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#### 1. Report of the Officer-in-charge

- (i) Bhagwan Birsa Biological Park, Ranchi is one of the most beautiful and progressive zoos in India having 104 ha of area of mildly undulating topography with natural dry deciduous Sal forests & associates surrounded by on two sides water bodies cided Getalsud Dam. It provides a natural habitat to wild animals to live in peace and harmony with the nature. It is situated on the Ranchi-Ramgarah section of National Highway 33, on the outskirts of Ranchi and about 20 kms from it. It is separated by the NH in two unequal halves, the smaller part being the botanical section of 23 Ha while that of 81 ha, larger one being the zoological section. This zoo was inaugurated on 26<sup>th</sup> January 1994. Most of the animals of this zoo live in open, large moated areas surrounded by natural vegetation providing them a feeling of living in their natural habitat.
- (ii) The main objective of Bhagwan Birsa Biological Park is to facilitate the linkage between ex-situ and in-situ conservation of flora & fauna, breeding and rearing of endangered faunal species with the object of saving them from extinction, awareness and education in wildlife conservation through zoo-people interface.
- (iii) It is one of the major tourist attractions in Jharkhand, with an annual foot fall of about 8 lakhs. The zoo has about 1462 number of animals representing 85 different species of Mammals, Reptiles and Birds. The animals are kept in an environment which is similar to their natural habitat and the same helps them grow and breed well. The major breeding species are Himalyan Black Bear, Sloth Bear, Leopard Cat, Royal Bengal Tiger, Jungle Cat, Jackal, Fox, Stripped Hyena, Spotted Deer, Barking Deer, Sambar, Nilgai, Black Buck, Indian Gour, Hippopotamus, Gangetic Gharial, Emu, Ostrich, Indian Peafowl, kalji peasant and other different species of pheasants.
- (iv) Zoo also rehabilitates and takes care of orphaned/injured/stray/sick animals, rescued from wild or from circuses, derecognized zoos etc.
- (v) The zoo is managed by Jharkhand Zoo Authority, an autonomous body and the annual plan of zoo is approved by the governing body. The funds of the authority consist of grants from the state government, revenues received from visitor ticket sales and other miscellaneous revenues.
- (vi) Green fodder is grown organically in-house within the park, which ensures fresh, nutritions and pollution free fodder to the herbivores of the zoo.
- (vii) The Biological Park also has an aquarium which is perhaps the largest fresh water aquarium in the country housing about 1500 number of fishes representing 120 Sps in 58 display tanks, with an annual footfall of about 0.73 lakh visitors.

(Y.K. DAS, IFS)

Chief Conservator of Forests and Director Bhagwan Birsa Biological Park, Ranchi

### 2. History of the Zoo

Bhagwan Birsa Biological Park was established by the erstwhile Govt. of Bihar over an area of 104 Ha. of notified Protected Forest in Chakla village, Ormanjhi block, Ranchi district, with the objective of conservation of endangered and threatened flora and fauna and to develop among visitors an empathy for wild animals and motivate them to support the cause of conservation of wildlife. After the decision of the erstwhile Govt. of Bihar for establishment of zoo, the actual construction etc got started in the year 1986-87 and the zoo was formally opened to visitors on 26.01.1994. The zoo has been named after Birsa Munda, a legendary tribal freedom fighter of Chotanagpur area where in he is revered as Bhagwan and hence

the name of this zoo "Bhagwan Birsa Biological Park". Initially the zoo was recognised as a small zoo but in the year 2013 it was upgraded to a medium zoo. The zoo had been under the direct management of state government up to 23.10.2009 and the revenue collected used to be deposited in the state exchequer. However the government of Jharkhand vide its notification no. WL/21/2007/3361, dated 23.10.2009 constituted an autonomous body namely Jharkhand Zoo Authority for better management of Bhagwan Birsa Biological Park, allowing the authority to keep and manage by itself the revenues generated for fulfilling the objects of the zoo, through annual plan of operations duly approved by the governing body of the Authority.

#### 3. Vision

Zoo and aquariums with their unique resource of live animals, their expertise and their links to field conservation will be recognized as leaders and mentors in formal and informal education for conservation. The educational role of zoos and aquariums will be socially, environmentally and culturally relevant, and by influencing people's behaviour and values, education will be seen as an important conservation activity. Zoos and aquariums will expand the training of their own staff and of others engaged in-situ and ex-situ work.

#### 4. Mission

Our mission is to provide better upkeep & veterinary care to the inmates of this zoo to ensure their conservation though best management practices and bringing awareness among the people.

### 5. Objective

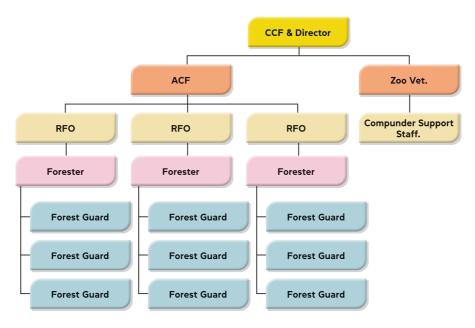
Bhagwan Birsa Biological Park has been established with objective of conservation of endangered and threatened flora and fauna and to develop among visitors an empathy for wild animals and motivate them to support the cause of conservation of wildlife.

#### 6. About us

S.No.	Particulars	Information	
	Basic	Information about the Zoo	
1	Name of the Zoo	BHAGWAN BIRSA BIOLOGICAL PARK, CHAKLA, ORMANJHI, RANCHI.	
2	Year of Establishment	1994	
3	Address of the Zoo	Vill & P.O- Chakla, Ormanjhi, Distt- Ranchi – 835219 (Jharkhand)	
4	State	JHARKHAND	
5	Telephone Number	9006216090, 9470590742	
6	Fax Number	-	
7	E-mail address	jharkhandzooauthority@gmail.com	
8	Website	https://birsazoojharkhand.in	
9	Distance from nearest	Airport: Birsa Munda Airport, Ranchi. 30 km.	
		Railway Station: Ranchi Raily Station 21.3 km	
		Bus Stand: Khadgarha Bus Stand 19.4 km.	
10	Recognition Valid upto (Date)	September, 2020	
11	Category of zoo	Medium	

S.No.	Particulars	Information
12	Area (in Hectares)	104 Hac (Divided into two parts 83 Hac + 21 Hac)
13	Number of Visitors (Financial Year)	Adult : 438129
		Children : 150181
		Total Indian : 588310
		Total Foreigners : NIL
		Total Visitors: 588310
14	Visitors' Facilities Available in Zoo	Rest sheds, R.O. Drinking water, Lavatory, Battery Operated Vehicle, Wheel- Chair, Boating, Canteen, Parking. Etc.
15	Weekly Closure Day of the Zoo	Monday
	Manag	ement Personnel of the zoo
16	Name with designation of the Officer	Chief Conservator Forest & Director
	in-charge	-Cum- Member Secretary, Jharkhand Zoo Authority.
	Name of the Veterinary Officer	Dr. AJAY KUMAR.
	Name of the Curator/Range Forest Officers	(i) Mr. N. Choudhury. (ii) Mr. R.C. Paswan
	Officers	(iii) Mr. R.L. Paswan
	Name of the Biologist	-
	Name of the Education Officer	-
	Name of the Compounder/ Lab Assistant	Mr. Brajendra Kumar Singh.
	Owr	ner / Operator of the Zoo
17	*Name of the Operator	Department of Forest, Environment & Climate Change, Government Of Jharkhand
18	Address of the Operator	Nepal House, Doranda, Ranchi - 834002
19	Contact details/Phone number of Operator	0651-2491669
20	E-mail address of Operator	dysecyfdjharkhand2013@rediffmail.com

# 7. Organizational Chart



#### 8. Human Resources

### Manpower of the Zoo\*

Sl.No.	Name of post	Sanctioned strength	In position
1	Chief Conservator of Forests and Director	01	01
2	Asst. Conservator of Forests	01	01
3	Range Forest Officer	03	03
4	Veterinary Doctor	01	01
5	Head clerk	01	01
6	Steno	01	<del>-</del>
7	Assistants	03	02
8	Forester	03	-
9	Forest Guard	08	02
10	Compounder	01	01
11	Driver	02	01
12	Animal keeper-cum-Sweeper	24	14
13	Orderly / Peon	04	01
14	Chowkidar	06	01
15	Mali (Gardener)	05	<del>-</del>
16	Sweeper	03	-
17	Khansama	01	-
	Total	68	29

### 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	(i) Sri Vishal Mahto, Animal Keeper (ii) Sri Sadhu Oraon, Zoo Keeper	Zoo Keeper Training programme	25.03.2020 to 28.03.2020	Kanan Pandari Zoo, Bilaspur, Chhattisgarh
2	Dr. Ajay Kumar, Zoo Vet.	Forth Asia working Group Meeting and International Seminar on Elephants Endotheliotropic Herpes Virus	28.11.2019 to 31.11.2019	Assam State Zoo, Guwahati.
3	Dr. Ajay Kumar, Zoo Vet.	Use of Chemical Immobilization as a means to mitigate human Elephant Conflict	01.09.2019 to 02.09.2019	Wildlife Institute of India in Association with Kerala Forest Department.

# 10. Zoo Advisory Committee – There is an executive committee which takes all the decisions for running the zoo .

- a. Date of constitution 23.10.2009
- b. Members (1) Pccf WL & CWLW (2) CCF, Wildlife (3) CCF & Director
- c. Dates on which Meetings held during the year 06.06.2019, 26.08.2019, 27.01.2020 and 16.03.2020

### 11. Health Advisory Committee- Not constituted.

As and when required Professors of Medicine, Pathology & Surgery of Ranchi Veterinary Collage are called for their advice.

### 12. Statement of income and expenditure of the Zoo

(A) Details of receipts from Bhagwan Birsa Biological Park - Zoo.

SL. No.	Items	No. of Visitors	Total Revenue received
1.	Adult	388701	15695550
2.	Child	56465	1165270
3.	School Children	69485	1474845
4.	Foreign Visitors		NIL
5.	Tender Fee		131000
6.	Snake House		1553150
7.	Battery operated vehicle		1387240
8.	Boating		1260160
9.	Canteen		304844
10.	Parking		1808580
11.	Revenue received from Forest officer's hostel, Doranda		172400
12.	Revenue received from Forest Palash Meeting Hall, Doranda		835000
13	Rent of Sovenir Shop		18000
	Total	514651	25806039

#### (B) Details of receipts from aquarium

SL. No.	Items	No. of Visitors	Total Revenue received
1.	Adult	49428	1368720
2.	Child	14420	126195
3.	School Children	9811	136150
4.	Camera Fee		30
5.	Parking		80160
	Total	73659	1711255
	Grand Total (A+B)	588310	27517294

## (C) Details of Expenditure for 2019-20

क्र0 सं0	कार्य विवरणी	स्वीकृत अनुमानित व्यय राशि (लाख में)	व्यय राशि (रू०)
1	2	3	4
1	स्थापना व्यय		
i	पदाधिकारियों / कर्मचारियों का भुगतान :		
	• वेतन, जीवनयापन भत्ता आदि (salary)	147.00	10973301.00
	• यात्रा—व्यय	5.00	19162.00
	• एल.टी.सी. / एच.टी.सी.	2.00	-
	• वर्दी	0.50	-
ii	कार्यालय व्यय	4.50	320392.00
iii	मोटरगाड़ी– परिचालन एवं रख–रखाव।	6.00	600000.00
iv	दूरभाष (मोबाईल / इन्टरनेट)।	0.70	33744.00
v	विद्युत व्यय (उर्जा—प्रभार)।	20.00	2425015.00
vi	दैनिक श्रमिकों की मजदूरी ।	115.00	11230024.30
vii	EPF share (श्रमिकों का)	30.00	2767403.00
viii	कौशल विकास / प्रशिक्षण	5.50	-
योग		336.20	28369041.30
2	वन्य प्राणियों का आहार, दवायें एवं अन्य सामग्री।	205.00	19717320.00
3	वन्यप्राणियों के लिए हरा चारा उत्पादन।	10.50	1010000.00
4	मशीन एवं उपकरण।	10.00	588099.00
5	वन्यप्राणी विषय पर फिल्म एवं साहित्य का क्रय	5.00	424600.00
6	जैविक उद्यान में अन्दर ग्राउण्ड केबलिंग का विस्तार तथा आवश्यकतानुसार आंशिक बदलाव।	20.00	235508.00
7	बागवानी एवं सौंदर्यीकरण कार्य।	18.00	1463033.84
8	जैविक उद्यान के भवन, सड़क / चारदिवारी एवं अन्य आधारभूत संरचना का अनुरक्षण / जीर्णोद्धार / सुदृढ़ीकरण कार्य।	170.00	16965175.20
9	जैविक उद्यान के (जूलोजिकल प्रभाग में) विभिन्न इन्क्लोजर्स के अनुरक्षण/जीणोद्धार/सुदृढ़ीकरण कार्य	185.00	16914122.00
10	जैविक उद्यान में अग्नि सुरक्षा एवं आपदा प्रबंधन (अंश कार्य)।	10.00	-
11	जैविक उद्यान में पुटुस उन्मूलन	5.00	299823.00
12	वन्यप्राणी एवं दर्षक व्यवस्था सम्बन्धी रूटीन/मौसमी/विविध कार्य।	20.00	1886924.26
13	पेशेवर एवं कंसल्टेसी सेवायें (कोर्ट केसेज, चार्टर्ड एकाउन्टेंट, आकिटेक्ट्स, वन्यप्राणी चिकित्सा विशेषज्ञ आदि से सम्बधित व्यय।	10.00	580276.00
14	प्रचार — प्रसार, वर्क शाप एवं प्रशिक्षण आदि।	15.00	961358.40
15	दैनिक श्रमिकों के लिए जू-किट का क्रय।	10.00	742204.00
16	एक नये पीकअप भैन एवं एक मोटर साइकिल का क्रय	11.00	935295.00
17	जैविक उद्यान में अबाध विद्युत आपूर्ति व्यवस्था का संधारण—जेनसेट परिचालन एवं विद्युत व्यवस्था का रख—रखाव	10.00	1074982.00

क्र0 सं0	कार्य विवरणी	स्वीकृत अनुमानित व्यय राशि (लाख में)	व्यय राशि (रू०)
18	जैविक उद्यान में जलापूर्ति का संधारण	8.00	292428.00
19	CCTV सर्विलांस की व्यवस्था की स्थापना (अंशिक)	200.00	-
20	मुख्य द्वार (Entrance Plaza) का निर्माण (चिल्ड्रेन पार्क के साथ) विस्तार — अंश कार्य	100.00	-
21	पार्किंग सुविधा का विस्तार	50.00	2540100.00
22	मुख्य द्वार पर Electronic gate with RFID System की व्यवस्था	20.00	83064.00
23	वनस्पति प्रभाग में एक जलमीनार का निर्माण, (75000 हजार लीटर) एवं बोरिंग से मीनार तक पानी पाइपलाइन लेआउट। डीप बोरिंग, पंप का अधिष्ठापन (शेष अंष कार्य) (समापन कार्य)	4.70	470000.00
24	वन क्षेत्र पदाधिकारियों का आवास निर्माण का शेष अंश कार्य (दो मंजिला भवन ) (समापन कार्य)	27.52	2752000.00
25	हिप्पो इन्क्लोजर के गंदे पानी का निकासी व्यवस्था	10.00	-
26	ओपेन बटर फ्लाई पार्क का निर्माण। (अंश निर्माण)	100.00	2500000.00
27	प्राइमेट इन्क्लोजर का निर्माण।	50.00	-
28	स्लो-लॉरिस इन्क्लोजर का निर्माण।	20.00	-
29	बैट्री चालित चार वाहनों का क्रय (दो 14 सीटर एवं दो 6 सीटर)।	42.00	3897088.00
30	वन्यप्राणी आदान—प्रदान एवं परिवहन व्यय	65.00	223000.00
31	जैविक उद्यान के विभिन्न इन्क्लोजर्स में इन्वायरल्मेन्टल इनरिचमेंट कार्य हेतु परामर्शी की नियुक्ति, डिजाईन, DPR निर्माण तथा अंश इनरिचमेंट कार्य का संपादन	100.00	-
32	मछलीघर केंपस में दर्शक सुविधायें	5.00	487355.00
33	समुद्री मछलियों के लिये एक मछलीघर की स्थापना— सिविल स्ट्रक्चर का निर्माण	0.00	-
34	Biological monitoring and research हेतु 4 research fellows/assistants dk engagment.	11.52	-
35	Dental Instruments का क्रय	1.00	-
36	नये शवदाह गृह का निर्माण, इसके कैम्पस की चाहरदीवारी, अंदर में पाथवे एवं रैम्प का निर्माण।	50.00	1996300.00
37	नये जन्तु अस्पताल का निर्माण (सिविल कार्य)।	50.00	4932400.00
38	पुराने आहार गोदाम का सुदृढीकरण	10.00	150000.00
39	जैविक उद्यान में Solid and liquid waste का पर्यावरण के दृष्टिकोण से प्रबंधन हेतु योजना—डिजाईन—डी०पी०आर० आदि निर्माण हेतु परामर्शी की नियुक्ति तथा कार्य	40.00	-
40	भगवान बिरसा जैविक उद्यान परिसर में Water harvesting structures का निर्माण	5.00	-
41	Meat handlers & carnivore keepers के लिये इववजेEcoveralls/gloves की व्यवस्था	1.00	69600.00
42	चार नये वाटर बोट (नौका) का क्रय, लाइफ जकेटस्, आदि के साथ।	8.00	-
43	नये चौसिंघा इन्क्लोजर का निर्माण	15.00	-
44	नये जैन्ट स्क्विरल इन्क्लोजर निर्माण	8.00	800000.00

क्र0 सं0	कार्य विवरणी	स्वीकृत अनुमानित व्यय राशि (लाख में)	व्यय राशि (रू०)
45	नये माउस डियर इन्क्लोजर का निर्माण	8.00	800000.00
46	नये फीजेन्ट्री इन्क्लोजर का निर्माण	50.00	2000000.00
47	जैविक उद्यान के पुराने साइनेजेज का बदलाव/मरम्मति	15.00	932028.00
48	हाथी इन्क्लोजर का सुदृढ़ीकरण	50.00	1296817.00
कुल		1839.24	90020900.70
	в. पलाश सभागार, डोरण्डा, राँची से स	ांबंधितः—	
1	दैनिक श्रमिकों एवं सुरक्षा एजेंसी का मजदूरी भुगतान	7.20	659524.00
2	पलाश सभागार में 120 चेयर एवं फोर्ल्डींग बेंचेस आदि का क्रय	15.00	1237718.00
3	विभागीय बैठक / कार्याशाला आदि के लिए projection system	8.00	672682.00
4	पलाश सभागार में अग्नि सुरक्षा कार्य	35.00	-
5	भवन एवं चारदीवारी की सामान्य मरम्मति एवं रख—रखाव।	10.00	713710.00
6	सभी 13 ए.सी. का रख—रखाव।	0.80	91459.00
7	जेनसेट पर व्यय (डीजल मोबिल सहित)।	2.00	62770.00
	कुल	78.00	3437863.00
	C- वन पदाधिकारियों का होस्टल :		
1	दैनिक श्रमिकों एवं सुरक्षा एजेंसी का मजदूरी भुगतान	10.00	865555.00
2	वार्षिक रख—रखाव (सामान्य मरम्मित बेडसीट, पर्दे, क्रोकरीज, उपस्कर, टायेटरीज, सभी ७ ए.सी., सभी ७ टी.वी. सेट टाटा स्काई कनेक्षन के साथ रख—रखाव एवं आवष्यकतानुसार उपस्करों / किचेन appliances, डिसइन्फेक्टेटेंस आदि का क्रय)।	15.00	354714.00
3	सोलर हाट वाटर सिस्टम।	5.00	394350.00
4	अबाध विद्युत आपूर्ति (जेनसेट का डीजल/मोबिल सहित अनुरक्षण)।	1.00	77761.00
5	कैम्पस का सौर्न्दीयकरण (बागवानी एवं लॉन का अनुरक्षण)।	2.00	7500.00
6	Dining Hall के Common Toilet का जीर्णोद्वार / सुदृढ़ीकरण	1.50	147625.00
7	Dining Hall में दो 1.5 टन का AC लगाना	1.00	100000.00
8	कमरा संख्या –4 का शौचालय का जीर्णोद्वार/सुदृढ़ीकरण	0.75	72000.00
	कुल	36.25	2019505.00
D	डोरण्डा, राँची स्थित वन भवन कैम्पस में नये वन विश्रामागार का निर्माण (अंश कार्य)	250.00	-
	सकल योग (A+B+C+D)	2539.69	123847310.00
	या	2540.00	
	अन्य सम्पन्न कार्य (आकस्मिक)		
1	श्री राजेन्द्र महतो, दैनिक वेतन श्रमिक के आकास्मिक मृत्यु के कारण उत्पन्न परिस्थित में उनके परिवार को दाह संस्कार आदि हेतु दी गयी सहायता राशि एवं उनके चिकित्सा के दौरान व्यय		135000.00

क्र0 सं0	कार्य विवरणी	स्वीकृत अनुमानित व्यय राशि (लाख में)	व्यय राशि (रू०)
2	मछलीघर के मजदूरों की मजदूरी वार्षिक कार्य योजना में मछलीघर का दैनिक वेतन श्रमिकों का मजदूरी शामिल नहीं था क्योंकि मछलीघर का प्रबंधन सर्वश्री उतेकर फिसरीज द्वारा किया जाता था। किन्तु माह सितम्बर 2019 में उत्तेकर फिसरीज से संविदा रद्द होने के पश्चात मछलीघर का प्रबंधन जैविक उद्यान द्वारा किया जा रहा है।		530661.02
	Total		665661.02
	Total	2540.00	124512971.02

# 13. Daily Feed Schedule of animals

			आहार		
क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति	
1	2	3	4	5	
1	बाघ	महिषमांस (हड्डी रहित)	(i) माह अप्रैल से जुलाई तक — 9kg (ii) माह अगस्त से मार्च तक — 10kg	सोमवार का दिन फास्टिंग रहेगा।	
2	सिंह	महिषमांस (हड्डी रहित)	(i) माह अप्रैल से जुलाई तक — 9kg (ii) माह अगस्त से मार्च तक — 10kg	सोमवार का दिन फास्टिंग रहेगा।	
3	तेंदुआ	महिषमांस (हड्डी रहित)	(i) माह अप्रैल से जुलाई तक — 5.2kg (ii) माह अगस्त से मार्च तक — 3kg	(i) सोमवार का दिन फास्टिंग रहेगा। (ii) ''राजा'' नामक तेंदुआ को 5.0 लीटर दूध अलग से प्रत्येक दिन दिया जाएगा।	
4.	लकडबग्घा	महिषमांस (हड्डी रहित)	(i) माह अप्रैल से जुलाई तक —75.1kg (ii) माह अगस्त से मार्च तक — 2kg	सोमवार का दिन फास्टिंग रहेगा।	
5	सियार	महिषमांस (हड्डी रहित)	500 ग्राम	सोमवार का दिन फास्टिंग रहेगा।	
6	लोमड़ी	चिकेन	500 ग्राम	सोमवार का दिन फास्टिंग रहेगा।	
7	जंगल बिल्ली	(i) महिषमांस (हड्डी रहित) (ii) चिकेन	500 ग्राम 750 ग्राम	(i) मंगलवार, वृहस्पतिवार एवं शनिवार। (ii) बुध, शुक्र, एवं रविवार। (iii) सोमवार का दिन फास्टिंग रहेगा।	
8	लेपर्ड कैट	चिकेन	500 ग्राम	सोमवार का दिन फास्टिंग रहेगा।	
9	पेंगोलिन	अंडा (उबालकर) मिल्क पाउडर	2 अद्द 20 ग्राम	दोनो को मैसकर दिया जाएगा।	
10	मगरमच्छ	(i) महिषमांस (हड्डी रहित) (ii) हाइब्रिड मंगुर मछली (जिन्दा)	2.00 किलोग्राम 5.00 किलोग्राम	मंगलवार एवं शुक्रवार को (यानि सप्ताह में दो दिन) प्रतिमाह	

क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति
11	घडियाल	हाइब्रिड मांगुर मछली (जिन्दा)	750 ग्राम	
12	साहिल	चना मकई दर्श अमरूद / खीरा केला (पका) बैंगन / पत्ता गोभी	50 ग्राम 50 ग्राम 250 ग्राम 500 ग्राम 100 ग्राम	
13	देशी भालू	(i) खीर :—    चावल (अरवा मोटा)    दूध    गुड (ii) अंडा (iii) शहद एवं स्लाइस ब्रेड (iv) तरबूज / षकरकंद (सीजन में)	1.25 किलोग्राम 1.50 लिटर 500 ग्राम 1 पीस 4 पीस ब्रेड, 25 ग्राम शहद (ब्रेड में शहद लगाकर) शकरकंद 500 ग्राम या तरबूज — 1 किलोग्राम	सप्ताह में तीन दिन (मंगल, वृहस्पत एवं शनिवार) दोनों में से एक, जो भी उपलब्ध हो।
14	हिमालयन काला भालू	स्लाइस ब्रेड दूध केला (पका) पता गोभी /गाजर/ खीरा	28 पीस (लगभग 750 ग्राम) 1.50 लीटर 2.50 किलोग्राम 500 ग्राम	
15	सांभर	गेहूँ चोकर मकई दर्रा मूँगफली खल्ली साधारण नमक कुट्टी घास सोयामील महुआ	600 ग्राम 250 ग्राम 100 ग्राम 15 ग्राम 4 किलोग्राम 10 किलोग्राम 150 ग्राम	अक्टूबर से फरवरी
16	चीतल	गेहूँ चोकर मकई दर्रा मूँगफली खल्ली साधारण नमक कुट्टी घास सोयामील महुआ	200 ग्राम 100 ग्राम 50 ग्राम 10 ग्राम 1 किलोग्राम 6 किलोग्राम 100 ग्राम	अक्टूबर से फरवरी

		आहार		
क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति
17	नीलगाय	गेहूँ चोकर मकई दर्रा मूँगफली खल्ली साधारण नमक कुट्टी घास सोयामील महुआ	500 ग्राम 250 ग्राम 100 ग्राम 15 ग्राम 3 किलोग्राम 10 किलोग्राम 150 ग्राम	अक्टूबर से फरवरी
18	बार्किग डीयर (कोटरा)	बर्डमेष पालक साग साधारण नमक घास / पत्ता सोयामील महुआ	500 ग्राम 500 ग्राम 10 ग्राम 2 किलोग्राम 50 ग्राम 50 ग्राम	अक्टूबर से फरवरी
19	कृष्णमृग या सफेद कृष्णमृग	गेहूँ चोकर मकई दर्रा मूँगफली खल्ली चना चोकर साधारण नमक कुट्टी घास चना सोयामील	200 ग्राम 100 ग्राम 50 ग्राम 25 ग्राम 10 ग्राम 4 किलोग्राम 100 ग्राम	चना पानी में भींगाकर देना है।
20	हाथी	अरवा चावल (मोटा) चना गुड़ साधारण नमक केला (पका) ईख घास पत्ता / डाली / छाल महुआ खीरा / तरबूज	<ol> <li>किलोग्राम</li> <li>किलोग्राम</li> <li>किलोग्राम</li> <li>ग्राम</li> <li>किलोग्राम</li> </ol>	मौसम में। अक्टूबर से फरवरी 15 अप्रैल से 15 जून तक एवं ईख उपलब्ध नहीं रहने पर।
21	बाईसन (गौर)	गेहूँ चोकर बादाम—खल्ली जौ दर्रा चना घास / पत्ता साधारण नमक कुट्टी	<ul> <li>2.5 किलोग्राम</li> <li>500 ग्राम</li> <li>500 ग्राम</li> <li>1 किलोग्राम</li> <li>50 किलोग्राम</li> <li>10 ग्राम</li> <li>5 किलोग्राम</li> <li>5 किलोग्राम</li> </ul>	

		आहार		
क्रम सं0	वन्यप्राणी	सामग्री	मात्रा	अभ्युक्ति
			(प्रति वयस्क)	
22	हिप्पो	गेहूँ चोकर	४ किलोग्राम	
		कुट्टी	10 किलोग्राम	
		केला (पका)	3 किलोग्राम	
		घास गाजर	50 किलोग्राम	
			2 किलोग्राम	
		आलू महुआ	5 किलोग्राम	अक्टूबर से फरवरी
		19*11	500 ग्राम	517Q4X XI PX4XI
23	बन्दर	चना	25 ग्राम	
		चावल	25 ग्राम	भात पकाकर।
		मूँगफली	50 ग्राम	
		अमरूद / खीरा या अन्य	100 ग्राम	मौसम में।
		मौसमी फल		
		गाजर / बैगन	100 ग्राम	
		केला (पका)	500 ग्राम	नीम, चना, सरसो, बरसीम घास या
		पता	25 ग्राम	दुधिया लत्तर का।
				9
		पत्तागोभी	25 ग्राम	
		(वितासामा	25 प्राप	
0.1	<u></u>			
24	लंगूर	चना चावल	50 ग्राम	भात पकाकर।
		्यापल मूँगफली	50 ग्राम 100 ग्राम	पारा अवगवर ।
		अमरूद / खीरा या अन्य	100 ग्राम	मौस में।
		मौसमी फल	100 %11	
		गाजर / बैगन	200 ग्राम	
		केला (पका)	750 ग्राम	
		पता	25 ग्राम	नीम, चना, सरसो, बरसीम घास या
				दुधिया लत्तर का।
		पत्तागोभी	25 ग्राम	
25	सिवेट कैट	केला (पका)	500 ग्राम	
		सेव	100 ग्राम	
		चिकेन	150 ग्राम	
26	अजगर	चिकेन (जिन्दा)	लगभग ८०० ग्राम (एक पीस)	सप्ताह में दो बार –
	(पाईथन)			(हाइबरनेषन अवधि छोडकर)

क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति
27	रसेल वाईपर, सैण्ड बोआ, बैण्डेड करैत, कोबरा, करैत, कीलबैक, ट्रिंकेट, धामिन, वाईपर, कैट स्नेक	एक दिन ओल्ड चिक (जिन्दा) या जीवित एवं स्वस्थ चूहा।	एक पीस	सप्ताह में एक बार — (हाइबरनेषन अवधि छोडकर)
28	मोनीटर लिजार्ड (गोह)	महिषमांस	750 ग्राम	सप्ताह में दो बार (न्यूनतम 3 दिन का गैप)
29	वाटर मोनीटर लिजार्ड	छोटी मछली या चिकेन मीट	250 ग्राम	सप्ताह में तीन बार (न्यूनतम 1 दिन का गैप)
30	रंगीन मोर तथा सफेद मोर	पौल्ट्री फीड पालक साग बर्डमेष प्याज धान	150 ग्राम 50 ग्राम 50 ग्राम 25 ग्राम 25 ग्राम	
31	देशी बतख	धान बर्डमेष	50 ग्राम 50 ग्राम	
32	हिल मैना तथा कोयल	केला (पका) पपीता चना सत्तू	2 पीस 50 ग्राम 50 ग्राम	
33	पेलीकन (हवासील	छोटी मछली (ताजा)	किलोग्राम 1.5 किलोग्राम	अप्रैल से सितम्बर। अक्टूबर से मार्च।
34	देशी हंस (Mute Swan)	बर्डमेष धान चावल	100 ग्राम 150 ग्राम 75 ग्राम	भात पकाकर।
35	लव वर्ड एवं बजरीगर	चिड़ियादाना पालक साग	25 ग्राम 10 ग्राम	
36	तोता	धान सूरजमूखी बीज अमरूद / सेव मूँगफली (छिलका सहित) चना	<ul><li>5 ग्राम</li><li>5 ग्राम</li><li>50 ग्राम</li><li>20 ग्राम</li><li>20 ग्राम</li></ul>	
37	ललमुनिया	चिड़ियादाना पालक साग	5 ग्राम 10 ग्राम	

		आहार		
क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति
38	कोकाटेल	केला (पका) सेव चना पालक साग	2 पीस 100 ग्राम 25 ग्राम 25 ग्राम	
39	White Ibis	चिकेन मीट	175 ग्राम	कीमा बनाकर
40	ब्राह्नी डक	पोल्ट्री फीड पालक साग धान बर्डमेष पालक साग	50 ग्राम 50 ग्राम 50 ग्राम 50 ग्राम 50 ग्राम	
41	तीतर एवं फ्रेंकोलिन	पल्सग्रेन धान चिड़ियादाना लहसुन मकई दर्रा	20 ग्राम 10 ग्राम 25 ग्राम 10 ग्राम 20 ग्राम	
42	गरूड़	चिकेन	700 ग्राम	
43	ग्रेलैग गूज	पोल्ट्री फीड पालक साग बाजरा धान बर्डमेष	50 ग्राम 50 ग्राम 25 ग्राम 50 ग्राम 50 ग्राम	
44	एमू	पोल्ट्री फीड पत्तागोभी / पालक साग सेव केला (पका) पल्सग्रेन पपीता प्याज	500	
45	गोल्डेन फीजेंट सिल्वर फीजेंट कालीज फीजेंट	पोल्ट्री फीड लहसुन धान मकई दर्रा पल्सग्रेन पालक साग	20	
46	मलार्ड डक एवं मैडरिन डक	पोल्ट्री फीड पालक साग धान बर्डमेष	100 ग्राम 50 ग्राम 100 ग्राम 100 ग्राम	

		आहार		
क्रम सं0	वन्यप्राणी	सामग्री	मात्रा (प्रति वयस्क)	अभ्युक्ति
47	सिल्वर फीजेंट	पोल्ट्री फीड धान ल्हसुन मकई दर्रा पल्सग्रेन पालक साग	20	
47	लेडी ऐमहर्स्ट फीजेंट	पोल्ट्री फीड धान ल्हसुन मकई दर्रा पल्सग्रेन पालक साग	20	
48	बड़ा तोता (big Indian parrakit)	केला (पका) अमरूद / सेव मूँगफली सूरजमुखी बीज चना	1 पीस 100 ग्राम 20 ग्राम 5 ग्राम 20 ग्राम	
49	हॉर्नबिल (धनेष)	केला (पका) पपीता सेव चना सत्तू सूरजमुखी बीज	2 पीस 100 ग्राम 50 ग्राम 25 ग्राम 5 ग्राम	
50	जपानीज फिजेंट	पोल्ट्री फीड धान लहसुन मकई दर्श पालक साग	25 ग्राम 10 ग्राम 10 ग्राम 50 ग्राम 20 ग्राम	
51	ग्रास उल्लू	चिकेन मीट	300 ग्राम	
52	यूरेषियन इगल उल्लू	चिकेन मीट	400 ग्राम	
53	शुतुरमुर्ग	पोल्ट्री फीड पता गोभी पालक	<ul><li>2 कि0ग्राम</li><li>1 कि0ग्राम</li><li>1 कि0ग्राम</li></ul>	

## 14. Vaccination Schedule of animals

Sl.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
1	Tiger	Rhinotracheits Calcivirosis Panleucopenia	Fel-o-vax or Ronvac	Yearly	

SI.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
2	Lion	Rhinotracheits Calcivirosis Panleucopenia	Fel-o-vax or Ronvac	Yearly	
3	Leopard	Rhinotracheits Calcivirosis Panleucopenia	Fel-o-vax or Ronvac	Yearly	
4	Elephant	Foot & Mouth Disease	F.M.D Vaccine	Half yearly	

#### 15. De-worming Schedule of animals

Sl.No.	Species	Drug used	Month
1	Lion,	(i) Praziquantel + Pyrantel	Quarterly (February, May,
2	Leopard	Pamoate + Febantel. (ii) Fenbendazole + Ivermectin	August, November)
3	Tiger	(.,, : =::::=::::::::::::::::::::::::::::	
4	Jungle Cat		
5	Jackal		
6	Fox		
7	Palm civet cat		
8	Leopard Cat		
9	Deer, Antelopes Sloth Bear, Himalayan Bear, Indian Gaur, Elephant, Hippopotamus	Fenbendazole + Ivermectin + Albendagole	Quarterly (February, May, August, November)

- Quarterly routine deworming is done with above drugs.
- Routine faecal Examination (Twice in a year i.e. Last week of March or 1st week of April and last week of September or 1st week of October) is done.

#### 16. Disinfection Schedule

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Birds	Aviary/ Pheasantry	Protecsil Sodium Hypochloride	Weekly
2	All Big Cats	Exhibit enclosure Retiring cell Nursery	Protecsil Phenyle, Lime powder	Weekly Daily
3	Deer, Antelopes	Exhibit enclosure	Protecsil Lime powder	Weekly
4	Elephants	Exhibit enclosure Pilkhana	Protecsil Lme powder & Phenyle	Weekly Daily

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

### 18. Development Works carried out in the zoo during the year

Developmental works like overhead water tank, Strengthening of Black buck enclosure, enrichment of black swan enclosure, Vermi composting infrastructure, Strengthening of boundary wall, Visitor amenities etc.

#### 19. Education and Awareness programmes during the year

At present, there is no Education Officer/Curator in Bhagwan Birsa Biological Park, yet different types of zoo education programmes like celebration of wildlife week, Biodiversity Conservation Day, world wildlife day, world environment day etc have been celebrated. Besides these, field training of wildlife health and hygiene for final year veterinary students and refresher training cum visit of forest guards as well as exposure of newly recruited forest guards during 2018-19 were conducted successfully.

During wildlife week (from 2nd October) elocution, essay and painting competitions on various topics related to the wildlife and its conservation were organized involving students of many schools situated in the Ormanjhi Block. Prizes were distributed among winning students.

Govt. of Jharkhand has made mandatory for school children to visit the tourist places in their extracurricular activities. As a result, many schools undertook zoo visit programme for their students during the year. The students were addressed by zoo official and had talk with zoo keepers.

In order to strengthen and diversify the zoo education programme, a modern audio – visual public education centre - cum – library has been built in the zoo premises. It is a two storey building of architectural grandeur. The ground floor of the building has modern audio visual facility while the first floor has library. Wildlife related films are screened to school children on special occasions. The theatre also serves the purpose of conference hall. The library on the first floor is having books & publications related to wildlife.

#### 20. Important Events and happenings – Celebration of

- (i) World Tiger Day
- (ii) Wold Environment Day
- (iii) Earth Day

- (iv) Biodiversity Day
- (v) Wildlife Day
- (vi) Wildlife Week

### 21. Seasonal special arrangements for upkeep of animals

#### Seasonal Special Arrangements in Summer:-

- 1. Grass Thatching in nursery area.
- 2. Jute bag hanging in windows & grill area. Twice or thrice water sprinkling is done in jute bag curtain.
- 3. Glucose & Electrolyte powder is provided in drinking water for animals.
- 4. Seasonal high water containing fruits & vegetables (like, cucumber, Watermelon, musk melon to deer, Antelope & Elephants)
- 5. Arrangement of Air coolers in the retiring cells

#### Seasonal special Arrangements in winter:-

- 1. Jute curtain in all windows & grill doors.
- 2. Arrangement of Electric heater in the retiring cells of carnivore mammals.
- 3. Special arrangements of rolled gunny bags & blankets in shape of tunnel for Brumation /Hibernation of snakes.
- 4. Arrangement of paddy straws bed in rest area of Deers, Antelopes & Elephant.

#### 22. Research Work carried out and publications - NIL

- 23. Conservation Breeding Programme of the Zoo NIL
- 24. Animal acquisition / transfer / exchange during the year

Α.	Animals arriving in the Zoo					
/	H.NO.	Species	Number (M:F)	From which Zoo	Date of arrival in the zoo	
		Asicitic Lion	1:0	Junagarh	31.3.2020	
B.	Animals going from the zoo					
	H.NO.	Species	Number (M:F)	Going to which Zoo	Date of deposition from the zoo	
		Elephant	1:0	Wildlife SoS, Mathura	23.11.2019	
		Leopard Cat	1:1	Neharu Zoological Park, Hydrabad	05.08.2019	
		Banded Krait	1:0	Sakarbagh Zoo Junagarh, Gujrat	05.08.2019	

## 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	3.04.2019	Eum 0:0:3 - (3)	Bokaro	31.03.2020	-	Hand reared
2	24.3.2020	Dove 0:0:8 (8)	Ranchi	31.03.2020	-	Hand reared
3	20.04.2019	Mouse Dear 1:1:0 (2)	D.F.O. Ranchi	31.03.2020	-	Hand reared

## 26. Annual Inventory of animals

### Form - II

[See Rule 11(1)] Part - A

Inventory Report for the Year: 2019-20

#### **Endangered Species\***

S.No.	Animal Name	Scientific name	Opei	ning S	tock a	s on		Births		Ac	quisiti	ion	D	ispos	al		Death		Clos	ing St	ock a	s on
			М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Peafowl Indian	Pavo cristatus	10	7	8	25	-	-	-	-	-	-	-	-	-	-	-	-	10	7	8	25
2	Peafowl White	Pavo cristatus	2	1	4	7	-	-	-	-	-	-	-	-	-	-	-	-	4	3	-	7
3	Hill Mynah igkM+h eSuk	Pseudibis papiliosa	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
4	Hornbi <b>ll</b>	Anthracoleros albirustris	-	-	4	4	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2	2
5	Bear Himalayan Black	Ursus thibetanus	3	4	4	11	-	-	-	-	-	-	-	-	-	1	-	-	6	4	-	10
6	Bear Sloth	Melursus ursinus	6	2	1	9	-	-	-	-	-	-	-	-	-	-	-	-	6	2	1	9
7	Cat Jungle	Felis chaus	5	4	2	11	-	-	2	-	-	-	-	-	-	-	-	-	4	4	5	13
8	Gaur (Bison)	Bos frontalis gaurus	4	1	-	5	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	5
9	Elephant Asiatic	Elephas maximus	2	1	-	3	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	1
10	Langur Common	Semnopithecus ente <b>ll</b> us	2	2	1	5	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	5
11	Leopard / Panther	Panthera pardus	5	3	-	8	-	-	-	-	-	-	-	-	-	-	-	-	5	3	-	8

S.No.	Animal Name	Scientific name	Ope	ning S	itock a	s on		Births		Ac	quisit	ion	D	ispos	al		Death		Clos	ing St	ock a	s on
12	Macaque Rhesus	Macaca mulatta	22	20	9	51	-	-	5	-	-	-	-	-	-	-	-	-	22	20	14	56
13	Deer Barking Muntajac	Muntiacus muntjak	8	17	1	26	-	-	5	-	-	-	-	-	-	1	2	-	10	17	1	28
14	Black Buck	Antilope cervicapra	21	19	5	45	-	-	15	-	-	-	-	-	-	4		-	18	30	8	56
15	Procupine Indian	Hystrix indica	5	5	5	15	-	-	5	-	-	-	-	-	-	-	-	-	5	5	10	20
16	Jackal	Canis aureus	4	4	5	13	-	-	1	-	-	-	-	-	-	-	-	-	4	4	6	14
17	Fox Common	Vulpes bengalensis	1	1	4	6	-	-	4	-	-	-	-	-	-	-	-	-	1	2	7	10
18	Palm Civet Cat	Paradoxurus hermapnroditus	2	-	-	2	-	-	-	-	-	-	-	-	-	1		-	1	-	-	1
19	White black Buck	Antilope cervicapra	4	10	4	18	-	-	4	-	-	-	-	-	-	-	2	-	4	10	6	20
20	Tiger	Panthera tigris tigris	3	4	-	7	-	-	-	-	-	-	-	-	-	-	-	-	3	4	-	7
21	Leopard Cat	Prionailurus bengalensis	3	4	1	8	-	-	-	-	-	-	1	1	-	1	1	-	2	2	-	4
22	Slow Loris	Nycticebus bengalensis	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
23	Indian Giant Squirrel	Ratufa indica	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
24	Mouse Deer	Moschiola indica	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	1	-	2
25	Gharial	Gavialis gangeticus	1	2	37	40	-	-	17	-	-	-	-	-	-	-	-	-	1	2	54	57
26	Crocodile Marsh	Crocodylus palustris	1	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	3
27	Python	Python molurus molurus	1	1	5	7	-	-	-	-	-	-	-	-	-	-	-	-	1	1	5	7
28	Russel's Viper	Viperra russe <b>ll</b> i	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
29	Moniter Lizard	Varanus salvator	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
30	Water Moniter Lizard	Varanus salvator	-	-	2	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	0
31	Cobra Spectacled	Naja naja	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
32	Keel Back	Yenochrophis piscator	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
33	Rat Snake	Ptyas mucosus	1	1	1	3	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	3
34	Kalij pheasant	Lophura leucomela- nos	1	1	-	2	-	-	2	-	-	-	-	-	-	-	-	-	1	1	2	4
35	Dove	Spilopelia chinensis	-	-	-		-	-	-	-	-	8	-	-	-	-	-	-	-	-	8	8
			119	118	121	358			60	1	1	8	2	1	-	10	8		119	131	157	407

<sup>\*</sup>Animals under Schedule I and Schedule II of the Wild Life (Protection) Act, 1972

### Part - B

### Other than Endangered Species

_		,	_							_			_					. <u> </u>	_			
S.No.	Animal Name	Scientific name	Ор	ening	Stock a	as on		3irth:	5	Ac	quisiti	ion	D	ispos	al		Death	1	Clo	sing S	itock a	s on
			М	F	U	Т	М	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
1	Pelican Grey	Pelecanus philippensis	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
2	Love Birds	Melopsittacus undulatus	-	-	134	134	-	-	-	-	-	-	-	-	-	-	1	-	-	-	133	133
3	Common Pariah Kite	Milvus migrans	-	-	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6
4	Eagle	Ichthyophaga ichthyaetus	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
5	Grass Owl	Tyto capensis	-	-	4	4	-	-	-	-	-	-	-	-	-	1	3	-	-	0	0	0
6	Eurasian Owl	Bubo bubo	-	-	5	5	-	-	-	-	-	-	-	-	-	1	2	-	-	-	2	2
7	Emu	Dromaius novaehollandiae	2	5	8	15	-	-	-	-	-	3	-	-	-		1	-	3	5	9	17
8	Golden Pheasant	Chrysolophus pictus	2	2	-	4	-	-	-	-	-		-	-	-	-	-	-	2	2	-	4
9	Parrakeets	The green Prarrakeets	-	-	52	52	-	-	-	-	-		-	-	-	1	2	-	-	-	49	49

S.No.	Animal Name	Scientific name	Ор	ening	Stock a	s on		Birth	5	Ac	quisiti	on	D	ispos	al	ı	Death		Clo	sing S	stock a	s on
10	Lalmuniya	Lonchura Castaneothorax	-	-	382	382	-	-	-	-	-		-	-	-	-	-	-	-	-	382	382
11	Robin	Saxicoloides falicatus	-	-	1	1	-	-	-	-	-		-	-	-	-	-	-	-	-	1	1
12	Koel	Eudynamys scolopacca	-	-	1	1	-	-	-	-	-		-	-	-	-	-	-	-	-	1	1
13	Cocka Teil	Nymphicus hollandicus	2	2	7	11	-	-	-	-	-		-	-	-	1		-	-	-	10	10
14	Budgeriger	Melopsitacus undulatus	1	1	-	2	-	-	-	-	-		-	-	-	-	-	-	1	1		2
15	White Ibis	Threskiornis melanocephalus	3	3	-	6	-	-	-	-	-		-	-	-	1	2	-	2	1	-	3
16	Brahmi duck	Todorna ferrugi	1	1	-	2	-	-	-	-	-		-	-	-	-	-	-	1	1	-	2
17	Titar	Francolinus pondicerianus	-	-	4	4	-	-	-	-	-		-	-	-	-	-	-	-	-	4	4
18	Adjutant stork	Leptoptilos dubrus	-	-	4	4	-	-	-	-	-		-	-	-	1	1	-	-	-	2	2
19	Black frankolin	Francolinus francolinus	-	-	2	2	-	-	-	-	-		-	-	-	-	-	-	-	-	2	2
20	Night Heron	Nycticorax nycticorax	1	1	-	2	-	-	-	-	-		-	-	-	-	-	-	1	1	-	2
21	Grey Heron	Ardea cinerea	1	1	-	2	-	-	-	-	-		-	-	-	-	-	-	1	1	-	2
22	Malard duck	Anas platyrhynchos	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
23	Mandrin duck	Aix galericulata	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
24	Lady Amherst Pheasant	Chrysolophus amherstiac	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
25	Red Japanese Pheasant		1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
26	Ostrich	Strithio camelus	4	3	2	9	-	-	-	-	-	-	-	-	-	-	-	-	4	3	2	9
27	Silver pheasant	Lophura nycthemera	2	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	4
28	Black Swan	Cygnus atratus	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
29	Black Neck Swan	Cygnus melancoryphus	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
30	Red Lory	Eos bornea	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
31	Weaver bird	Ploceus philippinus	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
32	Zebra finch	Taeniopy guttata	-	-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5
33	Java Finch	Padda oryzivora	-	-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5
34	Quail	Coturnix coturnix	-	-	4	4	-	-	2	-	-	-	-	-	-	-	-	-	1	1	4	6
35	Hippopotamus	Hippopotamus amphibius	3	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	4
36	Deer Sambar	Rusa unicolor	10	13	5	28	-	-	5	-	-	-	-	-	-	1	-	-	15	12	5	32
37	Deer Spotted	Axix axis	74	161	20	255	-	-	50	-	-	-	-	-	-	6	4	-	85	170	40	295
38	Hyaena Stripped	Hyaena hyaena	4	3	2	9	-	-	3	-	-	-	-	-	-	-	-	-	4	3	5	12
39	Asiatic Lion	Panthera leo	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	1	-	2
40	Lion Hybrid	Panthera leo	1	2	-	3	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	2
41	Nilgai	Boselaphus Tragocamelus	5	10	3	18	-	-	3	-	-	-	-	-	-	1	2	-	5	10	3	18
42	Wild Boar	Sus scrofa	2	3	-	5	-	-	-	-	-	-	-	-	-	-	-	-	2	3		5
43	Sand Boa	Eryx conicus	1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	4
44	Banded Karait	Bungarus fasciatus	-	-	2	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1
45	Karait	Bungarus caeruleus	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
46	Trinket Snake	Coelognathus helena	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
47	Green pit viper	Trimeresurus gramineus	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
48	Cat Snake	Boiga trigonata	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
49	Sand Boa red	Eryx johni	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
50	Tortoise Indian Star	Geochelone elegans	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
			126	219	676	1021	-	-	63	1	1	3	-	-	1	14	19	-	142	224	689	1055



















# 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	Love Bird	Melopsittacus undulatus	F	06.04.2019	Cardio-respiratory failure as a result of Enteritis & respiratory tract infection.
2	Spotted Deer	Axix axis	М	07.04.2019	Cardio-respiratory failure as a result of infighting between males.
3	Barking Deer	Muntiacus muntjak	F	09.04.2019	Cardio-respiratory failure as a rresult of fetal toxaemia with nephritis.
4	Nilgai (Blue bull)	Boselaphus tragocamelus	М	12.04.2019	Cardio-respiratory as a result of snake envenomation.
5	Black buck	Antelope cervicapra	М	25.04.2019	Cardio-respiratory failure due to punctured wound in lung, injury as a result of infighting between males.
6	Spotted Deer	Axix axis	М	14.05.2019	Cardio-respiratory failure as a result of pulmonary insufficiency might be due to broncho-carcinoma.
7	Barking Deer	Muntiacus muntjak	М	16.05.2019	Cardio-respiratory failure due to infighting.
8	Himalyan Black Bear	Ursus thibetanus	М	01.06.2019	Cardio-respiratory failure as a result of suspected snake bite.
9	Spotted Deer	Axix axis	F	09.06.2019	Cardio-respiratory failure as a result of neurogenic shock.
10	Black buck	Antelope cervicapra	М	11.07.2019	Cardio-respiratory failure as a result of septicaemia & nephritis.
11	Barking Deer	Muntiacus muntjak	F	22.08.2019	Cardio-respiratory in old age.
12/14	Parakeets - (3)	The green Prarrakeets	M-1 F-2	23.08.2019	Death due to severe enteritis.
15/16	Water Monitor Lizard	Varanus salvator	F-2	29.08.2019	Death due to fracture of vertibrae & neurogenic shock.
17	Hybrid Lion	Panthera leo	F	06.09.2019	Cardio-respiratory failure from snake envenomation and multiorgan failure.
18	Nilgai (Blue bull)	Boselaphus tragocamelus	F	16.09.2019	Cardio-respiratory failure due to head injury, fracture of neck bone and neurogenic shock.
19	Black buck	Antelope cervicapra	М	18.09.2019	Cardio-respiratory failure as a result of pneumonia & nephritis in old age.
20	Albino Black buck	Antelope cervicapra	F	22.09.2019	Cardio-respiratory failure due to chronic liver dysfunction.
21	Nilgai (Blue bull)	Boselaphus tragocamelus	F	24.09.2019	Cardio-respiratory failure as a result of suspected hepatocellular carcinoma and obstructed cystic duct.
22	Albino Black buck	Antelope cervicapra	F	28.09.2019	Cardio-respiratory failure as a result of pneumonia & nephritis.
23	Sambar	Rusa unicolor	М	28.09.2019	Cardio-respiratory failure as a result of infighting.
24	Hornbill	Anthracoleros albirustris	М	28.09.2019	Death due to cardiac-arrest as result of infighting.
25	Spotted Deer	Axix axis	М	29.09.2019	Cardio-respiratory failure due to nephritis in old age.
26	Black buck	Antelope cervicapra	М	17.10.2019	Cardio-respiratory failure due to severe gastritis & enteritis.
27	Spotted Deer	Axix axis	F	26.10.2019	Cardio-respiratory failure due to pneumonia in old age.
28	Spotted Deer	Axix axis	F	20.11.2019	Cardio-respiratory failure due to pneumonia & enteritis in old age.
29	Leopard Cat	Felis bengalensis	М	08.12.2019	Cardio-respiratory failure as a result of urinary tract infection & pulmonary infection in old age.
30	Emu	Dromaius novachollandiae	F	09.01.2020	Cardio-respiratory as a result of enteritis.

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
31	Spotted Deer	Axix axis	М	09.01.2020	Cardio-respiratory failure due to infighting.
32	Spotted Deer	Axix axis	F	18.01.2020	Cardio-respiratory failure as a result of neurogenic shock during Parturition.
33	Spotted Deer	Axix axis	М	07.02.2020	Cardio-respiratory failure due to cardiac tamponade.
34	Cockatiel	Nymphicus hollandicus	М	12.02.2020	Death appears to be due to injury by predator.
35/37	White Ibis	Threskiornis melanocephalus	M-1 F-2	23.02.2020	Death appears to be due to acute viral infection.
38/39	Lesser Adjutant stork (2)	Leptoptilos dubrus	M-1 F-1	23.02.2020	Death appears to be due to acute viral infection.
40/42	Grass Owl (3)	Tyto capensis	F-3	23.02.2020	Death appears to be due to pneumo-enteritis.
43	Eurasian Eagle Owl	Bubo bubo	F	23.02.2020	Death appears to be due to Cardio-respiratory failure as a result of pneumonia & septicemia.
44	Indian palm civet cat	Paradoxurus hermapnroditus	М	23.02.2020	Death appears to be due to haemorrhagic ulcerative gastritis.
45	Lesser Adjutant stork	Leptoptilos dubrus	М	25.02.2020	P.M. not done as these are suspected to be Avian influenza.
46	Grass Owl	Tyto capensis	F	25.02.2020	P.M. not done as these are suspected to be Avian influenza.
47/48	Eurasian Eagle Owl	Bubo bubo	M-1 F-1	25.02.2020	P.M. not done as these are suspected to be Avian influenza.
49	Spotted Deer	Axix axis	М	26.02.2020	Cardio-respiratory failure as a result of traumatic shock during infighting.
50	Leopard Cat	Felis bengalensis	F	10.03.2020	Cardio-respiratory failure as a result of ascites and hydrothorax as well as septicaemia.
51	Elephant	Elephas maximus	M	12.03.2020	Cardio-respiratory failure as a result of wide spread haemorrhagic lesion in vital organs, specially heart, as well as severe gaseous dilatation. Lesions are suggestive of EEHV infection and finally confirmed positive for EEHV infection based on PCR using Elephant endotheliotropic herpesvirus terminase gene primers.

# 28. Compliance with conditions stipulated by the Central Zoo Authority

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
1	10.1(7)	The zoo should have proper and appropriate arrangements for managing solid and liquid waste and storm water with no adverse impact on the surrounding environment.			Proper arrangements have been made for management of waste & storm water. Further an expert/consultant will be engaged to assist the park authority.
2	10.1(7)	The cage for red and other Munias, Weaver birds and doves are not suitable for these birds. The birds should be shifted to appropriate cage with earth or sand flooring and branches for perching. The number of birds in cage should be restricted to not more than 15 small birds in one cage.			Complied
3	10.2(2)	Appropriately qualified persons should be put in place to carry out the functions of Biologist.			We are in the process of engaging a Biologist Permission has been obtained from the governing body.

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
4	10.2(2)	Appropriately qualified persons should be put in place to carry out the functions of Education Officer.			We are in the process of engaging an Education Officer.
5	10.2(2)	The zoo should post an official with a Master's degree in Wildlife Science/Zoology as a full time Curator, solely responsible for looking after the upkeep of animals and maintenance of animal enclosures.			The Mater will be placed before the governing body.
6	10.2(3)	In case of the scientific and technical posts are to be filled up by direct recruitment, the Recruitment Rule for such posts should provide for their carrier progression including the benefit of flexible complementing scheme for their promotions.			The post will be filled on contract basis.
7	10.3(1)	The water bodies inside the zoo should be properly maintained to attract free living water birds.			Complied
8	10.3(6)	If the rescued animal pertains to an endangered species, a report should be sent to the Central Zoo Authority.			Complied from time to time
9	10.4(6)	The enclosure of Hornbill should be improved as suggested in the last evaluation.			Complied
10	10.4(10)	The Zoo Operator should ensure that every enclosure in the zoo should bear a sign board displaying scientific information regarding the animals exhibited in it.			Complied
11	10.5(1)	There should be provision of footbath of adequate size with proper disinfectant at entry and exit points of all animal houses.			Complied
12	10.5(1)	The zoo should have a sufficient size functional freezer in the meat processing facility for storage of meat products and to keep cold until it is fed.			Complied
13	10.5(2)	The feed store should be made rodent proof and food items should be kept on platform to avoid deterioration of food due to moisture etc.			Complied
14	10.5(2)	Properly designed meat processing room should be constructed at a reasonable distance from the food store with proper drainage facilities.			Complied
15	10.5(2)	The meat handlers entering the facility should change into a clean and disinfected boots and coveralls.			Complied
16	10.5(2)	The meat handlers should use clean gloves when handling the meat.			Complied
17	10.5(2)	The keepers should use clean gloves, while they handle the meat prior to feeding animals.			Complied
18	10.5(10)	The Zoo should make arrangements for recording in writing the detailed information about biological behaviour, population dynamics and veterinary care of the animals exhibited, so that a detailed database can be developed. This database should be exchanged with other zoos as well as the Central Zoo Authority.			Database & Veterinary care is maintained and other aspect will be complied in due course.
19	10.6(1)	The existing Veterinary Hospital of the zoo is in very bad shape. The zoo should have an appropriate full-fledged veterinary unit with all basic diagnostic facilities, pharmacy, diagnostic and treatment room, comprehensive range of drugs, operation theatre and in-patient wards.			Complied
20	10.6(6)	The Zoo should provide one qualified Lab Assistant and Compounder for assisting the Senior Veterinary Officer/ Veterinary Officer in healthcare of zoo animals.			Experienced compounder is in place
21	10.6(3)	The zoo should have basic dental instruments.			Will be complied

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
22	10.6(3)	The zoo should post one qualified Lab. Assistant to assist the Veterinarian of the zoo.			Will be complied
23	10.6(6)	The zoo should have formal MoU with the Veterinary College, B.A.U. Ranchi at the earliest for healthcare of zoo animals with following objectives Assistance in scientific diagnosis of diseases of serious nature and advice on the effective remedial treatment. Training and upgrading technical skills of animal health staff. Development of protocols for preventive medicines and vaccination.			Will be complied
24	10.7(2)	The zoo veterinarian should have specialized knowledge and skills in wildlife pathology. He should be deputed for such skill development.			Complied
25	10.7(2)	The zoo should have an appropriate incinerator for disposal of animal carcass in an environment friendly manner.			Complied
26	10.9(1)	The Zoo should keep in collection only such numbers and species for which appropriate housing facility exists. The zoo operator shall be responsible for ensuring that the number of animals of any species does not go beyond the carrying capacity of the enclosures available in the zoo and housing standards are not compromised for keeping the excessive numbers. The animals in excess number at the zoo such as Sambar, Spotted deer, Barking deer, Striped Hyaena, Blue bull, Indian porcupine, Emu, Love birds, Pea fowl, Black buck, Jungle cat, Jackal, Rhesus macaque, Gharial, Spotted munia, Parakeets etc. Should be shifted to other recognised zoos in consultation with the Central Zoo Authority.			Exchange of Surplus animal is done from time to time.
27	10.9(9)	The Zoo Operator should take necessary steps to safeguard against uncontrolled growth in the population of species like Sambar, Spotted deer, Barking deer, Gharial, Rhesus macaque etc. By adopting appropriate population control measures.			Appropriate population control measures will be adopted from time to time based on requirement.
28	10.9(4)	The zoo should acquire mates for single and unpaired animals on priority basis and in the event of the zoo failing to find a mate for single and unpaired animal within a period of six months, the unpaired or single animal should be transferred or exchanged or given on breeding loan to any other zoo in accordance with the norms specified by the Central Zoo Authority in this regard.			Will be complied
29	10.9(4)	The zoo should provide mates for the single animal species such as Eagle, Koel, Indian Robin, Joans Boa, Cat Snake, Trinket snake, Lorry and Black Necked Swan.			Will be complied
30	10.10(1)	The zoo should prepare a detailed Research Plan for the zoo and execute it with the help of the Biological and Research Scholars. An MoU should be signed in this regard with eminent Biological Research Institutions.			Will be complied

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

- a. Mammals Jackal, Jungle cat, Bat, Squirrel etc.
- b. Birds Crow, Common mynah, Eagle, Pariah kite, Grass Owl, Haril, Dove, Munia, Bush lark, Francolin etc
- c. Reptiles Rat Snake, Russell's Viper, Cobra, Banded Krait, python, Kariat, keel back, Chamallion etc.



















# BHAGWAN BIRSA BIOLOGICAL PARK, ORMANJHI, RANCHI JHARKHAND ZOO AUTHORITY

(Registered under the Society Registration Act, 1860 vide Registration number 143/2010-11)

The Department of Forests, Environment & Climate Change

Govt. of Jharkhand

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