

INDIRA GANDHI PARK ZOO & DEER PARK

**Annual Report for the year**

**2019-20**



HORTICULTURE DEPARTMENT  
ROURKELA STEEL PLANT, ROURKELA

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## 1. Report of Officer-in-Charge

Indira Gandhi Park Zoo & Deer Park under Rourkela Steel Plant, Steel Authority of India Limited is a live museum of live flora and fauna. The ambience and its natural environment have made the park and zoo unique with a back drop of the Durgapur Hill of Chhotanagpur Plateau. The second largest zoo of Odisha has a head count of 168 mammals, 71 aves and 08 reptiles. During the year 2019-20, the completion of the boundary wall, renovation of aviary and an ultra-modern zoo veterinary hospital with all features and amenities have been constructed. The hospital caters the needs of all veterinary requirements including treatment, post operative care and operation theatre with AC facilities. Amongst the added features, boating and toy train is providing additional recreational facilities to the visitors thronging to the park.

Project for construction of a zoo interpretation centre is underway and a proposal for construction of a cable car from I.G. Park to Durgapur Hill range is in pipe line. Due to COVID-19 pandemic, the zoo including the park was closed to prevent spread of the disease since 16/03/2020. Since then, disinfection schedule is being strictly adhered to maintain the zoo in healthy and hygienic condition by following all the guidelines of State and Central Government as well as of Central Zoo Authority. Regular spraying of virucidal agent inside the animal enclosures, intermittent spraying of hypochlorite solution in open areas and roads were taken up. Checking of all the personnels involved in zoo management including the keepers were regularly taken up as a bio-security measure. Sterilization of the vehicles carrying feed items was a feature at the main gate. All perishable feed materials like fruits, vegetables, milk packets, eggs, fishes, etc. procured on daily basis were being washed thoroughly on 1.0 % KMnO<sub>4</sub> solutions after receiving the materials.



DR. AVIJIT BISWAS  
SENIOR VETERINARY OFFICER & I/C

## **2. History of the Zoo**

A Botanical Garden was established in the early 1960's, and a few species of birds and some spotted deer were given place there. It was subsequently christened as Indira Gandhi Park Zoo. With passage of time, new species were introduced to the collection and was given recognition by Central Zoo Authority in the year 1995 as Mini Zoo and subsequently in addition of animals and other related facilities further recognized as a Small Zoo.

Indira Gandhi Park Zoo is situated in the centre of Rourkela city, the industrial capital of Odisha on the Howrah Mumbai Railway line. It owes its splendor to the natural surroundings of the Chhotanagpur hill range amidst the tranquil environs and soothing natural beauty with a small lake. Indira Gandhi Park Zoo is spread over an area of 50 acres where six varieties of mammals, thirteen varieties of birds and four varieties of reptiles are housed for conservation as well as education for the visitors.

## **3. Vision**

To achieve the distinction of an outstanding zoo through conservation, education, research and spreading awareness for wildlife protection with exciting visitor experiences by connecting people to biodiversity conservation.

## **4. Mission**

Develop amongst visitors' an empathy for wild animals and motivate them to support the cause of conservation of wildlife and also to provide holistic nature conservation education with wholesome recreation.

## **5. Objective**

- a. To provide a glimpse of some of the flora and fauna of the region
- b. To maintain a natural ecosystem in the Steel Township
- c. To provide awareness on conservation and education among all

## **6. About us**

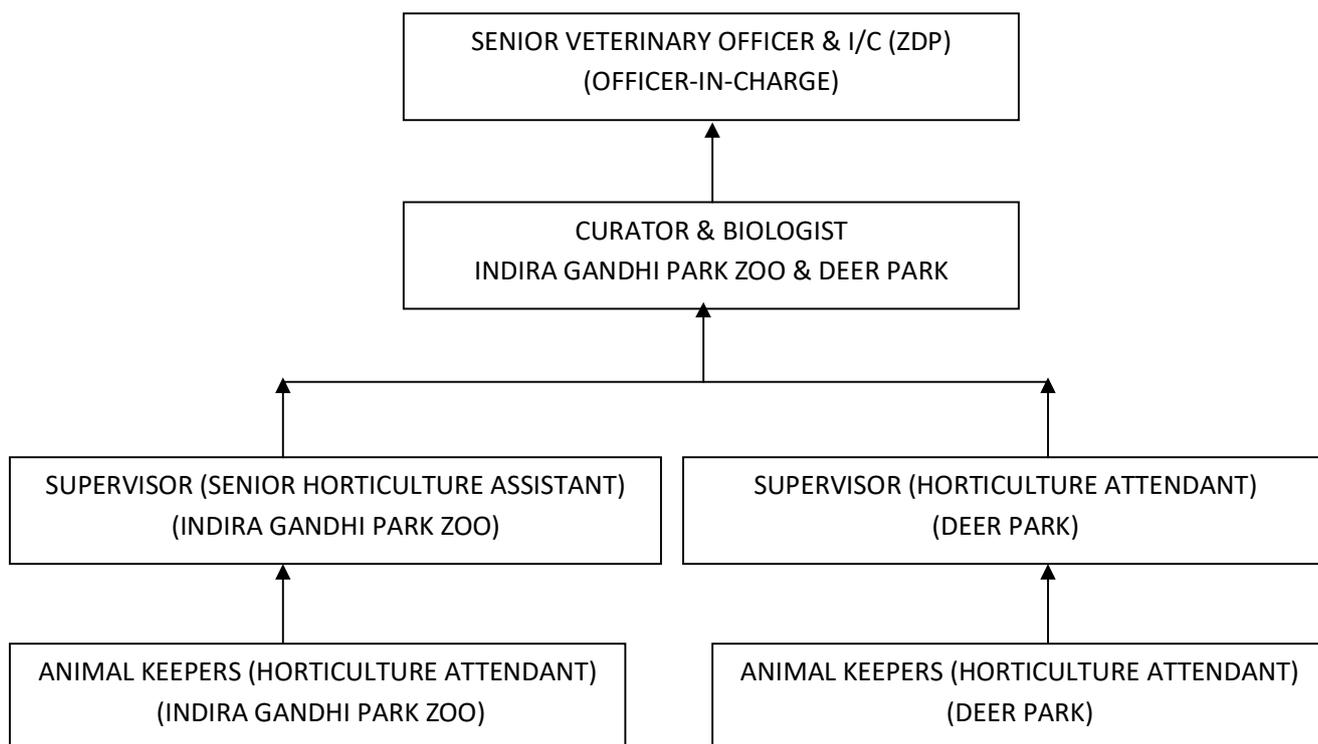
Indira Gandhi Park Zoo and Deer Park is one of the major conservation centre for wild animals in Western Odisha. The prime objective of the zoo is to spread awareness on Conservation of wild fauna among the common public. The Zoo boasts of a landscape with soft green grasses, the glossy leaves of varied bushes, the canvas of canopies of a good collection of trees, the colorful beds of seasonal and perennials, beautiful roses of more than 150 different varieties. It is a pleasure to loosen up amidst nature in the serene surroundings. Animals like the crocodile, Indian rock python, gharial, barking deer, sambar and spotted deer, four horned antelope and birds like the Indian peafowl, white ibis, varieties of pheasants, exotic birds like love birds, budgerigar, cockatiels, blue and gold macaws, emus and ostriches are the major attractions for the visitors. A 'Zoo Aquarium' with 16 aquarium boxes houses different ornamental fishes is an additional feature enriching the zoo.

Deer Park is another unit of Indira Gandhi Park Zoo situated at Sector-8, Rourkela amidst dense vegetation and simulated habitat. The Deer Park is housed only spotted deer species for conservation and visitor awareness. The Deer Park was dedicated to the public by Sri V. Krishnamurthy on 16.02.1989, the then Chairman of Steel Authority of India Limited. Initially, the deer population was increasing more than hundred due to successful breeding among themselves.

Sl. No.	Particulars	Information
<b>Basic Information about the Zoo</b>		
1	Name of the Zoo	Indira Gandhi Park Zoo & Deer Park
2	Year of Establishment	16.08.1995
3	Address of the Zoo	Rourkela Steel Plant, Horticulture Department, Sector – 4 Rourkela – 769002
4	State	Odisha
5	Telephone No.	0661-2439563
6	Fax No.	+91 661 2600058
7	E-mail address	<a href="mailto:indiragandhizoo-cza@cza.nic.in">indiragandhizoo-cza@cza.nic.in</a> <a href="mailto:avijit.biswas@sail.in">avijit.biswas@sail.in</a>
8	Distance from nearest	Airport: 7.0 KM (Rourkela Airport) Railway Station: 5.0 KM (Rourkela Railway Station) Bus Stand: 4.0 KM (Main Bus Stand)
9	Recognition Valid upto	17.10.2020 (Applied for Renewal of Recognition)
10	Category of zoo	Small Zoo
11	Area (in Hactares)	20.0
12	Number of Visitors	Adult: 4,55,410 nos.
13	Visitor facilities available in Zoo	Children: Free entry below 5 years (No data available) Total Indian: 4,55,410 Nos. Total Foreigners: (No data available) Total Visitors: 4,55,410 Nos. Aquarium, Musical Fountain, Boating in lake, Toy train, Watch Tower, Doll Museum, Childrens' Play Arena, Restaurant, Refreshment kiosks, Drinking Water Kiosks, Sit Outs and Rain Shelters, etc.
14	Weekly Closure Day of the Zoo	Monday

<b>Management Personnel of the Zoo</b>		
16	Name with designation of the Officer –in –Charge	Dr. Avijit Biswas, Senior Veterinary Officer & I/c (ZDP)
	Name of the Veterinary Officer	Dr. Avijit Biswas
	Name of the Curator	Dr. Satyanarayan Mishra
	Name of the Biologist	Dr. Satyanarayan Mishra
	Name of the Education Officer	None
	Name of the Compounder/ Lab Assistant	K.C. Soren (on contractual basis)
<b>Owner/ Operator of the Zoo</b>		
17	Name of the Operator	Chief Executive Officer, Rourkela Steel Plant
18	Address of the Operator	Office of CEO, Rourkela Steel Plant, Rourkela – 769 011, Odisha
19	Contact details/Phone Number of Operator	+91 661 2513318
20	E-mail address of Operator	ceo.rsp@sail.in

## 7. Organisational Chart



8. Human Resources

Sl. No.	Designation	Number of Posts	Names of the Incumbents
1	Officer-in-Charge	1	Dr. Avijit. Biswas
2	Veterinary Officer	1	Dr. Avijit. Biswas
3	Curator	1	Dr. Satyanarayan Mishra
4	Biologist	1	Dr. Satyanarayan Mishra
5	Compounder/Stockman	1	1
6	Supervisor	2	1
7	Animal Keeper	9	6
8	Ticket collector	2	2
9	Security Personnel	19	14
10	Gardener (Horticulture Attendant)	3	3

9. Zoo Advisory Committee

- a. Date of Constitution: 01.09.2007
- b. Members: Divisional Forest Officer, Rourkela Forest Division, Rourkela  
Honorary Wildlife Warden of Sundargarh District  
DGM I/c, Town Services / DGM , Sports & Horticulture  
Head of Civil, Town Engineering  
Head of Horticulture  
Veterinary Officer / Officer I/c Zoo & Deer Park (Convener)
- c. Dates on which Meetings held during the year: NIL

10. Health Advisory Committee

Health Advisory Committee was not formed.

11. Statement of income and expenditure of the Zoo

YEAR	REVENUE GENERATION (Rs.)	EXPENDITURE (Rs.)
2019-20	45,54,100.00	92,62,920.00

12. Daily feed schedule of animals

Sl. No.	Name of the Species	Diet	Qty. in KG/Day/ Individual		Day of fasting
			Winter	Summer	
MAMMALS					
01	Sambar	Deer Mash	3.000	3.000	NIL

		Green Grass	15.000	15.000	
			<b>18.000</b>	<b>18.000</b>	
02	Spotted Deer	Deer Mash	1.000	1.000	NIL
		Green Grass	10.000	10.000	
			<b>11.000</b>	<b>11.000</b>	
03	Barking Deer	Deer Mash	0.500	0.500	NIL
		Green Grass	10.000	10.000	
			<b>10.500</b>	<b>10.500</b>	
04	Chowsingha	Deer Mash	0.500	0.500	NIL
		Bengal gram	0.100	0.100	
		Green Grass	10.000	10.000	
			<b>10.600</b>	<b>10.600</b>	
05	Rhesus monkey	Rice (boiled)	0.050	0.050	NIL
		Vegetables	0.400	0.400	
		Fruits	0.500	0.500	
		Peanut	0.050	0.050	
			<b>1.000</b>	<b>1.000</b>	
06	Common Mongoose	Rice	0.030	0.030	NIL
		Small fish	0.200	0.200	
			<b>0.230</b>	<b>0.230</b>	
BIRDS					
07	Indian peafowl	Paddy	0.075	0.075	NIL
		Bengal gram	0.020	0.020	
		Poultry feed	0.010	0.010	
		Wheat	0.025	0.025	
		Vegetables	0.100	0.100	
		Jowar	0.020	0.020	
		Bajra	0.020	0.020	
		Egg (nos.)	0.500	0.500	
			<b>0.770</b>	<b>0.770</b>	
08	Hill Mynah	Fruits	0.100	0.100	NIL
		Rice	0.030	0.030	
			<b>0.130</b>	<b>0.130</b>	
09	Rosy pelican	Small fish	<b>1.000</b>	<b>1.000</b>	NIL
10	White Ibis	Small fish	<b>0.150</b>	<b>0.150</b>	NIL
11	Parakeet	Paddy	0.025	0.025	NIL

		Bengal gram	0.010	0.010	
		Fruits	0.150	0.150	
		Gota Moong	0.010	0.010	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
			<b>0.197</b>	<b>0.197</b>	
12	Golden pheasant	Paddy	0.025	0.025	NIL
		China dana	0.015	0.015	
		Poultry feed	0.005	0.005	
		Wheat	0.020	0.020	
		Vegetable	0.100	0.100	
		Gota Moong	0.050	0.050	
		Maize whole seed	0.020	0.020	
		Jowar	0.020	0.020	
		Bajra	0.025	0.025	
		Sunflower	0.020	0.020	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
		Egg (nos.)	0.500	0.500	
			<b>0.802</b>	<b>0.802</b>	
13	Lady amhrest's pheasant	Paddy	0.025	0.025	NIL
		China dana	0.015	0.015	
		Poultry feed	0.005	0.005	
		Wheat	0.020	0.020	
		Vegetable	0.100	0.100	
		Gota Moong	0.050	0.050	
		Maize whole seed	0.020	0.020	
		Jowar	0.020	0.020	
		Bajra	0.025	0.025	
		Sunflower	0.020	0.020	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
		Egg (nos.)	0.500	0.500	
			<b>0.802</b>	<b>0.802</b>	
14	Budgerigar	Paddy	0.010	0.010	NIL
		China dana	0.005	0.005	
		Poultry feed	0.005	0.005	
		Sunflower seed	0.005	0.005	

		Red millet	0.002	0.002	
		Niger	0.002	0.002	
		Canary seed	0.002	0.002	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
			<b>0.033</b>	<b>0.033</b>	
15	Love bird	Paddy	0.010	0.010	NIL
		China dana	0.005	0.005	
		Poultry feed	0.005	0.005	
		Sunflower seed	0.005	0.005	
		Red millet	0.002	0.002	
		Niger	0.002	0.002	
		Canary seed	0.002	0.002	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
			<b>0.033</b>	<b>0.033</b>	
16	Cockatiel	China dana	0.015	0.015	NIL
		Poultry feed	0.005	0.005	
		Wheat	0.010	0.010	
		Sun Flower Seed	0.005	0.005	
		Red Millet	0.008	0.008	
		Niger	0.008	0.008	
		Cannery seed	0.008	0.008	
		Grit	0.001	0.001	
		Cuttlefish bone	0.001	0.001	
			<b>0.061</b>	<b>0.061</b>	
17	Emu	Vegetables	0.875	0.875	NIL
		Fruits	0.500	0.500	
		Maize Seed	0.630	0.630	
		Egg (1 no. each)	0.050	0.050	
			<b>2.055</b>	<b>2.055</b>	
18	Ostrich	Ostrich Feed Mash	2.500	2.500	NIL
		Egg (1 no. each)	0.050	0.050	
			<b>2.550</b>	<b>2.550</b>	
19	Blue and Gold Macaw	Fruits	0.250	0.250	NIL
		Peanut	0.050	0.050	
		Gota Moong	0.050	0.050	
		Sun flower seed	0.050	0.050	

		Egg (0.5 no)	0.025	0.025	
			<b>0.425</b>	<b>0.425</b>	
<b>REPTILES</b>					
20	Gharial	Big Fish	<b>1.500</b>	<b>1.500</b>	<b>TUE, THU &amp; SAT</b>
21	Mugger	Chicken	<b>1.500</b>	<b>1.500</b>	<b>TUE, THU &amp; SAT</b>
22	Indian Rock Python	Chicken	<b>1.250</b>	<b>1.250</b>	<b>EXCEPT MONDAY</b>

### 13. Vaccination & De-worming Schedule of animals

SL. NO.	NAME OF VACCINE/PROPHYLAXIS MEASURES	SPECIES	PERIODICITY
1	RANIKHET F1 STRAIN VACCINE	AVIAN	6 MONTHS
2	DEWORMING MEASURES	HERBIVORE	3 MONTHS
3	DEWORMING MEASURES	AVIAN	3 MONTHS
4	DEWORMING MEASURES	REPTILES	3 MONTHS
5	DEWORMING MEASURES	HIBERNATING REPTILES	5 MONTHS

### 14. Disinfection Schedule

ITEMS NO.	DESCRIPTION OF JOB	PERIODICITY
I	Cleaning & sweeping of enclosures	DAILY
II	Cleaning and scrubbing of Water pots and feeding pots	DAILY
III	Potassium Permanganate washing of floors and water/feed pots	15 DAYS
IV	Colour washing with lime colour	6 MONTHS
V	Cleaning of Water body or Dry Moat.	3 MONTHS
VI	Change of Potassium Permanganate solution in Foot Bath	DAILY
VII	Change of Lime treated sand after monsoon	6 MONTHS
VIII	Removal of floating matters and leftover feed	15 DAYS
IX	Refilling of water and cleaning of weeds	15 DAYS
X	Spraying of washing soda inside enclosure	1 MONTH

XI	Spraying of bleaching powder outside enclosure	7 DAYS
XII	Cleaning of feeding cubicles and chamber with Kohorsolin	1 MONTH
XIII	Cleaning of weeds around periphery of enclosure	1 MONTH

15. Health Check-up of employees for zoonotic diseases

The following employees of Indira Gandhi Park Zoo & Deer Park have been screened against zoonotic diseases on 29.01.2020 at Ispat General Hospital, Rourkela

Sl. No.	Name	Designation	Date of Health Check up	Findings of Health Check up
1	Dr. Avijit Biswas	Sr. Vet. Off. & I/c (ZDP)	29.01.2020	Good Health
2	Dr. S. Mishra	Curator & Biologist	29.01.2020	Good Health
3	Sri Hema Mishra	Sr. Hort. Assistant	29.01.2020	Good Health
4	Sri Gujuru Lohar	Hort. Attendant	29.01.2020	Good Health
5	Sri Kartik Nayak	Hort. Attendant	29.01.2020	Good Health

16. Development Works carried out in the zoo during the year

Different maintenance and development works were undertaken at IG Park Zoo during the year. Among the others, the following are some of the development activities during the year 2019-20.

- a) Construction of Zoo Hospital with all facilities for treatment and healthcare of zoo inmates.
- b) Construction of Interpretation Centre has been started at the entrance of IG Park.
- c) Construction of separation of service path and visitor path for the animal enclosures
- d) Elevation of 400 m of the perimeter wall to a height of 2.0 m from ground level on both sides
- e) Repair work of chain-link mesh, MS iron structures and colour painting of iron structures of Aviary.

17. Education and Awareness programmes during the year

Indira Gandhi Park Zoo is one of the major places for the students to learn about wildlife conservation in the western part of Odisha. Zoo Education Programme is a regular affair of the zoo activities every year. During the year 2019-20, more than 700 students took part in the zoo education programme in different occasions.

18. Seasonal special arrangements for upkeep of animals

Special arrangement for the zoo animals are taken care during scorching summer and hardest winter periods. During summer, different animals were provided with extra shed to beat the heat. The zoo management ensures the potable available in all enclosures. Additionally, electrolyte powder was provided to the birds to prevent dehydration. Gunny sheets were provided to pheasants with spraying water on it is one among the daily activities during the summer period. Moreover, desert coolers were provided to different animals like, macaque, pheasants, macaws. The rest sheds were provided covered with hay to reduce direct effect of heat during the hot summer. To monitor temperature of the enclosure area, thermometers were installed for vigil observation.

During the hardest winter of the year, reptiles and avian species are cared most to survive against the cold. Straws are being provided to Indian rock pythons to stimulate the hibernation activities. Basking area is being provided to mugger and gharial with sand bank in the enclosures. External heat sources were provided to the birds like macaws, budgerigars, love birds, cockatiels during the night time to get additional heat.

19. Research work carried out and publication

Students of degree college of Rourkela had undertaken research project for their curriculum at Indira Gandhi Park Zoo. The students focused on different faunal diversity in captivity as well as free ranging wildlife. During the year, 6 nos. of students of Ispat Autonomous College, Sector – 16, Rourkela had undertaken short-term research projects as follows:

Sl. No.	Name of the Student	Class	Title of Project Work
1	Ms. Chitrasmita Behera Ms. Pragnya Rani Pradhan Ms. Janhavi Tajan Ms. Monali Manjari Seth Ms. Niharika Majhi Ms. Usha Rani Patra	+3 Final Year	Study of animal behavior at Indira Gandhi Park Zoo, Rourkela

## 20. Annual Inventory of animals

ENDANGERED SPECIES

S. No.	Animal Name	Scientific Name	Opening Stock as on 01.04.2019				Births			Acquisitions			Disposal			Deaths			Closing Stock as on 31.03.2020			
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
	<b>Birds</b>																					
1	Common Pea fowl	<i>Pavo cristatus</i>	3	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	4
	Hill Mynah	<i>Gracula religiosa</i>	-	-	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	<b>Total Birds</b>		<b>3</b>	<b>1</b>	<b>1</b>	<b>5</b>	-	-	-	-	-	-	-	-	-	-	-	<b>3</b>	<b>1</b>	-	<b>4</b>	
	<b>Mammal</b>																					
1	Four-horned antelope	<i>Tetracerus quadricornis</i>	3	6	1	10	-	-	-	-	-	-	-	-	-	-	-	3	6	1	10	
3	Common Mongoose	<i>Herpestes edwardsii</i>	3	3	-	6	-	-	-	-	-	-	-	-	-	-	-	3	3	-	6	
4	Rhesus macaque	<i>Macaca mulatta</i>	2	1	-	3	-	-	-	-	-	-	-	-	-	-	-	2	1	-	3	
	<b>Total Mammals</b>		<b>8</b>	<b>10</b>	<b>1</b>	<b>19</b>	-	-	-	-	-	-	-	-	-	-	-	<b>8</b>	<b>10</b>	<b>1</b>	<b>19</b>	
	<b>Reptile</b>																					
1	Crocodile(Mugger)	<i>Crocodylus palustris</i>	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	
2	Gharial	<i>Gravialis gangeticus</i>	1	2	-	3	-	-	-	-	-	-	-	-	-	-	-	1	2	-	3	
3	Python	<i>Python molurus</i>	1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	1	-	2	3	
	<b>Total Reptiles</b>		<b>3</b>	<b>3</b>	<b>2</b>	<b>8</b>	-	-	-	-	-	-	-	-	-	-	-	<b>3</b>	<b>3</b>	<b>2</b>	<b>8</b>	

OTHER SPECIES

S. No.	Animal Name	Scientific Name	Opening Stock as on 01.04.2019				Births			Acquisitions			Disposal			Deaths			Closing Stock as on 31.03.2020					
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
	<b>Birds</b>																							
1	White Ibis	<i>Threskiornis threskiornis</i>	1	-	-	1										1								
2	Parakeet	<i>Psittacula sp.</i>			27	27														-	27	27		
3	Cockatiel	<i>Nymphicus sp.</i>			3	3														-	3	3		
4	Budgerigarh	<i>Melopsittacus sp.</i>			14	14														-	14	14		
5	Love bird	<i>Agapornis sp.</i>			6	6														-	6	6		
6	Ostrich	<i>Struthio camelus</i>	1	1		2											1	1		-			2	
7	Emu	<i>Dromius novaehollandiae</i>	2	2	8	12										1	1			2	2	6	10	
8	Rosy Pelican	<i>Pelicanus onocrotalus</i>	1			1											1			-	-		1	
9	Lady Amherst's Pheasant	<i>Chrysolophus amherstiae</i>	1	1	-	2										1				-	1	-	1	
10	Golden pheasant	<i>Chrysolophus pictus</i>		1		1											1			-	-		-	
11	Blue & Gold Macaw	<i>Ara aurundinacea</i>	2	1	-	3														2	1	-	3	
	<b>Total Birds</b>		<b>8</b>	<b>6</b>	<b>58</b>	<b>72</b>										<b>3</b>	<b>2</b>			<b>6</b>	<b>5</b>	<b>56</b>	<b>67</b>	
	<b>Mammal</b>																							
1	Spotted Deer	<i>Axis axis</i>	45	91	-	136	-	-	-	-	-	-	-	-	-	1	1	-		44	90	-	134	
2	Barking Deer	<i>Muntiacus muntjac</i>	7	3	-	10	-	-	-	-	-	-	-	-	-	-	-	-		7	3	-	10	
3	Sambar Deer	<i>Cervus unicolor</i>	1	3	-	4	1	-	-	-	-	-	-	-	-	-	-	-		2	3	-	5	
	<b>Total Mammal</b>		<b>53</b>	<b>97</b>	<b>0</b>	<b>150</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>		<b>53</b>	<b>96</b>	<b>-</b>	<b>149</b>	

## 21. Mortality of animals

### Engangered Species:

S. No.	Name of the Species	Scientific Name	Sex	Date of Death	Cause of Death
01.	Hill Mynah	<i>Gracula religiosa</i>	Female	15.06.2019	Death may be due to toxaemic shock as a result of egg-bound condition.

### Other Species:

S. No.	Name of the Species	Scientific Name	Sex	Date of Death	Cause of Death
01.	Spotted Deer	<i>Axis axis</i>	Male	04.04.2019	Death may be due to old age complications.
02.	White Ibis	<i>Threskiornis threskiornis</i>	Male	12.07.2019	Death may be due to old age complications
03.	Emu	<i>Dromaius novaehollandiae</i>	Male	06.08.2019	Death may be due to obstruction in proventriculus
04.	Emu	<i>Dromaius novaehollandiae</i>	Female	08.08.2019	Death may be due to dehydration caused by diarrhea
05.	Spotted Deer	<i>Axis axis</i>	Female	01.12.2019	Death due to old age complications
06.	Lady Amhrest's Pheasant	<i>Chrysolophus amherstiae</i>	Male	16.01.2020	Death may be due to liver abscess
07.	Golden Pheasant	<i>Chrysolophus pictus</i>	Female	06.02.2020	Death may be due to egg bound condition.

22. Compliances with conditions stipulated by Central Zoo Authority

SL. NO.	NORM UNDER RZR, 2009	Conditions Stipulated	Status with regard to compliance of the conditions
1	10.1 (3)	The visitors' path and service path are overlapping at many places which need to be done appropriately aligned. The same should be proposed accordingly in proposed the Master (Layout) Plan/ Master Plan.	Separation of Visitors path and Service path has been completed by December 2019 except Aviary. The aviary shall be modified as per the suggestion put forth by evaluating officer.
2	10.2(1)	The Zoo Operator has not posted whole time officer in-charge of the Zoo. Veterinarian of the zoo and Officer in-charge of the zoo are one and the same.	Whole time Officer-In-Charge of the zoo and Senior Veterinary Officer are same.
3	10.2(2)	The Zoo Operator has not posted scientific and technical staff as mandatory for a 'Small Zoo'. A Biologist should also be appointed.	Contract for posting of scientific and technical staff has been finalized and work started from Jan, 2020.
4	10.3(3) & 10.5(6)	i. The purpose of operating zoo in two units at a distance from each other in the Rourkela Township is not justifiable for proper management of the animal. It is viable to operate the zoo at one single unit. ii. Theme of display and viable sex ratio of animals shall be maintained immediately.	Letter for transfer of spotted deer of Deer Park, Sector-8 has been communicated to Forest Department, Govt. of Odisha on 14.03.2008. However a fresh communication regarding release of surplus nos. spotted deer to DFO, Rourkela Forest Department, Govt. of Odisha has been done on 30.11.2019.
5	10.3(7) & 10.5(8)	The Zoo should not accept the rescued animal disproportionate to the availability of infrastructure and also submit a detail report on such animals acquired in the past.	Presently the rescued animals have been housed in suitable enclosures. List of rescued animals acquired in the past has been communicated to PCCF (WL) & CWLW for necessary action (copy attached as Annexure-I).
6	10.4(1)	The zoo as per proposed master (layout) plan shall modify its existing enclosure in nature immersing enclosures. The moat should be preferred as front barrier towards visitor	Modification of the enclosures as per the suggestion of the Scientific Officer, CZA which shall be taken up in FY 2020-21.

		viewing side in place of chain link fence.	
7	10.3(2)	All the animal enclosures in the zoo are not in accordance with the specification of the CZA. The enclosure should be re-modified and appropriately designed following the guidelines and norms of the CZA in this regard.	The enclosures shall be re-modified after approval of Master (Layout) Plan and designs from CZA. We have already submitted Master (Layout) Plan to CZA for approval.
8	10.3(3)	The enclosures of the birds are very dingy and do not provide appropriate space for birds, keeper and visitors. This needs immediate attention.	Modification of bird enclosures shall be taken up after approval of Master (Layout) Plan and sanction of budget.
9	10.5(5)	A schedule for disinfection of enclosures should be prepared and implemented in the zoo.	Schedule for disinfection of enclosures has been already in vogue and submitted (copy attached as Annexure-II).
10	10.6(1)	The zoo shall submit a report on completion of ongoing work of Veterinary Infrastructure and its use with documentary proof.	The veterinary infrastructure including veterinary hospital has been completed. Photos of the new IG Park Zoo hospital is attached at Annexure-III).
11	10.6(5)	The Veterinary support staff should be deployed as per prescribed norms.	Posting veterinary support staff on contractual basis has started from Jan, 2020.
12	10.9(4)	The single sex animals like Rosy pelican and Golden pheasant should be paired.	Proposal for pairing has already been communicated to Nandankanan Zoological Park on 31.01.2019. After obtaining approval the job shall be taken up on priority basis.
13	10.9(9)	The population control measures should be adopted to bring the population of the deer species with carrying capacity or surplus population may be shifted to nearby zoo or released back to its natural habitat.	Population control measure for spotted deer in deer park has already been taken up by separating the male and female deer. Letter for transfer of spotted deer of Deer Park, Sector-8 has been communicated to Forest Department, Govt. of Odisha on 14.03.2008. However a fresh communication regarding release of surplus nos. spotted deer to DFO, Rourkela Forest Department, Govt. of Odisha has been done on

			30.11.2019
14	10.12(3)	The visitors' path and amenities like toilet should be provided with access to 'Divyang' personnel and wheel chair should be made available.	Wheel Chair has already been provided at the main gate and ramp has been provided in toilets and visitors paths at desired locations for access of 'Divyang' personnel.

23. SOME FREE RANGING WILDLIFE AT INDIRA GANDHI PARK ZOO & DEER PARK

**BIRDS**

Sl. No.	Common Name	Scientific Name	Status
Family:PHALACROCORACIDAE			
1	Little Cormorant	<i>Phalacrocorax niger</i>	VC
2	Darter or Snake-bird	<i>Anhinga rufa melanogaster</i>	VR
3	Pond Heron	<i>Ardeola grayii</i>	C
4	Cattle Egret	<i>Bubulcus ibis coromandus</i>	VC
5	Smaller or Median Egret	<i>Egretta intermedia</i>	R
6	Little Egret	<i>Egretta garzetta</i>	VC
7	Night Heron	<i>Nycticorax nycticorax</i>	C
8	Openbill Stork	<i>Anastomus oscitans</i>	R
Family:ANATIDAE			
9	Lesser Whistling Teal or Tree Duck	<i>Dendrocygna javanica</i>	R
Family: ACCIPITRIDAE			
10	Pariah Kite	<i>Milvus migrans govinda</i>	C
11	Shikra	<i>Accipiter badius</i>	C
Family: PHASIANIDAE			
12	Red Jungle fowl	<i>Gallus gallus</i>	R
Family:RALLIDAE			
13	White breasted Waterhen	<i>Amaurornis phoenicurus</i>	C
Family:JACANIDAE			
14	Bronze winged Jacana	<i>Metopidius indicus</i>	C
Family:COLUMBIDAE			
15	Indian Blue Rock Pigeon	<i>Columba livia</i>	VC
16	Indian Spotted Dove	<i>Streptopelia chinensis</i>	VC
Family:PSITTACIDAE			
17	Rose-ringed Parakeet	<i>Psittacula krameri</i>	VC
Family:CUCULIDAE			
18	Indian Koel	<i>Eudynamis scolopacea</i>	VC
19	Common Crow-Pheasant / Coucal	<i>Centropus sinensis</i>	VC
Family:STRIGIDAE			
20	Eastern Spotted Scops Owl	<i>Otus spilocephalus</i>	C
21	Barn Owl	<i>Tyto alba</i>	R
Family:CAPRIMULGIDAE			
22	Indian Jungle Nightjar	<i>Caprimulgus indicus</i>	C
Family:ALCEDINIDAE			
23	Lesser Pied Kingfisher	<i>Ceryle rudis</i>	R
24	Indian Small Blue Kingfisher	<i>Alcedo atthis</i>	C
25	White breasted Kingfisher	<i>Halcyon smyrnensis</i>	VC
Family:MEROPIIDAE			
26	Indian Small Green Bee-eater	<i>Meropos orientalis</i>	VC
Family:CORACIIDAE			
27	Indian Roller or Blue Jay	<i>Coracias benghalensis</i>	C

Family:MEGALAIMIDAE			
28	Small Green Barbet	<i>Megalaima viridis</i>	C
Family:PICIDAE			
29	Mahratta Woodpecker	<i>Picoides mahrattensis</i>	R
30	Golden backed Woodpecker	<i>Chrysocolaptes lucidus</i>	
Family:ORIOLOIDAE			
31	Indian Golden Oriole	<i>Oriolus oriolus</i>	C
32	Indian Black headed Oriole	<i>Oriolus xanthornus</i>	VC
Family:DICRURIDAE			
33	Indian Black Drongo	<i>Dicrurus macrocercus</i>	VC
Family:STURNIDAE			
34	Blackheaded or Brahminy Myna	<i>Sturnus pagodarum</i>	R
35	Indian Pied Myna	<i>Sturnus contra</i>	C
36	Indian Myna	<i>Acridotheres tristis</i>	VC
Family:CORVIDAE			
37	Northeastern Tree Pie	<i>Dendrocitta vagabunda</i>	C
38	Indian House Crow	<i>Corvus splendens</i>	VC
39	Indian Jungle Crow	<i>Corvus macrorhynchos</i>	VC
Family:CAMPEPHAGIDAE			
40	Large Cuckoo-shrike	<i>Coracina novaehollandiae</i>	R
Family:PYCNONOTIDAE			
41	Red whiskered Bulbul	<i>Pycnonotus jocosus</i>	C
42	Red vented Bulbul	<i>Pycnonotus cafer</i>	C
Family:MUSCICAPIDAE			
43	Striated Babbler	<i>Turdoides subrufus</i>	R
44	Jungle Babbler	<i>Turdoides striatus</i>	C
45	Indian Tailor Bird	<i>Orthotomus sutorius</i>	R
46	Yellow Browed Leaf Warbler	<i>Phylloscopus inornatus</i>	R
47	Indian Magpie Robin	<i>Copsychus saularis</i>	
Family:MOTACILLIDAE			
48	Indian White Wagtail	<i>Motacilla alba</i>	R
49	Forest Wagtail	<i>Motacilla indica</i>	R
Family:NECTARINIIDAE			
50	Indian Purplerumped Sunbird	<i>Nectarinia zeylonica</i>	C
51	Indian Purple Sunbird	<i>Nectarinia asiatica</i>	C
Family:ZOSTEROPIDAE			
52	Indian White-eye	<i>Zosterops palpebrosa</i>	R
Family:PLOCEIDAE			
53	Indian Baya	<i>Ploceus philippinus</i>	C

### MAMMALS

SI No.	Common Name	Scientific Name	Status
1	Common mongoose	<i>Herpestes edwardsii</i>	VC
2	Jungle Cat	<i>Felis chaus</i>	R
3	Common fruit bat	<i>Pteropus giganteus</i>	VC

### REPTILES

SI No.	Common Name	Scientific Name	Status
1	Land Monitor lizard	<i>Varanus bengalensis</i>	C
2	Indian Python	<i>Python molurus</i>	R
3	Russels Viper	<i>Daboia russelli</i>	R
4	Banded krait	<i>Bungarus fasciatus</i>	R
5	Common Indian Krait	<i>Bungarus caeruleus</i>	R
6	Binocellate Cobra	<i>Naja naja</i>	R
7	Monocellate Cobra	<i>Naja kaouthia</i>	R
8	Rat Snake	<i>Ptyas mucosus</i>	C
9	Common Indian Broze back	<i>Dendrelaphis tristis</i>	R
10	Checkered keel back	<i>Xenochrophis piscator</i>	C
11	Chameleon	<i>Chameleon zeylanicus</i>	R
12	Common Green Whip Snake	<i>Ahaetulla nasuta</i>	R
13	Earth Boa	<i>Eryx johnii</i>	C
14	Garden lizard	<i>Calotes verricolor</i>	VC
15	Blind snake	<i>Typlops graminus</i>	C

### FISHES

Sl. No.	Scientific name	Local name/English name
1.	<i>Labeo rohita</i>	Rohi
2.	<i>Labeo calbasu</i>	Kalabaini
3.	<i>Catala catala</i>	Bhakura
4.	<i>Cirrhinus mrigala</i>	Mirikali
5.	<i>Labeo gonius</i>	Khursia
6.	<i>Labeo bata</i>	Rajapohala
7.	<i>Puntius sarana</i>	Serena
8.	<i>Puntius ticto</i>	Kerandi
9.	<i>Puntius sophore</i>	Chepta kerandi

10.	<i>Puntius chola</i>	Pita kerandi
11.	<i>Cirrhinus reba</i>	Chhunchia pohala
12.	<i>Wallago attu</i>	Balia
13.	<i>Channa striatus</i>	Seula
14.	<i>Channa marulius</i>	Sala
15.	<i>Channa punctata</i>	Gadisa
16.	<i>Channa gachhua</i>	Chenga
17.	<i>Notopterus chitala</i>	Chitala
18.	<i>Notopterus notopterus</i>	Fail
19.	<i>Clarius batrachus</i>	Magura
20.	<i>Heteropneustes fossilis</i>	Singhi, Rata
21.	<i>Anabas testudineus</i>	Kau
22.	<i>Mystus vittatus</i>	Kantia
23.	<i>Ompok pabda</i>	Pobata. Poba
24.	<i>Glossogolius biocellatus</i>	Neuli
25.	<i>Glossogobius giuris giuris</i>	Baligarada
26.	<i>Mastacembelus armatus</i>	Bommy
27.	<i>Mastacembelus pancalus</i>	Todi
28.	<i>Cyprinus carpio</i>	Bilatirohi
29.	<i>Ctenopharyngodon indella</i>	Graascrap
30.	<i>Anguilla bengalensis</i>	Lamba bommy
31.	<i>Xenentodon canceila</i>	Duithantia gania
32.	<i>Osteobrama cotis</i>	Chandi
33.	<i>Nandus nandus</i>	Vutasi/Olua
34.	<i>Chela laubuca</i>	Khankarakhai
35.	<i>Gadusia chapra</i>	Makandi
36.	<i>Ailia coila</i>	Baunsa patri
37.	<i>Amblypharyngodon mola</i>	Mahurali
38.	<i>Oxygaster bacaila</i>	Jaradi
39.	<i>Esomus danrica</i>	Dandikiri
40.	<i>Chanda nama</i>	Guachippi
41.	<i>Aplocheilus panchax</i>	Chariakhia
42.	<i>Rasbora daniconius</i>	Black-line Rasbora
43.	<i>Colisa fasciatus</i>	Giant Gourami
44.	<i>Lepidocephalus irrota</i>	Lokak loach
45.	<i>Pseudambassis ranaa</i>	Indian Glassy fish
46.	<i>Tetradon cuticutia</i>	Ocellated Pufferfish
<b>Prawns</b>		
1.	<i>Macrobrachium malcolmsonii</i>	Nai chingudi
2.	<i>Macrobrachium rude</i>	Nai chingudi

## BUTTERFLIES

Sl. No.	ENGLISH NAME	SCIENTIFIC NAME	STATUS
	<b>FAMILY PAPILIONIDAE</b>		
1	COMMON ROSE	<i>Pachliopta aristolochiae</i>	C
2	CRIMSON ROSE	<i>Pachliopta hector</i>	C
3	COMMON JAY	<i>Graphium doson</i>	R
4	TAILED JAY	<i>Graphium agamemnon</i>	O
5	COMMON MIME	<i>Papilio clytia</i>	R
6	LIME	<i>Papilio demoleus</i>	VC
7	COMMON MORMON	<i>Papilio polytes</i>	VC
8	SPOT SWORDTAIL	<i>Graphium nomus</i>	O
9	COMMON BANDED PEACOCK	<i>Papilio crino</i>	O
10	BLUE MORMON	<i>Papilio polymnestor</i>	O
	<b>FAMILY PIERIDAE</b>		
11	COMMON EMIGRANT	<i>Catopsilia pomona</i>	VC
12	MOTTLED EMIGRANT	<i>Catopsilia pyranthe</i>	C
13	SMALL GRASS YELLOW	<i>Eurema brigitta</i>	R
14	COMMON GRASS YELLOW	<i>Eurema hecabe</i>	VC
15	SPOTLESS GRASS YELLOW	<i>Eurema laeta</i>	C
16	COMMON JEZEBEL	<i>Delias eucharis</i>	O
17	PSYCHE	<i>Leptosia nina</i>	VC
18	PIONEER	<i>Belenois mesentina</i>	C
19	COMMON GULL	<i>Cepora nerissa</i>	VC
20	COMMON ALBATROSS	<i>Appias albina</i>	O
21	STRIPED ALBATROSS	<i>Appias libythea</i>	C
22	WHITE ORANGE TIP	<i>Ixias marianne</i>	C
23	YELLOW ORANGE TIP	<i>Ixias pyrene</i>	C
24	SMALL SALMON ARAB	<i>Colotis amata</i>	I
25	SMALL ORANGE TIP	<i>Colotis etrida</i>	I
26	COMMON WANDERER	<i>Pareronia valeria</i>	C
	<b>FAMILY NYMPHALIDAE</b>		
27	COMMON EVENING BROWN	<i>Melanitis leda</i>	O
28	COMMON PALMFLY	<i>Elymnias hypermenstra</i>	O
29	COMMON BUSHBROWN	<i>Mycalesis perseus</i>	O
30	DARK BRANDED BUSHBROWN	<i>Mycalesis mineus</i>	R
31	NIGGER	<i>Orsotriaena medus</i>	O
32	COMMON FOURRING	<i>Ypthima huebneri</i>	O
33	COMMON NAWAB	<i>Polyura athamas</i>	R
34	TAWNY COSTER	<i>Acraea violae</i>	VC

35	COMMON LEOPARD	<i>Phalanta phalantha</i>	C
36	COMMON SAILER	<i>Neptis hylas</i>	VC
37	COMMON SERGEANT	<i>Athyma perius</i>	R
38	COMMANDER	<i>Limenitis procris</i>	O
39	COMMON BARON	<i>Euthalia aconthea</i>	O
40	ANGLED CASTOR	<i>Ariadne ariadne</i>	O
41	YELLOW PANSY	<i>Junonia hierta</i>	VC
42	BLUE PANSY	<i>Junonia orithya</i>	O
43	LEMON PANSY	<i>Junonia lemonias</i>	VC
44	PEACOCK PANSY	<i>Junonia almana</i>	O
45	GREY PANSY	<i>Junonia atlites</i>	O
46	CHOCOLATE PANSY	<i>Junonia iphita</i>	VC
47	GREAT EGGFLY	<i>Hypolimnas bolina</i>	C
48	DANAID EGGFLY	<i>Hypolimnas misippus</i>	O
49	GLASSY TIGER	<i>Parantica aglea</i>	O
50	BLUE TIGER	<i>Tirumala limniace</i>	R
51	PLAIN TIGER	<i>Danaus chrysippus</i>	C
52	STRIPED TIGER	<i>Danaus genutia</i>	C
53	COMMON INDIAN CROW	<i>Euploea core</i>	VC
	<b>FAMILY LYCAENIDAE</b>		
54	COMMON PIERROT	<i>Castalius rosimon</i>	VC
55	STRIPED PIERROT	<i>Tarucus nara</i>	O
56	ZEBRA BLUE	<i>Leptotes plinius</i>	O
57	QUAKER	<i>Neopithecops zalmora</i>	O
58	PALE GRASS BLUE	<i>Pseudozizeeria maha</i>	O
59	LESSER GRASS BLUE	<i>Zizina otis</i>	O
60	LIME BLUE	<i>Chilades laius</i>	O
61	GRAM BLUE	<i>Euchrysops cnejus</i>	O
62	PEA BLUE	<i>Lampides boeticus</i>	O
63	TINY BLUE	<i>Zizula hylax</i>	C
64	COMMON CERULEAN	<i>Jamides celeno</i>	C
65	LINE BLUE SP.	<i>Nacaduba sp.</i>	O
66	LEAF BLUE	<i>Amblypodia anita</i>	C
67	COMMON SILVERLINE	<i>Spindasis vulcanus</i>	VC
68	CLUB SILVERLINE	<i>Spindasis syama</i>	C
69	SLATE FLASH	<i>Rapala manea</i>	C
70	SUNBEAM	<i>Curetis thetis</i>	C
	<b>FAMILY HESPERIIDAE</b>		
71	INDIAN SKIPPER	<i>Spialia galba</i>	O
72	COMMON SMALL FLAT	<i>Sarangesa dasahara</i>	O
73	BUSH HOPPER	<i>Ampittia dioscorides</i>	C

74	GOLDEN ANGLE	<i>Caprona ransonnetti</i>	I
75	INDIAN/CEYLON ACE	<i>Halpe homolea</i>	O
76	CHESTNUT BOB	<i>Iambrix salsala</i>	O
77	RESTRICTED DEMON	<i>Notocrypta curvifascia</i>	R
78	GRASS DEMON	<i>Udaspes folus</i>	R
79	INDIAN PALM BOB	<i>Suastus gremius</i>	R
80	TREE FLITTER	<i>Hyarostis adrastus</i>	C
81	COMMON REDEYE	<i>Matapa aria</i>	C
82	GIANT REDEYE	<i>Gangara thyrasis</i>	R
83	COMMON GRASS DART	<i>Taractrocera maevius</i>	O
84	RICE SWIFT	<i>Borbo cinnara</i>	O
85	SMALL BRANDED SWIFT	<i>Pelopidas mathias</i>	C
	<b>STATUS</b>		
	VC=Very common		
	C=Common		
	O=Occasional		
	R=Rare		
	I=Indeterminate		

### DRAGONFLIES & DAMSEL FLIES

<b>SUBORDER: ANISOPTERA</b>		
<b>FAMILY: AESHNIDAE</b>		
1	Blue Darner	<i>Anax immaculifrons</i> Rambur, 1842
2	Blue-tailed Green Darner	<i>Anax guttatus</i> Leach, 1815
3	Parakeet Darner	<i>Gynacantha bayadera</i> Selys, 1891
<b>FAMILY: GOMPHIDAE</b>		
4	Common Clubtail	<i>Ictinogomphus rapax</i> (Rambur, 1842)
5	Deccan Bowtail	<i>Macrogomphus annulatus</i> (Selys, 1854)
6	Common Hooktail	<i>Paragomphus lineatus</i> (Selys, 1850)
<b>FAMILY: LIBELLULIDAE</b>		
7	Trumpet-tail	<i>Acisoma panorpoides</i> Rambur, 1842
8	Scarlet Marsh Hawk	<i>Aethriamanta brevipennis</i> (Rambur, 1842)
9	Little Blue Marsh Hawk	<i>Brachydiplax sobrina</i> (Rambur, 1842)
10	Ditch Jewel	<i>Brachythemis contaminata</i> (Fabricius, 1793)
11	Granite Ghost	<i>Bradinopyga geminata</i> (Rambur, 1842)
12	Emerald-banded Skimmer	<i>Cratilla lineata</i> Foerster, 1903
13	Ruddy Marsh Skimmer	<i>Crocothemis servilia</i> (Drury, 1770)
14	Black-tipped Ground Skimmer	<i>Diplacodes nebulosa</i> (Fabricius, 1793)
15	Ground Skimmer	<i>Diplacodes trivialis</i> (Rambur, 1842)

16	Restless Demon	<i>Indothemis limbata</i> (Selys, 1891)
17	Asiatic Bloodtail	<i>Lathrecista asiatica</i> (Fabricius, 1798)
18	Fulvous Forest Skimmer	<i>Neurothemis fulvia</i> (Drury, 1773)
19	Ruddy Meadow Skimmer	<i>Neurothemis intermedia</i> (Rambur, 1842)
20	Pied Paddy Skimmer	<i>Neurothemis tullia</i> (Drury, 1773)
21	Blue Marsh Hawk	<i>Orthetrum glaucum</i> (Brauer, 1865)
22	Tri-coloured Marsh Hawk	<i>Orthetrum luzonicum</i> (Brauer, 1868)
23	Green Marsh Hawk	<i>Orthetrum sabina</i> (Drury, 1770)
24	Crimson-tailed Marsh Hawk	<i>Orthetrum pruinosum</i>
25	Blue-tailed Yellow Skimmer	<i>Palpopleura sexmaculata</i> (Fabricius, 1787)
26	Wandering Glider	<i>Pantala flavescens</i> (Fabricius, 1798)
27	Yellow-tailed Ashy Skimmer	<i>Potamarcha congener</i> (Rambur, 1842)
28	Rufous Marsh Glider	<i>Rhodothemis rufa</i> (Rambur, 1842)
29	Common Picturewing	<i>Rhyothemis variegata</i> (Linnaeus, 1763)
30	Coral-tailed Cloudwing	<i>Tholymis tillarga</i> (Fabricius, 1798)
31	Red Marsh Trotter	<i>Tramea basilaris</i> (Palisot de Beauvois, 1805)
32	Black Marsh Trotter	<i>Tramea limbata</i> (Desjardins, 1832)
33	Crimson Marsh Glider	<i>Trithemis aurora</i> (Burmeister, 1839)
34	Long-legged Marsh Glider	<i>Trithemis pallidinervis</i> (Kirby, 1889)
35	Greater Crimson Glider	<i>Urothemis signata</i> (Rambur, 1842)
36	Brown Dusk Hawk	<i>Zyxomma petiolatum</i> Rambur, 1842
<b>FAMILY: MACROMIIDAE</b>		
37	Common Torrent Hawk	<i>Epopthalmia vittata</i> Burmeister, 1839
<b>SUBORDER: ZYGOPTERA</b>		
<b>FAMILY: COENAGRIONIDAE</b>		
38		<i>Aciagrion occidentale</i> Laidlaw, 1919
39		<i>Aciagrion pallidum</i> Selys, 1891
40	Dartlet species	<i>Agriocnemis femina</i> (Brauer, 1868)
41	Pygmy Dartlet	<i>Agriocnemis pygmaea</i> (Rambur, 1842)
42	Dartlet species	<i>Agriocnemis sp.nov.</i>
43	Orange-tailed Marsh Dart	<i>Ceriagrion cerinorubellum</i> (Brauer, 1865)
44	Coromandel Marsh Dart	<i>Ceriagrion coromandelianum</i> (Fabricius, 1798)
45	Golden Dartlet	<i>Ischnura aurora</i> (Brauer, 1865)
46	Senegal Golden Dartlet	<i>Ischnura senegalensis</i> (Rambur, 1842)
47	Black Marsh Dart	<i>Onychargia atrocyana</i> (Selys, 1865)
48	Pale Blue Marsh Dart	<i>Pseudagrion decorum</i> (Rambur, 1842)
49	Blue Marsh Dart	<i>Pseudagrion microcephalum</i> (Rambur, 1842)
50	Saffron-faced Blue Dart	<i>Pseudagrion rubriceps</i> Selys, 1876
<b>FAMILY: LESTIDAE</b>		

51	Brown Spreadwing	<i>Lestes umbrinus</i> Selys, 1891
52	Emerald-striped Spreadwing	<i>Lestes viridulus</i> Rambur, 1842
<b>FAMILY: PLATYCNEMIDIDAE</b>		
53	Pied Bush Dart	<i>Copera ciliata</i> (Selys, 1863)
54	Yellow Bush Dart	<i>Copera vittata</i> Selys, 1863
55	Blue Bush Dart	<i>Copera marginipes</i> (Rambur, 1842)