

**TATA STEEL ZOOLOGICAL PARK
JAMSHEDPUR**



ANNUAL REPORT
2021-2022



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2021-22**

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REPORT OF THE OFFICER IN-CHARGE

Greetings to our Friends & Supporters,

We were relieved to have been able to open from October 2021 after being closed since March, 2020. Although we were once again forced to close in January, 2022 till end of February, 2022 due to sudden flare up of COVID-19 pandemic cases in the State, we enjoyed seeing the smiles on our visitors' faces for each day we remained opened. It's become a very special period for us and was the pinnacle of a very difficult year.

We are indebted to the hard work of all the staff and officers within the Zoo and are proud of the professional way they have handled such a turbulent period in its history. Not only are we indebted to our own people, but we were also overwhelmed by the response to our calls for financial support from the public and particularly Tata Steel Limited.

Our public call for financial support through the 'Animal Adoption Program' was more successful than any of us could have imagined. The support of the companies through animal adoption has helped us deal with the significant costs when shut with no visitor income.

Despite all of these efforts we had to make difficult decisions to reduce costs and very sadly some staff left us— not something any of us would have anticipated at the start of the year.

Conservation and conservation education are our objectives. Tata Steel Zoological Park operates round the clock, and this did not falter during this difficult period. We are proud of the fact that COVID-19 restricted but did not halt us from the objectives. The Zoo continued with its conservation work within the collections of animals and plants on the Zoo site. Our team of conservationists worked tirelessly despite the COVID restrictions and its impact on their work, colleagues, and family life.

None of us wanted this to be the case but Tata Steel Zoological Park is led by a professional group of people, and we therefore remain confident that we will emerge from the Corona virus restrictions in a good position to return to full levels of activity.

Our education and engagement team rose to the challenge of a greater emphasis upon the virtual world and established a suite of sessions for schools and colleges in the city and Nation in particular of hosting the weeklong '*Azadi ka Amrit Mahotsav*'.

We thank all of my colleagues for their contributions in directing our efforts to maintain as much of our mission as possible, whilst focusing upon our financial health.

Thanking all,


(Bipul Chakrabarty)
DIRECTOR

TATA STEEL ZOOLOGICAL PARK



Tata Steel Zoological Park (Zoo) which lies within the heart of the beautiful, green city of Jamshedpur (Jharkhand) was established in 1990. Zoo is operated by Tata Steel Zoological Society, an NGO fully supported by Tata Steel Limited. The Society is registered under Societies Registration Act, Govt. of Jharkhand and as a 'Charitable' institution under section 12AA of the Income Tax Act.

Zoo was formally opened for public visitation on 3rd March 1994. The Zoo is recognized as a 'Medium' category Zoo by Central Zoo Authority u/s 38H of the Wildlife (Protection) Act, 1972.

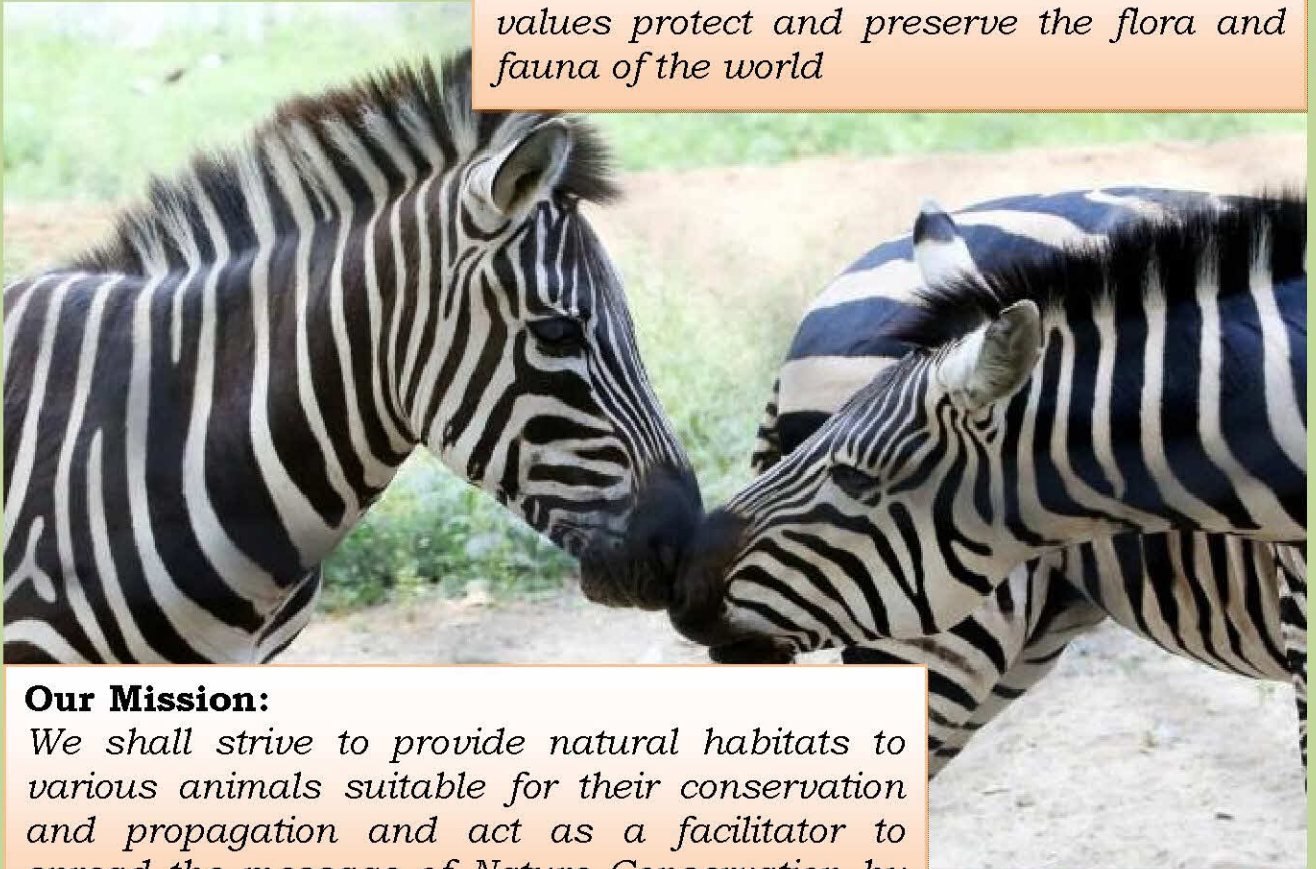
The 25 hectares Zoo campus is located between two wetlands on either side, the Subarnarekha River to its north and Jayanti Sarovar to its south; both these wetlands are famous for attracting large number of bird species hence adding to the intrinsic value of fauna. Animal enclosures are thoughtfully positioned to give the best immersive and naturalistic experience to the visitors and the lush environment does justice to the prime goal of preserving animals and helping them propagate in captivity.

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

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.

**ABOUT US-
ZOO OPERATIONS**

The Zoo has a full time 'Director' as the Officer-in-Charge. The functional areas being overseeing day to day Zoo operation & Planning. In discharge of responsibilities, Director is assisted by team of officers and staff, which is explained as below. Director reports to Hon. Secretary, Tata Steel Zoological Society for all purpose.



Deputy Director (Zoo) looks after the health care of animals. Major activities of the team being health care of animals, food & nutrition & general hygiene of zoo campus. For smooth discharge of responsibilities, Deputy Director is assisted by Asst. Veterinary Officer and a Field Supervisor/Veterinary Assistant. Deputy Director reports to Hon. Secretary, Tata Steel Zoological Society.

Curator (Zoo) looks after day-to-day management of captive wild animals, maintenance of their enclosures, enrichment, feeding, disinfection & transportation. Compiling of quarterly and annual animal inventory are also his duties. For smooth discharge of responsibilities, Curator is assisted by a battery of animal Keepers, Asst. keepers, Field assistants and animal attendants. Curator reports to the Deputy Director of the Zoo for all purposes.

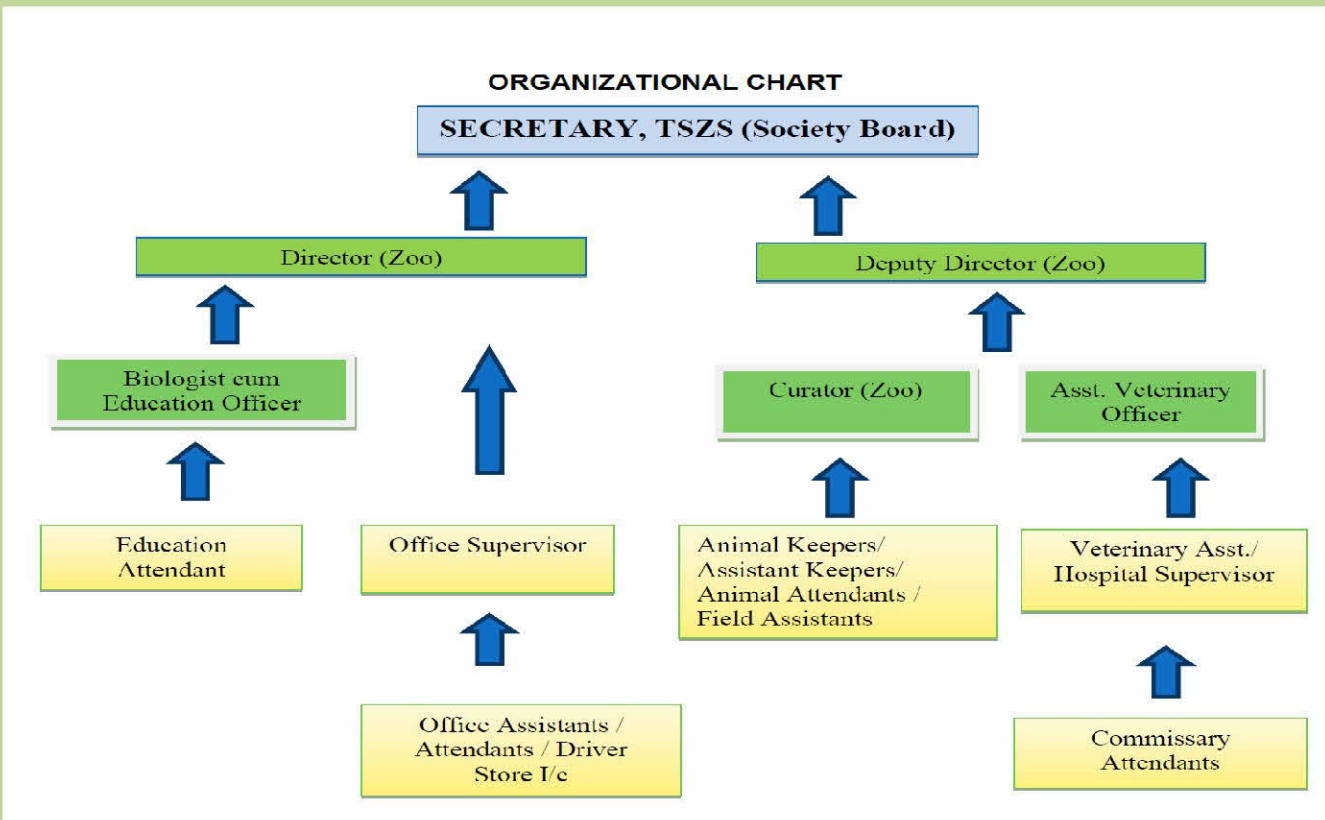
Biologist cum Education (BEO) officer looks after the Zoo Biology, Education awareness & Research activities. Major work being recording of animal behaviour, maintaining studbooks for endangered animals, organizing education awareness programmes, running of the Nature Education Centre & library. BEO is also responsible for drafting Zoo annual report & press notes. BEO is assisted by an office attendant and volunteers and reports to the Director (Zoo) for all purposes.

Office Supervisor looks after the office administration, accounting, contracts, procurement, stores, ticketing, meetings of the Society & Zoo security. Office Supervisor in discharge of his duties, is assisted by three office Assistants, Asst. Accountant and an attendant and reports to the Director (Zoo) for all purpose.

S.No.	Particulars	Information
Basic Information about the Zoo		

S.No.	Particulars	Information
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	0657-2234600
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)	19/08/2022
11	Category of zoo	Medium
12	Area (in Hectares)	25
13	Number of Visitors (2021-22) Closed due to COVID-19 Pandemic till September, 2021 & again from 3/1/22 to 4/03/2022	Adult : 131280 Children : 48760 Total Indian: 180040 Total Foreigners: --Nil Total Visitors: 180040
14	Visitors' Facilities Available in Zoo	Shelters, benches, drinking water kiosk, toilets, wheel chair, battery operated vehicle, food & refreshment stalls.
15	Weekly Closure Day of the Zoo	Monday
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	Mr. Bipul Chakrabarty, Director
	Name of the Deputy Director	Dr. Manik Palit (Veterinarian)
	Name of the Curator	Dr. Sanjay Kumar Mahato
	Name of the Biologist & Education Officer	Dr. Seema Rani
	Name of the Office Supervisor (Acting)	Mr. Mritunjay Kumar
Owner / Operator of the Zoo		
17	Name of the Operator	President, 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

S.No.	Particulars	Information
19	Contact details/Phone number of Operator	Mr. Amitabh, Secretary, TSZS & Head, Skills Development & Sports, CSR, Tata Steel Limited, 3E Road, Northern Town, Jamshedpur-831001 Tel: 0657-6642438; Mb.8092084774
20	E-mail address of Operator	c.amitabh@tatasteel.com



HUMAN RESOURCE

Sl. No.	Designation	Sanctioned post/ posts	Names of the Incumbent
ADMINISTRATION			
1.	Director	One	Mr. Bipul Chakrabarty
2.	Deputy Director	One	Dr. Manik Palit (Veterinarian)
3.	Office Supervisor	One	Vacant
4.	Accounts Assistant	One	Mr. Rakesh Munda
5.	Sr. Office Assistant	One	Mr. Mritunjay Kumar
6.	Office Assistant	Three	Mr. Shyam Ranjan Mahato, Mr. Sunil Kar & Smt. Monalisa Banerjee (Till 30/6/2021)
7.	Sr. Office Attendant	Two	Mr. Pratap Gill & Mr. Kartik Gorai

8	Senior driver	One	Mr. Biswanath Mazumdar
CAPTIVE ANIMAL MANAGEMENT & CONSERVATION EDUCATION			
9	Curator	One	Dr. Sanjay Kumar Mahato
10	Biologist cum Education Officer	One	Dr. Seema Rani
11	Asst. Veterinary Officer	One	Vacant
12	Field Supervisor	One	Vacant
13	Veterinary Compounder	One	Mr. Himanshu Aghara
14	Lab Assistant	One	Vacant
15	Keeper (Animals)	Four	Mr. Dilip Dey, Mr. S. A. Ansari & Mr. Tarkeswar Ram
16	Asst. Keeper (Animals)	Fourteen	Mr. Sulendra Das; Mr. Bijoy Mukhi; Mr. Binod Sharma; Mr. Surendra Kumar Singh; Mr. Lalan Kumar; Mr. Dinesh Mahato & Mr. Linsa Harpal
17	Field Assistant	Two	Mr. Ali Akhtar Khan & Mr. R. Srinivas
18	Animal attendants	Outsourced (Eight)	Smt.Malti Manjhi; Smt.Gyani Devi; Mr. Mazumdar Mahato; Mr. Rajkishor Harpal; Mr. Manoj Nag; Mr.Bharat Chandra Mahato; Mr. Vishal Singh & Mr.Rajesh Pal

CAPACITY BUILDING

Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
Dinesh Mahato, Asst. Keeper	Captive management of Reptiles	24 th to 26 th Nov.2021	Nandankanan Biological Park, Bhubaneswar, Odisha
Bharat Chandra Mahato, Animal Attendant	As above	As above	As above
Bipul Chakrabarty Director	General Zoo Management	10 th -11 th Oct.2021	Sardar Patel Zoological Park, Kevadiya, Gujarat

ZOO ADVISORY COMMITTEE

The Zoo Advisory committee was reconstituted on 22nd March,2021 by Tata Steel Limited. Following are the members of the committee:

1	Vice President, Corporate Services, Tata Steel	President
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2	Chief, Corporate Social Responsibility, Tata Steel	Vice President
3	Capt. Amitabh- Head, Skill development & Sports, CSR, Tata Steel Jamshedpur	Secretary
4	Mr. Vinay Kumar Sharma, Sr.Manager (CMAG), Tata Steel Jamshedpur	Treasurer
5	Mr. Arvind Kumar Sinha-Dy.GM (Town Services), Jamshedpur	Member
6	Mr. Arun Kumar Singh, Sr.Manager (Societies),Tata Steel Jamshedpur	Member
7	Ms.Deepika Chaurasia, Sr.Manager Corp.Communications, Tata Steel Jamshedpur	Member
8	Mr. Ajay Kumar Singh, Head HRBP, Iron making, Tata Steel Jamshedpur	Member
9	Mr. Sumir Mathur, Sr.legal Counsel, Tata Steel	Member
10	Mr. Prashant Kumar Singh, Lead Soln. & Business Development, Tata Steel Jamshedpur	Member
	Permanent Invitees from Zoological Park	
11	Mr. Bipul Chakrabarty	Director
12	Dr. Manik Palit	Deputy Director

The Zoo advisory committee met virtually (e-meetings) on various occasions to review the zoo operations, communications strategy & animal adoption programme in the wake of Zoo being closed to visitors for COVID-19 Pandemic.

HEALTH ADVISORY COMMITTEE

Zoo Veterinary Health Advisory Committee members met virtually on 13/04/2021; 12/12/2021 & 11/02/2022. Regular consultation was also held with the members of Health Advisory committee virtually including obtaining their assistance in Post-mortem examination of endangered animals that had died in the Zoo.

1	Dr. M. Navin Kumar, Deputy Director (Retd), Nehru Zoological Park, Hyderabad, Telangana	Chairperson
2.	Dr. A.B. Shrivastav, Director (Retd), School of Wildlife Forensic and Health, Veterinary College Jabalpur, M.P	Member
3.	Prof. Niranjana Sahoo, Coordinator, Centre for Wild life Health, College of Veterinary Science and Animal husbandry, OUT, Bhubaneswar, Odisha	Member
4.	Dr. ManikPalit, Deputy Director and Veterinary Officer, Tata Steel Zoological Park, Jamshedpur, Jharkhand	Coordinator
5	Mr. Bipul Chakrabarty, Director, Tata Steel Zoological Park	Invitee

6	Dr. Sanjay Kumar Mahato, Curator, Tata Steel Zoological Park	Invitee
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Following was the outcome of the meeting

- Line of treatment to be adopted for a pure breed South African Lioness 'Zoya', on her closed Pyometra.
- Line of treatment for White Tiger 'Kailash', aged 12 years and suffering from carcinoma in the chest area as diagnosed through X-ray.
- Future action plan for managing penile prolapse in male Gharial.

Other than the above advisory committees, the Zoo was also guided by following two subcommittees in its day to day administrative and development matters:

A) Zoo Purchase Committee

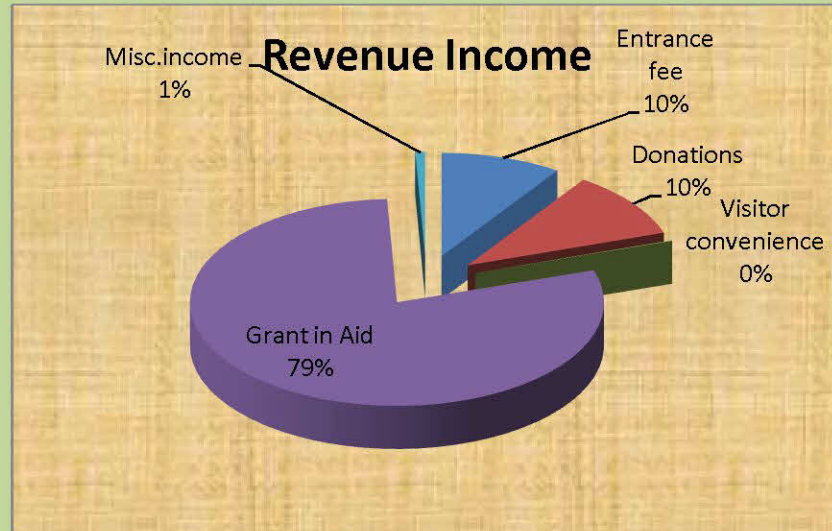
Sl. No.	Name / designation	Position
1.	Mr. Arun Kr. Singh, Sr. Manager, Societies, Tata Steel & Member, TSZS	Chairman
2.	Dr. Manik Palit, Dy. Director, TSZP	Member
3.	Dr. Sanjay Kumar Mahato, Curator, TSZP	Convener

B) Zoo Civil Construction Committee

Sl. No.	Name / designation	Position
1.	Dr. Manik Palit, Dy. Director cum Veterinary Officer, TSZP	Member
2.	Dr. Sanjay Kumar Mahato, Curator, Tata Steel Zoological Park	Convener
3.	Er. P. P. Kundu (Retd.), Tata Steel Utilities & Infrastructure Services Limited	Technical Member
3.	Er. N. K. Singh, PASA Cell, Tata Steel	Technical Member

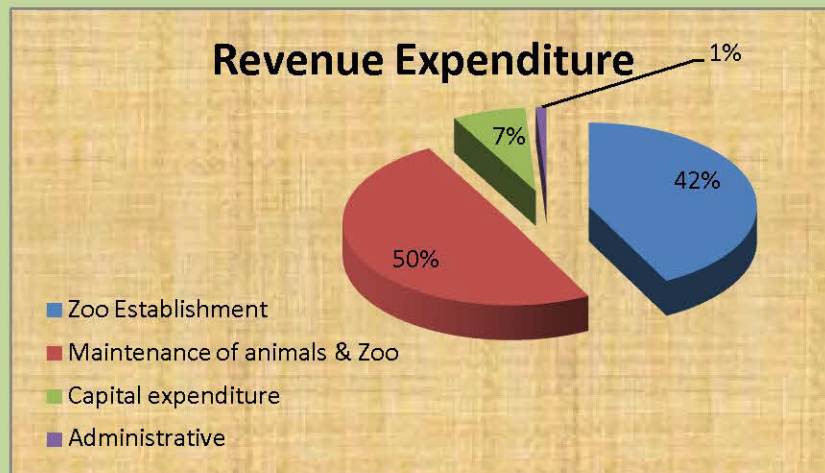
**FINANCIAL PERFORMANCE-
Statement of Income & Expenditure**

Revenue Income:



Tata Steel Limited during the financial year 2021-22 provided Grant in Aid of ₹4.0crores to Tata Steel Zoological Society for annual maintenance & operation of Zoo. The Society revenue through animal adoption and other miscellaneous income was ₹1.05 crores.

Revenue Expenditure:



Total amount spent by Tata Steel Zoological Society for running the Zoological Park during 2020-2021 was ₹3.70 crores, major expenditure being on maintenance of captive animals, their enclosures & establishment.

DAILY FEED SCHEDULE OF ANIMALS

Captive Animals are provided with a balanced diet drawn up by Curator, Veterinarian and Biologist of the Zoo. Accordingly, food is prepared and distributed on daily basis by animal keepers. All large cats are put on a day's fast every Monday. Details of food provided are given 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



Sl	Name of Animal	Diet Prescribed for each animal	Quantity	
BIRDS				
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	Budgerigar/ Finches	China dana with paddy 10%	10gms	
		Green Veg. leaves per group/ cell	50 gms	
		Bajra	5 gms	
		Sunflower seeds/ Kusum seeds per group/ cell	30 gms	
5	Love birds	China dana with Paddy 10%	30 gms	
		Bajra	10 gms	
		Sunflower seeds/ Kusum seeds	10 gms	
		Banana / Papaya	10 gms	
6	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	
7	Ostrich	Mix Grain	2.5 kg	
		Banana	2 ps	
		Boiled eggs	1 ps	
		Green Vegetable Leaves	250 gms	
8	Emu	Mix Grain	1.5 kg	
		Boiled Egg (Seasonal)	1 pc	
		Banana	2 pc	
		Green Vegetable Leaves	250 gms	
		Green Grass	Ad Lib	
9	Bar Headed Goose	Paddy	100 gms	
		Polished Rice	100 gms	
		Green Vegetable Leaves	150 gms	
		Green Grass	Ad Lib	
10	White Ibis	Fish (dead)	200 gms	
11	Rosy Pelican	Fish (dead)	300-500 gms	
12	Bengal eagle owl	Meat (Boiled)	100 gms	
WORLD OF PARROTS				
1	Parakeets	Soaked Gram (Chana)	25 gms	
		Morning 9.00 a.m.	Groundnut	25 gms
			Sunflower, Kusum Seeds (Seasonal)	10 gms
		Forenoon 11.00a.m-12 noon	Germinated Green Gram (Moong)	10 gms
			Carrots / Beetroot	25 gms
			Seasonal Fruit / Peas	25 gms

		Green Chillies	5 gms
		Banana	10 gms
		Papaya / Guava	10 gms
		Soaked Corn Kernels	25 gms
2	Cockatiel	Foxtail Millet (Cheena Dana) with 10% Paddy Whole	10 gms
	Morning 9.00 a.m.	Sunflower, Kusum Seeds (Seasonal)	10 gms
		Germinated Green Gram (Moong)	10 gms
	Forenoon 11.00am –12 noon	Carrots / Beetroot	10 gms
		Seasonal Fruit / Peas	5 gms
		Banana	10 gms
		Soaked Gram (Chana)	25 gms
3	Cockatoo	Soaked Gram (Chana)	50 gms
	Morning 9.00 a.m.	Groundnut	50 gms
		Sunflower, Kusum Seeds (Seasonal)	20 gms
		Germinated Green Gram (Moong)	10 gms
	Forenoon 11.00am – 12 noon	Carrots / Beetroot	25 gms
		Peas / Seasonal Fruit	25 gms
		Green Chillies	5 gms
		Banana	50 gms
		Papaya / Guava	10 gms
		Pedigree Pellets	10 gms
		Soaked Corn Kernels	25 gms
4	Rainbow Lorikeet	Milk	30 ml
		Honey	2.5 ml
		Cerelac	10 gms
		Banana/ Papaya/ Watermelon	20 gms
REPTILES			
1	Indian Star Tortoise	Carrots / Sweet Potato	10 gms
		Papaya	10 gms
		Tomato / Banana / Watermelon	10 gms
		Cucumber	10 gms
		Green Vegetable Leaves –Spinach (Palak)	10 gms
		Bengal Gram	10 gms
		Calcium granules	5 gms
2	Marsh Crocodile	Meat (Buffalo meat)- Alternate day	0.500gms-1Kg
		Meat (Buffalo meat): Winter (Alternate day)	0.500 gms
3	Gharial	Fish (dead) – Alternate day	500 gms
		Fish (dead) –Winter (Alternate day)	250-500 gms

<u>MAMMALS</u>			
1	Nilgai & Sambar	Concentrated Mixture	1.5 kg
		Chaff (Kutti)	200 gms
		Molasses (Seasonal)	100 gms
		Tree Leaves	Ad Lib
		Green Grass	Ad Lib
2	Spotted Deer, Blackbuck, Barking Deer, Hog Deer	Concentrated Mixture	750 gms
		Chaff (Kutti)	100 gms
		Molasses (Seasonal)	50 gms
		Tree Leaves	Ad Lib
		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
		Carrot	100 gms
		Honey / Molasses (Braising of tree branches)	50 gms
		Banana	200 gms
	Afternoon	Boiled rice	750 gms
		Milk	1 litre
		Boiled egg (Seasonal- Winter)	1pc / 100 gms
	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
Pumpkin			100 gms
Green Vegetable Leaves			100 gms
6	Macaque (Bonnet / Rhesus): 9.00 am	Banana	100 gms(1 pc)
		Apple	50 gms(½ pc)
		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
		Citrus fruits (Seasonal)	50 gms
	4.00 pm	Cooked Bread (Chapati)	100 gms
7	Hanuman Langur:	Green Leaves	Ad Lib
	Morning 9.00 am	Banana	100 gms (1 pc)
		Apple	50 gms (1/2 pc)
	Forenoon 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
	Green Vegetable Leaves	100 gms	
Afternoon 3.00 pm	Tree Leaves	Ad Lib	
Afternoon 4.30 pm	Cooked Bread (Chapati)	100 gms	
8	White Throated Capuchin Morning 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
	Forenoon 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
		Boiled Egg	50 gms
		Boiled Snail (2 days a week)	25 gms
Afternoon 4.00 pm	Cooked Bread (Chapati)	100 gms	
9	Mandrill	Banana	100 gms (1 pc)
	Morning 9.00 am	Apple	100 gms (1 pc)
		Dog feed	10 gms
	Forenoon 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 (SimlaMirch)	100 gms
		Boiled Egg (once a week, in winter twice a week)	67 gms (1 pc)
	Afternoon 2.00-3.00 pm	Cooked Mixed Grain Bread (Chapati)	50 gms
	Afternoon 4.00 pm	Cooked Rice / Kichri (rice, dal, turmeric powder, salt) on alternate day	400 gms
		Groundnut (whole) / Sunflower seeds	50 gms
10	African Lion		
	Male	Buffalo meat (6 days in a week)	6-8 Kg
		Winter- Buffalo Meat (6 days in a week)	8-10 Kg
	Female	Buffalo meat (6 days in a week)	6-7 Kg
		Winter- Buffalo Meat (6 days in a week)	6-8 Kg
11	Bengal Tiger		
	Male	Buffalo meat (6 days in a week)	6-8 Kg
		Winter- Buffalo Meat (6 days in a week)	8-10 Kg
	Female	Buffalo meat (6 days in a week)	6-7 Kg
		Winter- Buffalo Meat (6 days in a week)	6-8 Kg
12	Leopard		
	Male	Buffalo meat (6 days in a week)	2 Kg
		Chicken (6 days in a week)	1.0 Kg
		Winter- Buffalo Meat (6 days in a week)	2-2.5 Kg
		Chicken (6 days in a week)	1.0 Kg
	Female	Buffalo meat (6 days in a week)	2 Kg
		Chicken (6 days in a week)	1.0 Kg
		Winter- Buffalo Meat (6 days in a week)	2-2.5 Kg
		Chicken (6 days in a week)	1.0 Kg
13	Striped Hyena		
	Male	Buffalo Meat (6 days a week)	2 -2.5 kg
	Female	Buffalo Meat (6 days in a week)	1.5-2.0 Kg.
14	Grants Zebra		

	Concentrated Mix.	2.750 Kg
	Roughages	3.25 Kg
	Carrot, Sweet Potato/ beat room – 2.00 Kg	
	Grass hey-1.00 Kg	
	Paddy straw- 0.50 Kg	
	Molasses (Winter)-	0.60 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%

Note: During the year we provide Pork (de-skinned) and chicken to the carnivores as per the prescribed by Vet.

Last feed schedule was revised on 15/01/2020 and continued during the year under report.

Vaccination & De-worming Schedule

In compliance to Recognition of Zoo Rules,2009 a vaccination and de-worming schedule has been drawn up by the veterinarian of the zoo and the same is implemented as per details provided below:

Vaccination Schedule followed for Zoo animals are:

#	Species	Diseases covers		Name of the vaccine	Dose and route	Periodicity	Last done
1	Tiger, Lion & Leopard	Feline Distemper	Calci virus, Rhinotracheitis and Rabies infection	Feligen CRP	1.00 ml S/C or I/M	Annual	Dec 2021
2.	Cloven footed Herbivores	Foot & Mouth diseases	FMD virus	Clovax/ RakchaO vac	2.00 ml S/C or I/M	Every nine month	Nilgai / Sept 2021
3	Large cats	Haemo-protozoan infection	Trypanosomiasis	Triquine injection	2.00--3.00 ml for Body weight 100 kg - to 200 kg	Every nine month	Feb 2022

De-worming Schedule

#	Class of Animal	Species	Month	Schedule of rotation	Remarks
1.	Large cats and Hyena	Tiger, Lion, Leopard, Hyena	Mar, Jun, Sep, Dec	Four times in a year	Group of medicines changed almost every time
2.	Ursidae	Sloth bear	Mar, Jun, Sep, Dec	Four times in a year	Not change
3.	Herbivores	Hippopotamus, Deer, Antelope	Feb, May, Sept	Three times in a year	Alternate group on each occasion
4	Primates	Mandrill, Macaques, Capuchin monkey, Langur	Feb, May, Aug, Nov	Four times in a year	Sometimes changed

5.	Aves	Peafowl, Ostrich, Emu, Duck, Pelican, Goose, Jungle fowl, Pheasant, Parakeet, Guinea fowl and Small birds	Feb, Jun, Oct	Three times in a year	-do-
6.	Reptiles	Crocodile, Gharial and Indian Star tortoise	Sept and Mar	Twice in a year	-do-

Disinfection Schedule

Curator (Zoo) in consultation with the veterinarian draws up the annual schedule for disinfection of all animal enclosures. Nimyl solution (neem & eucalyptus oil-based disinfectant) is used for cleaning the feeding cells. For open exhibit area lime and turmeric powder are spread ad libitum. Details of the schedule are provided below:

Disinfection / Cleaning Schedule of Zoo Animal Enclosures

#	Species	Type of Enclosure	Disinfectant used and Methods	Frequency of Disinfection
1	Hippopotamus	Wet moat open enclosure	a) Change of water of wet moat	Weekly
			b) Removal of dung & silt, Lime spreading in moat & enclosure	Monthly
			c) Tall grass cutting in display area	As per requirement
2	Monkeys & Macaques	Wet moat open enclosure and Closed enclosure	a) Lime -bleach spreading in and around enclosure	Weekly
			b) Cleaning of night shelter & cell with lime-bleach	Fortnightly
			c) Sterilization of cells with blow lamp	Monthly
			d) Cleaning of wet moat of Capuchin enclosure	Alternate month
			e) De-silting of wet moat (Langur and Mandrill)	As per requirement

			f) Tall grass cutting and removal in display area (Langur)	As per requirement
3	A. Birds & Pheasants	Closed Aviaries	a) Lime spreading around cells (Out side enclosure)	Weekly
			b) Cleaning of cells with Kohrsolin	Monthly
			c) Turning of soil inside the cells	Monthly
	B. Aquatic birds	Closed enclosure-Chainlink Covered	a) Lime-bleach spreading in and around enclosure	Weekly
			b) Change of water	Monthly
			c) De-silting of pond	As per requirement
4	Deer & Antelope	Open enclosure with chainlink fence	a) Cleaning of enclosure and spreading of lime/bleach	Weekly
			b) Removal of dung from enclosure	Monthly
5	Bear	Dry moat open enclosure	a) Cleaning of cells with lime/Kohrsolin	Weekly
			b) Lime bleach spreading in and around enclosure	Weekly
			c) Sterilization of cells with blow lamp	Monthly
			d) Bush (tall grass) cutting in display area	As per requirement
6	Lion, Tiger, Leopard & Hyena	Dry moat open enclosure, Wet moat open enclosure, Closed enclosure with chainlink covered, Dry moat open enclosure respectively.	a) Cleaning of cells with lime-bleaching/Kohrsolin	Weekly
			b) Lime -bleaching spreading in and around enclosure	Weekly
			c) Sterilization of cells with blow lamp	* Weekly
			d) Bush (tall grass) cutting of enclosures	As per requirement
			e) Cleaning of tiger moat	As per requirement

#	Species	Type of Enclosure	Disinfectant used and Methods	Frequency of Disinfection
7	Zebra	Open enclosure with chainlink fence	a) Lime –bleach spreading in and around enclosure	Weekly
			b) Cleaning of night shelter & cell with lime-bleach	Fortnightly
			b) Removal of dung from enclosure	Monthly/as per requirement
			f) Tall grass cutting and their removal in display area	As per requirement
8	Mugger & Gharial	Open enclosure with wall and chainlink fence	a)Change of pond water	Monthly
			b) Lime powder spreading around enclosure	Weekly
			c) de-silting of pond	As per requirement
			d) Tall grass cutting/ bush cutting	As per requirement
9	Ostrich & Emu	Open enclosure with chainlink fence	a) Removal of dung	Monthly
			Lime /Bleach spreading in and around enclosure	Weekly
			Tall grass cutting	As per requirement
10	Deer safari	Open enclosure with concrete wall fence	a) Lime spreading around feeding pots & on dung	Fortnightly
			a) Cleaning of Drink water pool with lime-bleach	Monthly
			b) Tall grass/Bush cutting	As per requirement
11	Indian Star Tortoise	Closed enclosure with chain link and welded mesh fence	Lime spreading around (Outside) enclosure	Weekly
			Cleaning of encl. and Turning of Soil	Monthly

#	Species	Type of Enclosure	Disinfectant used and Methods	Frequency of Disinfection
12	Butterfly Park	Closed enclosure with agronet covered	Lime spreading in & around the Centre.	As per requirement
13	Herbivores & carnivores	As mentioned above for respective animals	Turning of Soil of display area	Once in 5 years/ as per requirement
14	Large cats	As mentioned above for respective animals	Burning of display area	Yearly

Health check-up of Zoo Employees

All zoo employees including contractual staffs are subjected an annual medical examination. During the year under report, medical examination could not be conducted due to COVID-19 restrictions and lockdown.

DEVELOPMENTAL ACTIVITIES

ANIMAL HABITATS AND UPKEEP

During the year under report, the following activities were taken up as part of improving upon the welfare of captive animals:

- a) Newly acquired area survey for enclosure no. 25A as per new master plan layout Through M/s Gupta enterprises.
- b) 16 sitting was organised for Zoo Purchasing Committee Meeting to finalise the annual contracts of animal food, staffs uniform, Zoo kiosks/Restaurants etc. There were 3 (three) meeting was organised for Zoo Civil Construction Committee.
- c) 12 trips, approx 9600 cu.ft soil dumped in deer safari to strengthening the tree base by covering exposed tree roots.
- d) Lion and Tiger kraal was repaired and strengthen with fabrication of iron bars in the fence.
- e) The vendor for Painting and white washing has been finalised and work done in some of the enclosure including office and Zoo hospital building.
- f) Annual sampling of water quality in the Zoo was tested through Water Management Department, JUSCO on 09.08.2021.

AWARENESS AND EDUCATION

It has been a constant effort on part of the Zoo to fulfil its primary objective and to meet AICHI TARGET-1 of its strategic plan for Biodiversity Conservation 2011-2020. Our main target group is youth, especially the students at school and colleges for spreading awareness about biodiversity conservation. This year we organised numerous educational programmes on using the virtual platform, Major awareness activities undertaken during the year are illustrated below.

This also provided us with an advantage of expanding our outreach in terms of audiences.

Following was the calendar of events organised during the year under report:

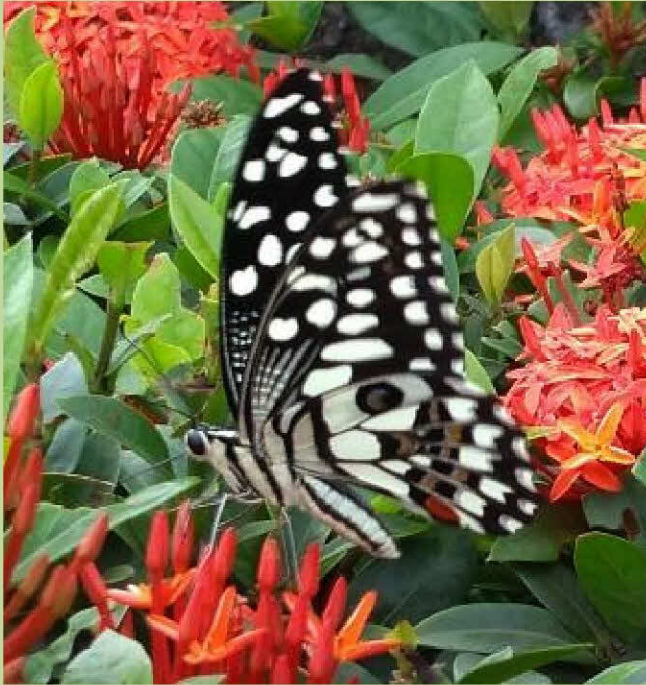
S.No.	Events / Programs	Period	Activity
1	Earth Day	22/04/2021	Virtual awareness program on the newly emerging threats to our wildlife under the limelight along with measures to avoid it at its best
2	International Day for Biological Diversity	22/05/2021	Virtual awareness programme organised by Zoo volunteers to sensitise people on the need to conserve the Biological Diversity of Singhbhum landscape.
3	World Environment Day	05/06/2021	Webinar- "A Road to Restoring our Environment"- involving the awardees of Best Eco Club Teacher award.
4	Conservation to Coexistence – CZA guided endangered species awareness activity as part of 'Azadi ka Amrit Mahotsav'. Species in focus for the Zoo was 'Black buck'	26/07/2021 to 01/08/2021	Weeklong awareness activities included poster making, slogan writing, quiz programme (Zoo storm), expert talk show and virtual tour of the blackbuck habitat in the Zoo.
5.	Elephant Day	12/08/2021	Virtual awareness programme by Zoo team (Platform Facebook)
6	International Day for Vulture	14/09/2021	Virtual awareness programme by Zoo team (Platform Facebook)
7	Wildlife Week	02/10/2021 to 06/10/2021	Theme- 'Connecting to Nature' Weeklong awareness activities included quiz programme (Zoo storm), Drawing/painting

			competition; Essay competition; best Eco club teacher award and expert talk.
8	Zoo Foundation Day	16/01/2022	Inhouse activities and sharing of experiences
9	Hippo Day	15/02/2022	Virtual awareness programme by Zoo team on the species (Platform Facebook)
10	World Wildlife Day	03/03/2022	Virtual awareness programme with the theme "saving one species can save another species" for recovering key species for ecosystem restoration.
11	World Forestry Day	21/03/2022	Virtual awareness campaign to drive home the importance of Forests in our life centred around the theme "Forests & Sustainable Production and Consumption".
12	World Water Day	22/03/2022	Virtual awareness campaign on Facebook with theme "NO WATER, NO LIFE /"जल बचाओ जीवन बचाओ" , so every individual should take responsibility for saving Freshwater and preserving Water Resources.



Volunteer Program: Volunteers are engaged and associated at Zoo in not only research activities, but also in wildlife conservation education initiatives. This Year Ms. Riya Chakrabarty, a resident of Jamshedpur pursuing MSc (H) Zoology from Lovely Professional University, Punjab continued as a Volunteer at the Zoo.

SEASONAL SPECIAL ARRANGEMENTS FOR UPKEEP OF ANIMALS



a) Zoo grown Lemon provide to all primates during pick summer days as feeding enrichment. Approx 300 pieces of Lemon provided to the captive primitive primates.

b) Ecological enrichment of all cells of Pheasantry carried out with providing new perches and hiding space. Enrichment done in kraal of Sloth bear (JOJO) by providing heavy wooden logs. 14 Earthen pots provided to the birds as nest boxes. Refresh of enclosure substrate with replacement of sand done in all kraals, aviaries etc.

c) Plan for seasonal management was prepared and implemented accordingly. Mainly Zoo needs the

plan for summer management, monsoon/flood management and winter management action plan. This year Preparation of cyclone YASS for captive animals was also in place.

- d) Cleaning and re-set up of newly revamped all aquariums done at Aquarium house in the Zoo.
- e) Introduced newly acquired Pheasants (Silver pheasant (1:10 and Ring-necked pheasants 1:1) with Zoo stock.
- f) Animal keeping staffs (Mr. Dilip Dey, Keeper, Mr. Lalan Kumar, Asst. Keeper and Mr. Bharat Chandra Mahato, Animal attendant) were deputed for night feeding of hand rearing chicks of African grey Parrot simultaneously for a period upto three months. The bird chicks were successfully reared to adulthood.
- g) Free ranging two cobras, two Indian Rock Python and three Rat snakes were rescued from animal enclosure and released in the Zoo Forest patches.

RESEARCH WORK

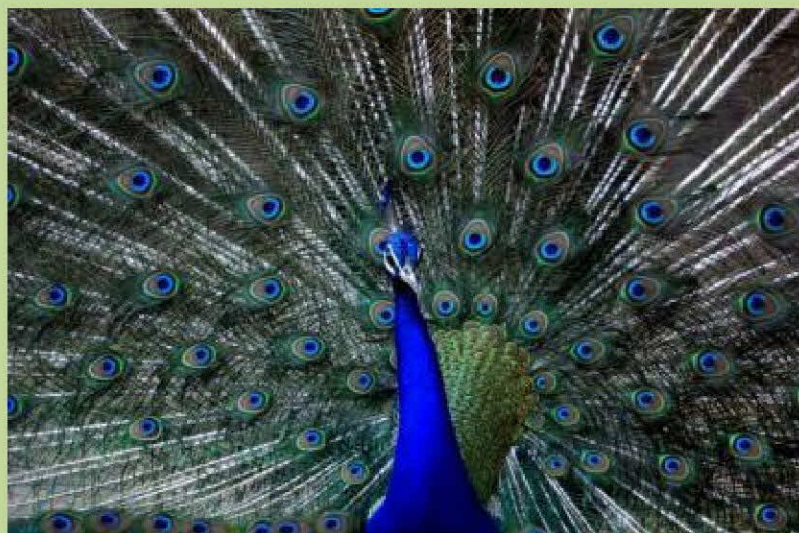
A micro habitat was created for breeding African grey parrot in the Zoo. Due to early rejection of chicks by the parents they were shifted for hand rearing. The chicks were reared with bird feed Nutribird- A19. First 30 days of hatching, chicks were fed 8 times in 24 hrs. Gradually the frequency was decreased & quantity of solid food including fruits etc. was increased under the guidance of Biologist cum Education Officer and Curator.

RESCUE AND REHABILITATION OF WILD ANIMALS

The Zoo is situated within the largest Elephant landscape (Central-East) of the country which harbours quite a few reserve forests and wildlife sanctuaries notable among them being the Dalma Elephant Reserve. Thus, the zoo regularly cooperates with the Forest Department in rescue and rehabilitation of wild animals. During the year under report, various species of animals rescued by the Forest Department in injured condition and were provided veterinary care at the Zoo Veterinary Hospital before being rehabilitated back to their wild habitat. List of rescues attended during 2021-2022 is provided below:

#	Date of Rescue	Details of animals and no of specimen	Received from	Date of submission of report to CWLW/ CZA	Action taken	
					Date & place of rehabilitation / Disposal	Reason for housing in the Zoo / if not released in their habitat
1	9.06.2021	Hanuman languor, adult ,male	R.F.O. JSR	--	9.06.2021 at Dalma forest area	Admitted as was injured in road accident-require treatment and care
2	13.07.2021	Rhesus monkey male	R.F.O. JSR	--	Died on 15.07.2021	The monkey is having missing lower limb (foot) left leg with a gangrenous wound admitted for treatment and care.

#	Date of Rescue	Details of animals and no of specimen	Received from	Date of submission of report to CWLW/ CZA	Action taken	
					Date & place of rehabilitation / Disposal	Reason for housing in the Zoo / if not released in their habitat
3	17.07.2021	Hanuman Langur, Male	R.F.O , Chakulia	--	Died on 22.07.2021	The monkey is having missing lower limb (foot) left leg with a gangrenous wound admitted for treatment and care.
4	14.08.2021	Hanuman Langoor – Male	R.F.O Mango	--	Died on 15.08.2021	Having opened wound in the left hind limb below knee joint .
5	2.10.2021	Honey Badger	R.F.O Mango	--	3.10.2021 Handed over to RFO after treatment for rehabilitation on	Was admitted and provided SOS treatment



**ANNUAL INVENTORY:
(1.04.2021 to 31.03.2022)**

SCH-I & SCH-II -WILD LIFE (PROTECTION) ACT						
S.No	Name of species	Scientific Name	STOCK AS ON 31.03.2022			
BIRDS			M	F	U	T
1	Pea Fowl (NC)	<i>Pavocristatus</i>	3	7	0	10
2	Hill myna	<i>Gracula religiosa</i>	0	0	3	3
3	Grey Jungle fowl	<i>Gallus sonnererati</i>	0	1	0	1
TOTAL BIRD			3	8	3	14
REPTILE						
1	Gharial	<i>Gavialis gangeticus</i>	0	3	0	3
2	Mugger	<i>Crocodylus palustris</i>	0	1	0	1
TOTAL REPTILE			0	4	0	4
MAMMALS						
1	Sloth Bear	<i>Melursus ursinus</i>	1	0	0	1
2	Black Buck	<i>Antilope cervicapra</i>	31	37	6	74
3	Indian Hog deer	<i>Axis porcinus</i>	7	10	3	20
4	Northern plain Gray Langur	<i>Semnopithecus entellus</i>	2	4	1	7
5	Leopard	<i>Panthera pardus</i>	1	1	0	2
6	Bonnet Monkey	<i>Macaca radiata</i>	2	2	0	4
7	Rehsus Monkey	<i>Macaca mulata</i>	0	3	0	3
8	Tiger Bengal (Normal)	<i>Panthera tigris tigris</i>	0	2	0	2
9	Tiger Bengal (White)	<i>Panthera tigris tigris</i>	1	0	0	1
TOTAL			45	59	10	114

ANIMALS of OTHER SCHEDULE

BIRDS			M	F	U	T
1	Cockateel	<i>Nymphicus hollandicus</i>	0	0	23	23
2	Bar Headed Goose	<i>Anser indicus</i>	0	0	1	1
3	Black headed Ibis	<i>Threskionis melanocephalus</i>	1	1	0	2
4	Rainbow Lory	<i>Tricoglossus haematodus</i>	0	1	0	1
5	Larg. Ind. Parakeet	<i>Psittacula cupatrai</i>	12	4	0	16
6	Rose Ring. Parakeet	<i>Psittaculakrameria</i>	4	3	0	7
7	Red Breasted parakeet	<i>Psittacula alexandri</i>	1	2	0	3
8	Red Jungle Fowl	<i>Gallus gallus</i>	1	2	0	3
9	Silver pheasant	<i>Lophuranyx themera</i>	1	2	0	3
10	Reeves pheasant	<i>Syrmaticus reevesi</i>	0	1	0	1
11	Lady Amherst pheasant	<i>Chrysolophus amherstiae</i>	0	1	0	1
12	Ring necked pheasant	<i>Phasianus colchinus</i>	1	1	0	2

13	Emu	<i>Dromaius novaehollandiae</i>	2	5	0	7
14	Ostrich	<i>Struthio camelius</i>	0	1	0	1
15	Sulphur crest. Cockatoo	<i>Cocatoegalarita</i>	2	1	0	3
16	African Grey Parrot	<i>Psittacus erithacus</i>	2	2	2	6
17	Great white Pelican	<i>Pelecanus Onocrotalus</i>	0	1	0	1
18	Indian Eagle owl	<i>Bubo begalensis</i>	0	0	1	1
20	Budgerigar	<i>Melopsittacus undulatus</i>	0	0	1	1
21	Java Sparrow	<i>Lonchura oryzivora</i>	0	0	1	1
22	Helmeted Guinea Fowl	<i>Numida meleagris</i>	0	0	1	1
23	Japanese quail	<i>Coturnix japonica</i>	0	0	11	11
TOTAL			25	27	56	108
MAMMALS						
1	Sambar Deer	<i>Cervus unicolor</i>	1	5	0	6
2	Chital	<i>Axis axis</i>	41	60	15	116
3	Indian muntjack	<i>Muniacus muntjack</i>	4	5	0	9
4	Nilgai	<i>Boselaphus tragocamelus</i>	3	3	1	7
5	Stripped Hyaena	<i>Hyaena hyaena</i>	2	0	0	2
6	Hippopotamus	<i>Hippopotamus amphibius</i>	1	0	0	1
7	Mandrill Monkey	<i>Mandrillus sphinx</i>	4	12	0	16
8	Indian crested Porcupine	<i>Hystrix begalensis</i>	1	1	0	2
9	African Lion	<i>Panthera leokrugerii</i>	2	3	0	5
10	Grant's Zebra	<i>Equus bohemi</i>	1	1	0	2
TOTAL			60	90	16	166
REPTILES						
1	Red-eared slider turtle	<i>Trachemys scripta elegans</i>	1	1	0	2
2	Indian Star tortoise	<i>Geochelone elegans</i>	12	12	0	24
TOTAL			14	12	0	26



**Annual Mortality
(2021-22)**

S.No.	Name of the Animal Mammals	Scientific name	Sex	Date of death	Reason of Death
1	Hog deer fawn	<i>Axis porcinus</i>	Male	2.04.2021	cardio- respiratory, open wound n septicaemia
2	black buck fawn	<i>Antilope cervicapra</i>	Male	8.04.2020	Cardio-respiratory failure- dehydration n maternal rejection
3	Barking deer fawn	<i>Muntiacus muntjack</i>	Male	24.04.2021	Cardio-respiratory failure - dehydration n shock
4	Cheetal deer	<i>Axis axis</i>	Female	29.04.2021	Cardio-respiratory failure - hepatitis sunstroke n dehydration
5	Hanuman Langoor	<i>Cemnopethicus entelus</i>	Female	4.05.2021	cardio-respiratory failure
6	Black buck	<i>Antilope cervicapra</i>	Male	10.05.2021	Cardio-pulmonary failure predisposed with septicaemia n shock
7	Hog deer, fawn	<i>Axis porcinus</i>	Female	26.05.2021	Cardio-respiratory failure - pneumonia n exposure to rain
8	black buck fawn	<i>Antilope cervicapra</i>	Female	30.05.2021	Cardio-respiratory failure - dehydration and heat stroke
9	Nilgai calf	<i>Boselaphus tragocamelus</i>	Female	19.05.2021	Cardio-respiratory failure - dehydration and heat stroke
10	Hog deer	<i>Axis porcinus</i>	Female	25.-6.2021	Cardio-respiratory failure and shock
11	Cheetal deer	<i>Axis axis</i>	Male	25.06.2021	Cardio-respiratory failure n internal haemorrhage and shock
12	Cheetal deer	<i>Axis axis</i>	Female	30.06.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
13	Cheetal deer	<i>Axis axis</i>	Male	3.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
14	Cheetal deer	<i>Axis axis</i>	Male	3.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
15	Cheetal deer	<i>Axis axis</i>	Male	3.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
16	Cheetal deer	<i>Axis axis</i>	Female	3.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
17	Cheetal deer	<i>Axis axis</i>	Female	4.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
18	Cheetal deer	<i>Axis axis</i>	Female	10.07.2021	Cardio-respiratory failure n acute haemorrhagic gastro-enteritis
19	Rhesus Monkey	<i>Maccaca mulatta</i>	Male	15.07.2021	Cardio-respiratory failure n tetanus (toxaemia) and leg

20	Hanuman Langoor	<i>Cemnopethicus entelus</i>	Male	19.07.2021	wound Cardio-respiratory failure
21	Hog deer	<i>Axis porcinus</i>	Male	17.01.2022	Cardio-respiratory failure
22	Black buck	<i>Antilope cervicapra</i>	Male	10.08.2021	Cardio-respiratory failure n gastro-enteritis with shock
23	Black buck	<i>Antilope cervicapra</i>	Female	13.08.2021	Chest injury , internal haemorrhage may be due to in-fight
24	Black buck	<i>Antilope cervicapra</i>	Female	16.08.2021	Chest injury , internal haemorrhage may be due to in-fight
25	Black buck	<i>Antilope cervicapra</i>	Male	17.09.2021	Chest and abdominal haemorrhage , susp. In-fight injury
26	Black buck	<i>Antilope cervicapra</i>	Female	18.09.2021	Chest injury , internal haemorrhage may be due to in-fight
27	Black buck, fawn	<i>Antilope cervicapra</i>	Female	9.10.2021	internal haemorrhage of chest cavity may be due to in-fight
28	Black buck, fawn	<i>Antilope cervicapra</i>	Male	13.10.2021	internal haemorrhage of chest n abdominal cavity may be in-fight injury
29	Black buck	<i>Antilope cervicapra</i>	Female	1.12.2021	Cardio-respiratory failure and pneumonia (cold exposure)
30	Black buck fawn	<i>Antilope cervicapra</i>	Male	27.12.2021	Cardi-respiratory failure , ascites and cold exposure pneumonia
31	Hog deer	<i>Axis porcinus</i>	Male	17.01.2022	Cardi-respiratory failure , Myocarditis and pneumonia
32	Hog Deer	<i>Axis porcinus</i>	Female	21.01.2022	Cardi-respiratory failure , and traumatic injury of gravid uterus n shock
33	Black buck	<i>Antilope cervicapra</i>	Female	1.02.2022	Cardi-respiratory failure , n internal haemorrhage- death of foetus .
34	Black buck	<i>Antilope cervicapra</i>	Female	23.02.2022	Traumatic injury of visceral organs and gravid uterus .
35	Black buck	<i>Antilope cervicapra</i>	Female	25.02.2022	Internal haemorrhage and traumatic injury of pelvic area.
36	Black buck fawn	<i>Antilope cervicapra</i>	Male	26.02.2022	Internal haemorrhage and traumatic injury of pelvic area.
37	Cheetal deer,	<i>Axis axis</i>	Male	11.09.2021	Pneumonia and pleurisy of lungs
38	Cheetal deer fawn	<i>Axis axis</i>	Female	18.03.2022	Maternal rejection

S.No.	Name of the Animal	Scientific name	Sex	Date of death	Reason of Death
1	Guinea fowl	<i>Numida melegris</i>	Male	13.04.2021	Died due to enteric infection and dehydration shock
2	Japanese Quail	<i>Coturnix japonica</i>	Female	15.04.2021	Enteric infection and dehydration
3	Emu chick	<i>Dromaius novaehollandi</i>	Female	28.05.2021	Cardio-respiratory failure - Acute pneumonia
4	Zebra finch	<i>Taeniopygia guttata</i>	Male	14.06.2021	Died due to enteric infection and dehydration shock
5	Japanese Quail	<i>Coturnix japonica</i>	Female	18.06.2021	Enteric infection and dehydration
6	Red jungle fowl Large.	<i>Gallus gallus</i>	Female	30.08.2021	Tumour like growth in the intestine
7	Ind.parakeet Reeves	<i>Psittacula eupatria</i>	Female	11.09.2021	Enteric infection and dehydration shock
8	pheasant	<i>Sirmaticus reevesi</i>	Female	18.08.2021	Hepatitis and enteritis
9	Red jungle fowl	<i>Gallus gallus</i>	Female	30.08.2021	Tumour like growth in the intestine
10	Zebra finch	<i>Taeniopygia guttata</i>	Unsexed	4.09.2021	Missing , suspected for predation
11	Budgerigar	<i>Melopsitticus undulatus</i>	Female	9.09.2021	Died due to enteric infection and dehydration shock
12	Large. Ind.parakeet Reeves	<i>Psittacula eupatria</i>	Female	11.09.2021	Died due to enteric infection and dehydration shock
13	pheasant	<i>Sirmaticus reevesi</i>	Male	11.10.2021	Enteric infection and dehydration shock
14	Japanese Quail	<i>Coturnix japonica</i>	Female	13.10.2021	Enteric infection and dehydration shock
15	Japanese Quail	<i>Coturnix japonica</i>	Female	27.10.2021	Enteric infection and Hepatitis
16	Japanese Quail	<i>Coturnix japonica</i>	Female	6.11.2021	Died due to tumour growth near Liver and gizzard
17	Emu chick	<i>Dromaius novaehollandi</i>	Female	7.11.2021	Cardio-respiratory failure n congenital defective limbs
18	Budgerigar	<i>Melopsitticus undulatus</i>	Male	10.11.2021	Cold exposure and pneumonia
19	Budgerigar	<i>Melopsitticus undulatus</i>	Female	11.11.2021	Cold exposure and pneumonia
20	Red jungle fowl	<i>Gallus gallus</i>	Female	16.11.2021	Tumour like growth in the intestine
21	Guinea fowl	<i>Numida melegris</i>	Male	22.11.2021	Died due head injury n internal haemorrhage-predation
22	Hill mynah	<i>Gracula religiosa</i>	Male	7.12.2021	Died due to pneumonia - cold exposure

23	Ring necked pheasant		Female	28.12.2021	Died due to enteric infection and dehydration
24	Japanese Quail	Coturnix japonica	Female	30.12.2021	Died due to enteric infection and dehydration
25	Emu	<i>Dromaius novaehollandi</i>	Female	10.01.2022	Cardio-respiratory failure , severe enteritis and shock
26	Japanese Quail	Coturnix japonica	Male	19.03.2022	Died due to enteric infection
27	Red jungle fowl	<i>Gallus gallus</i>	Female	26.03.2022	Died due to enteric infection and dehydration

Reptile

1	Gharial	<i>Gavialis gangeticus</i>	Male	13.04.2021	Cardio-respiratory failure predisposed lung n liver necrosis
2	Indian Star tortoise	<i>Geochelone elegans</i>	Female	4.06.2021	Died due to Enteritis and dehydration shock
3	Indian Star tortoise	<i>Geochelone elegans</i>	Female	13.08.2021	Died due to Enteritis and dehydration shock
4	Indian Star tortoise	<i>Geochelone elegans</i>	Male	2.11.2021	Died due to Enteritis and dehydration shock



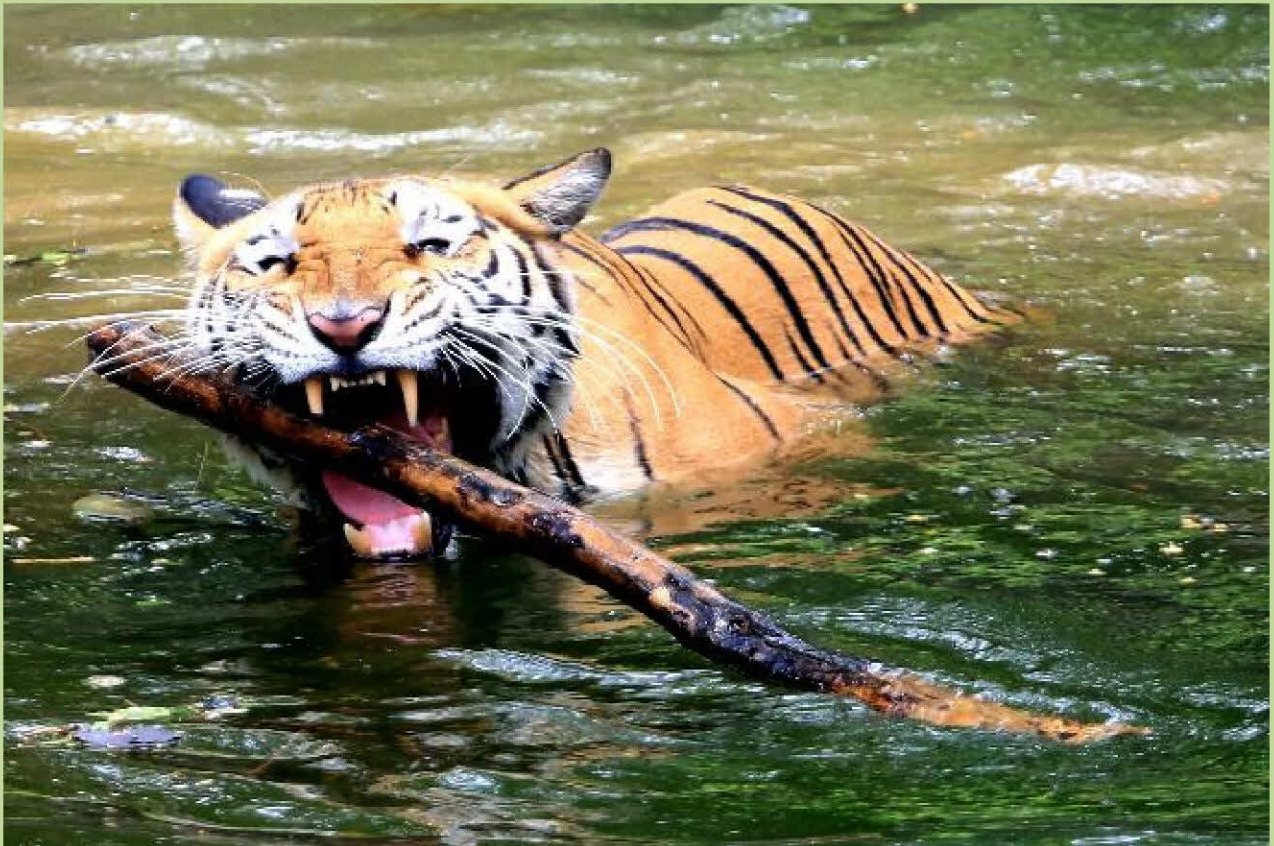
**DETAILS OF COMPLIANCE W.R.T CONDITIONS CONVEYED BY CENTRAL ZOO
AUTHORITY VIDE Letter No.19-47/92-CZA(52)/ C.No.146960 DATED 08.02.2021**

S.No.	Norm No.	Condition	Time period	Status of compliance as on 30/06/22
(1) General requirements				
1	10.1(8)	One old obese rhesus macaque with pendulous abdomen should be kept off display	Immediately	Animal Expired
(2). Administrative & staffing pattern				
2.	10.2(2)	Scientific and Technical staff specified in the Recognition of Zoo Rules,2009 as applicable for a 'Medium Zoo' should be appointed in the Zoo.	Sixty months	Compounder appointed
(4) Animal Housing, display of animals and animal enclosures:				
3	10.4(3)	Enclosures and night shelters should be made rat proof by fixing net on the drain outlets	One month	Completed
(5). Upkeep and Healthcare of animals				
4	10.5(2)	For large cats, Buffalo meat is being procured which is not cost effective. District administration should be approached for permitting supply of buffalo meat to the zoo for the specific purpose of feeding the large carnivores in the zoo. Guidance on the subject can be had from the in-charge, Bhagwan Birsa Biological Park, Ranchi.	Three months	Completed
5	10.5(2)	Random food and water samples are not being tested in a recognised laboratory. A system should be introduced for random checking of food and water on a regular basis and sample reports should be properly documented and kept on record	Two months	Process initiated and ongoing
6	10.5(6)	Enclosures and night shelters of important species should have CCTV facility with monitors in room of Director and Veterinary Officer to keep a close watch on the health	Six months	Process initiated

		and behavioural disposition of animals.		
(6). Veterinary and infrastructure facilities				
7	10.6(3) & 10.7(4)	Post-mortem room needs to be modernized with an oil-fired incinerator instead of the present wood fired one, which is not permitted by the CPCB/SPCB. Waste water from PM room needs to be collected in a pit outside and appropriately treated before being discharged. Also, the chimney of the present incinerator is surrounded by leaves and branches of adjacent trees. The chimney needs to be insulated from the surrounding vegetation to eliminate the possible fire hazard.	Eighteen months	Plan for new PM room has been finalised. Work in progress.
8	10.6(5)	Veterinary support staff namely the Lab Assistant and the Stockman/Compounder should be appointed in the Zoo.	One year	Compounder appointed
9	10.6(6)	Zoo management should have such an arrangement for animal diagnostics with a local veterinary college laboratory and should enter into an MoU with the local veterinary College.	Four months	Dialogue with Ranchi Veterinary College have been initiated. Progress stalled due to COVID-19.
9.Acquisition and breeding of animals				
10	10.9(4)	Efforts should be continued for pairing of remaining unpaired animals, viz Bengal Eagle Owl, Hippo, Ring-Necked Pheasant, Bar-Headed Goose, Ostrich and Mugger. If pairing is not possible, it could be translocated to some other zoo where its mate is available.	One year	We are actively exploring with other zoos. Few proposals are lying with CZA for approval.
11	10.9(9)	Number of Nilgai, Chital and blackbuck housed in the zoo should be restricted to the prescribed number for a Medium Zoo and the Master Plan approved by the Central Zoo Authority.	Eighteen months	Ongoing

S.No.	Norm No.	Condition	Time period	Status of compliance as on
12	10.9(10)	Although a Disaster Management Team (DMT) has been constituted under the Curator, there is no written Disaster Management Plan (DMO). Zoo authorities should formulate a DMP at the earliest to be followed by the DMT.	Six months	Completed

*****X*****



**CAMPUS WILD ANIMAL DIVERSITY
LIST OF FREE-LIVING ANIMALS**

Bird Diversity

Red Vented Bulbul
Red whiskered bulbul
Grey Partridge
Stone Curlew
Purple Sunbird
Hoopoe
Golden Oriole
Coppersmith Barbist
Common Mynah
Asian pied starling
Brahminy Mynah
Small blue kingfisher
White Breasted Kingfisher
Common Crow
Crow Pheasant
Baya
Kite
Parakeets
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
Asian Koel

Mammal Diversity

Jungle cat
Golden jackal
Indian Flying fox
Lesser bandicoot rat
Indian Grey Mongoose
Indian palm squirrel

Reptile Diversity

Indian Rat Snake
Indian Rock Python
Checkered Keelback
Common trinket
Indian Cobra
Indian Soft shell turtle
Bengal Monitor lizard

Annual Report Picture Courtesy:
Mr.Sanjib Dutta & Zoo library

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