

GARCHUMUK DEER PARK (MINI ZOO)

Annual Report

2020-21

58 Gate, Ulughata, Uluberia, Howrah-711315

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1. Report of the Officer-in-charge:

Basically zoo is an establishment where wild animals are kept for display to the public different from Circus and other educational scene.

In the earlier stage this zoo (was not a zoo then) at Garchumuk, Howrah was an enclosure of some deer for displaying public with picnic spot run by the Howrah Zilla Parishad. Public are generally gathered here for their weekly entertainment.

After receiving this enclosure from Howrah Zilla Parishad, the Department of Forest, Howrah Division, actually started to create this zoo as scientific centre for caring the animals and ensuring their welfare and preservation. Lots of works are to be done to connect general public with the animals and inspire everyone to love, value and care for the natural world. Practically the Garchumuk Deer Park (Mini Zoo) is now in taking off stage.



Raju Sarkar, WBFS
Ex-Officio Director
Garchumuk Deer Park (Mini Zoo)
&
Divisional Forest Officer
Howrah Division

2. History of the Zoo:

The establishment of Garchumuk Deer Park can be traced back to the year 1988. The following sequence of events has been chronologically presented.

On 26th July 1988 during closing ceremony of Aranya Saptah, Sabhadhipati, Howrah Zilla Parishad, District Magistrate, Howrah, Mayor, Howrah Municipal Corporation among other dignitaries visited Garchumuk Forest, established by the Social Forestry Division, Howrah. One compact block of nearly 50 ha of man-made forests, close to the famous sluice gate on Lower Damodar Canal was tentatively selected for establishment of the only Deer Park in the District of Howrah.

From the earlier correspondences found in official records, it is evident that Howrah Zilla Parishad was very keen to render all needed assistance in setting up the Park, with the technical support of Social Forestry Division, Howrah. The then Sabhadhipati, Howrah Zilla Parishad approached the then Minister-in-Charge, Environment & Forest Department, Government of West Bengal with the proposal to establish a Deer Park.

During the year 1990, initial financial assistance to the tune of Rs. 30,50,900 was provided by Howrah Zilla Parishad at the disposal of the DFO, Howrah Social Forestry Division, in connection with creation & maintenance of Plantations (about 300 Hectares) and construction of Deer enclosure.

Enclosure for Deer was constructed during the year 1990 with RCC posts and G.I. barbed wire fencing & chain link fencing over 700 m length & 2.6 m height. A pair of Deer (1 Male & 1 Female) was transported in wooden boxes from Deer Research Centre, Salt Lake and was released in the newly constructed Deer enclosure at Garchumuk on 29.12.1990.

The first check list of free living Birds in and around Garchumuk was prepared by Shri Biswajit Roy Chowdhury in 1990. A total of 60 species of Birds were identified in the check list.

The Deer Park was formally inaugurated & opened to public by the then M.I.C., Forest & Environment, Gov. of W.B. on 31.01.1991. The inauguration ceremony was covered by prominent media houses such as Doordarshan & All India Radio.

During 1990-91, Govt. of India accorded administrative approval to the scheme of “Captive Breeding & Rehabilitation of endangered species” and allocated fund to the tune of Rs. 1,08,500 towards captive breeding & rearing of Fishing Cats in Howrah District and their subsequent release in the wild.

The construction of the enclosure & captive breeding Centre for Fishing Cats within the Deer Park was completed in July 1991. The enclosure had an area of 600 sqm. with a pond inside and planted with perennial shrubs and ‘Hogla’ to provide hiding place for the Wild Cats. The enclosure barrier had brick lining of 30 cm height & 30 cm wide at the base all around the enclosure. Iron angle of size 75 mm × 75 mm × 6 mm were erected at 3.5 m interval with chain link fencing of 50 mm × 50 mm mesh of 10 gauge wire embedded in the iron angle posts. One den made of laterite blocks & mud plaster was also constructed inside the enclosure. The said den exists till date and has been preserved as a heritage structure of the Zoo.

1 female Fishing Cat was first released in the newly constructed enclosure on 12.11.1991 by the then Chief Wild Life Warden, West Bengal. After about a years’ time the breeding pair was complete with the release of one male Fishing Cat in the captive breeding centre on 14.12.1992.

During 1992, one committee was constituted under the chairmanship of the then Chief Wild Life Warden to discuss pending applications on Deer distribution to different institutions of the State. In terms of the decision of this Committee, another pair of Spotted Deer (one male & one female) was transported in wooden boxes from Alipore Zoological Garden, Kolkata and was released at Garchumuk during September 1992.

The first Aviary enclosure of the Deer Park was constructed in the year 1994. It was a circular shaped Aviary of 7.50 metre Diameter and 8 meter height, with a wet moot (tank) encircling the enclosure. Peafowls were displayed in the Aviary & Turtles were housed in this encircling water tank later. This aviary enclosure existed till 2021, though badly damaged and had been recently dismantled.

The first formal application for recognition as a Deer Park was submitted to Central Zoo Authority by the Secretary, Howrah Zilla Parishad during the year 1994.

During the year 1995, the following animals were sent to the Park from Deer Research Centre, Salt Lake for better survival & upkeep: Rose Ringed Parakeets: 106 nos, Alexandrine

Parakeets: 10 nos, Blossom headed Parakeets: 3 nos, Koel: 5 nos, Hill Myna: 2 nos, Munia: 8 nos, Pariah Kite: 2 nos, Baz: 1 no. & Nilgai: 1 no.

Further during the year 1995, a proposal & detailed estimate for construction of a Leopard enclosure and introduction of an Elephant in the Park, as desired by then M.I.C. Environment & Forests, Govt. of West Bengal, was sent by DFO Howrah Social Forestry Division to the Sabhadhipati, Howrah Zilla Parishad. Howrah Zilla Parishad agreed to provide the necessary financial assistance. However from available official records, it appears that the construction of these two enclosures could not be taken up for want of approval of CZA as the Zoo did not had a Master Plan at that time.

One male Black Buck was introduced in the Animal Collection of Garchumuk during the year 2003. However its source and mode of transportation could not be found from available official documents. This single Black Buck was housed in the Deer enclosure along with Spotted Deer and Nilgai. It died on 21/09/2015, the cause of death as stated by the Veterinarian was cardio respiratory failure due to over age.

The Central Zoo Authority granted recognition to Garchumuk Deer Park, Howrah as a Mini category Zoo under Section 38H of the Wild Life (Protection) Act, for a period upto 31.03.2011, vide F. No. 23-3/97-CZA (382) (M) dated 18/03/2008.

The first ever Master Plan for the long term development of the Zoo was submitted to CZA in the year 2009, by Howrah Zilla Parishad. But no official records are available to trace the reasons as to why it was not approved.

During the year 2011-12, a proposal offering a young pair of Leopards (*Panthera pardus*) as gift was received from the Director, Sakkarbaug Zoo, Junagadh. However the then ex-officio Director, Garchumuk, expressed his inability to keep the majestic Wild Cat for want of suitable enclosure for the animal.

Garchumuk Deer Park & Mini Zoo was brought under the management control of the West Bengal Zoo Authority vide Department of Forest Notification no. 747-For Dt. 03.04.2012 (Annexure IX) along with 11 (eleven) other Zoological Parks of the State & the Divisional forest Officer, Howrah Social Forestry Division was designated as the "Ex-officio Director" who was authorized to manage the Zoo and manage the funds of West Bengal Zoo Authority through separate bank accounts to be opened in the name of WBZA.

The first approved master (layout) plan of Garchumuk Deer Park & Mini Zoo, dt. 26/10/2013, has been approved.

The entire campus of the Park including the Rest House, DFO Camp Office and staff quarters, animal enclosures & existing stock of Animals etc. were finally handed over by the Divisional Forest Officer, Howrah Division to the Member Secretary, West Bengal Zoo Authority on 19.08.2014 under their joint Seal & Signature.

The construction of the Crocodile Pond enclosure was completed during the year 2014-15. One seized female Marsh (Mugger) Crocodile was transferred from the Wild Animal Rescue &

Transit facility Centre, Salt Lake to Garchumuk on 12.02.2015, and released in the newly constructed enclosure.

The construction of the Turtle Pond enclosure, similar in design to the Crocodile enclosure was also completed during the year 2014-15. During the year 2016, 476 no. of Indian Soft Shelled Turtles (*Lissemys punctata punctata*) received from Rescue Centre at Salt Lake, Kolkata were released in the pond. Thereafter in the year 2017, 100 no. Turtles were translocated to North Bengal Wild Animal Park, Siliguri.

The Porcupine enclosure was also constructed during 2014-15. It was a hexagonal enclosure having an underground concrete chamber. The only approved research work, by the Wildlife Research Advisory Committee prior to 2021, was “Study on Ethology of Indian Crestless Porcupine (*Hystrix brachyura*)” submitted & conducted by University of Calcutta, during the year 2015.

The construction of the Pheasantry enclosure was completed during 2015-16. One pair each of Golden Pheasant, Silver Pheasant & Red Jungle Fowl were transferred from Padmaja Naidu Himalayan Zoological Park, Darjeeling as donation for display to the visitors on 01/09/2016.

The second master (layout) plan of Garchumuk Deer Park (Mini Zoo), Howrah was approved by the CZA in its 30th meeting held during 2017, vide agenda item no. 7 based on recommendation of the technical committee of the CZA

The Fishing Cat enclosure was constructed during 2020-21. 4 Fishing Cats (2:2), rescued from various locations of Howrah District, were introduced into the enclosure during January 2021.

With the introduction of the Fishing Cats, the Zoo presently qualifies for recognition as a ‘Small Zoo’ & even a ‘Medium Zoo’, based on the criteria’s provided in ‘Rule 9’ of the Recognition of Zoo Rules, 2009 and ‘Rule 2’ of the (amendment) Rules, 2013.

Area of the Zoo:

12.314 Hectare. The area is almost flat. Soil is sandy loam to clay.

Approach:

Garchumuk is well connected with road and rail. One can avail a number of options to reach Garchumuk. It is 60 km from Kolkata and takes around 2.5 hours to reach by road. One can avail a bus heading to Gadiara from Kolkata (Esplanade), and alight at the '58 Gate' stop. The tourists can also drive along NH6 to Uluberia and take left to local road to reach Garchumuk. Trains are available from Howrah, which takes around 45 minutes to reach Uluberia. From Uluberia, one will find jeep, bus or auto to reach Garchumuk at a distance of 15 km only.

Legal status:

Owner of the land is Irrigation & Waterways Dept., Govt. of West Bengal.

Flora:

The common species are Akashmoni (*Acacia auriculiformis*), Sirish (*Albigia spp*), Arjun (*Terminalia arjuna*), Mango (*Mangifera indica*), Neem (*Azadirachta indica*), Babla (*Acacia nelotica*) etc.

Detailed list of free living species (Flora) found at Garchumuk Deer Park (Mini Zoo), Howrah

Sl. No.	Common Name	Scientific Name
1	Mango	<i>Mangifera indica</i>
2	Akashmoni	<i>Acacia auriculiformis</i>
3	Areca Palm	<i>Dypsis lutescens</i>
4	Arjun	<i>Terminalia arjuna</i>
5	Amlaki/Indian Gooseberry	<i>Phyllanthus emblica</i>
6	Asothhto/Sacred Fig	<i>Ficus religiosa</i>
7	Babla	<i>Vachellia nilotica</i>
8	Bahera	<i>Terminalia bellirica</i>
9	Bakphul	<i>Sesbania grandiflora</i>
10	Bastard teak	<i>Butea monosperma</i>
11	Baniam Tree	<i>Ficus bengalensis</i>
12	Betel Nut Tree	<i>Areca palm</i>
13	Blackberry	<i>Rubus fruticosus</i>
14	Black Palm	<i>Astrocaryum standleyanum</i>
15	Cluster Fig Tree	<i>Ficus racemosa</i>
16	Chhatim	<i>Alstonia scholaris</i>
17	Coconut	<i>Cocos nucifera</i>
18	Eucalyptus	<i>Eucalyptus obliqua</i>
19	Ghoranim	<i>Melia azedarach</i>
20	Guava	<i>Psidium guajava</i>
21	Gum Arabic Tree	<i>Acacia senegal</i>
22	Jam	<i>Acacia acuminata</i>
23	Jamrul	<i>Syzygium samarangense</i>
24	Jarul/Queen's Crepe Myrtle	<i>Lagerstroemia speciosa</i>
25	Jamun	<i>Syzygium cumini</i>
26	Jangli jilabi/SaiBabla	<i>Pithecellobium dulce</i>
27	Java Olive Tree	<i>Sterculia foetida</i>
28	Kadam/Burflower Tree	<i>Neolamarckia cadamba</i>
29	Kanchan	<i>Bauhinia variegata</i>
30	Kanthal	<i>Artocarpus heterophyllus</i>
31	Khejur	<i>Phoenix dactylifera</i>
32	Krishnachura/Gulmohar/Royal poinciana	<i>Delonix regia</i>

33	Kul	<i>Ziziphus mauritiana</i>
34	Mahogany	<i>Swietenia macrophylla</i>
35	Mulberry Tree	<i>Morus alba</i>
36	Marmelos Tree	<i>Aegle marmelos</i>
37	Minjiri	<i>Cordia dichotoma</i>
38	Neem	<i>Azadirachta indica</i>
39	Peacock Flower	<i>Caesalpinia pulcherrima</i>
40	Pitali	<i>Trewia nudiflora</i>
41	Phalsa	<i>Grewia asiatica</i>
42	Pomelo	<i>Citrus maxima</i>
43	Radhachura	<i>Peltophorum pterocarpum</i>
44	Rain Tree	<i>Albizia saman</i>
45	Red Sander	<i>Pterocarpus santalinus</i>
46	Rose Apple Tree	<i>Syzygium jambos</i>
47	Rudraksha	<i>Elaeocarpus ganitrus</i>
48	Sabeda/ Sapoddila	<i>Manilkara zapota</i>
49	Sandal Wood	<i>Santalum paniculatum</i>
50	Sissoo	<i>Dalbergia sissoo</i>
51	Sonalu	<i>Cassia fistula</i>
52	Simul/ Malabar silk cotton tree	<i>Bombax ceiba</i>
53	Siamese Cassia	<i>Senna siamea</i>
54	Siris	<i>Albizia lebbek</i>
55	Sal Tree	<i>Shorea robusta</i>
56	Starfruit	<i>Averrhoa carambola</i>
57	Subabul	<i>Leucaena leucocephala</i>
58	Tamarind	<i>Tamarindus indica</i>
59	Teak	<i>Tectona grandis</i>
60	TejPata	<i>Cinnamomum tamala</i>
61	Tut	<i>Morus nigra</i>
62	Wood Apple	<i>Limonia acidissima</i>

Climate:

Mainly three seasons appear in the area in a year. The dry season is March to June, the wet season from June to September and winters from December to February. A highly humid atmosphere and abundant rains characterize the climate of Howrah District. The atmosphere is highly humid during May to August. Relative humidity ranges between 60 -

Rainfall:

During recent years the annual average precipitation noted is 1744 mm (approx). of which 70% is received during monsoon months. The rainfall generally increases with the onset of the

south-west monsoon during June to September. North-east monsoon comes during October-December with an average rainfall recorded.

Season:

- **Summer time in Garchumuk (From March to May):** Summers are extremely hot. March is the onset of summer season in Garchumuk and it lasts till the end of May. The minimum temperature during summers is over 30°C and the maximum temperature crosses 40°C.
- **Monsoon time in Garchumuk (From June to September):** Monsoon time is generally between the months of June and September. During the monsoon season, Garchumuk experiences heavy showers. The weather remains cool, however the humidity increases. The region receives a heavy rainfall in August when the South west monsoon arrives.
- **Winter time in Garchumuk (From November to February):** In the months of November to February, a pleasant and cool weather prevails. The minimum temperature during the winter time drops down to 9°C and the maximum temperature is about 11°C. This time is generally preferred for traveling because the afternoons and evenings are quite enjoyable due to the cold climate.

Boundary:

East side :Uluberia - Gadiara Road

West side: Damodar River

North side: Kata Damodar Nadi (58 Gates)

South side: Garchumuk.

Zoo is surrounded by brick wall from all sides

3. Vision:

The modern zoo has to operate across the whole spectrum of conservation activities from ex-situ breeding of threatened species to research, education, training and capacity building. In the recent past there has been a paradigm shift in the zoo management globally.

The vision of Garchumuk Zoological Garden is primarily to establish itself as an elite scientific institution engaged in animal welfare and conservation of wildlife, by achieving the highest standards of housing and upkeep for Zoo animals and development of requisite expertise for upkeep and healthcare of the animals on one hand and promoting planned coordinated conservation breeding of endangered wild animal species of the region, on the other hand.

The Zoo also aspires to establish itself as a centre of knowledge on effective techniques for maintaining natural ambience through suitable landscaping and pollution free environment and to develop amongst the visitors' empathy for wild animals, an understanding and awareness about the need for conservation of natural resources and for maintaining the ecological balance.

4. Mission:

The Mission of Garchumuk Zoological Garden, Howrah is to achieve the distinction of an outstanding 'Small Zoo' through world class conservation, education, research and exciting visitors' experiences by connecting people to wildlife and biodiversity conservation and to develop empathy among visitor for wild animals.

The Zoo also aspires to establish itself as a 'medium category Zoo' in near future through increased foot fall and to develop amongst the visitors' empathy for wild animals, an understanding and awareness about the need for conservation of natural resources & endangered Wild fauna.

5. Objective:

The objectives of Garchumuk Zoological Garden has been framed in consonance with National Zoo Policy, 1998, Recognition of Zoo rules, 2009 with (amendment) rules, 2013 and various guidelines of Central Zoo Authority, and is as follows:

- Display of the rich biodiversity of the region ie. Gangetic plains of South West Bengal in general and wetland ecosystem fauna of Howrah and Hooghly Districts in particular, with some exotic animals in its collection plan, in modern Zoo enclosures.
- Compliment and strengthen the national efforts in conservation of wildlife, through planned coordinated breeding of endangered wild animal species of the region, under ex-situ condition and raise stocks for rehabilitating them in wild as and when it is appropriate and desirable.
- Promote nature education and interpretation, to inspire amongst Zoo visitors empathy for wild animals, an understanding and awareness about the need for conservation of natural resources and for maintaining the ecological balance.
- To provide healthy recreation to the visitors, through proper landscaping and providing a naturalistic environment within the Zoo to enable the visitors to have communion with nature.
- To act as a Rescue Centre by receiving and keeping orphaned, seized, rescued & injured wild animals, their treatment and care and subsequent release in nature or providing life time care facility.
- Development of expertise in management of captive animals, zoo architecture & landscaping.
- Promote research on animal biology & behaviour, disease control & health care, food & nutrition, habitat and reproductive biology of wild animals displayed in the Zoo for evolving strategies for providing the animals housed in the Zoo a better quality of life, enhanced longevity and improved reproduction potential.

6. About us

S.No.	Particulars	Information
1	Name of the Zoo	Garchumuk Deer Park (Mini Zoo)
2	Year of Establishment	1991
3	Address of the Zoo	58 Gate, Ulughata, PO Khurigachi, PS Shyampur, Uluberia, Dt. Howrah, West Bengal.
4	State	West Bengal
5	Telephone Number	03214 - 271044 033-2641-1772
6	Fax Number	033-2641-1772
7	E-mail address	dfohowrah@gmail.com
8	Website	NA
9	Distance from nearest	Airport:66 Km (Kolkata Airport)
		Railway Station: Howrah -43.0 KM
		Uluberia:15.0 KM
		Bus Stand: Garchumuk Bus Stand within ½ KM
10	Recognition Valid upto (Date)	Reg. No. 23-3/97-CZA(382)(NE) Dated: 05/03/2021 and renewal of recognition as a Mini category Zoo is for a period up to 19 th August-2021.
11	Category of zoo	Mini Category Zoo
12	Area (in Hectares)	16.836 Acre. The area is almost flat. Soil is sandy loam to clayee.
13	Number of Visitors (Financial Year)	Adult :
		Children :
		Total Indian :
		Total Foreigners :
		Total Visitors: For the period from April - 2020 to March - 2021: 82,085 Nos.
		(Zoo was closed during April-20 to Sept-20 due to pandemic situation)
14	Visitors' Facilities Available in Zoo	1) Seating Arrangement 2) First-Aid Arrangement

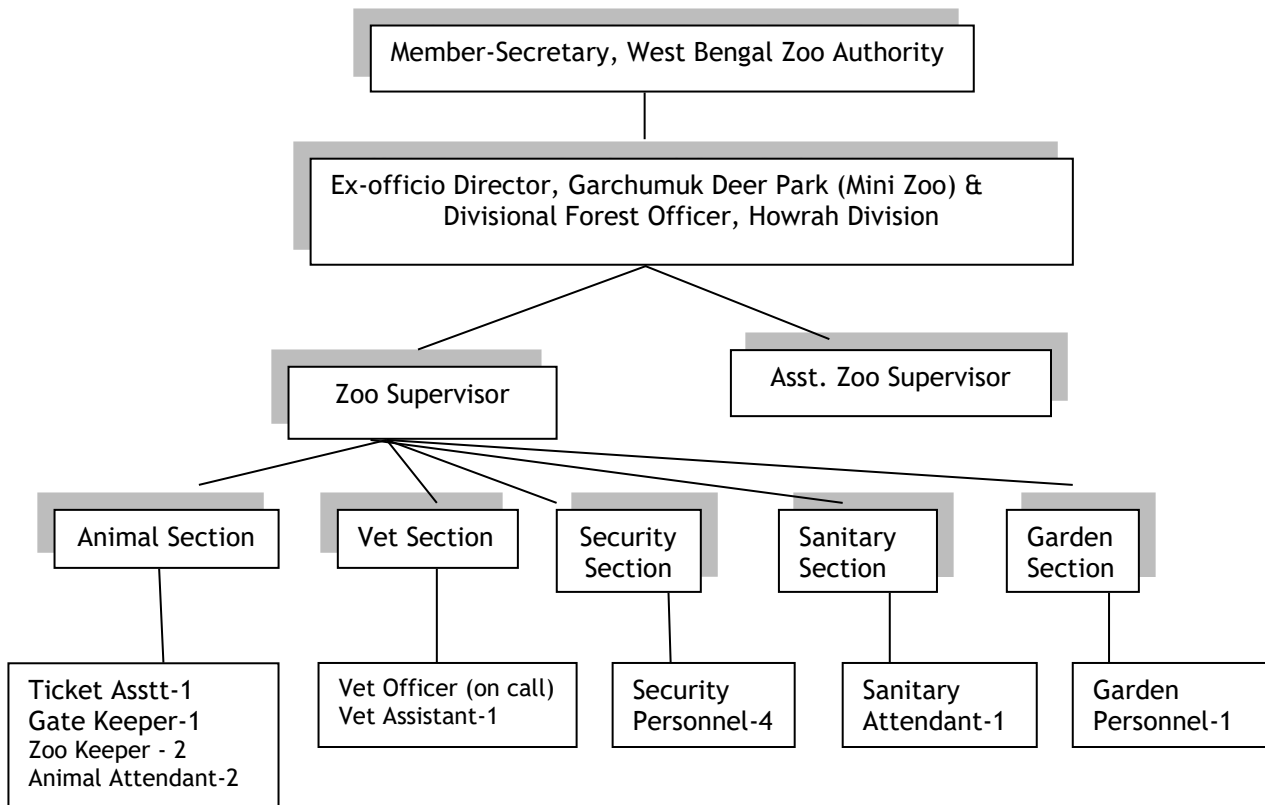
		3) Facility of Lawns
15	Weekly Closure Day of the Zoo	Nil
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	Ex-officio Director, Garchumuk Deer Park (Mini Zoo) & Divisional Forest Officer, Howrah Division.
	Name of the Veterinary Officer	Dr. Pritam Sinha, M.V.Sc. (Surgery & Radiology), Regn. No. 2819 as V.O. at Shyampur-I Block, Howrah under Animal Resource Dev. Deptt., Govt. of West Bengal (on contact basis).
	Name of the Curator	NA
	Name of the Biologist	NA
	Name of the Education Officer	NA
	Name of the Compounder/ Lab Assistant	NA
Owner / Operator of the Zoo		
17	*Name of the Operator	West Bengal Zoo Authority
18	Address of the Operator	Aranya Bhawan, 7th floor, Block-LA-10A, Sector-III, Salt Lake City, Kolkata-700 106
19	Contact details/Phone number of Operator	
20	E-mail address of Operator	m^swbza@gmail.com

* Rule 2(m) of the Recognition of Zoo Rules, 2009.

“Zoo Operator” means the person who has ultimate control over the affairs of the zoos provided that _____

- I. in the case of a firm or other association of individuals, any one of the individual partners or members thereof; or
- II. in the case of a company, any director, manager, secretary or other officer, who is in-charge of and responsible to the company for the affairs of the zoo; or
- III. In case of zoo owned or controlled by the Central Government or any State Government or Union Territory Administration or any Trust or Society funded by the Central Government or a State Government or a Union Territory Administration, the Secretary of the concerned Department of that Government, or as the case may be the Union Territory Administration, shall be deemed to be the Zoo Operator.

7. Organizational Chart:



8. Human Resources:

Manpower of the Zoo

Sl.No.	Designation	Number of Sanctioned Posts	Names of the incumbent
1	Zoo Supervisor	<u>1</u>	Ajit Kumar Dhal
2	Veterinary Assistant	1	Ms. Subhechha Maity
3	Ticket Clerk	1	Smt. Moumita Dey
4	Gate Keeper	1	Sh. Pradip Kumar Das
5	Zoo Keeper	1	Sh. Tapan Das
6	Zoo Keeper	1	Sh. Subrata Bag
7	Animal Attendant	1	Sh. Mohan Chandra Manna
8	Animal Attendant	1	Abdul Salam Molla
9	Garden Attendant	1	Sh. Palan Sardar
10	Sanitary Attendant	1	Sk.Akkash Ali
11	Security	1	Sh. Asit Pramanik
12	Security	1	Sk. Monirul Khan
13	Security	1	Sh. Jagabandhu Naskar
14	Security	1	Sh. Susanta Das

9. Capacity Building of zoo personnel:

Sl.No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	Smt. Niranjita Mitra, WBFS Ex-Officio Director, Garchumuk Deer Park (Mini Zoo) & DFO, Howrah Forest Division	Enrichment of Animal enclosure in Zoo	2(two) days	Zoological Garden Alipore, Kolkata under West Bengal Zoo Authority

10. Zoo Advisory Committee - Nil

- a. Date of constitution
- b. Members
- c. Dates on which Meetings held during the year

11. Health Advisory Committee- Nil

- a. Date of constitution : 07.03.2018

b. Members:

The Director, Animal Husbandry & Veterinary Services

Joint Director, ARD IAH & VB (R & T) Belgachia, Kolkata-37

Dr. Joyjit Mitra, Specialist (Sero-Epidemiology) RDDDL (ER), IAH & VB, Belgachia, Kolkata-37

Dr. Debasish Chatterjee, Asst. Director, ARD (Vety) (Disease Investigation), IAH & VB, Belgachia, Kolkata-37

Dr. Proloy Mandal, Asst. Director, ARD (Vety), IAH & VB Belgachia, Kolkata-37.

- c. Dates on which Meetings held during the year- Nil

12. Statement of income and expenditure of the Zoo during the year 2020-21:

Income during the year 2020-21

1. From Entry Fee Collection: - Nil
2. Rent from Forest (Zoo) Rest House- Nil

3. Sale of Tender documents; Rs. 2000/-

4. Misc receipt - Rs. 1001/-

I.	Spill over amount of last year (2019-20)	: Rs.	6,47,659.41
II.	Total amount received	: Rs.	1,50,69,933.00
III.	Total expenditure	: Rs.	1,35,69,763.12
IV.	Total Balance at Bank	: Rs.	21,47,180.29

13. Daily feed Schedule of animals

Sl.No.	Species	Feed item	Quantity		Day of fasting
			Winter	Summer	
1	Peacock	Poultry Mesh, Green Leaf, Wheat Grain, Paddy	Poultry Mesh-450 gm, Green Leaf-270 gm, Wheat Grain-180 gm, Grain Paddy-180 gm per day for 6 peacocks		Nil
2	Parakeet	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses, Salt	Wheat grain-30 gm, Maize-30 gm, Paddy, -30 gm Ground Nut Grain-30 gm, Pulses-30 gm per day, Salt as required		Nil
3	Golden Pheasant	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses and Salt	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses-80 gm per day, Salt		Nil
4	Silver Pheasant	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses and Salt	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses-80 gm per day, Salt		Nil
5	Red Jungle Fowl	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses and Salt	Wheat grain, Maize, Paddy, Ground Nut Grain, Pulses-80 gm per day, Salt-		Nil
6	Spotted Deer	Gram, Ground Nut Cake, Molasses black Salt, Green fodder	Gram- 24 Kgs, Oil cake-12 Kgs, Molasses- 7 Kgs, Wheat Bran-42 Kgs, -1 Kg per Day for 74 Spotted Deer		Nil

7	Porcupine	Potato, Radish, carrot	Potato-800 gm, raddish-800 gm, Carrot-800 gm	Nil
8	Fishing Cat	Chicken, Fish	Chicken 250 gm, Fish 500 gm	One Day Fasting
9	Marsh Crocodile	Fish, chicken Meat	Fish-800 gm, Chicken Meat-1.5 Kgs for 1 (one) no. crocodile one day interval	One day interval
10	Indian Soft Shelled Turtle	Green leaves, Water Spinach	Green leaves- 30 gm per turtle & Water Spinach-11 kgs. Per day for 377 Nos. Turtle	Nil

14. Vaccination Schedule of animals

Sl.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
1.	Peacock		Nil		
2.	Parakeet				
3.	Golden Pheasant				
4.	Silver Pheasant				
5.	Red Jungle Fowl				
6.	Marsh Crocodile				
7.	Indian Soft-Shelled Turtle				
8.	Porcupine				
9.	Spotted Deer				
10.	Fishing Cat	Rabies	1 ml	Yearly	
		Feline Pan Leukopenia (FPL)	1 ml	Yearly	

15. De-worming Schedule of animals

Sl.No.	Species	Drug used	Month
1	Peacock	Liq. Albomer-10 ml / peacock X 3 time in a year, Liq, Vimeral-30 ml per peacock X 3 times in a year, Liq. Ostocalcium-500 ml. / peacock X 3 times in a year	3 times in a year
2	Parakeet	Liq. Albomer-1 ml / parakeet X 3 times in a year, Liq. Vimeral-5 ml / parakeet X 3 times in a year	3 times in a year
3	Golden Pheasant	Liq. Albomer-1 ml / parakeet X 3 times in a year, Liq. Vimeral-10 ml / birds X 3 times in a year	3 times in a year
4	Silver Pheasant		
5	Red Jungle Fowl		
6	Spotted Deer	Liq. Albomer 40ml/deer X 3 (three) time in a year Syr. Zycloz-4 ml. At a time, Agrimin forte-500 gm /Deer X 3 times in a year	3 times in a year
7	Porcupine	Liq. Albomer-5 ml./ porcupine X 3 times in year Spreading Lime Powder inside / outside the pond monthly basis	3 times in a year
8	Fishing Cat	Albendazole, Febendazole, Praziquantal, Pyrantel Pamotate	3 times in a year

16. Disinfection Schedule:

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Marsh Crocodile	Aquatic Enclosure-2(two) Nos.	Thorough cleaning & lime powder spray	Monthly
2	Indian Soft-Shelled Turtle			
3	Birds Aviary	Enclosure - three side covered with steel net	(1) Cleaning	Every Day
			(2) Lime powder spray-monthly	Monthly

		enclosure & one side concreted wall with mud flooring		
4	Porcupine	Four side covered with iron net with mud flooring	(1) Cleaning	Every day
			(2) Lime powder spray	Monthly
5	Spotted Deer	Ponds - 2 (two) Nos. within Iron chain-link enclosure	(1) Thorough cleaning the deer enclosure - 2 months interval	2 months interval
			(2) Turning the mud inside the deer enclosure by digging sun drying earth for disinfection - 6 months interval.	6 months interval.
			(3) Cleaning the ponds (inside the enclosure) and removing the debris etc. and spray lime powder - 1 month interval.	1 month interval.
6	Fishing Cat	Top open enclosure enclosed with chain link fencing and feeding cells	In house spray- proper cleaning. Khorsolin spray, application of turmeric powder inside floor, walls and around enclosure, 1% Potassium Permanganate both as dips and rinses and cleaning of equipment	Everyday

17. Health Check-up of employees for zoonotic diseases:

Nil

18. Development Works carried out in the zoo during the year 2020-21:

- i. Construction of one Post Mortem Room for the animals completed.
- ii. Construction of Night Shelter of Lesser Cat completed.
- iii. Construction of Visitors' Pathway & Internal Road (Part) completed.
- iv. Construction of Kitchen-cum-Store Room for Zoo animals completed.
- v. Construction of conservation breeding centre for indigenous pheasantry - under process
- vi. Construction of visitor's sitting arrangement with structural shed - under process

19. Education and Awareness programmes during the year: Nil
20. Important Events and happenings: Observe World Environment Day & Wildlife Day.
21. Seasonal special arrangements for upkeep of animals: Yes
22. Research Work carried out and publications: Nil
23. Conservation Breeding Programme of the Zoo: Nil
24. Animal acquisition / transfer / exchange during the year:

A.	Animals arriving in the Zoo				
	H.NO.	Species	Number (M:F)	From which Zoo	Date of arrival in the zoo
	Nil				
B.	Animals going from the zoo				
	H.NO.	Species	Number (M:F)	Going to which Zoo	Date of deposition from the zoo
	Nil				

25. Rescue and Rehabilitation of wild animals carried out by the Zoo

Sl.No	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	10.12.2020	Fishing Cat (<i>Prionailurus viverrinus</i>) Male	Amta	30.03.2021	–	Weak Condition/ threatened in nature
2	26.12.2020	Fishing Cat (<i>Prionailurus viverrinus</i>) Male	Uluberia	30.03.2021	–	Weak Condition/ threatened in nature

PART - B
Gar Chumuk (Ulughata) Deer Park, Howrah, West Bengal

Proforma for Annual Inventory Report
Inventory Report for the Year : 2020-2021

Other than Endangered Species*

- Modified Closing Balance

S.No.	Animal Name	Scientific Name	Opening Stock (01-Apr-2020)				Births			Acquisitions			Disposals			Deaths			Closing Stock (31-Mar-2021)							
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T				
Aves																										
1.	# Golden Pheasant	<i>Chrysolophus pictus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
2.	Red Junglefowl	<i>Gallus gallus</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3.	Silver Pheasant	<i>Lophura nycthemera</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
4.	Rose-ringed Parakeet	<i>Psittacula krameri</i>	22	35	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	35	0	57
Total Aves		4	25	37	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	37	0	62	
Mammalia																										
1.	# Chital/ Spotted Deer	<i>Axis axis</i>	21	34	20	75	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	29	46	10	85
Total Mammalia		1	21	34	20	75	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	29	46	10	85	
Total			46	71	20	137	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	54	83	10	147	

S.No.	Animal Name	ScientificName	Opening Stock (01-Apr-2020)				Births			Acquisitions			Disposals			Deaths			Closing Stock (31-Mar-2021)									
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T						
Grand Total																												
			210	294	20	524	0	0	10	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	219	308	10	537

Curator (Animals)


Director

27. 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	Indian Peafowl	<i>(Pavo cristatus)</i>	1 (M)	1.10.2020	Death may due to severe joint infection along with toxemia and anorexia condition

28. Compliance with conditions stipulated by the Central Zoo Authority

Sl. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
1	9(1)	A regular whole time 'in-charge' of the zoo should be placed with adequate financial and administrative power.	Immediately	July-2016	Matter referred to WBZA

29. List of free-living wild animals within the zoo premises:

Sl. No.	Common Name	Scientific Name
MAMMALS		
1	Rhesus Macaque	<i>Macaca mulatta</i>
2	Small Indian Civet	<i>Viverricula indica</i>
3	Asian Palm Civet	<i>Paradoxurus hermaphroditus</i>
4	Fishing Cat	<i>Prionailurus viverrinus</i>
5	Jungle Cat	<i>Felis chaus</i>
6	Indian Fox	<i>Vulpes bengalensis</i>
7	Red Fox	<i>Vulpes vulpes</i>
8	Common Flying Fox	<i>Pteropus giganteus</i>
9	Common Mongoose	<i>Herpestes edwardsii</i>
10	Small Indian Mongoose	<i>Herpestes auropunctatus</i>
11	Common Five striped Squirrel	<i>Funambulus pennantii</i>
12	Common Bandicoot	<i>Peramelemorphia</i>
13	Bengal Mole	<i>Bandicota bengalensis</i>
14	Common Indian Hare	<i>Lepus nigricollis</i>
BIRDS		
1	Common Myna	<i>Acridotheres tristis</i>

2	Asian Pied Starling/ Pied Myna	<i>Gracupica contra</i>
3	Bramhney Mayna	<i>Sturnia pagodarum</i>
4	Chestnut-tailed Starling/ Grey headed Myna	<i>Sturnia malabarica</i>
5	House Crow	<i>Corvus splendens</i>
6	Pond Heron	<i>Ardeola grayii</i>
7	Night Heron	<i>Nycticorax nycticorax</i>
8	Bronze winged Jacana	<i>Metopidius indicus</i>
9	Little Cormorant	<i>Microcarbo niger</i>
10	Cotton Pigmy goose	<i>Nettapus coromandelianus</i>
11	Little grebe	<i>Tachybaptus ruficollis</i>
12	Red vented Bulbul	<i>Pycnonotus cafer</i>
13	Jungle Babbler	<i>Turdoides striata</i>
14	Large green Barbed	<i>Megalaima zeylanica</i>
15	Jungle Myna	<i>Acridotheres fuscus</i>
16	Barn Owl	<i>Tyto alba</i>
17	Bengal Red Whiskered Bulbul	<i>Pycnonotus jocosus</i>
18	Blossom Headed Parakeet	<i>Psittacula roseata</i>
19	Brown Leaf Warbler	<i>Phylloscopus collybita</i>
20	Black Redstart	<i>Phoenicurus ochruros</i>
21	Blue Whistling Thrush	<i>Myophonus caeruleus</i>
22	Blue Throated Barbet	<i>Megalaima asiatica</i>
23	Brahminy Kite	<i>Haliastur indus</i>
24	Black Kite	<i>Milvus migrans</i>
25	Black Winged Kite	<i>Elanus caeruleus</i>
26	Blue Rock Pigeon/Common pigeon	<i>Columba livia</i>
27	Blue Earned Kingfisher	<i>Alcedo meninting</i>
28	Black Breasted Sunbird	<i>Aethopyga saturata</i>
29	Purple rumped Sunbird	<i>Leptocoma zeylonica</i>
30	Purple Sunbird	<i>Cinnyris asiaticus</i>
31	Common Sandpiper	<i>Actitis hypoleucos</i>
32	Common Wood Shrike	<i>Tephrodornis pondicerianus</i>
33	Chestnut Headed Bee eater	<i>Meropsleschenaulti</i>
34	Green Bee eater	<i>Merops orientalis</i>
35	Coppersmith	<i>Megalaima haemacephala</i>
36	Common Swallow	<i>hirundo rustica</i>
37	Common Hawk Cuckoo/Papia	<i>Hierococcyx varius</i>
38	Asian koel	<i>Eudynamys scolopaceus</i>
39	Common Cuckoo	<i>Cuculus canorus</i>
40	Cattle Egret	<i>Bubulcus ibis</i>
41	Little Egret	<i>Egretta garzetta</i>
42	House Sparrow	<i>Passer domesticus</i>
43	Indian Ring Dove/Eurasian collered Dove	<i>Streptopelia decaocto</i>
44	Spotted Dove	<i>Spilopelia chinensis</i>

45	Lesser Whistling Teal	<i>Dendrocygna javanica</i>
46	Large Whistling Teal	<i>Dendrocygna bicolor</i>
47	Large Billed Crow	<i>Corvus macrorhynchos</i>
48	Grey Nightjar	<i>Caprimulgus jotaka</i>
49	Magpie Robin	<i>Copsychus saularis</i>
50	Purple Moorhen	<i>Porphyrio porphyrio</i>
51	Palm swift	<i>Cypsiurus balasiensis</i>
52	Pintail	<i>Anas acuta</i>
53	Rose Ringed Parakeet	<i>Psittacula krameri</i>
54	Scarlet Minivet	<i>Pericrocotus speciosus</i>
55	Spotted Munia	<i>Lonchura punctulata</i>
56	Tailor Bird	<i>Orthotomus sutorius</i>
57	Alexandrine Parakeet	<i>Psittacula eupatria</i>
58	Common Moorhen	<i>Gallinula chloropus</i>
59	Indian Roller	<i>Coracias bengalensis</i>
60	Lesser pied Kingfisher	<i>Ceryle rudis</i>
61	Open-bill Stork	<i>Anastomus oscitans</i>
62	Spotted Owlet	<i>Athene brama</i>
63	Indian Tree Pie	<i>Dendrocitta vagabunda</i>
64	White wagtail	<i>Motacilla alba</i>
65	White breasted Kingfisher	<i>Halcyon smyrnensis</i>
66	White breasted Water hen	<i>Amaurornis phoenicurus</i>
67	Yellow wagtail	<i>Motacilla flava</i>
68	White wagtail	<i>Motacilla alba</i>
69	Honey Buzzard	<i>Pernis apivorus</i>
70	Fantail Snipe	<i>Gallinago gallinago</i>
71	Black Stork	<i>Ciconia nigra</i>
72	Baya Weaver	<i>Ploceus philippinus</i>
73	Shikra	<i>Accipiter badius</i>
74	Greater coucal	<i>Centropus sinensis</i>
75	Common Hoopoe	<i>Upupa epops</i>
76	Stork billed Kingfisher	<i>Pelargopsis capensis</i>
77	Common Kingfisher	<i>Alcedo atthis</i>
78	Lineated Barbet	<i>Megalaima lineata</i>
79	Lesser goldenback/ Golden backed Woodpecker	<i>Dinopium benghalense</i>
80	Common lora	<i>Aegithina tiphia</i>
81	Brown Shrike	<i>Lanius cristatus</i>
82	Black Drongo	<i>Dicrurus macrocercus</i>
83	Black Hooded Oriole	<i>Oriolus xanthornus</i>
84	Black headed Oriole	<i>Oriolus larvatus</i>
85	Golden Oriole	<i>Oriolus oriolus</i>
86	Black naped Oriole	<i>Oriolus chinensis</i>

87	Common Tailorbird	<i>Orthotomus sutorius</i>
88	Jungle Babbler	<i>Turdoides striata</i>
89	Oriental Magpie Robin	<i>Copsychus saularis</i>
90	Pale Billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>
91	Scarlet backed Flowerpecker	<i>Dicaeum cruentatum</i>
92	Jerdon' Schloropsis	<i>Chloropsis jerdoni</i>
93	Crow Pheasant	<i>Centropus sinensis</i>
94	Koel	<i>Eudynamys scolopaceus</i>
95	Grey Tit	<i>Parus cinereus</i>
REPTILES		
1	Indian Soft Shelled Turtle	<i>Nilssonina gangetica</i>
2	Bengal Monitor Lizard	<i>Varanus bengalensis</i>
3	Water Monitor	<i>Varanus salvator</i>
4	Spectacled Cobra	<i>Naja naja</i>
5	Monocled Cobra	<i>Naja kaouthia</i>
6	Common Krait	<i>Bungarus caeruleus</i>
7	Banded Krait	<i>Bungarus fasciatus</i>
8	Russell's Viper	<i>Daboia russelii</i>
9	Rat Snake	<i>Ptyas mucosa</i>
10	Checkered Keelback	<i>Xenochrophis piscator</i>
11	Green Keelback	<i>Rhabdophis plumbicolor</i>
12	Striped Keelback	<i>Amphiesma stolatum</i>
13	Vine Snake	<i>Ahaetulla nasuta</i>
AMPHIBIANS		
1	Indian Bull Frog	<i>Hoplobatrachus tigerinus</i>
2	Common Indian Toad	<i>Duttaphrynus melanostictus</i>
BUTTERFLY		
1	Common Jay	<i>Graphium doson</i>
2	Tailed Jay	<i>Graphium agamemnon</i>
3	Common Mime	<i>Papilio clytia</i>
4	Lime Butterfly	<i>Papilio demoleus</i>
5	Common Mormon	<i>Papilio polytes</i>
6	Blue Mormon	<i>Papilio polymnestor</i>
7	Common Rose	<i>Pachlio ptaaristolochiae</i>
8	Mottled Emigrant	<i>Catopsilia pyranthe</i>
9	Common Emigrant	<i>Catopsilia pomona</i>
10	Common Jezebel	<i>Delias eucharis</i>
11	Psyche	<i>Leptosia nina</i>
12	Indian Cabbage White	<i>Pieris canidia</i>
13	Striped Albatross	<i>Appiasolferna</i>

14	Common Albatross	<i>Appiasalbina</i>
15	Common Wanderer	<i>Pareronia valeria</i>
16	Common Grass Yellow	<i>Eurema hecabe</i>
17	Yellow Orange Tip	<i>Ixias pyrene</i>
18	Striped Pierrot	<i>Tarucus nara</i>
19	Common Cerulean	<i>Jamides celeno</i>
20	Common Silverline	<i>Cigaritis vulcanus</i>
21	Forget me not	<i>Catochrys opsstrabo</i>
22	Tiny Grass Blue	<i>Zizula hylax</i>
23	Common Bushbrown	<i>Mycalesis perseus</i>
24	Common Five-ring	<i>Ypthima baldus</i>
25	Common Four-ring	<i>Ypthima huebneri</i>
26	Tawny Coster	<i>Acraes terpsicore</i>
27	Common Palmfly	<i>Elymnias hypermnestra</i>
28	Common Leopard	<i>Phalanta phalantha</i>
29	Common Sailer	<i>Neptis hylas</i>
30	Common Castor	<i>Ariadne merione</i>
31	Danaid Eggfly	<i>Hypolimnas misippus</i>
32	Blue Tiger	<i>Tirumala limniace</i>
33	Striped Tiger	<i>Danaus genutia</i>
34	Plain Tiger	<i>Danaus chrysippus</i>
35	Common Indian Crow	<i>Euploea core</i>
36	Common Evening Brown	<i>Melanitis leda</i>
37	Rice Swift	<i>Borbo cinnara</i>
38	Brown Awl	<i>Badamia exclamationis</i>