VEERMATA JIJABAI BHOSALE BOTANICAL UDYAN & ZOO

Annual Report for the year 2022-2023



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<u>1. Report of the Officer-in-charge</u>

BRIHANMUMBAI MUNICIPAL CORPORATION

VEERMATA JIJABAI BHOSALE BOTANICAL UDYAN & ZOO

From Director's Desk

It give me immense pleasure to announce the completion of 160 years of the Mumbai Zoo on 18th November 2022. The history dates back to the British era when the garden was then established under the Queens's rule as Victoria gardens famously known as "Ranibaug or Rani chi Baug" till it was renamed later in 1969 as Veermata Jijabai Bhosale Udyan. The popularity of the garden was enhanced by the animal exhibits and in 1980 the garden was renamed by the addition of the word Zoo and was known as Veermata Jijabai Bhosale Udyan & Zoo, Mumbai. The premises has a touch of modernization with regards to exhibits and facilities while keeping in mind the heritage and botanical aspect of the premises. In the past few years various animal facilities, theme gardens, modern and unique animal exhibits, improvised pathways and roads and upgraded public amenities have resulted in a progressive increase in visitors' footfall.

The exotic Humboldt penguin birds have successfully formed pairs and have resulted in successful breeding with the arrival of Penguin chicks namely Oreo, Oscar, Bingo, Alexa and Flash. The big question mark of whether these birds would survive and breed has now been brushed aside by the arrival of the penguin chicks implying successful stabilization and breeding of the species yet unknown to this country.

The newly developed animal exhibits have been equipped with Glass viewing panels, natural and aesthetically built GRC structures like dens, rock work, water bodies with water circulation feature, waterfalls with sensors, animal holdings and shaded areas along with landscapes augmented with indigenous species of plants merged with the surroundings and suitable for the specific animal.

With the advent of social media a number of activities, events, and expert talks were conducted on the Zoo's own social media handle like Instagram, facebook, twitter under the branding "The Mumbai Zoo". One need not visit the Zoo as the virtual tour is now possible on you tube via a series of videos on the history of Zoo, Penguins, various animal exhibits and many more series will be launches in the future.

The Zoo has a rich botanical treasure and it is the second green lung of the Mumbai city, the first green lung being the Sanjay Gandhi National Park, Borivali. It's a proud moment for us to declare that the addition of the word botanical to the existing name of the zoo on 12th December 2022 and will be now recognized as Veermata Jijabai Bhosale Botanical Garden and Zoo. With the most advanced animal exhibits enhanced with naturalistic enrichment, acrylic glass panels, rock work and other facilities, the Zoo is embellishing its look while maintaining its heritage precincts of more than 160 years.

All efforts towards a green and clean future ahead ..!!

Dr. Sanjaykumar A. Tripathi

Director (Zoo)

<u>2. History of the Zoo</u>

Veermata Jijabai Bhosale Botanical Udyan & Zoo is one of the oldest zoos in the country & was established in 1862. This area was under the control of Agri-Horticultural Society of Western India. The management of this Udyan & Zoo was handed over to MCGM by the then state govt in 1873. The total area of this Udyan & Zoo is approx. of 53 acres and is declared as "Heritage Grade II (B)" site. This Udyan & Zoo has been given recognition as "Medium Zoo" by Central Zoo Authority, New Delhi. The Zoo is renamed as Veermata Jijabai Bhosale Botanical Udyan & Zoo on 12-12-2022.

3. Vision

Veermata Jijabai Bhosale Udyan and Zoo is one of the oldest zoos in the country and was established in the year 1862. The total area of the Udyan and the Zoo is approximately 53 acres and is declared as Heritage Grade II (B) site. This Udyan and Zoo has been given recognition as "Medium Zoo" by the Central Zoo Authority, New Delhi

Considering the small area of this zoo and a great footfall (around 10 to 15 thousand visitors on an average per day) it is felt that this zoo should work more in educating the people for creating love, interest, empathy and awareness among general visitors, school students/teachers group, college students and representative of various organizations. Various event days related to wildlife, Nature and Environment shall be organized for the purpose in the interpretation center newly constructed at this zoo having the facilities such as a 200-seater auditorium and exhibition areas which are under development. These facilities can be used for conducting various training programme, seminars, workshops, exhibition, wildlife weeks, essay/drawing/elocution competitions and similar other activities including various audiovisual shows, wildlife movies and power point presentation etc.

Most of the New Animal Enclosures will be open and spacious (as per the area norms prescribed for Indian Animals by the Central Zoo Authority, New Delhi). The Natural environment, as per the natural habitat of the respective animals will be created. This will satisfy the basic needs of the animals and provide them comfort and security. These exhibits will also be helpful in educating the visitors about the natural habitats of the animals. There will be visitors viewing areas with the acrylic glass panels, which would not only serve the purpose of a barrier in between the animals and visitors but also shall facilitate the visitor's viewing.

4. Mission

"To engender a respect for wildlife and inspire conservation action"

The zoo aims to create an ambiance that will create awareness about wildlife and inculcate a healthy attitude towards animals. By providing naturalistic, immersion exhibits that display animals in their "wild" surroundings and by imparting information through engaging signage, the zoo aims to become a learning center, albeit in a relaxed and leisurely manner.

The future objective of the zoo is to meet world standards for animal care and husbandry, for environmental education and to be a truly memorable visitor experience.

As part of its mission, the zoo aims to help the visitor be a good zoo steward. Caring for the collection is a primary responsibility of the zoo and the visitor has an important role to play in ensuring the health and well-being of the collection. Visitors shall be briefed on what behaviors are acceptable in the zoo, how their behavior has an impact on animal health and the quality of their own experience and the reasons why respectful conduct is important. Visitor action, both at the zoo and at their home, should serve as an example to others to respect wildlife and to protect the environment on which all life depends.

It is important to educate the visitors about extinction and remind them of our losses, like the dodo, the Indian Cheetah, the Pink headed duck which were all lost due to man's fault. Remembering our losses is important so that we may learn not to commit the same grave mistakes again and help species that are already on the brink of extinction and thus inspire conservation action amongst them.

5. Objective

The objective of the V.J.B. Udyan and Zoo is to develop in to one of the best Zoos in the country as well as abroad, by providing best facilities to the Zoo inmates as well as the visitors. Such as a well-equipped Zoo hospital, cafeteria, food kiosks, drinking water fountains, beautiful internal gardens, rain water shelters, high class Toilets etc. It aims to perform as one of the best nature Interpretation centres for creating interest and awareness about the role of a Zoo in particular and also about Nature, Wildlife and Environment in general, in the minds of people, especially school/college students and teachers. The Zoo interpretation centre having facilities such as an auditorium for conducting various educational activities and the exhibition area are under development, which will be functional in near future.

6. About us

S.No.	Particulars	Information
Basic]	Information about the Zoo	
1	Name of the Zoo	Veermata Jijabai Bhosale Botanical Udyan & Zoo
2	Year of Establishment	1862
3	Address of the Zoo	Dr. Babasaheb Ambedkar Rd., Byculla (East), Mumbai- 400 027
4	State	Maharashtra
5	Telephone Number	022-223772414
6	Fax Number	_
7	E-mail address	vjbudyanzoo@yahoo.co.in dirzoo01@mcgm.gov.in
8	Website	
9	Distance from nearest	Airport: 16 km (Approx.)
		Railway Station: From Byculla Station: 550 m (Approx.) Reay Road Station: 700 m(Approx.)
1033	Recognition Valid up to (Date)	22/03/2020
11	Category of zoo	Medium

S.No.	Particulars	Information
12	Area (in Hectares)	21.4483 Hectares (Approx.)
		Adult: 2063653
		Children: 785425
13		Total Indian: 4912713
	Number of Visitors	Adult: 2006
	(Financial Year)	Children: 278
		Total Foreigners: 2284
		Date 01.04.2022 to 31.03.2023
		Total Visitors: <u>28,51,362</u>
14	Visitors' Facilities Available in Zoo	 Ticket house with baggage counter souvenir shop and public toilet Drinking water fountains Rain water shelters Interpretation Center Child care center Public Toilets Cafe Wild- Eatery
15	Weekly Closure Day of the	Wednesday
	Zoo	
Mana	gement Personnel of the zoo	
16	Name with designation of the	Dr. Sanjaykumar A. Tripathi
	Officer in-charge	Director (Zoo)
	Name of the Veterinary Officer	Dr. Komal V. Raul

S.No.	Particulars	Information
	Name of the Curator	Dr. Devanand D. Shirsat
	Name of the Biologist	Dr. Abhishek N. Satam
	Name of the Education	-
	Officer	
	Name of the Compounder/	Shri. Arun Bhagane (In Charge)
	Lab Assistant	
Owner	r / Operator of the Zoo	
17	*Name of the Operator	Municipal Commissioner.
		Brihanmumbai Municipal Corporation Mumbai
18	Address of the Operator	2 nd Floor, Municipal Head Office,
		Mumbai- 400 001.
19	Contact details/Phone number	022- 22620251
	of Operator	022-22620525
20	E-mail address of Operator	mc@mcgm.gov.in

7. Organizational chart

Director (ZOO) I

		•			
ا Deputy Superinte (Vet) Zoo			ן Deputy Si	uperintendent of Garo	den
· · · 1				ł	
I I	L.	1	I	i	
Veterinary Curato	or Administrative	Education	Maintenance	Horticultural	
Section (Zoo)	Section	Section I	Section	Assistant I	
Veterinary	Administrative	Education-cum-	Sub.	Assistant Head	
Officer	Officer I	Public Relation Officer	Engineer	Mistry	
Head Animal	Head Clerk	I	Electrician	Mistry II	
Keeper	I	Zoo Biologist	1	1	
1	Clerk		Plumber cum	Head Mali	
Mahawat	1		Fitter -III	1	
	Executive		1	Mali	
Elephant	Assistant		Carpenter III		
Keeper	Peen		 Maldar	Labour	
Veterinary	Peon		Welder	Hamal	
Dresser			Mechanic	l	
l			I	Halalkhor	
Camel Keeper			Carpenter	I	
1				Sweeper	
Camel Leader				L.	
				Garden	
Assistant Head				Attendants	
Animal Keeper				Helper	
Veterinary Dresser				Helper	
l				Mukadam	
Horse SYCE				Wakadam	
Labour					
1					
Laboratory Servants	S				

8. Human Resources

Sr. No.	Designation	Number of Sanctioned Posts	Names of the incumbent
1	Director (Zoo)	1	1
2	Deputy Superintendent (Vet) Zoo	1	1
3	Deputy Superintendent of Garden	1	1
4	Veterinary Officer	1	0
5	Curator (Zoo)	1	1
6	Education-cum-Public Relation Officer	1	0
7	Biologist	1	1
8	Administrative Officer	1	1
9	Head Clerk	1	1
10	Horticultural Assistant	4	2
11	Clerk	3	3
12	Executive Assistant	2	2
13	Clerk (Store)	1	1
14	Peon	2	2
15	Tracer	1	0
16	Draftsman	1	0
17	Mechanic	1	0
18	Mistri I	1	0
19	Welder	1	0
20	Helper	1	0
21	Carpenter II	1	0
22	Painter	2	0
23	Head Mali	1	0
24	Plumber cum Fitter -III	1	0
25	Garden Attendants	3	2
26	Carpenter- III	1	0
27	Mukadam	5	0

28	Mistry II	4	1
29	Mali	81	31
30	Sweeper	14	12
31	HalalKhor	1	0
32	Store Attendant	1	0
33	Garden Labourer	15	3
34	Hamal	2	0
35	Cart Driver	2	0
36	Head Animal Keeper	1	0
37	Mahawat	3	0
38	Elephant Keeper	1	1
39	Camel Keeper	2	0
40	Camel Leader	1	0
41	Assistant Head Animal Keeper	2	0
42	Veterinary Dresser	1	1
43	Animal Keeper	25	13
44	Assistant Veterinary dresser	1	1
45	Horse Syce	2	0
46	Zoo Labourer	14	13
47	Laboratory Servants	2	1
	TOTAL	216	96

9. Capacity building of zoo personnel

Sr. No.	Name & Designation of the zoo personnel	Subject matter of training	Period of training	Name of the institution where the training attended
1.	Dr. Sanjay Tripathi (Director Zoo)	National Conference for Zoo Directors at Bhubaneshwar	10 th -11 th September 2022	Nandankanan Zoological Park, Bhubaneshwar
2.	Dr. Sanjay Tripathi (Director Zoo)	National Conference for Zoo Directors at Mysuru	18 th -19 th January 2023	Sri Chamarajendra Zoological Garden, Mysuru
3.	Dr. Devanand Sirsat (Curator Zoo)	Zoo Biologist Workshop	23 rd to 25 th November 2022	Nehru Zoological Park, Hyderabad
4.		Capacity Enhancement workshop for Education officer in Indian Zoo		Veermata Jijabai Bhosale Botanical Udyan and Zoo
5.	Mr. Sanju Kharava Mr. Omkar Satardekar Zoo animal keeper	Regional Capacity Enhancement workshop for zoo keeper of the Western Region		Nahargarh Biological Park, Jaipur, Rajasthan
6.	Dr. Abhishek Satam (Biologist & EPRO ic)	Capacity Enhancement workshop for Zoo Biologist		Greens Zoological and Rehabilitation Center Jamnagar

<u>10. Zoo Advisory Committee –</u> NIL

11. Health Advisory Committee-

<u>a. Date of Constitution-</u> 05.07.2011 (Committee was reformed on 1st July 2022)

b. Members

1.) Dr. D. U. Lokhande

Professor, Dept. of Surgery & Radiology

2.) Dr. B.N.Ramteke

Prof of animal Nutrition
3.) Dr. D.N. Desai
Sectional Head of Poultry Science
4.) Dr. P.V. Meshram
Asst. Professor, Veterinary Pathology
5.) Dr. K.V. Garud
Scientist Veterinary Nuclear Medicine
6) Dr. D. P. Chaudhary
Veterinary Pathologist
7) Dr. Siwani Tandel
Avian and Exotic animal Practitioner
8) Dr. Amrita Deb
Avian and Exotic animal Practitioner

c. Dates on which meetings held during the year- 6-10-2022

<u>12. Statement of income and expenditure of the Zoo</u>

Financial Year 2022-23				
Annual Revenue (Rs.) Entry fees 11,17,37,386				
Annual Expenditure (Rs.	Annual Expenditure (Rs. In Crore)			
Allotted Revenue BudgetConsumed RevenueAllotted CapitalConsumed CapitalExpdt.BudgetExpdt				
30.21 Cr.	28.21 Cr.	104	Nil	

<u>13. Daily Feed Schedule of animals</u>

Sr. No.	Species	Species Feed item	Feed item	Quantity per animal		Day of fasting
			Winter	Summer		
l.	Elephant	Нау	20 kg.	5 % less feed	None	
		Rice Straw	10 kg.			
		Lucern grass	55 kg.			
		Banana	5 Dozen	_		
		Carrots	15 kg.			
		Sugar Cane	25 kg.			
		Pony pellets + wheat bran + oil cake	5 kg. + 5 kg. + 0.8 kg.	_		
		Jaggery	500gm			
		Garlic+ pepper+ sesame seeds+ turmeric+ methi +linseed+ karli	1kg	_		
		Soaked and boiled Bengal gram	0.5 kg			
	Hippopotamus	Soaked Gram + Maize	5 Kg.	5 % less feed	None	
		Wheat Bran	20 Kg.			
		Lucern grass	20-30 Kg.			
		Pony Pallet	10 Kg.			
		Carrots	4-5 Kg.			
		Banana	1/2 Dozen			
		Oil Cake	200 gm.			

3.	Sambar/ Nilgai	Soaked gram + maize	¹⁄₂ Kg.	5 % less feed	None
		Wheat bran + Oil cake	3-4 Kg		
		Carrots	1⁄4 Kg.		
		Lucern Grass	2 Kg.		
		Нау	1 Kg.		
		Cattle Feed	1⁄2-1 Kg		
		Bananas	4-5 nos.		
		Rock salt	Available		
4.	Barking Deer	Soaked Gram + Maize	1⁄4 Kg	5 % less feed	None
		Wheat Bran	0.5 kg		
		Carrots	1⁄4 Kg.		
		Lucern Grass	¹⁄₂-1 Kg.		
		Нау	1⁄2-1 Kg.		
		Cattle Feed	1⁄4 Kg		
5	Spotted Deer,	Soaked Gram + Maize	¹ / ₄ Kg. + ¹ / ₄ Kg	5 % less feed	
		Wheat Bran	.1 kg		
		Carrots	¹⁄₂ Kg.		
		Lucern Grass	1-2 Kg.		
		Нау	¹⁄₂ Kg.		
		Cattle Feed	1⁄2 Kg		
		Rock salt	Available		

6	Swamp Deer	Soaked gram + maize	¹⁄₂ Kg.	5 % less feed	
		Wheat bran + Oil cake	1⁄2 Kg.+100gm		
		Carrots	1⁄4 Kg.		
		Lucern Grass	2 Kg.		
		Нау	1 Kg.		
		Cattle Feed	¹⁄2 Kg		
		Bananas	4-5 nos.		
		Rock salt	Available		
7.	Rhesus macaque And Bonnet macaque	Groundnuts	100 gms.	5 % less feed	None
		Socked gram + Maize	100 gms.		
		Carrots	50 gms.		
		Banana	4 No.		
		Ladies finger, Beet, Tomato, Cucumber	}80 gms.		
		Other vegetables and Fruits (apple, guava, seasonal fruit)	}500- 800 gms		
		Water Melon	100 gms		
8	Wild Boar	Wheat bran + Oil cake	¹ / ₂ Kg.+100gm	¹ / ₂ Kg.+100gm	None
		Carrots	1⁄2 Kg	¹∕₂kg	
		Lucern Grass	2 Kg.	2 Kg.	

		Нау	1 Kg.	1 Kg.	
		Bananas	4-5 nos.	4-5 nos.	
		Rock salt	2-4 no.s	2-4 no.s	
		Sweet potato	½ kg	¹∕2 kg	
		Sugar cane	750 gms	750 gms	
		Cucumber	300gms	300gms	
9	Sloth Bear	Porridge (rice, milk, jaggery, boiled eggs)	1 litre (½ kg, 1 litre, 100 gms, 2 nos.)	(1/2 kg, 11itre,	None
		Рарауа	500gm		
		Water melon	1 Kg		
		Apple	1 nos.		
		Banana	½ dozen		
		Chikoo	03 nos.		
		Salad leaves	250 gms		
		Cabbage	100 gms		
		Beetroot	50 gms		
		Carrot	250 gms		
		Groundnut with cover	100 gms		
		Honey	20ml		
		Рарауа	500gm		

10	···· I · · ·	Chicken/Beef with bone	4 Kgs.	4 Kgs.	Thursday
	Hyena	Eggs	2 no.s	2 no.s	
		Rock Salt	Always avail	Always avail	
11	Leopard	Chicken/Beef with bone	5 Kgs.	5 Kgs.	Thursday
		Rock Salt	Always avail	Always avail	
12	Royal	Chicken/Beef with bone	12 Kgs.	12 Kgs.	Thursday
	Bengal Tiger	Chicken kheema for cubs	1⁄2 - 1kg		
		Rock Salt	Always avail	Always avail	
13	Golden	Chicken/Beef with bone	1.5 Kgs.	1.5 Kgs.	Thursday
	Jackal	Rock Salt	Always avail	Always avail	
14	Bill	Plantain (Banana)	4 Nos.	4 Nos.	None
		Рарауа	100 gms	100 gms.	
		Egg boile	1 no	1 no	
		Seasonal fruits	50gms	50gms	
15.	Macaw	Apple, Chickoo	300 gms.	300 gms.	None
	(per pair)	Groundnuts with cover	200 gms.	200 gms.	
		Sugar cane	200 gms.	200 gms.	
		Guava	200 gms.	200 gms.	
		Sunflower seed	100 gms.	100 gms.	
		Paddy	100 gms.	100 gms.	
		Calcium powder	50 gms.	50 gms.	

		Corn Cobs	1 spoon on food	1 spoon on food.	
		Green peas,	In season	In season	
		Mosambi,	In season	In season	
		Pomogranate	In season	In season	
16	African Grey Parrot	Apple, Chickoo	50 gms.		
	1 anot	Groundnuts with cover	50 gms.		
		Sugar cane	100 gms		
		Guava	100 gms.		
		Sunflower seed	50 gms.		
		Paddy	100 gms.		
		Calcium powder	50 gms.		
		Corn Cobs	1 spoon on food		
		Green peas,	In season		
		Mosambi, Pomogranate	In season		
17	Goldden	Mixed grains	100 gms	100 gms	
	Pheasant	Egg	1 no		
		Fruits and leafy vegetables mixed	50- 80 gms.		
18	Cockatiel	Kang	50 gms.	50 gms.	None
	(Per pair)	Sunflower seed	50 gms.	50 gms.	
		Mixed vegetables	100 gms.	100 gms.	
		Mix Fruits	50 gms.	50 gms.	

		Cuttle Fish Bone/ Calcium Powder	As Supplement.	As Supplement.	
19	Emu	Lucern grass	1 Kg		
		Coriander + Green leafy vegetables	½ Kg		
		Mixed Fruits	1⁄4 Kg		
		Egg	2 no		
		Bird Feed	1 Kg		
20	Adjutant stork/ Painted Stork	Fish	500 gms.	500 gms.	None
21	Pelican	Fish	2 Kgs.	2 Kgs.	None
22	Saras Crane	Mixed Grain.	250 gms.	250 gms.	None
		Fish	200 gms.	200 gms.	1
		Mixed Leafy vegetables	50 gms.	50 gms.	
23	Red Crown	Fish	300 gms.	300 gms.	None
	Crane	Mixed Grain	250 gms.	250 gms.	
		Mixed vegetables	100 gms.	100 gms.	
		Mixed Fruits	100 gms.	100 gms.	
24	Turtle	Fish (Minced) in the morning	100-200 gm		
		Beef Kheema in the afternoon	100-200 gm		
25	Tortoise	Mixed Fruits_+ Mixed Vegetables + Boiled Eggs	50-100 gm		

		Salad Leaves						50-100 gm		
26	Snakes	Mice						1 No.	1 No.	Depending on the size
27	Crocodiles/ Mugger	Fish (Big)						10 kgs	10 kgs	Beef / chicken if not consuming fish
28		Sardine/Eel/ Anchovies	Bombay	Duck/	Mackerel/	Indian	Salmon/	700-800 gms	700-800 gms	Sunday

<u>14. Vaccination Schedule of Animals</u>

Sr. no.	Species	Disease vaccinated for	Name of the vaccine and dosage/quantity used	Periodicity	Remarks
1.	Striped Hyena, Golden Jackal, Sloth Bear	 i) a) Canine Distemper b)Canine Leptospira canicola, pomona grippotyphosa, and icterohaemorrhagica c)Canine Adenovirus type 2 d) Canine Parainfluenza e) Canine Parvovirus 	7 in 1 vaccine	Annually	Subcutaneous
		ii) Canine Rabies iii) Canine Corona virus	Anti-Rabies vaccine Corona vaccine	Annually Annually	-
2.	Leopard, Royal Bengal Tiger	· · · · · · · · · · · · · · · · · · ·	Feligen vaccine	Annually	Subcutaneous
	liger	ii) Canine Rabies	Anti-Rabies vaccine	Annually	
3.	All birds	a) Ranikhet disease	Lasota vaccine/ Ranikhet vaccine	Biannually	Drinking water
4.	Elephant	Rabies Tetanus	Anti-Rabies Vaccine Tetanus Toxoid 3 ml	Annually	Intramuscular

15. Deworming Schedule of Animals

Sr. no.	Class of animals	Species	Drug used	Month
1.	Carnivores	Hyena, Golden Jackal,	Febantel+ Pyrantel+Praziquantel	Quarterly
2		Leopard, Royal Bengal Tiger	Pyrantel+Praziquantel	Quarterly
3.	Primates	Monkeys	Fenbendazole/ Albendazole	Quarterly
4	Omnivores	Sloth Bear	Febantel+ Pyrantel+Praziquantel/ Fenbendazole	Quarterly
5	Herbivores	Elephants Hippopotamus Deer Antelope Nilgai Wild Boar	Ivermectin Fenbendazole Levamisole Oxyclozanide Albendazole	Quarterly
6	Birds	Peafowl, Parakeet, Macaw, Cockatoo, Cockateil, Budgerigar, Parrot, Emu, Crane, Stork, Heron, Pelican <i>etc</i> .	Fenbendazole Amprolium in case of occidian	Quarterly
5.	Reptiles	Crocodile, Turtle, Tortoise, Snake	Fenbendazole	Quarterly

16. Disinfection Schedule

Disinfectants in the form of sprays, solutions, powders eg. Potassium permanganate, Dettol, Aseptic, Kohrsoline, Bleaching powder are used to maintain hygiene in and around animal enclosures.

Sr. No.	Class of animals	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1.	Carnivores	Hyena Tiger Leopard Jackal	Feed House and water body	Kmno4, Kohrsoline, Virkon, Germigo	Daily with water and once a week with disinfectant
2.	Omnivores	Monkeys Sloth Bear	Feed House and water body	Kmno4, Kohrsoline, Virkon, Germigo	Daily with water and once a week with disinfectant
3.	Herbivores	Elephants Hippopotamus Deer Antelope Nilgai Wild Boar	Feed House and water body	Kmno4, Kohrsoline, Virkon, Germigo	Water body cleaned once a week.
4.	Birds	Pheasant,Parakeet, Macaw, Cockatoo, Cockateil, Parrot Emu, Crane, Stork Heron, Pelican <i>etc</i> .	Enclosure and water body	Kmno4, Kohrsoline, Virkon, Germigo	Water body cleaned once a week.
5.	Exotic Birds	Humboldt Penguin	Main Exhibit, Kitchen, Accomodation	F10, Virkon, Chlorhexidine, Organic disinfectant	Once a week (Fumigation)
6	Foot dips at each Exhibits	Virkon S Kohrsolin-Th			

<u>17. Health screening of employees for zoonotic diseases</u>

All zoo staff were screened for TB.

Sr. no.	Name	Designation	Date of Health check-up	Findings of Health Check up
1	Nitin Kadam	Head Animal Keeper	29-03-2023	Negative
2	Israr Khan	Asst. Head Animal keeper	29-03-2023	Negative
3	Omkar Satardekar	Labour	29-03-2023	Negative
4	Ravindra Nivate	Animal keeper	29-03-2023	Negative
5	Arun Bhangane	Animal keeper	29-03-2023	Negative
6	Rakesh Jadhav	Animal keeper	29-03-2023	Negative
7	Jeetsingh Bali	Animal keeper	29-03-2023	Negative
8	Jamal Khan	Animal keeper	29-03-2023	Negative
9	Vilas Amberkar	Lab Assitant	29-03-2023	Negative
10	Sanju Kharva	Animal keeper	29-03-2023	Negative
11	Balkrishna Shelke	Labour	29-03-2023	Negative
13	Mahesh Choughule	Animal keeper	29-03-2023	Negative
14	Amol shinde	Animal keeper	29-03-2023	Negative
15	Ramesh Pawar	Animal keeper	29-03-2023	Negative
16	Balu Waghmare	Animal keeper	29-03-2023	Negative
17	Arun Bhangane	Animal keeper	29-03-2023	Negative
18	Gurunath Narvekar	Compounder	29-03-2023	Negative
20	Ashish Tambe	Animal keeper	29-03-2023	Negative
22	Saif Khan	Labour	29-03-2023	Negative

23	Maruti Makadwala	Animal keeper	29-03-2023	Negative
24	Amit Waghmare	Labour	29-03-2023	Negative
25	Amethibalan	Labour	29-03-2023	Negative
26	Pratik Hate	Labour	29-03-2023	Negative
27	Sachin Satam	Labour	29-03-2023	Negative
28	Mahesh Kashte	Labour	29-03-2023	Negative
30	Suresh Rathod	Animal keeper	29-03-2023	Negative
33	Siddharth Kadam	Animal keeper	29-03-2023	Negative
34	Aaakash Dherbhere	Labour	29-03-2023	Negative
35	Dr. S.A. Tripathi	Director (Zoo)	29-03-2023	Negative
36	Dr. Devanand Sirsat	Curator	29-03-2023	Negative
37	Dr. Dipika Valsarajan	V.O.	29-03-2023	Negative
38	Dr. Abhishek Satam	Biologist	29-03-2023	Negative

18. Developmental Works carried out in the zoo during the year 2022-23

Indian Wolf, Barasinga, Barking Deer, Spotted Deer enclosure and Bird Aviary and Maggar Gharial exhibit has been completed

19. Education and Awareness programmers during the year

International Leopard Day (3rd May 2022)

On the occasion of International Leopard Day, Honourable Additional Municipal Commissioner Smt. Ashwini Bhide commences the release of the fifth episode of The Mumbai Zoo's (V.J.B. Udyan and Zoo) Virtual Tour series titled Mumbaikar Leopard, busting myths and misconceptions about the most misunderstood big cat of Mumbai City.

https://youtu.be/JBFx8dM2Mws



Celebration of "World Environment Day" (5th June 2022)

A small step towards greener planet! On the occasion of World Environment Day (5th June), Dr. Sanjay Tripathi, Director, Veermata Jijabai Bhosale Udyan and Zoo, and Mr. Jitendra Pardeshi, Superintendent of Gardens, Mumbai and their staff members planted trees in the premises of Mumbai Zoo.



World Ocean day (8th June 2022)

On the occasion of World Ocean Day, SEAmposium, a one-day event jointly organized by Eco Folks and Maharashtra Pollution Control Board (MPCB) was held at Veermata Jijabai Bhosale Udyan and Zoo. The event was inaugurated by Mr. Virendra Tiwari, APCCF (Mangroves Cell) and Dr. Sanjay Tripathi, Director of the Mumbai Zoo. Winners of Fotothon 2022- Photography competition were also felicitated by Dr. Tripathi.



<u>Celebration of "International Tiger Day" (29th July 2022)</u>

On the occasion of International Tiger Day, 29th June 2022 the 7th to 10th-grade students of Children Academy Group of Schools, Malad in collaboration with VJBU and Zoo presented a skit on the theme of Importance of Tigers in the Ecosystem and the Zoo etiquettes to be followed when

visiting the Zoo Tiger exhibit.



Azadi ka Amrit Mahotsav Celebrating 75 years of India's Independence 13th to 15th August 2022

Celebrating 75 years of India's Independence, a series of short plays - 'Swarajya Mahotsav' has been organized by the Education Department of the Brihanmumbai Municipal Corporation at the Mumbai Zoo from 11th Aug to 13th Aug. This event was inaugurated today by the Education Officer of BMC, Mr. Rajesh Kankal, Director (Mumbai Zoo), Dr. Sanjay Tripathi and Deputy Education Officer (City), Ms. Sanjivani Kapse. Officers of the Education Department and teachers and students of BMC schools attended the event.



Students of Nawab Tank Marathi School (E ward) performed a short play on 'Prati Sarkar Kranti Sinha Nana Patil'

Students of J.R. Municipal School (B ward) performed a short play on 'Journey of Independence'



https://www.youtube.com/watch?v=Z9wKxbm3wyg

Independence Day Celebration 15th August 2022

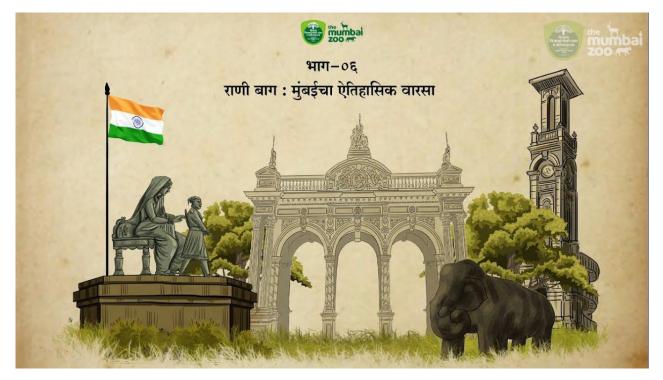
On the occasion 75th year of India's Independence, the Mumbai Zoo under took a tree plantation drive in which 75 trees including several medicinal plants were planted.



On the proud occasion of Independence Day, Honourable Additional Municipal Commissioner

Smt. Ashwini Bhide commences the release of the sixth episode of The Mumbai Zoo's (V.J.B. Udyan and Zoo) Virtual Tour series titled –"Mumbai's Historical Heritage".

https://www.youtube.com/watch?v=gha63oBJojE&t=125s



Celebration of Wildlife Week 2022 at the Mumbai Zoo

Day 1

Wildlife Week celebration at the Mumbai Zoo was flagged off on 2nd October by the Zoo Director, Dr. Sanjay Tripathi. Chairperson of Kalsootri, Mrs. Meena Naik, Dy. Supdt. Vet, Dr. Komal Raul, and Curator Zoo, Dr. Devanand Shirsat graced the event.



Mrs. Meena Naik, Chairperson at Kalsootri, performed a puppet play 'Swachh Bharat' on the first day of the Wildlife week celebration which is also the birth anniversary of Mahatma Gandhi who played a major role to inculcate values of cleanliness & sanitation in our daily life.



As a part of Wildlife Week celebrations, A drawing competition on the theme "Welcome Cheetah" was organized at the Mumbai Zoo. A lot of young minds showcased their creativity through their paintings.





Day 2

On the Day 2 of Wildlife week 2022, Mrs. Sayee Girdhari, Project Coordinator- Season Watch, Nature Conservation Foundation conducted an expert talk on 'Chasing Climate Change in Mumbai' in the 3D Auditorium of the Mumbai Zoo.

The talk enlightened the present audience on how every citizen can contribute to this citizen science study and also helped in understanding the impact of climate change on the environment.





The Mumbai Zoo's own grand cafeteria "Zoo Ville" was inaugurated today by Additional Municipal Commissioner (Eastern Suburbs ahead) Smt. Ashwini Bhide, In presence of Deputy Municipal Commissioner, (Garden) Mr. Kishore Gandhi, and other bmc officials.



Day 3

Keeper's day celebration

International Zookeeper's day was celebrated by engaging the zoo keepers in various activities like quiz, guess the animals, outdoor games etc.





Day 4

As part of wildlife week 2022 celebrations, Mumbai Zoo organized a wild wisdom quiz, an online quiz competition to create awareness about animal facts, wildlife values and importance.

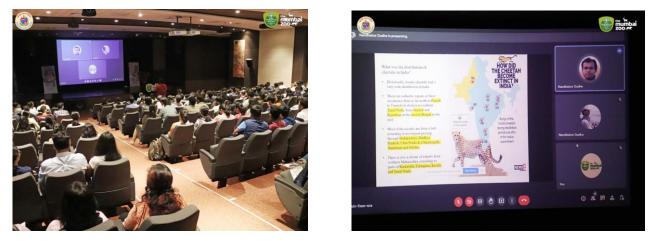


Day 5

On Day 5 of Wildlife week 2022, Vann Ki Baat: Expert online talk on 'Project Cheetah in India' was given by Mr. Nandkishor Dudhe, Project officer BNHS-ENVIS. The event was attended by

students of Mumbai Veterinary College.





Post Centennial Diamond Jubilee year celebrations 19th November 2022

Post Centennial Diamond Jubilee year celebrations of The Mumbai Zoo was organised in the 3D Auditorium of the Zoo. The program was inaugurated by Additional Municipal Commissioner (Western Suburbs) Dr. Sanjiv Kumar in the presence of Deputy Municipal Commissioner (Garden) Mr. Kishore Gandhi, Superintendent of Gardens Mr. Jitendra Pardeshi, Director of the Mumbai Zoo Dr. Sanjay Tripathi and entire staff of the Mumbai Zoo.





On the occasion of the 160th anniversary of The Mumbai Zoo, Online ticketing system was launched by Hon'ble Additional Municipal Commissioner (Western Suburbs) Dr. Sanjiv Kumar. Using this platform the visitors can purchase tickets online from anywhere.



On the occasion of the 160th anniversary of the Mumbai Zoo, 'Here Comes the Animal Parade' a book written by children's writer Keti Bagli and Medha Rajadhyaksha was released by Additional Municipal Commissioner (Western Suburbs) Dr. Sanjiv Kumar, Deputy Municipal Commissioner (Garden) Mr. Kishore Gandhi, Garden Superintendent Mr. Jitendra Pardeshi and Director of the Mumbai Zoo Dr. Sanjay Tripathi. The book has been translated into Marathi by Shubhada Kulkarni. The design of book as well as the 160 years logo was designed by Shardul Kharpude. The main aim of the book is to convey the facts about animals in simple language. Soon the Marathi and English versions of this book will be available for citizens.



On the occasion of the Post Centennial Diamond Jubilee Anniversary of the Mumbai Zoo we bring to you the seventh episode of the 'Virtually Wild' series: "Mee Ranichi Bagh"

https://www.youtube.com/watch?v=G_YYjN4FutY&t=105s

Earth Hour 26th March 2023

The Mumbai Zoo in collaboration the World Wild Fund for Nature-India (WWF) created awareness about Earth Hour. We displayed information board about Earth Hour concept, why it is important. How we can contribute to Nature Conservation. We showed the documentary by WWF to all the visitors at 3D theater.





Animal welfare Fortnightly Programmes

Species and Habitat Awareness 10 July 2022

Tarun Bharat Daily and Maha MTB in association with The Habitat Trust jointly released a video series "Species and Habitat Awareness" to create awareness about various lesser known animal species and their habitats in Maharashtra. This event was inaugurated at the Mumbai Zoo by the Principal Chief Conservator of Forests (Wildlife), Shri. Sunil Limaye in the presence of Additional Principal Chief Conservator of Forests (Mangrove Section) Shri. Dr. Virendra Tiwari and Director of Mumbai Zoo, Dr Sanjay Tripathi.



Sessions on Avian Nutrition and Disease 1st August 2022

Continuing Education program of Phoenix Veterinary Speciality was held at V.J.B. Udyan &Zoo on 31st July 2022 which was attended by veterinarians, avian breeders and hobbyists. Speakers Dr. Shivani Tandel of Phoenix Veterinary Speciality and Mr. Rajesh Nataraj of Essel World Bird Park conducted interactive sessions on Avian Nutrition and Disease. The session also included a visit to the bird aviaries and Humboldt Penguin section of the zoo.



Kids for Tiger 14th January 2023

On January 14, 2023, the second Kids for Tigers - Save the Tiger event was conducted at the Veermata Jijabai Bhosale Botanical Udyan and Zoo. Post the Nature Trail, the kids participated in a poster-making competition on the theme "What impressed me the most on the nature trail". This was Kids for Tigers' Mumbai chapter's second Save the Tiger event with the Forest Department of Maharashtra. The event was attended by Revati Kulkarni Patil, Deputy Director (South) Sanjay Gandhi National Park (SGNP), and Dr. Devanand Sirsat, Curator Zoo, along with three forest guards, as well as Dr. Abhishek Nandkishor Neelam Satam, Zoo Biologist & Education and Public Relation Officer In-charge at the Botanical Udyan and Zoo.



<u>Three Day National Capacity Building Workshop – 15th to 17th February 2023</u>

Central Zoo Authority (CZA), New Delhi in association with Veermata Jijabai Bhosale Botanical Udyan and Zoo (The Mumbai Zoo) organized a capacity enhancement workshop for 40 Education Officers in Indian Zoos from 15th to 17th February, 2023 at Veermata Jijabai Bhosale Udyan & Zoo, Byculla, Mumbai also known as the Mumbai Zoo, The objective of the workshop was "MEASURING OUR IMPACT: Towards a more systematic approach to developing an education master-plan in zoos, visitor engagement experience enhancement and a holistic experience planning".

The learning objective was achieved with educative lectures and most importantly hands on activities conducted throughout the workshop at the Mumbai Zoo. The interactions and knowledge exchanged between education officers will definitely help augment capacity as well as further sensitize them to the value and importance of engagement practices and enhance their ability to the growing needs of incorporating experiential learning methodologies.







The Story Express Storytelling Festival 9th March 2023

Your Gateway to Imagination

Story express in collaboration with Akshara Foundation, Veermata Jijaibai Bhosale Botanical Udyan and Zoo, Wrapper India and Amar Chitra Katha celebrated the 4th edition of The Story express Storytelling Festival on Thursday, March 9th 2023 at Veermata Jijaibai Bhosale Botanical Udyan and Zoo, Byculla. This was one of its kind festival held exclusively for children in NGOs aged 8-14 years. The intent of this event was to help children realize their potential through stories and assist our educators in building their knowledge and imagination.

Stories were told by authors and storytellers outside animal enclosures, a zoo and a tree walk were conducted and writing workshops was held for children as well as the accompanying teachers and the grand finale was with the festival of children films for everyone.





20. Important events and happenings:-

Death Anniversary of Veermata Jijabai Bhosale (as per date)

The 348th Death Anniversary of Veermata Jijabai Bhosale, as per date was observed on Wednesday, the 17th June 2022. Dr. Sanjay Tripathi, Director (Zoo) paid homage to Jijamata by offering garlands to the statue of Veermata Jijabai Bhosale and Bal Shivaji at V.J.B.Botanical Udyan & Zoo other officials from V.J.B.Udyan & Zoo remained present at the occasion.

Death Anniversary of Veermata Jijabai Bhosale (as per the Solar Calender)

The 348th Death Anniversary of Veermata Jijabai Bhosale, as per the Solar Calender was observed on Saturday, the 21th June 2022. Dr. Sanjay Tripathi, Director (Zoo) paid homage to Jijamata by offering garlands to the statue of Veermata Jijabai Bhosale and Bal Shivaji at V.J.B.Botanical Udyan & Zoo other officials from V.J.B.Udyan & Zoo remained present at the occasion.

<u>Celebration of Birth Anniversary of Veermata Jijabai Bhosale at V.J.B.Botanical Udyan &</u> Zoo (6th January 2023 - as per the Solar Calender)

The 425th Birth Anniversary of Veermata Jijabai Bhosale was celebrated by offering garlands to the statutes of Veermata Jijabai Bhosale & Balshivaji at the hands of Dr. Sanjay Tripathi, Director (Zoo) on 6th January 2023 at Veermata Jijabai Bhosale Udyan-Zoo. Other Zoo officials remained present to grace the occasion.

<u>Celebration of 425th Birth Anniversary of Veermata Jijabai Bhosale at V.J.B.Botanical</u> <u>Udyan & Zoo (as per date) 12th January 2023</u>

The 425th Birth Anniversary of Veermata Jijabai Bhosale was celebrated by offering garlands to the statutes of Veermata Jijabai Bhosale & Balshivaji at the hands of Dr. Sanjay Tripathi, Director (Zoo) on 12th January 2023 at Veermata Jijabai Bhosale Udyan-Zoo. Other Zoo officials remained present to grace the occasion.





International Yoga Day 21st June 2022

On the occasion of International Yoga Day, Brihanmumbai Muncipal Corporation in

association with Prajapita Brahmakumari Ishwariya Vishwavidyalaya, arranged a Yoga Shibir at Mumbai Zoo. The event was done in collaboration with Security dept, BMC and presided over by, Dr Sanjeev Kumar - Additional Muncipal Commissioner (Western Suburb). Deputy Municipal Commissioner (Gardens), Mr. Kishor Gandhi and Director (Zoo), Dr. Sanjay Tripathi, Chief Security Officer, Shri. Tawde, along with Security and Zoo staff also actively participated in yoga and meditation sessions.



Zoo Awareness Programmes

The programmes for creating interest and awareness about the order concept of zoo as per the National Zoo Policy 1998 were conducted.

Students of Stephen high school for the deaf under the Montfort Care program visited the Mumbai Zoo on thrusday, 22nd September 2022 as a part of their educational and vocabulary building trip. These 50 specially abled students were warmly greeted by the Director of Mumbai Zoo, Dr Sanjay Tripathi and by the Suprerintendent of Gardens, Mumbai , Mr Jitendra Paradeshi



On 9th and 10th February 2023 Dr. Sanjay Tripathi Director Zoo and Dr. Abhishek Satam were invited as Guest Speaker at K J Somaiya College of Science and Commerce for their annual festival Zorilla.

Internship Students

Final year veterinary students from Mumbai Veterinary College started their internship at Mumbai zoo in batches of 10 students per month starting from 01.01.2022. The internship students are given training in wild animal restraining methods, handling remote drug delivery systems, hands on training during wound dressings, blood collection, necropsy etc., feed preparation, quality inspection and distribution of feed, providing enrichment to zoo animals etc.





21. Seasonal special arrangements for upkeep of animals

Summer:

1.) **Feed enrichment**: Whole fruits like watermelon and seasonal fruits, whole tender coconuts, ice lollies and ice fruit cakes made out of cut seasonal fruits and sweetened water with jaggery syrup are offered to monkeys and elephants. Whole watermelons and pumpkins are also provided to the hippopotamus.

2.) Enclosure enrichment:

Wet mud patches in the enclosures are provided for the deer to cool off in the Summer.

Small water pools are provided for the monkeys in the enclosures.

Roofs of the bird enclosures are covered with palm leaves.

Monsoon:

Animal enclosure roofs are covered with Tarpaulin sheets.

Dry hay is provided in all animal houses and sheds of deer enclosures to keep the deer dry and warm during the rains. Similarly, jute gunny bags are provided to monkeys and hyaenas.

Winter:

Dry hay is provided in all deer animal houses and sheds to keep the deer warm during Winter. Similarly, jute gunny bags are provided to monkeys and hyaenas.

Cyclone Nisarg:

Tree trimming was carried out surrounding the animal enclosure in advance before the cyclone to prevent damage to enclosures and escape of animals. All carnivores were taken inside the feed house during the cyclone.

22. Research work carried out and publications- None

23. Conservation breeding Programme of the zoo- None

24. Important cases during 2019-2020 at VJBU and Zoos

MANAGEMENT OF INJECTION SITE ABSCESSES FOLLOWING SUBCUTANEOUS ADMINISTRATION OF TRIQUIN (QUINAPYRAMINE SULPHATE AND QUINAPYRAMINE CHLORIDE) IN CAPTIVE LARGE FELIDS

Trypanosomosis is commonly reported in captive wild animals in India. One of the prophylactic drug combinations used for Trypanosomosis is Quinapyramine sulphate and Quinapyramine chloride (inj. Triquin) which is administered subcutaneously. However, Triquin can cause irritation at the injection site if not diluted well or administered properly. Here we discuss three cases of injection site abscesses- in a pair of Leopards and a Royal Bengal Tigress resulting from prophylactic Triquin injection. The abscesses in all three cases were of varying degrees and therefore different approaches of wound management were used. Surgical intervention, Chitosan bandaging and Ozone therapy were used for the treatment of deep abscess in the Tigress. Surgical intervention and daily wound dressing were used for the female Leopard whereas the abscess in the male Leopard healed only by daily wound dressing due to its small size. The felids were also given oral chymotrypsin, antibiotic and multivitamin supplements throughout the treatment. Proper approach to wound management helps to reduce the wound size and scarring at the wound site in these large felids. Proper dilution of inj. Triquin and careful administration can prevent injection site reactions.

24. Animal Acquisition / transferred / exchange during the year- None

25. Rescue and Rehabilitation of wild animals carried out by the zoo- None

<u>26. Annual</u> Inventory of animals

						ermata E Invent	ndan	gered S	Specie	es (Sc	h I &	II)		<u>i</u>								
Sr. no	Species	Scientific Name			as on 4-22			Birth		A	cquir	ed	D	ispos	al		Deatl	h	Stock 31-03	k as on 3-23		
			Μ	F	U	Т	М	F	U	Μ	F	U	М	F	U	Μ	F	U	М	F	U	Т
A	Mammals																					
1	Elephant Indian	Elephas maximus	0	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	1
2	Macaque Rhesus	Macaca mulatta	4	4	15	23	-	-	2	-	-	-	-	-	-	1		-	3	4	17	24
3	Swamp Deer	Rucervus duvaucelli	1	0	0	1	-	-	-	-	-	-	-	-	-	1	-	-	0	0	0	0
4	Leopard	Panthera pardus	1	1	0	2	-	-	-	1	1	-	-	-	-	-	-	-	2	2	0	4
5	Golden Jackal	Canis lupus	2	0	0	2	-	-	-	-	-	-	-	-	-	-	-	-	2	0	0	2
6	Sloth Bear	Melarsus ursinus	0	1	0	1	-	-	-	1	-	-	-	-	-	-	-	-	1	1	0	2
7	Striped Hyena	Hyaena hyaena	1	1	0	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0	2
8	Royal Bengal Tiger	Panthera tigrid tigris	1	2	0	3	4	-	-	-	-	-	-	-	-	2	1	-	3	1	0	4
	Total of A		10	10	15	35	4	0	2	2	1	0	0	0	0	4	1	0	12	10	17	39
В	Birds		М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Hornbill Indian Pied	Anthracocer os malabaricus	0	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	1
2	Indian Peafowl	Pavo cristatus	0	2	0	2				-	-								0	1	0	1
	Total of B		0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
С	Reptiles		М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Cobra Indian	Naja naja	1	0	0	1	-	-	-	-	-	-	-	-	-	1	-	-	0	0	0	0
2	Crocodile Long Snouted	Gavialis gangeticus	2	0	0	2	-	-	-	-	-	-	-	-	-	-	-	-	2	0	0	2
3	Crocodile Marsh (Mugger)	Crocodylus palustris	3	2	0	5	-	-	-	-	-		-	-	-		1	-	3	1	0	4
4	Python Indian Rock	Python molurus	2	2	1	5	-	-	-	-	-	-	-	-	-	-	-	1	2	2	0	4
5	Rat Snake	Ptyas mucosus	0	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	0	0	1	1
6	Turtle Indian Black	Melanochely s trijuga	0	0	5	5	-	-	-	-	-	-	-	-	-	-	-	-	0	0	5	5
7	Indian Flapshell Turtle		0	0	9	9	-	-	5	-	-	-	-	-	-	-	-	5	0	0	9	9
	Total of C		8	4	16	28	0	0	5	0	0	9	0	0	0	1	1	6	7	3	15	25
	Total of A+B+C		19	17	31	66	4	0	7	2	1	0	0	0	0	5	3	6	19	15	32	66
				(9	9 Flap s	shell tu	rtles f	ound ir	n Croc		Pond ond)	in zoo	o pren	nises	while	dewa	tering t	the				

					Ve	ermata						00, M	lumba	ai								
						Annua			es (Sc from 01			1-03-2	023									
Sr. no	Endangere d Species	Scientific Name			k as on 04-22			Birth			cquire			ispos	al		Death	n			k as on 03-23	
D			М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Crane Sarus	Grus antigone	1	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	1
2	Heron Night	Nycticorax nycticorax	0	0	63	63	-	-	15	-	-	-	-	-	-	-	-	-	0	0	78	78
3	Parakeet Alexandrin e	Psittacula eupatria	7	3	9	19	-	-	-	-	-	-	-	-	-	-	-	-	7	3	9	19
4	Pelican Rosy / White	Pelecanus onocrotalus	1	1	0	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0	2
5	Stork Adjutant	Leptoptilos dubius	1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	3
6	Stork Painted	Mycteria leucocephala	0	1	11	12	-	-	1	-	-	-	-	-	-	-	-	-	0	1	11	12
	Total of D		10	6	85	101	0	0	16	0	0	0	0	0	0	0	0	1	10	6	99	115
Е	Mammals		Μ	F	U	Т	М	F	U	Μ	F	U	М	F	U	М	F	U	М	F	U	Т
1	Barking Deer	Muntiacus Muntjack	5	10	5	20	-	-	2	-	-	-	-	-	-	3	3	1	2	7	6	15
2	Sambar Deer	Cervus unicolor	1	2	0	3	-	-	-	-	-	-	-	-	-	-	-	-	1	2	0	3
3	Spotted Deer	Axis axis	6	2	12	20	-	-	2	-	-	-	-	-	-	-	-	8	6	2	6	14
4	Wild Boar	Sus scrofa	0	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	1
	Total of E		12	15	17	44	0	0	4	0	0	0	0	0	0	3	3	9	9	12	12	33
	Total of D + E		22	21	102	145	0	0	20	0	0	0	0	0	0	3	3	10	19	18	111	130

				Ve	ermat	ta Jijaba Other			Udyan – Sch III &		, Mur	nbai										
				Ar	nnual /	Invento					1-03-	2023										
Sr. no	Species (III & IV)	Scientific Name	Stoc	k as on				Birth			cquire			isposa	al		Death	h			k as or •03-23	١
Е	Birds	,	М	F	U	Т	М	F	U	Μ	F	U	М	F	U	Μ	F	U	Μ	F	U	Т
1	Budgerigar	Melopsittacus undulates	6	5	0	11		-		-	-	-	-	-	-	4	2		2	3	0	5
2	Cockatiel grey + White	Nymphicus hollandicus	0	1	44	45		-	20	-	-	-	-	-	-		-	-	0	1	64	65
3	Crane Crowned Red	Grus japonicus	3	2	0	5	-	-	-	_	-	-	-	-	-	-	-	-	3	2	0	5
4	Emu	Dromaius novaehollandia e	0	0	3	3											-	1	0	0	2	2
5	Macaw Military	Ara militaris	3	1	0	4	2	2		-	-	-			-	-			5	3	0	8
6	Parrot African Grey	Psittacus erithacus	2	6	0	8	-	-	-	_	-	-							2	6	0	8
7	Humboldt Penguin	Spheniscus humboldti	5	4	0	9	4	1		_	-	-						-	9	5	0	14
8	Pheasant Golden	Chrysolophus pictus	3	2	0	5	-	-	1	_	-	-				1	1	-	2	1	1	1
	Total		22	21	47	90	6	3	21	0	0	0	0	0	0	5	3	1	23	21	67	111

							(1	unkn	own E	mu ie	dent	ified	as m	ales	on N	lecro	opsy)				
	Mammals		М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Hippopotamus	Hippopotamus amphibius	2	2	0	4				-	-	-	-	-	-	-			2	2	0	4
	Mammals – 12 species, 76, Birds – 16 species, 228, Reptiles – 6 species, 25																					

	-	n report of Endang at V. J. B. Udyan &		-	mals/ Birds/ Reptiles 30-03-2023
Sr. No.	Name of Species	Scientific name	Date of Acquisition	No. & Sex	Remarks
1	Cockatiel	Nymphicus hollandicus	11.05.2021	29U	Handed over by Forest Dept on
2	Pheasant Golden	Chrysolophus pictus	30.07.2021	3M 3F	Donation from Aviary Paradise, Bangalore
3	Parrot African Grey	Psittacus erithacus	09.09.2021	3M 3F	Donation from Aviary Paradise, Bangalore

	- -	t of Endangered and B. Udyan & Zoo fro	-		-
Sr.	Name of Species	Scientific name	Date of	No. &	Remarks
No.			Disposition	Sex	

Anr	-	ndangered and other Sp. o lyan Zoo from 01-04-202		s/ Reptiles at
Sr. No.	Name of Species	Scientific name	Date of Birth	No. & Sex
1	Humboldt Penguin	Spheniscus humboldti	02/04/22	1M
2	Humboldt Penguin	Spheniscus humboldti	26/04/2022	1M
3	Pheasant Golden	Chrysolophus pictus	9/5/2022	1U
4	Cockatiel	Nymphicus hollandicus	27/05/2022	4U
5	Indian Flapshell Turtle	Lissemys punctata	10/6/2022	5U
6	Humboldt Penguin	Spheniscus humboldti	09/08/22	1M
7	Barking Deer	Muntiacus Muntjack	18/08/2022	1U
8	Parakeet Alexandrine	Psittacula eupatria	04/09/22	1U
9	Rhesus Macaque	Macaca mulata	22/09/2022	1U
10	Humboldt Penguin	Spheniscus humboldti	02/10/22	1M
11	Cockatiel	Nymphicus hollandicus	22/10/2022	2U
12	Royal Bengal Tiger	Panthera tigrid tigris	04/11/22	4M

13	Humboldt Penguin	Spheniscus humboldti	13/12/2022	1M
14	Heron Night	Nycticorax nycticorax	21/01/2023	15U
15	Cockatiel	Nymphicus hollandicus	23/01/2023	10U
16	Cockatiel	Nymphicus hollandicus	01/02/23	04U
17	Barking Deer	Muntiacus Muntjack	10/02/23	1U
18	Stork Painted	Mycteria leucocephala	19/02/2023	1U
19	Rhesus Macaque	Macaca mulata	24/02/2023	1U
20	Heron Night	Nycticorax nycticorax	30/1/2022	4U
21	Spotted Deer	Axis axis	4/3/2023	1U
22	Spotted Deer	Axis axis	14/03/2023	1U

		Egg repo	ort of Crocodile	(Crocodylu	s palustris)	
Sr. No.	Date of egg	No. of	Date of	Date of	Date of egg disposed	Method of
	lay	eggs	incubation	hatch		incubation
1	Crocodile	Crocodylus	18-04-2019	29	20- Artificial	3 eggs
		palustris			incubation 6 – Natural	broken
					incubation	discarded
	E	gg report of	Humboldt Peng	guin (<i>Sphen</i>	iscus humboldti)	
Sr. No.	Date of egg	No. of	Date of	Date of	Date of egg disposed	Method of
	lay	eggs	incubation	hatch		incubation

27. Mortality of Animal

D	eath/Disposed report of E	ndangered and other Sp. of from 01-04-2022 t		Reptiles at	V. J. B. Udyan Zoo
Sr. No.	Name of Species	Scientific name	Date of Death	No. & Sex	Cause of Death/Disposal
1	Cockatiel	Nymphicus hollandicus	12.04.2021	1F	Cardiac Shock
2	Spotted Deer	Axis axis	16.04.2021	1M	Cardiac Shock
3	Parakeet Red Breasted	Psittacula alexandri	26.04.2021	1M	Old age
4	Spotted Deer	Axis axis	26.04.2021	1F	Cardiac Shock, h/o dystocia
5	Macaque Rhesus	Macaca mulatta	27.04.2021	1M	Multiple organ failure
6	Spotted Deer	Axis axis	30.04.2021	1M (fawn)	Cardiac shock
7	Budgerigar	Melopsittacus undulates	30.04.2021	2F	Cardiac shock
8	Golden Jackal	Canis lupus	18.05.2021	1F	Asphyxia
9	Spotted Deer	Axis axis	22.05.2021	1F	Septicemia
10	Budgerigar	Melopsittacus undulates	23.05.2021	2F	Cardiac Shock
11	Cockatiel	Nymphicus hollandicus	25.05.2021	1M	Enteritis
12	Budgerigar	Melopsittacus undulates	01.06.2021	1M	Cardiac Shock, old age
13	Cockatiel	Nymphicus hollandicus	07.06.2021	1 M	Cardiac Shock, leg injury
14	Indian Flapshell Turtle	Lissemys punctata	17.06.2021	1F	Cardiac Shock, gout
15	Cockatiel	Nymphicus hollandicus	20.06.2021	1 M	Cardiac Shock, infighting
16	Parakeet Alexandrine	Psittacula eupatria	26.06.2021	1 M	Cardiac Shock, wing injury
17	Spotted Deer	Axis axis	27.07.2021	1M (fawn)	Cardiac Shock
18	Cockatiel	Nymphicus hollandicus	28.07.2021	1 M	Cardiac shock, enteritis
19	Spotted Deer	Axis axis	30.07.2021	1F	Multiple organ failure, old age
20	Emu	Dromaius novaehollandiae	04.08.2021	1F	Respiratory failure
21	Cockatiel	Nymphicus hollandicus	05.08.2021	1F	Cardiac shock, overgrown beak, anorexia
22	Sambar Deer	Cervus unicolor	06.08.2021	1F	Respiratory failure
23	Budgerigar	Melopsittacus undulates	09.08.2021	1M	Cardiac Shock
24	Barking Deer	Muntiacus Muntjack	16.08.2021	1M	Cardiac Shock, septicemia
25	Cockatiel grey	Nymphicus hollandicus	19.08.2021	1M	Cardiac Shock
26	Budgerigar	Melopsittacus undulates	19.08.2021	1M	Cardiac Shock, infight injury
27	Budgerigar	Melopsittacus undulates	20.08.2021	1F	Cardiac Shock, infight injury
28	Spotted Deer	Axis axis	06.09.2021	1F	Respiratory failure

29	Parrot African Grey	Psittacus erithacus	29.09.2021	1M	Intestinal obstruction
30	Parrot African Grey	Psittacus erithacus	02.10.2021	1M	Multiple organ failure
31	Cockatiel	Nymphicus hollandicus	07.10.2021	1M	Cardiac Shock, infight injury
32	Budgerigar	Melopsittacus undulates	13.10.2021	2M	Cardiac Shock, infight injury
33	Sambar Deer	Cervus unicolor	23.11.2021	1F	Respiratory failure
34	Budgerigar	Melopsittacus undulates	29.11.2021	1F	Hepatitis, old age
35	Macaw Military	Ara militaris	04.12.2021	1M	Cardiac Shock, old
					age
36	Cockatiel	Nymphicus hollandicus	11.12.2021	1M	Cardiac Shock
37	Spotted Deer	Axis axis	13.12.2021	1F	Respiratory
					failure,Infight injury
38	Pheasant Golden	Chrysolophus pictus	25.12.2021	1F	Cardiac Shock
39	Budgerigar	Melopsittacus undulates	30.12.2021	1M	Cardiac Shock, infight
					injury
40	Budgerigar	Melopsittacus undulates	28.01.2022	1F	Cardiac shock,
					enteritis
41	Spotted Deer	Axis axis	30.01.2022	1M	Respiratory failure
42	Indian Flapshell Turtle	Lissemys punctata	06.02.2022	1M	Cardiac Shock,
					septicemia
43	Barking Deer	Muntiacus Muntjack	07.02.2022	1F	Respiratory failure
44	Macaque Rhesus	Macaca mulatta	24.02.2022	1F	Cardiac Shock, old
					age
45	Budgerigar	Melopsittacus undulates	02.03.2022	1F	Old age, cardiac
					shock, hepatic failure
46	Indian Flapshell Turtle	Lissemys punctata	10.03.2022	1M	Septicemia
47	Macaw Military	Ara militaris	17.03.2022	1M	Cardiac Shock, old
					age

Sr. No.	Norm No.	Details on the conditions stipulated by the Central Zoo Authority, New Delhi, MoEF	Status with regard Compliance of the conditions as submitted by the Officer-in- charge of the Zoo
2.	Administrative	and Staffing Pattern :	
1	10.2 (1)	The financial powers of the Director for purchasing items or daily use are not sufficient for such a large zoo. It should be increased substantially.	The financial powers for Director are currently Rs.40,000/- for daily expenditure and for tendering procedure up to Rs.20,00,000/- as per current MCGM norms.
2	10.2 (2)	Recruitment of Veterinary support staff should be completed early.	Lab Technician post has been approved and being advertised for recruitment.
3.	Development	and Planning :	I
3	10.3 (6)	The implementation of collection plan as approved by the CZA should start early.	This Zoo has already initiated compliance in this regard by adding various species like, Tiger, Leopard, Jackal, Hyena, etc. as per new approved Animal Collection Plan and these animals are displayed in newly developed exhibits.
4	10.3 (7)	Proposal should be forwarded for consideration of the CZA for transfer of rescued wild animals for which the zoo does not have off-display housing facility of prescribed design and dimension.	At this stage, this zoo has (1) one rescued Malabar Pied Hornbill for which PCCF, Wildlife has granted permission to retain the bird at Zoo since it is unfit to be released in wild. In due course, permission will be sought from CZA, for the acquisition of the said bird in Zoo's Animal

			Collection Plan.			
4. Animal Housing, display of animals and animal enclosures :						
5	10.4 (10)	The interpretation centre should be made functional.	The interpretation centre will be made functional within 2 months.			
5.	5. Upkeep and health care of animals :					
6	10.5 (3)	Sufficient size freezer for shortage of meat products should be purchased immediately.	Complied. The zoo has purchased two (2) deep freezers (500 kg capacity) in addition to one already existing for storage of meat products.			
9.	Acquisition and	breeding of animals :				
7	10.9 (4)	The lone Malabar Pied Hornbill should be transferred to some other Zoo or paired here only.	This Zoo will initiate the exchange proposal for pairing of the lone Malabar pied hornbill.			
8	10.9 (4)	Single female sloth bear should be paired or transferred to some other Zoo.	This zoo has already submitted animal exchange proposals to various zoos having sloth bear male in excess. This zoo has already finalized animal exchange proposal with Indore Zoo, who have agreed to spare a pair of Sloth bear. The proposal is awaiting nod from CZA.			

11	. Education and	outreach activities :	
9	10.11 (1)	Various visitors' facilities should be created along with dedicated website for the Zoo and conducted tours should be started.	Various visitors' facilities like shelters, pyau, toilets have been developed and made operational.
			To develop dedicated website for the Zoo, the proposal has been initiated for administrative approval.
12	. Visitors facilit	ies :	
10	10.12 (1)	Since the Zoo is situated in the densely populated south Mumbai, battery operated vehicles will be of great help to the visitors.	The facility of battery operated vehicles is included in the comprehensive revenue income plan, which is under process. Very soon this facility will be made available for the visitors.

29. List of free living wild animals within zoo premises

Mammals:

- 1. Mongoose
- 2. Fruit Bats
- 3. Three striped Palm Squirrel

<u>Birds:</u>

- 1. Common House Crow
- 2. Jungle Crow
- 3. Rose-ringed Parakeet
- 4. Alexandrine Parakeet
- 5. Plum Headed Parakeet
- 6. Indian Grey Hornbill
- 7. Black Kite
- 8. House Sparrow
- 9. Common Mynah
- 10. Eurasian Cuckoo
- 11. White-throated Kingfisher
- 12. Purple-rumped Sunbird
- 13. Cattle Egret
- 14. Grey Heron
- 15. Pond Heron
- 16. Night Heron
- 17. Copper-smith Barbet

- 18. White-breasted Water-hen
- 19. Ashy Drongo
- 20. Golden Oriole
- 21. Tailor Bird
- 22. White-browed Fantail
- 23. Spotted Owlet
- 24. Rock Pigeon
- 25. Indian Cormorant
- 26. Crow Pheasant
- 27. Magpie Robin
- 28. Red-vented Bulbul
- 29. Red- whiskered Bulbul
- 30. Barn owl
- 31. Paradise Flycatcher

Reptiles:

- 1. Checkered Keelback
- 2. Common Rat Snake
- 3. Skinks
- 4. Geckos
- 5. Garden Lizards
- 6. Worm Snake
- 7. Wolf snake











