

# SANJAY GANDHI BIOLOGICAL PARK, PATNA

## Annual Report for the year 2019-20



Sanjay Gandhi Biological Park, Patna

## CONTENTS

<b>S.No</b>	<b>Section</b>	<b>Page Number</b>
1.	Report of the Officer-in-charge	4
2.	History of the Zoo	4
3.	Vision	4
4.	Mission	5
5.	Objective	5
6.	About us	5-7
7.	Organizational Chart	8
8.	Human Resources	9-11
9.	Capacity Building of the zoo personnel	11
10.	Zoo Advisory Committee	11
11.	Health Advisory Committee	11-12
12.	Statement of income and expenditure of the Zoo	12
13.	Daily feed Schedule of animals	12-17
14.	Vaccination Schedule of animals	18
15.	De-worming Schedule of animals	18-19
16.	Disinfection Schedule	20

<b>S.No</b>	<b>Section</b>	<b>Page Number</b>
17.	Health Check-up of employees for zoonotic diseases	20
18.	Development Works carried out in the zoo during the year	20-21
19.	Education and Awareness programmes during the year	21
20.	Important Events and happenings in the zoo	21-23
21.	Seasonal special arrangements for upkeep of animals	24
22.	Research Work carried out and publications	24
23.	Conservation Breeding Programme of the Zoo	24-25
24.	Animal acquisition / transfer / exchange during the year	25
25.	Rescue and Rehabilitation of the wild animals carried out by the zoo	26
26.	Annual Inventory of animals	27-32
27.	Mortality of animals.	33-34
28.	Status of the Compliance with conditions stipulated by the Central Zoo Authority	34
29.	List of free living wild animals within the zoo premises	34-37
30.	Annexure – “A”	38-43

## **1. Report of the Officer-in-charge**

Sanjay Gandhi Biological Park is the only Biological Park in the State of Bihar where animals of about 94 species are housed including Indian one horned Rhinoceros, Tiger, Leopard, Clouded Leopard, Hippopotamus, Crocodile, Elephant, Himalayan black bear, Jackal, Black bucks, Spotted deer, Peafowl, Hill myna, Gharial, Python, Indian Rhinoceros, Chimpanzee, Giraffe, Zebra, Emu, and White peacock.

The Park is currently having more than 300 species of trees, herbs and shrubs. Plant exhibits including a nursery for medicinal plants, an orchid house, a fern house, a glass house, and a rose garden. The Park also includes an Aquarium where about 35 species of fishes are housed. A Nocturnal House has been constructed for the nocturnal animals.

The Central Zoo Authority has approved the Master Plan of the Zoo for future development which will be executed in phased manner. A Rhino Conservation & Breeding Centre is being constructed with the prior approval and funding from the Central Zoo Authority.

A Zoo Education Centre has been construction for awareness, education among the people especially children about wildlife. The zoo is very sensitive about the facilities for visitors, public conveniences and other amenities also.

## **2. History of the Zoo**

The Park was first established as a [Botanical garden](#) in 1969. The then Hon'ble [Governor of Bihar](#), Sri [Nityanand Kanoongo](#), provided almost 34 acres of land from the [Governor House](#) campus for the garden. In 1972, 58.2 acres of land of Public Works Department and 60.75 acres land of [Revenue Department](#) was transferred to the [Forest Department](#) to expand the park. Since 1973, this park is being developed as a Biological park, combining a [botanical garden](#) with a [zoo](#). The land acquired from the Public Works Department and the Revenue Department has been declared as [Protected Forest](#) by the State Government on 8 March 1983. In the year 1980, it was named as 'Sanjay Gandhi Biological Park'.

This is the only Biological Park in the State of Bihar where animals of about 110 species are housed including Tiger, Leopard, Clouded Leopard, Hippopotamus, Crocodile, Elephant, Himalayan black bear, Jackal, Black bucks, Spotted deer, Peafowl, Hill myna, Gharial, Python, Indian Rhinoceros, Chimpanzee, Giraffe, Zebra, Emu, and White peacock.

The Park is currently having more than 300 species of trees, herbs and shrubs. Plant exhibits including a nursery for medicinal plants, an orchid house, a fern house, a glass house, and a rose garden. The Park also includes an Aquarium where about 35 species of fishes are housed.

## **3. Vision**

The vision of the Park is to educate and generate awareness about the fauna & flora among the people especially children who are the future of the country.

#### 4. Mission

To save and protect wildlife through conservation, research, education as well as to provide better facility to the rescued animals. Breeding of animals especially endangered species and to release them in their natural habitat for maintaining the ecological balance.

#### 5. Objective

The main objective of the zoos shall be to complement and strengthen the national efforts in conservation of the rich biodiversity of the country, particularly the wild fauna. This objective can be achieved through the following protocol:-

- a. Conservation of endangered species.
- b. To inspire amongst zoo visitors empathy for wild animals, and understanding and awareness about the need for conservation of natural resources and for maintaining the ecological balance.
- c. Providing opportunities for scientific studies useful for conservation.
- d. Besides the aforesaid objectives, the zoos shall continue to function as rescue center's for orphaned wild animals.

#### 6. About us

S.No.	Particulars	Information
<b>Basic Information about the Zoo</b>		
1	Name of the Zoo	Sanjay Gandhi Biological Park, Patna
2	Year of Establishment	1972
3	Address of the Zoo	Sanjay Gandhi Biological Park, P.O. G.P.O. Patna- 800 001
4	State	Bihar
5	Telephone Number	0612-2217455
6	Fax Number	-
7	E-mail address	patnazoo@yahoo.com
8	Website	www.zoopatna.com

S.No.	Particulars	Information
9	Distance from nearest	Airport: 2 Kms.
		Railway Station: 6 Kms.
		Bus Stand: 8 Kms.
10	Recognition Valid upto (Date)	28-09-2021
11	Category of zoo	'A'
12	Area (in Hectares)	153.00 Acres
13	Number of Visitors 2019-20 (Financial Year)	Adult : 16,73,108
		Adult Group: 88,269
		Children : 2,30,613
		Child Group: 1,26,639
		<b>Total Indian : 21,18,629</b>
		Total Foreigners : -
		<b>Total Visitors: 21,18,629</b>
14	Visitors' Facilities Available in Zoo	<ol style="list-style-type: none"> <li>1. 3D Theatre</li> <li>2. Drinking water fountain</li> <li>3. Purified water</li> <li>4. Wheel chair to disabled person</li> <li>5. Pram for small child.</li> <li>6. Toilet</li> <li>7. Clock room</li> <li>8. Restaurant</li> <li>9. Battery Operated Vehicle</li> <li>10. Battery Operated Trackless toy train</li> <li>11. Souvenir Shop</li> <li>12. Fully Wi-Fi Campus</li> <li>13. Signage's QR Code</li> <li>14. Visitor's shed</li> <li>15. First Aid</li> <li>16. Children's Park</li> <li>17. Fully air-conditioned Library</li> <li>18. Patna Zoo is covered entire zoo with CCTV</li> <li>19. Guide Map</li> </ol>

S.No.	Particulars	Information
15	Weekly Closure Day of the Zoo	Monday
<b>Management Personnel of the zoo</b>		
16	Name with designation of the Officer in-charge	Shri Amit Kumar, IFS Director, Sanjay Gandhi Biological Park, Patna
	Name of the Veterinary Officer	1. Dr. Ram Kumar Pandey 2. Dr. Samrendra Bahadur Singh
	Name of the Curator	-
	Name of the Biologist	-
	Name of the Education Officer	-
	Name of the Compounder/ Lab Assistant	Shri Maksudul Hassan, Compounder (Retd.)
Owner / Operator of the Zoo		
17	*Name of the Operator	Principal Secretary, Deptt. of Environment, Forest & Climate change, Govt. of Bihar
18	Address of the Operator	Sinchai Bhawan, Patna.
19	Contact details/Phone number of Operator	0612-2217455/ Mob. 8986153174
20	E-mail address of Operator	patnazoo@yahoo.com

\* Rule 2(m) of the Recognition of Zoo Rules, 2009.

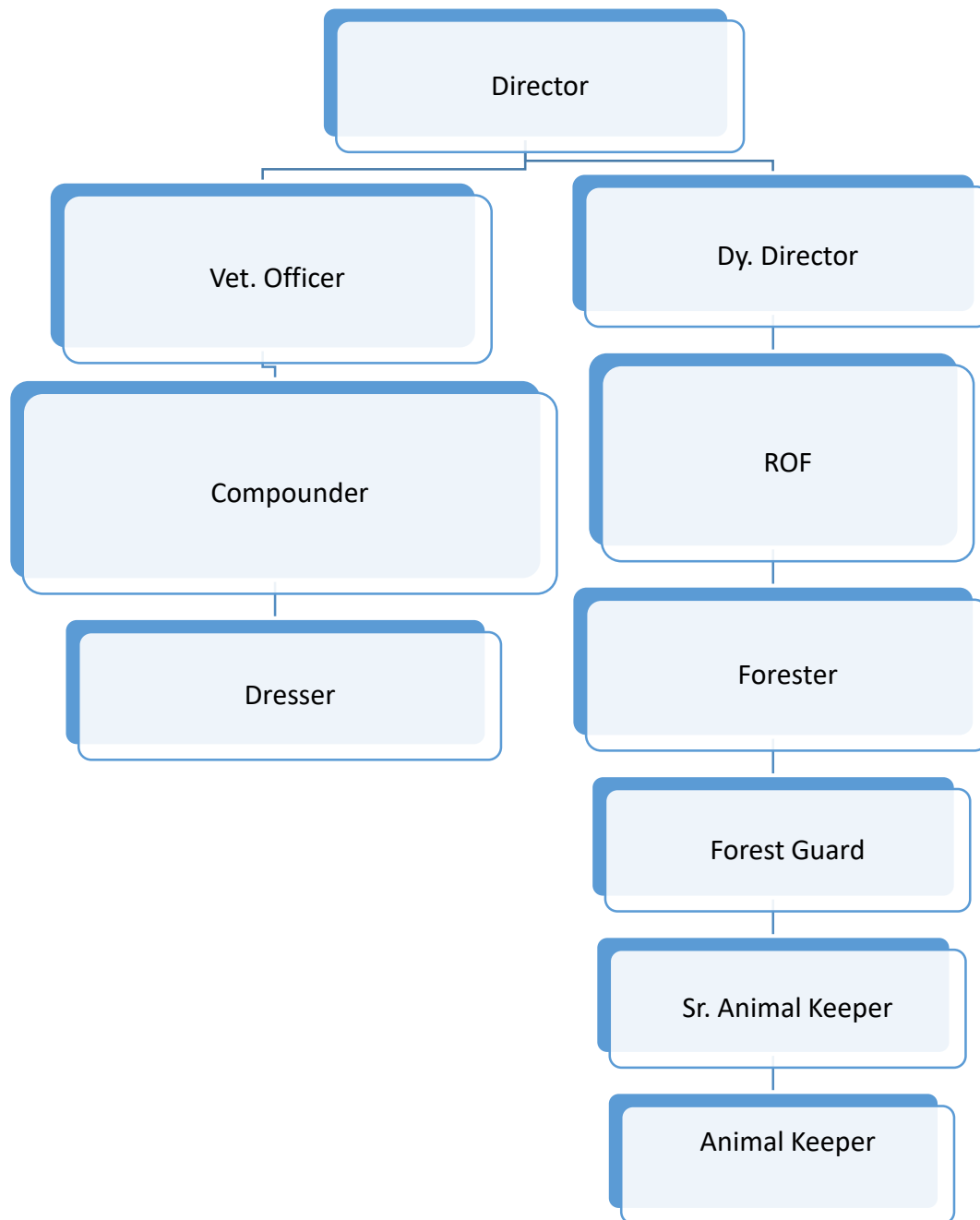
*“Zoo Operator” means the person who has ultimate control over the affairs of the zoos provided that\_\_\_\_\_*

*I. in the case of a firm or other association of individuals, any one of the individual partners or members thereof; or*

*II. in the case of a company, any director, manager, secretary or other officer, who is in-charge of and responsible to the company for the affairs of the zoo; or*

*III. In case of zoo owned or controlled by the Central Government or any State Government or Union Territory Administration or any Trust or Society funded by the Central Government or a State Government or a Union Territory Administration, the Secretary of the concerned Department of that Government, or as the case may be the Union Territory Administration, shall be deemed to be the Zoo Operator.*

## 7. Organizational Chart





## 8. Human Resources

### Manpower of the Zoo\*

Sl.No.	Designation	No. of sanctioned Post	No. of Post held	No. of Vacancy	Names of the incumbent
1	Director	1	1	0	Sri Amit Kumar
2	Dy. Director	1	1	0	Sri R.K. Sinha
3	Vet. Officer	2	2	0	1 Dr. R.K. Pandey 2 Dr. S.B. Singh
4	ROF	2	2	0	1 Sri Anand Kumar 2 Sri Rajesh Pd. Choudhary
5	Biologist	1	0	1	-
6	Zoo Education Officer	1	0	1	-
7	Asst. Nature Education Officer	1	0	1	-
8	Head Clerk	1	0	1	-
9	Stenographer	1	0	1	-
10	Clerk	7	6	1	1 Sri N.K. Sharma, 2 Sri S.K. Srivastawa, 3 Smt. Kalawati Devi 4 Smt. Shruti Kumari 5 Sri Vivek Sharma 6 Sri Nikunj Kumar
11	Forester	5	3	2	1 Sri Rampati Rajak, 2 Sri Arun Kumar, 3 Sri Jang Bahadur Ram,
12	Vet. Compounder	4	0	4	-
13	Driver	5	2	3	1 Sri Awadh Kishore Singh, 2 Sri Mahboob Alam
14	Forest Guard	16	16	0	1. Sri Jitendra Kr. Mahto 2. Sri Ram Kumar 3. Sri Sanjeev Kr. Singh 4. Sri Omprakash Kumar 5. Sri Rupesh Kumar 6. Sri Sonu Kumar 7. Sri Ajit Kumar 8. Ms. Rizwana Khatun 9. Ms. Rimjhim Kumari 10. Ms. Payal Kumari 11. Ms. Jyoti Kumari 12. Ms. Shila Kumari 13. Mrs. Puja Kumari 14. Sri Santosh Kumar 15. Sri Amit Kumar 16. Sri Sumit Kumar
15	Senior Animal Keeper	3	0	3	-
16	Animal Keeper	64	37	27	1 Sri Parmeshwar Ram 2 Sri Shatrughan Paswan 3 Sri Kishun Raut 4 Sri Raudi Ram 5 Sri Ashok Kumar

					6 Sri Suresh Prasad 7 Sri Subodh Prasad 8 Sri Chandradeo Singh 9 Sri Jagat Kishor Mahto 10 Sri Mukteshwar Singh 11 Sri Baijnath Paswan 12 Sri Bashiruddin 13 Sri Binda Rai 14 Sri Ram Prasad 15 Sri Qaisar Abbas 16 Sri Dinanath Paswan 17 Sri Musaffir Yadav 18 Sri Dipu Mahto 19 Sri Dinanath Prasad 20 Sri Dinesh Kumar 21 Sri Murari Prasad 22 Sri Rawan Kr. Singh 23 Sri Naresh Mochi 24 Sri Rajendra Singh 25 Sri Rajendra Prasad 26 Sri Ramesh Paswan 27 Sri Shiv Prasad 28 Sri Dasai Mahto 29 Sri Shakir Hussain 30 Sri Vijay Prasad 31 Sri Mahesh Jha 32 Sri Krishna Kumar Srivastav 33 Sri Abhimanyu Pandey 34 Sri Vishek Kumar 35 Sri Devnandan Bind 36 Sri Vikram Kumar 37 Sri Kunj Bihari
17	Mali	15	5	10	1 Sri Ram Binod Singh 2 Sri Shyam Sundar Prasad 3 Sri Brijnandan Rajak 4 Sri Budhan Choudhary 5 Sri Sahbir Ram
18	Pump Operator	2	1	1	Sri Umesh Prasad
19	Plumber	1	1	0	Sri Ramashray Ram
20	Museum Keeper	1	0	1	-
21	Electrician	1	0	1	-
22	Mahawat	3	2	1	1 Sri Ravindra Prasad 2 Sri Jawahar Rai
23	Chowkidar	3	2	1	1 Sri Bilat Thakur 2 Sri Ram Govind Ram
24	Peon	4	3	1	1 Sri Rakesh Kumar Jha 2 Smt. Kabutari Devi 3 Sri Birju Paswan
25	Sweeper	7	2	5	1 Sri Telesphor Topo 2 Sri Rajnandan Munda
26	Baira	2	2	0	1 Sri Arun Kumar 2 Sri Pramod Kumar
27	Cook	3	1	2	Sri Sushil Singh
28	Thela Chalak	1	1	0	Sri Munshi Ram
29	Sapera	1	1	0	Sri Madan Sharma

30	Dresser	1	1	0	Sri Dinesh Jha
31	Aquarium Attendant	3	2	1	1 Sri Rajnandan Sharma 2 Sri Bachcha Pd. Singh
32	Carpenter-cum-Welder	1	0	1	-
33	3D Theatre Technician	3	3	0	-
34	Technician	1	0	1	-
<b>Total</b>		<b>168</b>	<b>94</b>	<b>74</b>	

\*Please give abovementioned information in respect of all zoo personnel, from the Officer in-charge upto the Animal Keeper.

### 9. Capacity Building of zoo personnel

Sl.No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended

### 10. Zoo Advisory Committee – ----

- a. Date of constitution
- b. Members
- c. Dates on which Meetings held during the year

### 11. Health Advisory Committee–

- a. Date of constitution : - 07- 01-2005
- b. Date of Re-constitution : - 31-07-2020

#### c. Members :-

- i. Dr. Ali Ahmad Khan, President, Animal Health Advisory Committee
- ii. Dean, Bihar Veterinary College, Patna
- iii. Director, LRS, Patna
- iv. Dr. K.P. Mallik
- v. Dr. Anup Rai
- vi. Dr. Alka Sharan
- vii. Dr. Ajeet Kumar
- viii. Dr. Ramesh Tiwary
- ix. Dr. Gyandeo Singh
- x. Dr. Pallav Shekhar
- xi. Dr. Manoj Kumar

- xii. Dr. Kaushal Kumar
- xiii. Dr. Farid Ahmad Khan, (Homeopath)
- xiv. Veterinary Officer, Sanjay Gandhi Biological Park, Patna

### Dates on which Meetings held during the year

1) 14-10-2019

### 12. Statement of income and expenditure of the Zoo

Year	Total Revenue (Rs.)	Total Expenditure
2019-20	8,24,57,179/-	21,36,74,666/-

### 13. Daily feed Schedule of animals

Diet Chart of Sanjay Gandhi Biological Park, Patna							
Sl. No.	Name of animals	Feed Item	Quantity (per animal)				
			Winter		Summer		Fasting
			Per Day	Weekly	Per Day	Weekly	Every Monday
01	Lion	Beef (Buffalo)	11.000		8.000		
		Chicken	7.500		7.000		4.200
02	Tiger	Beef (Buffalo)	15.000		11.000		
		Chicken	0.000		0.000		1.000
	Tiger (cub)	Chicken	2.500		2.000		1.500
03	Bear	Cucumber	0.150		0.150		0.150
		Apple	0.400		0.700		0.400
		Banana	0.750		0.750		0.750
		Chana	0.075		0.150		
		Gur	0.700		0.700		
		Milk	3.000		2.500		0.750
		Atta Roti	1.000		0.750		0.750
		Badam	0.150		0.750		
		Rice	0.350		0.300		
		Papaya	0.150		0.350		
		Carrot	0.100				
		Chyawanprash	0.030				
		Egg	2				
Honey		0.100		0.100			

04	Leopard	Beef (Buffalo)	0.800		0.200		
		Chicken	2.000		2.000		1.150
05	Chimpanzee	Milk	0.750		0.750		0.750
		Rice	0.125		0.125		0.125
		Gur	0.075		0.075		0.075
		Banana	1.250		1.000		1.250
		Apple	0.750		0.500		0.750
		Pomegranate	0.750		1.000		1.000
		Onion	0.100		0.100		0.100
		Chana	0.050		0.050		0.050
		French Been	0.100		0.100		0.100
		Egg	2				
		Chyawanprash	0.030				
		Daav			2		
		Mango			0.750		
06	Hyena	Beef (Buffalo)	1.000		1.000		
		Chicken	1.000		1.000		1.000
07	Wolf	Chicken	2.500		2.500		2.500
		Beef (Buffalo)	0.500		0.500		
08	Monkey	Chana	0.050		0.050		0.050
		Badam	0.050		0.050		0.050
		Banana	0.500		0.500		0.500
		Cucumber	0.100		0.100		0.100
		Sweet Potato	0.100				0.100
		Guava			0.100		
		Atta Roti	0.100		0.100		0.100
09	Hippopotamus	Deermesh	5.500		5.500		1.600
		Banana	2.000		2.000		0.600
		Bhusa	7.000		7.000		7.000
		Choker	20.000				20.000
		Sudan Grass			50.000		
		Brinjal	0.200	Tue	0.200		
			0.200	Fri	0.200		
		Pumpkin	0.200	Wed	0.200		
			0.200	Sat	0.200		
		Potato	0.200	Thu	0.200		
			0.200	Sun	0.200		
10	Giraffe	Deermesh	1.000		0.800		1.000
		Chana	2.000		1.800		
		Wheat	1.000		0.600		
		Choker	1.000		1.000		1.000
		Moong	1.000		0.600		
		Banana	7.000		7.000		2.500
		Cucumber	2.000		2.000		2.000
		Apple	3.000		3.000		3.000

		Potato	0.600		0.600		0.600
		Cabbage	0.350		0.350		0.350
		Onion	0.150		0.150		0.150
11	Rhinoceros	Deermesh	7.000		7.000		1.500
		Chana	1.500		1.500		1.000
		Atta	1.000		1.000		1.000
		Wheat	1.400		1.400		1.000
		Gur	0.600		0.600		0.500
		Besan	0.500		0.500		0.500
		Moong	0.050		0.050		
		Banana	1.500		1.500		1.500
		Bhusa	11.000		11.000		11.000
		Choker	5.500				5.500
		Sudan Grass			50.000		
		Barseem Grass	50.000				
12	Gaur	Deermesh	2.500		2.500		2.500
		Bhusa	10.000		10.000		10.000
		Gur	0.500		0.500		0.500
		Salt	0.150		0.150		0.150
		Banana	0.500		0.500		0.500
		Choker	2.000				2.000
		Sudan Grass			30.000		
13	Zebra	Deermesh	1.000		1.000		1.000
		Chana	1.500		1.500		1.500
		Wheat	1.000		1.000		1.000
		Moong	0.250		0.250		0.250
		Gur	0.500		0.500		0.500
		Bhusa	5.000		5.000		5.000
		Choker	3.000				3.000
		Sudan Grass			10.000		
14	Elephant	Deermesh	3.750		3.750		
		Paddy	12.500		12.500		12.500
		Banana	5.000		5.000		2.500
		Cucumber	2.500		2.500		2.500
		Atta Roti	2.000		2.000		2.000
		Sugarcane	25.000				25.000
		Sudan Grass			100.00		
		Banana Thumb			30.000		
		Bamboo leaf	10.000				
15	Vulture	Beef (Buffalo)	1.000		1.000		
16	Emu	Chana	0.200		0.200		
		Moong	0.070		0.070		
		Banana	2.350		2.350		0.200
		Onion	0.060		0.060		
		Garlic	0.020		0.020		

		Spinach	0.300		0.300		
		Egg	1				
17	Ghariyal	Rehu			1.500	Sun	
					1.500	Thu	
18	Jackle	Beef (Buffalo)	0.500		0.500		
19	Cassowary	Banana	2.000		2.000		
		Chana Sattu	0.250		0.250		
		Spinach	0.500		0.500		
20	Ostrich	Banana	1.250		1.250		0.250
		Wheat	0.150		0.150		
		Bajra	0.075		0.075		
		Chana	0.250		0.250		0.250
		Moong	0.150		0.150		0.150
		Maize	0.250		0.250		
		Atta Roti	0.200		0.200		
		Poultry feed	0.375		0.375		0.375
		Onion	0.150		0.150		
		Garlic	0.025		0.025		
		Spinach	0.500		0.500		
		Tomato	0.125		0.125		
21	Peafowl	Bajra	0.050		0.050		
		Wheat	0.150		0.150		
		Paddy seed	0.050		0.050		
		Onion	0.125		0.125		
		Garlic	0.025		0.025		
		Spinach	0.250		0.250		
22	Rosy Pelican	Rehu	1.500				
23	Sarus Crane	Maize Darra	0.100				
		Poultry feed	0.750				
24	Deer Hog	Deermesh	0.600		0.600		0.600
		Bhusa	0.150		0.150		0.150
		Chokar	0.175		0.175		
		Chana	0.175		0.175		
		Wheat	0.060		0.060		
25	Deer Barking	Deermesh	0.600		0.600		0.600
		Bhusa	0.150		0.150		0.150
		Chokar	0.175		0.175		
		Chana	0.175		0.175		
		Wheat	0.060		0.060		
26	Deer Spotted	Deermesh	0.400		0.400		
		Bhusa	0.700		0.700		0.700
		Chokar	0.300		0.300		
27	Deer Swamp	Deermesh	1.200		1.200		
		Bhusa	0.300		0.300		0.300
		Chokar	0.700		0.700		0.700

		Gur	0.030		0.030		0.030
28	Sambhar Deer	Deermesh	1.100		1.100		
		Bhusa	1.700		1.700		1.700
		Chokar	1.000		1.000		
		Gur	0.030		0.030		
29	Black Buck	Deermesh	0.450		0.450		
		Bhusa	0.500		0.500		0.500
		Chokar	0.250		0.250		
30	Deer Sangai	Deermesh	2.000		2.000		2.000
		Chana	1.250		1.250		1.250
		Gur	0.250		0.250		0.250
31	Black Swan	Banana	0.500		0.500		0.500
		Chana	0.100		0.100		
		Wheat	0.150		0.150		
		Moong	0.150		0.150		
		Spinach	0.500		0.500		
32	Otter	Rehu	3.000		3.000		
33	Muggar	Beef (Buffalo)				1.500 (twice in a week)	
34	Sand boa	Chick	1	Thu	1	Thu	
			1	Sun	1	Sun	
35	Cobra	Guinea pig	5	Thu	5	Thu	
			5	Sun	5	Sun	
		Chick	2	Thu	2	Thu	
			2	Sun	2	Sun	
36	Python	Cockerel	1.000	Thu	1.000	Thu	
			1.000	Sun	1.000	Sun	
37	Russell Viper	Guinea pig	10	Thu	10	Thu	
			10	Sun	10	Sun	
38	Rat Snake	Chick	3	Thu	3	Thu	
			3	Sun	3	Sun	
39	Goh	Rehu	0.250	Thu	0.250	Thu	
			0.250	Sun	0.250	Sun	
40	Hill Myna	Chana Sattu	0.075		0.075		0.020
		Banana	0.200		0.200		0.050
41	Haril	Chana Sattu	0.040		0.040		0.010
		Banana	1.000		1.000		0.125
42	Dhanesh	Chana Sattu	0.100		0.100		0.030
		Banana	2.500		2.500		0.750
43	Small Birds (Budgeriger, Cockatiel, Love Bird)	Paddy seed	0.100		0.100		
		Kauni	0.425		0.425		
		Bajra	0.225		0.225		
		Chinna	0.200		0.200		



44	Birds (Illiger's Macaw, Scarlet Macaw, Cockatoo)	Chana	0.500	0.500		
		Badam	1.100	1.100		
		Apple	1.500	1.500		1.500
		Papaya	1.250	1.250		
		Chilli	0.125	0.125		0.125
		French Bean	0.250	0.250		0.250
		Sugarcane	1.000	1.000		1.000
45	(Kalij Pheasant, Silver Pheasant, White Peafowl)	Maize Darra	0.400	0.4		
		Bajra	0.100	0.100		
		Paddy seed	0.500	0.500		
		Kauni	0.100	0.100		0.100
		Wheat	0.750	0.750		
		Poultry feed	0.750	0.750		
		Birdmesh	0.500	0.500		
		Onion	0.350	0.350		
		Garlic	0.100	0.100		
		Spinach	1.000	1.000		
		Egg	2	2		
		Green Salad				4.000
46	Buzzard	Day ond Chick	2	2		2
47	Owl	Day ond Chick	2	2		2
48	Kite	Beef (Buffalo)	0.200	0.200		0.200
49	Golden Cat	Chicken	1.000	1.000		1.000
50	Leopard Cat	Chicken	1.000	1.000		1.000
51	Jungle Cat	Chicken	1.000	1.000		1.000
52	Sahil	Banana	1.000	1.000		
		Cucumber	0.300	0.300		
		Chana	0.060	0.060		
		Badam	0.125	0.125		
		Apple	0.300	0.300		
		Sweet Potato	0.300	0.300		
		Potato	0.190	0.190		
		Atta Roti	0.125	0.125		
53	Civet Cat	Banana	0.750	0.750		
		Apple	0.250	0.250		

#### 14. Vaccination Schedule of animals

Sl.No.	Species	Disease vaccinated for	Drug	Periodicity	Quantity & Variation
01	Feline (Big Cat)	Feline rhinotracheitis virus, Feline calici virus, Panleucopenia virus	Feligen CRP	Annually	1 does per adult
		Trypanosoma (Surra)	2. Antitryps =Triquin		0.25 ml per 10 kg body wt.
02	Elephant	Tetnus	1. Tet-vac	Annually	2 ml per adult
		Foot & Mouth disease	2. FMD Vaccine		2 ml per adult

#### 15. De-worming Schedule of animals

Sl.No.	Species	Drug used	Periodicity	Quantity & Variation
01	Lion (adult)	Fenbendazole	Quarterly	1.5 gm for three days
02	Tiger (adult)	Fenbendazole	Quarterly	1.5 gm for three days
03	Leopard (adult)	Fenbendazole	Quarterly	750 mg per for 3 days
04	Birds (Companion birds)	Worm out Gel 20 gm/L praziquantel 20 gm/L oxfendazole	Quarterly	2 ml in 160 ml water 5 mg per kg body wet
05	Ungulates	Fenbendazole/Ivermectin	Quarterly	Fenbendazole -5 mg/kg body wt. Ivermectin - 1 mg / 5 kg body wt.
06	Rhinoceros	Fenbendazole	Quarterly	9 gm per adult
07	Elephant	Fenbendazole	Quarterly	12 gm per adult
08	Bison (adult)	Fenbendazole/Ivermectin / Albendazole	Quarterly	Fenbendazole - 3 gm Ivermectin. - 100 mg Albendazole - 3 gm
09	Giraffe ( adult)	Fenbendazole	Quarterly	2.5-3 gm per adult
10	Hippo	Fenbendazole	Quarterly	8 gm per adult

11	Jungle Cat	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	1/2 tab. for 3 days
12	Leopard Cat	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	1/2 tab. for 3 days
13	Sahil	Mebex Mebendazole - 100 mg	Quarterly	1/2 tab. per adult
14.	Fishing Cat	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	1 tab. per adult
15.	Indian Fox	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	1/2 tab. for 3 days
16	Zebra	Fenbendazole/Ivermectin	Quarterly	Fenbedazole - 1.5 gm Ivermectin - 80 mg
17	Cassowary	Mebex Mebendazole - 100 mg	Quarterly	150 mg
18	Emu	Mebex Mebendazole - 100 mg	Quarterly	150 mg
19	Ostrich	Mebex Mebendazole - 100 mg	Quarterly	200 mg per adult
20	Rosy Pelican	Mebex Mebendazole - 100 mg	Quarterly	100 mg per bird
21	Sloth bear	Fenbendazole/Ivermectin	Quarterly	1.5 gm per adult / 50 mg per adult
22	Himalayan Bear	Fenbendazole/Ivermectin	Quarterly	1.5 gm per adult / 60 mg per adult
23	Chimpanzee	Albendazole	Quarterly	400 mg for per adult
24	Hyena	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	2 tab. per adult for 3 days
25	Wolf	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	2 tab. per adult for 3 days
26	Squirrel	Ivermectin	Quarterly	1-2 mg
27	Jackle	Fantas Plus Fenbendazole - 150 mg Praziquantel - 50 mg	Quarterly	2 tab. for 3 days
28	Monkey & Langoor	Albendazole	Quarterly	5-7 mg per kg body wt.
29	Peafowl & Pheasant	Albendazole	Quarterly	5 mg per kg body wt.

**Note :- Faecal sample for examination on 2nd week of March, June, September , December and subsequent deworming done on 3rd week of the month. After deworming adjunct medication is followed.**

### 16. Disinfection Schedule

Sl.No.	Species	Drug	Periodicity	Quantity & Variation
01	Ungulates	Turning of soil and lime treatment	Quarterly	As needed
		Moat cleaning	Every Monday	
02	Birds	Kohrsolin-TH	fortnightly	100 ml per 10 litre of water as spray for regular disinfection
		Turning of soil and lime treatment	Quarterly	As needed
03	Feline , Canidae	Nighthouse disinfection by blow gun firing followed by turmeric powder spray.	Every Monday	As needed
		Outdoor encloser- soil and lime treatment	Quarterly	As needed

**Note :- As per requirement disinfection is performed before the schedule time.**

### 17. Health Check-up of employees for zoonotic diseases

Sl.No.	Name	Designation	Date of Health Check up	Findings of Health Check up
Nil				

### 18. Development Works carried out in the zoo during the year

Sl. No.	Work done
1	Completion of highly ambitions Rhino Breeding Centre.
2	Operationalization of trackless toy train at the Zoo.
3	Completion and Operationalization of the Souvenir Shop.
4	Completion of Snake house, Giraffe enclosure extension.
5	Through constant persuasion got the scheme sanctioned from CZA related to new Ghariyal, Hyena, Wolf and Jackal enclosures for 2019-20 financial year.
6	New enclosure for Green anaconda, Rhino iguana, Nile crocodile, Royal python etc.
7	Renovation of food go-down.
8	Road widening

9	Fully Wi-Fi Campus
10	Signage's (QR Code)
11	Operationalization of 3D Theatre
12	Renovation of Canteen
13	Construction work for keeping Double horn Rhinoceros to be received from Vietnam.
14	Fully air conditioned Library.
15	Patna Zoo is in the process to cover entire Zoo with CCTV and public addressal system for better protection.

## 19. Education and Awareness programmes during the year

A Zoo Education Centre has been established in the Park where wildlife awareness activities are being carried out, especially among the school children by film show related to wildlife three days in a week.

## 20. Important Events and happenings

Following events were organised during the year:-

### 1. Tiger Day (29 July 2019)





## 2. Rhino Day (22 September 2019)



## 21. Seasonal special arrangements for upkeep of animals

Diet control (addition and deletion of food items as per seasonal requirement) together with husbandry practices (Introduction of coolers, fans and room heaters, covering of windows and open spaces, trimming of large trees for proper sunbath are some activities done as per seasonal requirements) are under practice as seasonal special arrangements for upkeep of animals.

## 22. Research Work carried out and publications

Patna Zoo is in process to sign a memorandum of understanding with Patna Veterinary College to carry out research work on the wild animals kept at Zoo. A book based on the control of 'Man-Elephant Conflict' has been published.

## 23. Conservation Breeding Programme of the Zoo

Captive breeding of Greater one-horned rhinoceros in Sanjay Gandhi Biological Park has helped it to acquire global recognition. First pair of the pachyderm was brought to the park in 1979 and its breeding started in 1988. The park houses the highest number of individuals of the species in captivity after San Diego Zoo, California, U.S.A.

Breeding of endangered and rare animals is prime focus of the park. The park is one of the best breeding centres of the Greater One-horned Rhinoceros in the world. Breeding of the species started way back in 1988. The park witnessed the birth of two calves in 2011 and three calves in 2013. At present the zoo houses 12 rhinoceros (6 males and 6 females) of four different bloodlines. The following table Breeding Successfully enlists the species bred successfully in the park.

<b>Breeding Successfully (Births in the last 5 years till 31.03.2020)</b>							
<b>SL.NO.</b>	<b>NAME OF ANIMALS</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>TOTAL</b>
01	Peafowl	0	0	0	0	2	<b>2</b>
02	Bear- Sloth	0	0	2	2	2	<b>6</b>
03	Black Buck	2	5	5	2	1	<b>15</b>
04	Cat Jungle	0	5	2	0	2	<b>9</b>
05	Cat Leopard	0	0	0	0	0	<b>0</b>
06	Deer Swamp (Barasingha)	5	1	4	4	4	<b>18</b>
07	Rhinoceros-Indian one horned	0	0	3	0	0	<b>3</b>
08	Tiger-Royal Bengal	0	1	0	0	0	<b>1</b>
09	Tiger-white	0	4	0	0	0	<b>4</b>
10	Crocodile-Long snouted-Ghariyal	0	0	5	0	0	<b>5</b>
11	Budgerigar	0	0	0	5	0	<b>5</b>
12	Duck Mallard	0	0	1	0	12	<b>13</b>
13	Deer-Barking	2	1	4	2	3	<b>12</b>
14	Deer-Hog	1	2	5	6	2	<b>16</b>
15	Deer-Sambar	3	3	1	4	3	<b>14</b>
16	Deer-Spotted	2	4	3	3	7	<b>19</b>
17	Hippopotamus	0	0	0	1	0	<b>1</b>
18	Hyena-Stripped	2	0	2	0	4	<b>8</b>



19	Nilgai- Blue Bull	0	0	2	2	0	4
20	Giraffe	0	1	2	0	2	5
21	Emu	0	0	0	0	3	3
22	Indian Wolf	0	0	0	0	4	4

#### 24. Animal acquisition / transfer / exchange during the year 2019-20

A.	Animals arriving in the Zoo				
	H.No.	Species	Number (M:F:U)	Acquisition from	Date of arrival in the Zoo
		Zebra	0:1:0	Alipore Zoo Kolkata	27-06-2019
		Royal Bengal Tiger	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		Lion Tailed Macaque	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		Grey Wolf	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		Reticulated Python	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		White Peafowl	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		Ostrich	1:1:0	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		Painted Stork	0:0:5	Anna Zoological Park, Vandalur, Chennai	30-08-2019
		One horned Rhinoceros	1:0:0	Assam State Zoo, Guwahati	06-12-2019
		Himalayan Black Bear	1:1:0	Assam State Zoo, Guwahati	06-12-2019
		Sloth Bear	1:0:0	Bettiah Division	13-02-2020
		Sangai (Manipur Deer)	4:3:0	Assam State Zoo, Guwahati	28-02-2020
B.	Animals going from the Zoo				
	H.No.	Species	Number (M:F:U)	Disposal to	Date of desposition from the Zoo
		Royal Bengal Tiger	1:0:0	Alipore Zoo, Kolkata	24-06-2019
		Black Buck	3:3:0	Alipore Zoo, Kolkata	24-06-2019
		Deer Sambar	1:1:0	Alipore Zoo, Kolkata	24-06-2019
		One horned Rhinoceros	0:1:0	Anna Zoological Park, Vandalur, Chennai	01-09-2019
		Ghariyal	1:2:0	Anna Zoological Park, Vandalur, Chennai	01-09-2019
		Giraffe	0:1:0	Assam State Zoo, Guwahati	25-11-2019
		Ghariyal	1:2:0	Assam State Zoo, Guwahati	02-03-2020
		Black Buck	1:2:0	Assam State Zoo, Guwahati	02-03-2020
	Swamp Deer	1:2:0	Assam State Zoo, Guwahati	02-03-2020	

## 25. Rescue and Rehabilitation of wild animals carried out by the Zoo during 2019-20

Sl. No.	Name of Animals	No. of Rescue
1	Langur	09
2	Monkey	21
3	Owl	02
4	Leopard	01
5	Elephant	02
6	Peacock	01
7	Fishing Cat	01
8	Vulture	01
9	Turtle	02
10	Cat	02
11	Kite	01
12	Civet Cat	04
13	Snake	58
14	Nilgai	01
15	Monitor Lizard	02
<b>Total</b>		<b>108</b>

## 26. Annual Inventory of animals

Form – II  
[See Rule 11(1)]  
Part – A

Inventory Report for the Year : 2019-20

### SANJAY GANDHI BIOLOGICAL PARK, PATNA, BIHAR. ANNUAL INVENTORY REPORT- 31.03.2020

Animals listed under Schedule-I & Schedule-II of Wildlife (Protection) Act, 1972 Endangered species.

Sl. No.	Animal Name	Scientific Name	Stock as on 01.04.2019				During the Year												Stock as on 31.03.2020						
							Births			Acquisitions			Disposals			Deaths									
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T			
<b>BIRDS</b>																									
01	Buzzard	<i>Butastur teesa</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
02	Myna-Hill	<i>Gracula religiosa</i>	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
03	Hornbill- Common Grey	<i>Tockus birostris</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
04	Hornbill-Indian pied	<i>Anthracoseros malabaricus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
05	Kite-Pariah/Black Kite	<i>Milvus migrans</i>	4	6	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	2	12	
06	Kite-Black Winged	<i>Elanus caeruleus</i>	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	
07	Peafowl	<i>Pavo cristatus</i>	3	3	0	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	3	2	8	
08	Peafowl-white	<i>Pavo cristatus</i>	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	0	3	
09	Red Jungle fowl	<i>Gallus gallus</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	2		
10	Owl Eagle Forest	<i>Bubo nipalensis</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
11	Vulture Himalayan Grffon	<i>Gyps himalayensis</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
12	Pheasant Grey Peacock	<i>Polyplectron bicalcaratum</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
<b>TOTAL BIRDS</b>			<b>13</b>	<b>21</b>	<b>4</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>13</b>	<b>21</b>	<b>6</b>	<b>40</b>			
13	Bear-Himalayan Black	<i>Selenarctos thibetanus</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	2	
14	Bear- Sloth	<i>Melursus ursinus</i>	4	2	0	6	0	1	1	1	0	0	0	0	0	0	0	1	5	3	0	8			
15	Black Buck	<i>Antilope cervicapra</i>	25	27	7	59	0	0	1	0	0	0	4	5	0	3	7	0	15	20	6	41			
16	Cat Jungle	<i>Felis chaus</i>	3	3	0	6	0	0	2	0	0	0	0	0	0	0	0	0	3	3	2	8			
17	Cat Leopard	<i>Prionailurus bengalensis</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		

18	Civet-Common Palm	<i>Paradoxurus hermaphroditus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
19	Deer Brow-antlered (Sangai)	<i>Cervus eldi thamin</i>	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	4	3	0	7
20	Deer Swamp (Barasingha)	<i>Rucervus duvaucelii</i>	4	7	4	15	0	0	4	0	0	0	1	2	0	2	1	0	4	9	0	13
21	Gaur Indian	<i>Bos frontalis gaurus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
22	Elephant-Indian	<i>Elephas maximus</i>	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
23	Jackal	<i>Canis aureus</i>	2	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	6
24	Langur-Common	<i>Presbytis entellus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
25	Leopard / Panther	<i>Panthera pardus</i>	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5
26	Lion-Hybrid	<i>Panthera leo</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
27	Lion Indian	<i>Panthera leo persica</i>	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
28	Macaque-Assamese	<i>Macaca assamensis</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
29	Macaque-Lion tailed	<i>Macaca silenus</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2
30	Macaque-Rhesus	<i>Macaca mulatta</i>	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4
31	Otter smooth Indian	<i>Lutra perspicillata</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
32	Rhinoceros-Indian one horned	<i>Rhinoceros unicornis</i>	6	6	0	12	0	0	0	1	0	0	0	1	0	1	0	0	6	5	0	11
33	Tiger-Royal Bengal	<i>Panthera tigris tigris</i>	1	1	0	2	0	0	0	1	1	0	0	0	0	0	0	0	2	2	0	4
34	Tiger-white	<i>Panthera tigris tigris</i>	1	3	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	3
35	Wolf Indian	<i>Canis lupus</i>	1	1	0	2	2	2	0	1	1	0	0	0	0	2	2	0	2	2	0	4
36	Indian Fox	<i>Vulpes bengalensis</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
37	Fishing Cat	<i>Prionailurus viverrinus</i>	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
<b>TOTAL MAMMALS</b>			<b>60</b>	<b>68</b>	<b>11</b>	<b>139</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>10</b>	<b>7</b>	<b>0</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>9</b>	<b>10</b>	<b>1</b>	<b>57</b>	<b>70</b>	<b>8</b>	<b>135</b>
<b>REPTILES</b>																						
38	Cobra-Indian	<i>Naja naja</i>	4	6	4	14	0	0	0	0	0	0	0	0	0	0	0	0	4	6	4	14
39	Crocodile-Long snouted-Ghariyal	<i>Gavialis gangeticus</i>	4	18	43	65	0	0	0	0	0	0	2	4	0	0	1	2	2	13	41	56
40	Crocodile-Marsh-Muggar	<i>Crocodylus palustris</i>	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
41	Monitor Water Lizard	<i>Varanus salvator</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
42	Python-Indian Rock	<i>Python molurus</i>	3	2	12	17	0	0	0	0	0	0	0	0	0	0	1	0	3	1	12	16
43	Reticulated Python	<i>Python reticulatus</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2
44	Snake Rat-Dhaman	<i>Ptyas mucosus</i>	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
45	Turtle- Indian soft-shelled	<i>Lissemys punctata</i>	35	25	250	310	0	0	0	0	0	0	0	0	0	0	0	0	35	25	250	310
46	Turtle- Ganges soft-shelled	<i>Aspideretes gangeticus</i>	5	8	8	21	0	0	0	0	0	0	0	0	0	0	0	0	5	8	8	21

47	Turtle- Three striped roof	<i>Batagur dhongoka</i>	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4
<b>TOTAL REPTILES</b>			<b>53</b>	<b>64</b>	<b>324</b>	<b>441</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>52</b>	<b>59</b>	<b>322</b>	<b>433</b>
<b>TOTAL ANIMALS</b>			<b>126</b>	<b>153</b>	<b>339</b>	<b>618</b>	<b>2</b>	<b>3</b>	<b>10</b>	<b>12</b>	<b>9</b>	<b>0</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>10</b>	<b>13</b>	<b>3</b>	<b>122</b>	<b>150</b>	<b>336</b>	<b>608</b>
<b>Other species</b>																						
<b>BIRDS</b>																						
01	Budgerigar	<i>Melopsittacus undulatus</i>	7	26	48	81	0	0	0	0	0	0	0	0	0	0	0	5	7	26	43	76
02	Cassowary	<i>Casuarus casuarus</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
03	Cockatiel	<i>Nymphicus hollandicus</i>	2	4	19	25	0	0	0	0	0	0	0	0	0	2	1	4	0	3	15	18
04	Crane-Common	<i>Grus grus</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05	Crane-Sarus	<i>Grus antigone</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
06	Duck-Brahmini	<i>Tadorna ferruginea</i>	4	3	0	7	0	0	0	0	0	0	0	0	0	0	1	0	4	2	0	6
07	Emerald Dove	<i>Chakophaps indica</i>	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
08	Emu	<i>Dromaius novaehollandiae</i>	2	2	1	5	0	0	3	0	0	0	0	0	0	1	0	0	1	2	4	7
09	Goose-Bar Headed	<i>Anser indicus</i>	5	4	0	9	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	9
10	Heron-Night	<i>Nycticorax nycticorax</i>	2	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4
11	Ibis-black	<i>Pseudibis papillosa</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12	Stork Adjutant (lesser)	<i>Leptoptilos javanicus</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
13	Painted Stork	<i>Mycteria leucocephala</i>	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5	5
14	Love Birds	<i>Agapornis</i>	2	4	16	22	0	0	0	0	0	0	0	0	0	0	0	0	2	4	16	22
15	Duck Mallard	<i>Anas platyrhynchos</i>	2	5	4	11	0	0	11	0	0	0	0	0	0	1	2	2	4	13	19	
16	Moorhen	<i>Gallinula chloropus</i>	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
17	Owl-Indian Great Horn	<i>Bubo bubo</i>	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
18	Owl Barn	<i>Tyto alba</i>	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
19	Parakeet-Blossom Headed	<i>Psittacula cyanocephala</i>	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18
20	Pelican-Rosy/white	<i>Pelecanus onocrotalus</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	1	0	2	1	0	3	
21	Pheasant-Golden	<i>Chrysolophus pictus</i>	7	5	0	12	0	0	0	0	0	0	0	0	0	0	0	0	7	5	0	12
22	Yellow-legged green Pigeon	<i>Treron phoenicoptera</i>	4	2	2	8	0	0	0	0	0	0	0	0	0	0	0	0	4	2	2	8
23	Pheasant-Silver	<i>Lophura nycthemera</i>	4	5	13	22	0	0	0	0	0	0	0	0	1	0	0	3	5	13	21	
24	Pheasant-Lady Amherst	<i>Chrysolophus amherstiae</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
25	Pigeon-Common Green	<i>Treron phoenicoptera</i>	1	0	4	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	4

26	Black Swan	<i>Cygnus atratus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
27	Ostrich	<i>Struthio</i>	0	2	0	2	0	0	0	1	1	0	0	0	0	0	1	0	1	2	0	3
28	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
29	Medium sulphur crested Cockatoo	<i>Cacatua galerita elonora</i>	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	
30	Greater sulphur crested Cockatoo	<i>Cacatua galerita galerita</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
31	Illiger's Macaw	<i>Primolium maracana</i>	0	0	10	10	0	0	0	0	0	0	0	0	0	0	1	0	0	9	9	
32	Scarlet Macaw	<i>Aro macao</i>	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	
33	Macaw Red & Green	<i>Spix's macaw</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
34	Finch Zebra	<i>Taeniopygia guttata</i>	1	0	18	19	0	0	0	0	0	0	0	0	1	0	1	0	0	17	17	
	<b>TOTAL BIRDS</b>		<b>58</b>	<b>71</b>	<b>176</b>	<b>305</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>13</b>	<b>53</b>	<b>67</b>	<b>182</b>	<b>302</b>
<b>MAMMALS</b>																						
35	Deer-Barking	<i>Muntiacus muntjak</i>	9	11	3	23	0	0	3	0	0	0	0	0	0	1	2	0	8	15	0	23
36	Deer-Hog	<i>Axis porcinus</i>	8	11	6	25	0	0	2	0	0	0	0	0	0	1	0	0	8	18	0	26
37	Deer-Sambar	<i>Cervus unicolor</i>	17	21	8	46	0	0	3	0	0	0	1	1	0	0	0	10	37	0	47	
38	Deer-Spotted	<i>Axis axis</i>	16	40	10	66	0	0	8	0	0	0	0	0	1	1	0	20	45	7	72	
39	Hippopotamus	<i>Hippopotamus amphibius</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	
40	Hyena-Stripped	<i>Hyaena hyaena</i>	3	1	0	4	1	3	0	0	0	0	0	0	1	0	0	3	4	0	7	
41	Nilgai- Blue Bull	<i>Boselaphus tragocamelus</i>	4	7	2	13	0	0	0	0	0	0	0	0	1	1	0	2	9	0	11	
42	Porcupine-Indian	<i>Hystrix indica</i>	3	4	7	14	0	0	0	0	0	0	0	0	0	0	0	3	4	7	14	
43	Zebra Grant	<i>Equus quagga boehmi</i>	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	1	0	2	
44	Giraffe	<i>Giraffa camelopardalis</i>	1	4	0	5	0	2	0	0	0	0	0	1	0	0	0	1	5	0	6	
45	Chimpanzee	<i>Pan troglodytes</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
	<b>TOTAL MAMMALS</b>		<b>65</b>	<b>102</b>	<b>36</b>	<b>203</b>	<b>1</b>	<b>5</b>	<b>16</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>59</b>	<b>141</b>	<b>14</b>	<b>214</b>
<b>REPTILES</b>																						
46	Sand Boa	<i>Eryx johini</i>	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	
47	Snake Water	<i>Enhydryis enhydryis</i>	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
48	Viper Russel's	<i>Viperarusselli</i>	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	
	<b>TOTAL REPTILES</b>		<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	
<b>TOTAL BIRDS</b>			<b>71</b>	<b>92</b>	<b>180</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>13</b>	<b>66</b>	<b>88</b>	<b>188</b>	<b>342</b>
<b>TOTAL MAMMALS</b>			<b>125</b>	<b>170</b>	<b>47</b>	<b>342</b>	<b>3</b>	<b>8</b>	<b>24</b>	<b>10</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>10</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>1</b>	<b>116</b>	<b>211</b>	<b>22</b>	<b>349</b>

<b>TOTAL REPTILES</b>	<b>53</b>	<b>64</b>	<b>348</b>	<b>465</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>52</b>	<b>59</b>	<b>346</b>	<b>457</b>
<b>GRAND TOTAL</b>	<b>249</b>	<b>326</b>	<b>575</b>	<b>1150</b>	<b>3</b>	<b>8</b>	<b>40</b>	<b>13</b>	<b>11</b>	<b>5</b>	<b>9</b>	<b>14</b>	<b>0</b>	<b>21</b>	<b>22</b>	<b>16</b>	<b>234</b>	<b>358</b>	<b>556</b>	<b>1148</b>





## 27. Mortality of animals

## SANJAY GANDHI BIOLOGICAL PARK, PATNA

## Details of death during 2019-20 (from 1st April, 2019 to 31st March, 2020)

Sl.No.	Species	Scientific Name	Sex	No.	Date of death	Cause of death as diagnosed through P.M.
01	Duck-Brahmini	<i>Tadoma ferruginea</i>	F	01	18.04.2019	Hunted by predator
02	Black Buck	<i>Antilope cervicapra</i>	F	01	26.04.2019	Mother rejection
03	Hog Deer	<i>Axis porcinus</i>	M	01	27.04.2019	Infighting
04	Budgeriger	<i>Melopsittacus undulates</i>	U	02	20.06.2019	Heat Stroke
05	Budgeriger	<i>Melopsittacus undulates</i>	U	03	21.06.2019	Heat Stroke
06	Blue Bull (Nilgai)	<i>Boselaphus tragocamelus</i>	M	01	30.06.2019	Cardiac arrest
07	Cat Leopard	<i>Prionailurus bengalensis</i>	M	01	04.07.2019	Old age associated with deep Pyoderma
08	Cockatiel	<i>Nymphicus hollandicus</i>	U	01	13.07.2019	Old age
09	Deer Swamp	<i>Rucervus duvaucelii</i>	F	01	15.07.2019	Mother rejection
10	Crocodile (Gharyal)	<i>Gavialis gangeticus</i>	U	01	18.07.2019	Cardiac respiratory failure
11	Pheasant Grey Peacock	<i>Polyplectron bicalcaratum</i>	M	01	19.07.2019	Old age
12	Pelican Rosy	<i>Pelecanus onocrotalus</i>	F	01	26.07.2019	Old age
13	Illiger's Macaw	<i>Primolium maracana</i>	U	01	06.08.2019	Ascitis
14	Black Buck	<i>Antilope cervicapra</i>	M	01	09.08.2019	Gravious injury due to infighting
15	Duck Mallard	<i>Anas platyrhynchos</i>	U	01	14.08.2019	Eaten by predator
16	Duck Mallard	<i>Anas platyrhynchos</i>	F	01	22.08.2019	Old age
17	Cockatiel	<i>Nymphicus hollandicus</i>	U	01	02.09.2019	Old age
18	Python Indian Rock	<i>Python molurus</i>	F	01	10.09.2019	Asphyxia
19	Blue Bull (Nilgai)	<i>Boselaphus tragocamelus</i>	F	01	16.09.2019	Old age
20	Deer Barking	<i>Muntiacus muntjak</i>	M	01	21.09.2019	Gravious injury
21	Ostrich	<i>Struthio camelus</i>	F	01	28.09.2019	Septicaemic shock
22	Cockatiel	<i>Nymphicus hollandicus</i>	F	01	29.09.2019	Old age
23	Deer Spotted	<i>Axis axis</i>	M	01	30.09.2019	Gravious injury
24	Deer Spotted	<i>Axis axis</i>	F	01	30.09.2019	Gravious injury
25	Pigeon Common Green	<i>Reron phoenicoptera</i>	M	01	09.10.2019	Old age
26	Cockatiel	<i>Nymphicus hollandicus</i>	M	01	14.10.2019	Old age
27	Deer Barking	<i>Muntiacus muntjak</i>	F	01	17.10.2019	Gravious injury due to infighting
28	Cockatiel	<i>Nymphicus hollandicus</i>	M	01	20.10.2019	Old age
29	Finch Zebra	<i>Fringillidae</i>	M	01	25.10.2019	Old age
30	Cockatiel	<i>Nymphicus hollandicus</i>	U	02	26.10.2019	Parasitic enteritis
31	Finch Zebra	<i>Fringillidae</i>	U	01	27.10.2019	Old age
32	Duck Mallard	<i>Anas platyrhynchos</i>	U	01	28.10.2019	Eaten by predator
33	Crocodile (Gharyal)	<i>Gavialis gangeticus</i>	U	01	29.10.2019	Asphyxia
34	Emu	<i>Dromaius novaehollandiae</i>	M	01	01.11.2019	Old age
35	Deer Barking	<i>Muntiacus muntjak</i>	F	01	22.11.2019	Gravious injury
36	Bear Sloth	<i>Melursus ursinus</i>	U	01	29.11.2019	Canabolism

37	Black Buck	<i>Antilope cervicapra</i>	F	01	01.12.2019	Gravious injury
38	Red Jungle Fowl	<i>Gallus gallus</i>	F	01	03.12.2019	Old age
39	Deer Swamp	<i>Rucervus duvaucelii</i>	M	01	07.12.2019	Old age
40	Black Buck	<i>Antilope cervicapra</i>	M	01	15.12.2019	Old age
41	Silver Pheasant	<i>Lophura nycthemera</i>	M	01	17.12.2019	Old age
42	Hyena-Stripped	<i>Hyaena hyaena</i>	M	01	26.12.2019	Pneumonia
43	Rhinoceros- Indian one horned	<i>Rhinoceros unicornis</i>	M	01	13.01.2020	Cardiac respiratory failure
44	Wolf Indian	<i>Canis lupuspallipes</i>	F	01	31.01.2020	Machenical Phenumonia
45	Wolf Indian	<i>Canis lupuspallipes</i>	F	01	03.02.2020	Broncho Phenumonia
46	Wolf Indian	<i>Canis lupuspallipes</i>	M	01	05.02.2020	E-coli
47	Wolf Indian	<i>Canis lupuspallipes</i>	M	01	07.02.2020	Respiratory failure
48	Crocodile (Gharyial)	<i>Gavialis gangeticus</i>	F	01	10.02.2020	Asphyxia
49	Black Buck	<i>Antilope cervicapra</i>	F	01	07.03.2020	Flea anaemia
50	Black Buck	<i>Antilope cervicapra</i>	F	01	10.03.2020	Flea anaemia
51	Black Buck	<i>Antilope cervicapra</i>	F	01	11.03.2020	Flea anaemia
52	Black Buck	<i>Antilope cervicapra</i>	M	01	23.03.2020	Septicemia
53	Black Buck	<i>Antilope cervicapra</i>	F	02	24.03.2020	Septicemia
54	Deer Swamp	<i>Rucervus duvaucelii</i>	M	01	30.03.2020	Old age suspected T.B.

## 28. Compliance with conditions stipulated by the Central Zoo Authority

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
Details enclosed as "Annexure- A"					

## 29. List of free living wild animals within the zoo premises:-

### (1) Free Range Birds of Sanjay Gandhi Biological Park, Patna.

Sl. No.	Common Name	Sch-IV	Status	IUCN/WPA Status
1	Little Cormorant	<i>Phalacrocorax niger</i>	R*2	Sch-IV
2	Indian Pond Heron	<i>Ardeola grayi</i>	R*1	Sch-IV
3	Cattle Egret	<i>Bulbulcus ibis</i>	RA1	Sch-IV
4	Little Egret	<i>Egretta garzetta</i>	R*2	Sch-IV
5	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	RM3	Sch-IV
6	Black (Paharia) Kite	<i>Milvus migrans</i>	RM1	Sch.- I
7	Shikra	<i>Accipiter badius</i>	RM2	Sch.-I
8	Bronze-winged Jacana	<i>Metopidius indicus</i>	R*2	Sch.-IV
9	Red-wattled Lapwing	<i>Vanellus indicus</i>	R*A1	Sch-IV

10	Yellow-footed Green Pigeon	<i>Treron phoenicoptera</i>	R*2	Sch-IV
11	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	R*A1	Sch-IV
12	Spotted Dove	<i>Streptopelia chinensis</i>	R*A1	Sch-IV
13	Alexandrine Parakeet	<i>Psittacula eupatria</i>	R*3	Sch-IV
14	Rose ringed Parakeet	<i>Psittacula krameri</i>	R1	Sch-IV
15	Common Hawk Cuckoo	<i>Hierococcyx (Cuculus) varius</i>	R*2	Sch-IV
16	Asian Koel (Koel)	<i>Eudynamys scolopacea</i>	R*1	Sch-IV
17	Greater Coucal	<i>Centropus sinensis</i>	R1	Sch-IV
18	Barn Owl	<i>Tyto alba</i>	R3-4	Sch-IV
19	Spotted Owlet	<i>Athene brama</i>	R1	Sch-IV
20	Asian Palm Swift	<i>Cypsiurus (parvus) batasiensis</i>	R2	Sch-IV
21	Common Kingfisher	<i>Alcedo atthis</i>	RM1	Sch-IV
22	Stork-billed Kingfisher	<i>Halcyon (Pelargopsis) capensis</i>	R3	Sch-IV
23	White-throated Kingfisher	<i>Halcyon symrnenensis</i>	R*1	Sch-IV
24	Green Bee-eater	<i>Merops orientalis</i>	R*M1	Sch-IV
25	Common Hoopoe	<i>Upupa epops</i>	RBW2	Sch-IV
26	Blue-throated Barbet	<i>Megalaima asiatica</i>	R2	Sch-IV
27	Black-rumped Flameback	<i>Dinopium benghalense</i>	N1	Sch-IV
28	Brown Shrike	<i>Lanius cristatus</i>	W2	Sch-IV
29	Eurasian Golden oriole	<i>Oriolus oriolus</i>	RMP2	Sch-IV
30	Black-hooked Oriole	<i>Oriolus xanthornus</i>	R*2	Sch-IV
31	Black Drongo (King-Crow)	<i>Dicrurus (adsimillis) macrocercus</i>	R*A1	Sch-IV
32	Asian Pied Starling	<i>Sturnus contra</i>	R*2	Sch-IV
33	Common Myna	<i>Acridotheres tristis</i>	R1	Sch-IV
34	Rufous (Indian) Treepie	<i>Dendrocitta vagabunda</i>	R2	Sch-IV
35	House Crow	<i>Corvus splendens</i>	RA**1	Sch.-V
36	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	R1	Sch-IV
37	Red-vended Bulbul	<i>Pycnonotuse cafer</i>	R1	Sch-IV
38	Jungle Babbler	<i>Turdoides striatus</i>	E1	Sch-IV
39	Red-throated Flycatcher	<i>Ficedula (Muscicapa) parva</i>	WP1	Sch-IV
40	Common Tailorbird	<i>Orthotomus sutorius</i>	R1	Sch-IV
41	Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	WP(B**?)1	Sch-IV
42	Oriental Magpie Robin	<i>Copsychus saularis</i>	RM1	Sch-IV
43	Olive-backed (Indian Tree) Pipit	<i>Anthus hodgisi</i>	MAW2	Sch-IV
44	White (Pied) Wagtail	<i>Motacilla alba</i>	S,W	Sch-IV

45	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	E2	Sch-IV
46	Pale-billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>	NA2	Sch-IV
47	Purple-rumped Sunbird	<i>Nectarinia zeylonica</i>	R2	Sch-IV
48	Purple Sunbird	<i>Nectarinia aslatica</i>	R*AM1	Sch-IV
49	House Sparrow	<i>Paser domesticus</i>	M1	Sch-IV

## Symbols

- E Endemic to the Indian subcontinent (resident unless otherwise indicated)  
N Near endemic (resident unless otherwise indicated)  
R Resident  
B Breeder  
S Summer visitor  
A Altitudinal migrant  
M Migrants within the subcontinent (e.g. breeds in the Himalays & winters in  
P Passage migrant  
W Winter visitor  
\* Subject to some (local) seasonal movement or nomadism  
\*\* Localised or patchily distributed (eg. B\*\*= breeds locally)  
? Status uncertain
- 1 Abundant or very common  
2 Common  
3 Fairly common  
4 Uncommon

### (2) Free Range Mammals of Sanjay Gandhi Biological Park, Patna

Sl. No.	Name of species	Scientific Name
1	Jackal	<i>Canis aureus</i>
2	Ruddy Mongoose	<i>Herpestus smithii</i>
3	Civet – Common Palm	<i>Paradoxurus hermaphroditus</i>
4	Stripped Squirrel	<i>Funambulus palmarum</i>
5	Jungle Cat	<i>Felis chaus</i>
6	Indian Flying Fox	<i>Pteropus giganteus</i>

**(3) Free Range Reptiles of Sanjay Gandhi Biological Park, Patna**

<b>Sl. No.</b>	<b>Name of species</b>	<b>Scientific Name</b>
1	Cobra	<i>Naja naja</i>
2	Goh- common	<i>Varanus sylvestris</i>
3	Bongarus Karait	<i>Bungarus caeruleus</i>
4	Rate snake	<i>Ptyas mucosus</i>
5	Water snake	<i>Enhydris enhydris</i>

**Compliance Report of the CZA observations arises vide F.No. 19-51/92-CZA(37)(Vol.VIII)(NS)/4738/2018 dated  
05.11.2018 for renewal of recognition of Patna Zoo**

Sl. No.	Relevant Schedule No.	Conditions	Action taken
<b>1. General requirements</b>			
1	10.1(6)	Proper drainage should be provided in all of the animal enclosures for liquid waste and storm water.	Proper drainage has been provided in maximum number of animal enclosures for liquid waste and storm water. Action is being taken for providing drainage system in rest of the enclosures.
<b>2. Administrative and Staffing Pattern</b>			
2	10.2(2)	Appropriately qualified persons should be put in place to carry out the functions of Biologist.	One post of Biologist has been sanctioned. Action is being taken to deploy the suitable person.
3	10.2(2)	Appropriately qualified persons should be put in place to carry out the functions of Education Officer.	One post of Zoo Education Officer has been sanctioned. Action is being taken to deploy the suitable person.
4	10.2(2)	The zoo should post an official with a Master's degree in Wildlife Science/Zoology as a full time Curator, solely responsible for looking after the upkeep of animals and maintenance of animal enclosures.	Mr. Anand Kumar, M.Sc. (Zoology) who is posted as Range Officer of Forests, Zoological Range in this zoo, is solely responsible for looking after the upkeep of animals and maintenance of animal enclosures.
5	10.2(3)	In case of the scientific and technical posts to be filled up by direct recruitment, the Recruitment Rule for such posts should provide for their career progression including the benefit of flexible complementing scheme for their promotions.	At the time of deployment of suitable person, recruitment Rules will be followed.

<b>3. Development and Planning</b>			
6	10.3(1)	The toy train track which is operating inside the Park should be suitably aligned and modified with provision of electric/battery operated locomotive and adequate interpreting facilities.	Steps are being taken to follow the guidelines. Presently it is non-operative.
7	10.3(1)	The water bodies inside the zoo should be properly maintained to attract free living water birds.	The water bodies inside the zoo are being maintained to attract free living water birds.
8	10.3(3)	The existing post-mortem room, located very near to the hospital, should be dismantled, and constructed away from the hospital and display area.	New postmortem room will be constructed soon.
9	10.3(6)	The zoo should prepare a Collection Plan of animals to be housed and displayed.	Complied.
10	10.3(6)	The zoo should make sincere efforts to execute the Collection Plan approved by the Central Zoo Authority particularly acquire mates for single animals.	Efforts are being taken to execute the Collection Plan approved by the Central Zoo Authority particularly to acquire mates for single animals. Recently mates for Gaur, Zebra & Tiger has been arranged from different zoos.
11	10.3(6)	The zoo should get a small Rescue Centre and small Isolation and Quarantine Wards for animals of different species that are received as rescued animals.	In process.
12	10.3(6)	If the rescued animal pertains to an endangered species, a report should be sent to the Central Zoo Authority.	Report will be sent to the Central Zoo Authority.
<b>4. Animal housing, display of animals and animal enclosures</b>			
13	10.4(1)	The zoo should make concerned efforts to nature immersing animal viewing facilities at exhibits of all species at the zoo.	Nature immersing animal viewing facilities has been provided at exhibits of the important species.
14	10.4(2)	Appropriately designed open, natural enclosures should be constructed for monkeys (Assamese, Stump tailed and Rhesus)	Construction of natural enclosures for monkeys (Assamese, Stump tailed and Rhesus) is in process.
15	10.4(2) & 10.4(8)	The zoo should construct a moated open-air enclosure for Jackals. Prior approval of the design should be taken before construction.	Complied.

16	10.4(2)	Barking deer enclosure which is covered from top looks quite dingy chain-link at the top of the exhibit to be removed.	Complied.
17	10.4(6)	The artificial artifacts like concrete structure should be replaced.	As per guidelines of the CZA, it will be done in near future.
18	10.4(9)	Viewing area of the visitors to the animal enclosures should be confined to one side only.	In most of the animal enclosures, viewing area of the visitors has been confined to one side only.
19	10.4(10)	The Zoo Operator should ensure that every enclosure in the zoo should bear a signboard displaying scientific information regarding the animals exhibited in it.	New signages has been installed in various enclosures.
<b>5. Upkeep and Healthcare of animal</b>			
20	10.5(1)	There should be provision of footbath of adequate size with proper disinfectant at entry and exist points of all animal houses.	Complied.
21	10.5(1)	The zoo should have a sufficient size functional freezer in the meat processing facility for storage of meat products and to keep cold until it is fed.	Complied.
22	10.5(1)	The partition wall in Hyena enclosure should be removed and the animals should be kept in viable social groups.	Complied.
23	10.5(1)	The zoo has single/single sex animals. Mates for single sex animals should be procured on priority basis.	Mates for single sex animals e.g. Zebra, Gaur etc. have been procured. We are in touch with other zoos for getting mates for other single sex animals.
24	10.5(2)	Properly designed meat processing room should be constructed at a reasonable distance from the food store with proper drainage facilities.	Complied.
25	10.5(4)	The feeding cells of the ungulate enclosures are located at prominent locations within the paddock. These should be demolished and appropriately designed feeding cells and kraals should be constructed at the end of the paddock away from the animal viewing area. All kraals should be covered on top by chain-link.	Complied.
26	10.5(8)	The zoo should have formal linkages through an MoU on healthcare, preventive, health management, surgical interventions, clinical tests, disease diagnosis and consultation in treatment and management during the period of convalescence.	Complied. MoU with the Bihar Veterinary College, Patna has been signed.



<b>6. Veterinary and infrastructure facilities</b>			
27	10.6(3)	The zoo should have basic dental instruments.	In process
28	10.6(3)	The zoo should construct a quarantine/isolation ward, away from the hospital/post-mortem room and display area.	In process
29	10.6(5)	The zoo should post one qualified Lab. Assistant to assist the Sr. Veterinary Officer/Veterinary Officer.	The post of Technician has been sanctioned which will be filled up with appropriate qualified person.
30	10.6(6)	The zoo should have formal MoU with the local veterinary college at the earliest for healthcare of zoo animals with following objectives a) Assistance in scientific diagnosis of diseases of serious nature and advice on the effective remedial treatment. b) Training and upgrading technical skills of animal health staff. c) Development of protocols for preventive medicines and vaccination.	Complied.
<b>7. Post-mortem and disposal of carcasses of animals</b>			
31	10.7(1)	The zoo should have a modern post mortem room, equipped with sufficient light and post mortem equipment.	Estimate will be submitted soon for modern post mortem room.
32	10.7(2)	The zoo veterinarian should have specialized knowledge and skills in wildlife pathology. He should be deputed for such skill development.	The Veterinarians posted in this zoo are being sent for skill development training from time to time.

<b>9. Acquisition and Breeding of Animals</b>			
33	10.9(1)	<p>The zoo shall keep in collection only such numbers and species for which appropriate housing facility exists. The Zoo Operator shall be responsible for ensuring that the number of animals of any species does not go beyond the carrying capacity of the enclosures available in the zoo and housing standards are not compromised for keeping the excessive numbers.</p> <p>The animals like Rhesus macaque, Sambar, Spotted deer and Blackbuck are over populated. Necessary efforts should be initiated for the decongestion.</p>	Observation made by the CZA is being followed. Excess of animals will be shifted to the newly constructed safari.
34	10.9(4)	The zoo should acquire mates for single and unpaired animals on priority basis and in the event of the zoo failing to find a mate for single and unpaired animal within a period of six months, the unpaired or single animal should be transferred or exchanged or given on breeding loan to any other zoo in accordance with the norms specified by the Central Zoo Authority in this regard.	Mates for single sex animals e.g. Zebra, Gaur etc. have been procured. We are in touch with other zoos for getting mates for other single sex animals.
35	10.9(4)	The zoo should provide mates for the Gaur, Zebra, Leopard Cat, Fishing Cat, Cassowary, Manipur Deer, Otter, Lion (Asiatic) etc.	Mates for single sex animals e.g. Zebra, Gaur etc. have been procured. We are in touch with other zoos for getting mates for other single sex animals. Manipur deer has been procured from Assam Zoo.
36	10.9(6)	The zoo should construct the Conservation Breeding Facility in off display area of the zoo for the Indian Rhino.	Complied.
37	10.9(6)	The zoo should prepare a detailed conservation breeding plan for Indian Rhino with the help of a population biologist. All the Rhinos at the zoo should be marked with transponders. The zoo should ensure regular exchange of animals with the participating zoos to safeguard against the inbreeding depression setting in the zoo populations.	The construction of Rhino Conservation and Breeding Centre has been completed. Proper care is being taken to avoid inbreeding.

<b>10. Research Activities</b>			
38	10.10(1)	The zoo should prepare a detailed zoo research plan for the zoo and execute it with the help of the Research Officer, Research Scholars and Biological Assistants. MoU should be signed in this regard with eminent Biological Research Institutions.	MoU has been signed with the Bihar Veterinary College, Patna.