

TATA STEEL ZOOLOGICAL PARK JAMSHEDPUR



Annual Report

2017-18

**At Jubilee Park, Jamshedpur,
East Singhbhum, Jharkhand
(India)**

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Dear Readers,

We are pleased to present before you the 23rd edition of Annual report of Tata Steel Zoological Park, Jamshedpur, Jharkhand currently the only such institution being operated by a corporate house in the country. The Year 2017-18 was a mixed bag of success and failures and important highlights are presented below in bulleted form.



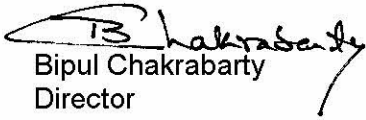
- Existing pheasantry modernized by increasing the area as per the Central Zoo Authority standards with nature simulating enrichment.
- Feeding cells of Grey langur improved by increasing the area as per standards of Central Zoo Authority.
- Kraals of dimension prescribed by Central Zoo Authority provided to Grey langurs and Mandrill monkeys.
- Butterfly larva room redeveloped through benevolent grant from Coal India Limited
- CCTV cameras installed in Tiger enclosure and in hospital and food store.
- 100 spotted deer, 4 Sambars and 4 Hog deer transferred to zoos under West Bengal Zoo Authority as a measure to reduce overpopulation.
- 10 acres of additional land added to zoo campus.
- Service Rules, Recruitment Rules & promotion guidelines of zoo personnel framed and adopted.
- Vector control plan for Zoological Park campus prepared in association with Jamshedpur Utilities and Services Co.Ltd.
- Zoo selected as partner organization of the Galliformes Specialist Group of SSC IUCN.
- 'Keeper for a Day' programme launched
- Zoo mini food court developed and 'Donor wall' installed
- Zoo education activities got coverage in the 2017 Annual Journal of International Zoo Educators Association.

In spite of our best efforts to meet the welfare of all captive wild animals in the collection, we lost two precious Bengal tigers at closing of this financial year, suspected to be due to Babeiosis.

We express our heartfelt thanks to the management of the Zoological Park and citizens of Jamshedpur for being with us in the thick & thin of 2017-18.

Happy reading

On behalf of Team Tata Steel Zoological Park


Bipul Chakrabarty
Director

TATA STEEL ZOOLOGICAL PARK

Tata Steel Zoological Park (Zoo) was established in 1992 and was thrown open for public visitation on 3rd March, 1994. The Zoo is managed & operated by Tata Steel Zoological Society.

Zoo is located inside the Jubilee Park site and is spread over an area of 25 hectares with beautifully landscaped gardens interspersed, small forest patches with an abundance of free ranging birds, mammals, reptiles and amphibians. Zoo was provided conditional recognition as a Medium category zoo by Central Zoo Authority u/s 38H of the Wild Life (Protection) Act, 1972 in April 2017. The recognition to the zoo is valid till 21/03/2020.

Our Vision:

We envision an earth in which human values protect and preserve the flora and fauna of the world.

Our Mission:

We shall strive to provide natural habitats to various animals suitable for their conservation and propagation and act as a facilitator to spread the message of Nature Conservation by Awareness and Educational Programme.

Our objective:

To manage the Zoo as per the prescribed standards and norms of 'Recognition of Zoo Rules, 2009' of Wild Life (Protection) Act, 1972 and the National Zoo Policy, 1998.

ZOO AT A GLANCE

ADMINISTRATION:

Overall administrative control of the Zoo lies with the Director. Key functional areas being overseen by the Director are General administration & Planning. The Director is assisted in his work by an Office supervisor, two Office assistant, a Sr. attendant and a Sr. driver. The Director reports to Secretary of Tata Steel Zoological Society Board.

Deputy Director in association with the Asst. Vet (Part time) looks after the upkeep and Health care of animals. Major activities of the team being health care of animals, food & nutrition, maintenance(civil) of animal enclosures and general hygiene in zoo campus. The team is assisted by a Field Supervisor, a Sr. Zoo assistant and two field assistants. The Deputy Director is overall responsible for Zoo animal welfare & reports to Secretary of Tata Steel Zoological Society Board.

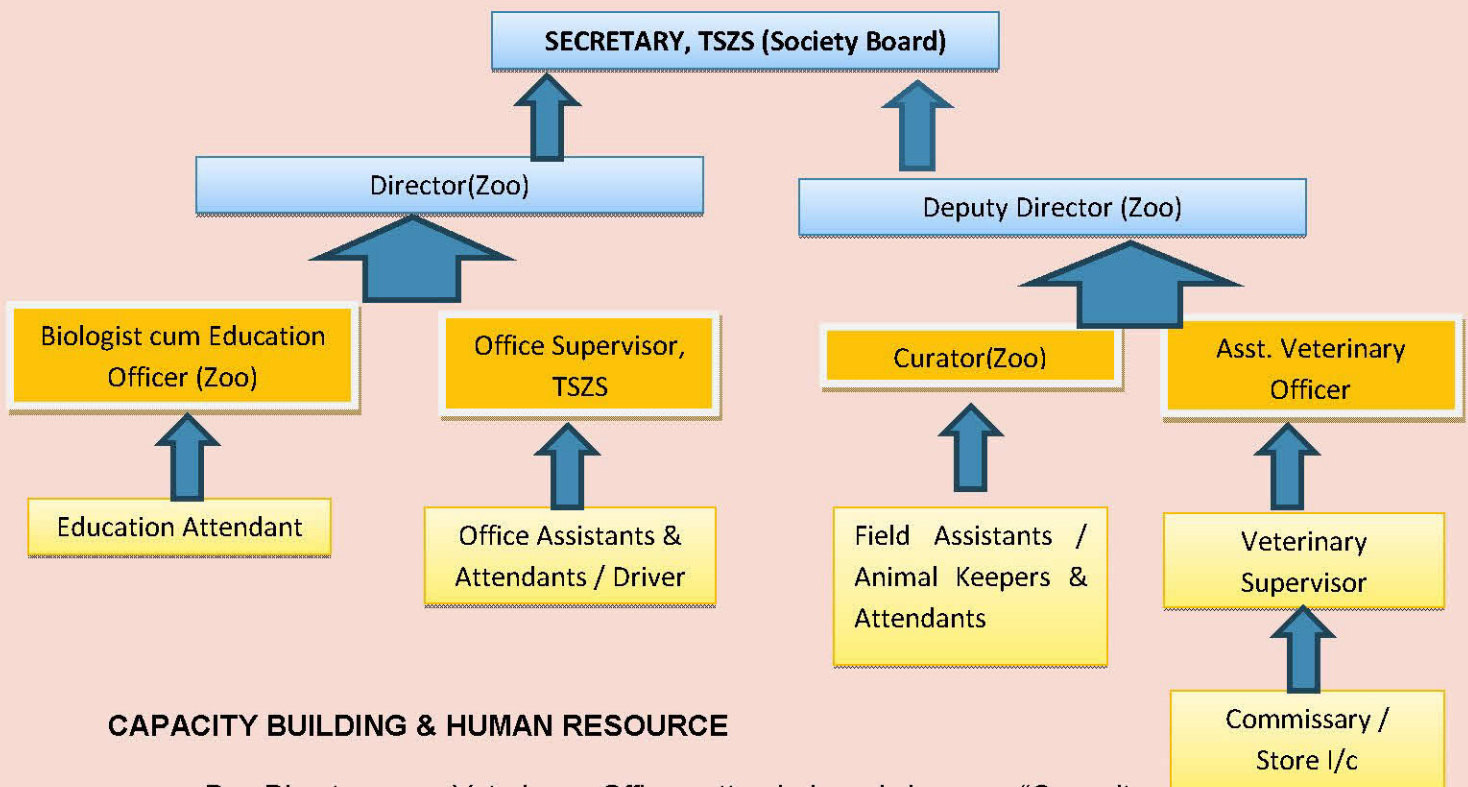
Curator looks after the general maintenance of animal enclosures, feeding of the animals and disinfection of enclosures. He also oversees the enrichment of animal enclosures. All Keeper and Asst. keepers reports to the Curator. Curator is also responsible for overall maintenance of the Zoo estate. The Curator is assisted in his day to day work by Field assistants & animal keepers. The Curator reports to the Deputy Director of the Zoo for all purpose.

Biologist cum Education officer takes care of recording of animal behavior, maintaining of animal inventory, studbooks, history cards, organizing awareness / educational programmes including running of the zoo information centre cum library. The Biologist is assisted by an office attendant and volunteers. The Biologist cum Education Officer reports to the Director (Zoo) for all purpose.

S.No.	Particulars	Information
Basic Information about the Zoo		
1	Name of the Zoo	Tata Steel Zoological Park
2	Year of Establishment	1994
3	Address of the Zoo	At Jubilee Park, P.O.Bistupur, Jamshedpur, East Singhbhum
4	State	Jharkhand
5	Telephone Number	0657-6508011
6	Fax Number	Nil
7	E-mail address	tatasteelzoo@gmail.com
8	Website	http://www.tatazoo.com
9	Distance from nearest	Airport: 145Km (Ranchi Airport) Railway Station: 5Km (Tatanagar) Bus Stand: 3Km (ISBT)
10	Recognition Valid upto (Date)	21/03/2020
11	Category of zoo	Medium
12	Area (in Hectares)	25
13	Number of Visitors (Financial Year)	Adult :347981 Children :100904 Total Indian: 448885 Total Foreigners: Nil Total Visitors: 448885
14	Visitors' Facilities Available in Zoo	Shelters, benches, drinking water, toilets, wheel chair, battery operated carts, food court
15	Weekly Closure Day of the Zoo	Monday

S.No.	Particulars	Information
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	Mr. Bipul Chakrabarty, Director
	Name of the Veterinary Officer	Dr. Manik Palit, Deputy Director
	Name of the Curator	Mr. Sanjay Kumar Mahato
	Name of the Biologist	Dr. Seema Rani
	Name of the Education Officer	Dr. Seema Rani
	Name of the Compounder/ Lab Assistant	Mr. Sushen Chandra Mahato
Owner / Operator of the Zoo		
17	Name of the Operator	Tata Steel Limited through Secretary, Tata Steel Zoological Society
18	Address of the Operator	At Tata Steel Zoological Park, Jubilee Park, P.O. Bistupur, Jamshedpur, East Singhbhum, Jharkhand. Pincode: 831001
19	Contact details/Phone number of Operator	Ms. Radhika Singh, Secretary, TSZS Mb. 7033094918
20	E-mail address of Operator	radhika.singh@tatasteel.com

ORGANIZATIONAL CHART



CAPACITY BUILDING & HUMAN RESOURCE

- Dy. Director cum Veterinary Officer attended workshop on "Capacity building of Indian Zoo Veterinarian on Animal Management in Captivity" at New Delhi from 10.09.17 to 14.09.17.
- Dy. Director cum Veterinary Officer attended a "Brain storming session on wildlife forensic and health" at School of Wildlife & Forensic Health, Veterinary College Jabalpur, Madhya Pradesh from 27th to 28th February, 2018.

- Two animal Keepers namely Mr.Tarkeswar Ram and Mr. Manoj Nag participated in keeper Training programme held at Nandankanan Biological Park, Bhubaneswar from 20th to 25th March,2018.

S.No.	Designation	Sanctioned post/posts	Incumbency	Names of the Incumbent
Administration				
1.	Director	One	One	Bipul Chakrabarty
2.	Deputy Director	One	One	Dr.Manik Palit
3	Office Supervisor	One	Vacant	Vacant
4	Accountant	One	One	Outsourced
5	Sr. Office Assistant	One	One	Mr. Mritunjay Kumar
6	Office Assistant	Three	Three	Mr.Shyam Ranjan Mahato, Mr.Sunil Kar & Mrs. Monalisa Banerjee (contractual)
7	Senior Office Attendant	Two	Two	Mr. Pratap Gill & Mr. Kartik Gorai
8	Senior driver	One	One	Mr.B.N.Mazumdar
Captive animal management & Conservation education				
9	Curator	One	One	Mr.Sanjay Kumar Mahato
10	Biologist cum Education Officer	One	One	Dr.Seema Rani
11	Asst. Veterinary Officer	One	Vacant	Responsibility handled by a Part time veterinarian
12	Veterinary Assistant	One	Vacant	Responsibility handled by Field Supervisor
13	Field supervisor	One	One	Mr.SushenMahato
14	Animal Keeper	Four	Three	Mr.S.A.Ansari; Mr.Dilip Dey &Mr.Tarkeswar ram
15	Asst. Animal Keeper	Fourteen	Seven	Mr.Sulendra Das; Mr.Bijoy Mukhi; Mr.Binod Sharma;Mr.Surendra Kumar Singh;Mr.Lalan Kumar; Mr. Dinesh Mahato& Mr. Linsa Harpal
16	Field assistant	Two	Two	Mr. Ali Akhtar Khan & Mr. R. Srinivas
17	Animal attendants	Seven	Seven	Contractual (Mrs. Gyani Devi; Mrs. Shefali Das, Ms. Malti Manjhi; Mr. Rajkishor Harpal; Mr.Manoj Nag; Mr.Mazumdar Mahato & Mr. Rajesh Pal
	Total	Forty-three	Thirty two	

ZOO ADVISORY COMMITTEE

The Zoo Advisory committee was reconstituted on 02/05/2015. Following the are members of the committee:

1	Sunil Bhaskaran- Vice President, Corporate Services, Tata Steel	President
2	Mr. Sourav Roy- Chief, CSR, Tata Steel	Vice President
3	Mr. RishadChinoy-Head, Societies, Tata Steel	Secretary
4	Mr.Sanjeet Kumar, Sr.Manager, Direct Taxes, Tata Steel	Treasurer
5	Capt. D. Mishra- Sr.G.M, JUSCO	Member
6	Mr.Ritu Raj Sinha-Chief Corporate Services, Tata Steel	Member
7	Mr. Sanjay Kumar- Head, HR, Tata Steel	Member
8	Mr. Siddartha Gupta-Head, Legal, Tata Steel	Member
9	Mr. Amresh Sinha- Head, Corporate Communication,Tata Steel	Member
Permanent Invitees		
10	Mr. Bipul Chakrabarty	Director(Zoo)
11	Dr. ManikPalit	Deputy Director(Zoo)

The Zoo advisory committee met three times during the year on 13th June,2017; 29th September,2017 and 20th March,2018 respectively.

HEALTH ADVISORY COMMITTEE:

A zoo health advisory committee was initially constituted during December,2009 and the same was reconstituted again on 17thFebruary 2018 with following as members:

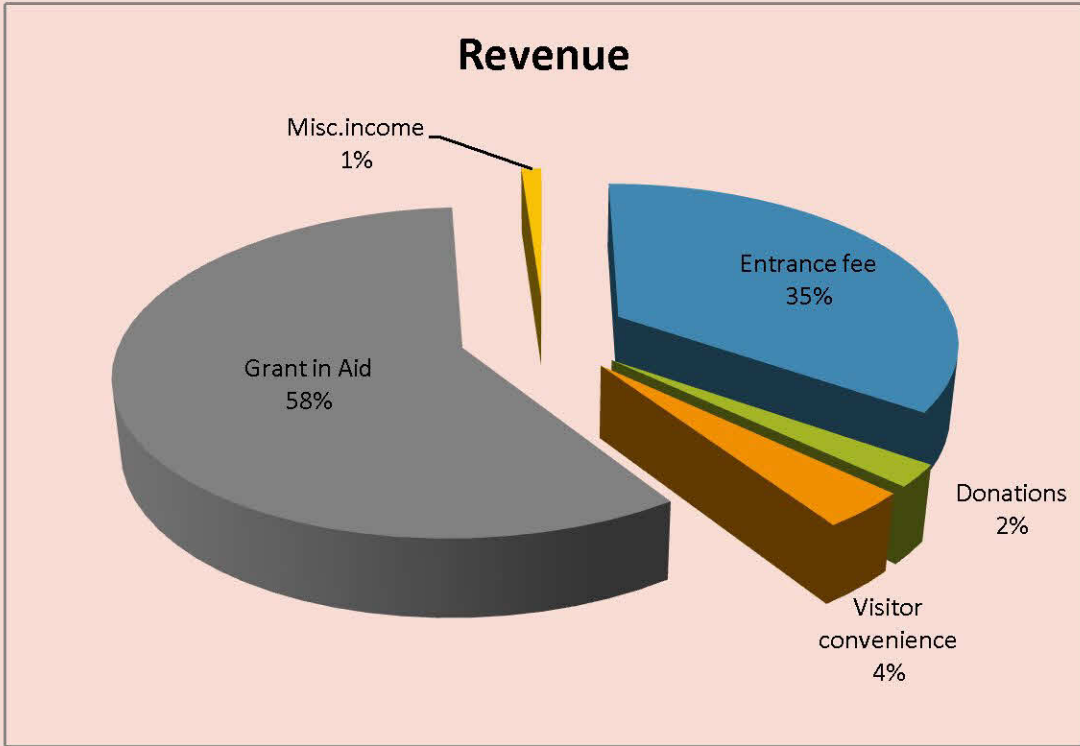
1	Dr. M.Naveen Kumar, Deputy Director(Retd.), Nehru Zoological Park, Hyderabad, Telangana	Chairperson
2	Dr. A.B.Srivastava, Director(Retd), School of Wildlife Forensic and Health, Veterinary College Jabalpur, Madhya Pradesh	Member
3	Prof. Niranjan Sahoo- Coordinator, Centre for Wildlife Health, College of Veterinary Science & Animal Husbandry, OUAT, Bhubaneswar, Odisha	Member
4	Dr. ManikPalit, Deputy Director, Tata Steel Zoological Park, Jamshedpur, Jharkhand	Coordinator

The reconstituted committee could not meet during the year. However, discussions on various health issues of the zoo animals were communicated over telephone and mails for seeking advice of the members.

FINANCIAL PERFORMANCE- Statement of Income & Expenditure

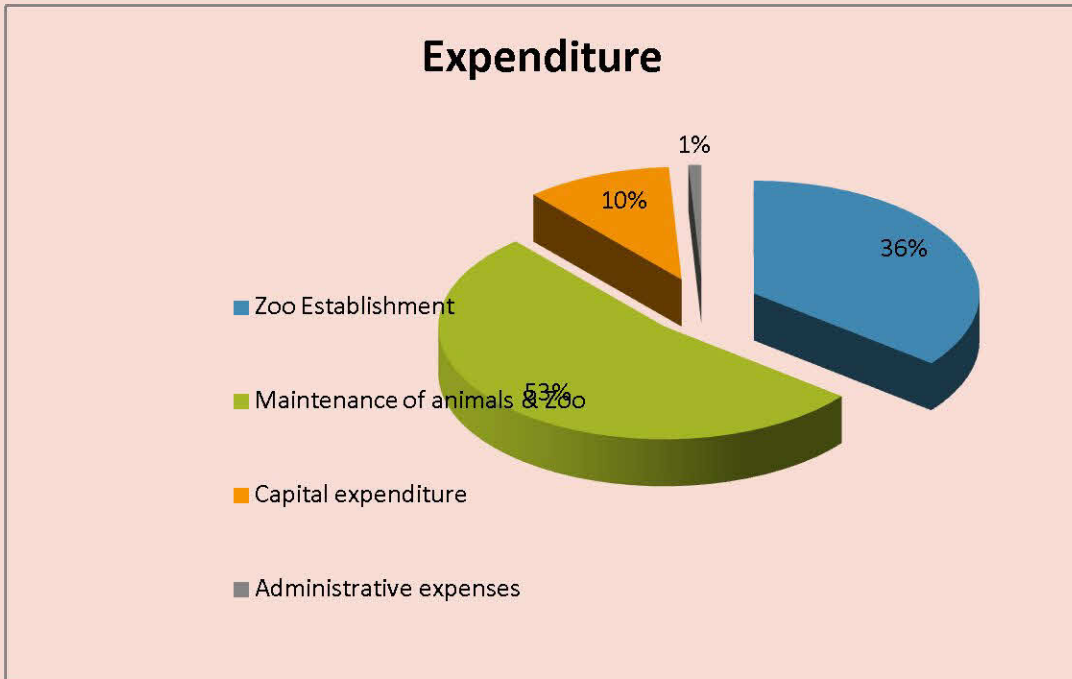
Revenue:

Tata Steel Limited during the financial year 2017-18 provided Grant in Aid of Rs. 200 lakhs to Tata Steel Zoological Society for annual maintenance & operation of Zoo. The Society through the zoo generated revenue worth Rs.143 Lakhs. Major revenue earnings were through entry fee, contracts and donations.



Expenditure:

Total amount spent by Tata Steel Zoological Society during 2017-18 for operating zoo was Rs. 329lakh, major expenditure being on maintenance of animals and their enclosures & establishment.



DAILY FEED SCHEDULE OF ANIMALS:

Captive Animals are provided with a balanced diet drawn up in consultation with the Veterinary Wing of the Zoo. Accordingly, they are prepared and distributed on daily basis by concerned staff and animal keepers. All large cats are put on a day's fast every Monday. Details are provided below:

Sl	Name of Animal	Diet Prescribed for each animal	Quantity
BIRDS			
1	Pheasants & Fowls	Mixed Grain (with 10% germinated green gram)	100gms
		Roasted Gram Powder (Sattoo)	10 gms
		Boiled Egg	15 gms (1/4)
		Green Vegetable Leaves	25 gms
2	Peacocks	Mixed Grain (with 10% germinated green gram)	200 gms
		Roasted Gram Powder (Sattoo)	20 gms
		Boiled Egg	30 gms (1/2)
		Green Vegetable Leaves	50 gms
3	Doves and Francolin	Mixed Grain (with 10% germinated green gram)	50 gms
		Roasted Gram Powder (Sattoo)	5 gms
		Boiled Egg	5 gms (1/8)
		Green Vegetable Leaves	15 gms
4	Hill Myna	Roasted Gram Powder (Sattoo)	50 gms
		Banana	100 gms
		Germinated Green Gram (Moong)	25 gms
		Mango / Guava/ Seasonal Fruit	25 gms
		Papaya	50 gms
5	Ostrich	Mix Grain	2.5 kg
		Banana	
		Green Vegetable Leaves	
6	Emu	Mix Grain	1.5 kg
		Boiled Egg (Seasonal)	1 pc
		Banana	2 pc
		Green Vegetable Leaves	250 gms
		Green Grass	Ad Lib
7	Bar headed Goose	Paddy	100 gms
		Polished Rice	100 gms
		Green Vegetable Leaves	250 gms
		Green Grass	Ad Lib
8	Mandarin Duck	Crushed Maize	100 gms
		Crushed Sorghum (Jowar)	25 gms
		Pearl Millet (Bajra)	25 gms
		Foxtail Millet (Cheena Dana)	25 gms
		Green Vegetable Leaves	50 gms
9	White Ibis	Fish	200 gms
10	Rosy Pelican	Fish	300 gms

Sl	Name of Animal	Diet Prescribed for each animal	Quantity
WORLD OF PARROTS			
1	Parakeets: Morning 9.00 a.m.	Soaked Gram (Chana)	25 gms
		Groundnut	25 gms
		Sunflower, Kusum Seeds (Seasonal)	10 gms
		Germinated Green Gram (Moong)	10 gms
	Parakeets: Forenoon 11.00 a.m – 12 noon	Carrots / Beetroot	25 gms
		Seasonal Fruit / Peas	25 gms
		Green Chillies	5 gms
		Banana	10 gms
2	Cockatiel: Morning 9.00 a.m.	Papaya / Guava	10 gms
		Soaked Corn Kemels	25 gms
		Soaked Gram (Chana)	25 gms
	Cockatiel: Forenoon 11.00 a.m – 12 noon	Sunflower, Kusum Seeds (Seasonal)	10 gms
		Germinated Green Gram (Moong)	10 gms
		Carrots / Beetroot	25 gms
		Seasonal Fruit / Peas	25 gms
		Green Chillies	5 gms
3	Cockatoo: Morning 9.00 a.m.	Banana	10 gms
		Papaya / Guava	10 gms
		Soaked Corn Kemels	25 gms
		Soaked Gram (Chana)	50 gms
	Cockatoo: Forenoon 11.00 a.m – 12 noon	Groundnut	50 gms
		Sunflower, Kusum Seeds (Seasonal)	20 gms
		Germinated Green Gram (Moong)	10 gms
		Carrots / Beetroot	25 gms
4	Jenday Conure	Peas / Seasonal Fruit	25 gms
		Green Chillies	5 gms
		Banana	50 gms
		Papaya / Guava	10 gms
		Pedigree Pellets	10 gms
		Soaked Corn Kemels	25 gms
5	Rainbow Lorikeet	Groundnut	
		Sorghum (Jawar) –Pearl Millet (Bajra)	20 gms
1	Star Tortoise	Papaya	20 gms
		Soaked Gram	20 gms
		Germinated Green Gram (Moong)	20 gms
		Sunflower Seeds	10 gms
		Carrots / Sweet Potato	10 gms
		Papaya	10 gms
		Tomato / Banana / Watermelon	10 gms
2	Marsh Crocodile	Cucumber	10 gms
		Green Vegetable Leaves -Spinach (Palak)	10 gms
3	Gharial	Bengal Gram	10 gms
		Calcium granules	5 gms
2	Marsh Crocodile	Meat: Winter (Weekly thrice)	1 kg
		Other season (Alternate days)	2 kg
3	Gharial	Fish	250-500 gms
REPTILES			

Sl	Name of Animal	Diet Prescribed for each animal	Quantity
MAMMALS			
1	Nilgai & Sambar	Concentrated Mixture	1.5 kg
		Chaff (Kutti)	500 gms
		Molasses (Seasonal)	100 gms
		Tree Leaves	20 kg
		Green Grass	Ad Lib
2	Spotted Deer, Blackbuck, Barking Deer, Hog Deer	Concentrated Mixture	750 gms
		Chaff (Kutti)	250 gms
		Molasses (Seasonal)	50 gms
		Tree Leaves	10 kg
		Green Grass	Ad Lib
3	Hippopotamus	Concentrated Mixture	10 kg
		Chaff (Kutti)	5 kg
		Molasses (Seasonal)	250 gms
		Green Grass	40 kg
		Banana	1.5 kg
		Bread	1.5 kg
		Potato	2 kg
		Sweet Pumpkin	2 kg
4	Sloth Bear: Morning	Groundnut	100 gms
		Sweet Potato / Potato	200 gms
		Cucumber / Carrot	200 gms
		Honey / Molasses (Braising of tree branches)	50 gms
		Banana	200 gms
	Sloth Bear: Afternoon	Khichdi – Broken Wheat (Dalia), Green Gram (Moong Dal) cooked	1 kg
		Milk	½ litre
		Boiled egg / Meat	1 pc / 100 gms
	Sloth Bear: Evening	Cooked Bread (Chapati)	750 gms
	5	Indian Crested Porcupine	Soaked Gram
Groundnut			100 gms
Carrot / Beetroot			100 gms
Potato			100 gms
Banana			100 gms
Papaya			50 gms
Pumpkin			50 gms
Green Vegetable Leaves			50 gms
6	Macaque (Bonnet / Rhesus): 9.00 am	Banana	100 gms(1 pc)
		Apple	50 gms(½ pc)
	Macaque (Bonnet / Rhesus): 11.00 am	Banana	200 gms
		Soaked Gram (Chana)	100 gms
		Groundnut	100 gms
		Carrot / Beetroot / Sweet Potato	100 gms
		Papaya / Corn / Guava	100 gms
		Green Vegetable Leaves	100 gms
		Capsicum (Simla Mirch)	50 gms
		Citrus fruits	50 gms
	Macaque (Bonnet / Rhesus): 4.00 pm	Cooked Bread (Chapati)	100 gms

Sl	Name of Animal	Diet Prescribed for each animal	Quantity
MAMMALS (Continued)			
7	Bengal Hanuman Langur: 9.00 am	Green Leaves	Ad Lib
		Banana	100 gms (1 pc)
		Apple	50 gms (1/2 pc)
	Bengal Hanuman Langur: 11.00 am	Banana	300 gms
		Soaked Gram (Chana)	100 gms
		Groundnut	100 gms
		Carrot / Beetroot / Sweet Potato	100 gms
Papaya / Corn / Guava		100 gms	
Bengal Hanuman Langur: 3.00 pm	Green Vegetable Leaves	100 gms	
Bengal Hanuman Langur: 4.30 pm	Tree Leaves	Ad Lib	
		Cooked Bread (Chapati)	100 gms
8	White Throated Capuchin: 9.00 am	Banana	100 gms (1 pc)
		Apple	50 gms (1/2 pc)
		Dog food (spread in display)	20 gms
		Sunflower seeds (spread in display)	15 gms
	White Throated Capuchin: 11.00 am	Banana	200 gms
		Soaked Gram (Chana)	50 gms
		Groundnut	50 gms
		Carrot / Beetroot / Sweet Potato	100 gms
		Papaya / Corn / Guava / Green Peas	100 gms
		Green Vegetable Leaves	50 gms
		Citrus fruits / Mango / Awla	100 gms
	White Throated Capuchin: 4.00 pm	Boiled Egg	50 gms
		Boiled Snail (2 days a week)	25 gms
		Cooked Bread (Chapati)	100 gms
9	Mandrill: 9.00 am	Banana	1 pc
		Apple	1 pc
	Mandrill: 11.00 am	Apple	200 gms
		Banana	200 gms
		Papaya	200 gms
		Seasonal Fruit-Guava/Mango/Corn	200 gms
		Carrot/beetroot	200 gms
		Sweet Pumpkin	200 gms
		Sweet Potato	200 gms
		Cabbage	200 gms
		Capsicum (Simla Mirch)	100 gms
Boiled Egg (once a week)	67 gms (1 pc)		
Mandrill: 2.00-3.00 pm	Cooked Mixed Grain Bread (Chapati)	50 gms	
	Cooked Rice + Soya	400 gms	
Mandrill: 4.00 pm	Groundnut (whole) / Sunflower seeds	50 gms	
10	African Lion / Bengal Tiger	Winter: Meat (6 days a week)	10 kg
		Other Seasons: Meat (6 days a week)	8 kg
11	Leopard	Male: Meat (6 days a week)	4 kg
		Female: Meat (6 days a week)	3 kg
12	Hyaena	Meat (6 days a week)	2 -2.5 kg

Formula for Deer concentrated mixture		Formula for Emu mix grain	
Bran Choker	20%	Crushed Maize	45%
Gram (Chana)	10%	Oil Cake	5%
Corn (Makai)	17%	Bird Mix. Grain	35%
Barley (Jau)	20%	Rice Bran	10%
Green Gram (Moong)	15%	Mineral Mixture	2%
Oil Cake (Khalli)	15%	Stone Grit	3%
Mineral Mixture	3%		
Formula for Birds mix grain		Formula for Ostrich mix grain	
Crushed Gram (Chana)	20%	Maize	30%
Whole Paddy	20%	Pearl Millets (Bajra)	10%
Crushed Maize	20%	Sorghum (Jawar)	10%
Wheat	15%	Soya Beans	6%
Split Red Lentils (Masoor Dal)	6%	Wheat Bran	20%
Sorghum (Jawar)	5%	Crushed Gram	10%
Pearl Millets (Bajra)	5%	Mineral Mixture	5%
Germinated Green Gram (Moong)	5%	Vegetable Oil	2%
Mineral Salt	2%	Vita Prot Mixture	2%
Stone Grit	2%	Germinated Green Gram (Moong)	5%

Vaccination & Deworming Schedule: In compliance to Recognition of Zoo Rules,2009 a vaccination and deworming schedule has been drawn up by the veterinary wing of the zoo and the same is implemented as per details provided below:

Vaccination Schedule

Sl.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
1	All large Felids (Lion, Tiger & Leopard)	Feline Pan-leucoponeia	Biofel PCHR/ 1ml per animal	Annual	-
2	Herbivores	Foot & Mouth disease	Rakhsaovac/ 2ml per animal	Biannual	-
3	Large Felids	Blood protozoa	Triquine/ as per body wt. 3ml for 200kg. wt.animal	Every 9 months	-

Deworming Schedule

Sl.No.	Species	Drug used	Month
1.	Carnivores	Fenbendazole, praziquantel, pyrantalpamoate +febantel	March, June, September & December
2.	Herbivores	Rafoxanide &ivermectin	February, May and September
3.	Primates	Albendazole	February, May, August and

			November
4.	Aves	Albendazole	February, June and October
5.	Reptiles	Albendazole / Fenbendazole, praziquantel, pyrantal pamoate +febantel	March & September

Disinfection Schedule: Zoo Curator in consultation with the veterinary wing draws up the annual schedule for disinfection of animal enclosures. While cleaning the feeding cells, Nimyl (neem & eucalyptus oil-based disinfectant) is used. In open enclosures lime and turmeric powder are spread adlibitum. Details of the schedule are provided below:

Disinfection / Cleaning Schedule of Zoo Animal Enclosures

Sl	Enclosure	Activity	Schedule
1	Hippopotamus	Change of water	4 times a month
		Removal of dung & silt, Lime spreading in moat & enclosure	Once a month
2	Langur & Monkeys	Cleaning of night shelter & cell with lime-bleach	4 times a month
		Sterilization of cells with blow lamp	Twice a month
		Tall grass cutting in Langur & Mandrill island	As per requirement
3	Birds & Pheasants	Lime spreading in cells	4 times a month
		Turning of soil inside the cells	Once a month
		Change of water in pelican pond	Twice a month
4	Deer & Antelope	Removal of dung from enclosure & spreading of lime bleach	Twice a month
		Cleaning of cells verandah with lime each	4 times a month
5	Bear	Cleaning of cells with lime /bleach	4 times a month
		Sterilization of cells with blow lamp	Twice a month
		Bush cutting in enclosure area	As per requirement
6	Lion, Tiger, Leopard & Hyena	Cleaning of cells with lime/bleach	4 times a month
		Sterilization of cells with blow lamp	Twice a month
		Cleaning of tiger moat	As per requirement
		Bush cutting of enclosures	As per requirement
7	Mugger & Gharial	Change of water	Twice a month
8	Ostrich & Emu	Removal of dung	Once a month
		Lime /Bleach spreading in enclosure	4 times a month
		Application of fly bait	As per requirement
9	Deer safari	Change of water from Drink water pool	Twice a month
		Bush cutting of safari area	As per requirement
10	Butterfly Park	Lime spreading in & around the Centre.	As per requirement
11	Herbivores & carnivores	Turning of Soil	Once in 5 years
Note: The above schedule may change as per requirement; it may increase or decrease the frequency of the work.			

Health checkup of Zoo Employees: All zoo employees including outsourced persons are subjected an annual medical examination through a Tata Main hospital. During the year under report, medical examination of all staff including laboratory tests for their sputum, faeces and blood was carried out on 6th September, 2017. Records are maintained by the hospital themselves.

DEVELOPMENTAL ACTIVITIES

ANIMAL HABITATS AND UPKEEP



Zoos are dynamic institutions and being public places are always under visitor scrutiny with respect to the facilities provided both for the animals and people. Thus, changes are imminent to happen. The Central Zoo Authority has approved a long-term master plan for redevelopment of the zoo and the same is currently being executed.

During the year under report following activities were taken up as part of improving upon the existing enclosures and enhancing the enrichment activities to

improve the condition of animal enclosures:



The existing pheasant enclosure was renovated, and area increased as per the Central Zoo Authority guidelines for housing of pheasants.

Kraal for Grey langur and Mandrill were constructed to provide space for housing lactating mothers and separation of males from the parent group.

AWARENESS AND EDUCATION- MEETING THE AICHI BIODIVERSITY TARGET: Important events and happenings

Chief objective of Zoo is to educate the visitors about wildlife conservation. Education activities are organized throughout the year with support of local NGO's and sponsors to achieve its objective and in order to meet the AICHI TARGET-1 of the Strategic Plan for Biodiversity Conservation 2011-2020. Through its educational activities it encourages the youth to conserve nature and use it sustainably, especially the students of school and colleges. More than 25000 students were made aware of biodiversity and wildlife conservation through the above programmes, of which 9800 were through 'Touch & learn' programme only. Major awareness activities undertaken during the year were:

- A. **World Biodiversity Day 2017 – 22nd May 2017**, World Biodiversity Day was organised at Tata Zoological Park in association with Prathibha Kendra. The programme, “**A day in the zoo**”, for children was organized. It was conducted in 3 parts. First, the children were taken on a tour of the zoo. In the second part, a programme “**Keeper Talk**” was done through which the children were introduced to the management of animals in captivity. Third part, comprised of a lecture presented by Dr. Seema Rani, Biologist Cum education Officer on topic, “**Importance of Plants to humans and animals in every day’s life**”.



Lecture on “Importance of Plants to humans and animals in every day’s life”

- B. **Art in Nature Camp 2017 (7th Edition)**: An art workshop cum exhibition was organised by the Zoological park in association with Artist Forum of Jamshedpur from 26th to 28th May, 2017 with theme “**Connecting People to Nature**”. 50 professional and amateur artists from Jamshedpur, Ranchi, New Delhi and other parts of Jharkhand participated in communicating through their works as how we are all connected to ‘Nature’. The exhibition was opened to public by Mr. Saryu Rai, Hon’ble Minister of Civil Supplies & parliamentary Affairs, Govt. of Jharkhand.



- C. **World Environment Day & Van mahotsav 2017** - World Environment Day was celebrated on 5th



Children from Sanskriti and Aurobindo Society participating in Awareness rally on theme “Connecting People to Nature”



Students of Rajkrit Primary School taking part in plantation drive during Van Mahotasava

June 2017 at the Tata Steel Zoological Park. This year a rally was organized with theme “**Connecting People with Nature**”. Children of NGO Sanskriti and Aurobindo Society portrayed their pledges to save environment in form of banners and slogans. A NukkarNatak was presented on theme “**Save Environment Save Yourself**” by children of local NGO Prathibha Kendra. Drives

were also conducted where plastic items brought by visitors were tagged Rs. 20 and vendors/kiosks sold items in paper bag. In total 70 children participated along with their accompany person.

With primary motive of spreading the value of afforestation, Tata Steel Zoological Park celebrates Van Mahotsav every year. Through this celebration it promotes inclusive participation in the initiative to plant trees from diverse sections of the society in and around Jamshedpur.

Like every year, this year Tata Zoo celebrated Van Mahotsav from 1st July to 31st July. During this period members of local NGO Anwasha, Inner Wheel Club of Jamshedpur and students of Rajkrit Primary school took part in the plantation initiative. More than 100 tree saplings were planted.

- D. Friendship Day 2017** – “A friend in need is a friend in deed”, with this saying in mind Friendship Day was celebrated in Tata Zoological Park in association with local NGO Anwasha. The children from Anwasha enthusiastically participated in the celebration. They tied friendship bands around trees and animal cages to denote friendship with them. A keeper talk on Mandrill monkey was given by Mr. Dilip Dey (Keeper) and Lalan Kumar (Asst. Keeper) and briefing about the role of plants and animals in our life was done by zoo curator, S.K. Mahato.



Zoo Keeper presenting 'Keeper Talk on Mandrill' Monkey to children of Local NGO Anwasha



- E. International Vulture Awareness Day & Wildlife Week 2017** – It is the first time that Tata Zoological Park celebrated Vulture Awareness Day on September 2nd 2017. The main objective of this day is to make people aware of the declining number of vultures in India. More than 100 School Children from various schools visited Tata Zoo and they were shown a movie about vulture conservation on the theme “save vultures from imminent extinction”.

World Wildlife Week was organized in Tata Zoo from 2nd October to 8th October 2017. The theme of the programme was “Sustainable Tourism for Development” and “Prakriti Paryawaranaur Hum”. The chief guest of the programme was Mr. Biren R Bhuta. A number of events including Best Eco Club Award, Special Recommendation Award, Inter School Essay Competition on topic “Ecotourism and its benefits to wildlife conservation”, Inter School Debate Competition on theme “Is Ecotourism a part of conservation”, Inter-school competition, Fancy

Dress Competition and On the Spot Painting Competition were conducted. A Total of 1147 students from 40 institutions participated in the programmes.

F. ANIMAL WELFARE FORTNIGHT 2018 –

Tata Zoological Park organized Animal Welfare Fortnight during 16th to 30th January. The main purpose was to spread awareness among the young generations about the welfare of animals by standing against cruelty.

16th January 2018 also marked the 28th foundation day of the Tata Zoo. On this day, Prabhat Pheri was organized in which students took a round of Jubilee Park along with the zoo personnel voicing slogans on stopping cruelty toward animals and encouraging taking care of them. This was followed by sit and draw competition organized with Sanskriti, a local NGO. Activities such as Keeper Talk on Tiger, Mandrill, Butterfly and Touch and Learn programme were also conducted. Dr. Seem Rani gave insight on animal welfare. Total of 691 participants from different schools and local NGOs took part in the activity.



Prabhat Pheri being flagged off on 28th Foundation Day of Tata Zoo

G. WORLD WETLAND DAY 2018 --- Every year on 2 February, World Wetlands Day is celebrated all over the world to make aware the public, discuss the value of wetlands, its beneficial aspects as well as to promote its conservation.

H. To spread the message of wetland conservation and its importance in human life Tata Steel Zoological Park organized a lecture on theme “Wetlands for a Sustainable Urban Future” by Dr. Hishmi Jamil Husain, Head, Environment and Forest Management Raw Material- Strategy Group, Tata Steel Ltd and a short film “JAL YODHA” at Nature education centre. More than 50 School Children participated in programme.



Participants watching a short film “JAL YODHA” at NEC on occasion of World Wetlands Day

I. WORLD FORESTRY AND WATER DAY 2018

–On eve of World Forestry Day 2018, a Sit and draw /Essay writing competition was jointly organized by Tata Steel Zoological Park and Jharkhand Lok Kala and Sanskriti Vikash Munch on 11th March 2018. The theme of the competition was save and conserve nature. More than 600 school children participated in the programme.



Participants of Sit and draw competition during World Forestry Day

- J. KEEPER FOR A DAY:** To give a lifetime opportunity to wildlife enthusiasts and to bring them more close and personal with zoo's most popular animals Tata Zoo has initiated popular and demanding programme this year called "Keeper for a Day". It involves unique animal encounters and mucking out activities. This has been successfully organized with very much eager by the participants.



VISITORS TO ZOOLOGICAL PARK- ONSITE & OFFSITE

During the year under report from 1st April, 2017 to 31st March, 2018, the Zoo was physically visited by 448885 visitors.

The Zoo has a website of its own <http://www.tatazoo.com> and a Facebook profile <http://facebook.com/jamshedpurzoo>. Total page visits on website between 1/4/17 to 31/3/18 was 13,754 out of which 85.8% were new visitors and 14.2% returning visitor. Of the visitors 46% were female and 54 % male. Other than Indian visitors, zoo website was accessed by people from 62 countries. The Zoo has 1290 friends on Facebook. Google rating of Zoo is 4.3. These platforms are utilized by the Zoo to engage visitors and convey its ideology and mission among the people at large. Trip Advisor has ranked the Zoo as the 3rd most visited locale in Jamshedpur and has handed over a 'Certificate of Excellence' based on visitor feedback.

SEASONAL MANAGEMENT OF CAPTIVE ANIMALS:

Zoo has prepared three action plans namely Monsoon Action Plan, Summer Action Plan and Winter Action Plan for managing its captive inmates as per the seasonal and environmental changes. The action plans are implemented by the Curator (Zoo) along with his team of staff.

RESEARCH & VOLUNTEER ACTIVITIES:

Mr. Amlan Das, a final semester M.Sc Zoology student from Cooperative college, Jamshedpur pursued his dissertation work on 'Diurnal Behavioural pattern of Bengal tiger cubs' from January to April, 2018.

Volunteers were engaged in carrying out the Zoo education activities and commemoration of Wildlife Week.

ACQUISITIONS & BIRTH OF ANIMALS

During the year under report following acquisitions, birth, death and disposal of endangered animals in the zoo took place:

Sl.no	Name of Species	Sex				Remarks
		M	F	U	T	
ACQUISITION						
1.	Striped Hyena	1	0	0	1	Exchange with Kanan Pendari

						Zoo, Bilaspur
2.	Cockatiel	0	0	13	13	Donation Receipt
3.	Lady Amherst Pheasant	0	1	0	1	
4.	Ring Necked Pheasant	1	2	0	3	
5.	Reeves Pheasant	0	2	0	2	
BIRTHS						
Mammals		M	F	U	T	
1	Black buck	0	0	28	28	
2	Royal Bengal Tiger	0	0	3	3	
3	Indian Hog deer	0	0	7	7	
4	Northern plains grey langur	0	0	2	2	
5	Bonnet Monkey	0	0	1	1	
6	Mandrill monkey	0	0	5	5	
7	Barking deer	0	0	2	2	
8	Spotted deer	0	0	37	37	
9	Sambar deer	0	0	2	2	
10	Nilgai	0	0	1	1	
Birds		M	F	U	T	
1.	Pea fowl	0	0	2	2	
2.	Cockatiel	0	0	2	2	
3.	Red jungle fowl	0	0	2	2	
4.	Java sparrow	0	0	4	4	
5.	Budgerigar	0	0	2	2	

RESCUE AND REHABILITATION OF WILD ANIMALS

The Zoo is nestled near the Dalma Wild Life Sanctuary. Owing to this, the zoo is involved on regular basis in rescue and rehabilitation of wild animals with active support from the Forest Department. During the year under report various species of animals rescued by the Forest Department and locals either in injured or orphaned condition were provided veterinary care at Zoo Veterinary Hospital before being rehabilitated back to their wild habitat. List of rescues attended during 2016-17 are provided below:

Sl.no	Name of Species	No. of Specimen	Date	Cause of rescue	Action Taken/ Outcome
1.	Turtle	One (Unsex)	17.04.17		Released in Zoo duck pond
2	Black Ibis	One (male)	26.06.17	Injury in left wing and eye and was kept in Pelican encl. for treatment and care	Died on 12.07.17 due to traumatic injury and shock.
3.	Pariah Kite	One (Unsex)	01.07.17	Rescued and handed over by DFO office and was suffering from acute diarrhea, unable to fly.	Provided treatment and care and after recovery released on 05.07.17.
		One	12-09-17	Rescued from Bagbera area –fractured wing	Resident at backyard of Zoo

		(Unsex) One (Unsex)	24.02.18	R.O. Rakhamines	hospital. Resident at backyard of Zoo hospital.
4.	Bengal Owl	One (Unsex)	05.07.17	Rescued from Safari area was dull and stressful	Provided treatment and care and shifted to Beat-I for display since 13.07.17.
5.	Hanuman Langoor	One (male) One (male) One (Female)	15.08.17 Sept. 2017 04.01.18	One injured (Rt. Side paralytic) langoor handed over by Social worker through forest department Rescued from Jugsalai area injured by accident Caught within zoo premises.	Treated and released in Dalma area on 05.01.18
6.	Rhesus monkey	One (Male)	Nov. 17	Rescued from Zoo area	Treated and released in Dalma area on 05.01.18
7.	Jackal	One (Male)	16.10.17	Rescued from Zoo Sloth bear encl.(moat)	Released same day at Parks & garden green patch
8.	Hill Mynah	One (Unsex)	24.02.18	Rescued from Sonari area, unable to fly.	Kept in Zoo
9.	Rat snake	One (Unsex)		Captured from Display area of Lion encl.	Released in deer safari
10.	Python	Two(Unsex)		Captured from Mandrill and Small mammal encl.	Released in deer safari
11	Spectacle cobra	One (Unsex)		Captured from Sloth bear encl.	Released in deer safari

ANNUAL INVENTORY:

BIRDS			
Sl	Name of species	Scientific Name	Stock as on 31/03/2018
1	Pea Fowl (normal)	<i>Pavocristatus</i>	11
2	Grey Jungle fowl	<i>Gallus sonnererati</i>	1
3	Hill myna	<i>Graculareligiosa</i>	2
4	Cockatiel	<i>Nymhicushollandicus</i>	26
5	Bar Headed Goose	<i>Anser indicus</i>	1
6	White Ibis	<i>Threskionisacthionica</i>	3

7	Rainbow Lory	<i>Tricoglos sushaematodus</i>	2
8	Large Ind. Parakeet	<i>Psittacula cupatrai</i>	4
9	Rose Ring. Parakeet	<i>Psittacula krameri</i>	2
10	Red Breasted parakeet	<i>Psittacula alexendri</i>	3
11	Red Jungle Fowl	<i>Gallus gallus</i>	17
12	Silver pheasant	<i>Lophurany cthemera</i>	4
13	Golden pheasant	<i>Chrysolophus pictus</i>	1
14	Reeves pheasant	<i>Syrmaticus reevesi</i>	3
15	Ringnecked pheasant	<i>Phasianus colchinus</i>	3
16	Lady Amherst pheasant	<i>Chrysolophus amherstiae</i>	2
17	Emu	<i>Dromaius novaehollandiae</i>	13
18	Ostrich	<i>Struthioniforms</i>	1
19	Sulphur crest. Cockatoo	<i>Cocatoe galarita</i>	3
20	African Grey Parrot	<i>Psittacus erithacus</i>	4
21	Rosy Pelican	<i>Pelecanus Onocrotalus</i>	2
22	Grey Lag Goose	<i>Anser anser</i>	1
23	Bengal Eagle owl	<i>Bubo begalensis</i>	1
24	Java Sparrow	<i>Lonchura oryzivora</i>	22
25	Budgerigar	<i>Melopsittacus undulatus</i>	12
	Total (Birds)		153

REPTILE			
SI	Name of species	Scientific Name	Stock as on 31/03/2018
1	Gharial	<i>Gavialis gangeticus</i>	4
2	Mugger	<i>Crocodylus palustris</i>	1
3	Red-eared slider turtle	<i>Trachemysscripta elegans</i>	2
4	Star tortoise	<i>Goechelon elegans</i>	35
	Total (Reptiles)		42

MAMMALS			
SI	Name of species	Scientific Name	Stock as on 31/03/2018
1	Sloth Bear	<i>Melursus ursinus</i>	2
2	Black Buck	<i>Antilope cervicapra</i>	55

3	Indian Hog deer	<i>Axis porcinus</i>	15
4	Northern plain Gray langur	<i>Semnopithecus entellus</i>	10
5	Leopard	<i>Panthera pardus</i>	3
6	Bonnet Monkey	<i>Macaca radiata</i>	6
7	Rehsus Monkey	<i>Macaca mulata</i>	4
8	Tiger Bengal (Normal)	<i>Panthera tigris tigris</i>	3
9	Tiger Bengal (White)	<i>Panthera tigris tigris</i>	1
10	Sambar Deer	<i>Cervus unicolor</i>	5
11	Cheetal	<i>Axis axis</i>	84
12	Barking Deer	<i>Muntiacus muntjack</i>	16
13	Nilgai	<i>Boselaphus trago camelus</i>	6
14	Stripped Hyaena	<i>Hyaena hyaena</i>	3
15	Hippopotamus	<i>Hippopotamus amphibius</i>	1
16	Capuchin Monkey	<i>Cibus capocinus</i>	1
17	Mandrill Monkey	<i>Mandrillus sphinx</i>	14
18	Porcupine	<i>Hystrix begalensis</i>	3
19	African Lion	<i>Panthera leokruger</i>	5
20	Grants Zebra	<i>Equus quagga boehmi</i>	2
	Total (Mammals)		239
	GRAND TOTAL		434

ANNUAL MORTALITY REPORT (Deaths during 2017-18)

Sl.No	Name of animal	Sex	Died on	Reason of Death
	Mammal		Date	
1	Black buck	Male	15.04.17	Internal haemorrhage, septicaemia and shock
2	Bengal Tiger	Female	30.04.17	Cardio-pulmonary failure pre-disposed with multi-organ insufficiency
3	Hog deer male	Male	18.05.17	Multi-organ failure due to old age
4	Black buck albino	Female	18.05.17	Heat stroke and shock
5	Mandrill (Baby day old)	Female	5.06.17	Congenital defective unable to suck
6	NPG Langur (baby)	Male	22.06.17	Died due to Hepatitis (jaundice)
7	Cheetal	Male	8.07.17	Died due to acute tympany and shock
8	Barking deer	Male	13.07.17	Internal haemorrhage and shock during capture process
9	Black buck	Male	13.07.17	Inter haemorrhage due to infight injuries
10	Black buck	Female	21.07.17	Chest injury and pleurisy due to

				inflight injuries
11	Black buck (Albino)	Female	25.07.17	Respiratory failure
12	Black buck (Albino)	Female	26.07.17	Respiratory failure
13	Black buck (Albino)	Female	26.07.17	Respiratory failure
14	Cheetal -2	M/F	30.07.17	Traumatic injury during capture process
15	Cheetal -3	M/F	1.08.17	Traumatic injury during capture process
16	Black buck	Male	4.08.17	Inter haemorrhage and shock due to capture myopathy
17	Cheetal	Male	8.08.17	Death due to abdominal injury and shock
18	Cheetal	Male	16.08.17	Death due to Pulmonary T.B
19	Barking deer	Male	23.08.17	Died due to internal haemorrhage (inflight injury)
20	Cheetal	Male	29.08.17	Death due to Pulmonary T.B
21	Sambhar Deer	Male	29.08.17	Pulmonary T.B and mayo carditis
22	Cheetal	Male-	29.08.17	Death due to Pulmonary T.B
23	Cheetal	Male-2	30.08.17	Death due to Pulmonary T.B
24	Sloth Bear	Male	15.09.17	Died due to Hepatic failure (Jaundice)
25	Black buck (fawn)	Female	19.09.17	Died due to Maternal rejection
26	Cheetal	Male	7.10.17	Death due to Pulmonary T.B
27	Sambar Deer Fawn	Female	8.10.17	Day old - Congenital deformity (Died after birth)
28	Black buck (fawn)	Female	11.10.17	Died due to congenital defective birth
29	Cheetal	Male	21.10.17	Died due to internal haemorrhage (inflight injury)
30	Mandrill (Baby day old)	Female	4.11.17	still birth (premature birth)
31	Cheetal	Male	8.11.17	Death due to Pulmonary T.B
32	Hog deer male	Female	9.11.17	Internal haemorrhage, neck and spinal injury -inflighting injury
33	Cheetal	Male	14.11.17	Death due to Pulmonary T.B
34	NPG Langur	Male	28.11.17	Died due to acute Respiratory infection (pneumonia)
35	Cheetal	Male	3.12.17	Death due to Pulmonary T.B
36	Cheetal	Male	10.12.17	Death due to Pulmonary T.B
37	Cheetal	Female	13.12.17	Died due to cold exposure
38	Nilgai	Female	14.12.17	Died due to cold exposure
39	Cheetal day old fawn	Female	16.12.17	Died due to cold exposure
40	NPG Langur(baby)	Male	29.12.17	Died due to cold exposure. Recent being transferred to new house
41	Black buck (Albino)	Male	5.01.18	Died due to internal haemorrhage and shock
42	Black buck (Albino)	Female	17.01.18	Died due to internal haemorrhage and rupture of abdominal muscle
43	Cheetal	Female	21.01.18	Died due to cold exposure along with minor abdominal injury
44	Cheetal (Fawn)	Male	23.01.18	Congenital defective birth
45	Cheetal (Fawn)	Female	24.01.18	Died due to Maternal rejection

46	Cheetal (Fawn)	Male	25.01.18	Still birth
47	Cheetal (Fawn)	M/F	26.01.18	still birth
48	Barking deer (fawn)	Female	29.01.18	Cold exposure
49	Cheetal	Male	30.01.18	Died due to cold exposure along with antler injury
50	Cheetal (Fawn)	Female	4.2.18	Separation from mother
51	Cheetal (Fawn)	Male	5.2.18	Separation from mother
52	Cheetal (Fawn)	Female	8.2.18	Separation from mother
53	Cheetal (Fawn)	Female	11.2.18	Separation from mother
54	Cheetal (Fawn)	Female	16.02.18	Separation from mother
55	Cheetal (Fawn)	Female	17.2.18	Death due to pulmonary failure
56	Cheetal (Fawn)	Female	22.2.18	Died due to separation from mother
57	Nilgai (calf)	Female	22.02.18	Carcass rotten death could not ascertain
58	Cheetal fawn	Female	26.02.18	Enteric infection
59	Tiger (cub)	Female	18.03.18	Died due to Cardio-respiratory failure &(suspected Babesiosis)
60	Tiger(Sub-adult)	Female	25.03.18	Died due to Cardio-respiratory failure
	Birds			
1	Bengal owl	Male	1.05.17	Chalky deposits on visceral organ
2	Red jungle fowl	Male	4.05.17	Infight injury lead to internal haemorrhage and shock
3	Silver Pheasant	Female	12.05.17	Internal haemorrhage,trauma caused by predator
4	Red jungle fowl	Male	18.05.17	Neck injury caused during infight
5	Guinea fowl	Female	4.06.17	Death due to enteric infection
6	Pea fowl	Female	8.06.17	Died due to predation by wild python
7	Mandarin duck	Female	30.06.17	Death due to senility (old age)
8	Pea fowl	Male	18.07.17	Death due to neck injury (traumatic injury)
9	Cockatiel	Un	4.0817	predation by wild cat/civet
10	Cockatiel	Un	4.0817	predation by wild cat/civet
11	Cockatiel	Un	4.0817	predation by wild cat/civet
12	Cockatiel	Un	4.0817	predation by wild cat/civet
13	Love bird	Un	13.08.17	predation by wild mongoose
14	Budgerigar	Un	16.08.17	Enteric infection
15	Guinea fowl	Female	2.09.17	Death due to enteric infection
16	Cockatiel	Female	12.09.17	Enteric infection
17	Red breasted Parakeet	Male	23.09.17	Died due to enteric infection
18	Java Sparrow	Un	23.09.17	Predation
19	Guinea fowl	Female	4.10.17	Death due to egg bound condition and shock
20	Budgerigar	Un	27.10.17	Enteric infection
21	Golden Pheasant	Female	9.11.17	Died due to Respiratory tract infection-pneumonia
22	Budgerigar	Male	9.11.17	Died due to old age -senility
23	Red Jungle fowl	Male	12.11.17	Infight injury lead to internal haemorrhage and shock

24	Red jungle fowl	Male	20.11.17	Predation by wild cat/mongoose
25	Red jungle fowl	Male	21.11.17	Predation by wild cat/mongoose
26	Japanese Quail	Un	15.12.17	Enteric infection
27	Red Jungle fowl	Male	16.12.17	RTI (pneumonia)
28	Cockatiel	Un	27.12.17	Enteric infection
29	Cockatiel	Male	7.01.18	Cold exposure
30	Java Sparrow	Un	10.01.18	Cold exposure
31	Java Sparrow	Un	7.03.18	Unknown aetiology
32	Guinea fowl	M	24.03.18	Acute enteric infection
REPTILE				
01	Indian Star tortoise-1	F	10.09.17	Rotten carcass (unknown aetiology)

	Disposal	M	F	U	T	Remarks
1.	Black buck	2	2	0	4	Exchange with Kanan Pendari Zoo, Bilaspur
2.	Indian hog deer	2	3	0	5	Donated to West Bengal Zoo Authority- North Bengal Wild Animals Park, Siliguri & Jungle Mahal Zoological Park, Jhargram
3.	Royal Bengal Tiger	1	0	0	1	
4.	Sambar deer	2	2	0	4	
5.	Spotted deer	40	60	0	100	
6.	Larg. Ind. Parakeet	0	0	5	5	Released in wild – in campus

**STATUS OF COMPLIANCE W.R.T CONDITIONS CONVEYED BY CENTRAL ZOO
AUTHORITY VIDE THEIR LETTER NO.19-47/92-CZA(52)(VOL.V)/735/2017 DATED 03/04/2017**

S.No.	Norm No.	Violation of Recognition of Zoo Rules, 2009	Status of compliance as on 31/05/2018
(1) General requirements			
1	10.1(9)	The Guinea fowls housed next to Red jungle fowl aviary should be removed from the zoo.	Request to retain Guinea Fowl submitted vide letter dated 04/04/2013 & 09/06/2017. Reply awaited from CZA. Not done
(3) Development and Planning			
2	10.3(6)	The Zoo has not adopted population control measures for the excess population of herbivores (Spotted deer & Blackbuck). Efforts should be made to control their population immediately.	Population control measures are underway. 33 male spotted deer have been sterilized. 100 spotted deer relocated to North Bengal Wild Animals Park, Siliguri.
(4) Animal housing, display of animals and animal enclosures			
3	10.4(2)	The present area (3.5 Hectares) of the Herbivore Safari does not meet minimum specification of the Central Zoo Authority. The Zoo should increase the area of the Herbivore Safari to 30 Hectares.	Area for increasing the space of safari park does not exist. Masterplan is being revisited to convert the same into a composite herbivore enclosure only. Vehicular visits stopped.
4	10.4(2)	Enclosure for Rhesus macaque does not meet the minimum dimension requirement as of prescribed by the CZA. The same should be provided with the size as prescribed by the CZA.	Master plan is being revisited to accommodate creation of a new enclosure for Rhesus macaque. Not done
5	10.4(3)	A rusted frame made of metal lying inside the enclosure for Common Langur should be removed as it may injure the animals housed therein. Instead the Zoo may provide large wooden logs.	Done
(9) Acquisition and breeding of Animals			
6	10.9(3)	The Zoo should find appropriate mate for single Hippo & Mugger. They should either be paired or be sent to nearby recognized Zoos on breeding loan.	Proposal with other Indian zoos being explored for pairing. Not done

S.No.	Norm No.	Violation of Recognition of Zoo Rules, 2009	Status of compliance as on 31/05/2018
(2) Administrative and staffing pattern			
7	10.2(2)	It is understood that the Zoo is in the process of appointing the Junior Veterinary Officer. It is suggested that while appointing the Veterinary Officer, preference should be given to those who have experience in Wildlife & Zoo Animal Management.	Recruitment Rules framed and adopted.
(3) Developing and Planning			
8	10.3(5)	The natural landscape of the Zoo and animal enclosures should be kept clean in such a way that hygiene at the Zoo is not affected.	On going
9	10.3(6)	The Rhesus macaque and Common Langur housed at the Zoo should be provided animals enclosure of the dimension as prescribed by the CZA else these animals may be shifted to a recognised Zoo after screening their health and following the protocols and prior approval from CZA.	Master plan is being revisited to accommodate creation of a new enclosure for Rhesus macaque. Feeding cells of Common langur is under renovation. Not done
10	10.3(7)	The isolation and Quarantine wards should be improved with respect to space and hygiene.	Not done
(4) Animal housing, display of animals and animal enclosures			
11	10.4(1)	Animal houses of Zebra and Blackbuck towards the visitor's pathway should be camouflaged by planting trees, bushes and climbers.	In process / partial compliance done.
12	10.4(1)	The Night house in the enclosure for Spotted deer is visible to the visitors. It should be screened by planting appropriate trees/shrubs.	Not done
13	10.4(1)	The Keeper's entry to enclosure for the Barking deer and Hog deer has been provided on front side towards the visitors viewing side. The same should be shifted away from visitors' pathway.	In process / partial compliance made
14	10.4(1)	The Machan restaurant which is not in operation, it should be covered suitably to avoid unpleasant look to the visitors.	Done
15	10.4(1.3 & 9)	Rusted chain-link steel pipes, stand-off barriers used at various enclosures and aviaries should be repaired/replaced and painted with olive green colour. The stand-off barrier should follow a uniform design in the Zoo.	Not done

S.No.	Norm No.	Violation of Recognition of Zoo Rules, 2009	Status of compliance as on 31/05/2018
16	10.4(2)	Old abandoned aviary next to enclosure for Capuchin monkey should be demolished.	Done
17	10.4(2)	Kraal of the African lion (40 Sq. mtrs.) and Bengal tiger (64 Sq. mtrs.) are very small. Its size should be increased to at least 100 Sq.mtrs. As per CZA's norms. Further Zoo may opt for construction of additional Kraals since it was seen that Zoo is housing 2 -4 animals together in a Kraal.	Masterplan being revisited to relocate the lion & tiger enclosure. Not done
18	10.4(2)	Kraal in the enclosure for Sloth bear should have adequate sun light and aeration.	Done
19	10.4(3)	Pots made of Plastic used in the Zoo to provide food & drinking water to the animals should be replaced.	Done
20	10.4(3)	Gharial and Mugger enclosures as well as others should be planted with live plants, bushes & grass of various species as per physical need of the animals housed therein. These enclosures should be filled with additional sand/soil for basking preferably around the water pool to facilitate easy climbing of animal from the water body.	Not done
21	10.4(3)	Keeper's entry gate provided towards visitor's side in most Herbivore enclosures may be shifted to an appropriate place away from visitors' reach.	Partial compliance. In process
22	10.4(6)	New aviaries for Pheasants constructed in the Zoo may be provided with appropriate size wooden logs as an enrichment of the pheasants.	Done
23	10.4(6)	The iron pipes used in aviaries either to be covered by jute rope or should be replaced with Bamboo or Wooden logs.	Done
24	10.4(6)	The new aviaries constructed at the Zoo to house exotic birds should be provided adequate enrichment artefacts.	Done
(5) Upkeep and healthcare of animals			
25	10.5(2)	The feed trough provided to the Ostrich is too high. The height of the same should be reduced.	Not Done

CAMPUS WILD ANIMAL DIVERSITY -LIST OF FREE LIVING WILD ANIMALS

Mammal diversity:

- Jungle cat
- Palm civet
- Lesser bandicoots
- Indian Grey mongoose
- Indian Flying Fox
- Indian palm squirrel

Bird Diversity:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Red Vented Bulbul • Red whiskered bulbul • Grey Partridge • Stone Curlew • Purple Sunbird • Hoopoe • Golden Oriole • Coppersmith Barbet • Common Mynah • Asian pied starling • BrahmnyMynah • Small blue kingfisher • White Breasted Kingfisher • Asian Koel • Common Crow • Crow Pheasant • Baya • Pariah Kite • Rose ring Parakeet | <ul style="list-style-type: none"> • Green Bee-Eater • Black Drongo • Magpie Robin • Spotted Dove • Ring Necked dove • Spotted munia • Rock Pigeon • Little Cormorant • Darter • White Breasted Water Hen • Lesser whistling teal • Common Coot • Bronze winged Jacana • Pond heron • Night heron • Cattle egret • Little Egret • Indian peafowl |
|--|--|

Reptile Diversity:

- Indian Rat Snake
- Common krait
- Indian rock python
- Common trinket
- Indian cobra
- Checkered keelback
- Indian soft-shell turtle
- Bengal Monitor lizard