

Annual Report 2019-20

Van Vihar National Park-Zoo, Bhopal



CONTENTS

S.No.	Section	Page Number
1.	Report Of The Officer-In-Charge	01
2.	History	03
3.	Vision	04
4.	Mission	05
5.	Objective	06
6.	About Us	07
7.	Organizational Chart	10
8.	Human Resources	11
9.	Capacity Building Of Zoo Personnel	13
10.	Exposure Visits	14
11.	Health Advisory Committee	14
12.	Statement Of Expenditure Of The Zoo	17
13.	Daily Feed Schedule Of Animals	18
14.	Vaccination Schedule Of Animals	20
15.	De-Worming Schedule Of Animals	20
16.	Disinfection Schedule	21
17.	Health Check Up	22
18.	Development Works Carried Out In The Zoo During The Year	23
19.	Education And Awareness Programmes During The Year	24
20.	Visit Of Dignitaries In Van Vihar	31
21.	Seasonal Special Arrangements For Upkeep Of Animals	33
22.	Conservation Breeding Programme	35
23.	Acquisition / Transfer / Exchange During The Year 2019-20	36
24.	Rescue And Rehabilitation Of Wild Animals Carried Out By The Zoo	37
25.	Annual Inventory Of Animals	38
26.	Mortality Of Animals.	39
27.	Compliance With Conditions Stipulated By The Central Zoo Authority	40
28.	List Of Free Living Wild Animals Within The Zoo Premises	46

Acknowledgements

I thank the Central Zoo Authority, Delhi, Secretary Forests and Operator of the zoo, Government of Madhya Pradesh, Chief Wildlife Warden Madhya Pradesh, and all the well wishers of Van Vihar. Special thanks to Dr. Sanjay Shukla, IFS, Shri Mridul Pathak, Wildlife SOS, BNHS and MP Tiger Foundation Society.



Photo Courtesy

Dr. Sanjay Shukla, IFS, for photographs on page no. 2, 8, 12, 14, 34, 46, Cover page and this page

Mridul Pathak, for photographs on page no. 5, 14, 17, 19

Rohan Singarpure for photographs of page no. 34

Kamlesh Chaturvedi, Forest Guard Van Vihar for photographs on page no. 4, 6, 22, 23, 29, 33, 34, 35

REPORT OF THE OFFICER IN CHARGE



The year 2019-20 was another good year for Van Vihar management. This year we saw an increase in outreach and extension program with introduction of activities such as Anubhuti Camps and Biodiversity camps.

Summer was tough with the upper lake receding and drying up. Van Vihar Management had to make lot of efforts for managing the stress period. Two new permanent water sources were revived and canals were de-silted.

It was a very long and heavy monsoon with rainfall figures achieving new highs. Lot of damage was seen in the display enclosures and the heavy rains continued till October into the wild life week.

Wild life week was a spectacular show as usual with huge participation of school children, Bird Watchers, Teachers, professionals in different activities.

A total of 3100 students participated in 17 events in the week long celebrations.

Anubhuti camps were organized for the first time in Van Vihar and much appreciated by the participating schools. This year we saw a huge participation 892 people in bird watching camps, 280 students and 22 teachers in 2 biodiversity camps and participation of 744 children of 19 schools in Anubhuti camps.

We celebrated New year with a resolution to reduce, reuse and recycle and to minimise use of single use plastic in our daily activities. We certainly took up a lot of recycling projects; from fences to signages a lot of waste was repurposed.

Van Vihar saw an addition to 03 new Barasingha fawns in the Barasingha enclosure post monsoon. We lost 2 Barasingha from the original population in February. Tough we lost Priya our oldest resident tigress finally to age but many new members joined Van Vihar. Munna the most photographed tiger of Kanha national Park was shifted to Van Vihar on 29.10.19.

A pair of orphan cubs who were not found fit to be released in wild, Bandhan and Bandhini were transferred here on 26.02.20 from Bandhavgarh. Finally another problematic male tiger Sattu, joined Van Vihar on 03.03.2020.

But definitely a highlight for van Vihar was the acquisition of a pair of lions, Satya and Nandi from Kanan Pendari Zoo, Bilaspur as a gift.

We acquired four exotic animals following an order of Indore High Court which were later gifted to Chhatbir Zoo, Punjab.

The Vulture Centre at Kerwa continues with conservation efforts.

The Rescue Centre in Van Vihar achieved new benchmarks when a female Tiger Cub rescued from wild near Baari, Raisen was treated and finally released to Satpura Tiger reserve after a long stay for 18 days. A lot of other animals were similarly treated successfully and released in the wild which include two leopards who are being treated and will be released soon after they are healed completely.

Kamalika Mohanta



Varu : In deep thought

VISION

To become a scientific institution engaged in animal welfare and conservation of wildlife. To be known as a centre of knowledge on effective techniques for maintaining good health and upkeep of resident animals and an example of natural ambience and pollution free environment.

MISSION



- I. Compliment the national efforts in conservation of wildlife through planned coordinated conservation breeding of endangered wild animal species of Central India.
- II. Develop amongst visitors, empathy for wild animals and motivate them to support the cause of conservation of wildlife.
- III. Develop amongst the visitors an understanding about the ecological linkages with the life supporting processes of nature and the need for keeping them intact by adopting sustainable life styles and living in harmony with nature.
- IV. Enhancing the role of zoos in conservation of wildlife through collaborative research aiming at attaining management skills for in-situ population and carrying out advocacy for protecting the wild animals and their natural habitat.
- V. To act as Rescue Centre by receiving and keeping orphaned, seized, rescued, injured wild animals subject to availability of appropriate housing for the same.

OBJECTIVE



Van Vihar was set up with the following broad objectives in view:

- I. To manage in captivity the wildlife of central India along with animals from other bio geographic regions of India in near-natural simulated habitat conditions to serve as a repository of genes and in-case of further expansion of the area of the zoo some rare exotic species can also be displayed in that area.
- II. To pursue conservation breeding of some rare and endangered species like- Tiger, Asiatic lion, Gyps vultures and Hard ground Barasingha etc.
- III. To provide the visitors, through a well-designed 'Interpretation programme' an opportunity to enjoy, experience, understand and appreciate nature and the need to conserve wildlife.
- IV. To carry out appropriate studies to strengthen both in-situ and ex-situ wildlife management.
- V. To serve as rescue center in Madhya Pradesh for orphaned, weak, diseased, injured and aged animals found unfit for release in the wild as well as those rescued from traditional animal performers and Circuses.

ABOUT US



S.No.	Particulars	Information
Basic Information about the Zoo		
1	Name of the Zoo	Van Vihar National Park - Zoo, Bhopal
2	Year of Establishment	24.11.1994
3	Address of the Zoo	Van Vihar National Park - Zoo, Bhadbhada Road, Bhopal, M.P. - 462003
4	State	Madhya Pradesh
5	Telephone Number	0755-2674278
6	Fax Number	0755-2674278
7	E-mail Address	dirvnp.bpl@mp.gov.in
8	Website	mpforest.gov.in, www.vanviharnationalpark.org
9	Distance from nearest	
	Airport :	about 17 km.
	Railway Station :	about 7 km.
	Bus Stand :	about 8 km.
10	Recognition Valid upto (Date)	30 September 2019
11	Category of zoo	Small
12	Area (in Hectares)	445.21 hectares
13	Number of Visitors (Financial Year)	Adult and Children : 5,49,563
		Total Indian : 549450
		Total Foreigners : 113
		Total Visitors : 5,49,563
Weekly Closure Day of the Zoo		Friday

VISITOR AMENITIES

- Food Kiosks and Restaurant
- Drinking water
- Public Toilets
- Deer Safari
- Battery Operated Vehicles on Rent
- Walk-in educational workshops
- Bicycles services for the visitors on rental basis
- Sit-outs and Rain-shelters
- Wheel Chair (Free of Cost)
- Interpretation Centre
- Open Amphitheatre

Management Personnel of the zoo

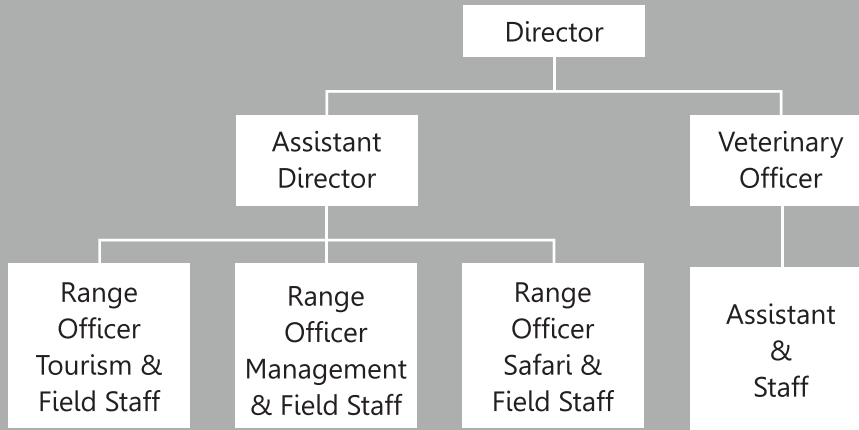
Name with designation of the Officer in-charge	Kamalika Mohanta I.F.S. (1997)
Name of the Veterinary Officer	Dr. Atul Gupta,
Name of the Curator	Range Officer Safari
Owner / Operator of the Zoo	
Name of the Operator	Shri H.S. Mohanta (I.F.S.)
Address of the Operator	Secretariat, MP Govt. Vallabh Bhawan Bhopal
Contact details/Phone number of Operator	0755-2579747
E-mail Address	secyforest@mp.gov.in

Free Ranging Animals in upper Plateau at Van Vihar

ENTRY FEE AND OTHER CHARGES

S.N.	Particulars	Educational / Research / Govt. of India & State Govt. Dept. & Inst.	Fee per person	
1	Pedestrians(Only entry Without Vehicle per person above five years)	Rs 10	Rs. 20	
1	Cycle (One person)	-	Rs. 30	
2	Two wheelers (Max. two person)	-	Rs. 60	
3	Auto Rickshaw (1- 4 person)	-	Rs. 120	
	Light vehicle - (up to 5 person cap.)	-	Rs. 250	
4	Light vehicle - (above 5 person cap.)	-	Rs. 400	
5	Mini bus (20 person cap.)	-	Rs. 1000	
6	Bus (above 20 seater)	-	Rs. 2000	
7	Battery Operated Van Ticket (each)	-	Rs. 50	
8	Safari by govt. vehicle	-	Rs. 50	
9	Tele-film/Tele documentary/ Still photography (1 to 7 days) /camera man/ day	Rs.5000	Rs. 10000	
10	Tele-film/Tele documentary/ Still photography (8 to 15 days) /camera man/ day	Rs.3750	Rs. 7500	
11	Tele-film/Tele documentary/ Still photography (16 to cont.) /camera man/ day	Rs.2500	Rs. 5000	
12	Limited time pass (Walk)	Monthly Rs.300	Yearly Rs. 3000	Life time Rs. 24000
13	Limited time pass (Cycle)	Rs.450	Rs. 4500	Rs. 30000

ORGANIZATIONAL CHART



Assistant Director



Veterinary Officer



Unit In-charge Tourism



Unit In-charge Safari



Unit In-charge Management



Patrolling in charge



Ex. Unit in-charge Management

HUMAN RESOURCES

Sl.No.	Designation	Snactioned Strength	Working Strength	Vacancy
Administrative personnel				
	Director	1	1	0
	Assistant Director	1	1	0
	Veterinary Officer	1	1	0
	Superintendent	1	0	1
	Stenographer	1	0	1
	Assistant grade-I	1	1	0
	Accountant	1	0	1
	Assistant grade-II	2	1	1
	Cinema Operator	1	1	0
	Draftsman	1	1	0
	Assistant Grade-III	4	4	0
	Driver	2	2	0
	Peon	2	2	0
	Daftari	1	1	0
Executive Personnel				
	Range Officer	6	4	2
	Deputy Ranger	3	1	2
	Forest gaurd	43	39	4
	Animal Keeper	64	59	-





RETIREMENTS AND TRANSFERS DURING THE YEAR

Transferred/Retired :-

- Shri Ram Swaroop Nagar, Sthayee Karmi retired from service on 31.07.2019
- Shri Khuman Singh, Curator Sthayee Karmi resigned on 31.08.19
- Shri Santosh Parashar, Range Officer was relieved on transfer on 08.07.19
- Shri S.S. Anwar, Range Officer, was relieved on transfer on 20.08.19
- Shri G.S. Nagar Range Officer, was relieved on transfer on 05.01.2020

Joined Us :-

- Shri D S Pooriya Range Officer joined on 15.07.19
- Shri Sunil Tiwari, Assistant Grade -II joined on 08.08.19
- Smt Kamalika Mohanta joined as Director on 14.08.19
- Shri R. K. Verma Range Officer joined on 22.08.19
- Shri L. Lakra Range Officer joined on 14.02.2020

CAPACITY BUILDING OF ZOO PERSONNEL



- Capacity building workshop for Field Personnel was organized on Zoo interpretation, Animal identification and behavior on 08.11.19 where total 48 participants were addressed by Dr Shubharanjan Sen, IFS and Shri A.K. Jain.
- Training of zoo personnel on identification of poisonous snakes, and basic herpetology including enclosure design was addressed by Dr Baiju (Wildlife SOS) on 30.11.19 where 43 participants had a lively interactive session with the guest.
- Training module for Animal Keepers and Zoo Personnel was organized on 24.02.2020 where 42 staff and animal keepers participated.



TRAINING SESSIONS FOR VAN VIHAR STAFF

EXPOSURE VISITS

- Shri Naval Khushwaha, Forest Guard and Shri Vinod Pal, Forest Guard attended Zoo keepers training organized by ISRO Jodhpur Tekash at Ahmedabad.
- Dr Atul Gupta attended two days workshop on managing Human Elephant Conflict organized by WII at Cochin on 1st and 2nd November 2019.
- Dr Atul Gupta attended workshop on Fingerprint Developing and Lifting Techniques on 15th November at Bhopal, organized by WCT in collaboration with MP Forest Department.
- Shri Pooriya, Range Officer, Shri Kamlesh Chaturvedi Forest Guard and Shri Rahul Singh Thakur, Forest Guard attended two days workshop on Anubhuti organized by MPEDB, Bhopal.
- Smt Kamalika Mohanta, Director attended workshop on Vulture Conservation organized by BNHS at Kolkata on 17th December and a two day workshop on Emotional Intelligence Organized by CEFNARM, at Dullapally, Telengana.



HEALTH ADVISORY COMMITTEE

Date of constitution - 11.10.2017

Members - Director Van Vihar, Assistant Director, Van Vihar, Dr. Atul Gupta, Veterinary Officer, Van Vihar, Special invitees: Dr. Kajal Jadhav, Assistant Professor. School of Wildlife Forensic and Health, Jabalpur, Dr. S.K. Tumadiya, Assistant Veterinary Surgeon State Veterinary Hospital Bhopal, Veterinary Officer Wildlife SOS Van Vihar Bhopal, Range Officer Safari, Range Officer Management, Range Officer Tourism and concerned animal keeper.



FINANCES

Sl. No.	Activity	Type	Revenue generated
1	Entry Fee	Pedestrians	2900140
		Bicycle	225090
		Two Wheeler	5321580
		Three Wheeler	1066800
		Four Wheelers	10642570
		Bus	244000
2	Concessional Entry Fee(in all categories)		349576
3	Rental Fee for Safari Vehicle and BOV		434150
4	Yearly Entry Pass Issue		244350
5	Outsourcing of Kiosks		527496
6	Fines and Penalties		45670
7	Bank Interest		9800
8	Other Miscellaneous		12690

The total Annual Revenue generated for the financial year 2019-20 is Rs. 22013631

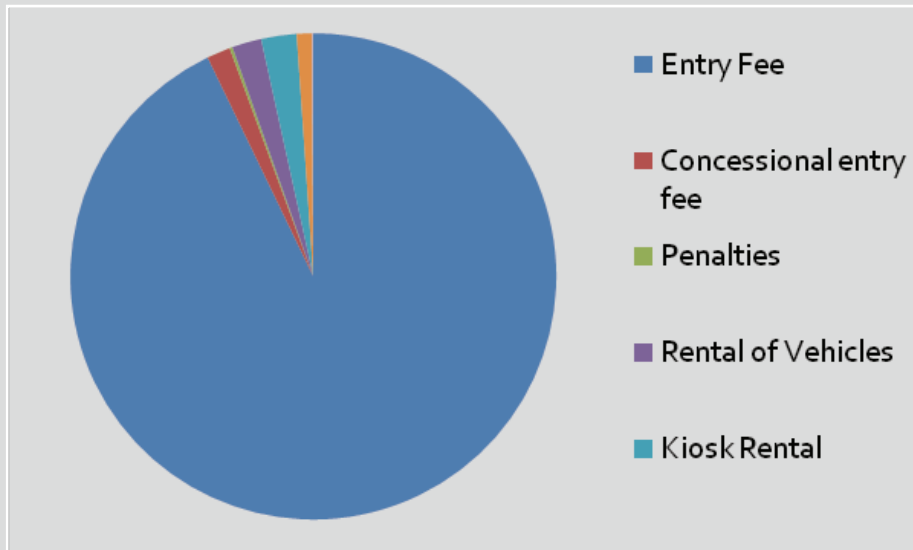
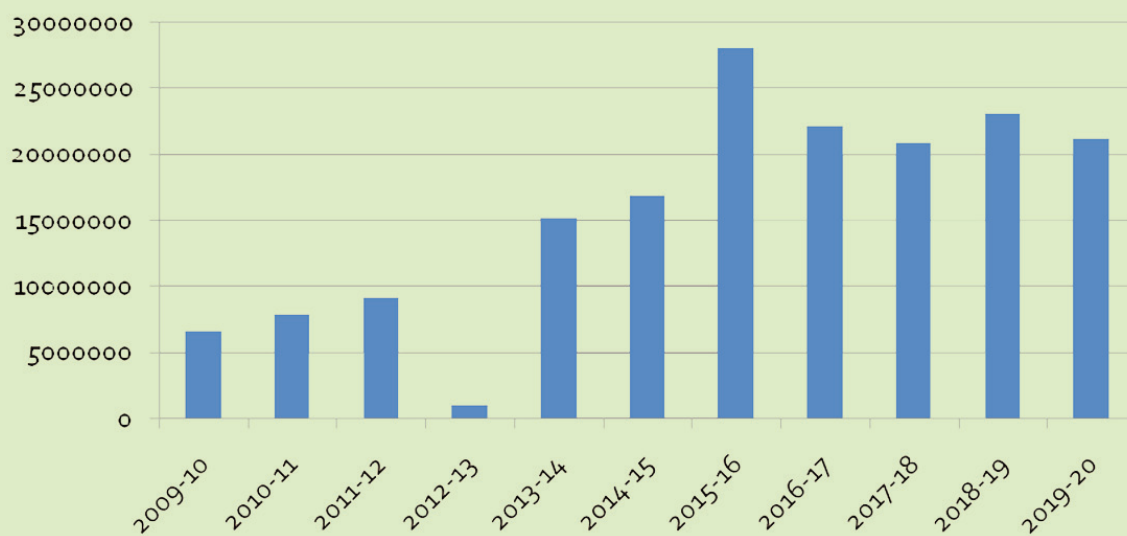


Figure 1. Share of Different Parameters in Yearly Revenue

Visitors and Revenue Generated in Last Eleven Years

Sl.No.	Year	Number Of Visitors	Revenue generated by Visitors
1	2009-10	243781	6602400
2	2010-11	278043	7923980
3	2011-12	307107	9139680
4	2012-13	350256	1081640
5	2013-14	385209	15208550
6	2014-15	510496	16907630
7	2015-16	402670	28106335
8	2016-17	419545	22193918
9	2017-18	566084	20873715
10	2018-19	616804	23131530
11	2019-20	549563	21195595

Revenue generated by Visitors



STATEMENT OF EXPENDITURE OF THE ZOO

S. No.	NAME OF PLAN	ALLOTMENT	EXPENDITURE
1.	10-2046 NON PLAN (2899)	5,88,15,074	5,80,59,831 (includes exp. from central server)
2	10-4406 PLAN (7882- 12 wages)	37,964	37,964
3.	10-2046 PLAN 3730- Central Assistance	46,15,800	33,71,811
4.	PARK DEVELOPMENT FUND	5,66,07,374	4,51,55,033
5	2723- Administration reinforcement	30,000	28,328
6	10-2216-6218 maintenance of building	4,00,000	1,64,787
7	6349 Wildlife management of outside the protected area	2,70,145	2,66,915
8	010-3054-9136 Road repair	27,000	22,640



Panna - Posing for Snap

DAILY FEED SCHEDULE OF ANIMALS

Sl. No.	Species	Feed Item	Quantity		Day of Fasting
			Summer	Winter	
1	Tiger	Buffalo meat	7-9 kg/day	8-10 Kg/day	Friday
2	Lion	Buffalo meat	6-8 kg/day	6-8 kg/day	Friday
3	Leopard	Buffalo meat	3-3.5 kg/day	3.5-4kg/day	Friday
4	Hyena	Buffalo meat	2-3kg/day	2-3kg/day	Friday
5	Jackal	Buffalo meat	1.5-2kg/day	1.5-2kg/day	Friday
6	Sloth Bear	Morning Mixed Flour (Sorgum, Corn, Barley, Wheat and Bajra) Balls of 05 flour with 10g salt	535 g 01 No.	535 g 01 No.	-
		Egg boiled	50 gm	50 gm	
		Honey	100 gm	100 gm	
		Dates	150 gm	150 gm	
		Vegetables			
		Afternoon Fruits (seasonal)	01 kg	01 kg	-
		Evening Daliya	350 gm cooked in 07 lts water	350 gm cooked in 07 lts water	
		Milk	01 Lts	01 Lts	
		Banana	02 no	02 no	
7	Bison	Dry and Green Fodder along with Sudana and Salt lick	Dry and Green Fodder along with 03 Kg Sudana and Salt lick	Dry and Green Fodder along with 03 Kg Sudana and Salt lick + Jaggery-01 kg	

8	Blackbuck	Dry and Green Fodder along with Sudana and Salt lick	As per requirement + 300 g Sudana	As per requirement + 300 g Sudana	
9	Chowsingha	Dry and Green Fodder along with Sudana and Salt lick	As per requirement + 150 g Sudana	As per requirement + 150 g Sudana	
10	Crocodile and Gharihal	Buffalo meat	15 kg/ day	15 kg/ day	
11	Turtle	Buffalo meat	03 kg/alternate day for all	03 kg/alternate day for all	
12	Star Tortoise	Vegetable	100-150 gm/day	100-150 gm/day	



Bholu in his Hammock

VACCINATION SCHEDULE OF ANIMALS

S.No.	Species	Disease vaccinated for	Name of Vaccine and dosage/ quantity used	Periodicity	Remarks
1	Tiger	Feline Rhinotracheitis+Calici+Panleukopenia	Fel-o-vax(killed virus) 01 ml	Yearly	
2	Leopard	Feline Rhinotracheitis+Calici+Panleukopenia	Fel-o-vax(killed virus) 01 ml	Yearly	
3	Lion	Feline Rhinotracheitis+Calici+Panleukopenia	Fel-o-vax(killed virus) 01 ml	Yearly	
4	Hyena	Rabies	Raksharab 01 ml	Yearly	
		canine distemper, canine adenovirus, canine parvo, canine parainfluenza, canine leptospirosis	Nobivac DHPPI+Lepto 01 dose	Yearly	
5	Jackal	Rabies	Raksharab 01 ml	Yearly	
		canine distemper, canine adenovirus, canine parvo, canine parainfluenza, canine leptospirosis	Nobivac DHPPI+Lepto 01 dose	Yearly	
6	Sloth Bear	Rabies	Defencer	Yearly	
		canine distemper, canine adenovirus, canine parvo, canine parainfluenza, canine leptospirosis	Vanguard plus 5L4	Yearly	

DE-WORMING SCHEDULE OF ANIMALS

S.No	Species	Drug used	Month
1	Tiger	Praziquantal, Ivermectin, Fenbendazole	May, August, December, March
2	Leopard	Praziquantal, Ivermectin, Fenbendazole	May, August, December, March
3	Lion	Praziquantal, Ivermectin, Fenbendazole	May, August, December, March
4	Hyena	Praziquantal, Ivermectin, Fenbendazole	May, August, December, March
5	Jackal	Praziquantal, Ivermectin, Fenbendazole	May, August, December, March
6	Sloth Bear	Praziquantal, Ivermectin, Fenbendazole	July, Nov, Jan, March
7	Bison	Albendazole, Fenbendazole	May, August, December, March

DISINFECTION SCHEDULE

S.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Tiger	Housing	Fumigation	Monthly
2	Tiger	Housing	Wash with Bleaching powder	Monthly
3	Tiger	Housing	Washig with Lyzol	Daily
4	Tiger	Water hole in enclosure	Painting with lime	fortnight
5	Lion	Housing	Fumigation	Monthly
6	Lion	Housing	Wash with Bleaching powder	Monthly
7	Lion	Housing	Washig with Lyzol	Daily
8	Lion	Water hole in enclosure	Painting with lime	fortnight
9	Leopard	Housing	Fumigation	Monthly
10	Leopard	Housing	Wash with Bleaching powder	Monthly
11	Leopard	Housing	Washig with Lyzol	Daily
12	Leopard	Water hole in enclosure	Painting with lime	fortnight
13	Hyena	Housing	Fumigation	Monthly
14	Hyena	Housing	Wash with Bleaching powder	Monthly
15	Hyena	Housing	Washig with Lyzol	Daily
16	Hyena	Water hole in enclosure	Painting with lime	fortnight
17	Sloth Bear	Housing	Fumigation	Monthly
18	Sloth Bear	Housing	Wash with Bleaching powder	Monthly
19	Sloth Bear	Housing	Washig with Lyzol	Daily
20	Sloth Bear	Water hole in enclosure	Painting with lime	fortnight

HEALTH CHECK UP

Health Check up of Animals was done with the help of Wildlife Forensic and Health Jabalpur



Health Check up of 10 forest guards Range Officer Safari, and 15 Animal Keepers and attendents was done on 22.05.18. All were Found Fit. Check up included general Health Check up and Check up for Tuberculosis. All personnel who come in close proximity of the animals were vaccinated against Rabies.

Infocus : Veterinary Officer, VVNP

Dr. Atul Gupta, completed his Bachelor Degree in Veterinary Sciences from Mhow, Indore in 1999. He joined Forest department on deputation in 2000 and completed the diploma course in Wildlife Management in 2001 and further specialized in wildlife health management from WII, Dehradun. He did a short term course in Radiology from IVRI Izzatnagar, UP. He went on to complete a two week course in Endangered species recovery from Durrell Wildlife Conservation Trust Jersey (UK) in 2009 and a two week course on Chemical and Physical Restrain of Wildlife from Milalange Trust Zimbabwe in 2013. He is an integral part of Van Vihar since 2006 and a most reliable person for Wildlife healthcare.

DEVELOPMENT WORKS CARRIED OUT IN THE ZOO DURING THE YEAR

A lot of new work and renovation of old housings and enclosures were taken up this year. Though no new structure was constructed, new works constructed this year includes constructions of water holes, anicuts, canal and contour walls amongst soil water conservation work. We suffered severe damage to the tiger and lion display enclosures by incessant heavy rains which resulted in collapse of the moat walls in several enclosures. These moat walls were again repaired. some enclosures in the off display area and display zone were further strengthened by construction of dwarf walls. Some renovation and restoration works were carried out in the *Pahari Baba* tower and Butterfly Park. Improvement works like Reconstruction of range office, Protection of old trees by making *chabutara* around them certainly aided the greenery inside Van Vihar. Apart from construction work, one battery operated Vehicle was purchased and one repaired and this facility was restarted in Van Vihar.



EDUCATION AND AWARENESS PROGRAMMES DURING THE YEAR

Van Vihar had a huge influx of education institutions, NGOs and other organizations like WWF, Bhopal Birds, Zunoon Adventure, coordinating with Van Vihar team to successfully conduct various education visits, awareness camps and bird watching events. Even the mega events like Anubhuti and Biodiversity Awareness camps were organized in Van Vihar with the help of MP Biodiversity Board and MPEco-tourism Development Board respectively which generated tremendous response in the schools and the students. Apart from the awareness and extension programs, Van Vihar has been organizing the State Wild Life Week on behalf of Wild Life Wing which is always a much awaited event amongst schools and students. This year too the wild life week celebration saw a participation of 82 schools and 3161 students in 15 activities. The day wise program is depicted below. Entry of the participants during these events and participation is entirely free of charge.

State Wildlife Week 2019-20

Every Year State Wildlife Week is celebrated with great enthusiasm in V. V. N. P. Bhopal since 1st of Oct. to 7th of Oct. This year to spread message of wildlife conservation among people seven "Nukkad Natak" were hosted at important places of Bhopal.



Date	Categories & Events	No of Participants
1.10.19 मंगलवार	Wildlife Week Inauguration	1647
	Painting Competition	
	"Inauguration Of The Wildlife Photo Competition Exhibition"	
2.10.19 बुधवार	Bird Watching & Biodiversity Camp	131
	Youth Parliament	64
3.10.19 गुरुवार	Bird Watching & Biodiversity Camp	150
	Photography Workshop And Competition (For School And College Students & Open Category)	64
	Teachers Workshop	30
4.10.19 शुक्रवार	Awareness Generation Through Creativity Workshops	211
	Product Created From Waste Material Competition	89
5.10.19 शनिवार	Bird Watching & Biodiversity Camp	100
	Rangoli Competition In Two Categories (I To Viii) And (Open)	111
	Palm Painting Competition (Open Category)	259
	Mehandi Competition (Open Category)	79
6.10.19 रविवार	Bird Watching & Biodiversity Camp	114
	Quiz Competition (Finals)	16
7.10.19 सोमवार	Fancy Dress Competition	96
	Face Painting Competition	
	Prize Distribution & Closing Ceremony	



State Wildlife Week Inauguration 01.10.19

GLIMPSES OF WILD LIFE WEEK - 2019



Painting Competition 01.01.2019



Youth Parliament for Biodiversity Awareness amongst 16 Forest Circles 02.10.19



Bird Watching Camp during wild life week was organized for four days, starting from 02.10.19

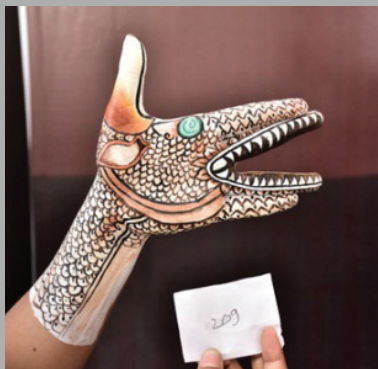


Teachers Workshop on 03.10.19

GLIMPSES OF WILD LIFE WEEK - 2019



Creativity Workshop on 04.10.19 included Stone Painting Making Paper Butterflies Clay Modelling



Rangoli Competition, Palm Painting Competition, Mehendi Competition on 05.10.2020



Biodiversity Camp, and Final Quiz Competition on 06.10.2020

GLIMPSES OF WILD LIFE WEEK - 2019



Face Painting, Fancy Dress Competition, Prize distribution & Closing ceremony 07.10.2020



A toony tails exhibition started during wildlife week and continued till November

Anubhuti

Anubhuti is a special awareness program being sponsored by Madhya Pradesh Eco Development Board. This program is being conducted in all the ranges of M.P. and this time it was taken up in Van Vihar too. Total target was to organize 6 camps of 120 students each but due to popularity of the program the participation was very high.

Date	Total Participating Students in each Camp	Number of Participating Schools	Remark
19.12.19	105	03	90 Students from Maharashtra also participated
23.12.19	145	03	
24.12.19	90	04	Camp for Special Children From 04 institutions Arushi Foundation, Nidaan, Cerebral palsy of India and Digdarshika Participated.
04.01.20	143	04	54 students from households of economically poor section also participated
07.01.20	78	01	All Girls Camp. Female students residing in govt. hostel Participated in this Camp.
09.01.20	116	03	Apart from 116 students, 40 RO trainees from Punjab Range Officer Training School also participated
22.01.20	67	01	Students of Govt. Deaf and Dumb higher Secondary School
Total Participants			Students 744
			Teachers 72
			RO Trainees 40
			Total 856



Different activities during Anubhuti Camps

VISIT OF DIGNITARIES IN VAN VIHAR

A number of Dignitaries visited Van Vihar this year. We had forestry personnel from Bhutan and Bangladesh, senior civil servants, trainee ACFs, Range Officers, Probationers from State training Academy, Honorable Chief Justice MP High Court, and world renowned shooter Mr. Gagan Narang who became a part of the "Close to my Heart" campaign of MPTFS.



SPECIAL EVENTS DURING THE YEAR

- Plantation of 500 trees near Pahari Baba was organized on 30.07.2019.
- An Exhibition on Wildlife Awareness "TOONY TAILS" was exhibited by WWF in the Van Vihar Premises From 1st October to 30th November, which was a major attraction for Visitors coming to the Zoo.
- An effort was made to bring specially abled Children of Umang organisation for visiting VanVihar. 27 children were brought to Van Vihar and taken around the Zoo in Battery operated Vehicles.
- Bird Count of Van Vihar along with Bhoj Wetland was organized by Bhopal Birds where professionals from different fields participated.



SEASONAL SPECIAL ARRANGEMENTS FOR UPKEEP OF ANIMALS

I. Summer arrangements -

For captive animals - Bhopal experiences high temperatures in summer. Temperature reaches up to 47°C. To keep the housings and kraals comfortable for captive animals, Desert coolers are provided. The doors and windows are covered with 'Khus mats', which are watered periodically to ensure coolness. The kraals are covered on top with hessian cloth too. The water holes in the enclosures are covered with temporary sheds for keeping the water cool and providing shade to animals, when they take a dip to get relief from the scorching heat.



For Free ranging animals - Large number of herbivores reside inside the zoo area. During this period scarcity of natural fodder and water is felt. To mitigate this, artificially created water holes at a number of places are filled with drinking water and green fodder is placed at strategic places on daily basis. 'Sudana' a nutrient supplement is also made available during the period for herbivores. Artificial shed arrangements are also made near the water holes.

II. Winter arrangements - Housing of captive animals are covered with curtains and at the peak period of winter heating facility in the housings is also provided. All the housings of Cats are provided with wooden *Thakats* for providing insulation to the animals. Special attention is given to the reptile housings by providing hay for providing warmth during winter.



CONSERVATION BREEDING PROGRAMME

Van Vihar is associated with two important conservation breeding program apart from being a participatory zoo for conservation breeding of Tigers and Lions.

Conservation Breeding of Hard Ground Swamp Deer (Barasinga) in Van Vihar Premises and Vulture Conservation cum Breeding Centre in Kerwa both are very ambitious programs being undertaken with the help of MP Forest Department and BNHS for Vultures.

Conservation Breeding for Barasinga

The initial population of 7 Barasinga were captured from Kanha NP and were brought to Van Vihar in January 2015. This year we had four new fauns and the number reached 18. but we lost four animals, two from the original population due to old age and one young animal due to infection. At the end of March we have 15 animals. So in 5 years we could more than double the number of the original population.



Vulture Conservation and Breeding Centre

The VCBC is located 9 kms from Van Vihar. It was set up with the help of BNHS and started functioning from 2014. This centre is basically concentrating on Ex-situ conservation of White Backed Vulture and Long Billed Vulture, the two main types found in M.P. The detailed information of the birds is given below.

Particulars	White Backed Vulture	Long Billed Vulture
Founder population	16	30
Mortalities	1	
Population on march 2020	17	37

ACQUISITION / TRANSFER / EXCHANGE DURING THE YEAR 2019-20

A Animal arriving in the Zoo					
1	H.No.	Species	Number (M:F)	From which Zoo	Date of arrival in the zoo
2		Gala Cockatoo	2	Seized Animals Handed over by DFO Indore	27.0819
3		Fox Squirrel	1		
		Umbrella Cockatoo	1		
4		Lion	1:1	Kanan Pendari Zoological Garden Bilaspur, Chhatisgarh	16.01.2020
B Animals going from the Zoo					
1	H.No.	Species	Number (M:F)	going to which Zoo	Date of deposition from the zoo
2		Gala Cockatoo	2	Chhatbir Zoo, Chandigarh	13.09.19
3		Fox Squirrel	1		
4		Umbrella Cockatoo	1		



RESCUE AND REHABILITATION OF WILD ANIMALS CARRIED OUT BY THE ZOO

S.n.	Date of Rescue	Species with number of animals rescued with their sex (M:F:U:T)	Received from	Date of Submission of Report to the 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	24.10.19	Tiger (1) M	KTR	29.10.19		Senile. Not Fit to be released in Wild.
2	8.11.19	Tiger (1)F	Range Badi Division Obedullaganj		8.11.19 STR	-
3	10.11.19	Tiger (1)F	STR		28.11.19 STR	-
4	18.01.20	Leopard (1) M	Rescued from Beat Gidhhagarh Range Raisen (West) Division Raisen	27.04.2020		Under Treatment. Will be released in wild after fitness check
5	22.02.20	Leopard (1) M	Division Narsinghpur	28.2.2020		Under Treatment. Will be released in wild after fitness check
6	26.02.20	Tiger (2) 1:1	BTR	28.02.2020		Not fit for release.
7	28.02.20	Blackbuck(1)	Hoshangabad	20.03.2020		Not fit for release.
8	03.03.20	Tiger (1) M	STR	12.03.2020		Man-eater. Conflict Animal. Not fit for Release.



ANNUAL INVENTORY OF ANIMALS

Inventory Report for the Year : 2019-20

Part-A : Animals under Schedule I and Schedule II of the Wild Life (Protection) Act, 1972

S.No.	Animal Name	Scientific name	Opening Stock as on				Births			Acquisition			Disposal			Death			Closing Stock as on						
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	T						
1	*Antelope four horned Chowsinga	Tetraceros quadricornis	4	2	0	6	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4	2	0	6
2	Bear sloth	Melursus ursinus	13	11	0	24	0	0	0	0	0	0	0	0	0	0	1	0	0	0	13	10	0	23	
3	*Black buck- Krishna Mrig	Antilope cervicapra	2	3	1	6	0	0	0	1	0	2	3	1	0	0	0	0	0	0	0	0	1	0	1
4	*Deer Swamp Barasinga	Cervus duvauceli branderi	3	3	8	14	0	0	3	0	0	0	0	0	1	1	0	0	0	0	2	2	11	15	
5	Indian Bioson- Gaur	Bos gaurus	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
6	*Chinkara- Indian Gazelle	Gazelle gazelle bennetti	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7	Jackal	Canis aureus	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
8	Leopard / Panther	Panthera pardus	8	3	0	11	0	0	0	0	0	0	0	0	0	1	0	0	0	0	8	2	0	10	
9	Lion Indian	Panthera leo persica	3	1	0	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	2	0	6	
10	Tiger Bengal	Panthera tigris tigris	3	6	0	9	0	0	0	3	1	0	0	0	0	0	1	0	0	0	6	6	0	12	
11	Tiger Bengal (White)	Panthera tigris tigris	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
12	Crocodile Long Snouted- Ghariyal	Gavialis gangeticus	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
13	Crocodile marsh- (Mugger)	Crocodylus palustris	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12	
14	Turtle Fresh Water Indian soft shelled	Lissemys punctata punctata	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	
	Total		40	35	45	120	2	0	3	4	3	0	4	3	1	4	0	1	4	0	41	31	47	119	

*Endangered Species

Part – B : Animals Other than Schedule I and Schedule II of the Wild Life (Protection) Act, 1972

S.No.	Animal Name	Scientific name	Opening Stock as on			Births			Acquisition			Disposal			Death			Closing Stock as on			
			M	F	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
15	Hyaena Stripped	Hyaena hyaena	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
16	* Deer Sambhar	Rusa unicolor	1	2	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0
17	* Deer spotted (Chital)	Axis axis	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
18	Tortoise Indian Star	Geochelone elegans	0	0	6	0	0	0	0	2	0	0	0	0	0	0	0	0	0	8	8
	Total		1	5	6	12	0	0	0	2	1	3	0	0	0	0	0	0	2	8	10
	G. Total		41	40	51	132	2	0	3	4	3	5	6	1	4	0	41	33	55	8	129

MORTALITY OF ANIMALS

Sl.No.	Animal Name (with individual identification mark, if any)	Scientific Name	Sex	Date of Death	Reason of Death as per the Post-mortem report
1	Bear sloth	Melursus ursinus	F	24.09.2019	Multi organ failure
2	Tiger Bengal	Panthera tigris tigris	F	07.10.2019	Respiratory failure due to senility.
3	Leopard (Panther)	Panthera pardus	F	15.12.2019	Lung infection leading to respiratory failure.
4	Deer Swamp Barasinga	Cervus duvauceli branderi	F	20.02.2020	Ascertained as the carcass was highly putrefied and decomposed.
5	Deer Swamp Barasinga	Cervus duvauceli branderi	M	25.02.2020	Senility

COMPLIANCE WITH CONDITIONS STIPULATED BY THE CENTRAL ZOO AUTHORITY

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
1. General requirements				
1	10.1(3)	The entry of the visitors towards the snakes' pits has been stopped as temporary arrangement. The temporary holding facility should be kept away from the visitors in the off display area. These snake pits should be demolished.	One Year	Complied. Pits have been demolished. Complied. Zoo has an effective waste disposal plan. The solid waste is being collected by our volunteers and taken out of the premise which is collected by BMC. liquid waste is diverted to soak pits and green waste is being used for composting.
2. Administrative & Staffing Pattern				
3	10.2(2)	The zoo is a medium category zoo. Therefore, the zoo should have the curator, the education officer and the biological, one person for each of the posts. These posts are separate posts with well-defined duties and responsibilities under the recognition of zoo rules, 2009. Therefore, these posts should be filled up accordingly as per rule.	One Year	The zoo has been recognized as a small zoo now. Compliance will be done in time. Proposal for sanction has been sent to the higher office. In the meantime help of retired officers and person associated with other organisations are helping for zoo interpretation and nature education.
3. Development & Planning				
4	10.3(1&2)	The zoo should get its Master Plan approved immediately.	Immediately	Master Plan has already been sent to CZA twice through State Government. Few days ago Zoo director attended the observations and again sent it to CWLW, which will be sent to CZA through State Government. The layout plan of Zoo is already approved by CZA in 2015. Now CZA should approve master plan quickly.

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
5	10.3(4)	The zoo should prepare the collection plan properly as per the availability of the housing facility in the zoo for the particular species.	Immediately	Collection plan based on housing capacity indicated has been sent to CZA about a year ago. The same has again been sent again along with the master plan.
6	10.3(3)	The pucca building in the zoo including animal houses and visitor facilities needs to be properly camouflaged with vegetation so that they merge with the green environment of the zoo.	One Year	Now the colour of building has been changed to sand stone colour, which matches very well with the surrounding. However more camouflaging using vegetation cover may further beautify the facilities.
7	10.3(8)	The zoo is accepting rescued animals for housing without intimation to the CZA. The CZA should be informed about the acquisition and housing of the rescued animals of the endangered species.	Immediately	Receipts of animals in the zoo are intimated to CZA through CWLW and state government. There is no single animal in the zoo without such intimation. Further CZA has acknowledged all the intimations and granted permissions. However the wild animals brought for treatment are kept in the premises for minimum period till the treatment is complete, which are in turn released back in wild, after obtaining permission from CWLW.
4. Animal housing, display of animals and animal enclosures				
8	10.4(3)	The chain link fences of the display enclosures should be properly erected without any looseness and with proper concrete & brick grouting. They should be periodically maintained and painted to protect it from rusting.	One Year	Maintenance is being done. All loose fencings have been tightened. Painting will be done before rains.
9	10.4(5)	Leopard enclosure should have inclined iron sheet to prevent escape of animals.	One Year	Existing barrier in leopard enclosure has a special design in which the chain link on top has an inverted U-shaped wire mesh which renders it impossible for any animal to climb out.

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
10	10.4(5)	The enclosure of the Nilgai, Sambar and Blackbuck has been constructed with temporary fencing. It was observed that the free living animal of the National Park has been kept in the enclosure for the visitors viewing. It is highly objectionable and should not be practiced in the zoo in future. No animal from the National Park should be taken in captivity for display to the public in captive conditions. The fencing should be removed immediately and all animals of the National Park be freed. The action needs to be taken against the officers responsible for this illegal action.	Immediately	Complied no herbivore animal except gaur is displayed in enclosure. No animal from the free ranging has been taken into captivity in recent years. The animals species present as free ranging have no place in the proposed collection plan and the revised master (layout) plan has been proposed accordingly. The compliance of removing animals from display enclosures has been done.
11	10.4(9)	All enclosures in the zoo should have stand-off barriers as per the CZA norms. The existing stand-off barriers of the animal enclosures do not have stand-off barriers. The stand-off barriers in front of leopard enclosure should be replaced immediately. Further, the foot paths for visitors, along the enclosures, are in very bad conditions. They need to be repaired immediately. The hedge plantations are required for all enclosures.	One Year	Standoff barrier in front of the Leopard enclosure has been replaced. Directions regarding foot paths and standoff barriers has been complied to a large extent and is being done. foot path of entire tiger trail has been completed. Hedge plantation has been taken up.
12	10.4(10)	The zoo being a medium category zoo, interactive interpretation facilities should be provided for the purpose of explaining behavior and biology of the species displayed in the enclosure.	One Year	The signage about animals and their behaviour have been placed. The provision of QR code facility enables visitors to see video and information in chosen language. Audio visual facility is available in snake interpretation area.

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
13	10.4(10)	Most of the enclosures in the zoo do not have appropriate signages. There is need to install signage's with adequate information regarding biology and behavior of the animals.	Immediately	Complied. signages in all the enclosures have been completed. further enrichment and information is being taken up to make zoo interpretation more entertaining.
5. Upkeep and healthcare of animals				
14	10.5(1)(h)	Provision of footbath of adequate size with proper disinfectant at entry and exit points of all animal houses should be provided and it should be made use of also.	One Year	It has been provided at entry and exit points of each enclosure.
15	10.5(2)(6)	The food and water samples should be tested randomly.	Immediately	Food and water samples are being tested randomly.
16	10.5(2)(3)	The zoo should have a sufficient sized functional freezer in the meat processing facility for storage of meat products and to keep cold until it is fed to the animals.	Immediately	The freezer is available in the feed house and it is used whenever necessary. Usually the fresh meat received from slaughter house is cut into small pieces and supplied to keepers for directly feeding the animals. Freezer is used only when the slaughter house is closed especially on 2 nd October, 15 th August and 26 th January and may be even on a day when there is bundh / strike call by some organisation.
17	10.5(2)(4)	The meat handlers entering the facility should change into a clean and disinfected boots and coveralls.	Immediately	Meat handlers are in practice of entering the facility using clean and disinfected boots, gloves. mask and apron etc.
18	10.5(2)(5)	The meat handlers should use clean gloves when handling the meat.	Immediately	Complied.

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
6. Veterinary and Infrastructure Facilities				
19	10.6(3)	The zoo should have a Lab Assistant	Immediately	Not required in a small zoo.
9. Acquisition and breeding of animals				
20	10.9(4)	The zoo should acquire mates for single animals (Gaur, White Tiger and Gharial) on priority basis.	Immediately	Process for acquisition has been started. Will be Complied.
10. Research activities				
21	10.10	The zoo should conduct research works on different aspects of captive wild animals for effective management.	One Year	A project on free ranging jackals in regards to health management of captive animals has been taken up.
11. Education and outreach activities				
22	10.11	The zoo should have appropriate signage's and interpretation facilities. Souvenir shop, Library facility accessible, dedicated website to carry out the education outreach and awareness activities.	Immediately	Van Vihar National Park and Zoo has signages, an independent website, workshops, educational and awareness activities are being held at regular intervals. Souvenir shop is being renovated so that it can be outsourced.
12. Visitors facilities				
23	10.12(1)	The civic facilities for visitors should be maintained neat and clean and it should be functional so that the visitors may use it. All of these civic facilities should be accessible appropriate and convenient for the physically disadvantaged persons.	Immediately	Zoo has clean toilets and other desired civic amenities. Proposal for more toilets near snake park and gates have been sent for sanction.

S. No.	RZR 2009 Norm no.	Particulars of suggestions/ recommendation	Time Period to Comply	Action Points
24	10.12(3)	Ramp facilities to the toilets and drinking points and all animal enclosures should be made available for the physically disadvantaged persons.	Immediately	Being complied.
Rule 9 of the Recognition of Zoo Rules, 2009				
25		<p>i. The zoo has 87 animals of the 15 species only in captivity as per the information provided at the time of evaluation. It was also confirmed during evaluation.</p> <p>ii. The zoo has a large number of free living animals in the National Park. The free living animals are being shown in the zoo inventory of captive animals. As a result the categorization of the zoo needs re-examination.</p> <p>iii. The area under the zoo should be clearly demarcated and enclosed with a chain link fence to separate captive animal facility from the national Park. The area under the National Park should be clear.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p>	<p>The zoo has been recognized as a small sized zoo. The inventory has already been revised as per the directions of the CZA.</p> <p>The directions of clear demarcation of the area of the zoo from the National Park has been proposed on the revised master (layout) plan being sent for approval. It is also requested here, that the National Park and the zoo has remained a unified ecosystem so far, with no issues regarding visitors-animal conflict or any administrative problems due to non demarcation of boundaries between the zoo and the National Park to date. There seems no need to fence the area and create a physical barrier on ground for the free ranging animals. It would affect their feeding and drinking water needs adversely if it is done and also take away the value of the park as well. It is therefore proposed and requested that the areas be demarcated with pillars or other structures agreed upon on the ground for administrative distinction.</p>

2. LIST OF FREE LIVING WILD ANIMALS WITHIN THE ZOO PREMISES

a. Mammals-

1. Sambhar
2. Cheetal
3. Neelgai
4. Black buck
5. Langoor
6. Wild boar
7. Jackal
8. Porcupine
9. Pangolin
10. Jungle Cat



b. Birds -

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
1	Little Grebe <i>Tachybaptus ruficollis</i>	water	M	Rare
2	Indian Shag <i>Phalacrocorax fuscicollis</i>	water	M	Uncommon
3	Little Cormorant <i>Phalacrocorax niger</i>	water	LM	Common
4	Large Cormorant <i>Phalacrocorax</i>	water	M	Rare
5	Darter <i>Anhinga rufa</i>	water	LM	Rare
6	Grey Heron <i>Ardea cinerea</i>	water	R	Common
7	Purple Heron <i>Ardea purpurea</i>	water	R	Less abundant
8	Large Egret <i>Ardea alba</i>	water	R	Common
9	Median Egret <i>Egretta intermedia</i>	water	R/LM	Less abundant
10	Little Green Heron <i>Ardeola striatus</i>	water	R/LM	Very rare
11	Night Heron <i>Nycticorax nycticorax</i>	Arboreal	R	Uncommon

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
12	Pond Heron	water	R	Common
	<i>Ardcola grayii</i>			
13	Cattle Egret	W/T	R	Common
	<i>Bubulcus ibis</i>			
14	Little Egret	W/T	R	Common
	<i>Egretta garzetta</i>			
15	Chestnut Bittern	W/A	LM	Very rare
	<i>Ixobrychus cinnamomeus</i>			
16	White Stork	W	M	Extremely rare
	<i>Ciconia ciconia</i>			
17	Painted Stork	W/T	LM	Uncommon
	<i>Mycteria leucocephala</i>			
18	Openbilled Stork	W/T	LM	Common
	<i>Anastomus oscitans</i>			
19	Whitenecked Stork	water	LM	Uncommon
	<i>Ciconia episcopus</i>			
20	Blacknecked Stork	water	M	Extremely rare
	<i>Ephippiorhynchus asiaticus</i>			
21	White Ibis	water	M	Less abundant
	<i>Threskiornis aethiopica</i>			
22	Glossy Ibis	water	M	Rare
	<i>Plegadis falcinellus</i>			
23	Black Ibis	water	LM	Rare
	<i>Pseudibis papillosa</i>			
24	Spoonbill	water	M	Common
	<i>Platalea leucorodia</i>			
25	Barheaded Goose	water	M	Uncommon
	<i>Anser indicus</i>			
26	Brahminy Duck	water	M	Common
	<i>Tadorna ferruginea</i>			
27	Comb Duck	water	LM	Common
	<i>Sarkidiornis melanotos</i>			
28	Lesser Whistling Teal	water	LM	Common
	<i>Dendrocygna javanica</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
29	Pintail	water	M	Common
	<i>Anas acuta</i>			
30	Common Teal	water	M	Uncommon
	<i>Anas crecca</i>			
31	Spotbill	water	LM	Common
	<i>Anas poecilorhyncha</i>			
32	Mallard	water	M	Very rare
	<i>Anas platyrhynchos</i>			
33	Gadwall	water	M	Common
	<i>Aas strepera</i>			
34	Wigeon	water	M	Common
	<i>Anas Penelope</i>			
35	Shoveller	water	M	Less abundant
	<i>Anas clypeata</i>			
36	Gargeny	water	M	Common
	<i>Anas querquedula</i>			
37	Common Pochard	water	M	Uncommon
	<i>Aytha ferina</i>			
38	Redcrested Pochard	water	M	Common
	<i>Netta rufina</i>			
39	White-eyed Pochard	water	M	Very rare
	<i>Aythya nyroca</i>			
40	Cotton Teal	water	M	Common
	<i>Nettapus coromandelianus</i>			
41	Blackwinged Kite	Terrestrial	R	Uncommon
	<i>Elanus caeruleus</i>			
42	Common Pariah Kite	Terrestrial	R	Common
	<i>Milvus migrans</i>			
43	Shikra	Terrestrial	R	Common
	<i>Accipiter badius</i>			
44	White-eyed Buzzard	Arboreal	R	Uncommon
	<i>Butastur teesa</i>			
45	Spotted Eagle	Terrestrial	M	Rare
	<i>Aquila clanga</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
46	Tawny Eagle	Terrestrial	LM	Very rare
	<i>Aquila vindhiana</i>			
47	Crested Serpent Eagle	Arboreal	R	Rare
	<i>Spilornis cheela</i>			
48	Peregrine Falcon	Arboreal	LM	Extremely rare
	<i>Falco peregrines</i>			
49	Short toed Eagle	Terrestrial	R	Uncommon
	<i>Circaetus gallicus</i>			
50	Marsh Harrier	W/T	M	Common
	<i>Circus aeruginosus</i>			
51	Whitebacked Vulture	Terrestrial	R	Extremely rare
	<i>Gyps bengalensis</i>			
52	Indian Longbilled Vulture	Terrestrial	LM	Extremely rare
	<i>Gyps indicus</i>			
53	Palla's Fishing Eagle	W/T	M	Extremely rare
	<i>Haliaeetus leucoryphus</i>			
54	King Vulture	Terrestrial	R	Extremely rare
	<i>Sarcogyps calvus</i>			
55	White Scavenger Vulture	Terrestrial	R	Common
	<i>Neophron percnopterus</i>			
56	Kestrel	Terrestrial	R	Uncommon
	<i>Falco tinnunculus</i>			
57	Common Grey Quail	Terrestrial	R	Common
	<i>Coturnix coturnix</i>			
58	Rain Quail	Terrestrial	R	Rare
	<i>Coturnix coromandelica</i>			
59	Painted Partridge	Terrestrial	R	Extremely rare
	<i>Francolinus pictus</i>			
60	Grey Partridge	Terrestrial	R	Common
	<i>Francolinus pondicerianus</i>			
61	Red Jungle Fowl	Terrestrial	R	Rare
	<i>Gallus gallus</i>			
62	Common Peafowl	Terrestrial	R	Common
	<i>Pavo cristatus</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
63	Common Crane	water	LM	Uncommon
	<i>Grus grus</i>			
64	Sarus Crane	water	R/LM	Common
	<i>Grus antigone</i>			
65	White Breasted Waterhen	water	R	Common
	<i>Amaurornis phoenicurus</i>			
66	Indian Moorhen	water	R	Uncommon
	<i>Gallinula chloropus</i>			
67	Purple Moorhen	water	R/LM	Common
	<i>Porolyrio porphyrio</i>			
68	Coot	water	M	Common
	<i>Fulica atra</i>			
69	Bronze winged Jacana	water	R	Common
	<i>Metopidius indicus</i>			
70	Pheasant Tailed Jacana	water	R	Common
	<i>Hydrophasianus chirurgus</i>			
71	Black winged Stilt	water	R/LM	Common
	<i>Himantopus himantopus</i>			
72	Indian Courser	Terrestrial	R	Uncommon
	<i>Cursorius coromandelicus</i>			
73	Red wattled Lapwing	W/T	R	Common
	<i>Vanellus indicus</i>			
74	Spurwinged Plover	water	R	Rare
	<i>Vanellus spinosus</i>			
75	Yellow Wattled Lapwing	Terrestrial	R	Uncommon
	<i>Vanellus malabaricus</i>			
76	Curlew	water	M	Very rare
	<i>Numenius arquata</i>			
77	Blacktailed Godwit	water	M	Uncommon
	<i>Limosa limosa</i>			
78	Painted Snipe	water	M	Rare
	<i>Rostratula benghalensis</i>			
79	Common Snipe	water	M	Uncommon
	<i>Gallinago gallinago</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
80	Redshank	water	M	Rare
	<i>Tringa tetanus</i>			
81	Marsh Sandpiper	water	M	Less abundant
	<i>Tringa stagnatilis</i>			
82	Greenshank	water	M	Uncommon
	<i>Tringa nebularia</i>			
83	Spotted Sandpiper	water	M	Common
	<i>Tringa glareola</i>			
84	Common Sandpiper	water	M	Common
	<i>Tringa hypoleucos</i>			
85	Little Ringed Plover	W/T	M	Common
	<i>Charadrius dubius</i>			
86	Kentish Plover	W/T	M	Uncommon
	<i>Charadrius</i>			
87	Temminck's Stint	water	M	Uncommon
	<i>Clalidris temminckii</i>			
88	Ruff and Reeve	water	M	Very rare
	<i>Philomachus pugnax</i>			
89	Brownheaded Gull	water	M	Rare
	<i>Larus brunnicephalus</i>			
90	Blackbellied Tern	water	M	Very rare
	<i>Sterna acuticauda</i>			
91	River Tern	water	R/M	Common
	<i>Sterva aurantia</i>			
92	Yellowlegged Green Pegion	Arboreal	R	Rare
	<i>Treron phoenicoptera</i>			
93	Blue Rock Pegion	Terrestrial	R	Common
	<i>Columba livia</i>			
94	Ring Dove	Terrestrial	R	Common
	<i>Streptopelia decaocto</i>			
95	Red Turtle Dove	Terrestrial	R	Common
	<i>Streptopelia tranquebarica</i>			
96	Spotted Dove	Terrestrial	R	Common
	<i>Streptopelia chinensis</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
97	Little Brown Dove	Terrestrial	R	Common
	<i>Streptopelia senegalensis</i>			
98	Roseringed Parakeet	Arboreal	R	Common
	<i>Psittacula krameri</i>			
99	Blossomheaded Parakeet	Arboreal	R	Uncommon
	<i>Psittacula cyanocephala</i>			
100	Indian Cuckoo	Terrestrial	R	Rare
	<i>Cuculus micropterus</i>			
101	Hawk Cuckoo	Terrestrial	R	Uncommon
	<i>Cuculus varius</i>			
102	Pied Crested Cuckoo	Terrestrial	LM	Common
	<i>Clamator Jacobinus</i>			
103	Koel	Terrestrial	R	Common
	<i>Eudynamis Scolopacea</i>			
104	Coucal	Terrestrial	R	Common
	<i>Centropus sinensis</i>			
105	Barn Owl	Terrestrial	R	Uncommon
	<i>Tyto alba</i>			
106	Indian Great Horned Owl	Terrestrial	R	Uncommon
	<i>Bubo bubo</i>			
107	Spotted Owlet	Terrestrial	R	Common
	<i>Athene brama</i>			
108	House Swift	Terrestrial	R	Common
	<i>Apus affinis</i>			
109	Alpine Swift	Terrestrial	LM	Very rare
	<i>Apus melba</i>			
110	Crested Tree Swift	Terrestrial	R	Uncommon
	<i>Hemiprocne longipennis</i>			
111	Common Indian Nightjar	Terrestrial	R	Common
	<i>Caprimulgus asiaticus</i>			
112	Pied Kingfisher	water	R	Common
	<i>Ceryle rudis</i>			
113	Small Blue Kingfisher	water	R	Common
	<i>Alcedo atthis</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
114	Whitebreasted Kingfisher	W/T	R	Common
	<i>Halcyon smyrnensis</i>			
115	Stork Billed Kingfisher	water	M	Very rare
	<i>Pelargopsis capensis</i>			
116	Black capped Kingfisher	water	M	Extremely rare
	<i>Halcyon pileata</i>			
117	Bluetailed Bee-Eater	Terrestrial	LM	Uncommon
	<i>Merops philippinus</i>			
118	Small Green Bee-eater	Terrestrial	R	Common
	<i>Merops orientalis</i>			
119	Blue Jay	Terrestrial	R	Common
	<i>Coracias benghalensis</i>			
120	Hoopoe	Terrestrial	R	Common
	<i>Upupa epops</i>			
121	Common Grey Hornbill	Terrestrial	R	Uncommon
	<i>Tockus birostris</i>			
122	Coppersmith	Terrestrial	R	Common
	<i>Megalaima haemacephala</i>			
123	Blackbacked Woodpecker	Arboreal	R	Very rare
	<i>Chrysocolaptes festivus</i>			
124	Brown Capped	Dendrocopos	R	Uncommon
	<i>Pygmywoodpecker</i>			
125	Mahratta Woodpecker	Arboreal	R	Uncommon
	<i>Picoides mahrattensis</i>			
126	Goldenbacked Woodpecker	Arboreal	R	Uncommon
	<i>Dinopium benghalense</i>			
127	Eurasian wryneck	Arboreal	R	Uncommon
	<i>Jynx torquilla</i>			
128	Large Green Barbet	Arboreal	R	Common
	<i>Megalaima zeylanica</i>			
129	Indian Pitta	Arboreal	R	Uncommon
	<i>Pitta brachyuran</i>			
130	Redwinged Bushlark	Terrestrial	R	Uncommon
	<i>Mirafra erythroptera</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
131	Blackbellied Finch-Lark	Terrestrial	R	Common
	<i>Eremopterix grisea</i>			
132	Rufoustailed Finchlark	Terrestrial	R	Common
	<i>Ammomanes phoenicurus</i>			
133	Crested Lark	Terrestrial	R	Common
	<i>Galerida cristata</i>			
134	Dusky Crag Martin	Terrestrial	R	Common
	<i>Hirundo concolor</i>			
135	Swallow	Terrestrial	R	Common
	<i>Hirundo rustica</i>			
136	Indian Cliff Swallow	Terrestrial	R	Common
	<i>Hirundo fluvicola</i>			
137	Wiretailed Swallow	Terrestrial	R	Common
	<i>Hirundo Smithii</i>			
138	Striated Swallow	W/T	R	Very rare
	<i>Hirundo daurica</i>			
139	Baybacked Shrike	Terrestrial	R	Rare
	<i>Lanius excubitor</i>			
140	Rufous backed Shrike	Terrestrial	R	Common
	<i>Lenius schach</i>			
141	Golden Oriole	Terrestrial	LM	Common
	<i>Oriolus oriolus</i>			
142	Black headed Oriole	Arboreal	R	Uncommon
	<i>Oriolus xanthornus</i>			
143	Black Drongo	Terrestrial	R	Common
	<i>Dicrurus adsimilis</i>			
144	Whitebellied Drongo	Terrestrial	R	Uncommon
	<i>Dicrurus caerulescens</i>			
145	Racket-tailed Drongo	Arboreal	R	Rare
	<i>Dicrurus paradiseus</i>			
146	Rosy Pastor	Terrestrial	M	Very rare
	<i>Sturnus roseus</i>			
147	Brahminy Myna	Terrestrial	R	Common
	<i>Sturnus pagodarum</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
148	Greyheaded Myna	Terrestrial	M	Uncommon
	<i>Sturnus malabaricus</i>			
149	Indian Myna	Terrestrial	R	Common
	<i>Acridotheres tristis</i>			
150	Bank Myna	Terrestrial	LM	Rare
	<i>Acridotheres ginginianus</i>			
151	Pied Myna	Terrestrial	R	Common
	<i>Sturnus contra</i>			
152	Tree Pie	Terrestrial	R	Common
	<i>Dendrocitta vegabunda</i>			
153	House Crow	Terrestrial	R	Common
	<i>Corvus splendens</i>			
154	Jungle Crow	Terrestrial	R	Common
	<i>Corvus macrorhynchos</i>			
155	Common Wood Shrike	Arboreal	R	Very rare
	<i>Tephrodornis pondicerianus</i>			
156	Blackheaded Cuckoo Shrike	Terrestrial	R	Very rare
	<i>Coracinamelanoptera</i>			
157	Large Cuckoo Shrike	Arboreal	R	Rare
	<i>Coracina novaehollandiae</i>			
158	Scarlet Minivet	Arboreal	R	Rare
	<i>Pericrocotus flammeus</i>			
159	Small Minivet	Arboreal	R	Uncommon
	<i>Pericrocotus cinnamomeus</i>			
160	Whitebellied Minivet	Terrestrial	R	Rare
	<i>Pericrocotus erythropygius</i>			
161	Iora	Terrestrial	R	Common
	<i>Aegithina tiphia</i>			
162	Goldfronted Chloropsis	Arboreal	R	Rare
	<i>Chloropsis aurifrons</i>			
163	Goldmantled Chloropsis	Arboreal	R	Very rare
	<i>Chloropsis cochinchinensis</i>			
164	Red vented Bulbul	Terrestrial	R	Common
	<i>Pycnonotus cafer</i>			

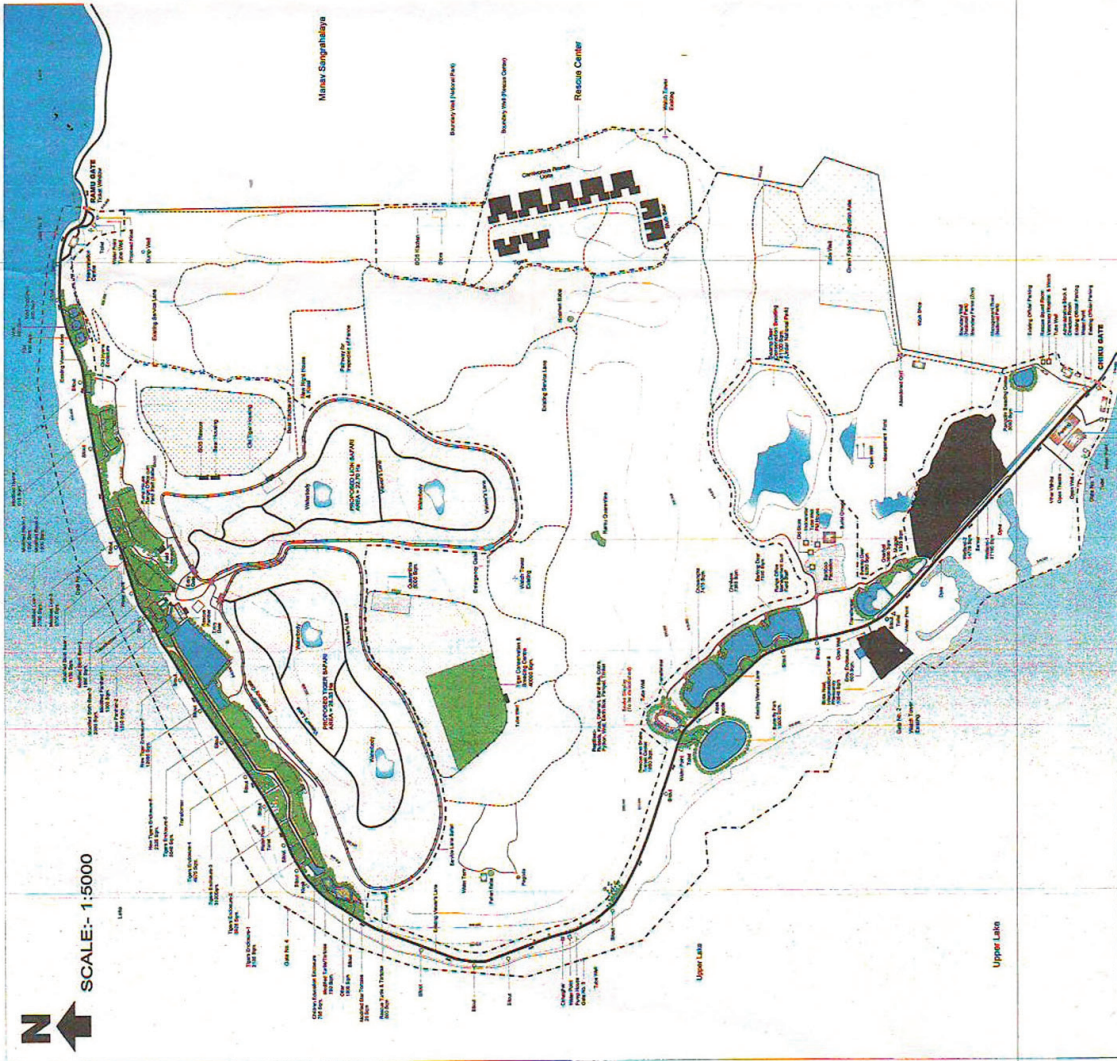
S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
165	Yollow-eyed Babbler	Terrestrial	R	Less abundant
	<i>Chrysomma sinense</i>			
166	Common Babbler	Terrestrial	R	Common
	<i>Turdoides caudatus</i>			
167	Large Grey babbler	Terrestrial	R	Common
	<i>Turdoides malcolmi</i>			
168	Jungle Babbler	Terrestrial	R	Common
	<i>Turdeides striatus</i>			
169	Redbreasted Flycatcher	Arboreal	M	Uncommon
	<i>Muscicapa parva</i>			
170	Tickel's Blue Flycatcher	Terrestrial	R	Less abundant
	<i>Muscicapa tickelliae</i>			
171	Paradise Flycatcher	Terrestrial	R	Rare
	<i>Terpsiphone paradise</i>			
172	Verditer Flycatcher	Arboreal	R	Rare
	<i>Muscicapa thalassina</i>			
173	Greyheaded Flycatcher	Arboreal	R	Common
	<i>Culicicapa ceylonensis</i>			
174	Whitebrow Fantail Flycatcher	Terrestrial	R	Uncommon
	<i>Rhipidura oureola</i>			
175	Ashy Wren-Warbler	Terrestrial	R	Common
	<i>Prinia socialis</i>			
176	Franklin's Wren-Warbler	Terrestrial	R	Less abundant
	<i>Prinia hodgsonii</i>			
177	Bristled Grassbird	Terrestrial	n/a	Recently discovered
	<i>Chaetornis striatus</i>			
178	Tailor Bird	Terrestrial	R	Less abundant
	<i>Orthotomus sutorius</i>			
179	Lesser Whitethroat	Arboreal	M	Common
	<i>Sylvia curruca</i>			
180	Bluethroat	Terrestrial	M	Very rare
	<i>Erithacus svecicus</i>			
181	Magpie Robin	Terrestrial	R	Common
	<i>Copsychus saularis</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
182	Black Redstart	Terrestrial	M	Common
	<i>Phoenicurus ochruros</i>			
183	Brown Rock chat	Terrestrial	R	Common
	<i>Cercomela fusca</i>			
184	Collared Bushchat	Terrestrial	M	Uncommon
	<i>Saxicola torquata</i>			
185	Pied Bush Chat	Terrestrial	R	Uncommon
	<i>Saxicola caprata</i>			
186	Indian Robin	Terrestrial	R	Common
	<i>Saxicoloides fulicata</i>			
187	Blue Rock Thrush	Terrestrial	R	Very rare
	<i>Monticola solitaries</i>			
188	Grey Tit	Arboreal	R	Uncommon
	<i>Parus major</i>			
189	Yellow cheeked Tit	Arboreal	R	Rare
	<i>Parus xanthogenys</i>			
190	Brown Rock Pipit	Terrestrial	R	Rare
	<i>Anthus similis</i>			
191	Paddyfield Pipit	Terrestrial	R	Common
	<i>Anthus novaeseelandiae</i>			
192	Thickbilled Flowerpecker	Arboreal	R	Uncommon
	<i>Dicaeum agile</i>			
193	Yellow Wagtail	Terrestrial	M	Uncommon
	<i>Motacilla flava</i>			
194	Yellowheaded Wagtail	Terrestrial	M	Uncommon
	<i>Motacilla citreola</i>			
195	Grey Wagtail	Terrestrial	M	Uncommon
	<i>Motacilla cinerea</i>			
196	White Wagtail	Terrestrial	R	Common
	<i>Motacilla alba</i>			
197	Large Pied Wagtail	Terrestrial	R	Common
	<i>Motacilla maderaspatensis</i>			
198	Purple Sunbird	Terrestrial	R	Common
	<i>Nectarimnia asiatica</i>			

S.No	Nomenclature	Water/ Terrestrial/ Arboreal	Migratory/ Resident/ Local Migratory	Status
199	White eye	Terrestrial	R	Common
	<i>Zosterops palpebrosa</i>			
200	Yellow Throated Sparrow	Terrestrial	R	Common
	<i>Petronia xanthocollis</i>			
201	House Sparrow	Terrestrial	R	Common
	<i>Passer domesticus</i>			
202	Baya	Terrestrial	LM	Common
	<i>Ploceus philippinus</i>			
203	Red Munia	Terrestrial	LM	Very rare
	<i>Estrilda amandava</i>			
204	Spotted Munia	Terrestrial	LM	Rare
	<i>Lonchura punctulata</i>			
205	Whitebacked Munia	Terrestrial	LM	Very rare
	<i>Lochura striata</i>			
206	White Throated Munia	Terrestrial	LM	Common
	<i>Lonchura malabarica</i>			
207	Crested Bunting	Terrestrial	LM	Uncommon
	<i>Melophus lathami</i>			



MASTER (LAYOUT) PLAN VAN VIHAR NATIONAL PARK & ZOO, BHOPAL M.P.



4. Schedule

Sl. No.	Particulars	Quantity	Unit	Rate	Total
1	Land	1000	Sqm	1000	1000000
2	Water	1000	Cum	1000	1000000
3	Construction	1000	Sqm	1000	1000000
4	Plantation	1000	Sqm	1000	1000000
5	Electricity	1000	Sqm	1000	1000000
6	Water Supply	1000	Sqm	1000	1000000
7	Drainage	1000	Sqm	1000	1000000
8	Other	1000	Sqm	1000	1000000
9	Contingency	1000	Sqm	1000	1000000
10	Grand Total				10000000

5. Schedule

Sl. No.	Particulars	Quantity	Unit	Rate	Total
1	Land	1000	Sqm	1000	1000000
2	Water	1000	Cum	1000	1000000
3	Construction	1000	Sqm	1000	1000000
4	Plantation	1000	Sqm	1000	1000000
5	Electricity	1000	Sqm	1000	1000000
6	Water Supply	1000	Sqm	1000	1000000
7	Drainage	1000	Sqm	1000	1000000
8	Other	1000	Sqm	1000	1000000
9	Contingency	1000	Sqm	1000	1000000
10	Grand Total				10000000

6. Schedule

Sl. No.	Particulars	Quantity	Unit	Rate	Total
1	Land	1000	Sqm	1000	1000000
2	Water	1000	Cum	1000	1000000
3	Construction	1000	Sqm	1000	1000000
4	Plantation	1000	Sqm	1000	1000000
5	Electricity	1000	Sqm	1000	1000000
6	Water Supply	1000	Sqm	1000	1000000
7	Drainage	1000	Sqm	1000	1000000
8	Other	1000	Sqm	1000	1000000
9	Contingency	1000	Sqm	1000	1000000
10	Grand Total				10000000

7. Schedule

Sl. No.	Particulars	Quantity	Unit	Rate	Total
1	Land	1000	Sqm	1000	1000000
2	Water	1000	Cum	1000	1000000
3	Construction	1000	Sqm	1000	1000000
4	Plantation	1000	Sqm	1000	1000000
5	Electricity	1000	Sqm	1000	1000000
6	Water Supply	1000	Sqm	1000	1000000
7	Drainage	1000	Sqm	1000	1000000
8	Other	1000	Sqm	1000	1000000
9	Contingency	1000	Sqm	1000	1000000
10	Grand Total				10000000

PROJECT: VAN VIHAR NATIONAL PARK & ZOO
Bhopal M.P.

CREATING: [Name]

MASTER (LAYOUT) PLAN
(Revised)

DATE: 12.03.2018
SCALE: 1:5000
DRAWING NO.: [Number]

EXECUTING AGENCY: [Name]

DIRECTOR: [Name]
Van Vihar National Park & Zoo, Bhopal M.P.

ASST. DIRECTOR: [Name]

CONSULTANT: [Name]

Aashraya Consultancy
100, Opal Bhawan, West Chhambal Reservoir, Chhambal, Bhopal M.P.
Email: aashraya@gmail.com

Notes:
1. The drawings are the property of Aashraya Consultancy and shall not be reproduced without the written permission of the consultant.
2. All the drawings shall be checked and approved with the signature of the consultant.
3. The consultant shall be held responsible for any error, discrepancy or omission shall be brought to the notice of the consultant immediately before commencing the work.

