat. It's an exciting and adventurous way to see these majestic animals.



### Herbivore safari

Visitors can witness animals including barking deer, spotted deer, sambar, four-horned antelope, wild boar, jungle fowl, peafowl, etc. moving freely in their natural habitat while in a specially designed vehicle on the 21-hectare safari. The park has been offering this safari since 2011.





### **Boatina**

Boating in Kanjia Lake is a relaxing and peaceful way to admire the natural beauty of Nandankanan. Paddle boats ranging in size and capacity from 2-seater to 6-seater are offered.





### Lion safari

Developed in 1984 on 20 hectares, the drive takes approximately twenty minutes through forested areas, enabling guests a chance to witness gorgeous lions in their natural habitat.









### Bear safari

Established in 2012, the Bear Safari at Nandankanan is a relatively new attraction. It allows tourists to witness sloth bears in their own environment and spans an area of more than 5 hectares. A rare chance to observe the behavior and way of life of these incredible creatures is provided through this safari.





### **Nocturnal Animal House**

It is a unique attraction designed to contain a range of nocturnal animals, including porcupines, owls, pangolins, and civets. Since these animals are nocturnal, keeping them in standard enclosures for public exhibition will not appeal to tourists. To make the nocturnal animals more active during the day for the benefit of visitors, the animals' wake-sleep cycle is reversed by imitating nighttime settings, causing the animals to become active during the day.



### **Reptile Park**



At the Reptile Park of Nandankanan, guests are greeted by a life-size Tyrannosaurus model. This area of the park is made more interesting by a small interpretation center and thirty various species of reptiles, including turtles, lizards, snakes, and crocodiles. The animal collection here features some unique attractions, including king cobras, pythons, and anacondas. Through interactive displays, live exhibitions of different reptile species, and models of ancient animals, the interpretation centre highlights the biology and evolution of reptiles.



### **Toy Train**

For guests of all ages, the Toy Train is an attraction that provides an enjoyable and picturesque trip. With five bogeys that can accommodate 72 passengers each and two wheelchairs for the disabled, the Toy Train is battery-operated. The 1.58 km round track of the Toy Train traverses by the lake and through the heavily forested hilltop region, where animals roam freely.







### **Aquarium**

A fantastic resource for learning more about the fascinating world of water and its inhabitants is the Aquarium of Nandankanan. Sufficient measures were implemented to incorporate thoroughly researched educational resources that highlight the distinctive characteristics and conservation requirements of the various freshwater and marine aquatic environments. The Hon'ble Chief Minister of Odisha dedicated the aquarium to the public on February 4, 2008.



### Library

The Library of Nandankanan provides an extensive collection of books and publications on topics of forestry, wildlife, veterinary etc. The library is conveniently placed and offers over 5,000 books and journals to enhance the knowledge among the visitors on importance of conservation of natural resources.







### **Interpretation Centre**

The interpretation center, which is located near the entrance gate of the park, uses a variety of audio-visual aids to provide information on Odisha's wildlife in general and Nandankanan in particular. A movie about Nandankanan is shown to visitors, who can also learn about the behind-the-scenes activities of the park.



### Zoo museum

The museum displays taxidermy specimens, preserved specimens of early developmental stages of animals and eggs of flightless birds. It also has exhibits on animal behaviour, ecology, conservation and biodiversity. This facility will be of great interest to the visitors in general and students in particular.



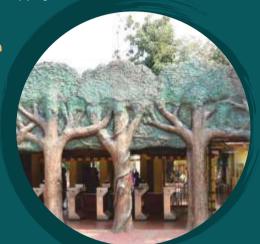


### **Battery Operated Vehicle**

Battery Operated Vehicles (BOVs), a paid service provided by the Zoo, allow guests to move quickly and easily around the park, stopping at all of the major attractions. BOVs can be reserved for Rs. 1000 per group for one hour, or they can be reserved on an as-needed basis for Rs. 80 per person. The zoo's Herbivore Lane, Reptile Park, Safari entrance gate, Tiger Avenue, Elephant Lane, Nocturnal Square, Kanan Square, Sloth Bear Enclosure, and Aquarium are the locations where BOVs have defined stoppages.

### Electronic gate entrance system

In order to increase the security and transparency of the zoo entry, the Electronic Gate Entrance System was implemented in 2012. Using one of the six electronic gates, guests can enter the zoo by scanning a ticket with a barcode. Accurate information on the quantity and type of visitors at any given time is also being provided to the park management by the system.





### Open top leopard enclosure

A big, realistic enclosure that is open to the sky houses leopards on display at Nandankanan is one of the first in India and is designed to provide guests a better view of the animals. The enclosure has solar powered electric fence for the safety and security of the leopards and the visitors. The enclosure is also unique with respect to the environmental enrichment done here.





### Amphibian enclosure

The Nandankanan amphibian enclosure is a facility that features six different kinds of amphibians, including toads and frogs. The enclosure comprises a 56 m² plinth space and a viewers' gallery. Additionally, it incorporates amenities like a swimming pool, live plants, sawdust, and running water to provide the amphibians a realistic habitat. The goal of the frog enclosure, one of the first of its kind in India, is to inform guests about the significance and diversity of amphibians.







### Walkthrough aviary

The Nandankanan walk-through aviary is a facility that features a variety of exotic birds, including ducks, parakeets, pheasants, conures, and turacos. With a tumbling waterfall, a meandering water channel, two pools, two arched bridges, and living plants, the aviary boasts a naturalistic setting. There is a 216-meter walking path paved with laterite stone and a separate entry and exit point for the aviary.



### Multi-level car parking

The Multi -Level Car Parking Facility at Nandankanan Zoological Park is a facility that was inaugurated by the chief minister of Odisha in 2022. It has a three-storey parking facility with a capacity to accommodate 583 cars and more than 2000 two-wheelers. The facility also has features like fire safety measures, driver rest rooms, drinking water and snack kiosks, CCTVs monitoring, elevator, ramps and landing facilities for visitors along with wash room for both gents and ladies. The facility not only provides safe parking of vehicles but also addresses the issues of traffic jam and rush at the main road near the zoo.





### Monocable pulsated ropeway

The Monocable Pulsated Ropeway at Nandankanan Zoological Park is a facility that allows visitors to enjoy a unique aerial view of the Kanjia lake and the flora and fauna of the park. It is a 618-meter long ropeway that connects the Nandankanan Zoo to the State Botanical Garden. It consists of 12 cabins, each with a capacity of 6 persons.







### **Entry Fees and Other Charges**

### Nandankanan Zoological Park

### **Entry Fee**

Rs. 50/-Indians (Above 12 years) Rs. 10/-Children (Age group of 3-12) Foreign visitor Rs.100/-Rs.100/-Handy cam camera

High end Video Camera

(Amateur Photographer) Rs.500/-

Movie Camera(Professional

Rs.4,000/-Photographers)

Nandankanan Safari

(Tiger, lion, bear & herbivores)

Non-AC 65/-Bus service AC Rs.100/-

Ropeway (Above 3years) Rs. 120/-

Toy Train

Children (Age 3-12) Rs. 30/-Adult Rs. 50/-

Boating (for 30 minutes)

Paddle Boat (2 seater) Rs.50/-

(4 seater) Rs.100/-Rs.150/-Family boat

Battery Operated Vehicle Rs. 80/- per person

Rs.1000/- Reserve for 1hr

Multi-Level Car Parking

Rs.70/-Bus Two-wheeler Rs. 20/-Three-wheeler Rs.30/-Four-wheeler Rs. 50/-Cycle Rs.5/-

### **Free Facilities**

Aquarium

Cloak room

Entry of differently able persons

Entry of Children below 3 years

Film still camera

Diaital still camera

Perambulator for children

Walk through aviary

Library

Children's park

**RO** Drinking water

Use of Toilets

Wheel chair for differently able persons





Month wise number of visitors during 2022-23

Month	No. of visitors	Month	No. of visitors
April	194236	October	379355
May	199821	November	311711
June	322632	December	573036
July	236293	January	504162
August	248542	February	351966
September	226149	March	317221
	chool children during	Wildlife Week	
& Children's'	Day		2870
TOTAL			3867994



### **Human Resources**

### (A) Director's office in Mayur Bhawan, Bhubaneswar

Sl.No.	Designation	Number of	Number of
	S	anctioned Posts	the incumbent
1	Director	1	1
2	D.C.F.	1	0
3	Senior Stenograph	ier 1	0
4	Senior Assistant	4	4
5	Junior Assistant	4	1
6	Driver	1	0
7	Office Peon	1	1
8	Office Sweeper	1	0
9	Office Chowkidar	1	0
10.	Watchman	1	1
	TOTAL	16	8

### (B) Deputy Director Office, Nandankanan Zoological Park

SI.No.	Name of each category of post	Sanctioned strength	No. of staff in position
1	Deputy Director, N.K.Z	.P. 1	1
2	Sr. Veterinary Officer	1	1
3	ACF	3	2
4	Vety. Assistant Surgeon	. 1	1
5	Forest Ranger	8	3
6	Head Clerk	1	0
7	Zoo Biologist	1	1
8	Education Officer	1	1
9.	Dy.Ranger	0	1
10	Fitter-cum-Mechanic	1	0
11	Junior Accountant	5	5
12	Junior Stenographer.	1	1
13	Forester	9	9
14	Driver(H.V)	3	0
15	Driver (L.V.)	4	1
16	Livestock-Inspector.	3	2
17	Projector Operator	1	0
18	Junior Librarian	1	1
19	Artist- cum- Modeler.	1	0
20	Guide	1	0





21	Junior Clerk.	4	2
22	Booking Clerk	3	0
23	Welder-cum-Blacksmith	1	0
24	Forest Guard	25	20
25	Mahunta	8	0
26	Mali	5	2
27	Khansama	1	0
28	Mahunta	3	1
29	Asst.Mahunta	8	0
30	Animal Keeper	101	59
31	Office Peon/Attendant	6	4
32	Sweeper	11	5
33	Bungalow Chowkidar	3	2
34	Winch Operator	1	0
35	Ticket Collector	10	7
36	Gangman	1	0
37	Mate	2	1
38	Boat Man	2	0
39	Zoo Watcher	22	9
40	Watchman	26	22
41	Cook-Cum-Animal feed		
	Distributor	2	0
	GRAND TOTAL:	292	165

### (c) State Botanical Garden, Nandankanan

SI.No	. Name of each category of post	Sanctioned strength	No. of staff in position
1	Curator	311 e 11 g 11 1	ni positioni
2	Junior Typist	1	0
3	Grafter	2	0
4	Pump Driver	1	0
5	Power Tiller Operator	1	0
6	Herbarium Attendant	1	0
7	Gardener	6	0
8	Attendant	6	5
9	Peon	3	2
10	Watchman	1	1
	TOTAL	23	8



### Capacity Building of Zoo Personnel

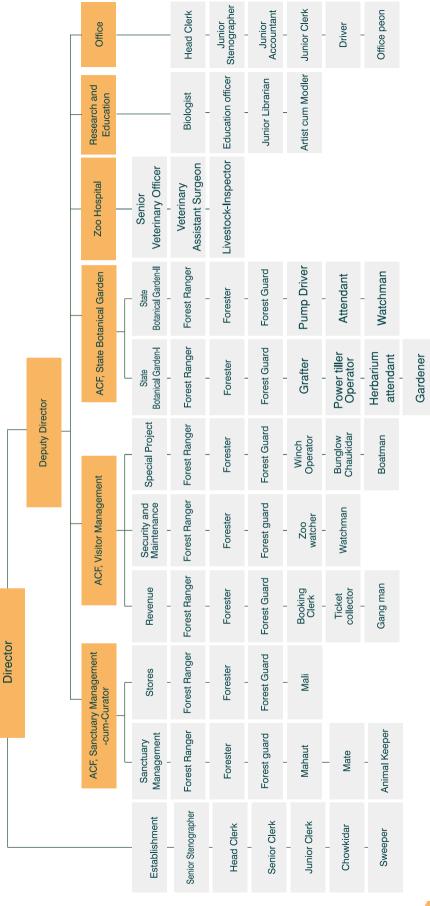
During the financal year, Zoo organized certain capacity-building training programs, and Zoo employees attended numerous such programs outside. A quick summary of all such programmes is given below.

- (1) Exposure visit to Arignar Anna Zoological Park, Chennai: A team of 8 members were sent for an exposure visit to Arignar Anna Zoological Park, Chennai from 31.08.2022 to 05.09.2022. Sri Sarat Kumar Sahoo, ACF, Dr Sudipta Kumar Panda, RO, Dr Santosh Gupta, Zoo Vet, Smt. Sudeepa Behera, Forester, Smt. Abhilipsa Mandal, Forest Guard, Sri Trailokya Maharana, Attendant, Sri Ranjit Behera, Outsourced staff & Sri Prasant Gouda, Outsourced were there in the team.
- (2) Exposure visit to Sri Chamarajendra
  Zoological Gardens, Mysuru: A team of 8
  members were sent for an exposure visit to Sri
  Chamarajendra Zoological Gardens, Mysuru
  from 24.08.2022 to 29.08.2022. The team
  included Dr Sarat Kumar Mishra, SVO, Sri
  Ranjit Mohanty, RO, Sri Gagan Bihari Mallick,

- RO, Sri Purna Chandra Behera, Forester, Sri Bimbadhar Rout, Forest Guard, Sri Anil Maharana, Animal Keeper, Sri Suresh Pingua, Outsourced staff & Sri Basant Pattanayak, Outsourced staff.
- (3) Exposure visit to Nehru Zoological Park,
  Hyderabad: A team of 8 members were sent
  for an exposure visit to Nehru Zoological Park,
  Hyderabad from 20.07.2022 to 25.07.2022
  The team consisted of Smt. Swagatika Sahoo,
  Range Officer, Miss Prangya Sahu, Forester,
  Sri Arupa Kumar Rout, Forester, Sri Pathani
  Jena, Animal Keeper, Sri Prafulla Bag,
  Animal Keeper, Sri Braja Kishore Sahoo,
  Animal Keeper, Sri Ram Chandra Naik,
  Animal Keeper and Sri Saroj Kumar Bhoi, Zoo
  Watcher.
- (4) Two Days Training Programme for animal keepers: Nandankanan Zoological Park organized two days training programme for 44 Animal keepers of Kanan Pendari Zoological Garden, Bilaspur in two batches, from 16th -17th July, 2022 and 21st -22nd July, 2022, each batch consisting 22 participants. In the training, hands on training on best management practices of Nandankanan Zoological Park have been imparted to the team.
- (5) International Conference organized by
  LACONES, CSIR-CCMB, Hyderabad and
  CZA, New Delhi.: Dr Rajesh Kumar
  Mohapatra, Biologist, Nandankanan
  Zoological Park attended International
  Conference on Reproductive Biology,
  Comparative Endocrinology and Development
  followed by workshop on Bio banking for
  conservation of endangered species in Indian
  zoo from 14th to 17th September, 2022
  organized by LA CONES, CSIR-CCMB,
  Hyderabad and CZA, New Delhi.

- (6) National Capacity Enhancement Workshop for Education officers: Sri Milan Kumar Panda, Education Officer, Nandankanan Zoological Park has participated in the National Capacity Enhancement Workshop for Education officers from 15th to 17th February, 2023 held at Byculla Zoo, Mumbai organized by CZA, New Delhi.
- (7) Workshop for elephant veterinarians: Dr Sarat Kumar Sahu, BVO, Nandankanan Zoological Park has participated in the "Elephant Health & Welfare INDIA- Workshop for elephant veterinarians" held at Wildlife SOS Elephant Conservation and Carte Centre in Mathura, Uttar Pradesh from 26th February to 03rd March, 2023.
- (8) Regional Workshop for Capacity
  Enhancement of Zookeepers: Sri Subash
  Chandra Pradhan, Animal Keeper has
  attended three days Regional Workshop for
  Capacity Enhancement of Zookeepers for
  eastern and north-eastern region held at
  Alipore Zoological Garden, Kolkata from 20th
  to 23rd February, 2023 organized by CZA,
  New Delhi.
- (9) Capacity Enhancement Workshop for Zoo Biologists: Sri Jyoti Shankar Mishra, Field Biologist, Pangolin Conservation Breeding Centre, Nandankanan Zoological Park has attended Capacity Enhancement Workshop for Zoo Biologist from 21st to 23rd March, 2023 held at Green Zoological Rescue and Rehabilitation Centre, Jamnagar organized by CZA, New Delhi.

# Its All About Team Work...



### VISITOR FLOW AND REVENUE GENERATED DURING THE YEAR 2022-23

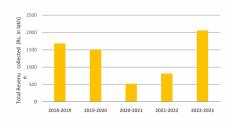
Item	Visitors Number	Revenue (in Rupees)
Entry fees		
Common visitors (Above 12 years)	3094044	154702200
Children (3 to 12 years)	46467	4674670
School children	56347	563470
Foreign visitors	1107	110700
Online booking- Adult	75005	0
Online booking- Children	16973	0
Online booking- Foreign Visitor	122	0
State Botanical Garden	150043	0
Online SBG	4016	
Free entry of differently abled persons	2870	0
Handycam 338	33800	
Outsourced facility		
Boating facilities		1061612
Safari facility		8789255
Toy Train facility	3679440	
Multi- Level Car Parking		2132622
Battery Operated Vehicle	16886350	
O.T.D.C. Restaurant		187692
O.T.D.C. Snacks bar	103348	
O.T.D.C. cafeteria		2
Sale of books and magazines		43890
Rent of Souvenir shop		244641
Rent of ATM counter (SBI)		87516
Rent of ATM counter (PNB)		88200
Sale of scrap materials		448576
Selling of seedlings		45030
Lifting of waste cattle bone		151700
Misc. Revenue		5450
Division Office (Cost of tender paper etc)	186000	
State Botanical Garden (SBG)		
Revenue collected at SBG		4910830
Online ticketing		
Online entry/facility reservation charges (zo	5784168	
Others		
Adoption of animals		931700
Total revenue collected	Rs. 205852862	

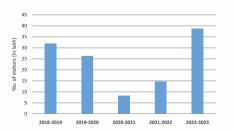
During 2022-23, a total of Rs. 2058.52 lakhs was earned in revenue from all sources.



Revenue generated during last five years.

Year	No. of visitor	s(in lakh)	Total Revenue(Rs. In lakh) collected
2018	-2019	31.943	1685.27
2019	-2020	26.295	1503.48
2020-	-2021	8.208	518.22
2021	-2022	14.62	814.40
2022	-2023	38.68	2058.52





# Statement of Income & Expenditure of the Zoo

Allocations and expenditures during the last five years. (Rupees in Lakhs)

Year	Expenditure & Allotment	Non- Plan/AEOM	State- Plan/PE	Central Plan	Centrally sponsored plan	CZA grant	CAMPA	Society Fund	Eco Tourism	Total
2018-19	Allotment Expenditure	111.184 110.327	615.74 615.74	-	12.208 12.208	-	507.90 504.60	1820.19 1309.29	-	2812.85 2552.165
2019-20	Allotment Expenditure	11.59 11.37	346.15 346.15	-	11.0 11.0	12.80 09.82	236.93 236.92	1846.00 1369.55	-	2504.47 1984.81
2020-21	Allotment Expenditure	471.32 471.32	2295.30 2295.30		16.41 16.41	-	414.94 414.95	997.25 696.67	1200.00 1200.00	5395.22 5094.65
2021-22	Allotment Expenditure	565.46 565.46	1072.39 1072.39		18.04 18.04	18.0 5.37	287.38 287.38	1262.53 715.70	-	3223.8 2664.34
2022-23	Allotment Expenditure	654.12 654.12	729.21 729.21	-	28.75 28.75	95.44 91.40	230.45 230.45	1335.25 952.68	-	3073.22 2686.61

### **ANIMAL EXCHANGE**

Sl.no	Species Received	Sex(M: F: U)	Zoo /Farm Name	Date of Arrival
1.	Black swan	2:3:0	Sri Chamarajendra Zoological Garden, Mysore	24.12.2022
2.	Slender tailed meerkat	2:2:0	Sri Chamarajendra Zoological Garden, Mysore	24.12.2022

SI.no	Species Given	Sex(M: F: U)	Zoo /Farm Name	Date of Disposal
1.	Asian openbill stork	1:1:0	Sri Chamarajendra Zoological Garden, Mysore	16.12.2022
2.	Cattle egret	1:1:0	Sri Chamarajendra Zoological Garden, Mysore	16.12.2022
3.	Little egret	1:1:0	Sri Chamarajendra Zoological Garden, Mysore	16.12.2022
4.	Grey pelican	1:1:0	Sri Chamarajendra Zoological Garden, Mysore	16.12.2022
5.	Silver pheasant	1:2:0	Sri Chamarajendra Zoological Garden, Mysore	16.12.2022

### Developmental works carried out during 2022-23

During the year, several initiatives aimed at the overall development of the Zoo were carried out, with a special emphasis on animal housing, veterinary care, and visitor facilities .



### Inauguration of Multi-Level Car Parking facility



Nursery for Hand rearing of animal babies



he Multi-Level Car Parking building has a three storied parking facility built over an area of 5.0 acre land with a built-up area of 16800 sq. mt (G+ 2F) and a capacity to accommodate parking for 583 cars. The estimated cost of the facility is Rs. 3542.79 Lakhs. The project work has been executed by R&B Division-III, Bhubaneswar from the budget provision made under "Development and Beautification of Nandankanan Zoological Park" by Nandankanan Zoological Park. Fire safety measures have been ensured in the facility. Driver rest rooms, drinking water kiosk, snack kiosks, CCTV surveillance, elevator, ramps, wash rooms etc, for visitors have

been provided. A parking area for safe accommodation of around 2000 nos two wheelers is also there within the complex. Boom barrier for car entry with digital ticketing system have also been provided. The facility not only provides safe parking of large number of vehicles at a time but also addresses the issues for traffic congestion and rush at main PWD Road from Nandankanan Police Station to Barang By-Pass Road. Inaugurated on 27.05.2022.

andankanan zoo receives orphaned and rescued wild animal babies from all across the state on regular basis for their hand raising and rehabilitation. Animal babies of the zoo animals also require bottle feeding due to mother rejection and related health issues. 'Nursery for hand rearing of animal babies' is a centre categorically designed to cater all these needs. The centre has the facility for the animal keeper to stay inside for rearing of new-born round the clock. It features one milk preparation section, one neonatal intensive care unit (ICU) for unwell neonates, and separate cells for carnivore, herbivore, and primate babies. The centre is connected to five tiny enclosed paddock areas wherein the physical exercise and access to sunlight to the animal babies can be ensured. This fully air-conditioned facility would undoubtedly help us in our attempts to rear rescued neonates.



### Renovation of Children's Park

With an area of 16000 square feet, the children's park located near the fountain square has been re-established with beautiful landscaping components and new equipment. Swings, Sliders, Merry Go-ground, Spring Riders, Double see-saw, Air walker, Pendulum, Trampoline, ABS Trainer, Spinner, and Multi-Play station are newly procured play equipments. Ten dustbins were placed at various spots to ensure cleanliness. There are 13 sit outs located at different locations for the convenience of the visitors. Educative signage have also been provided at different locations.

### **Operation Theatre**

Nandankanan has continually attempted to deliver the best healthcare to its denizens. The new 'Operation theatre' is fully equipped for all types of surgical interventions on sick captive animals. The centre has facilities for gaseous anaesthesia, oxygen supply, patient monitor, ventilator, ultrasonography and electro cautery system for bloodless surgery. The facility is completely air conditioned and fitted with ultraviolet lights for effective disinfection. It features all of the sophisticated instruments needed for safe and successful surgery, allowing us to take our healthcare centre to the next level





### **Zoo Laboratory**

The Zoo Laboratory is being developed to carry out microbiological, molecular, and reproductive diagnostic tests required for health care of zoo animals, as well as physio-chemical and microbiology examination of animal feed and drinking water. The zoo laboratory is being built with a cost of Rs 60 lakhs to achieve the aforesaid goal.

### Carnivore Quarantine Ward

The new quarantine facility has been developed to house new animals on arrival to zoo to keep them away from animals of the zoo. Quarantine facility for carnivores has been developed over an area of 1034 sqm, having provision of 4 kraals (15mX10mX4.5m), 8 retiring cells (3.25mX3mX3m) and 4 sliding squeeze cages along with 02 keeper corridors (23mX2.5mX3m) to house the large carnivores. This facility is being developed with an amount of Rs. 1, 08, 69,200/-



Modular Post-mortem House has been built on an area of 1237 square feet with a vitrified floor and include Pathologist chamber with wardrobes containing personal protective gear, adjacent restrooms, wash sink, and sit outs for pathologist and his team discussions, Necropsy Hall (20x 20 ft) with independent wide entry and exit gates for transporting the trolley with carcass, Spacious dissection area





to deal with the cases of large animals, Modern stainless steel mobile hydraulic dissection table with overhead illumination for dissection/viscera preparation, Morgue (Carcass holding space) cum staff preparation room (20x20ft) with Wash (Decontamination) sink for washing instruments after post-mortem, Large size Instrument rack for storing all post-mortem instruments, Two body mortuary refrigerators, two wheeled trolleys for transporting carcasses and weighing machine(1000 Kg capacity). The facility has been developed with an estimated cost of Rs.30, 43,600/-



### Indian Fox Enclosure

During the year, a new display area for Indian fox enclosures was built on an area of 350 square meters. The overall building cost is Rs 13.00 lakhs. This enclosure features a glassfronted open-top show room, three feeding cells, and a back kraal. Enclosure enrichment has been offered to improve breeding success and the aesthetic appeal of the enclosures.

### National Zoo Directors Conference at Bhubaneswar





A two days National Conference for Zoo Directors was organized by Central Zoo Authority, New Delhi & Nandankanan Zoological Park at Bhubaneswar from 10th September to 11th September, 2022. The conference was inaugurated by Shri Bhupender Yadav, Hon'ble Minister for Environment, Forest & Climate Change, Govt. of India. Shri Ashwini Kumar Choubey, Hon'ble Minister of State for Environment, Forest & Climate Change, Govt. of India, Shri Pradip Kumar Amat, Hon'ble Minister Forest, Environment and Climate Change Department, Govt. of Odisha, Smt. Aparajita Sarangi, Hon'ble Member of Parliament, Govt. of Odisha, Shri Satyabrata Sahu, Additional Chief Secretary, Forest, Environment and Climate Change Department, Government of Odisha, Shri Debidutta Biswal, Principal Chief Conservator of Forest & Head of Forest Force, Government of Odisha, Shri Sushil Kumar Popli, Principal Chief Conservator of Forest & Chief Wildlife Warden, Government of Odisha were present. During the inaugural session, MEE-Zoo 2022, Azadi ka Amrit Mahotsav- A compilation (Vol II), 2nd Edition of Field Guide for Rehabilitation

of Indian Pangolin and a short video compilation of activities undertaken during the Azadi Ka Amrit Mahotsav were released by Hon'ble Minister for Environment, Forest & Climate Change, Govt. of India and the dignitaries on the dais.

First day overviewed on pillars of change, targets, call for action and way forward with experience sharing followed by discussion. Second day covered holistic planning of conservation breeding of priority species in zoos, evaluation criteria of MEE of Zoo to better management practices in zoos. The valedictory session was graced by Shri Pradeep Kumar Amat, Hon'ble Minister Forest, Environment and Climate Change Department, Govt. of Odisha, Shri Debidutta Biswal, Principal Chief Conservator of Forest & Head of Forest Force, Shri Sushil Kumar Popli, Principal Chief Conservator of Forest & Chief Wildlife Warden. 2 films on providing a visual tour of Nandankanan Zoological Park and Species recovery of Gharials were released during the valedictory session by Shri Pradeep Kumar Amat, Hon'ble Minister Forest, Environment and Climate Change Department, Govt. of Odisha. The workshop ended with a vote of thanks by Dr Sanjay Kumar Shukla, Member Secretary, Central Zoo Authority. The National Conference for zoo directors was a successful event with the attendance and active participation of more than 70 zoo directors, prominent dignitaries, media personnel and experts from various fields of wildlife conservation and wildlife health.

## Animal Adoption Scheme to Integrate Public in Wildlife Conservation



A people's movement for conservation of flora and fauna reaps greater rewards. Animal adoption Programme of Nandankanan Zoological Park is with the primary goal of integrating the general people in the conservation of endangered animals. Individuals, organizations, and corporations can adopt an animal by contributing to the cost of feed, housing and health care of the individual animal. The Nandankanan website offers both offline and online adoption procedures. In 2022-23 financial year, 117 individuals and organizations like MGM, Minerals Limited, Bhubaneswar and Indian Oil Corporation Limited, Bhubaneswar have adopted animals of Nandankanan pledging an amount of Rs. 9, 31,700.

### List of Patrons 2022-23

SN	Name of the Person / Institutions	Animal / Birds / Reptile adopted	Period of Adoption
01	Shantanu Bhattacharjee		
	Burdwan, West Bengal	One Umbrella crested cockatoo	28-Mar-2023 to 27-Jun-2023
02	Ipsita		
	Bhubaneswar, Odisha	One Barbary Dove	22-Mar-2023 to 21-Apr-2023
03	Yuvaan		
	Bangalore, Karnataka	One Mandarin duck	20-Mar-2023 to 19-Mar-2024
04	Angika	0 8 1	00.44 0000 : 10.44 0004
0.5	Bangalore, Karnataka	One Black swan	20-Mar-2023 to 19-Mar-2024
05	Anand		00.44 0000 1 10.44 0004
06	Bangalore, Karnataka	One Common Squirrel Monkey	20-Mar-2023 to 19-Mar-2024
00	Quynh & Vineeth, Bengaluru, Karnataka	One Black swan	20-Mar-2023 to 19-Mar-2024
07	Anagha Inamdar	One black swarr	20-1/101-2023 10 17-1/101-2024
07	Pune, Maharashtra	One Common Mongoose	06-Mar-2023 to 05-Jun-2023
08	Meghanad Maharana	Che Common Mongecoe	33 Mai 2020 to 33 33H 2020
	Ghasipura, Keonjhar, Odisha	One Slender tailed Meerkat	03-Mar-2023 to 02-Apr-2023
09	Marce		
	Bhubaneswar,Odisha	One Spotted deer	27-Feb-2023 to 26-Aug-2023
10	Soumya Satish		
	Pune, Maharashtra	One White backed vulture	20-Feb-2023 to 19-Aug-2023
11	Soumya Satish		
	Pune, Maharashtra	One Long billed vulture	20-Feb-2023 to 19-Aug-2023

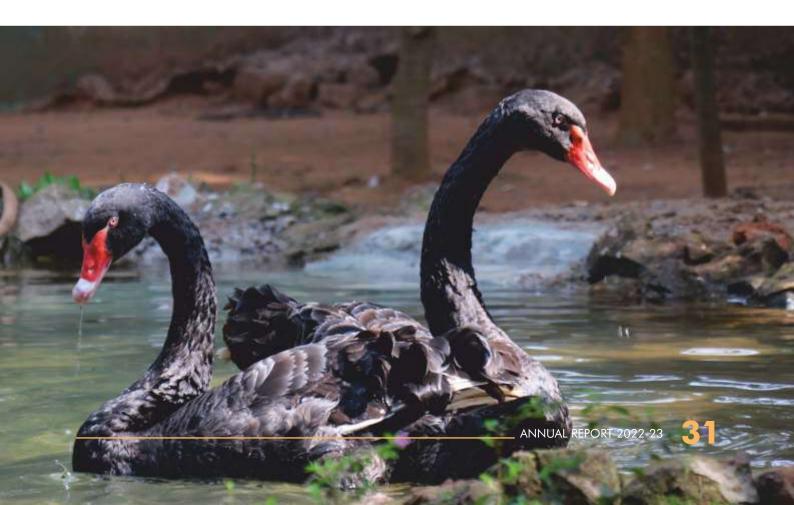
12	TD Satish		
	Pune, Maharashtra	Two Cinereous vultures	20-Feb-2023 to 19-Aug-2023
13	Amod Ashok Inamdar		
	Pune, Maharashtra	Two no. of Common Mongooses	18-Feb-2023 to 17-Mar-2023
14	R.		
	Bhubaneswar, Odisha	One Laughing Dove	11-Feb-2023 to 10-Feb-2024
15	Mamata Dash		
	Bhubaneswar, Orissa	One Barbary Dove	06-Feb-2023 to 05-Feb-2024
16	Mamata Dash		
	Bhubaneswar, Orissa	One Diamond Dove	06-Feb-2023 to 05-Feb-2024
17	Anagha Inamdar		
	Pune, Maharashtra	One Indian peafowl white	05-Feb-2023 to 04-Mar-2023
18	Akhil Patnaik		
	Bhubaneswar, Odisha	One Zebra finch	04-Feb-2023 to 03-Feb-2024
19	Amal Koshy Mathew		
	Keonjhar, Odisha	One Jungle Cat	04-Feb-2023 to 03-Mar-2023
20	Bhagyashree Pancholy		
	Udaipur, Rajasthan	One Himalayan black Bear	27-Jan-2023 to 26-Jan-2024
21	Pratikhya Pritilagnna		
	Dhenkanal, Odisha,	One Barn owl	26-Jan-2023 to 25-Jan-2024
22	Kaushik		
	Pune, Maharashtra	One Rose ring parakeet	25-Jan-2023 to 24-Feb-2023
23	Anagha Inamdar		
	Pune, Maharashtra,	One Common Mongoose	21-Jan-2023 to 20-Apr-2023
24	Sayali Shendge		
	Pune, Maharashtra	One Indian star tortoise	19-Jan-2023 to 18-Feb-2023
25	Punyasloka Pradhan		
	Bangalore, Karnataka	One Blackbuck	19-Jan-2023 to 18-Feb-2023
26	Amod Inamdar		
	Pune, Maharashtra	One Grey pelican	15-Jan-2023 to 14-Feb-2023
27	Anagha Inamdar		
	Pune, Maharashtra	One Mugger crocodile	15-Jan-2023 to 14-Feb-2023
28	Anagha Amod Inamdar		
	Pune, Maharashtra	One Mandarin duck	06-Jan-2023 to 05-Apr-2023
29	Vimlesh Kumar Pathak		
	Seraikela, Jharkhand	One Alexandrine parakeet	05-Jan-2023 to 04-Feb-2023
30	Surojato Roy	·	
	Kolkata, WB	One Large Egret	03-Jan-2023 to 02-Feb-2023
31	Bunny		
	Cuttack, Odisha	One no. of Indian white peafowl	02-Jan-2023 to 01-Jul-2023
32	Debdas Barik		
	Balasore, Orissa	One Mandarin duck	01-Jan-2023 to 30-Jun-2023
33	Sripriya Maharana,	2.2 2	
-	Bangalore, Karnataka	One Indian peafowl	31-Dec-2022 to 30-Jun-2023
34	Sripriya Maharana	position.	
5 1	Bangalore, Karnataka	Two Alexandrine parakeets	31-Dec-2022 to 30-Dec-2023
35	Priyangshu Chattopadhyay	o Alexandrino parakeels	5. 200 2022 to 00 Dec 2020
55	West Midnapore, West Bengal	One Spotted deer	25-Dec-2022 to 24-Dec-2023
	331 Triidinaporo, Trosi berigai	The opened door	20 200 2022 10 24 2000-2020
			ANNUAL REPORT 2022-23

24	D.i Cla	I	
36	Priyangshu Chattopadhyay West Midnapore, West Bengal	One Blossom headed parakeet	25-Dec-2022 to 24-Dec-2023
37	B Babitha Reddy	One biossom neaded parakeer	23-Dec-2022 to 24-Dec-2023
37	Bhubaneswar,Odisha	One White backed vulture	20-Dec-2022 to 19-Jan-2023
38	Rajat Nayak	One write backed volicie	20-2022 10 17-3011-2023
00	Dharwad,Karnataka	One Blackbuck	13-Dec-2022 to 12-Jan-2023
39	Aishwarya Daftari	Che Blacksock	10 000 2022 10 12 3011 2020
	Rajendra Nagar, Delhi	One Ganges soft shell turtle	01-Dec-2022 to 28-Feb-2023
40	Abhishek Mohanty	3,	
	Bhubaneswar, Odisha	One Mandarin duck	27-Nov-2022 to 26-Feb-2023
41	Amod Inamdar		
	Pune, Maharashtra	One Brahminy kite	23-Nov-2022 to 22-Dec-2022
42	Vaijayanthi Sandur		
	Khorda, Odisha	One White Tiger	19-Nov-2022 to 18-Dec-2022
43	Poornima Venkatesh		
	Thane, Maharashtra	One Tiger (RBT)	11-Nov-2022 to 10-Feb-2023
44	Shreya Mitra		
	Kolkata, West Bengal	One Spotted deer	11-Nov-2022 to 10-Feb-2023
45	Shruthi Chirla		
4.4	Hyderabad, Telangana	One Spotted deer	03-Nov-2022 to 02-Dec-2022
46	Debi Prasad Rout		00.11 0000 1 01.5 0000
47	Cuttack, Odisha	One Rose ring parakeet	02-Nov-2022 to 01-Dec-2022
47	Abhishek Pradhan Bhubaneswar,Odisha	One African average	01-Nov-2022 to 30-Nov-2022
48	Dr. Ranjan Kumar Mishra	One African grey parrot	01-1000-2022 10 30-1000-2022
40	Bangalore,Karnataka,560093	One Yellow backed lorry	31-Oct-2022 to 30-Oct-2023
49	Kaushik	One renow bucked forty	31-36-2022 10 30-36-2023
'/	Bangalore, Karnataka	One Assamese macaque	25-Oct-2022 to 24-Nov-2022
50	Kaushik		
	Bangalore, Karnataka	One Indian tent turtle	25-Oct-2022 to 24-Jan-2023
51	Dr.Bipadataran Biswal		
	Cuttack, Odisha	One Barbary Dove	23-Oct-2022 to 22-Nov-2022
52	Anwesha Panda		
	Puri,Odisha	One Alexandrine parakeet	16-Oct-2022 to 15-Oct-2023
53	Rashmi Rekha Dash		
	New Delhi	One Hippopotamus	16-Oct-2022 to 15-Apr-2023
54	Sachin Yadav		
	Lucknow, Uttar Pradesh	One Common Mongoose	09-Oct-2022 to 08-Nov-2022
55	Amod Inamdar		00.0.0000.000.000
F /	Pune, Maharashtra	One Barn owl	09-Oct-2022 to 08-Jan-2023
56	Anagha Inamdar	One Presum fish and	00 04 2022 4 08 N 2022
57	Pune, Maharashtra	One Brown fish owl	09-Oct-2022 to 08-Nov-2022
57	Nikhil Kumar Agarwal Bhubaneswar, Odisha	One Masked love bird	08-Oct-2022 to 07-Oct-2023
58	Lakshmi Gaur	OHE MUSKED TOVE DITU	55-06-2022 10 07-06-2023
50	Hyderabad, Telangana	One Asiatic Wild Dog	06-Oct-2022 to 05-Oct-2023
59	Ayantika swain	Che / Giane Wha bog	33 33, 2322 10 333 3CI-2023
3,	Nandankanan,Odisha,754005	One Hippopotamus	04-Oct-2022 to 03-Jan-2023
60	Yamuna Sudheer	le la e le comment	
	Kadapa, Andhra Pradesh	One Common Indian krait	01-Oct-2022 to 30-Sep-2023
	•		'

61 Yamuna Sudheer Kadapa, Andhra Pradesh 62 Anagha Inamdar Pune, Maharashtra 63 Amod Inamdar Pune, Maharashtra 64 Park S Bengaluru, Karnataka 65 Park S Bengaluru, Karnataka 66 Sudeshna Parida Khorda, Odisha 67 Anagha Inamdar Pune, Maharashtra 68 One Spotted deer 69 Amod Ashok Inamdar Pune, Maharashtra 69 One Indian porcupine 60 One Giant squirrel 61 Amogh Wanchoo Pune, Maharashtra 62 One Water monitor lizard 63 Amod Sharma 64 Bokaro, Jharkhand 65 Park S 66 Bengaluru, Karnataka 66 Sudeshna Parida 67 Anagha Inamdar Pune, Maharashtra 68 One White Eurasian spoonbill 69 Amod Ashok Inamdar Pune, Maharashtra 60 One Giant squirrel 61 One Giant squirrel 62 Amogh Wanchoo Pune, Maharashtra 63 One Water monitor lizard 64 One Water monitor lizard 65 One Water monitor lizard 66 Sudeshna Parida 67 Amogh Wanchoo Pune, Maharashtra 68 One Black buck 69 One Emu 69 One Emu 60 One Black buck 60 One Black buck 61 One Black buck 62 One Fischer's love bird 63 One Spotted turtle 64 One One Fischer's love bird 65 One
Anagha Inamdar Pune, Maharashtra One Nilgai 25-Sep-2022 to 24-Dec-2022 Amod Inamdar Pune, Maharashtra One Chitra turtle 10-Sep-2022 to 09-Oct-2022 Amod Inamdar Pune, Maharashtra One Peach faced love bird O3-Sep-2022 to 02-Sep-2023 O3-Sep-2022 to 02-Sep-2023 O3-Sep-2022 to 02-Sep-2023 O3-Sep-2022 to 02-Sep-2023 One Spotted deer O3-Sep-2022 to 02-Sep-2023 One White Eurasian spoonbill One White Eurasian spoonbill One Indian porcupine One Indian porcupine One Giant squirrel One Giant squirrel One Water monitor lizard One Water monitor lizard One Maharashtra One Nilgai One Emu One Emu One Black buck One Black buck One Black buck One Black buck
Pune, Maharashtra One Nilgai 25-Sep-2022 to 24-Dec-2022 Amod Inamdar Pune, Maharashtra One Chitra turtle 10-Sep-2022 to 09-Oct-2022 Bengaluru, Karnataka One Peach faced love bird O3-Sep-2022 to 02-Sep-2023 Bengaluru, Karnataka One Spotted deer O3-Sep-2022 to 02-Sep-2023 C5-Sep-2022 to 02-Sep-2023 C6-Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill O9-Aug-2022 to 28-Nov-202 C6-Sep-2023 C6-
Amod Inamdar Pune, Maharashtra One Chitra turtle 10-Sep-2022 to 09-Oct-2023 Amod Inamdar Pune, Maharashtra One Peach faced love bird O3-Sep-2022 to 02-Sep-2023 Bengaluru, Karnataka One Spotted deer O3-Sep-2022 to 02-Sep-2023 Amogha Inamdar Pune, Maharashtra One Indian porcupine One Giant squirrel One Giant squirrel One Water monitor lizard Amogh Wanchoo Pune, Maharashtra One Nilgai One Emu One Black buck One Black buck One Black buck  24-Aug-2022 to 23-Aug-2022
Pune, Maharashtra One Chitra turtle 10-Sep-2022 to 09-Oct-2022 4 Park S Bengaluru, Karnataka One Peach faced love bird O3-Sep-2022 to 02-Sep-2023 55 Park S Bengaluru, Karnataka One Spotted deer O3-Sep-2022 to 02-Sep-2023 56 Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202 57 Anagha Inamdar Pune, Maharashtra One Indian porcupine One Giant squirrel One Giant squirrel One Water monitor lizard One Water monitor lizard One Nilgai One Maharashtra One Rilgai One Emu  26-Aug-2022 to 25-Sep-2023 C6-Aug-2022 to 25-Sep-2023 C7 Anmogh Wanchoo Pune, Maharashtra One Emu One Black buck One Black buck One Black buck
Park S Bengaluru, Karnataka One Peach faced love bird O3-Sep-2022 to 02-Sep-2023 O5 Park S Bengaluru, Karnataka One Spotted deer O3-Sep-2022 to 02-Sep-2023 O6 Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202 One Indian porcupine One Indian porcupine One Giant squirrel One Giant squirrel One Water monitor lizard One Water monitor lizard One Nilgai One Maharashtra One Fune, Maharashtra One Maharashtra One Nilgai One Finu On
Bengaluru, Karnataka One Peach faced love bird 03-Sep-2022 to 02-Sep-2023 to 28-Sep-2023 to 28-Sep-2023 to 28-Nov-2023 to 28-N
65 Park S Bengaluru, Karnataka One Spotted deer  66 Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202 67 Anagha Inamdar Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-202 68 Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-202 69 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-202 70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-202 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-202 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
Bengaluru, Karnataka One Spotted deer  03-Sep-2022 to 02-Sep-2023  66 Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202  67 Anagha Inamdar Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-2023  68 Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-2023  69 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2023  70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2023  71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2023  72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022
66 Sudeshna Parida Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202 67 Anagha Inamdar Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-202 68 Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-202 69 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-202 70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-202 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-202 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202
Khorda, Odisha One White Eurasian spoonbill 29-Aug-2022 to 28-Nov-202 Anagha Inamdar Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-202  Amogh Wanchoo Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-202  One Water monitor lizard 26-Aug-2022 to 25-Sep-202  Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-202  Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-202  Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202  Xalyani Patra
Anagha Inamdar Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-2025 8 Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-2025 9 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2025 70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2025 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2025 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022 73 Kalyani Patra
Pune, Maharashtra One Indian porcupine 27-Aug-2022 to 26-Sep-2022 Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2022 One Nilgai 26-Aug-2022 to 25-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 One Black buck 24-Aug-2022 to 23-Aug-2022
Amod Ashok Inamdar Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022
Pune, Maharashtra One Giant squirrel 27-Aug-2022 to 26-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2022 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022
69 Amogh Wanchoo Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2022 70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2022 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022 73 Kalyani Patra
Pune, Maharashtra One Water monitor lizard 26-Aug-2022 to 25-Sep-2022 70 Amogh Wanchoo Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2022 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-2022 73 Kalyani Patra
Pune, Maharashtra One Nilgai 26-Aug-2022 to 25-Sep-2022 71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
71 Amogh Wanchoo Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2022 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
Pune, Maharashtra One Emu 26-Aug-2022 to 25-Sep-2023 72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
72 Anmol Sharma Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
Bokaro, Jharkhand One Black buck 24-Aug-2022 to 23-Aug-202 73 Kalyani Patra
73 Kalyani Patra
·
Bhawanipatna, Orissa One Fischer's love bird 22-Aug-2022 to 21-Sep-202
74 11 1 1 6 .
74 Harekrushna Swain, Shillana Markalana Gan Markad Lava kind
Shillong, Meghalaya One Masked love bird 17-Aug-2022 to 16-Sep-2022  75 Abhishek Tiwari
Bikaner, Rajasthan  One Red Handed Tamarin  13-Aug-2022 to 12-Sep-202
76 Manas
Angul, Odisha One Yellow sided conure 13-Aug-2022 to 12-Sep-2022
77 Saheli Ghosh Roy,
New Delhi One Giant squirrel 13-Aug-2022 to 12-Aug-202
78 Aesha Patel
Kheda, Gujarat Two Indian star tortoise 13-Aug-2022 to 12-Sep-2022
79 Damini Malpote
Mumbai, Maharashtra One Long tailed finch 13-Aug-2022 to 12-Sep-2023
80 Damini Malpote
Mumbai, Maharashtra  One Small Indian civet  13-Aug-2022 to 12-Sep-2022
81 Dr Manas Ranjan Puhan
Bhubaneswar, Odisha One Emu 07-Aug-2022 to 06-Sep-202
82 Vidhya Gopu
Adoor, Kerala One Indian star tortoise 04-Aug-2022 to 03-Sep-2022
83 Vikram Toprani Mumbai, Maharashtra One Leopard 02-Aug-2022 to 01-Sep-2022
84 Nagachetan BM
Bangalore, Karnataka One Burmese python 02-Aug-2022 to 01-Sep-2022
27.10g 2022 10 01-00p-2022

85	Kaushik		
	Pune, Maharashtra	One Common Indian krait	02-Aug-2022 to 01-Sep-2022
86	Sriram Sekhar		
	Navi Mumbai, Maharashtra,	One Red Sand Boa	31-Jul-2022 to 30-Jul-2023
87	Bibaswan Satpathy		
	Bhubaneswar,Odisha	One Barking deer	22-Jul-2022 to 21-Aug-2022
88	Pragyan Paramita Parida		
	Bhubaneswar, Odisha	One Common Mongoose	17-Jul-2022 to 16-Aug-2022
89	Pragyan Paramita Parida		
	Bhubaneswar,Odisha	One Russell's viper	17-Jul-2022 to 16-Aug-2022
90	Sunil Kumar		
	Khammam, Telangana	Two Alexandrine parakeets	12-Jul-2022 to 11-Aug-2022
91	Soumyashree and Shiva Shaurya,		
	Pune,Maharashtra	One Leopard Cat	09-Jul-2022 to 08-Aug-2022
92	Soumyashree and Shiva Shaurya		
	Pune, Maharashtra	One Yellow Anaconda	09-Jul-2022 to 08-Aug-2022
93	Sonal Sudeep		
	Cuttack, Odisha	One Black buck	29-Jun-2022 to 28-Jul-2022
94	Atharv		
	Chennai, Tamil Nadu	One Blue faced lorikeet	27-Jun-2022 to 26-Jul-2022
95	Rithul Krishna		
	Coimbatore,Tamil Nadu	One Ganges soft shell turtle	23-Jun-2022 to 22-Jul-2022
96	Viresh		
	Bhubaneswar, Odisha	One Common Squirrel Monkey	07-Jun-2022 to 06-Sep-2022
97	Swapna Vayuvegula		
	Hyderabad, Telangana	One Black Swan	28-May-2022 to 27-Jun-2022
98	Shivani Vijay		
	Hyderabad,Telangana	One Hippopotamus	22-May-2022 to 21-May-2023
99	Pruthesh Sahoo		
	Gurgaon, Haryana	One Bonnet macaque	21-May-2022 to 20-Aug-2022
100	Omkar Kadam		
	Pune, Maharashtra	One Long billed vulture	18-May-2022 to 17-Jun-2022
101	Deepak Joshi		
	Pune,Maharashtra	One Jackal	17-May-2022 to 16-Jun-2022
102	Sreelakshmy J Menon		
	Thrissur, Kerala	One Fischer's love bird	01-May-2022 to 30-Apr-2023
103	Basant Kumar Rout	, _, _, _,	
10.	Khurda, Odisha	One Blue faced lorikeet	27-Apr-2022 to 26-Oct-2022
104	Shikha Chaurasia		0/ / 0000 : 05 : 5555
105	Thane, Maharashtra	One Asian Brown Tortoise	26-Apr-2022 to 25-Apr-2023
105	Shikha Chaurasia	0 0 1 11 "	0/ 4 0000 + 05 4 0000
107	Thane, Maharashtra	One Banded krait	26-Apr-2022 to 25-Apr-2023
106	Vidita Menon		02 4 0000 1 02 1 1000
107	Gurgaon, Haryana	One Indian tent turtle	23-Apr-2022 to 22-Jul-2022
10/	Kaushik	00	20 4 - 2022 - 10 14 2022
100	Pune, Maharashtra	One Common Indian krait	20-Apr-2022 to 19-May-2022
108	Ramadevi Segaran	O S	20 A 2022 +- 10 H 2022
	Chennai, Tamil Nadu	One Spotted deer	20-Apr-2022 to 19-May-2022

Rajalakshmi segaran Chennai Tamil Nadu	One King Cohra	19-Apr-2022 to 18-May-2022
'	The King Cobra	17 7 (p) 2022 10 10 7 (may 2022
· ·	One Assamese macaque	16-Apr-2022 to 15-May-2022
·	The Assumese macaque	10 / pr 2022 10 13 // dy 2022
	One Bonnet macaque	16-Apr-2022 to 15-May-2022
'	Che Bermer macaqee	16 / Apr 2022 10 10 / May 2022
•	One Lauahina dove	12-Apr-2022 to 11-May-2022
· ·	3 1 1 3	,
′	One Indian flap shell turtle	11-Apr-2022 to 10-May-2022
·	•	,
Bhubaneswar, Odisha	One Hippopotamus	10-Apr-2022 to 09-Apr-2023
Sudhansu Kumar Nayak		
Bangalore, Karnataka	One Burmese python	04-Apr-2022 to 03-May-2022
Ajit Kashinath Nayak		
Baleshwar, Odisha	One Rose ringed parakeet	01-Apr-2022 to 30-Apr-2022
Ajit Kashinath Nayak		
Baleshwar, Odisha	One Alexandrine parakeet	01-Apr-2022 to 30-Apr-2022
Indian Oil Corporation Ltd. (MD)		
Odisha State Office	Three nos. of White Tiger	
A/2, Chandrasekharpur, Bhubanesw	var,	03-Sep-2022 to 02-Sep-2023
Khurda,Odisha,751024		
MGM Minerals Limited,		
Bhubaneswar	Two nos of Asiatic Lion	02-Mar-2023 to 01-Mar-2024
	Chennai, Tamil Nadu Anagha Amod Inamdar Pune, Maharashtra Amod Inamdar Pune, Maharashtra Sudhansu Kumar Nayak Bangalore, Karnataka Sudhansu Kumar Nayak Bangalore, Karnataka Jayashree Mahapatra Bhubaneswar, Odisha Sudhansu Kumar Nayak Bangalore, Karnataka Jajashree Mahapatra Bhubaneswar, Odisha Sudhansu Kumar Nayak Bangalore, Karnataka Ajit Kashinath Nayak Baleshwar, Odisha Ajit Kashinath Nayak Baleshwar, Odisha Indian Oil Corporation Ltd. (MD) Odisha State Office A/2, Chandrasekharpur, Bhubanesw Khurda, Odisha, 751024 MGM Minerals Limited,	Chennai, Tamil Nadu Anagha Amod Inamdar Pune, Maharashtra Amod Inamdar Pune, Maharashtra One Bonnet macaque Sudhansu Kumar Nayak Bangalore, Karnataka Sudhansu Kumar Nayak Bangalore, Karnataka One Indian flap shell turtle Jayashree Mahapatra Bhubaneswar, Odisha Sudhansu Kumar Nayak Bangalore, Karnataka One Hippopotamus One Burmese python Ajit Kashinath Nayak Baleshwar, Odisha One Rose ringed parakeet Ajit Kashinath Nayak Baleshwar, Odisha One Alexandrine parakeet Indian Oil Corporation Ltd. (MD) Odisha State Office A/2, Chandrasekharpur, Bhubaneswar, Khurda, Odisha, 751024 MGM Minerals Limited,





# \_\_\_\_\_ IMPRESSION OF OUR ESTEEMED GUESTS

Excellently maintained facility worth a visit during trips to Bhubaneswar. Thanks to the hospitality by the officials.

F Malin

Additional Director, NPS

Chennai, Tamil Nadu

16.04.2022

Thank You for hosting our team. The visit was beneficial in terms of learning.

Officers of Nagaland Forest Management Project

Nagaland

20.04.2022

Very courteous staff. Have intimate knowledge of the animals and their facilities, very helpful during our stay. Enjoyed!

Shraddha Kar & Radha Harsh

Camelot Drive, Huntington, USA

28.04.2022

Nice experience. Excellent hospitality with personal touch.

Sri Saroj Kumar Patnaik

Ex-Director, Nandankanan

21.05.2022

It's a beautiful and adventures experience. The authority are very much cooperative and they show everything. Thank you for your kind hospitality.

Saumitra Khan

Member of Parliament

Bishnupur, West Bengal

19.06.2022

It's a refreshing experience. Very well maintained with good hygiene and care for the animals. Cooperative & friendly staff and a wonderful memory to take along with you. Keep up the good work.

Dr Sadhana Pareek

25.06.2022

This is an incredible zoo, a true wonder of Odisha. I was impressed by the knowledgeable staff. Thank you so much for a wonderful tour. We will be back,

Gayatri Patnaik

Director, Beacon Press

**United Kingdom** 

05.07.2023

Myself along with my wife visited Nandankanan zoo. The Zoological Park is amazing, wonderful and rare. The animals are majestic ranging from Tiger to Capuchin monkey.

Justice B A Patil

Judge High Court of Karnataka & Chairman of Land Grabbing Court

Karnataka

07.08.2022

Great tour organised by Nandankanan officials. The premises were remarkably lush green and clean. Staffs are well mannered and knowledgeable. They briefed minute details about the zoo and animals. The Walk through aviary is altogether a new experience. Thanks a lot for making our visit memorable. Best wishes!

Ishwer Chandra Kumar

BSF Headquarters, Bhubaneswar

11.08.2022

Nice to be here an opportunity to visit this place. Animals are given enough space to live in and enjoy in. Bird watch was a new experience.

Sadhna Rani

Justice Allahabad High Court

Allahabad, Uttar Pradesh

18.08.2022

Thanks a lot for the opportunity to see this amazing zoo, thank you for your hospitality and hope for next cooperation. We wish successful season in breeding and visitor numerous.

Roman and Marketa Horsky

 $\mathsf{Director}\,\mathsf{Zoo}\,\mathsf{Zlin}$ 

Czech Republic

25.08.20222

It was an amazing opportunity form to be in the zoo. Campus is well maintained and the food served was sumptuous. Thank you for the whole hearted cooperation.

Asha T R

Principal, Mothers Public School

Bhubaneswar

27.08.2022

Excellent place. Would like to visit once again. Thanks for the great hospitality offered by team Nandankanan.

Director, Sepahijala Zoo

Tripura

12.09.2022

I have visited the zoo on 10th and 12th September, 2022. It is one of the best zoo in the country and I hope to learn a lot from them in the future management of Aizwal zoo. I appreciate all the hard works and achievements of Nandankanan zoo.

Director, Aizwal Zoo

Aizwal, Mizoram

12.09.2022

This is my first visit to Nandankanan Zoological Park, This is one of the great zoo that I have had the occasion to visit. Another striking feature is the health of the animals and its planned layout. I am told the annual footfall is around 33 lakhs. This is a reflection on the dedication, innovation and diligence of the staff right from the Director to the Keepers and cleaners. The research work and the breeding programme of endangered species is supported by the scientific approach and the laboratories are constantly upgraded. My heartfelt appreciation and salute to all the staff of the zoo. May they grow by leaps and bounds and their tribe increase in other zoos also. Overall a memorable visit.

DNS Suman, IFS

(Rtd) Principal Chief Conservator of Forests (HoFF)

Lucknow, Uttar Pradesh

29.09.2022

What a wonderful habitat for animals. They are happy and healthy animals. My compliments to Or Sanjeet Kumar, IFS, Deputy Director, Nandankanan and his dedicated team.

R.N. Choubey, IAS (Rtd)

Member UPSC

New Delhi

29.09.2022

Visited the place after several years. As always, it was a pleasure to come to Nandankanan. The place is very well maintained and an excellent example of keeping the habitat for the flora and fauna. My compliments to the entire team.

Sunil Kumar Bansal

Director General of Police

Bhubaneswar, Odisha

02.10.2022

It was a very nice experience and avery informative tour for children. With best wishes and regards.

Dr Rajni Kumari

Senior Scientist

ICAR-RCER

Patna, Bihar

06.10.2022

Amazing and pleasant zoological park, Everyone must one time visit here. A hub of nature to visit here.

A.K. Singh

Allahabad High Court

22.10.2022

We are infinitely blessed to be offered this beautiful occasion to spend the morning in the garden of the gods in heaven-Nandankanan. It is a time spent outside the bustle of society and timeless joy in nature. Please continue to keep up the premises and care of the animals with total involvement, as you clearly as now.

Vishnupriya

Satyachetana Ashram

Tiruvannamalai, Tamil Nadu

29.10.2022

Visited Nandankanan zoo and State botanical garden today for upcoming exposure visit of 18th Batch RFO trainees. Mrs Swati Mohanty, RO, Mr Ranjit Mohanty, RO, Mr Sudipa Behera, Forester, Mrs Milanbala Pradhan, FG were very cordial, cooperative and knowledgeable. Interacted with faculty & FRO trainees from Sundarnagar, HP. Visitor experience are quite high. All the best to

Nandankanan team.

Sangram Keshari Behera, IFS

Director, OFRC, Angul

29.10.2022

Appears to be largest man-made zoo. Staffs are polite. Neat A clean. Hospitality is also very good. Enjoyed a lot. Thank you.

Sandip Kumar C. More

Judge, Bombay High Court

Maharashtra

03.11.2022

One of the best zoological parks of our country. Impressed with the maintenance and visitor management.

P. Sivakumar, IFS

CCF,SAC

Silchar, Assam

12.11.2022

Very nicely maintained zoo and huge foot fall. Good experience.

P.V. Raja Rao, IFS

Addl PCCF.

26.11.2022

Very nice trip with utmost care and efficiency. Thanks for the memories.

Santosh Kumar Dubey

SP, IPS

Malkangiri, Odisha

28.11.2022

Enjoyed the trip to Nandankanan with my family. Great infrastructure and professionally managed.

Madhusmita, IAS

Sub-collector, Baliguda, Kandhamal

29.11.2022

Ultimate Experience! Staffs are very cooperative. Zoo is maintained. Thanks for memorable tour.

Indrajeet Khurana

OSD to Governor

Odisha

02.12.2022

Had a wonderful experience. Such a beautiful zoo and environment. Enjoyed especially seeing the carnivores.

Louis & Gail Donald

Surfers Paradise

Gold Coast, Old Australia

09.12.2022

Fantastic experience. Very well maintained. Attracting a lot of visitors. Dr Sanjeet Kumar, Deputy Director showed us around. Wish this zoo to grow more in coming moments and serve as an institution of learning for the new generation.

Justice (Rtd) Ranjan Gogai

Former Chief Justice of India

10.12.2022

Most spectacular place to visit for nature lovers. Guide was so helpful and provided his extra ordinary services. White tigers and Royal Bengal tigers are the special attractions of Nandankanan. Thank you so much.

Prayaga Srinivas

TSCOST, Dept of Env. Forests, Science & Technology

Govt. of Telangana, Hyderabad

22.12.2022

It is very wonderful experience to visit the zoo i.e. second largest zoo of country. Very well maintained and health status of all the animals are very good and excellent hospitality. This is wonderful, cheerful and unforgettable moments to see the various species of wild animals in one roof.

Dr Vikrant Singh Chouhan Senior Scientist, ICAR-IVRI Bareilly, Uttar Pradesh 31.12.2022

It was fascinating to visit Nandankanan after few years of break. The Zoo and Botanical Garden are well maintained. The upkeep of the guest house and garden is very good. My congratulations to Sri Debidutta Biswal, IFS, PCCF, Dr Sanjeet Kumar, IFS, Deputy Director, Mr Milan Panda, Education Officer, who not only guided and enlightened us but also documented the wildlife in Nandankanan very well. Thank you for all your hospitality also. Best Wishes and Regards.

Dr Satya Narayan Sabat, IPS, DG 18.01.2023

We had an amazing time at Nandankanan Zoological Park and State Botanical Garden. The tour and explanations offered by Mr Milan Panda was excellent. The zoo is very well-kept, surprised to see the vast area of land which is very well maintained. The food, the service provided to us, everything was a delight. We are extremely thankful for the great experience we had at Nandankanan.

Dr Shailendra Saini, NCPOR

South Goa

14.03.2023

We had a great experience at zoo, fully green for visitors even in hot summer. The enrichment of enclosures is extraordinary. Thousands of visitors seem to keenly enjoying their visit. There are varieties of animals and caring staff, worth spending 3 hours. It is an extraordinary experience with Sri Sanath Kumar, IFS and Mr Milan to learn many things in zoo.

.............

Dr G. Chandrasekhar Reddy, IFS

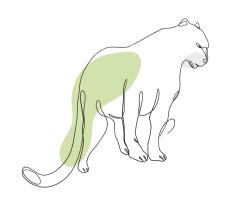
PCCF, VC & MD, TSFDC

Hyderabad, Telangana

24.3.2023



# **Veterinary Care**



The highest standards of animal husbandry and veterinary care have always been the priority of Nandankanan Zoological Park. Monitoring of animal health starts from the moment of its birth/arrival at the zoo. Prevention of disease/ailment is the main motto of the health program of Nandankanan. Within the park, there is a veterinary hospital. Three full-time veterinary surgeons provide veterinary care to captive animals, with assistance from the College of Veterinary Science & Animal Husbandry (C.V. Sc & A.H) Bhubaneswar and input from a number of experts. The Government of Odisha has formed a 'Technical Committee' to monitor and review health care and associated issues on a regular basis. A firm dialogue is being maintained with the C.V. Sc & A.H., Bhubaneswar, and its services are requisitioned in case of urgency. To prevent infections, a precise schedule for vaccination, deworming, and preventive medication is meticulously being followed.



# Infrastructure at Zoo Hospital

The Zoo Hospital is well equipped with the following infrastructures.

- A well-equipped 'Operation Theatre' having ceiling shadow-less lamp, gaseous anaesthesia oxygen supply and diathermy machine. The OT is backed by a diesel generator for uninterrupted power supply. The OT is attached to a 'Radiology Room' where facilities of Portable x-ray, Digital Radiography and Ultrasonography are available.
- A spacious 'Isolation Ward' to house the sick and injured animals for treatment.

- A 'Quarantine Ward' to house the newly acquired animals and sick animals suspected for contagious diseases.
- A pathological laboratory with automatic haematology analyser, serum analyser, trinocular microscope for analysis of blood, serum and stool samples.
- An advanced molecular and microbiological laboratory to carry out the molecular sexing, DNA isolation, cultural and antibiotic sensitivity tests of different bio-samples for early diagnosis and effective treatment of ailing animals.
- An incubation unit to assist the incubation of eggs of exotic and indigenous species of birds.
- A full- fledged air conditioned 'Centre for Rearing of Animal Babies' having round the clock care and monitoring provisions, advanced neonatal incubators and separate facilities for herbivore and carnivore mammals.
- A state of art 'Post-mortem Examination Hall' where equipments like mortuary refrigerator to store carcass, downdraft viscera dissection table, high rise ecofriendly incinerator are installed to carryout post mortem examination in a most scientific way.
- An 'Anti-depredation unit', equipped with all necessary equipment and drugs for chemical immobilization, is operating from the Nandankanan Biological Park that meets the emergency needs of the entire state.



# Collaboration withOdisha Veterinary College

A Memorandum of Understanding (MOU) has been signed with the College of Veterinary Science & Animal Husbandry (C.V. Sc & A.H), Bhubaneswar, for the use of the "Centre for Wildlife Health" services. The centre is equipped with onsite ultrasound and X-ray facility backed by a state of the art clinical laboratory. The 'Centre for Wildlife Health' was initially set up in the Veterinary College, Odisha University of Agriculture and Technology, Bhubaneswar as a regional centre with the financial assistance from the Central Zoo Authority, New Delhi. It was renamed as 'Centre for Wildlife Health' in April 2007 subsequent upon the bipartite agreement signed between the Forest Department, Government of Odisha and Odisha University of Agriculture and Technology, Bhubaneswar. The centre received an amount of Rs 45 lakhs during 2022-23 from Nandankanan for upgradation of facility as well as to meet the recurring expenses. The prime objective of the centre is to extend diagnostic facilities and advanced medical care to the captive animals of the Park. The centre is well equipped to carry out molecular, metagenomic, hematobiochemical, microbiological, parasitological and histo-pathological examinations.







# Committees constituted by Government of Odisha

### 1. Expert Committee

Government of Odisha, Forest & Environment Department vide Office order No FE-WL-WLF-0027-2019/21236/F&E dated 05.11.2019 constituted an 'Expert Committee' with the following members for strengthening of healthcare and upkeep of animals of Nandankanan Zoo.

- Shri S. K. Patnaik, IFS (Retd. PCCF Wildlife Odisha and Member CEC)- Chairman
- Director, WII, Dehradun or his representative- Member
- Director, IVRI, Izatnagar, Bareilly or his representative- Member
- Director, Wildlife Trust of India, Noida or his representative- Member
- Director, Salim Ali Centre for Ornithology & Natural History, Coimbatore or his representative- Member
- Director, Central Avian Research Institute, Bhubaneswar- Member
- Director, MCBT and Centre for Herpetology or his representative- Member
- Project Coordinator, Animal Disease Research Institute, Phulnakhara- Member
- Director, Nandankanan Biological Park, Bhubaneswar- Member Convener

### 2. Expanded Technical Committee

Government of Odisha, Forest & Environment Department vide Office order No FE-WL-WLF-0027-2019/21238/F&E dated 05.11.2019 expanded Technical Committee The following members and officials were included in the committee.

- Dr. J. N. Mohanty, Retd Prof. Surgery, Odisha Veterinary College- Chairman
- Sri S. Mohapatra, IFS (Retd.), former CWLW Odisha-Member
- Dr. L. N. Acharjyo, Retd Zoo Veterinarian-Member
- Dean, College of Veterinary Sciences, Odisha-Member
- Dr K. K. Sharma, Assam Veterinary College, Guwahati-Member
- Dr Naveen Kumar, Veterinarian (Retd.), Hyderabad-Member
- Dr Utkarsh Shukla, Deputy Director, Lucknow Zoo-Member
- Dr Arun A. Sha, Veterinary Director, Wildlife SOS, NewDelhi- Member
- Director HSDL, Bhopal or his representative-Member
- Director, Nandankanan Biological Park, Bhubaneswar-Member Convener

### 3. Health Committee

Government of Odisha, Forest & Environment Department vide Office order No FE-WL-WLF-0027-2019/21234/F&E dated 05.11.2019 constituted a Health Committee for strengthening of healthcare and upkeep of animals of Nandankanan Zoo, with the following members

- Professor and Head, Department of Preventive Medicine, CVSc & AH –cum-Project Coordinator, Centre for Wildlife Health, OUAT, Bhubaneswar-Chairman
- Professor and Head, Department of Surgery, CVSc & AH or his Nominee- Member
- Professor and Head, Department of Pathology, CVSc & AH or his Nominee- Member
- Head, Department of Parasitology, CVSc & AH or his Nominee- Member
- HOD, Department of Nutrition, CVSc & AH or his Nominee-Member

- Senior Veterinary Officer/ VAS Nandankanan-Member Convener
- All Veterinary Officers of Nandankanan-Member
- Deputy Director, Nandankanan Zoological Park-Member
- Curator, Nandankanan Zoological Park-Member
- Range Officer, Sanctuary Management Range-Member

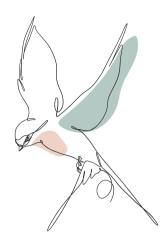
Date on which Health Committee visited/ meeting held during the year- 20/04/2022, 26/04/2022, 02/05/2022, 18/05/2022, 27/05/2022, 29/05/2022, 22/06/2022, 30/06/2022, 10/08/2022, 11/09/2022, 13/09/2022, 04/10/2022, 18/10/2022, 22/10/2022, 29/10/2022, 10/11/2022, 16/11/2022, 17/01/2023, 25/01/2023, 09/03/2023, 13/03/2023

### Intervention by the veterinary wing of the zoo

SI. No.	Activities	Number of co	ses dealt
1.	Cases treated		11137
2.	Surgery performed	29	
3.	De-worming		9849
4.	Chemical immobilization		161
5.	Screening of blood se	161	
6.	Bacteriological examination		116
7.	Faecal Sample examination		4126
8.	Molecular screening of samples		17

### Vaccination/ Chemoprophylaxis:

SI. No	Sl. No. Vaccination/					
	Chemoprophylaxis	cases dealt				
1	Multivalent vaccine for felids	87				
	(against Feline Panleucopenia)					
2	Raksha-Triovac	06				
3	H.S.V.	07				
4	Triquin Administartion	185				
5	Anti-Rabies Vaccine	25				
6	Tetanus Toxoid	08				
7	Multivalent Vaccine for canids	24				
9	Anthrax	03				
10	FMD vaccine	07				





# Vaccination Schedule

SI.No.	Species	Vaccine against	Drug/Schedule
1	Felids (tiger, lion, leopard, leopard cat, fishing cat, jungle cat)	Feline panleukopenia, Calici Disease, Rhinotracheitis	Nobivac Tricat Trio (Multivalent vac 8, 12, 16 wk and Annually
2	Hyenas, jackals, wolf, wild dog	Canine Distemper, Parvo, hepatitis, Leptospira Parainfluenza	Nobivac- DHPPi (Multivalent vaccine)Annually
		Rabies	Annually
3	Sloth bear and Himalayan Black bear	Canine Distemper, Parvo, hepatitis, Leptospira Parainfluenza	Nobivac- DHPPi (Multivalent vaccine) Annually
4	Elephant	Haemorrhagic septicemia	Half yearly
		Tetanus	Half Yearly
		Rabies	Annually
		Anthrax	Annually
5	Gaurs	Trivalent (HS, BQ, FMD)	Raksha - Triovac Annually
6	Birds	LaSota vaccine	Every December (in drinking water)

### Chemoprophylaxis Schedule

SI. No.	Species	Chemoprophylaxis against	Schedule
1	Carnivores (Felids-tiger, lion, leopard) (Canids-Wolf, Jackal, wild dog) (Hyenids)	Trypanosomiasis	Triquin- (Every) December, April, August
2	Birds	Coccidiosis	Sulfquinoxaline / Coccidiostats (during monsoon)

### Routine Fecal Sample Examination & Deworming Schedule

Sl. No.	Type of animal	Enclosure number	Period (month)
1	CARNIVORES 30,31,32,33 (tiger section) and		FEBRUARY
	(at 4 months	tiger safari, lion safari	JUNE
	interval) Or whenever		OCTOBER
	required	18,19,20,21,22,23,24,25,26,27 28,29,90,91.(tigers, lions, Jackal, leopards)	FEBRUARY
	·	bear safari sloth and Himalayan bears	JUNE
		bear saidir sioiri dha riimalayan bears	OCTOBER
		Small cats, small mammal house	FEBRUARY
		Nocturnal house	JUNE
			OCTOBER
2	HERBIVORES	Herbivore safari, Spotted deer(RBD), Elephants	MARCH
	(at 4 months Mouse deer, Giant squirrel, Indian hare		JULY NOVEMBER
	interval)	Hippopotamus, Giraffe	MARCH
	Or whenever required	Manipuri deer, Barking deer	JULY
	regorred	, ,	NOVEMBER
		Sambar, Swamp deer, Spotted deer, Nilgai,	MARCH
		Hog deer, Blackbuck, Whitebuck, Four horned antelope, Primates including Chimp	JULY
		nomed unletope, i findles incloding Chimp	NOVEMBER
3	BIRDS	Enclosures 1 to 13, enclosures inside the	FEBRUARY
	(at 4 months interval)	children park, Walk through aviary, VCBC	JUNE
	Or whenever required		OCTOBER
		Emu, Ostrich, Aquatic bird, Peacock , Lesser adjutant stork, Openbill	FEBRUARY
		stork, Saras crane, Black swan,	JUNE
		Mandarin duck, Rose ringed parakeet, Brahminy kite, Water birds	OCTOBER
4	REPTILES (at 4	All snakes	MARCH
	months interval)	Star tortoise, monitor lizard	JULY
	Or whenever required		NOVEMBER
5	Indian Pangolins	At Pangolin conservation breeding centre	FEBRUARY
	(at 4 months interval)		JUNE
	Or whenever required		OCTOBER

### Disinfection Schedule

Ideal upkeep of captive animals in the zoo principally depends on general hygiene and sanitation of the enclosures, captive animals along with their handlers. The following regimen of cleaning and disinfection is carried out in Nandankanan Zoological Park.

### a. Daily

- (1) Removal of fecal matter, leftover bone from carnivore enclosures, cleaning of floor of feeding cubicles, kraal, corridor, passage and exhibit area.
- (2) Removal of left over fodder, fecal matter from herbivore enclosures and cleaning.
- (3) The feed trough and water trough etc. to be cleaned with scrubber.
- (4) Drains to be cleaned with diluted phenyl.
- (5) Removal of plastic, polythene and unwanted materials from exhibit area and moats.

### b. Weekly

- (1) Pest control measures to be taken in and around feeding cubicle.
- (2) Deweeding to be carried out in and around enclosures.
- (3) Keeping the exhibit area and moat free from debris.
- (4) The feeding place and water trough etc. to be cleaned with bleaching powder.
- (5) Drains to be treated with lime and bleaching powder.
- (6) Feeding cubicles to be cleaned with potassium permanganate.

### c. Monthly

- (1) Leftover bones in bone pits to be lifted and the bone pits to be treated with acaricide.
- (2) Body spray on big cats with Acaricide (cypermethrin etc.) and also simultaneously in the enclosures in months when population of vector is high.
- (3) Monthly burning of all debris to be done in exhibit/display area whenever required. Liming to be carried out in and around enclosures.
- (4) Water purifier i.e. Sokrena WS to be treated to all water storing areas.

- d. Bi-monthly (1) Kohrsolin as ground spray is to be carried out in and around enclosure after deweeding.
  - (2) Acaricide spray (Cypermethrin etc.), simultaneously on the enclosure ground and on the body of the big cats
  - (3) All wet moat water to be pumped out, desilted, lime washed and then filled with fresh water.

### e. Half yearly

- (1) All feeding and drinking troughs are to be white washed.
- (2) All floors, walls, roof of feeding cells, transporting cages, netting, rods to be flame sterilized (March & November every year).

### f. Annually

- (1) Removal of top soil up to 6" in all kraals and intensively used, pacing areas and refilling with fresh sand and soil.
- (2) All walls, roof top both inside and outside to be lime washed.
- (3) All chain-link mesh, angles of enclosures and animal cages, sliding doors, squeeze cages etc. to be painted.

# Summer Care Management

### 1. Carnivore enclosures

- All the water pools available in the exhibit and back kraals are repaired for any cracks and water is kept filled up alternatively.
- Water in the pools is kept in running condition during peak hours of the day.
- The shutter of feeding cell is kept open throughout the day to allow the animal rest inside the feeding cell if it desires.
- Water from all water moats is pumped out, followed by cleaning, disinfection and refilling (wherever possible).
- Provision of shed above the water pools is made to prevent water from heating.
- Feeding cells are made straw thatched to keep the cells cool.
- Sprinklers are made available and operational in all carnivore enclosures including Jackal, hyena, wolf and wild dog.

### 2. Herbivore enclosures

- Provision of sprinklers is made operational.
- Wallowing tank of sambar enclosure is cleaned and provision of running water facility is made in wallowing tank.
- Water accumulation is not allowed inside the enclosure.
- Water in the pools is kept in running condition during peak hours of the day.
- Left over stems of fodders accumulated in the moat area is cleaned.
- Top soil is removed and enclosure is cleaned.
- Sprinklers are made available and operational in all enclosures including giraffe.

### 3. Herbivore Safari

- Sufficient number of sprinklers are made available and operational at different strategic locations inside herbivore safari
- Proper drainage of both large water pools are made operational so that silt does not accumulate on the floor. The water pools are cleaned and disinfected weekly.
- All the water troughs available are repaired, lime washed and covered with bamboo tati overhead to avoid heating.
- Artificial sheds made up of bamboo tati are provided at different locations to allow the deer take rest underneath.



### 1. Primate enclosures

- Provision of air coolers are made to Chimpanzee and other exotic primates wherever necessary.
- Benachera mat are hanged at the windows of chimpanzee enclosure feeding cell.
- Roof thatching with provision of cantilever are made at chimpanzee enclosure to provide shade on the feeding cell wall.
- Exhibit area of Assamese macaque, Capuchin, Tamarin and Squirrel monkey enclosures are covered with bamboo tati.
- Chimpanzees are not released to the exhibit area in case the temperature rises to more than 40°C.
- Provision of shed is ensured in the exhibit areas of all primate enclosures.

### 2. Reptile park

- In crocodile and water turtle enclosures water in the pool should be in running condition during peak hours of the day.
- Sheds are provided at all crocodile enclosures, turtle enclosures so that water does not get heated.
- Snake enclosures are covered with bamboo tati.
- At Iguana and yellow anaconda provision of bamboo tati on roof top is ensured.

### 3. Bird enclosures

- Provision of side wall curtains are made during day time (10 AM to 4 PM) to protect them from hot blowing wind.
- Water is sprinkled on side wall curtains, floors and roof tops within 8 AM every day.
- The grass lawn passage situated between bird enclosures (Enclosure 1 to 10) is flooded with water before 8 AM every day.
- Cinereous Vulture:- Water tank kept filled up with water. Water is sprayed over the bird and inside the enclosure in case the temperature goes beyond 40°C.
- Silver pheasant/ Golden pheasant enclosure/ring neck pheasant/lorikeet enclosures:- gunny bags/ bena chera are hanged up to half of the chain link mesh and water should be sprinkled over it 2-3 times a day.
- Emu and ostrich are given bath by spraying water on them during early part of the day (i.e. before 10AM).

 Larger earthen water pots are provided in all the bird enclosures to keep the drinking water cool.

### 4. Bear Enclosures

- All the bear enclosures (enclosure 15 and 16) are provided with two sheds each thatched with straw or bamboo. Bears are kept confined in the feeding cell during 10AM to 4PM in days temp goes beyond 40°C.
- Moats are cleaned, disinfected and refilled with fresh water. Water moats are topped with fresh water daily.
- Back-kraals of bear safari are provided with bamboo tati on the chain-link mesh roof top.

### 5. General considerations

- All enclosures are having wall hanging thermometers to record maximum/ minimum temperature of the day
- Staff of animal section to remain vigilant during peak hours of the day and inform Zoo Veterinary Hospital in case any behavioural change is noticed. One special squad is constituted to remain vigilant during peak hot hours of the day.
- Anti-stress medicines, multivitamins and electrolytes are supplemented in feed/drinking water as and when required.





# ——— Monsoon Care Management

- 1. Lime spreading in all herbivore enclosures is done at monthly interval.
- Leaking roof tops of different animal enclosures especially bird and reptile are properly sealed to avoid soiling of litter/substrate which can be source of infection.
- 3. Old and rough drinking water pots are replaced with new and clean one to facilitate clean water supply.
- 4. Water pools of the carnivore enclosures are lime washed every month.
- To protect the animals from water borne infections, stagnant water of all water moats are evacuated, cleaned thoroughly and treated with lime.
- Pruning of bushes and weeds inside and surrounding the carnivore enclosure are done every fortnight to protect the animals from predators and ecto-parasite infection. To avoid tick infestation, acaricide is sprayed after every deweeding.
- To check waterborne diseases, sensitive animals like Chimpanzee, exotic primates, Assamese
  macaque, and other delicate small mammals and birds are provided with clean and
  potable drinking water every day.
- 8. Roofing over the feeding troughs is ensured to prevent the food item getting wet.
- Cleanliness and hygiene measures at the slaughter house and feed receiving centre is ensured with sincerity. Floor washing with bleaching powder and antiseptic foot bath is ensured at feed distribution centre and slaughter house.
- 10. Vegetables, Fruits and greens are washed with 0.1% potassium permanganate solution prior to processing at feed distribution centre.
- 11. Feed transportation containers, tins and carry bags are properly cleaned and washed daily.
- 12. Potassium permanganate solution/lime foot bath at the entrance of all herbivore, carnivore and bird enclosures are strictly maintained.
- 13. Dumping pit of scat and excreta from carnivore enclosure are earth covered. Bone pits are cleaned every month.



# — Winter Care Management

### Birds housed in Enclosure no 1 to 13, 81 and inside Children Park:

- Drapes of agro net or clean gunny bag are hanged around the wire mesh from outside during night time.
- Lighting with 40W electric bulbs protected with a metallic frame in each enclosure are provided and switch made on during night time for warmth.
- As breeding season for most birds commensurate with the end of winter, provision of sufficient nest boxes and other nesting facilities are made in each enclosure according to requirement of the species after meticulous observation.

### 2. Chimpanzee and other exotic primates

- The windows of feeding cell are covered with drapes during night time at a distance so that it can't be pulled out or damaged. The existing window shutters are used during the night time.
- Medicines to improve immunity are supplemented in the diet.
- Provision of room heaters are kept in readiness for their use in extreme cold.
- In case of need, plywood sheet are spread on the floor of the night shelter of chimpanzee to keep the floor warm.

### 3. Snakes

- Clean fresh straw wrapped in gunny bag are provided inside each enclosure
- A 40W electric bulb are provided in the den to provide warmth
- Provision of UV-B bulbs, IR bulbs and room heaters are made available for reptile use.
- Provision direct sunlight into the enclosure is made by pruning obstructing tree branches.

### 4. Crocodiles:

 To ensure day time basking overhead branches of shady trees are pruned and fresh sand bed are spread in the basking zone. In extreme cold thatched sheds with underneath straws are provided in each enclosure to help crocs taking shelter in night.

### 5. Tiger and other carnivore enclosures:

- Stagnant/ accumulated rain water in all water moats may act as source of gastrointestinal infection which is pumped out. Silt accumulated inside moat is removed and the moat is treated with lime and allowed to keep dry.
- The top soil of tiger and lion enclosure/ back kraals (frequently used areas) are removed and replaced with fresh sand after sprinkling of lime.
- Lime washing of walls of feeding cells is done in every winter.
- The water pools inside the enclosure/ backkraals are inspected and repaired wherever required

### 6. Herbivore enclosures:

- All lake side herbivore enclosures are sprinkled with lime. Stagnant water and mud in enclosures are cleaned and replaced with fresh soil immediately.
- Top soil removal in all herbivore enclosure should start during winter so that it can be completed by arrival of hot and humid climate

### 7. General consideration:

 Annual lime washing of all wall structures of feeding cells, exhibit area, back-kraals and painting of chain-link mesh, squeeze/ transportation cages, angles, iron structures are made during winter.





# Significant achievements in health care

# 1. Successful management of traumatic myiasis in upper eyelid of an ostrich

On May 23, 2022, our eleven year old male ostrich (Struthio camelus) suffered a puncture injury at the upper eyelid of left eye causing profuse frothy discharges, itching, anorexia and severe annoyance as it was infested with maggots. Medication could not be provided as the ratite was not cooperating. Though risky, the ostrich was immobilised with ample precautions to minimize stress and trauma during induction and recovery of general anaesthesia. The clinical signs subsided and the wound healed up in about two weeks.

# 2. Dystocia and assisted parturition in a yellow anaconda (*Eunectes notaeus*)

One six year old female yellow anaconda (Eunectes notaeus) of our Park gave birth to one baby, but failed to deliver further babies even after 48hrs of the first birth. After examination of abdomen through x-ray and ultrasonography, two doses of hormone 'oxytocin' were administered at 90 minutes

apart along with other supportive therapy. Nine snakelets were born including eight live and one dead within 3 hrs of the hormone therapy.

# 3. Management of open fracture in a black buck fawn

A forty days old black buck fawn suffered open fracture of left radius-ulna bone. It was unable to suckle its mother and moving with difficulty in three legs. A sharp edge of fractured bone was piercing skin out making the bone marrow exposed. It was physically restrained, the sharp edge trimmed, fracture ends reduced and immobilized using plaster bandage having a window at the open wound site for regular dressing. Then, the fawn was left to its enclosure. It was seen walking comfortably and suckling milk from mother. The fawn was physically restrained every three days for dressing of the open wound, and the plaster bandage was removed after 35 days. The wound got completely healed and the fawn was able to walk with four legs.

# 4. Recurring umbilical hernia in a white tiger cub and its surgical management

A 5 months old white tiger cub 'Himanshi' was noticed with recurrence of umbilical hernia that was surgically corrected 2 months back. The cub was showing swelling at the umbilical region after taking buffalo meat. Surgical intervention was further carried out using anaesthetic mixture xylazine HCl and ketamine HCl administered intramuscularly. After freshening the hernia ring edges, the hernia was closed, non-absorbable synthetic polypropelene mesh was used as a supporting material to prevent further relapse of hernia. This time no further recurrence was noticed even after taking good meal. The tiger cub is presently doing well.

### Successful hand raising of lion cubs and wolf cubs

On 10-01-2023, Asiatic lioness 'Rewa' gave birth to two cubs for the first time and could not take care of its babies due to lack of sufficient maternal instinct. The cubs were rescued and brought to the 'Hand Rearing Centre' of the zoo. Also, it was for the first time in the history of Nandankanan zoo that on 17-01-2023, one wolf gave birth to six cubs. But, out of six only three were alive. As the cubs were not properly cared by the mother, they were also brought to the 'Hand Rearing Centre' and two of them survived. All lion cubs and wolf cubs are now being reared together with utmost care and precautions; presently all both of them are doing well with normal growth rate.

### 6. Treatment of female Hamadryas Baboon

On 21-02-2023, the female Hamadryas baboon 'Subha' was seen suffering from a wound at its ano-genital region. Detailed physical examination under immobilisation revealed severe myiasis and tissue damage. After careful removal of the maggots and dressing of the wound, the baboon was administered with intravenous fluid. The primate was kept at 'In-patient Ward' for 10 days in a squeeze cage. Regular antibiotic and wound dressing resulted in uneventful recovery.

# 7. Dystocia and assisted parturition in a Black buck (Antilope cervicapra)

Dystocia due to posterior presentation is not uncommon among ruminants. One such case was observed in a black buck at Nandankanan Zoological Park. A six year old doe was showing restlessness with abdominal straining. Observations made through binoculars revealed rupture of amniotic sac and a pair of hooves were seen to outside with discharges from vagina. The doe was immobilised using xylazine and ketamine combination. A live female fetus was removed through gentle traction and manual correction. The fawn was initially struggling to take air, but after cardio-pulmonary resuscitation it started breathing. The fawn was shifted to 'Hand Rearing Centre' for bottle feeding and the mother doe was provided with necessary treatment. It recovered successfully in a week.

# 8. Surgical management of tumor growth in a silver pheasant (Lophura nycthemera)

An adult male silver pheasant (Lophura nycthemera) of the zoo was seen with tumor like growth in the left leg at shank area involving spur. The bird was immobilised using Isoflurane anaesthesia. The tumor mass measuring 2.1cm×1.8cm×1.2cm was completely excised using standard procedure. The bleeding vessels were coagulated using electrocautery. The surgical wound completely healed in about two weeks. Histopathology examination of the excised mass was carried out at Centre for Wildlife Conservation, Management and Disease Surveillance, IVRI and it was diagnosed as a fibroma.

# ANNUAL REPORT ON BIRTH OF CAPTIVE ANIMALS AT NANDANKANAN ZOOLOGICAL PARK FROM 01.04.2022 TO 31.03.2023

S.N.	Date	Species	Sex(M:F:U)	S.N.	Date	Species :	Sex(M:F:U)
1.	19.04.2022	Black Kite	0:0:1	39.	02.10.2022	Mouse Deer	0:0:1
2.	26.04.2022	Mouse Deer	0:0:1	40.	07.10.2022	Blackbuck	0:0:1
3.	02.05.2022	Painted Stork	0:0:3	41.	12.10.2022	Blossom Headed Parakee	0:0:3
4.	02.05.2022	Ring Necked Parakeet	0:0:1	42.	15.10.2022	Manipuri Deer	0:0:1
5.	20.05.2022	Painted Stork	0:0:5	43.	16.10.2022	Monocellate Cobra	0:0:4
6.	25.05.2022	Grey Pelican	0:0:2	44.	20.10.2022	Blackbuck	0:0:3
7.	28.05.2022	Mandarin Duck	0:0:1	45.	20.10.2022	Violet Turaco	0:0:1
8.	03.06.2022	Swamp Deer	0:0:1	46.	28.10.2022	Monocellate Cobra	0:0:5
9.	05.06.2022	Blackbuck	0:0:4	47.	28.10.2022	Binocellate Cobra	0:0:4
10.	05.06.2022	Hog Deer	0:0:3	48.	30.10.2022	Budgerigar	0:0:5
11.	12.06.2022	Common Palm Civet	0:0:3	49.	30.10.2022	Java Sparrow	0:0:5
12.	13.06.2022	Star Tortoise	0:0:1	50.	31.10.2022	Alexandrine Parakeet	0:0:2
13.	16.06.2022	Banded Krait	0:0:1	51.	31.10.2022	Indian Gaur	0:0:1
14.	18.06.2022	Assamese Macaque	0:0:1	52.	10.11.2022	Openbill Stork	0:0:4
15.	18.06.2022	Banded Krait	0:0:1	53.	22.11.2022	Asiatic Lion	0:0:5
16.	27.06.2022	Rat Snake	0:0:1	54.	05.12.2022	Manipuri Deer	0:0:1
17.	28.06.2022	Rat Snake	0:0:10	55.	18.12.2022	Hog Deer	0:0:1
18.	05.07.2022	Hippopotamus	0:0:1	56.	20.12.2022	Blackbuck	0:0:1
19.	06.07.2022	Yellow Anaconda	0:0:1	57.	20.12.2022	Hog Deer	0:0:1
20.	08.07.2022	Stump Tailed Macaque	0:0:1	58.	01.01.2023	Blackbuck	0:0:1
21.	08.07.2022	Yellow Anaconda	0:0:8	59.	01.01.2023		0:0:1
22.	11.07.2022	Mouse Deer	0:0:1	60.	05.01.2023	Java Sparrow	0:0:10
23.	12.07.2022	Indian Peafowl	0:0:3	61.	06.01.2023	Tiger	0:0:2
24.	19.07.2022	Swamp Deer	0:0:1	62.	10.01.2023	Mouse Deer	0:0:1
25.	21.07.2022	Alexandrine Parakeet	0:0:1	63.	10.01.2023	Lion	0:0:2
26.	23.07.2022	Blackbuck	0:0:3	64.	12.01.2023	Sloth Bear	0:0:2
27.	26.07.2022	Indian Peafowl	0:0:2	65.	13.01.2023	Mouse Deer	0:0:1
28.	26.07.2022	Jackal	0:0:4	66.		Grey Pelican	0:0:3
29.	26.07.2022	Common Palm Civet	0:0:3	67.	18.01.2023	Indian Pangolin	0:0:1
30.	07.08.2022	Blackbuck	0:0:1	68.	18.01.2023	Indian Grey Wolf	0:0:3
31.	19.08.2022	Mouse Deer	0:0:2	69.	03.02.2023	Hog Deer	0:0:1
32.	20.08.2022	Assamese Macaque	0:0:1	70.	04.02.2023		0:0:1
33.	10.09.2022	Manipuri Deer	0:0:1	71.	04.02.2023	Sambar	0:0:1
34.	16.09.2022	Hippopotamus	0:0:1	72.	17.02.2023	Tiger	0:0:4
35.	16.09.2022	Mouse Deer	0:0:1	73.	22.02.2023	Hog Deer	0:0:1
36.	17.09.2022	Four Horned Antelope	0:0:1	74.	23.02.2023	Blackbuck	0:0:1
37.	17.09.2022	Spotted Deer	0:0:3	75.	23.02.2023	_	0:0:1
38.	25.09.2022	Blackbuck	0:0:2	76.	27.02.2023	Little Egret	0:0:2



77.	27.02.2023	Night Heron	0:0:2	91.	17.03.2023	Hog Deer	0:0:2
78.	27.02.2023	Blackbuck	0:0:1	92.	21.03.2023	Hog Deer	0:0:1
79.	28.02.2023	Bonnet Macaque	1:0:0	93.	23.03.2023	Blackbuck	0:0:1
80.	01.03.2023	Spotted Deer	2:3:0	94.	24.03.2023	Blackbuck	0:0:1
81.	02.03.2023	Spotted Deer	0:0:2	95.	25.03.2023	Java Sparrow	0:0:5
82.	05.03.2023	Spotted Deer	2:2:0	96.	25.03.2023	Spotted deer	3:2:0
83.	07.03.2023	Spotted Deer	3:2:0	97.	26.03.2023	Hog Deer	0:0:2
84.	09.03.2023	SpottedDove	0:0:1	98.	26.03.2023	Blackbuck	0:0:2
85.	10.03.2023	Spotted Deer	2:2:0	99.	27.03.2023	Budgerigar	0:0:5
86.	11.03.2023	Barn Owl	0:0:1	100.	28.03.2023	Blackbuck	0:0:2
87.	12.03.2023	Jackal	0:0:4	101.	28.03.2023	Hog Deer	0:0:1
88.	12.03.2023	Spotted Deer	4:3:0	102.	28.03.2023	Java Sparrow	0:0:5
89.	15.03.2023	Spotted Deer	3:3:0	103.	28.03.2023	Spotted deer	2:2:0
90.	17.03.2023	Blackbuck	0:0:1	104.	30.03.2023	Budgerigar	0:0:5
				105.	30.03.2023	Water Monitor Lizard	0:0:4

### Abstract

	MAMMAL	BIRD	REPTILE	AMPHIBIAN	TOTAL
BIRTH	160	108	14	0	282

# ANNUAL REPORT ON THE DEATH OF CAPTIVE ANIMALS AT NANDANKANAN ZOOLOGICAL PARK (FROM 01.04.2022 TO 31.03.2023)

### **MAMMALS**

SI.	DATE	ANIMAL	AGE	SEX	CAUSE OF DEATH
1	12.04.22	Normal Colour Tiger	About 1 year	М	Acute pneumonia, acute cardiac failure along with fracture at femur
2	14.04.22	Normal ColourTiger	One month	F	Anaemia and debility
3	15.04.22	Sambar deer	Adult	М	Septicemia
4	16.04.22	Asiatic lion	20 yr 3 months	F	Multiple tumor in lungs, liver cirrhosis associated with old age
5	19.04.22	Hippopotamus	About 12 years	F	Multiple injuries and septicemia
6	24.04.22	Manipuri deer	Adult	М	Acute Pneumonia
7	02.05.22	Gaur	Adult	F	Haemorrhagic Myositis
8	28.05.22	African lion	Adult	F	Snake bite
9	01.06.22	Spotted deer	Adult	М	Infighting
10	08.06.22	Sambar deer	Adult	М	Nasal tumor
11	20.06.22	Nilgai	3 months	М	Trampling
12	01.07.22	Barking deer	Adult	F	Suppurative pneumonia
13	11.07.22	Spotted deer	Adult	М	Infighting
14	20.07.22	Hippopotamus	About 1 month	М	Punctured wounds penetrating to abdominal cavity
15	02.08.22	Black buck	5 days	F	Heat stress
16	08.08.22	Barking deer	Adult	F	Tuberculosis
17	10.08.22	Leopard	About 16 years	М	Pneumonia
18	21.08.22	Barking deer	Adult	F	Pneumo-enteritis
19	22.08.22	Chimpanzee	7 months 25 days	F	Pneumonia
20	26.08.22	Sambar deer	21 days	F	Hepatitis
21	27.08.22	Black buck	7 days	М	Shock associated with fracture
22	13.09.22	Hog deer	Adult	F	Hepatitis associated with old age
23	18.09.22	Black buck	Adult	М	Shock associated with open fracture
24	21.09.22	Black buck	Adult	М	Anaemia associated with hepatitis
25	25.09.22	Spotted deer	Adult	М	Infighting
26	26.09.22	Barking deer	Adult	F	Pneumonia
27	02.10.22	Mouse deer	About 3 months	F	Acute pneumonia
28	04.10.22	Hippopotamus	19 days	F	Multiple injuries and septicemia
29	04.10.22	Mouse deer	About 3months	М	Pneumonia and enteritis
30	08.10.22	Mouse deer	Sub-adult	F	Pneumonia

31	10.10.22	Hog deer	Adult	F	Infighting injury
32	13.10.22	Nilgai	Adult	F	Liver tumor associated with senility
33	22.10.22	White Tiger	11 year 3 months	F	Lungs cancer
34	28.10.22	Elephant	About 68 years	F	Nephritis associated with old age
35	29.10.22	Spotted deer	Adult	Μ	Infighting injuries
36	02.11.22	Indian Gaur	One day	F	Pneumonia
37	11.11.22	Hog deer	Adult	Μ	Injury and septicemia
38	06.12.22	Swamp deer	Adult	Μ	Puncture injury and internal haemorrhage
39	06.12.22	Spotted deer	Adult	F	Infighting injury
40	10.12.22	Spotted deer	Adult	F	Senility
41	12.12.22	Spotted deer	Adult	М	Infighting injury
42	12.01.23	Hog deer	Adult	Μ	Infighting injury
43	16.01.23	Slender tailed Meerkat	Adult	F	Asphyxia
44	27.01.23	Manipur deer	About 2 mn	F	Debility, anaemia and pneumonia
45	31.01.23	Hog deer	About 6 mn	F	Hepatic abscess & anemia
46	02.02.23	Indian Grey Wolf	15 days	F	Pneumonia
47	04.02.23	Hog deer	5 days	F	Omphalitis
48	05.02.23	Sambar	Adult	F	Pneumonia
49	06.02.23	Sambar	Adult	F	Septicemia
50	06.02.23	Spotted deer	Adult	F	Hepatitis associated with senility
51	07.02.23	Spotted deer	Adult	Μ	Infighting injury
52	10.02.23	Sambar	Adult	М	Infighting injury
53	13.02.23	Bonnet macaqu	Adult	Μ	Debility associated with senility
54	20.02.23	Manipuri deer	About 15 yrs	М	Infighting injury associated with senility
55	04.03.23	Manipuri deer	About 13 yrs	Μ	Septicemia associated with senility
56	16.03.23	Black buck	Adult	F	Fracture of tibia and shock
57	17.03.23	Mouse deer	Adult	F	Septicemia
58	23.03.23	Indian Fox	Adult	М	Enteritis
	•	•			

# BIRDS

1	05.04.22	Rosy Pelican	About 32 years	F	Old age
2	12.04.22	Mandarin duck	Adult	F	Tumor of liver and intestine
3	28.06.22	Sun conure	Adult	М	Hepatitis
4	06.07.22	Brown throated Conure	Adult	М	Debility and old age
5	12.07.22	Meyer's Parrot	Adult	М	Shock
6	17.07.22	Alexandrine Parakeet	Adult	М	Visceral gout
7	19.07.22	Open billed Stork	Adult	М	Impaction
8	27.07.22	Golden Pheasant	Adult	М	Infighting
9	29.07.22	Yellow sided Conure	Adult	F	Parasitic enteritis
10	08.08.22	White Peafowl	Adult	F	Pneumo-enteritis
11	16.08.22	Sun Conure	About 4 months	М	Traumatic injury
12	17.08.22	Golden Pheasant	Adult	М	Nephritis
13	26.08.22	Yellow sided Conure	Adult	F	Internal haemorrhage

14	21.09.22	Yellow sided Conure	Adult	F	Hepatitis and enteritis
15	06.10.22	Ring necked dove	Adult	F	Pneumonia
16	07.10.22	Red Jungle fowl	Adult	Μ	Pneumo-enteritis
17	07.10.22	Sun Conure	Adult	F	Enteritis
18	09.10.22	Sun Conure	Adult	F	Enteritis
19	10.10.22	Jandaya Conure	Adult	Μ	Hepatitis and nephritis
20	16.10.22	Reev's Pheasant	Adult	F	Tumor in the abdomen
21	17.10.22	Grey heron	Adult	Μ	Pneumonia and debility
22	23.10.22	Emu	Adult	Μ	Infighting injury
23	26.10.22	Grey heron	Adult	Μ	Debility and senility
24	12.11.22	Sun Conure	Adult	F	Pneumonia
25	17.11.22	White Eurasian Spoonbill	About 29 years	F	Hepatitis associated with senility
26	21.11.22	Yellow sided Conure	Adult	Μ	Internal haemorrhage
27	11.12.22	Pine apple Conure	Adult	F	Hepatitis and parasitic enteritis
28	13.12.22	Yellow sided Conure	Adult	F	Parasitic enteritis
29	17.12.22	Emerald dove	Adult		Predator bite
30	19.12.22	Emerald dove	Adult		Predator bite
31	05.01.23	Swainson's Lorikeet	Adult	Μ	Hepatitis and nephritis
32	07.01.23	Yellow sided Conure	Adult	F	Enteritis
33	12.01.23	Yellow sided Conure	Adult	Μ	Internal haemorrhage and shock
34	17.01.23	Grey Heron	Adult	F	Hepatitis
35	26.01.23	Golden Pheasant	Adult	F	Infighting injury
36	06.02.23	Pineapple Conure	Adult	F	Hepatitis and nephritis
37	07.02.23	Mandarin duck	Adult	Μ	Visceral gout
38	10.02.23	Silver Pheasant	Adult	F	Infighting injury
39	14.02.23	Silver Pheasant	Adult	F	Salpingitis
40	18.02.23	Love bird (Fischers')	Adult	Μ	Enteritis
41	20.02.23	Yellow sided Conure	Adult	F	Haemorrhagic liver
42	09.03.23	Love bird (Fischers')	Adult	М	Traumatic injury & shock
43	16.03.23	Black swan	Adult	F	Pneumo-enteritis
44	23.03.23	Blue faced Lorikeet	Adult	F	Haemorrhagic enteritis
45	24.03.23	White Peafowl	Adult	F	Egg bound condition and shock
46	28.03.23	Mandarin duck	Adult	F	Internal haemorrhage and shock
47	29.03.23	Love bird (Fischers')	Adult	Μ	Hepatitis and enteritis





# BIRTH AND DEATH OF CAPTIVE ANIMALS FOR THE LAST FIVE YEARS TOTAL STOCK POSITION FROM 01.04.2018 TO 31.03.2023

Types	Stock as on 01.04.2018	Birth	Acquisition	Death	Disposal	Stock as on 31.03.2019
Mammals	1340	149	9	32	5	1461
Birds	1653	102	12	27	0	1740
Reptiles	289	7	0	1	0	295
Amphibians	21	0	0	0	0	21
Total	3303	258	21	60	5	3517
				1		
Types	Stock as on 01.04.2019	Birth	Acquisition	Death	Disposal	Stock as or 31.03.2020
Mammals	1461	173	13	44	0	1603
Birds	1740	18	44	46	0	1756
Reptiles	295	0	11	8	7	291
Amphibians	21	0	0	0	0	21
Total	3517	191	68	98	7	3671
Types	Stock as on 01.04.2020	Birth	Acquisition	Death	Disposal	Stock as or 31.03.202
Mammals	1603	131	17	32	7	1711
Birds	1756	138	-	39	56	1799
Reptiles	291	4	9	2	6	296
Amphibians	21	-	-	-	-	21
Total	3671	273	26	73	69	3827
				1		
Types	Stock as on 01.04.2021	Birth	Acquisition	Death	Disposal	Stock as on 31.03.2022
Mammals	1711	151	14	38	2	1836
Birds	1799	108		47	8	1852
Reptiles	296	14	2	2	7	303
Amphibians	21					21
Total	3827	273	16	87	17	4012
lolai	3027	2/3	10	67	17	4012
Types	Stock as on 01.04.2022	Birth	Acquisition	Death	Disposal	Stock as or 31.03.2023
Mammals	1836	141	04	58	02	1921
Birds	1852	78	05	47	71	1817
Reptiles	303	40		2		342
Amphibians	21					21
Total	4012	259	09	107	73	4100

Death Of Captive Animals In Nandankanan Zoological Park During The Past Five Years

Year	Total stock	Num	ber of de	aths	Amphibians	Percentage	Total
	As on 31st March	Mammals	Birds	Reptiles		_	
2018-19	3517	32	27	01	0	60	1.67%
201920	3671	44	46	08	0	98	2.60%
2020-21	3827	32	39	02	0	69	1.77%
2021-22	4012	38	47	02	0	87	2.12%
2022-23	4100	58	47	02	0	107	2.54%

# RESCUE AND REHABILITATION OF WILD ANIMALS BY NANDANKANAN ZOOLOGICAL PARK FROM 01.04.2022 TO 31.03.2023

Sl. No.	Date	Species	Place	Purpose
				Rescue/Treatment
1	11/04/2022	Common Langur	Chandaka	Rescue
2	24/04/2022	Elephant	Godibari	Treatment
3	15/05/2022	Elephant	Godibari	Treatment
4	21/05/2022	Common Langur	Kujanga	Rescue
5	22/05/2022	Common Langur	Kujanga	Rescue
6	29/05/2022	Common Langur	Astaranga	Rescue
7	03/06/2022	Tusker	Sambalpur	Rescue
8	09/06/2022	Elephant	Narsinghpur	Treatment
9	11/06/2022	Common Langur	Baideswar	Rescue
10	17/06/2022	Common Langur	Tangi	Rescue
11	19/06/2022	Elephant	Belapahad	Rescue
12	15/07/2022	Common Langur	Jaipur	Rescue
13	28/07/2022	Tusker	Athagarh	Treatment
14	29/07/2022	Common Langur	Cuttack	Rescue
15	30/07/2022	Elephant	Mangalajodi	Rescue
16	31/07/2022	Tusker	Ranapur	Rescue
17	03/08/2022	Tusker	Khordha	Treatment
18	17/08/2022	Common Langur	Phulnakhara	Rescue
19	28/08/2022	Common Langur	Khordha	Rescue
20	06/09/2022	Rhesus Macaque	Gopa	Rescue
21	07/09/2022	Common Langur	Konark	Rescue

23         29/09/2022         Elephant         Cuttack         Rescue           24         02/10/2022         Tusker         Betanati         Rescue           25         14/10/2022         Elephant         Chandaka         Treatment           26         22/10/2022         Common Langur         Astaranga         Rescue           27         26/10/2022         Tusker         Keonjhar         Rescue           28         02/11/2022         Tusker         Khordha         Rescue           29         05/11/2022         Tusker         Keonjhar         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37	22	20/09/2022	Wild Boar	Govindpur	Rescue
25         14/10/2022         Elephant         Chandaka         Treatment           26         22/10/2022         Tusker         Keonjhar         Rescue           27         26/10/2022         Tusker         Keonjhar         Rescue           28         02/11/2022         Tusker         Chandaka         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40	23	29/09/2022	Elephant	Cuttack	Rescue
26         22/10/2022         Common Langur         Astaranga         Rescue           27         26/10/2022         Tusker         Keonjhar         Rescue           28         02/11/2022         Tusker         Khordha         Rescue           29         05/11/2022         Tusker         Chandaka         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Bharipata         Rescue           41<	24	02/10/2022	Tusker	Betanati	Rescue
27         26/10/2022         Tusker         Keonjhar         Rescue           28         02/11/2022         Tusker         Khordha         Rescue           29         05/11/2022         Tusker         Chandaka         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Bharatpur         Rescue           41 <td>25</td> <td>14/10/2022</td> <td>Elephant</td> <td>Chandaka</td> <td>Treatment</td>	25	14/10/2022	Elephant	Chandaka	Treatment
28         02/11/2022         Tusker         Khordha         Rescue           29         05/11/2022         Tusker         Chandaka         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Bharatpur         Rescue           41         19/12/2022         Common Langur         Kujanga         Rescue	26	22/10/2022	Common Langur	Astaranga	Rescue
29         05/11/2022         Tusker         Chandaka         Treatment           30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Common Langur         Jagatsingpur         Rescue           40         12/12/2022         Common Langur         Balipatna         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue	27	26/10/2022	Tusker	Keonjhar	Rescue
30         08/11/2022         Tusker         Keonjhar         Treatment           31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Bharatpur         Rescue           41         19/12/2022         Common Langur         Bulipatna         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue	28	02/11/2022	Tusker	Khordha	Rescue
31         09/11/2022         Tusker         Keonjhar         Treatment           32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue	29	05/11/2022	Tusker	Chandaka	Treatment
32         10/11/2022         Tusker         Keonjhar         Treatment           33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Balipatna         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Tentulia         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue	30	08/11/2022	Tusker	Keonjhar	Treatment
33         11/11/2022         Tusker         Keonjhar         Treatment           34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Balipatna         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue      <	31	09/11/2022	Tusker	Keonjhar	Treatment
34         12/11/2022         Tusker         Keonjhar         Treatment           35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Balipatna         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Kujanga         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue	32	10/11/2022	Tusker	Keonjhar	Treatment
35         13/11/2022         Tusker         Keonjhar         Treatment           36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment     <	33	11/11/2022	Tusker	Keonjhar	Treatment
36         14/11/2022         Tusker         Keonjhar         Treatment           37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment	34	12/11/2022	Tusker	Keonjhar	Treatment
37         24/11/2022         Common Langur         Ratanpur         Rescue           38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue <td>35</td> <td>13/11/2022</td> <td>Tusker</td> <td>Keonjhar</td> <td>Treatment</td>	35	13/11/2022	Tusker	Keonjhar	Treatment
38         03/12/2022         Elephant         Chandaka         Treatment           39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Tentulia         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue	36	14/11/2022	Tusker	Keonjhar	Treatment
39         07/12/2022         Tusker         Baripada         Rescue           40         12/12/2022         Common Langur         Jagatsingpur         Rescue           41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Kujanga         Rescue           43         22/12/2022         Common Langur         Tentulia         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	37	24/11/2022	Common Langur	Ratanpur	Rescue
40 12/12/2022 Common Langur Jagatsingpur Rescue 41 19/12/2022 Common Langur Bharatpur Rescue 42 20/12/2022 Common Langur Balipatna Rescue 43 22/12/2022 Common Langur Kujanga Rescue 44 23/12/2022 Common Langur Tentulia Rescue 45 01/01/2023 Elephant Chandaka Treatment 46 10/01/2023 Tusker Konark Rescue 47 12/01/2023 Common Langur Balipatna Rescue 48 13/01/2023 Elephant Kumarkhunti Treatment 49 19/01/2023 Elephant Kumarkhunti Treatment 50 06/02/2023 Elephant Bhanjanagar Rescue 51 05/03/2023 Common Langur Konark Rescue 52 06/03/2023 Common Langur Konark Rescue	38	03/12/2022	Elephant	Chandaka	Treatment
41         19/12/2022         Common Langur         Bharatpur         Rescue           42         20/12/2022         Common Langur         Balipatna         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	39	07/12/2022	Tusker	Baripada	Rescue
42         20/12/2022         Common Langur         Balipatna         Rescue           43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	40	12/12/2022	Common Langur	Jagatsingpur	Rescue
43         22/12/2022         Common Langur         Kujanga         Rescue           44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	41	19/12/2022	Common Langur	Bharatpur	Rescue
44         23/12/2022         Common Langur         Tentulia         Rescue           45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	42	20/12/2022	Common Langur	Balipatna	Rescue
45         01/01/2023         Elephant         Chandaka         Treatment           46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	43	22/12/2022	Common Langur	Kujanga	Rescue
46         10/01/2023         Tusker         Konark         Rescue           47         12/01/2023         Common Langur         Balipatna         Rescue           48         13/01/2023         Elephant         Kumarkhunti         Treatment           49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	44	23/12/2022	Common Langur	Tentulia	Rescue
47       12/01/2023       Common Langur       Balipatna       Rescue         48       13/01/2023       Elephant       Kumarkhunti       Treatment         49       19/01/2023       Elephant       Kumarkhunti       Treatment         50       06/02/2023       Elephant       Bhanjanagar       Rescue         51       05/03/2023       Common Langur       Konark       Rescue         52       06/03/2023       Common Langur       Konark       Rescue	45	01/01/2023	Elephant	Chandaka	Treatment
48 13/01/2023 Elephant Kumarkhunti Treatment 49 19/01/2023 Elephant Kumarkhunti Treatment 50 06/02/2023 Elephant Bhanjanagar Rescue 51 05/03/2023 Common Langur Konark Rescue 52 06/03/2023 Common Langur Konark Rescue	46	10/01/2023	Tusker	Konark	Rescue
49         19/01/2023         Elephant         Kumarkhunti         Treatment           50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	47	12/01/2023	Common Langur	Balipatna	Rescue
50         06/02/2023         Elephant         Bhanjanagar         Rescue           51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	48	13/01/2023	Elephant	Kumarkhunti	Treatment
51         05/03/2023         Common Langur         Konark         Rescue           52         06/03/2023         Common Langur         Konark         Rescue	49	19/01/2023	Elephant	Kumarkhunti	Treatment
52 06/03/2023 Common Langur Konark Rescue	50	06/02/2023	Elephant	Bhanjanagar	Rescue
	51	05/03/2023	Common Langur	Konark	Rescue
53 13/03/2023 Rhesus Macaque Khuntuni Rescue	52	06/03/2023	Common Langur	Konark	Rescue
	53	13/03/2023	Rhesus Macaque	Khuntuni	Rescue

# ANNUAL ANIMAL INVENTORY (FROM 1ST APRIL-22 to 31ST MAR -23)

State Suppose   State Suppos		SCH-1, II, III & IV (Wildlife Protection Act)	otection Act)						Durin	During the Month	onth												
Statistical Control					Stock	as on 01	.04.20	22	Births		A	cquis	itions	Dis	posal		Deat	hs		Stock as	on Dt-	31.03.	2023
9. SCH-1 STH-I BIRDS         1         0	S. N.		Scientific name	SCH		ч	Π	_						Σ	ч	n	Σ	ч				n	ı
HILLMANNHH Gradue religious   1   2   2   14   14   15   15   15   15   15   15		SCH-I, SCH-II BIRDS																					
B. WHITE PERFONCE   Proceedings   1   3   3   12   14   15   15   15   15   15   15   15	-	HILL MYNAH	Gracula religiosa	_	0	0	-	-						0	0	0	0	0				_	-
B.WHITE PEACOWL.         Page of secretaries         1         2         3         1         6         0	2	A. INDIAN PEAFOWL	Pavo cristatus	_	3	3	12	18						0	0	0	0	0			_	17	23
ELHARANN WHITE SCHOUSHLILL HOUSINGHER ONE OF CONTRIBENCE OF CONTRI		B. WHITE PEAFOWL	Pavo cristatus	_	2	3	-	9						0	0	0	0	2				_	4
NUMER DATICE CALLE   Adaptairs monachus   1   0   0   0   0   0   0   0   0   0	က	EURASIAN WHITE	Platalea leucorodia	_	0	-	0	-						0	0	0	0	-				0	0
WHITE BACKED VULTURE   Appsy indicason in the continue of th	_	OI OOINDIEE	According to the second		c	c	c	c	+		t	+		c	c		-		+				c
WHITE BACKED VULTURE         Oppositionizing         1         2         8         11         0	4	CINEREOUS VULIURE	Aegypius monachus	-	0	0	2	2	_				1	0	0	0	0	0	_			2	2
WHITE BACKED VULLUME         Glyps bengalarisis         1         0         0         1         0	2	LONG BILLED VULTURE	Gyps indicus	_	-	2	8	=	$\dashv$					0	0	0	0	0	0	1		8	11
BRAMHINY KITE	9	WHITE BACKED VULTURE	Gyps bengalensis	_	0	0	-	-						0	0	0	0	0				_	-
BLACK KITE BLACK WITH BINIAL AYM BLACK BEAR BLACK BLANK BLACK BEAR BLACK BLANK BLACK BEAR BLACK BLANK BLACK BLACK BLACK BLANK BLACK BLANK BLACK BLANK BLACK B	7	BRAMHINY KITE	Haliastur indus	_	-	0	0	-						0	0	0	0	0	0	1	0	0	-
SHKRA         Accipite the Additional Liberty and Missional Liberty Annual Libe	∞	BLACK KITE	Milvus migrans	_	က	က	4	10		0	0			0	0	0	0	0			_	2	11
SCH-IAI INAMIMALLY         CONCENTION         1<	6	SHIKRA	Accipiter badius	_	0	0	2	2						0	0	0	0	0				2	2
SCH-I MIBITGS - TOTAL         11         12         31         54         0	10	GREY HORNBILL	Ocyceros birostris	_	-	0	0	-						0	0	0	0	0	0	_		0	_
SCH+I, SCH-II MAMMALS         FOUR HORNED ANTELOPE         Tench or sound incoming and incomin		SCH-I &II Birds - TOTAL			=	12	31	24						0	0	0	0	3			6	37	22
FOUR HORNED ANTELOPE / Tetraceros quadricomis         1         2         2         4         2         0 </th <th></th> <th>SCH-I, SCH-II MAMMALS</th> <th></th>		SCH-I, SCH-II MAMMALS																					
HIMALAYAN BLACK BEAR Selenarctos thibetenus II 2 3 6 1 1 1 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-	FOUR HORNED ANTELOPE / CHOWSINGHA	Tetraceros quadricomis	_	-	-	0	2						0	0	0	0	0	0		_	-	က
SLOTH BEAR         Melursus ursinus         1         3         6         1         10         0 </td <th>2</th> <td>HIMALAYAN BLACK BEAR</td> <td>Selenarctos thibetanus</td> <td>=</td> <td>2</td> <td>3</td> <td>0</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td> <td>~</td> <td>0</td> <td>5</td>	2	HIMALAYAN BLACK BEAR	Selenarctos thibetanus	=	2	3	0	5						0	0	0	0	0			~	0	5
BLACKBUCK         Antilope cervicapra         1         18         24         19         61         0         26         0         <	3	SLOTH BEAR	Melursus ursinus	_	3	9	-	10						0	0	0	0	0				3	12
UNMOLE CAT         Felis chaus         II         3         2         4         9         0	4	BLACKBUCK	Antilope cervicapra	_	18	24	19	61						0	0	0	2	_			23	43	82
COMMON PALM CIVET / International diductions         II         3         9         15         0         6         0<	5	JUNGLE CAT	Felis chaus	=	က	2	4	6						0	0	0	0	0				4	6
SMALL INDIAN CIVET         International states and control of the control of t	9	COMMON PALM CIVET /	Paradoxurus	=	က	က	6	15						0	0	0	0	0			<u>~</u>	15	21
BROWANTLERED DEER / SANGAI         Cervus eldi         I         6         5         9         20         0	7	SMALL INDIAN CIVET	Viverricula indica	=	-	0	0	-	+					0	0	0	0	0	0	-  -		0	-
MOUSE DEFA         Tragulus menmina         1         6         3         17         26         0         8         0<	8	BROW ANTLERED DEER / SANGAI	Cervus eldi	L	9	2	6	20	$\vdash$				$\vdash$	0	0	0	3	-	$\vdash$		=	0	19
SWAMP DEER / BRASINGHA         Cervus duvauceli         1         5         4         3         12         0	6	MOUSE DEER	Tragulus memmina	L	9	3	17	56	$\vdash$			$\vdash$		0	0	0	-	3	1			6	30
INDIAN ELEPHANT   Elephas maximus   1   0   3   0   3   0   0   0   0   0   0	10	SWAMP DEER / BRASINGHA	Cervus duvauceli	_	5	4	3	12						0	0	0	-	0			4	2	13
GAUR         Bos Gaurus         1         3         4         0         7         0         <	11	INDIAN ELEPHANT	Elephas maximus	_	0	3	0	3						0	0	0	0	1			5	0	2
JACKAL         Canis aureus         II         3         7         8         18         0	12	GAUR	Bos Gaurus	_	3	4	0	7	0	1 (				0	0	0	0	2			3	0	9
LEOPARD / PANTHER         Panthera pardus         1         2         3         0         5         0 <t< td=""><th>13</th><td>JACKAL</td><td>Canis aureus</td><td>=</td><td>3</td><td>7</td><td>8</td><td>18</td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td><td></td><td></td><td>16</td><td>26</td></t<>	13	JACKAL	Canis aureus	=	3	7	8	18						0	0	0	0	0				16	26
ASIATIC LION   Pantera leo persica   1   4   5   0   9   1   1   5   0   0   0   0   0   0   1   0   9   6   0	14	LEOPARD / PANTHER	Panthera pardus	_	2	3	0	5						0	0	0	-	0			3	0	4
	15	ASIATIC LION	Pantera leo persica		4	2	0	6	-	1,				0	0	0	0	-				0	15

_		1	1		l				ı		<u> </u>	l		ſ			Г	1	l	$\neg$						l	Ι		1	T	ı	l	Т
7	∞	Ξ	က	-	∞	50	9	က	2	10	6	∞	10	354	3.2023	-	12	9	108		32	-	2	7	2	2	2	12	64	-	-	2	c
0	0	2	0	0	4	9	0	0	0	2	က	2	9	124	Dt-31.03	0	10	4	6		22	0	3	2	0	-	0	<sub>∞</sub>	0	-	0	2	c
9	4	2	2	0	2	2	4	0	-	က	က	က	3	124	as on	0	-	-	6/		9	1	-	-	-	2	-	2	36	0	0	0	_
_	4	4	-	-	2	6	2	က	-	2	က	က	-	106	Stock	-	-	-	20		4	0	-	-	-	2	-	2	28	0	-	0	0
0	0	0	0	0	0	0	0	0	0	0	0	-	0	3		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	c
0	0	0	0	0	0	-	-	0	0	0	0	0	0	=	ths	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	c
-	0	0	0	0	0	-	0	0	0	0	0	0	-	<del>=</del>	Deaths	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	-	0	0	0	0	0	0	0	-	isposals	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	,
0	0	0	0	0	0	-	0	0	0	0	0	0	0	-	Dist	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	,
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Suc	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	,
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Acquisitions	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	,
O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Acq	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	,
O	0	-	0	0	0	9	0	0	0	2	-	က	0	74		0	6	4	0		0	0	0	4	0	0	0	7	0	0	0	0	
O	0	0	0	0	0	0	0	0	0	0	0	0	0	2	Births	0	0	0	0		0	0	0	0	0	0	0	2	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	2	Bir	0	0	0	0		0	0	0	0	0	0	0	2	0	0	0	0	1
,	8	10	က	-	∞	18	2	က	2	∞	∞	9	F	303	.2022	-	3	2	108		32	-	2	3	2	2	2	-	64	-	-	2	
o	0	-	0	0	4	0	0	0	0	က	2	0	9	98	.04.20	0	-	0	6		22	0	3	-	0	-	0	-	0	-	0	2	,
9	4	2	2	0	2	7	2	0	-	က	က	က	3	117	as on 01	0	-	-	6/		9	1	ļ	1	1	2	-	0	36	0	0	0	,
1	4	4	-	-	2	11	2	က	-	2	က	3	2	100	Stock a	1	-	-	20		4	0	-	1	-	2	-	0	28	0	-	0	
=	=		_	=	=	_	_	_	=	_	=	_	=			=	=	=	_					_			_	=	_	_	=	_	ŀ.
Macaca radiata	Macaca mulatta	Manis crassicaudata	Mellivora capensis	Ratufa indica	Herpestes edwardsi	Panthera tigris tigris	Panthera tigris tigris	Panthera tigris tigris	Cuon alpinus	Macaca assamensis	Macaca arctoides	Canis lupus pallipes	Vulpes bengalensis	SCH-I &II Mammals - TOTAL		Ophiophagus hannah	Naja naja kouthia	Naja naja	Gavialis gangeticus		Crocodilus palustris	Crocodylus porosus	Varanus bengalensis	Varanus salvator	Python molurus bivistatus	Python molurus molurus	Python reticulatus	Ptyas mucosus	Lissemys punctata punctata		Vipera ruselli	Chameleon zeylanicus	
BONNET MACAQUE	RHESUS MACAQUE	INDIAN PANGOLIN	RATEL	GIANT SQUIRREL	COMMON MANGOOSE	A. BENGAL TIGER	B. BENGAL TIGER (WHITE)	C. BENGAL TIGER (MELANISTIC)	AISATIC WILD DOG	ASSAMESE MACAQUE	STUMP TAILED MACAQUE	INDIAN GREY WOLF	INDIAN FOX	38	SCH-I & SCH-II REPTILES	KING COBRA	MONOCELLATE COBRA	BINOCELLATE COBRA	LONG SNOUTED	CROCODILE/ GHARIAL	MUGGER CROCODILE	SALT WATER CROCODILE	COMMON MONITOR LIZARD	WATER MONITOR LIZARD	BURMESE PYTHON	INDIAN ROCK PYTHON	RETICULATED PYTHON	RAT SNAKE	FRESH WATER TURTLE / INDIAN FLAP SHELL	GANGES SOFT SHELL TURTLE	RUSSEL'S VIPER	INDIAN CHAMELEON	L
16	17	18	19	20	21	22			23	24	25	56	27			-	2	3	4		5	9	7	8	6	10	11	12	13	14	15	16	!

	SCH-III, SCH-IV BIRDS						-			-	-	-	<b>-</b>		0 0	<u> </u>	0	64	132	89	264
				Stock a	as on 01 .C	.04.2022	_	Births		Ac	Acquisitions	ions	Disposal	osals	_	Deaths		Sto	Stock as on I	Dt-31.03	.2023
	SARUS CRANE	Grus antigone	Λ	1	0	0 1	_	0 0	0	0	0	0	0	0	0 0	0	0	-	0	0	-
	EMERALD DOVE	Chalcophaps indica	2	2	2	1		0 0	0	0	0	0	0	0	0 0	-	-	2	-	0	က
	SPOTTED DOVE	Spilopelia chinesis	2	_	-	9		0 0	-	0	0	0	0	0	0 0	0	0	-	-	7	6
	CATTLE EGRET	Bubulcus ibis	2	1	2	5 8		0 0	0	0	0	0	-	-	0 0	0	0	0	-	2	9
	LARGE EGRET	Cosmerodius albus	Λ	0	0	-		0 0	0	0	0	0	0	0	0 0	0	0	0	0	-	-
	LITTLE EGRET	Egretta garzetta	2	_	-	9		0 0	2	0	0	0	-	-	0 0	0	0	0	0	∞	∞
	MEDIAN EGRET	Egretta intermedia	2	0	0	-		0 0	0	0	0	0	0	0	0 0	0	0	0	0	-	-
	GREY HERON	Ardea cinerea	2	3	7	2	12 (	0 0	0	0	0	0	0	0	0 0	-	2	က	9	0	6
9 NIGHT	NIGHT HERON	Nycticorax nycticorax	2	33	36	40	109	0 0	2	0	0	0	0	0	0 0	0	0	33	36	42	111
10 ORIEN	ORIENTAL WHITE IBIS	Threskiornis melanocephalus	2	20	81	64 1	195 (	0 0	0	0	0	0	0	0	0 0	0	0	20	81	64	195
11 K0EL		Eudynamys scolopacea	2	-	-	0 2		0 0	0	0	0	0	0	0	0 0	0	0	-	-	0	2
12 RED MUNIA	UNIA	Estrilda amandava	2	0	0	-		0 0	0	0	0	0	0	0	0 0	0	0	0	0	-	-
13 BLACK	BLACK HEADED MUNIA	Lonchura malacca	2	0	-	0 1		0 0	0	0	0	0	0	0	0 0	0	0	0	-	0	-
14 SPOTT	SPOTTED MUNIA	Lonchura punctulata	2	1	0	0		0 0	0	0	0	0	0	0	0 0	0	0	-	0	0	-
15 BARN OWL	0WL	Tyto alba	2	2	-	3 6		0 0	-	0	0	0	0	0	0 0	0	0	2	-	4	7
16 BROW	BROWN FISH OWL	Bubo zeylonesis	Λ	-	-	0 2		0 0	0	0	0	0	0	0	0 0	0	0	-	-	0	2
17 ORIEN	ORIENTAL SCOPS OWL	Outs sunia	Ν	0	0	1 1		0 0	0	0	0	0	0	0	0 0	0	0	0	0	-	-
18 ALEXA	ALEXANDRINE PARAKEET	Psittacula eupatria	Λ	8	7	0 15		0 0	3	0	0	0	0	0	0	0	0	7	7	3	17
19 BLOSSOM PARAKEET	HEAD	Psittacula cyanocephala	2	1	-	0 2		0 0	3	0	0	0	0	0	0 0	0	0	-	-	3	5
20 ROSE RING	RING PARAKEET	Psittacula krameri manillensis	2	7	15	0 2	25 (	0 0	0	0	0	0	0	0	0 0	0	0	7	15	0	22
21 GREY I BILLED	GREY PELICAN/SPOT BILLED PELICAN	Pelecanus philippensis	≥	5	2	12 2	22 (	0 0	2	0	0	0	-	-	0 0	0	0	4	4	17	25
22 R0SY/	ROSY/WHITE PELICAN	Pelecanus onocrotalus	Λ	0	-	3 4		0 0	0	0	0	0	0	0	0 0	_	0	0	0	3	3
23 LESSE	LESSER ADJUTANT STORK	Leptoptilos javanicus	Ν	0	0	2 2		0 0	0	0	0	0	0	0	0 0	0	0	0	0	2	2
	PAINTED STORK	Mycteria leucocephala	2	9		20 3		0 0	∞	0	0	0	0	0	0 0	0	0	9	9	28	40
	OPEN BILLED STORK	Anastomus oscitans	2	2			10	0 0	4	0	0	0	-	-	0 0	0	-	-	-	6	1
26 RED JU	RED JUNGLE FOWL	Gallus gallus	2	3	2	3 8		0 0	0	0	0	0	0	0	0	0	0	2	2	က	7
TOTAL	TOTAL SCH III & IV Birds			129	173	177 4	479	0 0	29	0	0	0	4	4	0 2	က	4	123	166	202	491
III-HOS	SCH-III, SCH-IV MAMMALS			Stock a	as on 01 .C	.04.2022		Births		Ac	Acquisitions	ions	Disp	Disposals	_	Deaths		Stock	as on	Dt-31.03	.2023
BARKII	BARKING DEER	Muntiacus muntjak	=	22	44	8 7	74 (	0 0	0	0	0	0	0	0	0 0	4	0	22	40	8	0/
2 HOG DEER	EER	Axis porcinus	=	23	23	7 5	53 (	0 0	15	0	0	0	0	0	0	က	2	22	20	20	62
3 SAMB	SAMBAR DEER	Cervus unicolor	=	9	11	1	18 (	0 0	-	0	0	0	0	0	0 3	3	0	3	8	2	13
4 A. SP0T	A. SPOTTED DEER / CHITAL (200)	Axis axis	=	361	395	24 7	) 08/	0 0	2	0	0	0	0	0	0	0	0	360	395	59	784
B. SP01	B. SPOTTED DEER /CHITAL (RBD)	Axis axis	≡	337	194	0	531	21 19	0	0	0	0	0	0	0 5	က	0	353	210	0	563

G	Gazella bennetti	=	-	0	0	-	0	0	0	0	0	0 0	0	0	0	0	0	-	0	0	-
9	Lepus nigricollis	2	-	-	2	4	0	0	0	0	0	0 0	0	0	0	0	0	-	-	2	4
Уа	Hyaena hyaena	≡	2	4	0	9	0	0	0	0	0	0 0	0	0	0	0	0	2	4	0	9
ţe,	Pteropus giganteus	2	0	-	0	-	0	0	0	0	0	0 0	0	0	0	0	0	0	-	0	<del>-</del>
00	Boselaphus tragocamelus	≡	3	10	3	16	0	0	0	0	0	0 0	0	0	0	-	-	က	6	2	14
i ii	Sus scrofa	Ξ	2	-	-	4	0	0	0	0	0	0 0	0	0	0	0	0	2	-	-	4
_>_	Hystrix indica	2	-	0	-	2	0	0	0	0	0	0 0	0	0	0	0	0	-	0	-	2
SCH-IV Mammals			759	684	47	1490	21	19	21	0	0	0 0	0	0	10	14	3	770	689	65	1524
			Stock a	as on 01	.04.2022	22	Births	s		Acquisitions	sition		Disposals	sle	De	Deaths		Stock	Stock as on Di	Dt-31.03.2023	2023
5	Eryx johnii	≥	-	2	0	8	0	0	0	0	0	0 0	0	0	0	0	0	-	2	0	3
5	Eryx conicus	2	-	-	0	2	0	0	0	0	0	0 0	0	0	0	0	0	-	-	0	2
ļ	Chitra indica	≥	0	0	က	က	0	0	0	0	0	0 0	0	0	0	0	0	0	0	က	က
$\boldsymbol{n}$	Bungarus fasciatus	2	0	0	2	2	0	0	2	0	0	0 0	0	0	0	0	0	0	0	4	4
7	Bungarus caeruleus	2	0	0	2	2	0	0	0	0	0	0 0	0	0	0	0	0	0	0	2	2
2	Manouria emys	2	3	က	0	9	0	0	0	0	0	0 0	0	0	0	0	0	က	က	0	9
9	Geochelone elegans	≥	7	2	-	13	0	0	_	0	0	0 0	0	0	0	0	0	7	2	2	14
	- T0TAL		12	<del>=</del>	∞	31	0	0	8	0	0	0 0	0	0	0	0	0	12	Ξ	1	34
	Melopsittacus undulatus	ш	188	292	86	278	0	0	15	0	0	0 25	5 25	0 9	0	0	0	163	267	113	543
	Nymphicus hollandicus	ш	21	28	52	101	0	0	0	0	0	0 5	2	0	0	0	0	16	23	52	91
aı	Cacatua slphurea	ш	0	-	0	-	0	0	0	0	0	0 0	0	0	0	0	0	0	-	0	-
ас	Cacatua slphurea	ш	-	0	0	-	0	0	0	0	0	0 0	0	0	0	0	0	-	0	0	-
'n	Eupsittula pertinax	ш	-	-	-	က	0	0	0	0	0	0 0	0	0	-	0	0	0	-	-	2
2	Aratinga jandaya	Ш	-	2	18	21	0	0	0	0	0	0 0	0	0	0	0	-	-	2	17	20
2	Aratinga solstitialis	Ш	4	4	25	33	0	0	0	0	0	0 0	0	0	0	0	2	4	4	20	28
	Pyrrhura molinae molinae	ш	3	∞	0	=	0	0	0	0	0	0 0	0	0	0	2	0	က	9	0	6
$\sim$	Pyrrhura molinae sordida	ш	11	12	0	23	0	0	0	0	0	0 0	0	0	က	2	0	∞	7	0	15
4	Streptopelia risoria	ш	-	0	0	-	0	0	0	0	0	0 0	0	0	0	0	0	-	0	0	-
e	Geopelia cuneata	ш	-	-	0	2	0	0	0	0	0	0 0	0	0	0	0	0	-	-	0	2
2	Spilopelia senegalnesis	Е	1	-	0	2	0	0	0	0	0	0 0	0	0	0	0	0	1	-	0	2
	Streptopelia capicola	Е	-	-	-	က	0	0	0	0	0	0 0	0	0	0	0	-	-	-	0	2
_	Aix galericulata	Е	5	2	-	Ξ	0	0	_	0	0	0 0	0	0	-	2	0	4	က	2	6

-	EMU	Dromaius novaehollandiae	ш	2	က	7	12	0	0	0	0	0	0	0	0	0	_	0	0	_	3	7	=
8	BENGALESE FINCH	Lonchura striata	ш	9	Ξ	_	24	0	0	0	0	0	0	0	0	0	0	0	0	9	=	7	24
Ľ	LONG TAILED FINCH	Poephila cincta	ш	-	-	0	2	0	0	0	0	0	0	0	0	0	0	0	0	_	_	0	2
0,	STAR FINCH	Poephila ruficauda	ш	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
17	ZEBRA FINCH	Poephila guttata	ш	99	9/	78	220	0 0	0	0	0	0	0	0	0	0	0	0	0	99	9/	78	220
	BLUE FACED LORIKEET	Trichoglossus haematodus enetermedius	ш	-	-	-	က	0	0	0	0	0	0	0	0	0	0	0	-	_	-	0	2
0,	SWAINSON'S LORIKEET,	Trichoglossus haematodus moluccanus	ш	0	0	က	က	0	0	0	0	0	0	0	0	0	0	0	-	0	0	2	2
	YELLOW BACKED LORRY	Lorius garrulus flavopalliatus	ш	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
	FISCHERS LOVE BIRD	Agapornis fischeri	ш	7	10	16	37	0	0	0	0	0	0	0	0	0	0	0	33	=	10	13	34
匚	PEACH-FACED LOVE BIRD	Agapornis roseicollis	ш	4	9	2	12	0	0	0	0	0	0	0	0	0	0	0	0	4	9	2	12
	MASKED LOVE BIRD	Agapornis personatus	ш	-	2	-	4	0	0	0	0	0	0	0	0	0	0	0	0	-	2	-	4
	GREEN WINGED MACAW	Ara chloroptera	ш	-	-	0	2	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	2
	OSTRICH	Struthio camelus	ш	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
_	AFRICAN GREY PARROT	Psittacus erithacus	ш	-	-	0	2	0	0	0	0	0	0	0	0	0	0	0	0	_	_	0	2
	GOLDEN PHEASANT	Chrysolophus pictus	Е	5	14	2	24	0	0	0	0	0	0	0	0	0	2	_	0	3	14	4	21
	LADY AMHERST'S PHEASANT	Chrysolophus amherstiae	ш	1	2	∞	=	0	0	0	0	0	0	0	0	0	0	0	0	_	2	8	Ξ
Ë	REEV'S PHEASANT	Syrmaticus reevesii	Ш	0	-	3	4	0	0	0	0	0	0	0	0	0	0	_	0	0	0	3	3
ری	SILVER PHEASANT	Lophura nycthemera	Е	6	16	9	31	0	0	0	0	0	0	1	2	0	0	2	0	8	12	9	56
	YELLOW GOLDEN PHEASANT	Chrysolophus pictus mut.	ш	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	<del>-</del>
ш	EASTERN ROSELLA	Platycercus eximius	ш	-	-	-	က	0	0	0	0	0	0	0	0	0	0	0	0	_	_	-	က
$\overline{}$	JAVA SPARROW	Padda oryzivora	ш	1	23	64	86	0	0	25	0	0	0	0	0	0	0	0	0	7	23	89	123
ш,	BLACK SWAN	Cygnus atratus	Е	1	1	0	2	0	0	0	2	3	0	0	0	0	0	_	0	3	3	0	9
_	MEYER'S PARROT	Poicephalus meyeri	Е	2	2	0	4	0	0	0	0	0	0	0	0	0	_	0	0	1	2	0	3
ъ.	RED BELLIED PARROT	Pionus sordidus	Е	2	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	2
ш ч	RINGED NECKED PARAKEET   A. Lutino Mutation	Psittacula krameri krameri	ш	2	5	2	6	0	0	_	0	0	0	0	0	0	0	0	0	2	2	9	10
ш	B. Albino Mutation	Psittacula krameri krameri	ш	2	2	က	_	0	0	0	0	0	0	0	0	0	0	0	0	2	2	က	7
_	VIOLET TURACO	Musophaga violacca	ш	0	0	က	က	0	0	-	0	0	0	0	0	0	0	0	0	0	0	4	4
	LIVING STONE'S TURACO	Turaco living stonii	Е	1	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
		TOTAL EXOTIC BIRDS		372	536	411	1 1319	19 0	0	43	2	3	0	31	32	0	6	14	12	334	494	441	1269

	EXOTIC MAMMALS																					
	HAMADRYAS BABOON	Papio hamadryas	ш	-	-	0	2	0	0	0	0	0 0	0	0	0	0	0	0	-		0	2
2	CHIMPANZEE	Pan troglodytes	ш	2	9	0	8	0	0	0	0	0 0	0	0	0	0	-	0	2	2	0	2
3	GIRAFFE	Giraffa camelopardalis	Е	0	-	0	-	0	0	0	0	0 0	0	0	0	0	0	0	0	-	0	1
4	HIPPOPOTAMUS	Hippopotamus amphibius	В	4	7	-	12	0	0	5	0	0 0	0	0	0	0	2	-	4	2	2	11
2	HYBRID LION	Panthera leo	ш	4	က	0	7	0	0	0	0	0 0	0	0	0	0	0	0	4	က	0	7
9	AFRICAN LION	Panthera leo	ш	0	2	0	2	0	0	0	0	0 0	0	0	0	0	-	0	0	-	0	-
7	SLENDER TAILED MEERKAT	Suricata Suricatta	ш	0	0	0	0	0	0	0	-	3 0	0	0	0	0	-	0	-	2	0	3
8	BLACK-TUFTED MARMOSET	Callithrix penicillata	ш	က	-	က	7	0	0	0	0	0 0	0	0	0	0	0	0	3	-	က	7
6	RED-HANDED TAMARIN	Saguinus midas	ш	0	-	0	-	0	0	0	0	0 0	0	0	0	0	0	0	0	-	0	-
10	TUFTED CAPUCHIN	Sapajus apella	Е	0	-	0	-	0	0	0	0	0 0	0	0	0	0	0	0	0	-	0	1
11	COMMON SQUIRREL MONKEY	Saimiri sciureus	В	-	-	0	2	0	0	0	0	0 0	0	0	0	0	0	0	1	-	0	2
		TOTAL EXOTIC MAMMALS		12	24	4	43	0	0	2	-	3 0	0	0	0	0	2	-	16	22	2	43
	EXOTIC REPTILES																					
-	MORELET'S CROCODILE	Crocodylus moreletii	ш	0	2	0	2	0	0	0	0	0 0	0	0	0	0	0	0	0	2	0	2
2	SIAMESE CROCODILE	Crocodylus siamensis	ш	က	12	က	18	0	0	0	0	0 0	0	0	0	0	0	0	3	12	က	18
3	CUVIERS DWARF CAIMAN	Paleosuchus Palpebrosus	Е	2	3	0	2	0	0	0	0	0 0	0	0	0	0	0	0	2	က	0	2
4	A. GREEN IGUANA	Iguana iguana	ш	0	2	0	2	0	0	0	0	0 0	0	0	0	0	0	0	0	2	0	2
	B. RED IGUANA	Iguana iguana	Е	0	1	0	1	0	) 0	0	)   0	0 0	0	0	0	0	0	0	0	1	0	1
2	NILE CROCODILE	Crocodylus niloticus	ш	0	0	လ	က	0	0	0	0	0 0	0	0	0	0	0	0	0	0	3	3
9	YELLOW ANACONDA	Eunectes notaeus	ш	0	0	2	2	0	0	6	0	0 0	0	0	0	0	0	2	0	0	12	12
TOTA	TOTAL EXOTIC REPTILES			5	20	11	36	0	0	6	) 0	0 0	0	0	0	0	0	2	5	20	18	43
				Stock	as on 01	.04	2022	Births	S		Acquisitions	itions	۵	sposal	S	Deaths	ths		Stock	as on Di	Dt-31.03.	.2023
	Species			Σ	ட	Π	⊢	Σ	_ _	n	M	F U	⊠	ч	n	M	Ь	Π	M	ч	П	T
	AMPHIBIANS																					
-	INDIAN BULL FROG	Hoplobatrachus tigerinus	Λ	0	0	3	3	0	) 0	0	)   0	0 0	0	0	0	0	0	0	0	0	3	3
2	GREEN POND FROG	Euphlyctis hexadactyla	≥	0	0	က	က	0	0	0	0	0	0	0	0	0	0	0	0	0	က	က
3	INDIAN SKIPPER FROG	Euphlyctis cyanophlyctis	2	0	0	2	2	0	0	0	0	0 0	0	0	0	0	0	0	0	0	2	2
4	COMMON INDIAN TREE FROG	Polypedates maculatus	2	0	0	က	ဒ	0	0	0	0	0 0	0	0	0	0	0	0	0	0	က	3
5	ASIAN COMMON TOAD	Duttaphrynus melanostictus	2	0	0	2	2	0	0	0	) 0	0 0	0	0	0	0	0	0	0	0	2	5
9	MARBLED TOAD	Bufo stamaticus	Ν	0	0	2	2	0	) 0	0	) 0	0 0	0	0	0	0	0	0	0	0	2	2
	TOTAL AMPHIBIANS	ſ	1	0	0	21	21	0	0	0	0	0 0	0	0	0	0	0	0	0	0	21	21

	Stock	Stock as on 01	.04.2022	22												Sto	k as on	Stock as on Dt-31.03.2023	3.2023
	Σ	ш	n	<b>—</b>	Σ	ч	n	Z	ш	n	Σ	ш	N N	_	Π	Σ	ш	_	_
Birds	512	721	619	1852	0	0	78	2	က	0	35	36	0 11	1 20	16	3 468	699	089	1817
Mammal	874	825	137	1836	23	21	26	-	က	0	-	_	0 21	1 30	7 (	892	835	194	192
Reptiles	79	161	63	303	2	2	36	0	0	0	0	0	0 0	0	2	81	163	97	341
Amphibians	0	0	21	21	0	0	0	0	0	0	0	0	0 0	0	0	0	0	21	21
TOTAL	1465	1707	840	4012	22	23	211	3	9	0	36	37	0 32	2 50	) 25	5 1441	1 1667	7 992	4100
	No. of	Individuals	S		No.	No.of species	ies						No. of	of species	SS	No.	No. of Individuals	duals	
BIRDS - SCH I&II	=	12	31	24		10								10	_	=	6	37	22
-SCH III & IV	129	173	177	479		56								26	<i>-</i>	123	166	202	491
-EXOTIC	372	536	411	1319		41								41		334	494	441	1269
MAMMAL - SCH I& II	100	117	98	303		22								27		106	124	124	354
-SCH III & IV	759	684	47	1490		10								+		770	689	65	1524
-EXOTIC	15	24	4	43		10					r			=		16	22	2	43
REPTILE - SCH I & II	62	130	44	236		17								17		64	132	89	264
-SCH III & IV	12	1	8	31		9								7		12	=	=	34
-EXOTIC	2	20	1	36		9								9		2	20	18	43
AMPHIBIANS SCH I &II	0	0	0	0		0								0		0	0	0	0
-SCH IV	0	0	21	21		9								9		0	0	21	21
TOTAL	1465	1707	840	4012		157								1	162	1441	1 1667	7 992	4100





# Ensuring Quality Feed

The provision of well-balanced, high-quality food is vital for the health and reproduction of zoo animals. Keeping this in mind, supply of nutritious, healthy and hygienic food to the animals and birds is an important mandate of the Nandankanan Zoological Park. The Park has a Food Distribution Centre with a zoo kitchen to cater to the needs of the captive animals and birds. A separate Store Range is headed by a Range Officer looks after the supply of feed materials. To achieve the quality supply of feed to carnivores, a captive slaughter house was established within the Park. A fodder farm has also been developed to achieve self-sufficiency in fodder production to meet the nutritional requirements of the herbivores.. A total of 127 different feed items are being procured on a daily basis through an annual tender/departmental procurement process.

### Establishment of captive slaughter house

As a step forward the park has set up a captive slaughter house, first of its kind, inside the park to ensure regular supply of fresh and hygienically processed buffalo meat for the carnivores. Routine inspection includes ante and post-mortem examinations of animals and meat respectively. Post mortem examination is supported by both gross and microscopic examination of meat and vital organs. As a result, food borne health complications are being successfully kept at bay. The daily requirement of buffalo meat to feed the carnivore population in the park is about 450 Kg.

### Captive fodder farm

Different types of grasses and fodder are given to the herbivores from the captive fodder farm of the zoo spread over an area of 33 Acres.

Seasonal/Periodical organic farming of different grass/fodder is carried out in the farm to ensure supply of fresh and essential fodder to the herbivores in the zoo (daily requirement being about 3200 Kg). The month wise production of different grass and fodder during 2022-23 is as follows.

### Month wise production of fodder from Nandankanan Zoological Park Fodder Farm (in quintals) for the year 2022-23

Month	Para grass	Hybrid Napier (NB-21,Co3) grass	Common grass	Sorghum grass	Oat grass	Cowpea	Beer seem grass	Ray/ Malai grass	Paddy	Total
April-2022	259.20	166.50	688.00	60.00	-	110.00	-	-	-	1283.70
May-2022	246.11	168.30	819.63	62.00	-	108.00	-	-	-	1404.04
June-2022	237.30	162.00	823.90	72.00	-	48.00	-	-	-	1343.20
July-2022	246.11	167.40	780.43	82.00	-	-	-	-	115.00	1390.94
Aug-2022	273.11	167.40	1017.63	33.00	-	-	-	-	24.00	1515.14
Spte-2022	264.30	162.00	933.50	-	-	-	-	-	118.00	1 <i>477</i> .80
Oct-2022	271.61	167.40	973.55	-	-	-	-	-	112.00	1524.56
Nov-2022	241.80	139.50	966.50	-	-	-	-	-	70.00	1417.80
Dec-2022	249.86	144.15	1071.05	20.20	-	-	52.50	-	-	1537.76
Jan-2023	249.86	144.15	803.05	24.00	140.50	-	12.50	91.00	-	1465.06
Feb-2023	225.68	130.20	702.00	-	184.00	-	70.00	4.00	-	1315.88
Mar-2023	249.86	144.15	955.89	44.00	20.00	-	-	40.00	-	1453.90
TOTAL	3014.80	1863.15	10535.13	397.20	344.50	266.00	135.00	135.00	439.00	17129.78

The total production of fodder in the fodder farm during the year 2022-23 was 17129.78quintals. The cost of production was calculated to be Rs 2.75 /Kg of fodder.

ANNUAL REPORT 2022-23

### Feed distribution centre

Feed items received from various sources are screened by the Range Officer (Store), Assistant Director and the Zoo Vets. All the green vegetables and other perishable feed items are thoroughly cleaned and disinfected before distribution. The feed items received are weighed and distributed in prescribed quantities to various animal houses. 127 feed items are collected and supplied daily to meet the nutritional requirements of the 162 species of mammals, birds and reptiles. These include very specific items such as snail without shell, tree termite egg, live grass

hoppers and the like. The feed items are procured from various suppliers through open tenders and the price is approved by the Purchase Committee constituted by the Govt.

### Seasonal feed

To supplement the dietary requirements, some seasonal fruits and vegetables are provided to the animals considering their liking and acceptance like water melon, sugarcane, green coconut water, Ripe apple, Jamun, custard apple, green pea, ripe papaya, amla, guava and orange.

### Chlorination plant

The zoological park has chlorination plant to ensure the supply of purified drinking water and thereby preventing the spread of waterborne diseases.

### Vermicompost unit

The park has a vermicompost unit located inside the fodder farm where the organic waste of the zoo is being converted to natural plant fertilizer using earthworms. Another unit of vermicompost was added during the financial year.

# Month wise production of vermi compost 2022-23

SI No	Month	Unit 1	Unit-2	Total
1.	April-22	12 qntl	12 qntl	24 qntl
2.	May-22	12 qntl	16 qntl	28 qntl
3.	June-22	16 qntl	-	16 qntl
4.	July-22	-	-	
5.	Aug-22	-	-	
6.	Sept-22	-	-	
7.	Oct-22	5.2 qntl	5.2 qntl	10.4 qntl
8.	Nov-22	12 qntl	12 qntl	24 qntl
9.	Dec-22	12 qntl	12 qntl	24 qntl
10.	Jan-23	12 qntl	12 qntl	24 qntl
11.	Feb-23	12 qntl	12 qntl	24 qntl
12.	March-23	12 qntl	12 qntl	24 qntl
	TOTAL	105.2 qntl	93.2qntl	198.4 qnt

### Live Feed Rearing Centre





The centre was established on July, 2015 to ensure regular supply of hygienic live feed to the zoo animals. The centre is successfully breeding Wistar (albino) rat, BALB/c (albino) mice, guinea pig, snails, mealworm and hatching poultry chicks to fulfil daily requirement of live feed required for the zoo animals.

Month Wise Production Of Live Feed Rearing Centre 2022-23

Month	White mice	Cricket worm meal	Day old chicks
April-22	140	6000	923
May-22	105	2000	575
June-22	141	6000	512
July-22	66	6200	856
Aug-22	265	6200	925
Sept-22	120	6000	542
Oct-22	347	6200	836
Nov-22	399	4000	-
Dec-22	435	6200	108
Jan-23	549	9300	1625
Feb-23	652	13220	1032
Mar-23	794	14250	1 <i>7</i> 12
TOTAL	4013	85570	9646

\* Unit in Nos.

# Lawns and Gardens



Beautiful gardens, lawns and meadows have been established at different strategic locations to improve the aesthic appeal of the zoo and to provide resting places for the visitors. Facilities like sit-outs, drinking water points and toilets are also provided near such places. Lawns with gardens in six locations and 3 meadows are available inside the Zoological Park. The gardens are maintained with seasonal flowers round the year and are well appreciated by the visitors.





### 1. Research/project/internship carried out during 2022-23

Displaying its long-term commitment to research, Nandankanan Biological Park supported a number of research projects to assess biodiversity conservation, wildlife management, animal health issues and management of captive animals. To ensure optimal outcomes collaboration with a number of organizations was given priority. The research teams include in-house staff/officer, and other collaborative work with CVSc.& AH, Bhubaneswar, zoo vets, collaborating scientists and students of graduate, Master's and PhD levels. Funding for research is provided by CZA. The research findings would further increase our expertise in the management of captive animals. Some of the studies are published in national and international journals which are mentioned below.

#### A. Ongoing research project

Species Recovery of Gharial (Gavialis gangeticus) in river Mahanadi

Odisha is the only state of India with all three species of crocodiles; Gharial (Gavialis gangeticus), Mugger (Crocodylus palustris) and Saltwater crocodile (Crocodylus porosus). Mahanadi is one of the major rivers of India, and the southernmost distribution limit of the gharial. Rehabilitate gharials in the river Mahanadi following strict post-release monitoring protocols, Forest Department of Odisha initiated a project "Species Recovery of Gharial in River Mahanadi" in 2019. Under the project, a total of 19 gharials captive-bred gharials of Nandankanan Zoological Park consisting of 7 males and 12 female gharials were released in different batches in the river measuring 1.5m to 3.85m in length and aged between 5 to 16 years. Before the release, a survey was conducted to find out suitable release site(s) by evaluating river geo-physiography and anthropogenic activities.

All released Gharials were tagged with transmitters; 13 with radio transmitters and 6 with satellite transmitters for post-release monitoring. Three post-graduate research scholars were engaged for post-release monitoring. The transmitters helped the technical team to track gharials individually their daily activity, habitat use, seasonal dispersal pattern, breeding biology and threats.

Conservation measures also include the implementation of a 10km 'NO FISHING ZONE' in Satkosia gorge, the involvement of 14 forest divisions on both sides of the river Mahanadi for implementation of protection measures, community participation and awareness, compensation for damaged fishing net and a reward of Rs. 1000 for a live gharial if caught in the net.

One of the adult female gharials moved downstream about 120km and passed through a nylon fishing net and got its jaws wrapped up in torn net. She was rescued successfully with the cooperation of the rescue team from Nandankanan, local forest staff and fishermen using cast net and encirclement net. At present 5 adult individuals are being tracked. The other 8 gharials have reported dead and for remaining 6 numbers of gharials location could not be ascertained due to loss of signal.

Out of the 8 recorded deaths, 2 died due to blasting, 4 by entanglement in nylon nets, 1 killed by mugger, and 1 due to *Clostridium haemolyticum* infectious origin, the cause of which under investigation, indicating major

threats to survival as deleterious fishing activities, disturbed habitat, perceived interspecific conflict between gharial and mugger in the habitat.

Due to stringent protection efforts, research studies, implementation of the 'NO FISHING ZONE' and community awareness to reduce disturbances may have contributed to the natural breeding of gharials after a gap of 40 long years of Satkosia gorge sanctuary and hatching of 28 hatchlings in May, 2021 and 32 hatchlings in May, 2022, and 35 hatchlings in May, 2023. Provision of reward resulted in 7 numbers of gharial hatchlings/yearlings caught in fishing net were handed over by

Out of the 8 recorded deaths, 2 died due to blasting, 4 by entanglement in nylon nets, 1 killed by mugger, and 1 due to *Clostridium haemolyticum* infectious origin, the cause of which under investigation, indicating major threats to survival as deleterious fishing activities, disturbed habitat, perceived interspecific conflict between gharial and mugger in the habitat.

Due to stringent protection efforts, research studies, implementation of the 'NO FISHING ZONE' and community awareness to reduce disturbances may have contributed to the natural breeding of gharials after a gap of 40 long years of Satkosia garge sanctuary and hatching of 28 hatchlings in May, 2021 and 32 hatchlings in May, 2022, and 35 hatchlings in May, 2023. Provision of reward resulted in 7 numbers of gharial hatchlings/yearlings caught in the fishing net being handed over by local fisherman to local field staff/technical team. These hatchlings/yearlings were brought to Nandankanan Zoological Park for postrescue care and will be subsequently released back into the river near their mother after the flood season. The tenure of the first phase of the project was completed on 30th June 2023. The 2nd phase of the project is planned to be implemented with intensive awareness and protection along

with the release of adult-size gharials by tagging both VHF and GPS.

The implementation of the Species recovery of Gharial in river Mahanadi project helped in identifying the factors affecting the survival of gharial in the river Mahanadi and improved the understanding of their ecology and behaviour which will help in shaping the implementation of future conservation measures to save this species in its southernmost habitat.

#### 2. Internship programme

Nandankanan has launched an innovative internship program designed for graduate and postgraduate students. The primary goal of this initiative is to provide a platform to start and learn basic research in the field of zoo management and learn new skills of ex-situ and insitu conservation techniques at Nandankanan.

The internship program spans a duration of 30 days to 3 months, with new cohorts of interns enrolled each quarter. In the financial year 2022-23, a total of eight interns completed their assignments and submitted their theses. This program serves as a stepping stone for aspiring researchers, providing them with hands-on experience and fostering a deeper understanding of the intricacies of zoo management and conservation practices.



SHIVAM DASH



SOUMYA RANJAN BARAD



KESHARI PRASAD MOHANTY



FARHAT JAHAN



JEEVAN JYOTI SUNDARAY





SHAKTI SWARUP



MOUSUMEE DAS



ANNUAL REPORT 2022-23

### List of Interns who completed their works during 2022-23

Name and institution	Session	Торіс	Guided by
Shivam Dash  College of Forestry,  OUAT, Bhubaneswar	Fall, 2022	Study on nesting behaviour of Asian Openbill storks in Nandankanan Wildlife Sanctuary, Odisha	Sri Milan Kumar Panda Education Officer
Soumya Ranjan Barad College of Forestry, OUAT, Bhubaneswar	Fall, 2022	Study on Green Good Deeds practiced at Nandankanan Zoological Park	Sri Ranjit Mohanty Range Officer, Special Project
Jeevan Jyoti Sundaray Strewart College,Cuttack	Fall, 2022	Sustainable Development in Nandankanan and its overall effects on animal well-being	Dr Rajesh Kumar Mohapatra Biologist
Soumya Ranjan Pradhan College of Forestry, OUAT, Bhubaneswar	Fall, 2022	Study on Economic valuations of Biodiversity conservation in Nandankanan Zoological Park	Mrs Swagatika Sahoo Range Officer, Revenue
Keshari Prasad Mohanty M.P.C Autonomous College, Baripada	Spring, 2022	Assessment of invasive plant species diversity in Nandankanan Biological Park, Odisha	Mrs Sushree Swati Mohanty Range Officer, SBG-I
Farhat Jahan M.P.C Autonomous College, Baripada	Spring, 2022	Phytosociology of invasive plant species of Nandankanan Biological Park, Odisha	Mrs Swagatika Sahoo Range Officer, Revenue
Shakti Swarup Laxmi Narayan Degree College, Keonjhar	Spring, 2022	Reptile Enrichment at Nandankanan Zoological Park	Dr Rajesh Kumar Mohapatra Biologist
Mousumee Das Utkal University, Bhubaneswar	Spring, 2022	Study on spider prey selection of Mud-Dauber wasp	Dr Rajesh Kumar Mohapatra Biologist

# ConservationBreeding programme

## (A) Indian Pangolin Conservation Breeding Programme

Nandankanan Zoological Park has the only Conservation Breeding Centre for Indian pangolins in the world. The research on conservation breeding of Indian pangolin is actively going on in the centre established in 2008. Monitoring through the infrared-sensitive CCTV cameras unfolds the secrets of the life of the pangolins. Research at the centre has helped to develop proper housing, husbandry and conservation breeding protocols for this endangered species. The centre has successfully bred 16 Indian pangolins in captivity. Presently, there are 25 (13M:12F) pangolins. Initiatives are taken for collaboration with other pangolin facilities of South East Asia for mutual learning of best management practices including development of artificial diet, health care management, breeding and release protocols through Central Zoo Authority, New Delhi.

### (B) Conservation Breeding of Long-billed vultures

The Vulture Conservation Breeding Centre was constructed in an off-exhibit area of Nandankanan Zoological Park, Bhubaneswar during the year 2011-12 in an area of 0.3 acres surrounded by seven acres of undisturbed forest land with financial assistance from Central Zoo Authority, New Delhi. The Centre was established with the objectives to develop a protocol for captive management and breeding of long-billed vultures for reintroduction and release in to wild. The founder populations are twelve numbers of long-billed vultures procured from Gandhi Zoological Park, Gwalior on 26.11.2018. All the vultures are marked with leg

bands for individual identity. The sex of these monomorphic birds was identified using molecular sexing techniques at Zoo Laboratory,
Nandankanan. The centre presently has one colony aviary (100'X40'X20'), two nursery aviaries (10'X12'X8'). A laboratory complex with an observatory room for CCTV monitoring, laboratory for analysis of biological samples, an incubation room and a biologist chamber is available. The activity patterns of vultures are being monitored through two fixed angle and one PTZ camera with infrared facility.

#### (C) Conservation Breeding of Indian tiger

Nandankanan Zoological Park is breeding tigers since 1966 and has been a participating zoo for conservation breeding of Indian tigers since 2009. There are 380 births since 1966, including 52 births under the conservation breeding programme i.e., after 2009. The zoo has sent tigers to the coordinating zoo Nehru Zoological Park, Hyderabad in 2016, and received a wild tigress from NandanVan Zoo, Bhopal in 2009 and a zoobred tiger with 33% wild gene from Nehru Zoological Park, Hyderabad in 2016 to infuse new bloodline and increase heterozygosity. Presently the zoo has 27 tigers which include 17 (9:8) normal coloured tigers, 07 (3:4) white tigers and 03(3:0) melanistic tigers which going ahead with the conservation breeding programme.

#### (D) Conservation Breeding of Mouse deer

Nandankanan Zoological Park is breeding mouse deer since 1971 and has been a participating zoo in conservation breeding of mouse deer since 2009. There have been 58 mouse deer in captivity since 1971 including 41 births under the conservation breeding programme, i.e., after 2009. The zoo sent mouse deer to the coordinating zoo Nehru Zoological Park, Hyderabad in 2013 and 2016, to Sri Chamarajendra Zoological Garden, Mysore in 2018 and received mouse deer from Nehru Zoological Park, Hyderabad in 2016 to infuse new bloodline and increase heterozygosity. Presently the zoo has 31 mouse deer (12:9:10) and going ahead with conservation breeding programme.

# List of books and publications published during 2022-23

#### **Published Research papers**

- 1. Panda, B. P., Purohit, S., Parida, S. P., Dash, A. K., Mohapatra, R. K., and Pradhan, A. (2022). Noise pollution effect on composition of avian structure in different urban gradients. Materials Today: Proceedings.67 (8) ,1123-1128.
- Dash, M., Sahu, S.K., Gupta, S.K., Sahoo, N. and Mohapatra, D (2022).
   Trypanosoma evansi infection in a captive Indian Wolf Canis lupus pallipes molecular diagnosis and therapy. Journal of Threatened Taxa 14(1): 20494–20499.

#### Books published

- Mohapatra, R.K., Sahu, S. K., Joshi, A., Vanjari, C. D., Bhandari, B., Thakur, M., Perera, P., Mendis, A., Aditya, V., Sharma, G., Katdare, B., Chaudhuri, A., Mahapatra, M., Maharana, S., Kumar, S. and Nair, M.V.N. (2022) Field guide for rehabilitation of Indian pangolin. Second Edition. Nandankanan Biological Park, Bhubaneswar and Central Zoo Authority, New Delhi. pp: 1-41.
- 2. Samal SK, Das P, Pradhan R, Behera HK, Jena S, Mohapatra RK, Panda MK, Kumar S, Nair MV. (2022). Sunday Bird Walks: A citizen science initiative in Nandankanan. Nandankanan Biological Park, Forest and Environment Department, Government of Odisha. pp:1-88.

# Zoo Education Programme

Around 3.8 million people visit Nandankanan Zoological Park. Such a wide, diverse, varied and regular audience provides an excellent opportunity for education, and an enormous potential to heighten public perception and awareness about the animals and their conservation. Zoos are living institutions, living classrooms, living landscapes. Zoo education is a holistic discipline targeted at zoo visitors, staff and the wider community aiming to promote an understanding of, and concern and respect for biodiversity, animals and the natural world, and encourage action for a sustainable future. In order to have impact, we need to influence as many people as possible. To do this, we need to promise and deliver something relevant and attractive to the wider community. We want visitors to enjoy themselves, and to feel the wonder and affection toward animals. We want to make it easy for visitors to take action during their visit and after they leave our gates. To achieve this education programmes are designed with a different flavour, like celebration of birthday, elephant day, naming of new born, wetland day, pangolin day, world wildlife day, international tiger day, veterinary day, vulture day, display of signage etc. There is a dedicated zoo education officer in Nandankanan to take care of these activities.



DATE	PROGRAMME/ EVENT NO. OF PARTIC	CIPANTS
05.04.2022	Orientation Programme of trainees from Self Defense Training,	
	from Utkal Karate School, Bhubaneswar	122
20.04.2022	Visit Programme of officials of Nagaland Forest Department, Nagaland	19
21.04.2022	Induction Training Programme of FROs trainees from CASFOS, Coimbatore	36
05.05.2022	Field Training of 4th Year B.Sc (Forestry) students from OUAT, Bhubaneswar (Batch-I)	47
12.05.2022	Study Tour of M.Sc (Forestry) students from OUAT, Bhubaneswar	26
26.05.2022	Field Training of 4th Year B.Sc (Forestry) students from OUAT, Bhubaneswar (Batch-II)	45
28.05.2022	Induction Training Programme of FROs trainees from CASFOS, Burnihat	35
04.06.2022	Orientation Programme of +2 Intermediate students from KMBB, Cuttack	141
23.06.2022	Orientation Programme of +2 Intermediate students from KMBB, Cuttack	84
16.07. 2022 &		
17.07.2022	Two days training programme for staffs of Kanan Pendari Zoological Garden, Bilaspur	22
21.07.2022 &		
22.07.2022	Two days training programme for staffs of Kanan Pendari Zoological Garden, Bilaspur	22
29.07.2022	Celebration of International Tiger Day	>300
09.08.2022	Orientation Programme of students from National Environment Youth Parliament, New Delhi	06
09.08.2022	Orientation of CSS officers trainees from Gopabandhu Academy of Administration	30
10.08.2022	Celebration of World Lion Day	>200
12.08.2022	Celebration of World Elephant Day	>300
21.08.2022	Visit Programme of M.Sc Zoology students from Utkal University, Bhubaneswar	10
07. 9. 2022 &		
08.9.2022	Exposure visit of officials from Zoo Authority of Karnataka	06
10.09.2022	Visit programme of Zoo Directors from different zoos of India	>50
17.09.2022 to		
23.09.2022	Cheetah Awareness Week	>500
17.09.2023	Orientation Programme of B.V.Sc & AH (1ST Year) students from OUAT, Bhubaneswar	50
22.09.2022	Orientation of IAS probationers, Odisha Cadre	06
22.09.2022	Celebration of World Rhino Day	>100
23.09.2023	Orientation Programme of B.V.Sc & AH (1ST Year) students from OUAT, Bhubaneswar	50
02.10.2022 to		
08.10.2022	Celebration of 68th Wildlife Week	>500
11.10.2022	Orientation Programme of B.Sc (Forestry) students from OUAT, Bhubaneswar	50
12.10.2022	Orientation Programme of B.Sc (Forestry) students from OUAT, Bhubaneswar	44
13.10.2022	Visit programme of officers trainees of Special Foundation Course from	
	Gopabandhu Academy of Administration, Bhubaneswar	29
19.10.2022	Visit programme of FROs trainees HPFA, Sundarnagar	44
08.11.2022	Visit programme of IRTS probationers from Gopabandhu Academy	
	of Administration, Bhubaneswar	07
09.11.2022	Training programme of IFS officers from XIMB, Bhubaneswar	15
	ANNUAL REPORT 2022-23	<b>76</b>

11.11.2022	Visit programme of FROs trainees from Gujarat Forest Rangers College, Rajpipla	44
12.11.2022	Orientation programme of students from KIIT Animal &	
	Environmental Welfare Society, Bhubaneswar	60
12.11.2022	Visit programme of students from Saint Xavier High School, Cuttack	292
15.11.2022	Visit programme of students from different Government Schools of	
	Odisha organized by "SURAVI"	1000
15.11.2022	Visit programme of B.Sc Zoology students from ISPAT College, Rourkela	31
19.11.2002	Field visit of Integrated M.Sc students from NISER, Bhubaneswar	60
22.11.2022	Visit programme of students from Burdwan Holy Child School, Burdwan, West Bengal	100
26.11.2022	Visit programme of FROs trainees from Telangana State Forest Academy, Dulapally	35
26.11.2022	Field visit of students from B.Sc Zoology from Ravenshaw University	15
27.11.2022	Visit programme of IFS probationers from North Eastern State	32
27.11.2022	Visit programme of students from IHSE, SOA, Bhubaneswar	300
27.11.2022	Visit programme of Kendu Leaf seasonal staff, Odisha	100
30.11.2022	Field visit of B.Sc Nursing students from Hi-Tech Medical College, Bhubaneswar	52
20.12.2022	Field visit of FROs trainees from Tamil Nadu Forest Academy, Coimbatore	47
07.01.2023	Visit programme of FROs trainees from Odisha Forest Rangers College, Angul	32
12.01.2023	Asian Waterfowl Bird Census 2023	50
31.01.2023	Orientation Programme of IAS probationers on Odisha Darshan Tour	20
01.02.2023	Visit Programme of CSS officers from	
	Gopabandhu Academy of Administration, Bhubaneswar	17
02.02.2023	Celebration of World Wetland Day	>200
05.02.2023	Field visit of B.Sc Zoology students from North Orissa University, Baripada	15
11.02.2023	Education tour programme of school students from A.G. Mission School, Nayagarh	84
16.02.2023	Tour programme of Foresters trainees from Forest Training Institute,	
	Wimberlygunj, South Andaman	20
16.02.2023 to		
20.02.2023	Five days training on Wild Animal feeding, Restraint, Tranquilization	
	and Management of 5th Year students from B.V.Sc & AH from College of	
	Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar	45
17.02.2023 to		
20.03.2023	Great Backyard Bird Count 2023	>50
18.02.2023	Celebration of World Pangolin Day 2023	>200
22.02.2023	Study tour of B.Sc Zoology students from Paramananda College, Bolgarh	18
03.03.2023	Celebration of World Wildlife Day 2023	>200
05.03.2023	Field visit of staff of Green campus from CUTM, Bhubaneswar	25
08.03.2023 to		
12.03.2023	Five days training on Wild Animal feeding, Restraint, Tranquilization	
	and Management of 5th Year students from B.V.Sc & AH from College	
	of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar	45
14.03.2023	Tour visit of SFS officers trainees from CASFOS, Coimbatore	55
17.03.2023	Educational tour programme of school students from SAI International School,	
	Munduli Campus, Cuttack	>300

#### World Environment Day



On July 29, 2022, Nandankanan Zoological Park observed International Tiger Day 2022. On this occasion, many awareness programs were held, including an online quiz, a painting competition, an on-the-spot quiz, a signature campaign, and a keepers talk. The particular attraction of the day was the release of a special cover and printed post cards on "Tigers of Nandankanan" by Nandankanan and Indian Post Bhubaneswar Circle. The distinguished guests also released the inaugural edition of their quarterly newsletter "Nandanam" on this day.

On June 5, 2022, Nandankanan Zoological Park observed World Environment Day by arranging a number of programs and events, both offline and online, to raise public and visitors awareness on environmental concerns. The day began with a zoo cleanliness campaign in which top zoo officials, zoo staff, and zoo guides cleaned the plastic debris and weeds inside the zoo and along the Kanija lake shore. Following that, an on-the-spot guiz on the theme "Only One Earth" was held, in which visitors took part, and prizes were distributed to winners. To raise awareness among visitors, a signature campaign was also conducted. An online quiz and slogan writing competition were also organized, where more than 200 nos of individual participated. After evaluation prizes were sent to winners. All the participants were given ecertificate for their participation. The message on World Environment Day and activities undertaken was communicated to local print and electronic media for publication and posted on zoo website and social media platform for wider circulation.

#### International Tiger Day



#### Cheetah Awareness Week

Cheetah Awareness Week was celebrated at Nandankanan Zoological Park from 17<sup>th</sup> to 23<sup>rd</sup> September, 2022 on account of Reintroduction of Cheetah in India at Kuno Palpur Wildlife Sanctuary of Madhya Pradesh on 17<sup>th</sup> September, 2022. The celebration was observed with a mass awareness programme amongst the visitors with a message for Cheetah conservation. Awareness programme like online painting, online quiz, on the spot quiz, keepers talk, signature campaign were organized



#### World Elephant Day

Elephant day was celebrated at Nandankanan Zoological Park on 12th August, 2022. The celebration was observed with a mass awareness programme amongst the visitors with a message for elephant conservation. The elephants of the Zoo were received a special treat of feeding enrichments as coconut, banana, sugarcane, maize, water-melon and apple. The mahouts were also felicitated on the auspicious occasion for their hardwork and dedication. On this occasion online slogan and painting competition on importance of conservation of elephants were conducted at Nandankanan website. After the evaluation, prizes were sent



to the winners. All the participants were given e-certificates for their participation. On the spot quiz for students were conducted inside interpretation centre where prizes were distributed to 50 students. The distinguished guests and visitors put their message on elephant conservation in the signature campaign board. Keepers talk programme was also conducted with special focus to Nandankanan elephants to aware visitor about how keepers take care of elephant in daily routine.

#### Wildlife Week

68th National Wildlife Week was celebrated at Nandankanan Zoological Park from 2<sup>nd</sup> October to 8th October, 2022. Nandankanan organized a series of events to mark this historic moment. On this occasion one online guiz and painting competition on different themes were organized throughout the week in Nandankanan website. More than 500 participants were participated in this programme. All the participants were given ecertificates for their participation. Bird walk, Butterfly and moth walk, tree walk, herping trail and nature trail were also conducted to aware the students about the facts and knowledge about the wildlife. Keepers talk, on the spot quiz, signature campaign were also conducted throughout the week.





# Foundation Day of Nandankanan

The 63<sup>rd</sup> Foundation Day of Nandankanan Zoological Park was celebrated inside the park on 29th December, 2022 at 10:30 am. Shri Sushil Kumar Popli, IFS, PCCF (WL) & CWLW presided the meeting. Sri Pradip Kumar Amat, Hon'ble Minister, Forest, Environment & Climate Change, Govt. of Odisha graced the occasion as Chief Guest. Sri Debidutta Biswal, IFS, PCCF & HOFF, Odisha and Sri Suresh Kumar Routray, Hon'ble MLA, Jatni graced the occasion as Guest of Honour. Dr Manoj V. Nair, IFS,

Director, Nandankanan Biological Park given the key note address and Dr Sanjeet Kumar, IFS, Deputy Director given the vote of thanks. The best workers of Nandankanan were rewarded by the Guests for their tremendous works. Annual Report 2021-22, Eco-calendar-2023 and other publications were released on the occasion. The celebration was attended by the Ex-Directors of Nandankanan Zoological Park, Senior Forest Officers of the state, NGOs and eminent personalities of the State, Researchers and academicians, Members of Technical Committee, Health Committee of Nandankanan Zoological Park, Representatives from Print & Electronic media, local peoples and staff members of the park. On the occasion, Children's Park, Hand rearing baby unit, and Modern Operation Theatre were inaugurated by the Chief Guest and a new species- Slender-tailed meerkats were released into the enclosures.

#### World Wetland Day

World Wetland Day was celebrated on 2nd February, 2023 in front of Interpretation Centre of Nandankanan Zoological Park. First a wetland trail was conducted near Kanjia lake. The Programme was attended by the visitors, representatives of Print & Electronic Media and staff of Nandankanan Zoological Park. The theme for this year 2023 was "Wetland Restoration". An interactive quiz programme on the above theme was conducted amongst the visitors. Prizes were distributed to the winners, which is highly appreciated by the participants. Finally, a signature campaign was conducted to make the visitor aware about the importance of wetlands.



#### World Pangolin Day

World Pangolin Day was celebrated on 18th February, 2023 in front of Interpretation Centre of Nandankanan Zoological Park. An interactive quiz programme on the Pangolin conservation was conducted amongst the visitors. Prizes were distributed to the winners, which is highly appreciated by the participants. The Programme was



attended by the visitors, representatives of Print & Electronic Media and staff of Nandankanan Zoological Park. Finally, a signature campaign was conducted to make the visitor aware about the precious creature.

### World Wildlife Day



World Wildlife Day was celebrated on 03rd March, 2023 in front of Interpretation Centre of Nandankanan Zoological Park. The theme for this year 2023 was "Partnerships for Wildlife Conservation". An interactive quiz programme on the above theme was conducted amongst the visitors. Prizes were distributed to the winners, which is highly appreciated by the participants. The Programme was attended by the visitors, representatives of Print & Electronic Media and staff of Nandankanan Zoological Park. Finally, a signature campaign was also conducted to make the visitor aware about the importance of wildlife conservation.

### Sunday Bird Walk

As a part of Zoo education, Nandankanan has prioritized to connect people with nature through Citizen Science Programme. Taking the opportunity of "Sunday Bird Walk" the zoo intended to enhance voluntary public participation in collection of data on bird diversity in and around Nandankanan Wildlife Sanctuary, fostering public input and engagement to conserve and manage natural resources. This programme runs on every Sunday for 20-25 participants on first come first basis. The participants have to register their name and details between Monday to Friday in the Nandankanan online portal for participation on the coming Sunday Bird Walk. The reporting time for the participants at Forest Rest House of Nandankanan is at 06:15 am. The walk begins at 06:30 am and continues till 09:30 am. In this programme the participants get a chance to observe birds in-situ and ex-situ along with the guidance of various bird experts. This is a great platform not only for beginners but also for researchers and nature enthusiasts. Following the walk, the participants are added to a What's App group to address their post-session queries and experience sharing.





# Botanical Garden Nandankanan

The 75-hectare State Botanical Garden is located in the sylvan settings of the moist deciduous forest of Nandankanan Wildlife Sanctuary, bounded between two lakes, Kanjia and Kiakani. The Botanical Garden was established in 1963 and was managed by the Horticulture Department. On August 1, 2006, the operation of the State Botanical Garden was transferred to Nandankanan. Nature's symphony and the incredible touch of the in nature here would undoubtedly impress. This is one of the pioneering plant conservation and nature education centres of the State. The Botanical garden is sure to provide memorable experience to the green enthusiasts.





## Timing \_\_\_

The Garden remains open in all public days except Mondays from 7.30 AM to 5.30 PM (April to September) during summer and 8.00 AM to 5.00 PM (October to March) during winter.

# Entry Fee & Other Charges

#### **BOTANICAL GARDEN**

Children upto 12 years

Adult

Rs.20/Two-wheeler

Rs.30/Three-wheeler

Rs.30/Four-wheeler

Rs. 100/Heavy vehicle

Picnic spot

Bigger Pindis

Each room of the barrack

FRH-I- (Suit-I)

FRH-I-(Suit-II) FRH-II

Smaller Pindis

Holiday Cottage- (ground floor)

Holiday Cottage- (first floor)

Special picnic Pindis

Picnic sheds
Film shooting

TV serial/documentary

Album song

Rs. 250/- + Rs. 50/- (Service charges) each.

Rs. 500/- + Rs. 50/- (Service charges) each.

Rs. 1200/- + Rs. 100/- (Service charges)

Rs.3000.00+ Rs. 100/- Service charges

Rs.2500.00+ Rs. 100/-Service charges

Rs.2500.00+Rs. 100/-Service charges

Rs.2500.00+ Rs. 100/-Service charges

Rs.2500.00+ Rs. 100/-Service charges

Rs. 1500/- + Rs. 100/- (Service charges) each

Rs. 1200/- + Rs. 100/- (Service charges) each

Rs.25,000/- per day

Rs.15000/- per day

Rs.10,000/- per day

#### Infrastructure

The Botanical Garden has 26 satellite gardens distributed throughout undulating terrain with natural plants and meadows. The following sections highlight the key facilities accessible at the Botanical Garden.



#### Glass House

The glass house of 2013 square feet was designed to host succulent plants. The Glass House is enhanced by a variety of bonsai. From November to March, one can enjoy blooming ornamental plants.

#### Cacti House

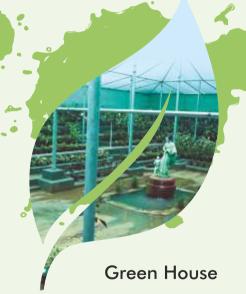
A 1080 square foot Poly home keeps key cactus and succulent plant species. The Cacti House houses a diverse collection of around 1200 cacti.

#### Dry Garden

A garden of xerophytic plants has been developed over an area of 0.65 Acre in front of Glass House. The entire garden has been designed with loose stone work to give it exclusive look of dry zone which attracts the visitors.

#### Children's Park

A niche for the kids has been created within the natural setting by providing swings, marry-goround, sliding chute etc. The gallery located nearby filled with ornamental plants enhances beauty of the Park.



A state of art green house of 5200 sq ft. houses the cultivars of 60 species of indoor plants like Aglaonema, Philodendron, Calathea, Cordyline, Diffenbachia, Spathophyllum, Peperomia, Monstera, Hemigraphis etc.



The park has been developed over an area of 1200 sq ft located by the scenic beauty of Kanjia Lake. It features a beautiful Buddha Statue as its centre piece. Rain shelter, sit outs and ornamental flower beds are other attractions.

#### **Butterfly Park**

Butterfly Park, an interesting option among visitors has been developed over an area of 36590 sq.ft. The garden has an unique landscape with 6400 butterfly dependant plants. The garden has one cascading waterfall with 170 sq ft. flowing water channel, fountains and artistic bridges. One can sight more than 58 species of butterfly here. The visitor will get the fragrance of beautiful flowers and feel the beauty of flying jewels of nature. The newly created Butterfly Park was opened to the visitors in February, 2014.

#### Rosarium

It is one of the richest collections of 1200 Rose plants belonging to 55 varieties grown over an area of 1.5 Acres of land. The garden is liked by the visitors most and has maximum foot flow during the winter.



#### **Butterfly Interpretation Centre**

The Centre spreads over an area of 800 sq.ft has been developed near the Butterfly Park. The newly opened centre has colourful pictorial display boards to disseminate information on butterfly to the visitors. The main objective of the centre is to provide latest information on various aspects of butterfly. A short documentary about butterfly is an added attraction. The Interpretation centre was opened to the visitors in March, 2015.



Models of different animals are used to explain the ecological niche with an objective to generate awareness among the children.



#### **Orchid House**

The largest Orchid House of the State spreads over an area of 5000 sq.ft. and displays more than 1000 orchids of 57 varieties belonging to 37 species. One can enjoy the orchid in bloom round the year displaying various colour of nature.

#### Medicinal Garden

A well renovated medicinal garden spreads over an area of 2.26 Acre which displays of rich collection of 225 species of herbs, shrubs, creeper, climber and trees.

#### Mughal Garden

The Mughal Garden covering an area of 1.01 ha has a cascade of flowing water and flowering plants both seasonal and perennial on both sides give a look of gardens of Mughal era. The garden is liked mostly by the young people and has maximum foot flow during winter.



A state of art Japanese Garden in Tsukyama-niwa style with flowing streams and other typical features is a star attraction. It covers an area of 0.50 acre.



The Evolution Garden covering an area of 0.77 ha gives complete information about the evolution system of plant kingdom. The one-way path takes a visitor from lower plant groups like Algae, fungi, Bryophyta, Pteridophyta to evolution of large plant groups like Gymnosperm and Angiosperms. The concept of such garden is very informative for the students and researchers.



#### Heritage Garden

The Heritage Garden covering an area of 1.2 Acre is situated adjoining to the Evolution garden with natural rock and old Banyan trees. A Tulsi (Occimum santum) garden containing six varieties of Tulsi plant with models of monk, live size cow and tribal hut are the attraction of the garden.



#### Landscape Garden

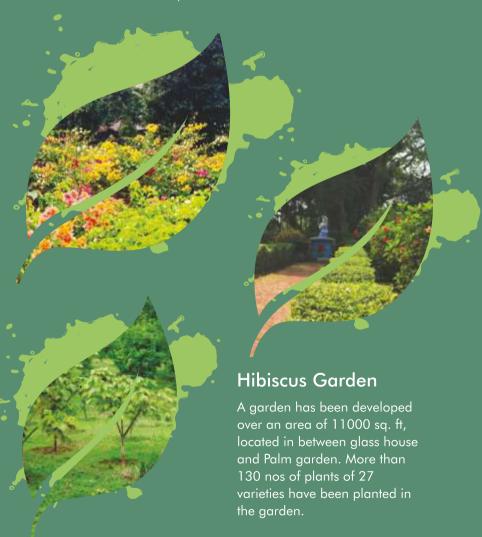
It is a model landscaping having different elements like lawn, trees and shrubs spread over an area of 1.6 Acre. 1000 trees of different species have been planted to maintain the rhythm. Palm garden is an amazing site to see varieties of common and rare palms. A collection of 29 varieties of beautiful palms have been planted over an area of 15000 sq.ft .One designed water body along with 15000 sq.ft grass carpet has been developed inside the Palm Garden for the public.

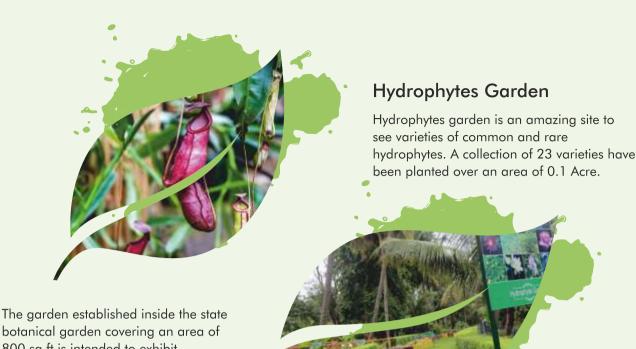
#### Bougainvillea Garden

One Bougainvillea garden has been developed over an area of 21400 sq.ft. More than 1000 Bougainvillea plants of different colours (8 varieties) have been displayed in the garden. A series of creepers raised on the back of the garden adds beauty to the park.

#### Arboretum

The Arboretum spread over an area of 4 ha has been established with collection of more than 234 species (from 49 families) found in the Eastern Zone forests. A minimum of 10 nos. of each species has been planted with signage displayed. A network of path has been made through the plantation which will be an ideal walk way for botanization for the trainees and students.





The garden established inside the state botanical garden covering an area of 800 sq ft is intended to exhibit carnivorous plants. Nandankanan is first of its kind to display carnivorous Plants. The garden has been developed initially to accommodate 4 species of carnivorous plants with provision of naturalistic landscape.

Bonsai Garden has area of 0.33 acres. Bonsai is Japanese term which literally translated as "Planted in a container". Bonsai are not genetical dwarfed plants but miniature of the plants which are produced by using techniques like pinching buds, pruning and wiring branches. This garden has various plant species suitable for bonsai like Ficus benghalensis, Casuarina equisetifolia, Schefflera, Murraya exotica, Tamarindus indica, Premna serratifolia, Arelias sp, Desmodium sp. Adensonia sp. Antidesma acidum. It has 118 stands with various bonsai plants and penjings as well as a separate stand for mame and sohini size bonsai pots.

#### Waste Management Garden

Waste Management has a covering area of 660sqmt. Various kind of waste materials like old tyres, old mineral water bottles, old glass bottle, old pvc pipes,old jeans pant, old cycle, old cycle rim, old plastic chair, old umbrella etc were used for garden creation. These waste materials were designed by giving various shapes styles to plant potting container, hangers etc. old glass bottles were simply coloured and used as a boarder of the path of garden.

#### Vertical Garden

The vertical Garden covers an area of 480sq ft just in one side of the main entrance of State Botanical Garden. Various types foliage plants with various shades of leaf such as Sansveria green, Sansveria trifasciata golden, Madarangared, Madarange green plant, Goldengrass, Rhoeoplant, Dwarfsatabari, Coleus, planted in vertical garden.



# for Management and Development of Nandankanan Biological Park.

Government of Orissa constituted the "Society for Management and Development of Nandankanan Zoological Park" on 27<sup>th</sup> August, 2005 and the society has been registered under the Registration of Societies Act of 1860 with Registration No. 22073/54 of 2005-2006 dated 27.08.2005, with the following principal objectives.



- (a) Complementing, supplementing, strengthening or otherwise expanding the activities of Nandankanan Zoological Park in the cause of insitu conservation of wildlife captive management of wildlife and eco-tourism and facilitating linkage between ex-situ and in-situ management of wildlife.
- (b) To act as platform for open debate, discussion and subscribe to otherwise assist any charitable, benevolent, scientific, national, public or any other institution the object or purpose of which are consistent with or which promotes objects of the society.
- (c) To coordinate and liaise with national/international bodies, experts and funding agencies and to receive constitution and funds from Government of India, Central Zoo Authority, State Government or any individual, institute, national or international agencies, any other institution of Central Government or State Government for specific conservation programme, development of eco-tourism amenities of Nandankanan.
- (d) To receive and manage all contributions given to the Society in large interest of Nandankanan Zoological Park for maintenance and upkeep of zoo animals, improvement of the premises as well as maintenance and upkeep of zoo animals, improve the premises as well as maintenance and improvement of visitors amenities.
- (e) To engage/employ such staff as may be necessary for efficient handling and conduct of business of the society with approval of General Body.
- (f) To do all such acts and activities as area incidental or conducive to attainment of the objectives or directly beneficial to the society in promotion of its objects, subject to the overall control of the Chief Wildlife Warden and in conformity with the Society Registration Act, 1860.
- (g) To carry out any other activities in the furtherance of the above objectives.

# Uniqueness of Nandankanan

- Only zoo in the world where melanistic tigers were born (2014) and displayed to the visitors.
- It is the host zoo for white tigers, white tigers were born to normal coloured parents in 1980, a unique event in the world.
- First zoo in the country where endangered Gharials were born in captivity in 1980.
- A unique white tiger safari was established in the Zoological Park on 1st October, 1991.
- Wonderful site for wildlife conservation and education where one can experience integration of ex-situ and in-situ conservation of wild fauna and flora.
- Presence of Kanjia Lake- A wetland of National Importance (2006)
- Conservation Breeding Centre for Indian Pangolin and Long billed vultures.
- Nandankanan has largest enclosures for housing Gharials and Hippopotamus.
- Second largest heronry for open billed storks in Odisha.
- Has a Captive Fodder Farm (over 33 Acs.) and a Slaughter house to cater the dietary needs of animals housed in the Zoological Park.
- First zoo in the country to become an Institutional member of World Association of Zoos & Aquarium (WAZA).
- First Zoo in the country where endangered Ratel was born in captivity.
- First zoo in the country after which an express train 12815/12816 Puri-New Delhi Express has been named as "Nandankanan Express".
- First zoo in the country to have Multi-Level Car Parking for visitors.



### Significant Achievements



Sri Prafulla Bag, Animal Keeper, awarded First position in 400 mts race in State Forest Sports Meet, Angul held on 22nd January, 2023.



Sri Prafulla Bag, Animal Keeper, awarded First position in 5000 mts race in State Forest Sports Meet, Angul held on 22nd January, 2023.



Sri Rama Chandra Kandi, Forest Guard, awarded First position in Discus throw in State Forest Sports Meet, Angul held on 22nd January, 2023.



Sri Rama Chandra Kandi, Forest Guard, awarded Second position in Discus throw in 26th All India Forest Sports meet held at Panchkula, Haryana from 10th to 14th March, 2023.

State Botanical Garden, Nandankanan won the following Prizes in different categories in the Annual Garden Competition during the Annual Flower Show 2023 organized by Regional Plant Resource center & Plant lovers association.

List of prizes of different category

#### Annual flower show at RPRC-2023

- 1st Prize for Glass house (Medium Garden Theme)
- 2. RPRC Running trophy for Medium Garden
- 3. Grade-A for Orchid House
- 4. 1st Prize for Bonsai Garden (Bonsai Theme)
- 5. Grade A for Butterfly Park

- 6. 2nd Prize for Mughal Garden (Very large garden theme)
- 7. 2nd Prize for Rose Garden (Rose Garden theme)
- 8. 3rd Prize for Medicine Garden (theme Garden)
- 9. 2nd Prize for potted succulent plant
- 10. Merit prize for Potted Bonsai
- 11. Merit prize for cut Rose hybrid tea

State Botanical Garden, Nandankanan won the following Prizes in different categories in the Annual Garden Competition during the Annual Flower Show 2023 organized by OUAT & Plant lovers association.

# Annual Rose and flower show organized by Orissa Horticultural & Rose society, OUAT-2023:

- 1. Queen of the show
- 2. 1st prize-HT cut roses (Yellow)
- 3. 1st prize-Floribunda cut roses
- 4. 1st prize-HT cut roses (RED)
- 5. 1st prize-Miniature cut roses
- 6. 1st prize-HT dutch roses (white)
- 7. 2nd prize-display of dutch Roses
- 8. 1st prize-pot croton
- 9. 1st prize-Bonsai
- 10. 1st prize-Pot Dieffenbachia
- 11. 1st prize-cut Dahlia (Large)
- 12. 1st prize-cut Dianthus
- 13. 1st prize-Pot poinsettia
- 14. 1st prize-Pot Dianthus
- 15. 1st prize-Cacti & succulents
- 16. 1st prize-Pot dracaena
- 17. 1st prize-Pot Maranta
- 18. 1st prize-Pot Bougainvillea
- 19. 1st prize-Fern

State Botanical Garden, Nandankanan won the following Prizes in different categories in the Annual Garden Competition during the Annual Flower Show 2023 organized by NALCO.

NALCO Annual Flower Show 2023 Best display in foliage potted plants

### National Law University Odisha Flower Show 2023

State Botanical Garden, Nandankanan won the following Prizes in different categories in the flower show during Open flower show exhibition organized by National Law University Odisha from 21.1.2023 to 23.1.2023

1st Prize in Exotic Species
2nd Prize in Cut Flower category

















# Superannuated Staff during 2022-23 With deepest gratitude from Nandankanan family for your valuable service.



Sri Banmali Gouda Animal Keeper 30.04.2022



Sri Nakula Chandra Beura Animal Keeper 30.06.2022



Sri Upendra Muduli Animal Keeper 31.07.2022



Sri Nilamani Das Zoo Watcher 31.07.2022



Sri Prafulla Kumar Behera Attendant 31.07.2022



Sri Kartika Behera Animal Keeper 31.07.2022



Sri Pravat Bhoi Zoo Watcher 31.10.2022



Sri Ganesh Chandra Muduli Mahout 30.09.2022



Rambha Bhoi Attendant 31.12.2022



Sri Shibaram Sahoo Animal Keeper 31.01.2023



Sri Shyama Singh Animal Keeper 28.02.2023



Draupadi Singh Animal Keeper 28.02.2023



Sri Bhramarabar Behera Animal Keeper 31.03.2023

# Felicitation of Staff during 63rd Foundation Day of Nandankanan for their outstanding performance.



Best worker in animal keeping
Shri Bhujabala Ratha, Outsourced



Best worker in animal keeping
Shri Mohan Soren, Animal Keeper



Best Keeper in enclosure maintenance and enrichment Shri Biswanath Gouda, Outsourced



Best worker in ensuring protection & security
Shri Biranchi Rout, Outsourced



Best worker in revenue collection

Shri Soumyajit Das, Outsourced



Best worker in lawn & garden maintenance
Shri Mantu Nayak, Outsourced



Best worker in veterinary health care
Shri Dusmanta Naik, Animal Keeper



Best Technical worker (Electricity & water supply)
Shri Sandip Sachidananda Das, Outsourced



Best worker in Raj Bhawan Deer Park **Shri Sudhira Kumar Behera, Forester** 



Special prize for commendable performance in SBG Shri Birabhadra Singh, EPF Worker



Best worker in ensuring cleanliness and sanitation Sonali Naik, Outsourced



Best worker in supply of feed & fodder and its distribution Shri Rabindra Tripathy, Animal Keeper



All-rounder performance of the year Shri Akshaya Kumar Das, Ticket Collector



Best Forester
Shri Purna Chandra Behera, Forester



Best Forest Guard
Smt. Jyotsna Patra, Forest Guard



Best Forest Guard

Shri Debendra Honnaga, Forest Guard



### NANDANKANAN BIOLOGICAL PARK ADOPTION SCHEME



Animal Adoption Programme of Nandankanan Biological Park was launched in the year 2008 to support the world class zoo care and people's movement towards conservation and preservation of flora and fauna which brings in higher dividends. The primary intention to evolved this scheme to involving general public in conservation of endangered animals, birds and reptiles. Individuals, philanthropists, organizations and corporate can adopted animals by way of contributing services for all inhabitants by providing quality food to meet their nutritional requirements, medical care, equipment, upgradation of the enclosure and enrichments. This scheme also brings patrons closer to the zoo and heighten their love and passion for the captive animals. Therefore, the zoo would like to invited philanthropists, institutions and industrial houses and individuals to lend a helping hand by donating liberally to the zoo. One can adopt any animal/bird/reptile for a period of one month, three months, six months and for one year. The animal adopted remains at the Nandankanan zoo receiving proper care and housing. This programme is being done both through online and offline mode. After adopting, a patron received a "Thank You" in the form of an Adoption Certificate. All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.

Animal Adoption rates for different species which had arrived based on the data collected for feed charges, veterinary care charges, animal keeping charges and administrative charges per year/six months/three months and one month and the privileges for patrons are as follows.

#### CURRENT ADOPTION CHARGES FOR DIFFERENT ANIMALS

Serial No	Name of the Species	Scientific name	No of animal available for adoption				
SCHEME				Per Year (365 Days)	Per six months (180 Days)	Per three months (90 Days)	Per month (30 Days)
BIRDS						0.000	
1	HILL MYNAH	Gracula religiosa	1	10000/-	5000/-	2500/-	1000/-
3	INDIAN PEAFOWL INDIAN PEAFOWL WHITE	Pavo cristatus	25 4	15000/-	7500/- 7500/-	3800/-	1300/-
4	CINEREOUS VULTURE	Pavo cristatus Aegypius monachus	2	10000/-	5000/-	2500/-	1000/-
5	LONG BILLED VULTURE	Gyps indicus	9	10000/-	5000/-	2500/-	1000/-
6	BRAMHINY KITE	Haliastur indus	1	10000/-	5000/-	2500/-	1000/-
7	BLACK KITE	Milvus migrans	12	10000/-	5000/-	2500/-	1000/-
8	SHIKRA	Accipiter badius	2	10000/-	5000/-	2500/-	1000/-
9	GREY HORNBILL	Ocyceros birostris	1	10000/-	5000/-	2500/-	1000/-
10	SARUS CRANE	Grus antigone	1	15000/-	7500/-	3800/-	1300/-
11	EMERALD DOVE	Chalcophaps Indica	3	10000/-	5000/-	2500/-	1000/-
12	SPOTTED DOVE	Spilopelia chinesis	9	5000/-	2500/-	1500/-	500/-
13	RING NECKED DOVE	Streptopelia capicola	2	5000/-	2500/-	1500/-	500/
14	CATTLE EGRET  LARGE EGRET	Bubulcus ibis	6	5000/-	2500/-	1500/- 1500/-	500/
16	LITTLE EGRET	Cosmerodius albus Egretta garzetta	8	5000/-	2500/-	1500/-	500/
17	MEDIAN EGRET	Egretta intermedia	1	5000/-	2500/-	1500/-	500/
18	NIGHT HERON	Nycticorax nycticorax	122	10000/-	5000/-	2500/-	1000/-
19	BLACK HEADED IBIS	Threskiornis aethiopica	205	10000/-	5000/-	2500/-	1000/-
20	KOEL	Eudynamys scolopacea	2	10000/-	5000/-	2500/-	1000/-
21	RED MUNIA	Estrilda amandava	1	10000/-	5000/-	2500/-	1000/-
22	BLACK HEADED MUNIA	Lonchura malacca	1	10000/-	5000/-	2500/-	1000/-
23	SPOTTED MUNIA	Lonchura punctulata	1	10000/-	5000/-	2500/-	1000/-
24	BARN OWL	Tyto alba	07	10000/-	5000/-	2500/-	1000/-
25	BROWN FISH OWL	Bubo zeylonesis	2	10000/-	5000/-	2500/-	1000/-
26	ORIENTAL SCOPS OWL	Outs sunia	1	10000/-	5000/-	2500/-	1000/-
27	ALEXANDRINE PARAKEET	Psittacula eupatria	17	5000/-	2500/-	1500/-	500/
28	BLOSSOM HEADED PARAKEET	Psittacula cyanocephala	5	5000/-	2500/-	1500/-	500/
29	ROSE RING PARAKEET	Psittacula krameri	22	5000/-	2500/-	1500/-	500/
30	GREY PELICAN	Pelecanus phillippensis	26	10000/-	5000/-	2500/-	1000/-
31	ROSY PELICAN	Pelecanus onocrotalus	3	10000/-	5000/-	2500/-	1000/-
32	PAINTED STORK	Mycteria leucocephala	52	15000/-	7500/-	3800/-	1300/-
33	OPEN BILL STORK	Anastomus oscitans	11	10000/-	5000/-	2500/-	1000/-
34	RED JUNGLE FOWL	Gallus gallus	6	10000/-	5000/-	2500/-	1000/-
35	BUDGERIGAR	Melopsittacus undulatus	543	5000/-	2500/-	1500/-	500/
36	COCKATIEL	Nymphicus hollandicus	91	5000/-	2500/-	1500/-	500/
37	LESSER SULPHUR CRESTED COCKATOO	Cacatua slphurea	1	10000/-	5000/-	2500/-	1000/-
38	UMBRELLA CRESTED COCKATOO	Cacatua slphurea	1	10000/-	5000/-	2500/-	1000/-
39	BROWN THROATED CONURE	Eupsittula pertinax	2	5000/-	2500/-	1500/-	500/
40	JANDAYA CONURE	Aratinga jandaya	18	5000/-	2500/-	1500/-	500/
41	SUN CONURE	Aratinga solstitialis	21	5000/-	2500/-	1500/-	500/
42	PINEAPPLE CONURE YELLOW SIDED CONURE	Pyrrhura molinae molinae	9	5000/-	2500/-	1500/-	500/
44	BARBARY DOVE	Pyrrhura molinae sordida Streptopelia risoria	14	5000/-	2500/-	1500/-	500/
45	DIAMOND DOVE	Geopelia cuneata	2	5000/-	2500/-	1500/-	500/
46	LAUGHING DOVE	Spilopelia senegalnesis	1	5000/-	2500/-	1500/-	500/
47	MANDARIN DUCK	Aix galericulata	11	5000/-	2500/-	1500/-	500/
48	LESSER ADJUTANT STORK	Leptoptilos javanicus	2	15000/-	7500/-	3800/-	500/
49	EMU	Dromaius novaehollandiae	13	10000/-	5000/-	2500/-	500/
50	BENGALESE FINCH	Lonchura striata	24	5000/-	2500/-	1500/-	500/
51	LONG TAILED FINCH	Poephila cincta	2	5000/-	2500/-	1500/-	500/
52	STAR FINCH	Poephila ruficauda	1	5000/-	2500/-	1500/-	500/
53	ZEBRA FINCH	Poephila guttata	220	5000/-	2500/-	1500/-	500/
54	GREY HERON	Ardea cinerea	9	5000/-	2500/-	1500/-	500/
55 56	BLUE FACED LORIKEET SWAINSON'S LORIKEET	Trichoglossus haematodus intermedius Trichoglossus haematodus	2 2	5000/-	2500/-	1500/-	500/
57	YELLOW BACKED LORY	moluccanus  Lorius garrulous flavopalliatus	1	5000/-	2500/-	1500/-	500/
58	FISCHERS LOVE BIRD,	Agapornis fisheri	32	5000/-	2500/-	1500/-	500/

59	PEACH FACED LOVE BIRD	Agapornis roseicollis	12	5000/-	2500/-	1500/-	500/
60	MASKED LOVE BIRD	Agapornis personatus	4	5000/-	2500/-	1500/-	500/
61	GREEN WINGED MACAW	Ara Chloroptera	2	15000/-	7500/-	3800/-	1300/
62	OSTRICH	Struthio camelus	6	15000/-	7500/-	3800/-	1300/
63	AFRICAN GREY PARROT	Psittacus erithacus	2	15000/-	7500/-	3800/-	1300/
64	GOLDEN PHEASANT	Chrysolophus Pictus	21	15000/-	7500/-	3800/-	1300/
65	LADY AMHERST'S PHEASANT	Chrysolophus amherstiae	11	15000/-	7500/-	3800/-	1300/
66	RING NECKED PHEASANT	Phasianus colchicus	16	15000/-	7500/-	3800/-	1300/
67	SILVER PHEASANT	Lophura nycthemera	25	15000/-	7500/-	3800/-	1300/
68 69	REEVE'S PHEASANT	Syrmaticus reevesii	1	15000/-	7500/- 7500/-	3800/-	1300/
70	YELLOW GOLDEN PHEASANT EASTERN ROSELLA	Chrysolophus Pictus mut. Platycercus eximius	3	15000/-	7500/-	3800/-	1300/
71	JAVA SPARROW	Padda oryzivora	123	5000/-	2500/-	1500/-	500/-
72	BLACK SWAN	Cygnus atratus	5	15000/-	7500/-	3800/-	1300/
73	MEYERS PARROT	Poicephalus mayeri	3	10000/-	5000/-	2500/-	1000/
74	RED BELLIED PARROT	Pionus sodidus	5	10000/-	5000/-	2500/-	1000/
75	VIOLET TURACO	Musophaga violacca	4	15000/-	7500/-	3800/-	1300/
76 <u> </u>	LIVING STONES TURACO RING NECKED PARAKEET	Turaco living stonii	7	15000/-	7500/-	3800/- 2500/-	1300/
/ /	KING NECKED LAKAKEET			10000/-	3000/-	2300/-	1000/
78	FOUR HORNED ANTELOPE	Tetraceros MAMMA	2	10000/-	5000/-	2500/-	1000/
70	/CHOWSINGA	quadriucornis		10000/-	3000/-	2300/-	1000/
79	HIMALAYAN BLACK BEAR	Selenarctos thibetanus	6	20000/-	10000/-	5000/-	1700/
80	SLOTH BEAR	Melursus ursinus	13	20000/-	10000/-	5000/-	1700/
81	BLACK BUCK	Antilope cervicapra	85	10000/-	5000/-	2500/-	1000/
82	JUNGLE CAT	Felis chaus	9	5000/-	2500/-	1500/-	500
83	LEOPARD CAT	Prionailurus bengalensis	1 22	10000/-	5000/-	2500/-	1000/
84	COMMON PALM CIVET	Paradoxurus hermaphroditus	23		2500/-	1500/-	500
85	SMALL INDIAN CIVET	Vivericulla indica	1 17	10000/-	5000/-	2500/-	1000/
86	BROW ANTLERED DEER / SANGAI	Cervus eldi	17	20000/-	10000/-	5000/-	1700/
87	MOUSE DEER	Tragulus memmina	31	20000/-	10000/-	5000/-	1700/
88	SWAMP DEER/ BARASINGHA	Cervus duvauceli	14	20000/-	10000/-	5000/-	1700/
89	INDIAN ELEPHANT	Elephas maximus	2	250000/-	125000/-	63000/-	21000
90	GAUR	Bos gaurus	6	50000/-	25000/-	12500/-	4200/
91	LEOPARD/PANTHER	Panthera pardus	4	50000/-	25000/-	12500/-	4200/
92	ASIATIC LION	Panthera leo persica	14	100000/-	50000/-	25000/-	8500/
93	BONNET MACAQUE	Macaca radiata	7	10000/-	5000/-	2500/-	1000/
94	RHESUS MACAQUE	Macaca mulatta	8	10000/-	5000/-	2500/-	1000/
95	INDIAN PANGOLIN	Manis crassicaudata	9	50000/-	25000/-	12500/-	4200/
96 97	RATEL GIANT SQUIRREL	Mellivora capensis Ratufa indica	1	50000/- 10000/-	25000/- 5000/-	12500/- 2500/-	1000/
98	COMMON MANGOOSE	Herpestes edwardsi	8	5000/-	2500/-	1500/-	500/
99	BENGAL TIGER (NCT)	Panthera tigris tigris	18	100000/-	50000/-	25000/-	8500/
100	BENGAL TIGER (WHITE)	Panthera tigris tigris	6	100000/-	50000/-	25000/-	8500/
101	BENGAL TIGER (MELANISTIC)	Panthera tigris tigris	3	150000/-	75000/-	37500/-	12500
100	ACIATIC WILD DOG	<u> </u>		00000/	10000/	5000/	1700
102	ASIATIC WILD DOG ASSAMESE MACAQUE	Cuon alpinus Macaca assamensis	11	20000/-	10000/-	5000/- 2500/-	1700/
104	BLACK BUCK	Antilope cervicapra	85	20000/-	10000/-	5000/-	1700/
105	BARKING DEER	Muntiacus muntjak	71	10000/-	5000/-	2500/-	1000/
106	HOG DEER	Axis porcinus	65	10000/-	5000/-	2500/-	1000/
107	SAMBAR DEER	Cervus unicolor	15	10000/-	5000/-	2500/-	1000/
108	SPOTTED DEER	Axis axis	802	5000/-	2500/-	1500/-	500
109	INDIAN HARE	Lepus nigricollis	5	10000/-	5000/-	2500/-	1000/
110 111	STRIPED HYAENA GIANT FRUIT BAT	Hyaena hyaena Pteropus giganteus	5	10000/-	5000/- 2500/-	2500/-	1000/
112	JACKAL	Canis aureus	28	5000/-	2500/-	1500/-	500/
113	NILGAI/BLUE BULL	Boselaphus tragocamelus	11	5000/-	2500/-	1500/-	500/
114	WILD PIG/ WILD BOAR	Sus scrofa	4	5000/-	2500/-	1500/-	500/
115	INDIAN PORCUPINE	Hystrix indica	2	10000/-	5000/-	2500/-	1000/
116	HAMADRYAS BABOON	Papio hamadryas	2	10000/-	5000/-	2500/-	1000/
					25000/-	12500/-	4200/
	CHIMPANZEE	Pan troglodytes	7	50000/-		25000/	OFOO.
118	CHIMPANZEE GIRAFFE	Giraffa Camelopardalis	1	100000/-	50000/-	25000/-	
118 119	CHIMPANZEE GIRAFFE HIPPOPOTAMUS	Giraffa Camelopardalis Hippopotamus amphibious	1 11	100000/-	50000/- 10000/-	5000/-	1700/
118 119 120	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo	1 11 7	100000/- 20000/- 50000/-	50000/- 10000/- 25000/-	5000/-	1700/
118 119 120 121	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo	1 11 7 1	10000/- 2000/- 5000/- 10000/-	50000/- 10000/- 25000/- 50000/-	5000/- 12500/- 25000/-	1700/ 4200/ 8500/
118 119 120 121 122	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata	1 11 7 1 7	100000/- 20000/- 50000/- 100000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/-	5000/- 12500/- 25000/- 3800/-	1700/ 4200/ 8500/ 1300/
118 119 120 121 122 123	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA	Girafta Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti	1 11 7 1 7	100000/- 20000/- 50000/- 100000/- 15000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/-	5000/- 12500/- 25000/- 3800/- 5000/-	1700/ 4200/ 8500/ 1300/ 1700/
118 119 120 121 122 123 124	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata	1 11 7 1 7	100000/- 20000/- 50000/- 100000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/-	5000/- 12500/- 25000/- 3800/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/
118 119 120 121 122 123 124 125	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis	1 11 7 1 7 1 10 4 8	100000/- 20000/- 50000/- 100000/- 15000/- 20000/- 50000/- 10000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/-	5000/- 12500/- 25000/- 3800/- 5000/- 12500/- 2500/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/
118 119 120 121 122 123 124 125 126	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina	1 11 7 1 7 1 10 4 8	100000/- 20000/- 50000/- 100000/- 15000/- 20000/- 20000/- 50000/- 10000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 5000/- 5000/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/
118 119 120 121 122 123 124 125 126 127	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canis lipus	1 11 7 1 7 1 10 4 8 2 8	10000/- 2000/- 50000/- 10000/- 15000/- 20000/- 20000/- 5000/- 10000/- 10000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/- 10000/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 5000/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/ 1700/
118 119 120 121 122 123 124 125 126 127 128 129	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canalusus Sapajus apella	1 11 7 1 7 1 10 4 8 2 8	10000/- 20000/- 50000/- 100000/- 15000/- 20000/- 50000/- 10000/- 10000/- 15000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/- 5000/- 10000/- 7500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 5000/- 3800/-	1700/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/ 1000/ 1700/ 1300/
118 119 120 121 122 123 124 125 126 127 128 129	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canis lipus	1 11 7 1 7 1 10 4 8 2 8	10000/- 2000/- 50000/- 10000/- 15000/- 20000/- 20000/- 5000/- 10000/- 10000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/- 10000/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 5000/-	1700/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/ 1000/ 1700/ 1300/
118 119 120 121 122 123 124 125 126 127 128 129 130	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canis lupus Sapajus apella Saimiri sciureus	1 11 7 1 7 1 10 4 8 2 8	10000/- 2000/- 2000/- 50000/- 10000/- 15000/- 20000/- 20000/- 10000/- 10000/- 10000/- 15000/- 15000/-	50000/- 10000/- 25000/- 50000/- 10000/- 10000/- 25000/- 5000/- 5000/- 10000/- 7500/- 7500/-	5000/- 12500/- 25000/- 3800/- 5000/- 12500/- 12500/- 2500/- 2500/- 3800/- 3800/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/ 1000/ 1300/
118 119 120 121 122 123 124 125 126 127 128 129 130	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Cansi Lupus Sapajus apella Saimiri sciureus Suricata suricatta	1 11 7 1 7 1 10 4 8 2 8	10000/- 20000/- 20000/- 100000/- 15000/- 20000/- 20000/- 10000/- 10000/- 15000/- 15000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/- 10000/- 7500/- 7500/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 12500/- 12500/- 2500/- 2500/- 5000/- 3800/- 3800/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1700/ 1300/ 500/-
118 119 120 121 122 123 124 125 126 127 128 129 130	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canis lupus Sapajus apella Saimiri sciureus	1 11 7 1 7 1 10 4 8 2 2 8 1 4	10000/- 2000/- 2000/- 50000/- 10000/- 15000/- 20000/- 20000/- 10000/- 10000/- 10000/- 15000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 5000/- 5000/- 5000/- 7500/- 7500/- 7500/- 7500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 5000/- 3800/- 3800/- 1500/- 3800/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1700/ 1300/ 500/-
118 119 120 121 122 123 124 125 126 127 128 129 130	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca arctoides Macaca anemestrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah	1 11 7 7 1 7 7 1 1 10 4 8 2 2 8 1 4 4 3 3 S	100000/- 20000/- 20000/- 50000/- 100000/- 150000/- 20000/- 10000/- 10000/- 15000/- 15000/- 15000/- 15000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 25000/- 5000/- 10000/- 7500/- 7500/- 7500/- 1500/- 1500/-	5000/- 12500/- 25000/- 3800/- 5000/- 12500/- 2500/- 2500/- 2500/- 3800/- 3800/- 1500/- 3800/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 4200/ 1000/ 1300/ 1300/ 1300/ 2500/
1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN KING COBRA MONOCELLATE COBRA	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca amestrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia	1 11 7 7 1 7 7 1 1 10 4 8 2 2 8 1 4 4 3 3 S S 1 1 12	100000/- 20000/- 20000/- 50000/- 15000/- 20000/- 50000/- 10000/- 20000/- 15000/- 15000/- 15000/- 30000/- 50000/- 5000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 50000/- 5000/- 7500/- 7500/- 7500/- 7500/- 15000/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 3800/- 1500/- 3800/- 7500/- 1500/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1000/ 1000/ 1300/ 1300/ 500/- 2500/ 500/
1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN  KING COBRA MONOCELLATE COBRA	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca nemestrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia Naja naja	1 11 7 7 1 1 10 4 8 2 8 1 1 4 3 S S 1 1 1 2 6 6	100000/- 20000/- 50000/- 15000/- 15000/- 20000/- 50000/- 10000/- 15000/- 15000/- 15000/- 15000/- 50000/- 50000/- 5000/- 5000/- 5000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 10000/- 5000/- 5000/- 5000/- 7500/- 7500/- 7500/- 15000/- 15000/- 2500/- 2500/- 2500/- 2500/- 2500/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 3800/- 3800/- 3800/- 1500/- 1500/- 1500/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1000/ 1000/ 1300/ 1300/ 500/- 500/- 500/- 500/- 500/-
117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN  KING COBRA MONOCELLATE COBRA BINOCELLATE COBRA	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca amestrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia	1 11 7 7 1 7 7 1 1 10 4 8 2 2 8 1 4 4 3 3 S S 1 1 12	100000/- 20000/- 20000/- 50000/- 15000/- 20000/- 50000/- 10000/- 20000/- 15000/- 15000/- 15000/- 30000/- 50000/- 5000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 50000/- 5000/- 7500/- 7500/- 7500/- 7500/- 15000/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 12500/- 2500/- 2500/- 3800/- 1500/- 3800/- 7500/- 1500/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1000/ 1000/ 1300/ 1300/ 500/- 500/- 500/- 500/- 500/-
118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN KING COBRA MONOCELLATE COBRA BINOCELLATE COBRA LONG SNOUTED CROCODILE / GHARIAL	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca amemstrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia Naja naja Gavialis gangeticus	1 11 7 1 7 1 10 4 8 2 8 1 4 3 S 1 12 6	100000/- 20000/- 20000/- 50000/- 15000/- 20000/- 50000/- 10000/- 10000/- 20000/- 15000/- 15000/- 30000/- 5000/- 5000/- 20000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 50000/- 5000/- 7500/- 7500/- 7500/- 2500/- 15000/- 2500/- 2500/- 15000/- 2500/- 15000/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 5000/- 2500/- 2500/- 3800/- 3800/- 3800/- 1500/- 3800/- 5000/- 5000/- 5000/- 5000/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1000/ 1000/ 1300/ 1300/ 500/- 1300/ 500/- 1700/ 500/ 1700/
1118 1119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN KING COBRA MONOCELLATE COBRA BINOCELLATE COBRA LONG SNOUTED CROCODILE / GHARIAL	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca aremestrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia Naja naja Gavialis gangeticus Crocodylus palustris	1 11 7 1 7 1 1 7 1 1 1 1 1 1 1 1 1 1 1	100000/- 20000/- 20000/- 50000/- 15000/- 15000/- 20000/- 50000/- 10000/- 15000/- 15000/- 15000/- 5000/- 15000/- 20000/- 20000/- 20000/- 20000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 50000/- 5000/- 7500/- 7500/- 7500/- 2500/- 2500/- 15000/- 2500/- 15000/- 15000/- 15000/- 15000/- 15000/- 15000/- 15000/- 15000/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 2500/- 2500/- 2500/- 3800/- 3800/- 3800/- 1500/- 3500/- 5000/- 5000/- 5000/- 5000/-	1700/ 4200/ 8500/ 1300/ 1700/ 1700/ 1700/ 1000/ 1300/ 1300/ 1300/ 500/- 500/ 500/ 1700/ 1700/ 1700/
1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1130 1131 1132	CHIMPANZEE GIRAFFE HIPPOPOTAMUS HYBRID LION AFRICAN LION BLACK TUFTED MARMOSET CHINKARA INDIAN FOX HOOLOCK GIBBON STUMP TAILED MACAQUE PIG TAILED MACAQUE INDIAN GREY WOLF TUFTED CAPUCHIN COMMON SQUIRREL MONKEY SLENDER TAILED MEERKAT RED HANDED TAMARIN KING COBRA MONOCELLATE COBRA BINOCELLATE COBRA LONG SNOUTED CROCODILE / GHARIAL	Giraffa Camelopardalis Hippopotamus amphibious Panthera leo Panthera leo Calhithrix penicillata Gazella bennetti Vulpes bengalensis Hoolock hoolock Macaca arctoides Macaca amemstrina Canis lupus Sapajus apella Saimiri sciureus Suricata suricatta Saguinus midas REPTILE Ophiophagus hannah Naja naja kouthia Naja naja Gavialis gangeticus	1 11 7 1 7 1 10 4 8 2 8 1 4 3 S 1 12 6	100000/- 20000/- 20000/- 50000/- 15000/- 20000/- 50000/- 10000/- 10000/- 20000/- 15000/- 15000/- 30000/- 5000/- 5000/- 20000/- 20000/-	50000/- 10000/- 25000/- 50000/- 7500/- 10000/- 25000/- 50000/- 5000/- 7500/- 7500/- 7500/- 2500/- 15000/- 2500/- 2500/- 15000/- 2500/- 15000/- 2500/-	5000/- 12500/- 25000/- 3800/- 5000/- 5000/- 5000/- 2500/- 2500/- 3800/- 3800/- 3800/- 1500/- 3800/- 5000/- 5000/- 5000/- 5000/-	

141	BURMESE PYTHON	Python molurus bivistatus	2	10000/-	5000/-	2500/-	1000/-
142	INDIAN ROCK PYTHON	Python molurus molurus	5	10000/-	5000/-	2500/-	1000/-
143	RETICULATED PYTHON	Python reticulatus	2	20000/-	10000/-	5000/-	1700/-
144	COMMON RAT SNAKE	Ptyas mucosus	12	5000/-	2500/-	1500/-	500/
145	FRESH WATER TURTLE /	Lissemys punctata punctata	64	5000/-	2500/-	1500/-	500/
	FLAP SHELL TURTLE						
146	GANGES SOFT SHELL TURTLE	Trionyx gangeticus	1	5000/-	2500/-	1500/-	500/
147	RUSSEL'S VIPER	Vipera ruselli	1	5000/-	2500/-	1500/-	500/
148	INDIAN CHAMELEON	Chameleon zeylanicus	2	5000/-	2500/-	1500/-	500/
149	COMMON SAND BOA	Eryx johnii	3	5000/-	2500/-	1500/-	500/
150	RED SAND BOA	Eryx conicus	2	5000/-	2500/-	1500/-	500/
151	CHITRA TURTLE	Chitra indica	3	10000/-	5000/-	2500/-	1000/-
152	BANDED KRAIT	Bungarus fasciatus	4	5000/-	2500/-	1500/-	500/
153	COMMON INDIAN KRAIT	Bungarus caeruleus	2	5000/-	2500/-	1500/-	500/
154	STAR INDIAN TORTOISE	Geochelone elegans	14	5000/-	2500/-	1500/-	500/
155	ASIAN BROWN TORTOISE	Manouria emys	6	10000/-	5000/-	2500/-	1000/-
156	INDIAN TENT TURTLE	Pangshura tentoria	3	5000/-	2500/-	1500/-	500/
157	MORELET'S CROCODILE	Crocodylus Moreletii	2	15000/-	7500/-	3800/-	1300/-
158	SIAMESE CROCODILE	Crocodylus siamensis	18	15000/-	7500/-	3800/-	1300/-
159	DWARF CUVIER'S CAIMAN	Paleopuchus palpebrosua	5	15000/-	7500/-	3800/-	1300/-
160	NILE CROCODILE	Crocodylus niloticus	3	15000/-	7500/-	3800/-	1300/-
161	YELLOW ANACONDA	Eunectes notaeus	11	15000/-	7500/-	3800/-	1300/-
162	GREEN IGUANA	Iguana iguana	2	10000/-	5000/-	2500/-	1000/-
163	RED IGUANA	Iguana iguana	1	10000/-	5000/-	2500/-	1000/-

Privileges proposed for the patron who will adopt the animals in Nandankanan Biological Park, Bhubaneswar.

- A. Level-I (Rs. 500/- to Rs. 10000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's chart.
- Two free zoo entry ticket.
- A plague at the animal's enclosure.
- B. Level-II (Rs. 10001/- to Rs. 25000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's chart.
- Four free zoo entry ticket
- A plague at the animal's enclosure.
- C. Level-III (Rs. 25001/- to Rs. 50000/-
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's

- chart.
- Six free zoo entry ticket
- A plague at the animal's enclosure.
- D. Level-IV (Rs. 50001/- to Rs. 75000/-
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's
- Eight free zoo entry ticket
- A plaque at the animal's enclosure.
- E. Level-V (Rs. 75001/- to Rs. 100000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's
- Ten free zoo entry ticket
- A plague at the animal's enclosure.
- Level-VI (Rs. 100001/- to Rs. 150000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.

- Mention on Annual Report Donor's chart.
- Ten free zoo entry ticket
- Five free Battery Vehicles ticket.
- A plague at the animal's enclosure.
- G. Level-VII (Rs. 150001/- to Rs. 200000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's
- Ten free zoo entry ticket
- Five free Battery Vehicles ticket
- Five free Safari entry ticket
- A plague at the animal's enclosure.
- H. Level-VIII (Rs. 200001/- to Rs. 250000/-)
- All donations and adoption contribution are exempted U/S 80G Income Tax Act 1961.
- Official certificate of adoption.
- Information Sheet about Adopted animal.
- Adoption folder with pen
- Mention on Adopter's chart on web wall of Nandankanan website.
- Mention on Annual Report Donor's
- Ten free zoo entry ticket
- Ten free Battery Vehicles ticket
- Ten free Safari entry ticket
- A plague at the animal's enclosure.