

SANJAY GANDHI BIOLOGICAL PARK, PATNA

Annual Report for the year
2018-19



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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.

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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
Basic Information about the Zoo		
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
9	Distance from nearest	Airport: 2 Kms.
		Railway Station: 6 Kms.
		Bus Stand: 8 Kms.
10	Recognition Valid upto (Date)	30 th April, 2021
11	Category of zoo	'A'
12	Area (in Hectares)	153.00 Acres
13	Number of Visitors (Financial Year)	Adult : 17,70,679
		Adult Group: 2,64,049
		Children : 2,51,419
		Child Group: 1,61,853
		Total Indian : 24,48,000
		Total Foreigners : -

S.No.	Particulars	Information
		Total Visitors: 22,92,710
14	Visitors' Facilities Available in Zoo	<ol style="list-style-type: none"> 1. Purified water 2. Wheel chair to disabled person 3. Pram for small child. 4. Toilet 5. Clock room 6. Restaurant 7. Battery Operated Vehicle 8. Visitor's shed 9. First Aid 10. Children's Park 11. Library 12. Guide Map
15	Weekly Closure Day of the Zoo	Monday
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	Shri Amit Kumar, IFS Director, Sanjay Gandhi Biological Park, Patna
	Name of the Veterinary Officer	<ol style="list-style-type: none"> 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
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	Sinchani Bhawan, Patna.
19	Contact details/Phone number of Operator	0612-2217455/ Mob. 8986153174

S.No.	Particulars	Information
20	E-mail address of Operator	patnazoo@yahoo.com

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

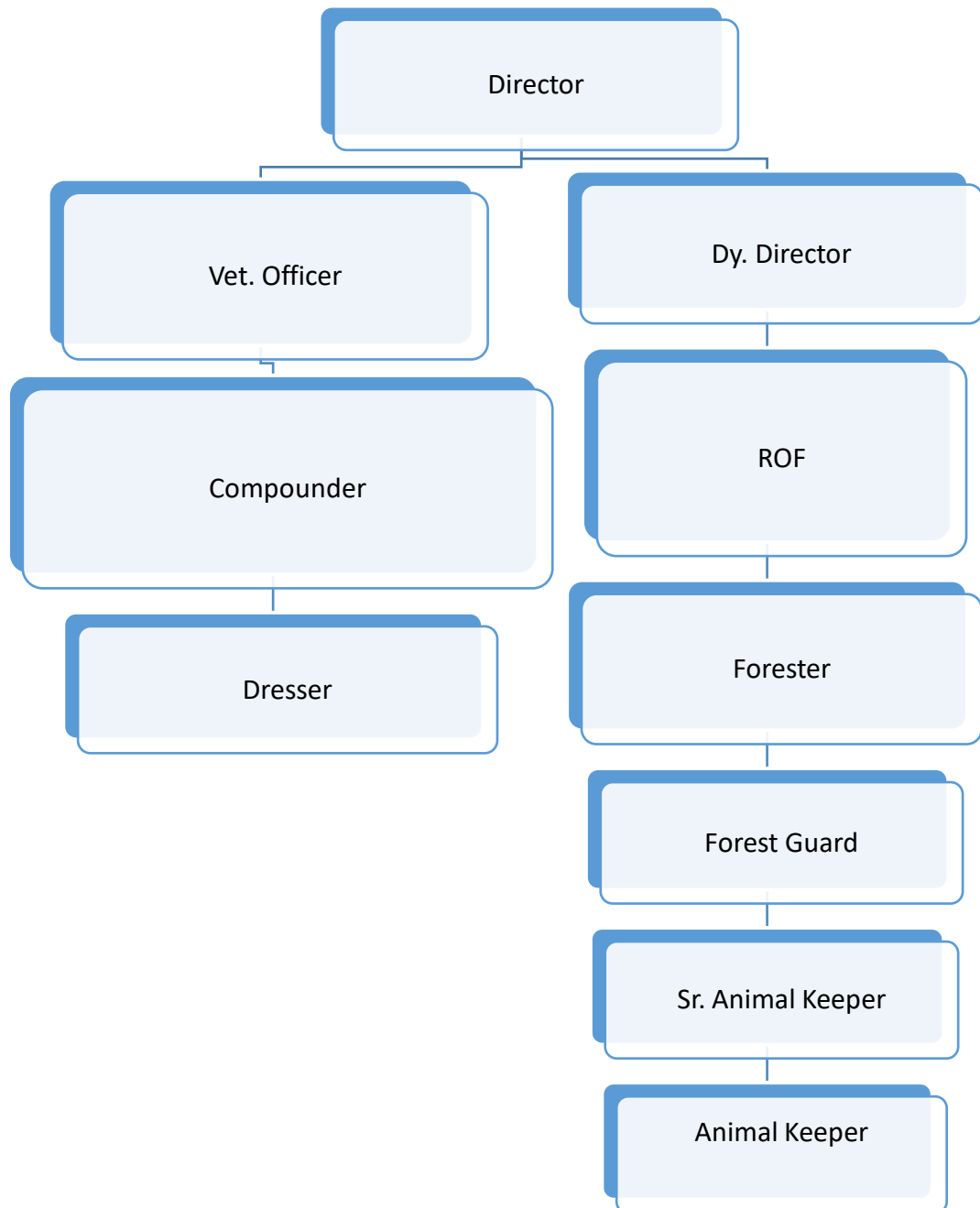
“Zoo Operator” means the person who has ultimate control over the affairs of the zoos provided that_____

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	Head Clerk	1	0	1	-
6	Stenographer	1	0	1	-
7	Clerk	7	3	4	1 Sri N.K. Sharma, 2 Sri S.K. Srivastawa, 3 Smt. Kalawati Devi
8	Forester	5	5	0	1 Sri Rampati Rajak, 2 Sri Rajaram Mandal, 3 Sri Arun Kumar, 4 Sri Jang Bahadur Ram,
9	Vet. Compounder	2	1	1	Sri Maksudul Hassan
10	Driver	5	2	3	1 Sri Awadh Kishore Singh, 2 Sri Mahboob Alam
11	Forest Guard	16	1	15	1. Sri Jitendra Kr. Mahto
12	Senior Animal Keeper	3	0	3	-
13	Animal Keeper	64	41	23	1 Sri Rajendra Gope 2 Sri Parmeshwar Ram 3 Sri Prabhu Dayal Rai 4 Sri Shatrughan Paswan 5 Sri Kishun Raut 6 Sri Raudi Ram 7 Sri Chandraket Singh 8 Sri Ashok Kumar 9 Sri Suresh Prasad 10 Sri Subodh Prasad 11 Sri Chandradeo Singh 12 Sri Jagat Kishor Mahto 13 Sri Mukteshwar Singh 14 Sri Baijnath Paswan 15 Sri Bashiruddin 16 Sri Binda Rai 17 Sri Ram Prasad 18 Sri Qaisar Abbas 19 Sri Dinanath Paswan 20 Sri Musaffir Yadav 21 Sri Dipu Mahto 22 Sri Dinanath Prasad 23 Sri Dinesh Kumar 24 Sri Murari Prasad 25 Sri Rawan Kr. Singh 26 Sri Naresh Mochi

					27 Sri Rajendra Singh 28 Sri Rajendra Prasad 29 Sri Rabindra Nath Singh 30 Sri Ramesh Paswan 31 Sri Shiv Prasad 32 Sri Dasai Mahto 33 Sri Shakir Hussain 34 Sri Vijay Prasad 35 Sri Mahesh Jha 36 Sri Krishna Kumar Srivastav 37 Sri Abhimanyu Pandey 38 Sri Vishek Kumar 39 Sri Devnandan Bind 40 Sri Vikram Kumar 41. Sri Kunj Bihari
14	Mali	15	6	9	1 Sri Panchu Das 2 Sri Ram Binod Singh 3 Sri Shyam Sundar Prasad 4 Sri Brijnandan Rajak 5 Sri Budhan Choudhary 6 Sri Sahbir Ram
15	Pump Operator	2	1	1	Sri Umesh Prasad
16	Plumber	1	1	0	Sri Ramashray Ram
17	Museum Keeper	1	0	1	-
18	Electrician	1	0	1	-
19	Mahawat	3	2	1	1 Sri Ravindra Prasad 2 Sri Jawahar Rai
20	Chowkidar	3	2	1	1 Sri Bilat Thakur 2 Sri Ram Govind Ram
21	Peon	4	3	1	1 Sri Bhim Ram 2 Sri Rakesh Kumar Jha 3 Smt. Kabutari Devi
22	Sweeper	7	4	3	1 Sri Raja Ram 2 Sri Prem Ram 3 Sri Telesphor Topo 4 Sri Rajnandan Munda
23	Baira	2	2	0	1 Sri Arun Kumar 2 Sri Pramod Kumar
24	Cook	3	1	2	1 Sri Sushil Singh
25	Thela Chalak	1	1	0	Sri Munshi Ram
26	Sapera	1	1	0	Sri Madan Sharma
27	Dresser	1	1	0	Sri Dinesh Jha
28	Aquarium Attendant	3	2	1	1 Sri Rajnandan Sharma 2 Sri Bachcha Pd. Singh
29	Carpenter-cum-Welder	1	0	1	-
Total		159	86	73	

*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
1	Sri Amit Kumar, IFS Director, SGBP, Patna	“Biodiversity Conservation” under the scheme on “Capacity Building in Forestry Sector” Foreign Training of Forestry Personnel (FTFP)	10-22 December, 2018 at Philippines and 24-25 December, 2018 at New Delhi.	Ministry of Environment, Forest & Climate Change (RT Division) Govt. of India. Operational with M/S Academics & Professional Studies Abroad (APSA), New Delhi
2	Dr. Samrendra Bahadur Singh, Veterinary Officer.	Skill Development Training Programme	29.10.2018 to 03.11.2018	CSIR-CCMB, Hyderabad
		Field Course: Interventions in Wild Animal Health.	27.01.2019 to 15.02.2019	Wildlife Institute of India, Dehradun.

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. Members :-

- 1) Dr. Ali Ahmed Khan (President)
- 2) Principal, Bihar Veterinary College, Patna
- 3) Dr. B.B. Verma Retd. Principal, Bihar Veterinary College, Patna
- 4) Dr. Lala Naresh Prasad, Retd. H.O.D, Pathology, Bihar Veterinary College, Patna
- 5) Dr. Samant Ray, H.O.D., Parasitology, Bihar Veterinary College, Patna
- 6) Director, I.A.H.P, Patna
- 7) Dr. Badri Prasad (Homeopath)

c. Dates on which Meetings held during the year

- 1) 13.10.2018 2) 29.12.2018

12. Statement of income and expenditure of the Zoo

Year	Total Revenue (Rs.)	Total Expenditure
2018-19	8,66,76,146/-	13,09,03,714/-

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				
04	Leopard	Honey		0.100		0.100	
		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
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 Been	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 enclouser- 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	Renovation of Snake House
2	Renovation of Canteen
3	Extension of Giraffe Cage
4	Construction of Shed near Giraffe Cage
5	Construction of Rhino Conservation & Breeding Centre.
6	Plantation on bank of road
7	Construction of Souvenir shop
8	Black topping of road.
9	Paver blocks on the bank of road
10	Beautification of 3D Theatre.

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 2018)





2. Rhino Day (22 September 2018)



3. Wildlife Week (02 – 08 October 2018)



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.

Breeding Successfully (Births in the last 5 years till 31.03.2019)							
SL.NO.	NAME OF ANIMALS	2014-15	2015-16	2016-17	2017-18	2018-19	TOTAL
01	Peafowl	4	0	0	0	0	4
02	Bear- Sloth	0	0	0	2	2	4
03	Black Buck	1	2	5	5	2	15
04	Cat Jungle	3	0	5	2	0	10
05	Cat Leopard	2	0	0	0	0	2
06	Deer Swamp (Barasingha)	3	5	1	4	4	17
07	Jackal	3	0	0	0	0	3
08	Loris Slow	1	0	0	0	0	1
09	Macaque-Rhesus	1	0	0	0	0	1
10	Rhinoceros-Indian one horned	0	0	0	3	0	3
11	Tiger-Royal Bengal	0	0	1	0	0	1
12	Tiger-white	0	0	4	0	0	4
13	Crocodile-Long snouted-Ghariyal	0	0	0	5	0	5
14	Budgerigar	0	0	0	0	5	5
15	Duck Mallard	0	0	0	1	0	1
16	Duck Muscovy	1	0	0	0	0	1

17	Pheasant-Silver	2	0	0	0	0	2
18	Deer-Barking	2	2	1	4	2	11
19	Deer-Hog	2	1	2	5	6	16
20	Deer-Sambar	4	3	3	1	4	15
21	Deer-Spotted	3	2	4	3	3	15
22	Hippopotamus	0	0	0	0	1	1
23	Hyena-Stripped	0	2	0	2	0	4
24	Nilgai- Blue Bull	2	0	0	2	2	6
25	Giraffe	0	0	1	2	0	3

24. Animal acquisition / transfer / exchange during the year 2018-19

A.	Animals arriving in the Zoo				
	H.No.	Species	Number (M:F:U)	Acquisition from	Date of arrival in the Zoo
		Gaur	1:0:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	08.12.2018
		Silver Pheasant	1:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	08.12.2018
		Yellow Pheasant	1:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	08.12.2018
		Lady Amhrest Pheasant	1:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	08.12.2018
		Heron Night	3:3:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	08.12.2018
B.	Animals going from the Zoo				
	H.No.	Species	Number (M:F:U)	Disposal to	Date of desposition from the Zoo
		Sloth Bear	1:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	11.12.2018
		Jungle Cat	0:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	11.12.2018
		Silver Pheasant	1:1:0	Sri Chamarajendra Zoological Gardens, Mysuru, Karnataka	11.12.2018
	Jackal	2:2:3	Free range	22.02.2019	

25. Rescue and Rehabilitation of wild animals carried out by the Zoo during 2018-19

1. Monkey	-	30
2. Langur	-	06
3. Elephant	-	05

4. Bear	-	02
5. Peacock	-	03
6. Spotted deer	-	02
7. Black buck	-	01
8. Jackal	-	03
9. Crocodile	-	01
10. Fishing Cat	-	01
11. Vulture	-	01
12. Turtle	-	02
13. Cat	-	02
14. Kite	-	01
15. Civet Cat	-	02
16. Snake	-	42
17. Monitor Lizard	-	<u>03</u>
Total		107

26. Annual Inventory of animals

Form – II
[See Rule 11(1)]
Part – A

Inventory Report for the Year : 1918-19

SANJAY GANDHI BIOLOGICAL PARK, PATNA, BIHAR.

ANNUAL INVENTORY REPORT- 31.3.2019

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

Sl. No.	Animal Name	Scientific Name	Stock as on				During the Year												Stock as on			
			01.04.2018				Births			Acquisitions			Disposals			Deaths			31.03.2019			
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
BIRDS																						
01	Buzzard	<i>Butastur teesa</i>	1	2	0	3	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	4	0	4
03	Hornbill- Common Grey	<i>Tockus birostis</i>	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
04	Hornbill-Indian pied	<i>Anthracoceros malabaricus</i>	1	1	0	2	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	4	6	2	12	
06	Kite-Black Winged	<i>Elanus caeruleus</i>	1	2	1	4	0	0	0	0	0	0	0	0	0	1	0	1	1	1	3	
07	Peafowl	<i>Pavo cristatus</i>	6	6	0	12	0	0	0	0	0	0	0	3	3	0	3	3	0	6		
08	Peafowl-white	<i>Pavo cristatus</i>	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	
09	Pheasant Kaleej (Nepali)	<i>Lophura leucomelano</i>	1	1	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	
10	Red Jungle fowl	<i>Gallus gallus</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
11	Owl Eagle Forest	<i>Bubo nipalensis</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
12	Vulture Himalayan Grffon	<i>Gyps himalayensis</i>	1	1	2	4	0	0	0	0	0	0	0	0	1	2	1	0	0	1		
13	Pheasant Grey Peacock	<i>Polyplectron bicalcaratum</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
TOTAL BIRDS			18	28	6	52	0	0	0	0	0	0	0	0	5	7	2	13	21	4	38	
14	Bear-Himalayan Black	<i>Selenarctos thibetanus</i>	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
15	Bear- Sloth	<i>Melursus ursinus</i>	4	2	2	8	1	1	0	0	0	1	1	0	1	1	0	4	2	0	6	
16	Black Buck	<i>Antilope cervicapra</i>	26	27	5	58	0	0	2	0	0	0	0	0	1	0	0	25	27	7	59	

17	Cat Jungle	<i>Felis chaus</i>	3	4	0	7	0	0	0	0	0	0	0	1	0	0	0	0	3	3	0	6
18	Cat Leopard	<i>Felis bengalensis</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
19	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
20	Deer Brow-antlered (Sangai)	<i>Cervus eldi thamin</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
21	Deer Swamp (Barasingha)	<i>Rucervus duvaucelii</i>	5	9	0	14	0	0	4	0	0	0	0	0	1	2	0	4	7	4	15	
22	Gaur Indian	<i>Bos frontalis gaurus</i>	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	2
23	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
24	Jackal	<i>Canis aureus</i>	5	8	0	13	0	0	0	0	0	0	3	4	0	0	0	0	2	4	0	6
25	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
26	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
27	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
28	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
29	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
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	0	0	0	0	0	0	0	0	0	6	6	0	12
33	Squirrel Gaint Malabar/Indian	<i>Ratufa indica</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
34	Tiger-Royal Bengal	<i>Panthera tigris tigris</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
35	Tiger-white	<i>Panthera tigris tigris</i>	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4
36	Wolf Indian	<i>Canis lupuspallipes</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
37	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
38	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
TOTAL MAMMALS			66	76	7	149	1	1	6	1	0	0	4	6	0	5	4	0	60	68	11	139
REPTILES																						
39	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
40	Crocodile-Long snouted-Ghariyal	<i>Gavialis gangeticus</i>	5	19	46	70	0	0	0	0	0	0	0	0	0	1	1	3	4	18	43	65
41	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

42	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
43	Python-Indian Rock	<i>Python molurus molurus</i>	3	2	12	17	0	0	0	0	0	0	0	0	0	0	0	0	3	2	12	17
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
TOTAL REPTILES			54	65	327	446	0	0	0	0	0	0	0	0	0	1	1	3	53	64	324	441
TOTAL ANIMALS			138	169	340	647	1	1	6	1	0	0	4	6	0	11	12	5	126	153	339	618

Other species

Sl. No	Animal Name	Scientific Name	Stock as on 01.04.2018				During the Year												Stock as on 31.03.2019				
							Births			Acquisitions			Disposals			Deaths							
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T	
BIRDS																							
01	Budgerigar	<i>Melopsittacus undulatus</i>	7	26	45	78	0	0	5	0	0	0	0	0	0	0	0	2	7	26	48	81	
02	Cassowary	<i>Casuaris casuaris</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>	1	4	20	25	0	0	0	0	0	0	0	0	0	0	0	0	1	4	20	25	
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	4	0	8	0	0	0	0	0	0	0	0	0	0	1	0	4	3	0	7	
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	0	0	0	0	0	0	0	0	0	0	2	2	1	5	
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>	0	0	2	2	0	0	0	3	3	0	0	0	0	1	3	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	Love Birds	<i>Agapornis</i>	2	5	17	24	0	0	0	0	0	0	0	0	0	1	1	2	4	16	22		
14	Duck Mallard	<i>Anas platyrhynchos</i>	2	5	4	11	0	0	0	0	0	0	0	0	0	0	0	0	2	5	4	11	
15	Moorhen	<i>Gallinula chloropus</i>	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	4	
16	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	

17	Owl Barn	<i>Tyto alba</i>	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	
18	Parakeet-Blossom Headed	<i>Psittacula cyanocephala</i>	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18	
19	Pelican-Rosy/white	<i>Pelecanus onocrotalus</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	
20	Pheasant-Golden	<i>Chrysolophus pictus</i>	6	5	0	11	0	0	0	1	1	0	0	0	0	1	0	7	5	0	12	
21	Yellow-legged green Pigeon	<i>Treron phoenicoptera</i>	4	2	2	8	0	0	0	0	0	0	0	0	0	0	0	4	2	2	8	
22	Pheasant-Silver	<i>Lophura nycthemera</i>	5	5	13	23	0	0	0	1	1	0	1	1	0	1	0	4	5	13	22	
23	Pheasant-Lady Amhrest	<i>Chrysolophus amherstiae</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	2	
24	Pigeon-Common Green	<i>Treron phoenicoptera</i>	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
25	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	
26	Ostrich	<i>Struthio camelus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
27	Duck Mandarin	<i>Aixgaleri culata</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
28	Medium suplpher 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	
29	Greater suplpher 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	
30	Illiger's Macaw	<i>Primolium maracana</i>	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	
31	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	
32	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	
33	Finch Zebra	<i>Fringillidae</i>	0	0	20	20	0	0	0	0	0	0	0	0	0	0	1	0	0	19	19	
	TOTAL BIRDS		54	71	178	303	0	0	5	6	6	0	1	1	0	3	6	4	56	70	179	305
MAMMALS																						
34	Deer-Barking	<i>Muntiacus muntjak</i>	9	11	1	21	0	0	2	0	0	0	0	0	0	0	0	9	11	3	23	
35	Deer-Hog	<i>Axis porcinus</i>	8	11	0	19	0	0	6	0	0	0	0	0	0	0	0	8	11	6	25	
36	Deer-Sambar	<i>Cervus unicolor</i>	18	22	4	44	0	0	4	0	0	0	0	0	1	1	0	17	21	8	46	
37	Deer-Spotted	<i>Axis axis</i>	18	40	7	65	0	0	3	0	0	0	0	0	2	0	0	16	40	10	66	
38	Hippopotamus	<i>Hippopotamus amphibius</i>	2	1	0	3	0	0	1	0	0	0	0	0	0	0	0	2	1	1	4	
39	Hyena-Stripped	<i>Hyaena hyaena</i>	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	
40	Nilgai- Blue Bull	<i>Boselaphus tragocamelus</i>	4	7	0	11	0	0	2	0	0	0	0	0	0	0	0	4	7	2	13	
41	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	
42	Zebra Grant	<i>Equus quagga boehmi</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
43	Giraffe	<i>Giraffa camelopardalis</i>	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0	1	4	0	5	

44	Chimpanzee	<i>Pan troglodytes</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
	TOTAL MAMMALS		68	102	19	189	0	0	18	0	0	0	0	0	0	3	1	0	65	101	37	203
	REPTILES																					
45	Sand Boa	<i>Eryx johini</i>	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13
46	Snake Water	<i>Enhydris enhydris</i>	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
47	Viper Russel's	<i>Viperarusselli</i>	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
	TOTAL REPTILES		0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24

	TOTAL BIRDS		72	99	184	355	0	0	5	6	6	0	1	1	0	8	13	6	69	91	183	343
	TOTAL MAMMALS		134	178	26	338	1	1	24	1	0	0	4	6	0	8	5	0	125	169	48	342
	TOTAL REPTILES		54	65	351	470	0	0	0	0	0	0	0	0	0	1	1	3	53	64	348	465
	GRAND TOTAL		260	342	561	1163	1	1	29	7	6	0	5	7	0	17	19	9	247	324	579	1150

27. Mortality of animals

SANJAY GANDHI BIOLOGICAL PARK, PATNA

Details of death during 2018-19 (from 1st April, 2018 to 31st March, 2019)

Sl.No.	Species	Scientific Name	Sex	No.	Date of death	Cause of death as diagnosed through P.M.
01	Spotted Deer	<i>Axis axis</i>	M	01	10.05.18	Gravious injury due to Infighting
02	Kite- Black Winged	<i>Elanus caeruleus</i>	F	01	11.05.18	Heat Stress
03	Hornbill-Comman Grey	<i>Tockus birostitis</i>	M	01	14.05.18	Gravious injury
04	Black Buck	<i>Antilope cervicapra</i>	M	01	05.06.18	Old Age
05	Budgeriger	<i>Melopsittacus undulatus</i>	U	01	07.06.18	Heat Stress
06	Deer Spotted	<i>Axis axis</i>	M	01	26.06.18	Gravious injury
07	Moorhen	<i>Gallinula chloropus</i>	M	01	12.07.18	Heat Stress
08	Finch Zebra (Bird)	<i>Fringillidae</i>	U	01	28.07.18	Gravious injury
09	Deer Swamp	<i>Rucervus duvaucelii</i>	M	01	17.08.18	Old Age
10	Love Bird	<i>Agapornis</i>	F	01	09.09.18	Old Age
11	Kalij Pheasant	<i>Lophura leucomelano</i>	F	01	16.09.18	Infighting injury
12	Budgerigar	<i>Melopsittacus undulatus</i>	U	01	20.09.18	Bacterial hepatitis
13	Duck Brahmini	<i>Tadorna ferruginea</i>	F	01	21.09.18	Gravious injury
14	Golden Pheasant	<i>Chrysolophus pictus</i>	F	01	27.09.18	Report awaited
15	Deer Swamp	<i>Rucervus duvaucelii</i>	F	01	28.09.18	Septicemic shock
16	Vulture Himalayan Grffon	<i>Gyps himalayensis</i>	U	01	05.10.18	Viscral Gout
17	Vulture Himalayan Grffon	<i>Gyps himalayensis</i>	U	01	06.10.18	Viscral Gout
18	Squirrel Gaint Malabar	<i>Ratufa indica</i>	M	01	22.10.18	Old Age
19	Ghariyal (Juvenile)	<i>Gavialis gangeticus</i>	U	01	25.10.18	Asphyxia
20	Love Bird	<i>Agapornis</i>	U	01	25.10.18	Old Age
21	Deer Sambhar (Fawn)	<i>Cervus unicolor</i>	F	01	27.10.18	Mother rejection
22	Vulture Himalayan Grffon	<i>Gyps himalayensis</i>	F	01	11.11.18	Old age
23	Deer Swamp	<i>Rucervus duvaucelii</i>	F	01	18.11.18	Old age
24	Heron Night	<i>Nycticorax nycticorax</i>	F	01	09.12.18	Injury in transportation
25	Heron Night	<i>Nycticorax nycticorax</i>	F	01	09.12.18	Injury in transportation
26	Sloth Bear	<i>Melursus ursinus</i>	F	01	10.12.18	Canabolism
27	Sloth Bear	<i>Melursus ursinus</i>	M	01	10.12.18	Mother's Rejection
28	Heron Night	<i>Nycticorax nycticorax</i>	F	01	11.12.18	Injury in transportation
29	Himalayan Black Bear	<i>Selenarctos thibetanus</i>	F	01	14.12.18	Old age
30	Heron Night	<i>Nycticorax nycticorax</i>	M	01	15.12.18	Gravious injury
31	Pea Fowl	<i>Pavo cristatus</i>	M	01	16.12.18	Septicemia
32	Pea Fowl	<i>Pavo cristatus</i>	M	01	18.12.18	A.I.(H5N1) suspected
33	Pea Fowl	<i>Pavo cristatus</i>	M	01	20.12.18	Avian Influenza (H5N1)

34	Pea Fowl	<i>Pavo cristatus</i>	F	01	21.12.18	A.I.(H5N1) suspected
35	Pea Fowl	<i>Pavo cristatus</i>	F	01	23.12.18	A.I.(H5N1) suspected
36	Pea Fowl	<i>Pavo cristatus</i>	F	01	24.12.18	A.I.(H5N1) suspected
37	Pea Fowl (W)	<i>Pavo cristatus</i>	F	01	28.12.18	A.I.(H5N1) suspected
38	Kalij Pheasant	<i>Lophura leucomelano</i>	M	01	29.12.18	A.I.(H5N1) suspected
39	Deer Sambhar	<i>Cervus unicolor</i>	M	01	14.01.19	Gravious injury
40	Crocodile	<i>Gavialis gangeticus</i>	M	01	24.01.19	Gravious injury
41	Sangai Deer	<i>Cervus eldi thamin</i>	M	01	02.02.19	Old age
42	Crocodile (Juvenile)	<i>Gavialis gangeticus</i>	F	01	06.02.19	Infighting
43	Crocodile (Juvenile)	<i>Gavialis gangeticus</i>	U	01	11.02.19	Infighting
44	Silver Pheasant	<i>Lophura nycthemera</i>	M	01	22.02.19	Gravious Injury
45	Crocodile (Juvenile)	<i>Gavialis gangeticus</i>	U	01	08.03.19	Gravious injury

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>Eudynamis 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 symnensis</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) macrocerus</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>Pycnonotus 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 hodginsi</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

Sl. No.	Name of species	Scientific Name
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
1. General requirements			
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.
2. Administrative and Staffing Pattern			
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 carrier progression including the benefit of flexible complementing scheme for their promotions.	At the time of deployment of suitable person, Recruitment Rules will be followed.

3. Development and Planning			
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.	Very soon new postmortem room will be constructed.
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 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.	If the animal pertaining to an endangered species is rescued, will be reported to the Central Zoo Authority.
4. Animal housing, display of animals and animal enclosures			
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 created at exhibit of the important species.
14	10.4(2)	Appropriately designed open, natural enclosures should be constructed for monkeys (Assamese, Stump tailed and Rhesus)	Natural enclosures have been constructed for many animal species in this zoo. 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.	A moated open-air enclosure for Jackals is under construction.

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.	It is in process to be 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 for all enclosures is being prepared.
5. Upkeep and Healthcare of animal			
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.	In process. New facility for meat processing is being prepared.
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.	In process.
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.

6. Veterinary and infrastructure facilities			
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.
7. Post-mortem and disposal of carcasses of animals			
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 Veterinarian posted in this zoo is being sent for skill development training from time to time.

9. Acquisition and Breeding of Animals			
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 is being 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.

10. Research Activities			
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.