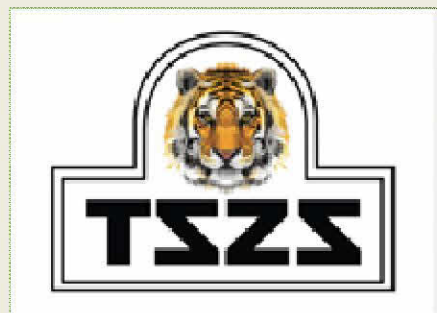


TATA STEEL ZOOLOGICAL PARK JAMSHEDPUR



**ANNUAL REPORT
2020-2021**

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REPORT OF THE OFFICER IN-CHARGE

Greetings to our Friends & Supporters,

Annual financial year 2020-2021 has truly been a challenging year, and I hope you and yours continue to fare well and are in good health. Like so many Zoos around the world, The Tata Steel Zoological Park has endured staggering challenges this year. However, thanks to phenomenal support of Tata Steel Limited and its associate companies, we received and are also grateful for our achievements despite the dire circumstances. We will forever be grateful.

We continue to provide high quality care for over 400+ animals, including new the new born.

We closed our doors to the public from 17th March,2020 and are yet to reopen for public visits. However, our team worked diligently to implement health and safety measures at the Zoo and keep both our animals and staff safe.

Due to health risks caused by the COVID-19 pandemic, in-person engagement with schools and student groups were no longer possible. One solution? Go virtual! We launched our virtual education program and have had great experiences sharing our wonderful wildlife with both schools in Jamshedpur and outside.

We welcomed new life to the Tata Zoo family, and we said goodbye to several animals that will forever remain in our hearts.


2020-2021 was also a year of loss. "Magru& Moti" – Dancing bears (Sloth Bear) rescued by the Indian Govt. agencies from the dancing bear trade near Agra were handed over to our zoo for lifetime care in year 1995. Both the bears were a prime attraction of our zoo. Magru& Moti had spent almost three decades in our zoo representing their species. More recently we lost 'Ved' the leopard, who was rescued as a cub in 2004 by the Assam State Forest Department near Kaziranga and handed over to our zoo in year 2008. Ved lived with us close to decade& half and along with his partner leopard 'Basanti' sired cubs 'Jumbo' & 'Etu' in 2009 and then Albastross in 2013.

We share their stories as we are thankful to have provided full lives for such amazing animals, and to share them with our visitors, especially school children, as part of our mission to create a positive understanding about the wildlife of India.

Our work continues and we remain hopeful for more progress and great achievements.

Thank you to our donors for your support when we needed it most. Finally, a heartfelt thank you to our community - for your words of encouragement, which have meant so much to us and to the entire Zoo team, which had worked tirelessly in these pandemic times to keep the Zoo kicking.

With warm regards


(Bipul Chakrabarty)
DIRECTOR

TATA STEEL ZOOLOGICAL PARK

History of Zoo-

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 birdspecies 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 Vision:

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

**Our Mission:**

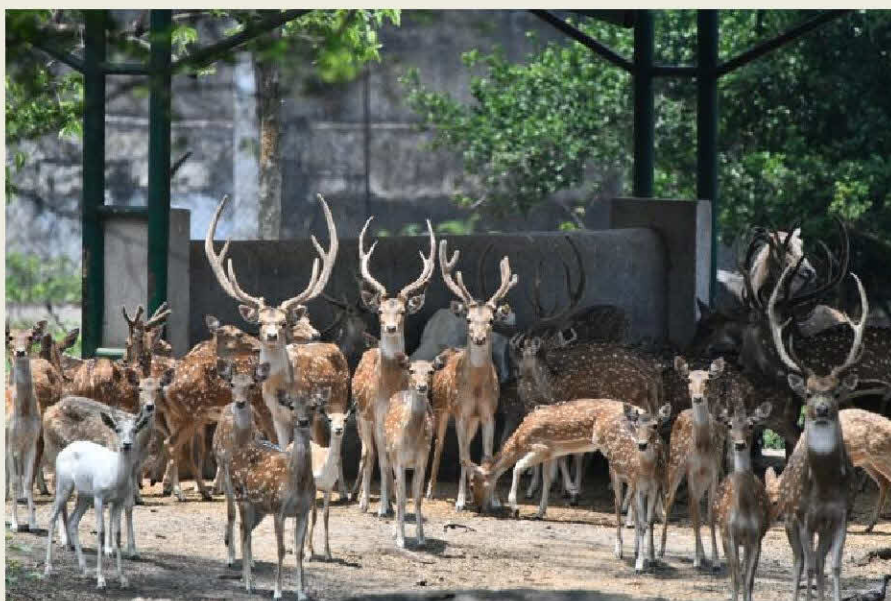
We shall strive to provide natural habitats to various animals suitable for their conservation and propagation and act as a facilitator to spread the message of Nature Conservation by Awareness and Educational Programme.

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.

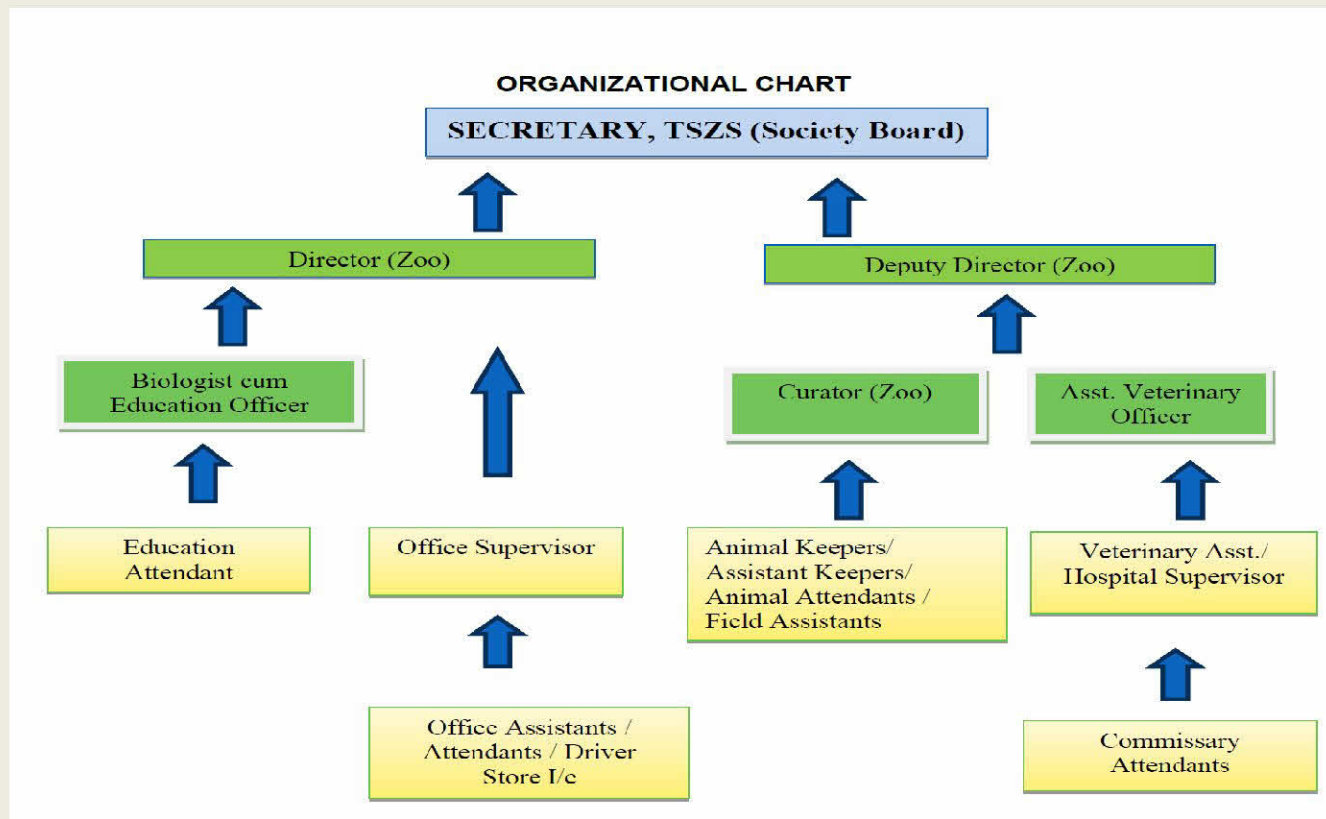
Curator (Zoo) looks after day-to-day management of captive wild animals, maintenance of their enclosures, enrichment, feeding, disinfection & transportation. Compiling of quarterly and annual animal inventory are also his duties. For smooth discharge of responsibilities, Curator is assisted by a battery 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		
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 (2020-2021) Closed due to COVID-19 Pandemic	Adult :Nil
		Children :Nil
		Total Indian:Nil
		Total Foreigners:--Nil
		Total Visitors: NIL
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	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
19	Contact details/Phone number of Operator	Mr. Amitabh, Secretary, TSZS & Head, Skills Development, CSR, Tata Steel Limited, 3E Road, Northern Town,

S.No.	Particulars	Information
		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.ManikPalit (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
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	Veterinary Asst. / Field Supervisor	One	Mr. Sushen Chandra Mahato (till 31 st December,2020)
13	Keeper (Animals)	Four	Mr. Dilip Dey, Mr. S. A. Ansari & Mr. Tarkeswar Ram
14	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
15	Field assistant	Two	Mr. Ali Akhtar Khan & Mr. R. Srinivas
16	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
Dr. Manik Palit, Deputy Director & Veterinarian	Refresher course on wildlife Health management for Veterinarians	23 rd – 25 th , Feb 2021	Central Zoo Authority (Virtual course)
Mr. Dilip Dey, Animal Keeper	Keeper Training	9 th - 12 th Feb 2021	Kanan Pendari Zoological Park, Bilaspur, Chhattisgarh

Dr. Sanjay Kumar Mahato, Curator (Zoo) was invited as a resource person by Forester Training Centre, Saranda, to provide firsthand training on Forest and Wildlife Management to the newly appointed Sub-beat Officers of Forest Department, Jharkhand at Dalma Wildlife Sanctuary.



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
2	Chief, Corporate Social Responsibility, Tata Steel	Vice President
3	Capt. Amitabh- Head, Skill development, CSR, Tata Steel	Secretary
4	Mr. Chandraprakash Sanjay Bhutada, Manager(Cash), Tata Steel	Treasurer
5	Mr. Arvind Kumar Sinha-Dy.GM (Town Services), TSUISL	Member
6	Mr. Arun Kumar Singh, Sr.Manager(Societies),Tata Steel	Member
7	Ms.Deepika Chaurasia, Sr.Manager (Communications) Tata Steel	Member
8	Mr. Shiv Shakner, Head HRM Employee Relations,Tata Steel	Member
9	Mr. Sumir Mathur, Sr.lagal Counsel, Tata Steel	Member
10	Mr.Prashant Kumar Singh, Sr. Manager (Sales), Tata Steel	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 23rd January, 2021. 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

Following was the outcome of the meeting

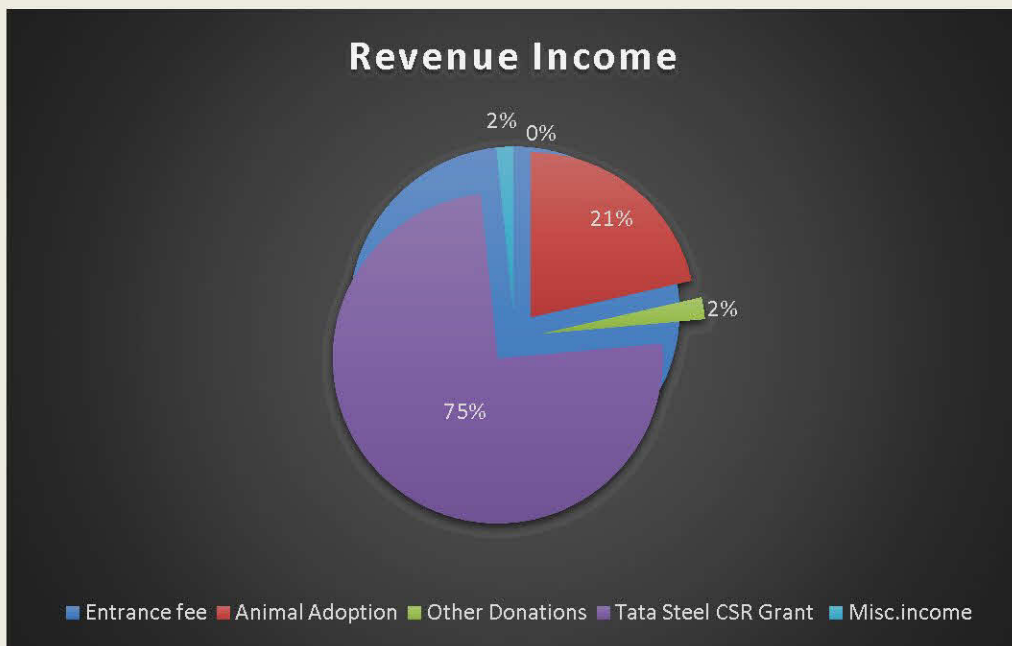
- Review of the general health condition of all captive animals in the zoo with officers & staff.
- Treatment of ailing white Bengal tiger Kailash.
- Treatment of hoof rupture in male Grant Zebra.
- Treatment of African Lioness 'Zoya'.
- Discussion on the outcome of the post-mortem reports of animals that had died in the zoo, the histopathological test reports obtained from IVRI and future action.

FINANCIAL PERFORMANCE-

Statement of Income & Expenditure

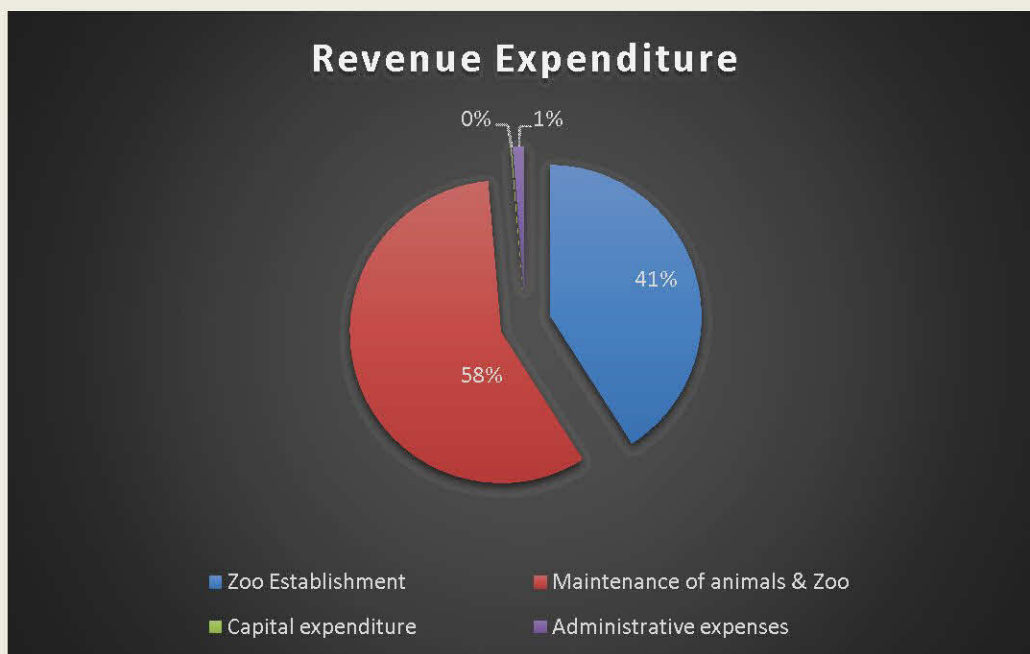
Revenue Income:

Tata Steel Limited during the financial year 2020-201 provided Grant in Aid of ₹2.78crores to Tata Steel Zoological Society for annual maintenance & operation of Zoo. The Society revenue through animal adoption and other miscellaneous income was ₹0.94 crores.



Revenue Expenditure:

Total amount spent by Tata Steel Zoological Society for running the Zoological Park during 2020-2021 was ₹3.16 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
<u>BIRDS</u>			
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

		Germinated Green Gram (Moong)	10 gms
	Forenoon 11.00a.m- 12 noon	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 (Goat meat)- Alternate day	0.500gms- 1Kg

		Meat (Goat 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):	Banana	100 gms(1 pc)
	9.00 am	Apple	50 gms(½ pc)
	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
4.00 pm	Cooked Bread (Chapati)	50 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	Banana	100 gms (1 pc)
	Morning 9.00 am	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
	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)
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	Goat meat (6 days in a week)	6-8 Kg
		Winter- Goat Meat (6 days in a week)	8-10 Kg
	Female	Goat meat (6 days in a week)	6-7 Kg
Winter- Goat Meat (6 days in a week)		6-8 Kg	
11	Bengal Tiger		
	Male	Goat meat (6 days in a week)	6-8 Kg
		Winter- Goat Meat (6 days in a week)	8-10 Kg
	Female	Goat meat (6 days in a week)	6-7 Kg
Winter- Goat Meat (6 days in a week)		6-8 Kg	
12	Leopard		
	Male	Goat meat (6 days in a week)	2 Kg
		Chicken (6 days in a week)	1.0 Kg
		Winter- Goat Meat (6 days in a week)	2-2.5 Kg
	Female	Chicken (6 days in a week)	1.0 Kg
		Goat meat (6 days in a week)	2 Kg
Chicken (6 days in a week)		1.0 Kg	
		Winter- Goat Meat (6 days in a week)	2-2.5 Kg

		Chicken (6 days in a week)	1.0 Kg
13	Striped Hyena		
	Male	Goat Meat (6 days a week)	2 -2.5 kg
	Female	Goat 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 provided Pork (de-skinned) and chicken to the carnivores as per the prescription of Zoo Veterinary Officer.

Feed Schedule was last revised on 07.12.2019.

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, Herpes virus and Rabies infection	Biofel - PCHR	1.00 ml S/C or I/M	Annual	Dec 2020
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 2020
3	Large cats	Haemo-protozoan infection	Trypanos omiasis	Triquine injection	2.00-- 3.00 ml for Body weight 100 kg - to 200 kg	Every nine month	June 2020

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	Hippopotamu s, Deer,	Feb, May, Sept	Three times in a year	Alternate group on each occasion

		Antelope			
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 adlibitum. 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 staff are subjected an annual medical examination. During the year under report, medical examination of all zoo personnel including laboratory tests for their sputum, faeces & blood was carried out. Outcome of health examination is provided below.

HEALTH CHECK-UP OF EMPLOYEES FOR ZOONOTIC DISEASES – 2020			
Date-25/03/2021			
#	Name	Designation	Findings of Health Check up
1	Mr. Bipul Chakrabarty	Director	No abnormal findings, free from zoonotic disease
2	Dr.M.Palit	Dy. Director	No abnormal findings, free from zoonotic disease
3	Dr. Sanjay Kumar Mahato	Curator	No abnormal findings, free from zoonotic disease
4	Dr. (Mrs.) Seema Rani	Biologist cum Education Officer	No abnormal findings, free from zoonotic disease
5	Mr. M.Kumar	Office Supervisor	No abnormal findings, free from zoonotic disease
6	Mr. Sunil Kar	Office Asst.	No abnormal findings, free from zoonotic disease
7	Mr. R.Srinivasan	Field Asst.	No abnormal findings, free from

			zoonotic disease
8	Mr. Ali Akhtar Khan	Field Asst.	No abnormal findings, free from zoonotic disease
9	Mr. S.R. Mahato	Office Asst.	No abnormal findings, free from zoonotic disease
10	Mr. Dilip Dey	Keeper	No abnormal findings, free from zoonotic disease
11	Mr. Tarkeshwar Ram	Keeper	No abnormal findings, free from zoonotic disease
12	Mr. S.Ansari	Keeper	No abnormal findings, free from zoonotic disease
13	Mr. Linsa Harpal	Asst. Keeper	No abnormal findings, free from zoonotic disease
14	Mr. Binod Sharma	Asst. Keeper	No abnormal findings, free from zoonotic disease
15	Mr. Vijay Mukhi	Asst. Keeper	No abnormal findings, free from zoonotic disease
16	Mr. Lalan Kumar	Asst. Keeper	No abnormal findings, free from zoonotic disease
17	Mr. Dinesh Mahato	Asst. Keeper	No abnormal findings, free from zoonotic disease
18	Mr. Sulendra Das	Asst. Keeper	No abnormal findings, free from zoonotic disease
19	Mr. S.K.Singh	Asst. Keeper	No abnormal findings, free from zoonotic disease
20	Mr. Pratap Singh Gill	Sr. Attendant	No abnormal findings, free from zoonotic disease
21	Mr. Kartic Gorai	Sr. Attendant	No abnormal findings, free from zoonotic disease
22	Mr. Biswanath Mazumdar	Sr. Driver	No abnormal findings, free from zoonotic disease
23	Mrs. Monalisha Banerjee	Office Asst.	No abnormal findings, free from zoonotic disease
24	Mr.Rakesh Munda	Accounts Asst.	No abnormal findings, free from zoonotic disease
25	Mr. Rajkishore Harpal	Animal Attendant	No abnormal findings, free from zoonotic disease
26	Mr. Gayani Devi	Animal Attendant	No abnormal findings, free from zoonotic disease
27	Mr. Mazumdar Mahato	Animal Attendant	No abnormal findings, free from zoonotic disease
28	Mr. Manoj Nag	Animal Attendant	No abnormal findings, free from zoonotic disease
29	Mrs. Malti Majhi	Animal	No abnormal findings, free from

		Attendant	zoonotic disease
30	Mr. Rajesh Pal	Animal Attendant	No abnormal findings, free from zoonotic disease
31	Mr. Vishal Singh	Animal Attendant	No abnormal findings, free from zoonotic disease
32	Mr. Bharat Chandra Mahato	Animal Attendant	No abnormal findings, free from zoonotic disease

Sd/-

Dr. D.K Mandal
 Medical Officer
 ADM Hospital, Jamshedpur

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:

- Throughout the year's schedule, cleaning and disinfection of animal enclosures like spreading of lime-bleach around enclosures especially the aviaries and Blow lamp lighting in cells (night shelter/ feeding cells) of Mandrills, sloth bear, primates, large cats, enclosures were done.
- During January, 2020 all aviaries were given special care as precautionary measures keeping bird flu in view- like spray of disinfectant around aviaries, spreading of lime-bleach around aviaries, placing of foot pad at main entry gate etc.
- To provide zoo animal simulated conditions of their natural habitat various ecological enrichment activities were taken up in form of providing wooden logs, perches, potted plants, sowing of crops in the cells, etc. in Pheasantry, World of parrots, Primates & Sloth bear enclosure. All ecological enrichments at the respective enclosures like breeding hut of Peacock, wooden platform of Lion, Tiger and Leopard enclosures were revived. In addition to fixed feed-schedule, Zoo grown Guavas, lemon, Jack fruits, Papaya provided to the animals as feeding enrichment.

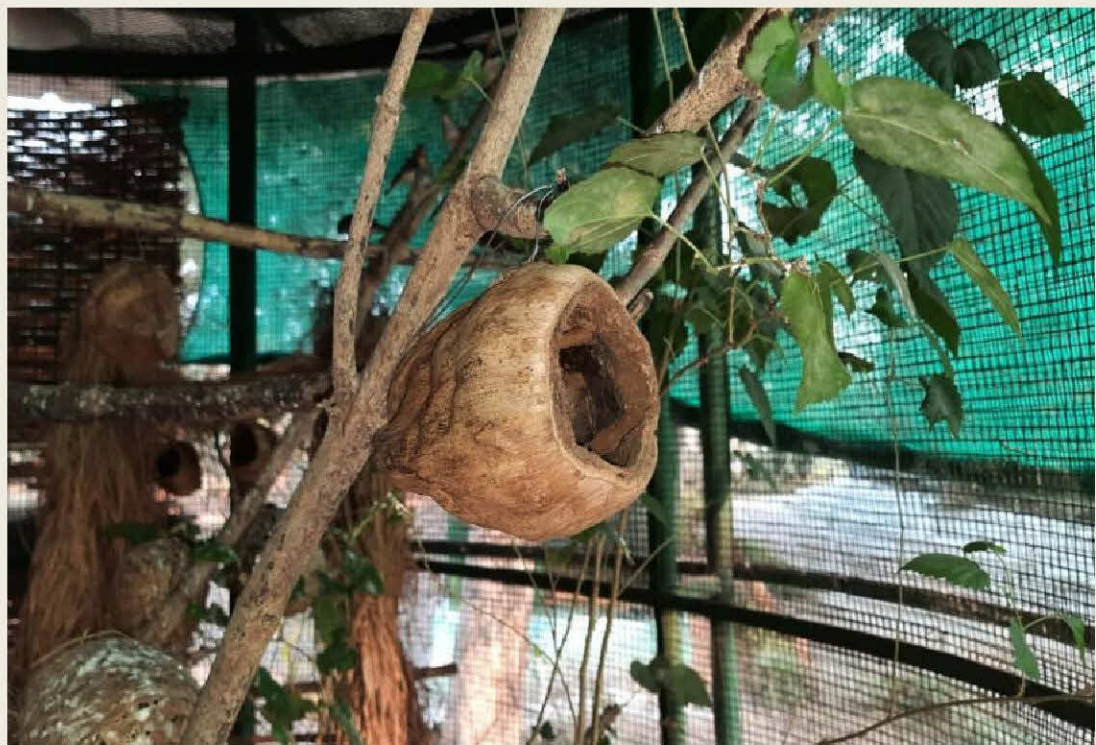


During the year, few special initiatives were undertaken:

a.) A semi-natural nest made up of dried tender coconut shell was provided to finches. Within a day they accepted and starting nesting.

b) Introduced the rich nutrients feed Silage to the deer's feeds. The observation recorded good consumption of silages by the deer and antelopes.

c) A breeding programme for African Grey Parrot was initiated during the year. There are 2:2=4 African grey parrots are housed in the captivity of the Zoo. The parrots were shifted to the bird rearing cell of the Zoo. The existing cell was modified into a semi-natural habitat for African Grey Parrots. One pair of the parrots bred successfully and now we have a chick with us.



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 onusing the virtual platform, Major awareness activities undertaken during the year are illustrated below.

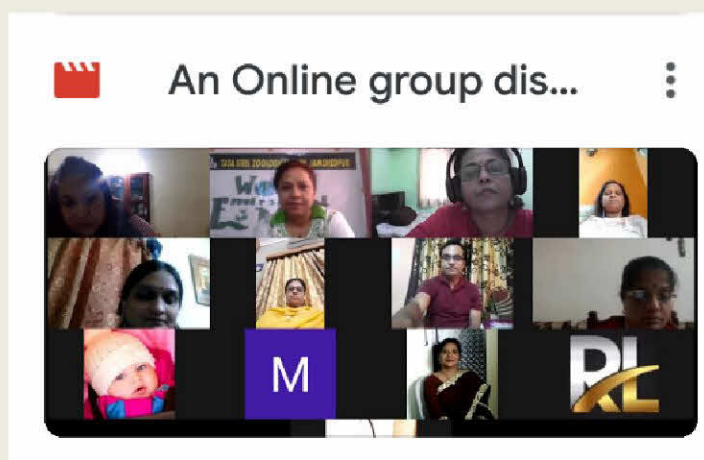
This also provided us with an advantage of expanding our outreach in terms of audiences.

A. Biodiversity Day (22nd May): This year, on the occasion International Biodiversity Day, Tata Zoo has organised an Online Essay writing and Painting Competition for the students (Std V- Std X). The theme for the year was **“Our solutions are in Nature”**. Topic for Online Essay writing and painting competition which was inspired by the theme for the day were **“Imitating Nature for Discovering Creative Solution to**



Existing Problems” (प्रकृति का अनुकरण कर जटिल समस्याओं का रचनात्मक समाधान।) and **“Nature and Its Beauty”** (“प्रकृति और इसकी सुंदरता”) respectively. After screening the overall entries, a total of 23 entries in essay writing and 33 in the painting competition has been accepted from 11 different schools in the city. The winners of the events had been felicitated with an e-certificate and a memento.

B. World Environment Day(5th June): Tata Steel Zoological Park, Jamshedpur has celebrated World Environment Day on the theme for the year **“Celebrate Biodiversity”** by organizing a **“Teacher’s Talk”** taken the academicians on the virtual platform. An online group discussion/ppt presentation by teachers on the topic **“Role of Teachers in Biodiversity**

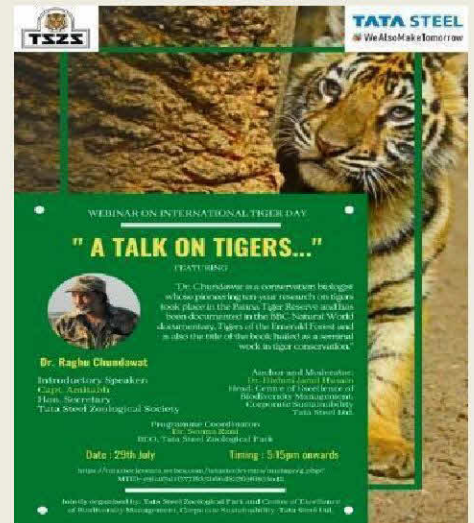


Conservation and their Challenges” was conducted which focused on the **“fundamentals of wildlife and biodiversity conservation.”**

C. Van Mahotsav(July) : Tata Steel Zoological Park, celebrates this entire month as Van Mahotsav month, a plantation programme dedicated to our Zoo tigers was organised by all Zoo personnel at Tiger display area on 29th July. Over the above we planted many fodder and fruit bearing (Papaya, Bar, Kathal, Jamun etc.) plants within the Zoo premises.



D. International Tiger Day (29th July): A webinar titled “A talk on Tigers” was organised on the occasion of International Tiger Day. The resource person who shared his valuable insight on tigers with us was **Dr. Raghu Chundawat**, who is renowned tiger conservationist and has 10 years of pioneering research experience at **Panna Tiger Reserve**. The introductory speaker for the event was Capt. Amitabh, Hon. Secretary, Tata Steel Zoological Society; and the event moderator was Dr. Hishmi Jamil Husain, Head Biodiversity, TSL.



E. Wildlife Week Celebration (30th September onwards): The Wildlife Week was celebrated from the **30th September – 8th October 2020**. The formal inauguration of the week long program was commenced on **October 5th, 2020** at the Tata Steel Zoological Park by **Chief Guest Capt. Amitabh, Hon. Secretary, Tata Steel Zoological Society**, at which the winners of best eco club teachers award were felicitated. The Celebration witnessed events like- Essay writing on the themes **“Man-Animal conflict: causes and remedy”** (**“ मानव-पशुसंघर्ष: कारण और उपाय”**) and painting competition

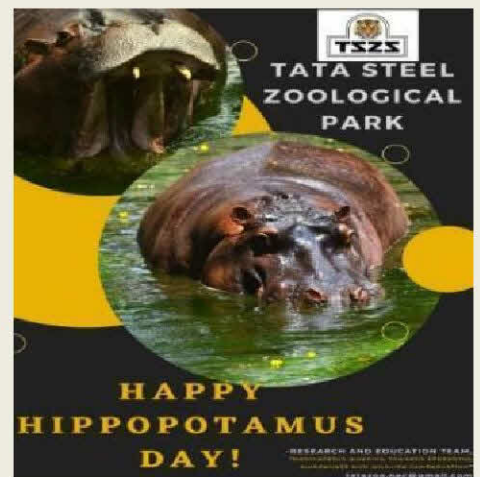
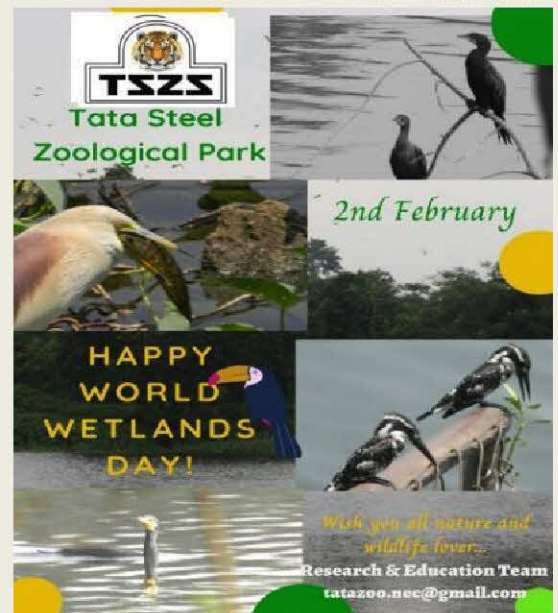
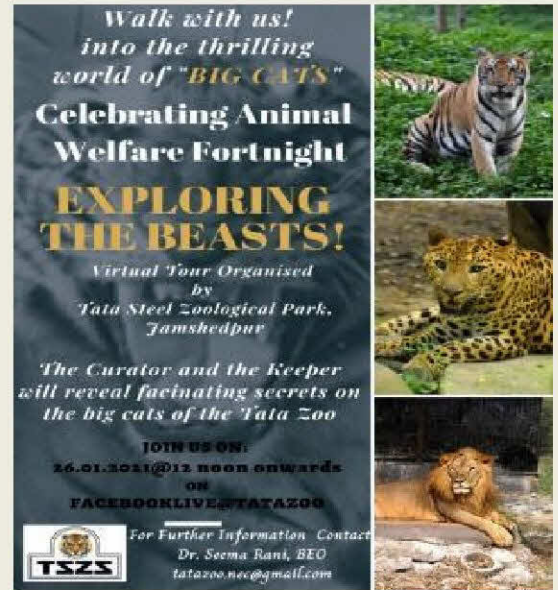


which was categorised under 3 groups on “Group of Plants and Animals”, “Forest Ecosystem” and “A Day in the wild“. The events had more than **900 entries** from **41 schools and institutes** of the region; a reflection of great enthusiasm by the participating institutions had been evident. Apart from the former, the week ended with a **FACEBOOK LIVE TALK** Sessions on different topics divided into two sessions (morning and afternoon) from **6th October to 8th October**.

F. Animal Welfare Fortnight (14th Jan-30th Jan): A virtual tour on Big Cats of Zoo namely “Exploring the beast” was organised to pay tribute to Animal Welfare fortnight 2021, over facebook. The video revolved around the strategies and maintenance of big cats i.e. Lion Tiger, and Leopard of Tata Zoo. The Dy. Director, The Curator of the Zoo accompanied by the Keepers of the respective sections provided with the deep insight into health aspects and functioning elements of big cats respectively.

G. World Wetland Day (2nd Feb): On 2nd February, 1971 conventions on wetland have been adopted. Thereafter, every year 2nd February, is observed as “World Wetlands Day” to chiefly elate awareness about the importance of wetlands and their ecological role in nature and the lives of other inhabitants of the earth. The 2021 theme for this day was “Wetlands and Waters”. Tata Steel Zoological Park, admiring and appreciating its migratory aquatic aves variety, celebrated this day by means of an e-posters which was crafted and adorned with the images of those migratory aquatic birds itself.

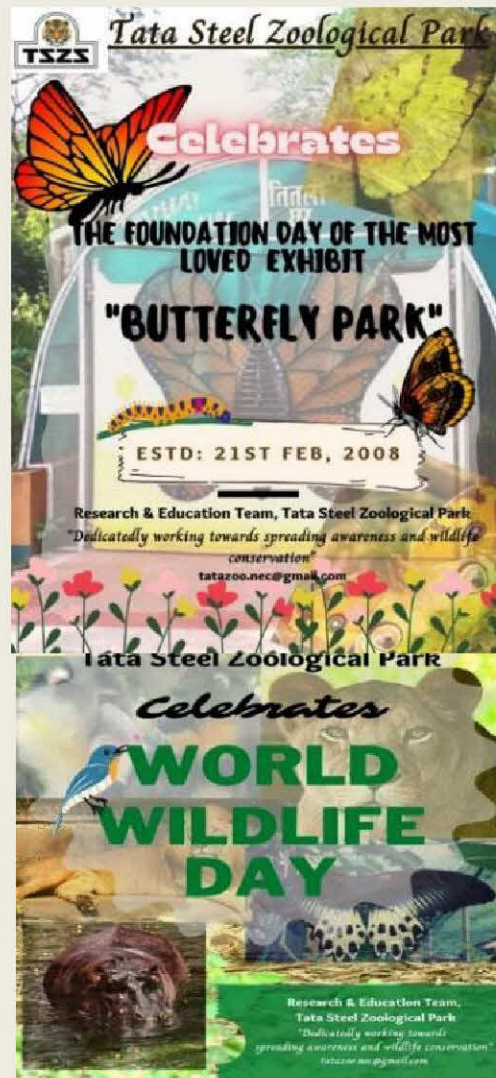
H. Hippopotamus Day (15th Feb): This year Tata Steel Zoological Park celebrated Hippopotamus day in the honour of its captive hippo, who is popular among the zoo family by the name “Raja”. Keeping the pandemic in view, the day was celebrated by



the means of a poster. The research and education team of Tata Zoo has presented a glimpse of Raja by sharing a video over Facebook.

I. Zoo Butterfly Park Foundation Day (21st Feb):

The butterfly Park at Tata Zoo has always been the most loved exhibit by the visitors and had also been most popular among kids. In these complex times of the pandemic when , zoo has literally lost physical interaction with their visitors, we initiated to share the nostalgic part of our memories with the general public. Moreover, Tata Zoo has been one among the various zoos who has been successfully breeding the chief pollinators “**about 12 species of butterflies**” in captive. The exhibit turned 13 this year with its establishment being on 21stFeb, 2008.



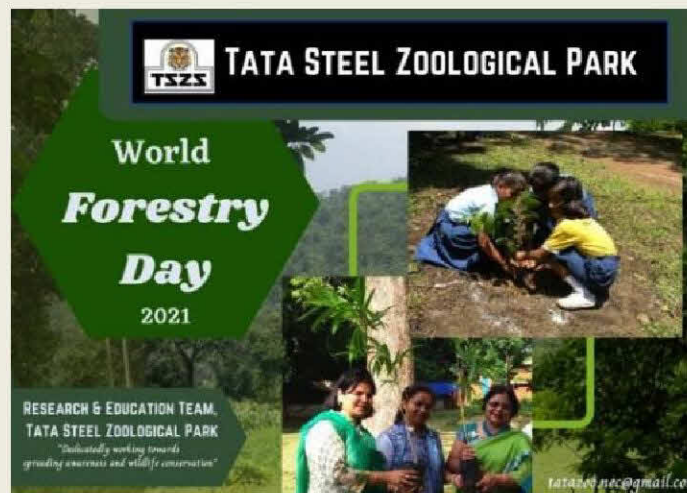
J. World Wildlife Day (3rd March): This day is celebrated annually, to create awareness among the public about the values and benefits of preserving wildlife which is a very crucial part of our ecosystem. This year the day was celebrated under the theme “**Forests and Livelihoods: Sustaining People and Planet.**” Tata Steel Zoological Park celebrated this day by a means of an e-poster which was crafted with photographs of the captive inhabitants of the zoo itself.

K. World Sparrow Day (14th March): In order to sensitize the public towards the depleting population of House sparrow (*Passer domesticus*), which had once been the most familiar bird spotted in the human inhabitations, Tata Zoo celebrated this day by a means of poster and an info-graphics which suggested various ways in which an individual could contribute towards restoring the population of the sparrows.



L. World Forestry Day (21st March): The existence of forest is vital for the existence of not only animals but also for the existence of human beings. Besides being the major source of oxygen which is crucial for maintenance of life on the planet earth, it also provides us with a variety of resources. The **theme for the year**

2021 is- “Forest restoration: a path to recovery and well-being.” To aware and encourage people towards the restoration of forest cover, we at Tata Steel Zoological Park ardently practice and endorse restoration of the greens, as we strongly believe that “saving one species will help us save another !!”. This day was celebrated by means of an e-poster which showcased the former physical activities by the zoo to promote the aforementioned.



M. World Water Day (22nd March): In-order to glorify its value, 22nd March is proclaimed as World Water Day. This day has been made a ritual since after 1993 by United Nations General Assembly. The theme for World Water Day 2021 is - “Valuing Water”

In India water is also called as “जीवन दायिनी”/ “Jeevan Daayini” i.e. “Giver of life”. None can think of any form of life prevailing on the surface of earth without water to nurture it. Tata Steel Zoological Park celebrated this day by a means of an e-poster which depicted that how important each drop of water is to nurture different elements of life on earth.



N. Keeper Talk: During the celebration of wildlife week (1st week of October), a “**Keep Talk**” was organised over **Facebook Live** on various captive animals of zoo. Here, the keepers were given the platform to share their experience with animals which they look after and manage in their respective enclosures. Namely, the keepers involved were: Mr. Dilip Dey, Mr. T. Ram, Md. S. Ansari, Mr. Lalan Kumar, Mr. Dinesh Mahato, & Mr. Vinod Sharma.

VISITORS TO ZOOLOGICAL PARK- ONSITE & OFFSITE

During the year under report from 1stApril, 2020 to 31stMarch, 2021, the Zoo remained closed to general visitors due to COVID-19 pandemic. The Zoo has a website of its own <http://www.tatazoo.com> and a Facebook profile <http://facebook.com/jamshedpurzoo>. These platforms are utilized by the Zoo to engage visitors and convey its mission among the people at large.

SEASONAL MANAGEMENT OF CAPTIVE ANIMALS

To manage the captive inmates as per the local seasonal and environmental changes, every year Zoo has implements three action plans viz; Monsoon Action Plan, Summer Action Plan and Winter Action Plan. The action plans are implemented by the Curator along with his team of staff.

Specially, two teams comprise of Animal Keeper, Asst. Keeper, Animal attendant and Field Assistant including some staffs from Admin office were constituted headed by the Curator of the Zoo.



Action for summer management in animal enclosure



Action for winter management in animal enclosure

RESEARCH WORK & PUBLICATIONS:

Various biological activities are constantly being undertaken throughout the year at Tata Zoo to ascertain proficient upkeep and management of the captive animals through best possible scientific measures. The following activities were carried out during the period 2020-21:

#	Time duration	Activity conducted	Animal/enclosure	Remarks
1	24th March-10th April	Food Consumption by Large Cats	Lion	Routine Monitoring of Food Consumption and Leftover by the Animal

#	Time duration	Activity conducted	Animal/enclosure	Remarks
2	5thMay-1st July	Monitoring of food consumption and leftover measurement	Tiger (Kailash)	Sick Animal
3	31 May-14 June	Monitoring of food consumption	Pheasants	Routine Monitoring of Food Consumption and Leftover by the Animal
4	11th-25th July	Monitoring of food consumption	Hippopotamus	Routine Monitoring of Food Consumption and Leftover by the Animal
5	22-28th July	Monitoring of diurnal behaviour	Emu	Introduction of new members with the old flock
6	20th-30th July	Monitoring of diurnal behaviour	Zebra	Sick Animal
7	14th-31st July	Observation of food consumption after Introduction of silage in deer foods	Deer in safari and Barking deer	Monitoring of adaption of newly introduced food
8	4th-13th Aug	Post release behaviour observation	Barking deer	Habitat Adaptation
9	17th -27th Aug	Food intake by large cats after introducing the buffalo meat	Lion, tiger, Leopard	Monitoring of adaption of newly introduced food
10	Sept	Monitoring of diurnal activity	Zebra	Sick Animal
11	Oct	Monitoring of Feeding behaviour	Mandrills	To Ensure Proper Feeding of all the Individuals from the Troop.

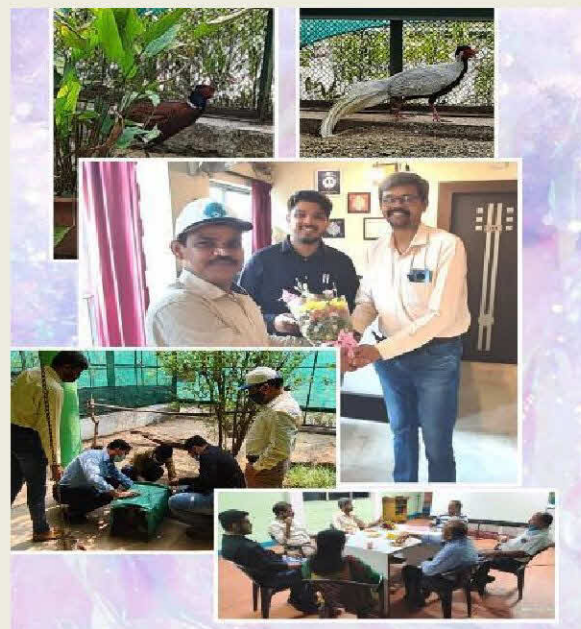
#	Time duration	Activity conducted	Animal/enclosure	Remarks
12	Oct	Creation of suitable habitat for the African Grey parrots	African Grey parrots	All the activities carried out are under the planned breeding programme which is yet ongoing
13	Oct-till date continuing	Monitoring of behaviour of shifted birds	African Grey parrots	
14	8 th-14 Nov	Monitoring of food consumption	Mandrills	To Ensure Proper Feeding of all the Individuals from the Troop.
15	25th Dec 20-12th Jan21	Monitoring of food consumption	Gharial's	Routine Monitoring of Food Consumption and Leftover by the Animal
16	10th Feb-19th Feb 21	Monitoring of behaviour	Mandrill	Sick Animal
17	11th March-	observation of diurnal behaviour	Pheasants	Newly arrived animals kept in quarantine

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 joined as an “Intern cum Volunteer” at the Zoo.

ANIMAL ACQUISITION / TRANSFER / EXCHANGE DURING THE YEAR

- Under an animal exchange programme- Surplus animals (Black bucks 5:5=10 and Hog deers 2:7:2=11) have been transferred to S. S. B. Zoo Vadodara after the approval of Central Zoo Authority of India. Dr. Pratyush Patankar, Zoo In-charge cum Curator received the animal at Tata Steel Zoological Park, Jamshedpur. As a token of appreciation Vadodara Zoo handed over Silver pheasants 1:1=2 and Ring-necked Pheasant-1:1=2 to us. The birds are under Quarantine at Zoo.
- Acquired 20 individuals of (6:14) Japanese Quails from Horticulture Department, Tata Motors, Telco and kept under Quarantine at Zoo Hospital.



#	H.NO.	Species	Number (M:F)	From which Zoo / Donor agency	Date of arrival in the zoo
1	N/A	Silver Pheasant	1:1	S.S.B. Zoo, Vadodara	12.03.2021
2	N/A	Ring necked Pheasant	1:1	S.S.B. Zoo, Vadodara	12.03.2020
3	N/A	Japanese quails	20 (10:10)	Donated by Flora Hort. Society, Jamshedpur	18.11.2020
#	Animal transfer				
1		Hog deer	2:7:2	S.S.B. Zoo, Vadodara	12.03.2021
2		Black buck	5:5	S.S.B. Zoo, Vadodara	12.03.2021

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 and locals either in injured or orphaned condition were provided

veterinary care at the Zoo Veterinary Hospital before being rehabilitated back to their wild habitat. List of rescues attended during 2020-2021 is provided below:

**List of wild/stray animal rescued and rehabilitated during the FY 2020-2021
by the Zoo Veterinary Hospital**

#	Date of rescue	Species with no.of animals rescued with their sex M:F:U	Received from	Date of submission of report to CWLW / CZA	Action taken	
					Date and Place of rehabilitation in their habitat	Reasons for housing in the zoo, if not released in their habitat
1	4.11.2020	Hanuman Langur / Male	Mr. Umesh Sigh, Forester JFD	Nil	31/03/2021 Forest near Dalma Wildlife Sanctuary	Was having swelling on Rt hind leg ankle area and limping
2	20.1.2021	Hanuman Langur	Wild trespass	Nil	20/01/21, Forest near Dalma Wildlife Sanctuary	None
3	8.02.21	Barn Owl	Office of MD Tata Pigments	Nil	8/02/21 Released into the jubilee Park area	Dehydrated
4	4.3.2021	Rhesus Monkey , Baby , male	RFO Mango, JFD	NIL	None	Hand rearing in Zoo Hospital nursery
5	25.3.2021	Indian Pea fowl Chick	RFO, Mango , JFD	Nil	None	Hand rearing in Zoo Hospital nursery

**ANNUAL INVENTORY:
(1.04.2020 to 31.03. 2021)**

SCH-I & SCH-II -WILD LIFE (PROTECTION) ACT						
S.No	Name of species	Scientific Name	STOCK AS ON 31.03.2021			
BIRDS			M	F	U	T
1	Pea Fowl (normal)	<i>Pavocristatus</i>	3	7	0	10
2	Hill myna	<i>Gracula religiosa</i>	0	0	2	2
3	Grey Jungle fowl	<i>Gallus sonnererati</i>	0	1	0	1
TOTAL BIRD			3	8	2	13
REPTILE						
1	Gharial	<i>Gavialis gangeticus</i>	1	3	0	4
2	Mugger	<i>Crocodylus palustris</i>	0	1	0	1
TOTAL REPTILE			1	4	0	5
MAMMALS						
1	Sloth Bear	<i>Melursus ursinus</i>	1	0	0	1
2	Black Buck	<i>Antilope cervicapra</i>	31	41	3	75
3	Indian Hog deer	<i>Axis porcinus</i>	5	10	3	18
4	Northern plain Gray Langur	<i>Semnopithecus entellus</i>	2	5	2	9
5	Leopard	<i>Panthera pardus</i>	1	1	0	2
6	Bonnet Monkey	<i>Macaca radiata</i>	2	3	0	5
7	Rehsus Monkey	<i>Macaca mulata</i>	1	3	0	4
8	Tiger Bengal (Normal)	<i>Panthera tigris</i>	0	2	0	2
9	Tiger Bengal (White)	<i>Panthera tigris</i>	1	0	0	1
TOTAL			44	65	8	117

**ANIMALS of OTHER
SCHEDULE & EXOTIC**

S.No	Name of species	Scientific Name	STOCK AS ON			
			31.03.2021			
BIRDS			M	F	U	T
1	Cockateel	<i>Nymhicus hollandicus</i>	0	0	25	25
2	Bar Headed Goose	<i>Anser indicus</i>	0	0	1	1
3	White Ibis	<i>Threskionisacthionica</i>	1	1	0	2
4	Rainbow Lory	<i>Tricoglossushaematodus</i>	0	1	0	1
5	Larg. Ind. Parakeet	<i>Psittaculacupatrai</i>	13	1	0	14
6	Rose Ring. Parakeet	<i>Psittaculakrameria</i>	4	2	0	6
7	Red Breasted parakeet	<i>Psittaculaalexendri</i>	1	2	0	3
8	Red Jungle Fowl	<i>Gallus gallus</i>	1	5	0	6
9	Silver pheasant	<i>Lophuranythemera</i>	1	2	0	3
10	Reeves pheasant	<i>Syrmaticusreevesi</i>	1	2	0	3
11	Lady Amherst pheasant	<i>Chrysolophusamherstiae</i>	0	1	0	1
12	Ringnecked pheasant	<i>Phasianuscolchinus</i>	1	2	0	3
13	Emu	<i>Dromaiusnovaehollandiae</i>	1	6	3	10
14	Ostrich	<i>Struthioniforms</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	0	4
17	Rosy Pelican	<i>PelecanusOnocrotalus</i>	0	1	0	1
18	Bengal Eagle owl	<i>Bubo begalensis</i>	0	0	1	1

19	Zebra Finch	<i>Taeniopygia guttata</i>	0	0	16	16
20	Budgerigar	<i>Melopsittacus undulatus</i>	0	0	1	1
21	JawaSprrow	<i>Lonchuraoryzivora</i>	0	0	2	2
22	Guinea Fowl	<i>Numida meleagris</i>	0	0	2	2
23	Japanese quail	<i>Coturnix japonica</i>	0	0	18	18
		TOTAL	28	30	69	127
	MAMMALS					
1	Sambar Deer	<i>Cervus unicolor</i>	1	4	1	6
2	Cheetal	<i>Axis axis</i>	46	66	14	122
3	Barking Deer	<i>Muniacusmuntjack</i>	5	6	0	11
4	Nilgai	<i>Boselaphustrago camelus</i>	3	2	2	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	Porcupine	<i>Hystrixbegalensis</i>	1	1	0	2
9	African Lion	<i>Panthera leokruger</i>	2	3	0	5
10	Grant's Zebra	<i>Equisbohemi</i>	1	1	0	2
		TOTAL	62	95	17	174
	REPTILES					
1	Red-eared slider turtle	<i>Trachemys scripta elegans</i>	1	1	0	2
2	Indian Star tortoise	<i>Geochelone elegans</i>	12	15	0	27
		TOTAL	13	16	0	29

**ANNUAL MORTALITY
(2020-2021)**

Sl.No	Name of animal	Scientific name	Sex	Date of death	Reason of Death
	Mammal				
1	Hanuman Langur	<i>Semnopithecus entelus</i>	Male	4.04.2020	Asphyxia and acute haemorrhagic gastritis
2	Striped Hyena	<i>Hyena hyena</i>	Female	5.04.2020	Carcinoma of mediastina lymph node
3	Nilgai calf	<i>Boselaphus tragocamelus</i>	Male	8.04.2020	Maternal rejection
4	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	9.04.2020	Unknown etiology, (putrified carcass recovered)
5	Black buck	<i>Antilope cervicapra</i>	Male	10.04.2020	Respiratory failure
6	Black buck	<i>Antilope cervicapra</i>	Female	17.04.2020	Cardio-pulmonary failure predisposed with old age
7	Black buck	<i>Antilope cervicapra</i>	Male	19.04.2020	Internal haemorrhage due to in-fight injury
8	Hog Deer (Fawn)	<i>Axis porcinus</i>	Female	5.05.2020	Maternal rejection
9	Black buck	<i>Antilope cervicapra</i>	Female	17.05.2020	Punctured wound on left paralumbar fossa
10	Cheetal	<i>Axis axis</i>	Male	18.05.2020	Chest injury and Septicaemia
11	Black buck (fawn)	<i>Antilope cervicapra</i>	Female	19.05.2020	Wound in the naval area, sepsis and shock
12	Hanuman Langur	<i>Semnopithecus entelus</i>	Female	22.05.2020	Congenital defective birth
13	Hog Deer(Fawn)	<i>Axis porcinus</i>	Female	25.05.2020	Internal haemorrhage and damage of

					viceral organ
14	Black buck fawn	<i>Antilope cervicapra</i>	Male	28.05.2020	Unknown etiology Carcass putrified and decomposed
15	Black buck fawn	<i>Antilope cervicapra</i>	Male	2.06.2020	Exposed to heavy rain after birth in the night hour
16	Hog Deer(Fawn)	<i>Axis porcinus</i>	Male	15.06.2020	Maternal rejection
17	Hog Deer(Fawn)	<i>Axis porcinus</i>	Male	16.06.2020	Predated by wild python snake
18	Black buck fawn	<i>Antilope cervicapra</i>	Male	18.06.2020	Exposed to heavy rain after birth in the night hour
19	Barking deer fawn	<i>Muntiacus muntjack</i>	Male	23.06.2020	Magotted wound in the anal area
20	Hog Deer	<i>Axis porcinus</i>	Female	3.07.2020	Internal haemorrhage- chest cavity - in-fight injury
21	Sloth Bear	<i>Melursus ursinus</i>	Female	5.07.2020	Ascites and geriatrics (senility) complications
22	Cheetal	<i>Axis axis</i>	Female	29.07.2020	Old age complications
23	Blackbuck (Albino)	<i>Antilope cervicapra</i>	Female	30.07.2020	Chest injury may be due to in-fight
24	Black buck	<i>Antilope cervicapra</i>	Female	14.08.2020	Maternal rejection
25	Cheetal	<i>Axis axis</i>	Male	15.08.2020	Old age and chest wound
26	Black buck	<i>Antilope cervicapra</i>	Female	22.08.2020	Respiratory failure predisposed by exposure to heavy rain
27	Black buck	<i>Antilope cervicapra</i>	Female	31.08.2020	Punctured wound in abdomen, lead to septicaemia
28	Barking deer	<i>Muntiacus muntjack</i>	Male	2.09.2020	Magotted wound

	fawn				in the anal area
29	Nilgai calf	<i>Boselaphus tragocamelus</i>	Male	24.09.2020	Maternal rejection
30	Sloth Bear	<i>Melursus ursinus</i>	Female	27.09.2020	Ascites , Hepatitis and old age
31	Black buck fawn	<i>Antilope cervicapra</i>	Male	28.09.2020	Maternal rejection
32	Nilgai calf	<i>Boselaphus tragocamelus</i>	Male	1.10.2020	Internal haemorrhage , in-fight
33	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	3.10.2020	Maternal rejection
34	Hog Deer(Fawn)	<i>Axis porcinus</i>	Male	11.10.2020	Congenital defective birth
35	Gray Langur baby	<i>Semnopithecus entelus</i>	Male	21.10.2020	Nephritis
36	Black buck	<i>Antilope cervicapra</i>	Male	24.10.2020	Chest injury may be due to internal haemorrhage
37	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	27.10.2020	Chest injury- In-fight
38	Nilgai	<i>Boselaphus tragocamelus</i>	Female	29.10.2020	Multi-organ failre- due to old age
39	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	1.11.2020	Respiratory distress
40	Albino buck (fawn)	<i>Antilope cervicapra</i>	Male	3.11.2020	Traumatic injury of visceral organs
41	Barking deer (fawn)	<i>Muntiacus muntjack</i>	Male	18.11.2020	Cold exposure and enteritis
42	Cheetal	<i>Axis axis</i>	Male	23.11.2020	Cold exposure and urine retention
43	Cheetal	<i>Axis axis</i>	Female	26.11.2020	Hydrothorax and pneumonia
44	Indian Leopard	<i>Panthera pardus</i>	Male	27.11.2020	Card.- respiratory. failure, ascites and arthritis - old age
45	Black buck	<i>Antilope cervicapra</i>	Female	29.11.2020	Prolapse of uterus and

					shock
46	Black buck	<i>Antilope cervicapra</i>	Male	2.12.2020	Wound of abdomen lead to septicaemia
47	Barking deer (fawn)	<i>Muntiacus muntjack</i>	Male	3.12.2020	Pneumonia and enteritis
48	Cheetal	<i>Axis axis</i>	Female	10.12.2020	Cold exposure
49	Black buck (fawn)	<i>Antilope cervicapra</i>	Female	11.12.2020	Cold exposure
50	Black buck	<i>Antilope cervicapra</i>	Male	12.12.2020	Old age and chest wound
51	Cheetal	<i>Axis AXIS</i>	Female	12.12.2020	Cold exposure
52	Albino buck	<i>Antilope cervicapra</i>	Male	14.12.2020	In=fight injury lead to punctured wound in the chest
53	Cheetal(2no.)	<i>Axis axis</i>	M/F	19.12.2020	Pneumonia and cold exposure
54	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	25.12.2020	Maternal rejection
55	Nilgai calf	<i>Boselaphus tragocamelus</i>	Male	28.12.2020	Cold exposure
56	Black buck (fawn)	<i>Antilope cervicapra</i>	Male	7.01.2021	Cold exposure lead to respiratory failure
57	Cheetal (fawn)	<i>Axis axis</i>	Male	10.01.2021	Cold exposure
58	Sambar deer (fawn)	<i>Cervus unicolor</i>	Female	13.01.2021	In-fight injury , may be caused by h/d male
59	Cheetal (fawn)	<i>Axis axis</i>	Male	16.01.2021	Cold exposure
60	Cheetal (fawn)	<i>Axis axis</i>	Female	22.01.2021	Maternal rejection
61	Cheetal	<i>Axis axis</i>	Male	28.01.2021	Magotted(deep) wound in the anal area
62	Cheetal	<i>Axis axis</i>	Female	3.02.2021	Oedema of abdomen and lungs congestion
63	Black buck	<i>Antilope cervicapra</i>	Female	6.02.2021	Int. haemorrhage- chest cavity -

					in-fight injury
64	Hog deer (Fawn)	<i>Axis porcinus</i>	Male	9.02.2021	Maternal rejection lead to cardio-resp. failure
65	Nilgai	<i>Boselaphus tragocamelus</i>	Male	15.02.2021	In-fight injury- chest and abdomen
66	Hog deer (Fawn)	<i>Axis porcinus</i>	Female	19.02.2021	Maternal rejection lead to cardio-resp. failure
67	Hog deer (Fawn)	<i>Axis porcinus</i>	Female	19.02.2021	Maternal rejection lead to cardio-resp. failure
68	Cheetal fawn	<i>Axis axis</i>	Female	10.03.2021	Maternal rejection
79	Hog deer (Fawn)	<i>Axis porcinus</i>	Female	14.03.2021	Capture myopathy
70	Mandrill monkey	<i>Mandrillus sphinx</i>	Female	17.03.2021	Cardio-respiratory failure- oedema of abdomen
	Birds				
1	Pea fowl	<i>Pavo cristatus</i>	Male	2.04.2020	Traumatic injury of head during in-fight
2	Red jungle fowl	<i>Gallus gallus</i>	Male	15.04.2020	Asphyxia(choking of throat by feed
3	Japanese Quail	<i>Coturnix coturnix japonica</i>	Male	26.05.2020	Enteric infection and hepatitis
4	Zebra finch	<i>Taeniopygia guttata</i>	Female	2.07.2020	Enteric infection
5	Zebra finch	<i>Taeniopygia guttata</i>	M/F	4.07.2020	Enteric infection
6	Zebra finch	<i>Taeniopygia guttata</i>	Female	24.07.2020	Enteric infection
7	Japanese Quail	<i>Coturnix coturnix japonica</i>	Male	26.07.2020	Enteric infection
8	Zebra finch	<i>Taeniopygia guttata</i>	Unsexed	28.07.2020	Predation , carcass not recovered fully
9	Zebra finch	<i>Taeniopygia guttata</i>	Female	1.08.2020	Dehydration and enteritis
10	Zebra finch	<i>Taeniopygia guttata</i>	Female	3.08.2020	Enteric infection
11	Japanese	<i>Coturnix coturnix</i>	Male	6.08.2020	Enteric infection

	Quail	japonica			
12	Zebra finch	<i>Taeniopygia guttata</i>	Female	11.08.2020	Enteric infection
13	Zebra finch	<i>Taeniopygia guttata</i>	unsexed	16.08.2020	Predation
14	Zebra finch	<i>Taeniopygia guttata</i>	Male	26.08.2020	Enteric infection
15	Zebra finch	<i>Taeniopygia guttata</i>	Female	27.08.2020	Enteric infection
16	Japanese Quail	Coturnix coturnix japonica	Male	28.08.2020	Enteric infection and hepatitis
17	Zebra finch	<i>Taeniopygia guttata</i>	Female	3.09.2020	Enteric infection
18	Zebra finch	<i>Taeniopygia guttata</i>	Female	6.09.2020	Enteric infection
19	Large. Ind.parakeet	<i>Psittacula eupatria</i>	Male	27.09.2020	Cardiac arrest
22	Zebra finch	<i>Taeniopygia guttata</i>	U	27.09.2020	Enteric infection
21	Zebra finch	<i>Taeniopygia guttata</i>	Female	13.10.2020	Enteric infection
22	Large. Ind.parakeet	<i>Psittacula eupatria</i>	Male	8.11.2020	Cold exposure, pneumonia
23	Large. Ind.parakeet	<i>Psittacula eupatria</i>	Male	9.11.2020	Cold exposure, pneumonia
24	Japanese Quail	Cotrnx coturnix japonica	Male	15.11.2020	Enteric infection and hepatitis
25	Zebra finch	<i>Taeniopygia guttata</i>	Female	28.11.2020	Cold exposure
26	Grey lag goose	<i>Anseranser</i>	Male	5.12.2020	Enteric infection
27	Redjungle fowl	<i>Gallus gallus</i>	Female	6.12.2020	Haemorrhagic enteritis and hepatitis
28	Japanese Quail	Coturnix coturnix japonica	Male	26.12.2020	Cod exposure and pneumonia
29	Emu chick	<i>Dromaius novaehollandi</i>	Female	9.01.2021	Congenital defective birth
30	Japanese Quail	Cotrnx coturnix japonica	Male	10.01.2021	Cod exposure and pneumonia
31	Redjungle fowl	<i>Gallus gallus</i>	Male	14.01.2021	Predation by wild cat/ jackal
32	Japanese Quail	Cotrnx coturnix japonica	Female	15.01.2021	Cod exposure and pneumonia
33	Redjungle fowl	<i>Gallus gallus</i>	Female	15.02.2021	Injured neck, suspected predation
34	Emu	<i>Dromaius novaehollandi</i>	Male	19.02.2021	Internal haemorrhage-suspected in-fight
35	Cockatiel	<i>Nymphicus hollandicus</i>	Female	31.03.2021	Enteric infection
	Reptiles				
1	Indian Star	<i>Geochelone elegans</i>	Female	1.06.2020	Urinary blockage

	tortoise				
2	Indian Star tortoise	<i>Geochelone elegans</i>	Female	26.07.2020	Unknown etiology, Putrefied carcass recovered
3	Indian Star tortoise	<i>Geochelone elegans</i>	Female	5.02.2021	Egg bound condition



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 15/06/2021
(1) General requirements				
1	10.1(8)	One old obese rhesus macaque with pendulous abdomen should be kept off display	Immediately	Not possible due to its social bonding with other members of the group
(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	Process initiated
(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	Done
(5). Upkeep and Healthcare of animals				
4	10.5(2)	For large cats, goat 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	Done. All large cats are provided with buffalo meat w.e.f 01/08/2020
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	Two months	Process initiated

		on record		
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 and behavioural disposition of animals.	Six months	Process initiated
(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	Not done
8	10.6(5)	Veterinary support staff namely the Lab Assistant and the Stockman/ Compounder should be appointed in the Zoo.	One year	Process initiated
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 initiated with Ranchi Veterinary College. Pending

S.No.	Norm No.	Condition	Time period	Status of compliance as on
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	In exploration state with other Indian zoos
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	Not done
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	Not done

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 Barbet
Common Mynah
Asian pied starling
BrahmnyMynah
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

Mammal Diversity

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

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:

Dr. Sanjay Kumar Mahato; Dr. Seema Rani; Dr. Manik Palit & eBird library

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