

# Indira Gandhi Park Zoo and Deer Park



## ANNUAL REPORT 2017-18

Horticulture Department  
Rourkela Steel Plant, Rourkela





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## Report Of OFFICER -IN-CHARGE

I am happy to place the report on Indira Gandhi Park Zoo & Deer Park for the year 2017-18.

Rourkela Steel Plant puts its continuous effort to maintain the verdant green canopy in gardens and parks which bedecked with colourful flowers are visitors' paradise. The Indira Gandhi Park Zoo & Deer Park maintained by us serve to provide visitors with recreation and relaxation and they are a huge draw throughout the year. Apart from this, Indira Gandhi Park Zoo & Deer Park, Rourkela have been playing a great role in animal health management. The zoo management has provided all measures for animal welfare, security and thrives to maintain a healthy environment for the zoo inmates.

Students, as also other visitors are keen followers and benefit a lot by getting knowledge and awareness of various flora and fauna through different zoo education programmes. This annual report is the testimony of activities undertaken during 2017-18. Plans are on the anvil to upgrade the zoo further and make it a centre of excellence in the arena of zoo education.

*A Biswas*

**DR. AVIJIT BISWAS**

SENIOR VETERINARY OFFICER & I/C



## 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.



## Vision

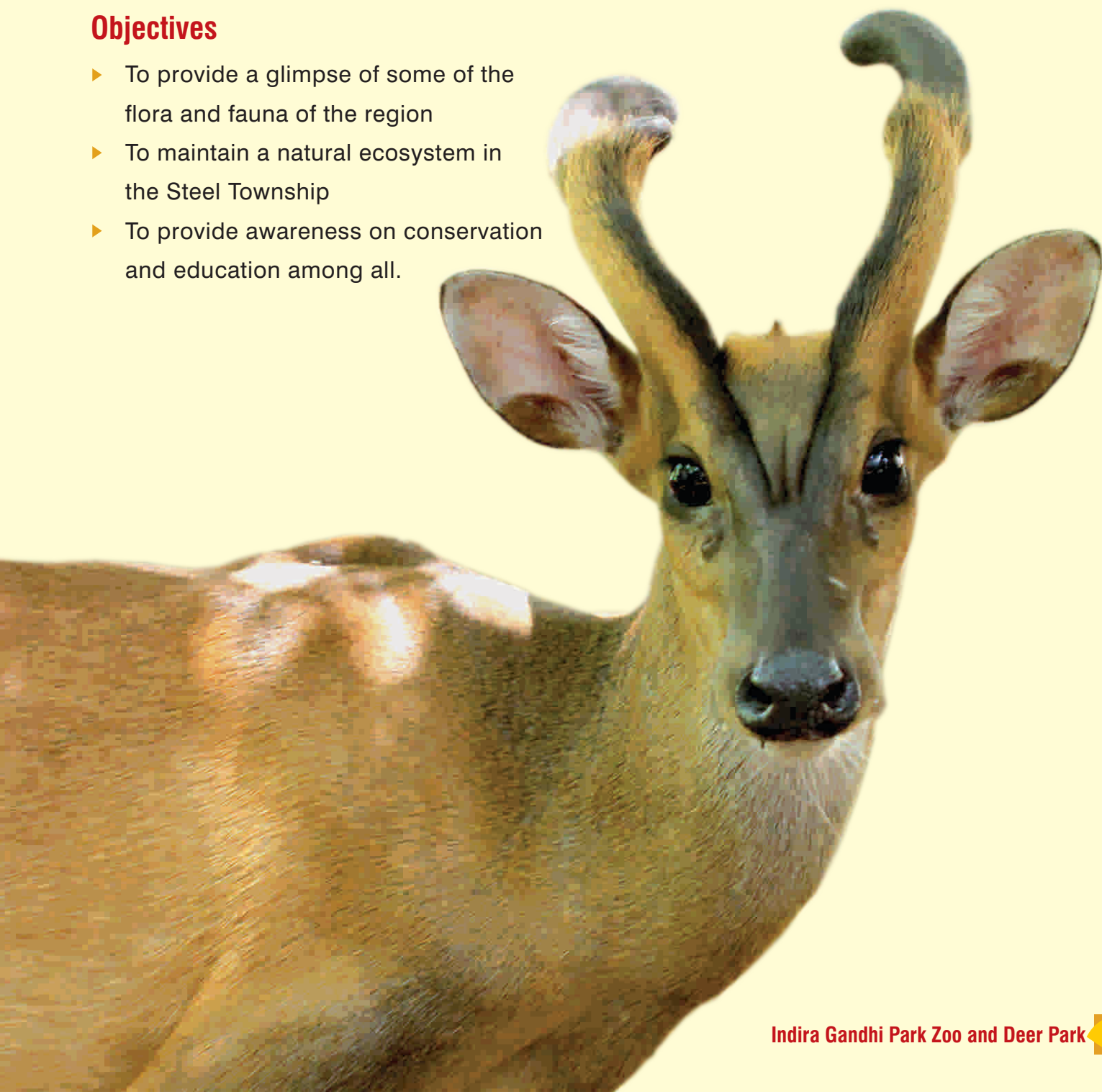
To achieve the distinction of an outstanding zoo through conservation, education, research and spreading awareness for wildlife protection with exciting visitor experiences by connecting people to biodiversity conservation.

## 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.

## Objectives

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



## About us

Indira Gandhi Park Zoo and Deer Park is one of the major conservation centre for wild animals in northern part of Odisha. Conservation of wild fauna and spreading awareness among the common public is the prime objective of the zoo. The Zoo boasts of a landscape with soft green grasses, the glossy leaves of varied bushes, the lusturing 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 relax amidst nature in the serene environs. 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.

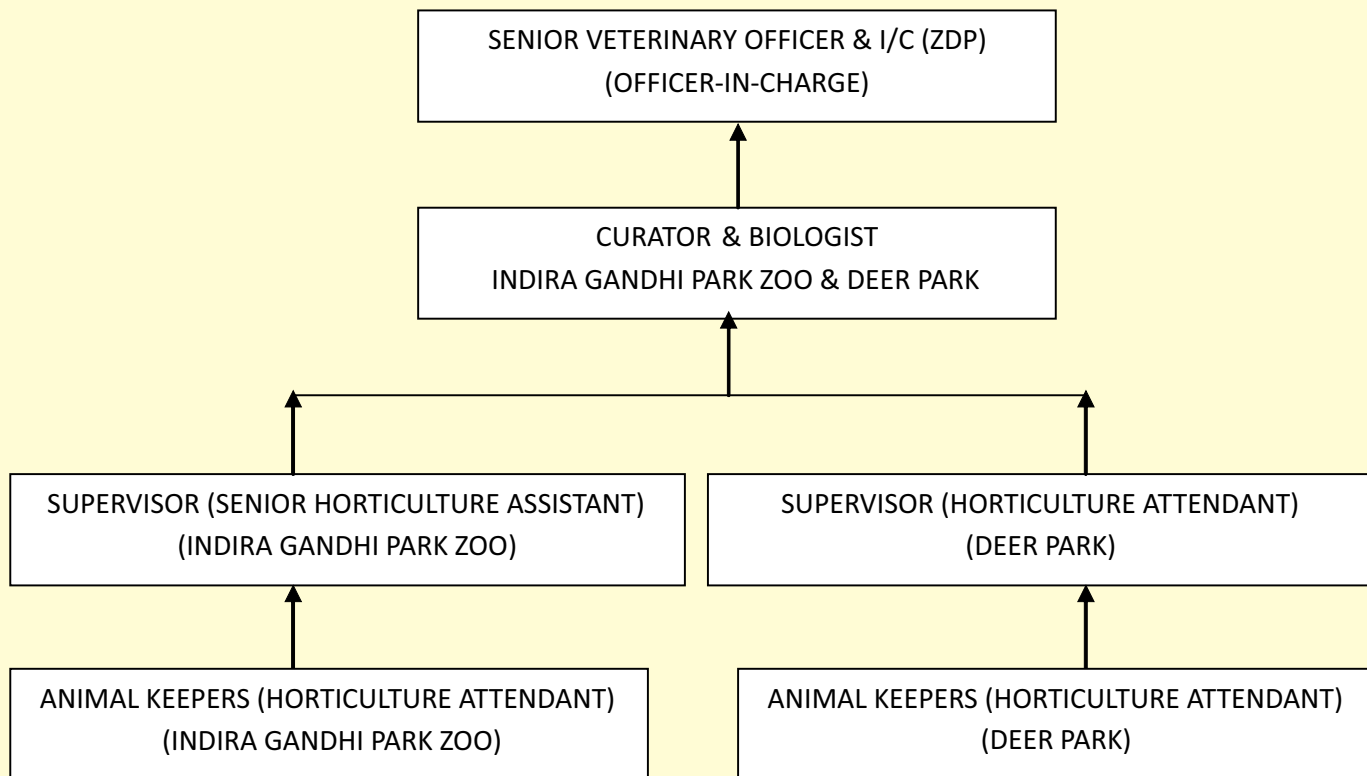
Deer Park is another unit of Indira Gandhi Park Zoo situated at Sector-8, Rourkela amidst dense vegetation and simulated habitat. The Deer Park is housed only spotted deer species for conservation and visitor awareness. The Deer Park was dedicated to the public by Sri V. Krishnamurthy on 16.02.1989, the then Chairman of Steel Authority of India Limited. Initially, the deer population were increasing more than hundred due to successful breeding among themselves. Later on guidelines of Central Zoo Authority, the male and female species of spotted deer were separated to control their population. Presently, there are 118 nos. of individuals are there at Deer Park among 39 are males and 79 are females.

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@sailrsp.co.in">avijit.biswas@sailrsp.co.in</a>
8	Website	NIL
9	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)
10	Recognition Valid upto	31.01.2017
11	Category of zoo	Small Zoo

12	Area (in Hactares)	20.0
13	Number of Visitors	Adult: 5,24,989 nos.
		Children: Free entry below 5 years (No data available)
		Total Indian: 5,24,989 Nos.
		Total Foreigners: (No data available)
	Total Visitors: 5,24,989 Nos.	
14	Visitor facilities available in Zoo	Aquarium, Musical Fountain, Boating in lake, Watch Tower, Doll Museum, Childrens' Play Arena, Restaurant, Refreshment kiosks, Drinking Water Kiosks, Sit Outs and Rain Shelters, etc.
15	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	None
<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@sailrsp.co.in



## Organisational Chart





## Human Resources

Sl. No.	Designation	Number of Posts	Names of the Incumbents
1	Officer-in-Charge	1	1
2	Veterinary Officer	1	1
3	Curator	1	1
4	Biologist	1	1
5	Compounder/Stockman	1	0
6	Supervisor	2	2
7	Animal Keeper	7	7
8	Ticket collector	2	2
9	Security Personnel	21	20
10	Gardener (Horticulture Attendant)	3	3

### Capacity Building of Zoo Personnel

The management of Indira Gandhi Park Zoo & Deer Park has always given emphasis on capacity building of its zoo personnels. During the year 2017-18, Sri Gujuru Lohar, Animal Keeper attended the training programme from 20th to 25th March 2018 at Nandankanan Biological Park, Bhubaneswar, Odisha on 'specialized theme base training programme for zoo keepers as a capacity building measures on basis regarding on regional basis on theme 'CZA Vision-2030'.

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	Sri Gujuru Lohar, Horticulture Attendant, Animal Keeper	Specialized theme base training programme for zoo keepers as a capacity building measures on basis regarding on regional basis on theme 'CZA Vision-2030'	20.03.2018 To 25.03.2018	Nandankanan Biological Park, Bhubaneswar



## 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

## Health Advisory Committee

Health Advisory Committee was not formed.

## Statement of Income and Expenditure of the Zoo

YEAR	REVENUE GENERATION (₹)	EXPENDITURE (₹)
2017-18	52,39,890.00	75,67,203.00



Refreshment Kiosk



Rain Shelter



Public Convenience Complex



Children's Play Arena

## 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	
		Baira	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	0.150	0.150	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	
		Baira	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	
		Baira	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	
		Canery 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	
		Canery 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>	
REPTILES					
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>

## 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

## 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 monsson	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

## Health Check-up of Employees of Zoonotic Diseases

The following employees of Indira Gandhi Park Zoo & Deer Park have been screened against zoonotic diseases on 22.05.2018 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)	22.05.2018	Good Health
2	Dr. S. Mishra	Curator	22.05.2018	Good Health
3	Sri Hema Mishra	Sr. Hort. Assistant	22.05.2018	Good Health
4	Sri Dhosa Nayak	Hort. Attendant	22.05.2018	Good Health
5	Sri Gujuru Lohar	Hort. Attendant	22.05.2018	Good Health
6	Sri Kartik Nayak	Hort. Attendant	22.05.2018	Good Health
7	Sri C.L. Munday	Hort. Attendant	22.05.2018	Good Health
8	Smt. Dasmy Chatry	Hort. Attendant	22.05.2018	Good Health
9	Smt. Suka Tirkey	Hort. Attendant	22.05.2018	Good Health

## Development Works Carried Out in the Zoo During the Year

Different maintenance and development works were undertaken at I G Park Zoo during the year. Among the others, the following are some of the development activities during the year 2017-18.

- Construction of anti climbing boundary wall around the graveyard to prevent entry of predators
- Elevation of rest portion of the perimeter wall to a height of 2.0 m from ground level on both sides
- Construction of 2 nos. of rain shelters for multispecies herbivore enclosure and four-horned antelope enclosure.
- Repair work of chain-link mesh, MS iron structures and colour painting of iron structures.

## 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 2017-18, more than 600 students took part in the zoo education programme in different occasions.

## Important Events and Happenings

52<sup>nd</sup> Annual Horticulture Show 2018 was organized inside Indira Gandhi Park on 11.02.2018. More than 1200 entries of different varieties of flowers, fruits and vegetables were displayed at the Show and witnessed by thousands of visitors.

## 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.

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.

## 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, 5 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. Supriya Majhi	+3 Final Year	Captive of Indira Gandhi Park Zoo, Rourkela
2	Ms. Kanchan Lakra	+3 Final Year	Butterfly Diversity of Indira Gandhi Park Zoo, Rourkela
3	Ms. Rachita Ekka	+3 Final Year	Checklist of Spider Fauna of Indira Gandhi Park Zoo, Rourkela
4	Ms. Rohini Mahato	+3 Final Year	Study of Avifauna Diversity of Indira Gandhi Park Zoo, Rourkela
5	Ms. Pooja Mahananda	+3 Final Year	Odonate Diversity of Indira Gandhi Park Zoo, Rourkela



## Zoo Intimates



FOUR HORNED ANTELOPE



INDIAN PEAFWOL



INDIAN ROCK PATHON



BARKING DEER



OSTRICH



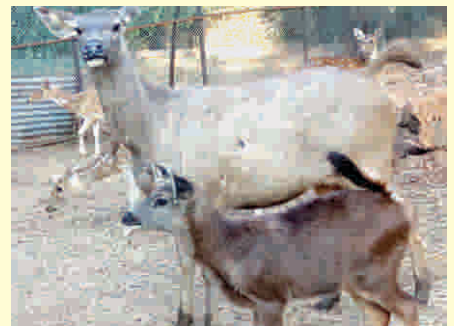
MUGGER



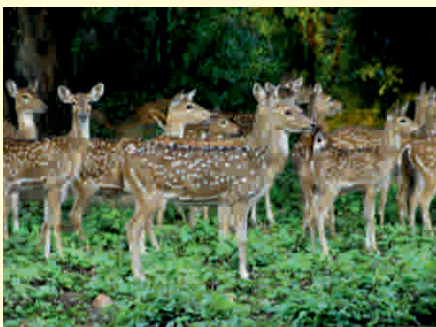
COMMON MONGOOSE



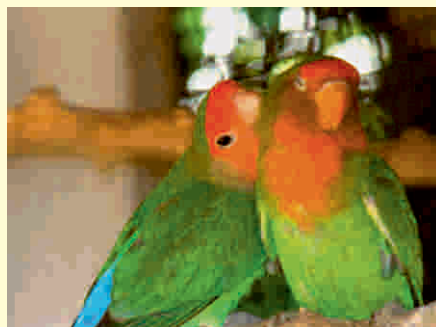
LADY AMHREST'S PHEASANT



SAMBAR



SPOTTED DEER AT DEER PARK



LOVE BIRDS



GOLDEN GOURAMI

## Annual Inventory of Animals

### ENDANGERED SPECIES

Sl. No.	Animal Name	Scientific Name	Opening Stock as on 01.04.2017				Births				Acquisitions				Disposal				Deaths				Closing Stock as on 31.03.2018			
			M	F	U	T	M	F	U	T	M	F	U	T	M	F	U	T	M	F	U	T	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	1
	<b>Total Birds</b>		<b>3</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>5</b>
		<b>Mammal</b>																								
1	Four-horned antelope	<i>Tetracerus quadricornis</i>	4	4	-	8	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	-	9
3	Common Mongoose	<i>Herpestes edwardsii</i>	3	3	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	6
4	Rehbus macaque	<i>Macaca mulata</i>	1	1	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	3
	<b>Total Mammals</b>		<b>8</b>	<b>8</b>	<b>-</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>9</b>	<b>-</b>	<b>18</b>
		<b>Reptile</b>																								
1	Crocodile(Mugger)	<i>Crocodilus 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>	2	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	4
	<b>Total Reptiles</b>		<b>4</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>9</b>

### OTHER SPECIES

Sl. No.	Animal Name	Scientific Name	Opening Stock as on 01.04.2017				Births				Acquisitions				Disposal				Deaths				Closing Stock as on 31.03.2018			
			M	F	U	T	M	F	U	T	M	F	U	T	M	F	U	T	M	F	U	T	M	F	U	T
		<b>Birds</b>																								
1	White Ibis	<i>Threskiornis sp.</i>	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
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>Aqapornis sp.</i>	-	-	6	6	-	-	-	-	-	-	-	-	-	-	-	-	6	6
6	Ostrich	<i>Struthio camelus</i>	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	2
7	Emu	<i>Dromius novaehollandiae</i>	2	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	2	4
8	Rosy Pelican	<i>Pelicanus onocrotalus</i>	1	0	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1
9	Lady Amherst's Pheasant	<i>Chrysolophus amherstiae</i>	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	2
10	Golden pheasant	<i>Chrysolophus pictus</i>	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1
11	Blue & Gold Macaw	<i>Ara aurundinacea</i>	2	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	2	4
	<b>Total Birds</b>		<b>8</b>	<b>8</b>	<b>54</b>	<b>70</b>													<b>8</b>	<b>54</b>
	<b>Mammal</b>																			
1	Spotted Deer	<i>Axis axis</i>	6	14	-	20	-	-	-	-	-	-	-	-	-	-	-	-	6	20
2	Barking Deer	<i>Muntiacus muntiac</i>	7	3	-	10	-	-	-	-	-	-	-	-	-	-	-	-	7	10
3	Sambar Deer	<i>Rusa unicolor</i>	2	3	-	5	-	1	-	-	-	-	-	-	1	-	-	-	1	4
	<b>Total Mammal</b>		<b>15</b>	<b>20</b>	-	<b>35</b>	-	<b>1</b>	-	-	-	-	-	-	<b>1</b>	-	-	-	<b>14</b>	<b>34</b>
	<b>DEER PARK</b>																			
1	Spotted Deer	<i>Axis axis</i>	<b>39</b>	<b>79</b>	-	<b>118</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>39</b>	<b>118</b>

## Mortality of Animals

Sl. No.	Name of the Species	Scientific Name	Sex	Date of Death	Cause of Death
01.	Sambar Deer	<i>Rusa unicolor</i>	Female	03.11.2017	Post-parturient complications
02.	Sambar Deer	<i>Rusa unicolor</i>	Male	13.11.2017	Internal haemorrhage arising out of infighting injuries

## Compliances with conditions stipulated by Central Zoo Authority

Sl. No.	Norm Under RZR, 2009	Condition Stipulated	Pending Since When	Status with regard to compliance of the conditions
1	10.1(3)	The visitors' path exceeds 25 % of the periphery of the enclosure in case of many animal enclosures in the zoo.	21.02.1997	The visitors' path to the enclosures has been restricted to 25% of the total enclosure perimeter by obstructing the view through fixing opaque materials.
2	10.1(3)	The visitor path and service path are not separated; even the service entry to the animal enclosure is right in the middle of the visitors' path of the enclosure.	25.02.1997	Presently the feed materials are transported to the animal enclosures in covered condition. We are making necessary changes in the existing infrastructure for making the service path away from the visitors' path. The job shall be completed by 30 <sup>th</sup> Sept. 2018.
3	10.1(5)	The height of the perimeter wall is not increased to 2 meters from ground level throughout the length. It is enhanced only on road side. Rest of the perimeter wall is left as it is	06.05.2010 07.01.2014	The work of heightening the boundary wall is under progress. The job shall be completed by 31 <sup>st</sup> July 2018.
4	10.1(7)	The zoo has failed to manage solid and liquid wastes generated in the zoo with least impact on environment	25.10.2017	Presently, the solid waste generated from the animal enclosure is being put in compost pit. We are also in the process of procuring a modern bio-compost machine of 300 ltr. With production of 50 KG manure per day which will be operational by 31 <sup>st</sup> Dec. 2018 for scientific solid waste management. With regard to liquid waste management, we are developing adequate underground drainage system which will be completed by 30 <sup>th</sup> September 2018.

5	10.1(9)	Stray dog menace is observed to be at alarming level. The zoo operator has failed to stop entry of stray dogs in the zoo premises.	25.10.2017	All the entry points for stray dogs are being plugged. Further, the watch & ward staff keeping a strict vigil to prevent entry of stray animals. Besides, entry of eatables by visitors has been prohibited in zoo area.
6	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.	12.10.2004	The present zoo in charge who is also looking after the jobs of veterinarian of the zoo is discharging the responsibility since year 2006 on whole time basis.
7	10.2(2)	The zoo operator has not posted scientific and technical staff as mandatory for a 'Small Zoo'	12.10.2004 06.05.2010	The Curator of the zoo has the desired qualification of the biologist and looking after the job.
8	10.3(1)	The corrected master plan along with the lay out plan as advised by the CZA has not been submitted to the CZA for approval.	16.08.1995 14.02.2001 13.07.2001 04.09.2008 25.11.2008 10.02.2009 07.07.2009 06.05.2010 02.11.2010 07.01.2014	The Master Plan along with lay out plan was submitted for approval of CZA. As per advice of CZA we resubmitted the plan with colour scheme on 09.01.2017 & 24.03.2017 (Copy placed at Annexure – I). Now, we have been again advised by CZA on 18.08.17 to submit the detail map of the enclosure housing endangered species, which is under preparation and shall be submitted by 15 <sup>th</sup> June 2018.
9	10.3(3) & 10.5(6)	The zoo is operating in 2 units at a distance from each other, in the Rourkela Township and their management is not proper. Not posted adequate curatorial and veterinary staff to keep a close watch on captive animals. Single staff has been deputed to feed the animals.	25.10.2017	The Deer Park was established at Sector -8 at a distance of 5 kms from IG Park Zoo at Sector -4 in the year 1989. The Deer Park is housing only spotted deer species in a very natural immersing landscape with less than 25% visiting area. Presently 2 employees are looking after the deer for necessary feeding, watering and daily care. Curator and Veterinary Officer posted at IG Park Zoo are also looking after the Deer Park on daily basis.

10	10.3(3)	The infrastructure of the zoo is located in haphazard manner. The residence of one staff, Operation Theatre/ Treatment Room, quarantine area of rescued animals, feed store, pathological lab are clubbed under one roof in a highly congested manner. It is closely located near the enclosure for four horned antelope. The master (layout) Plan amended as per observation communicated by the CZA is yet to be submitted to Central Zoo Authority for approval.	14.02.2001 13.07.2001 04.09.2008 25.11.2008 10.02.2009 & 06.05.2010	Construction of zoo veterinary hospital has been kept in the Master Plan along with pathological lab. at a new location meeting the requirements of the Rules. Operation Theatre and Treatment Room shall be part of the Zoo Hospital. Quarantine area is presently located in a separate area away from the animal enclosures. The amended Master Plan shall be submitted to CZA by 15 <sup>th</sup> June 2018.
11	10.3(3) & 10.9(1)	Theme of display and viable sex ratio of animals is not maintained. Barking Deer are housed in five different enclosures, of the two male Peafowl, single male is housed in two different enclosures where as single male Golden Pheasant is housed along with Lady Amherst's Pheasant.	14.02.2001 13.07.2001 04.09.2008 25.11.2008 10.02.2009 & 06.05.2010	Barking Deer is not being a social animal, always have a tendency to fight amongst each other specially during the breeding season. Attempt for housing all the barking deer in single enclosure is not possible with male population. The surplus male Barking Deer are housed in separate enclosures. Our attempts for keeping the peafowl together have failed due to infighting among themselves. We are attempting to pair the male peafowl through animal exchange programme with other zoos. The single female gold pheasant has been housed with Lady Amherst's pheasant so as to prevent boredom. Both the species are staying together in a peaceful manner since long time.
12	10.3(6)	The Animal Collection Plan of the Zoo is not yet finalized.	12.10.2004 06.05.2010	The Animal Collection Plan of IG Park Zoo and Deer Park has been submitted in the Master Plan for necessary approval. The same is attached as Annexure-II

13	10.3(7)	The zoo has acquired animals disproportionate to the availability of infrastructure. Acquired/ Rescued animals (python, common peafowl and four horned antelope) on 25.01.2010, 11.05.2012, 08.06.2014, 05.09.2014 and 03.06.2016 respectively without approval of CZA. Also the zoo exchanged four horned antelope with Zoological Garden, Alipore suppressing the fact.	16.08.1995 23.09.1998	Rehabilitation of python, common peafowl and four horned antelope which were rescued by Forest Department, Rourkela Forest Division, Govt. of Odisha has been done in the zoo. We have made correspondence with DFO & Wildlife Warden, Rourkela, Rourkela Forest Division, Govt. of Odisha vide out letter dated 16.08.2016 for further order in the matter. Till date we have not received any instructions from them regarding release/relocation / housing in zoos. Exchange of Four horned antelope was taken up with Zoological Garden, Alipore after obtaining necessary approval from CZA.
14	10.3(7)	Rescued animals are housed in cages in front of hospital. There is no functional facility in the zoo.	16.08.1995	At the time of zoo evaluation, the rescued animal was housed in the zoo hospital for treatment after quarantine.
15	10.3(7)	Rescued animals are housed and displayed along with captive animals	16.08.1995	The rescued animals after proper quarantine are being housed in separate enclosures.
16	10.3(8)	Report on rescued animals indicating source, legality of acquisition and infrastructure available for housing, upkeep and healthcare of the rescued animals has not been submitted by the Zoo Operator to the Chief Wildlife Warden of the State and Central Zoo Authority.	16.08.1995	The report of the rescued animals have been submitted to PCCF (WL)&Chief Wildlife Warden vide letter no. Hort./2012-13/1544-48 dated 03.09. 2012 and Hort./2016-17/1296 Dated 11.08.2016 (Copy Enclosed as Annexure - III).

17	10.4(2)	All the animal enclosures in the zoo is not in accordance with the specification of the CZA	16.08.1995 21.02.1997 07.11.1997 23.09.1998 14.02.2001 19.06.2009 06.05.2010	The enclosures of animals like pelican, emu, ostrich, and multi-species herbivore have already been modified to meet the specifications. The modification of other enclosures shall be undertaken in a phased manner.
18	10.5(2)	Diet schedule has not been prepared and is not being implemented	16.08.1995	The prescribed diet schedule for each and every zoo inmates are available which is implemented (Copy enclosed as Annexure-IV).
19	10.5(5)	Sample of feed and water is not tested at random for contaminants	25.10.2017	The Feed for zoo animals are inspected and checked physically on daily basis before offering to animals. The potable drinking water as supplied in the Steel Township are provided to the zoo animals. The quality of water is checked as per schedule by our Town Engineering Department. However, we shall send random feed and water samples for quality check in a schedule basis.
20	10.5(5)	Schedule for disinfection of enclosures has not been prepared and implemented.	16.08.1995	Schedule for disinfection of enclosures exists and regularly being followed and maintained (Sample copy enclosed as Annexure – V).
21	10.5(8)	Schedule for vaccination and other prophylactic measures has not been prepared and implemented.	16.08.1995	Vaccination schedule exists and prophylactic measures are taken and recorded on routine basis (Sample copy enclosed as Annexure – VI).
22	10.5(9)	Failed to screen staff involved in upkeep of animals against zoonotic diseases	16.08.1995	Health check-up of all zoo staffs are being carried out by Ispat General Hospital (IGH) once in every year. Screening against zoonotic diseases will be done by 25/05/2018.



23	10.5(10)	Records of the animals, namely animal History Card, Keeper's Diary, Daily Report and Treatment Card are not being maintained in format prescribed by the Central Zoo Authority.	16.08.1995 06.05.2010	Animal History Card, Daily Report, Keeper's Diary and Treatment Card are being maintained as per prescribed format provided by Central Zoo Authority. (Sample Copy enclosed as Annexure VIII)
24	10.6(1b)	Veterinary infrastructure is grossly inadequate. Infrastructure for treatment of animals and clinical examination is not provided in the zoo. The zoo has failed to constitute health advisory committee at zoo level and seek the guidance from the members in the matter of health and upkeep of animals.	16.08.1995 21.09.2000 14.02.2001 13.07.2001 12.10.2004 06.05.2010 07.01.2014	Proposal for construction of Zoo Hospital is in the Master Plan. For treatment of zoo animals and clinical examination, adequate infrastructure exists. A health advisory committee is there. (Copy of the order is enclosed for reference as Annexure - IX). The Committee is under reconstitution due to superannuation of the members.
25	10.6(1b)	Did not maintain record on procurement of vials of chemical immobilization drugs	25.10.2017	Record on procurement and use of chemical immobilization drugs is being recorded in a register.
26	10.6(3)	Quarantine Ward and Animal Isolation ward are in dilapidated condition and abandoned.	25.10.2017	Quarantine Ward and Animal Isolation Ward has been renovated.
27	10.6(3)	Animal restraining equipment is inadequate with respect to the animal collection of the zoo.	25.10.2017	We will augment the availability of adequate restraining equipment for which procurement process has been initiated.
28	10.6(5)	The Zoo Operator has not posted Veterinary Staff as per prescribed norms.	06.05.2010 07.01.2014	We have initiated the action for deployment of veterinary compounder/stockman.

29	10.7(4)	The disposal of carcass is improper. The wall adjacent to the burial ground is less than prescribed height. Thus, there exists chance for entry of stray animals.	16.08.1995 06.05.2010 07.01.2014	A two meter high wall around the burial ground with entry gate has been recently constructed.
30	10.9(4)	Housed Rosy Pelican and Golden Pheasant singly.	25.10.2017	4 nos. of Rosy pelican were housed inside pelican enclosure since 16.10.2008. In the year 2016-17, due to outbreak of avian influenza, 3 nos. of pelican succumbed. Presently, 1 no. of pelican exists. The solitary female Golden Pheasant was kept with the female lady Amherst's Pheasant on temporary basis till a suitable male is procured. This was done to prevent boredom in the species. We are exploring the possibility of pairing these birds through zoo animal exchange programme.
31	10.9(9)	Spotted deer housed in the zoo is beyond carrying capacity. The Zoo Operator has not adopted effective population control measures in prolific breeding species in spite of repeated advisory from this Authority.	16.08.1995 21.02.1997 23.09.1998 26.11.1998 13.07.2001 02.04.2002 12.10.2004 05.06.2008	Spotted deer housed at IG Park Zoo and Deer Park is within the carrying capacity. Male Spotted deer housed at Deer Park has been separated from the female deer in two separate enclosures as per the recommendation of CZA. As such controlled breeding policy exists at Deer Park.
32	10.12(2)	The anti-venom serum for snake bite is not available in the zoo premises	16.08.1995 06.05.2010	Anti venom serum for snake bite has been procured on 12.05.2018 and kept at Zoo Veterinary Hospital.
33	11(1)	The Zoo has not reported species displayed in the Aquarium in the Annual Inventory submitted to the Central Zoo Authority.	25.10.2017	A list of ornamental fishes housed in the Aquarium is placed at Annexure – X. However, the list shall be submitted with the Annual Inventory in future.

34	11(1)	<p>The factual information has not been recorded in the Animal Stock Register. Discrepancies observed during evaluation in the Animal Stock Register are as follows:</p> <ul style="list-style-type: none"> <li>a. Indicates presence of stock few species that were not found during evaluation. This has specific reference to Hill Mynah and Common Mongoose. On enquiry, it is stated that these species are freely available. The zoo is to maintain records of only captive animals.</li> <li>b. As per inventory reported to the CZA, one male spotted deer died on 31.01.2017 where as the post mortem report and stock register indicate that the animal died is female.</li> </ul> <p>As per stock register, the zoo disposed Star Tortoise on 24.06.2016. However, same is not reflected in the inventory report submitted to the CZA.</p>	25.10.2017	<ul style="list-style-type: none"> <li>a) Common Mongoose and Hill mynah are housed in mongoose enclosure and pheasant house, respectively inside IG Park Zoo.</li> <li>b) On 31.01.2017, a female spotted deer died and PM examination revealed death due to old age complications. However, in the inventory report submitted to CZA, it is inadvertently indicated as male.</li> <li>c) The procurement and disposal of Star Tortoise has been reflected in Annual Inventory submitted online to CZA (Copy attached as Annexure-XI).</li> </ul>
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## Checklist of Free Ranging Wildlife at Indira Gandhi Park Zoo & Deer Park

### MAMMALS

S. N.	English Name	Scientific Name	Status
1.	Common mongoose	( <i>Herpestes edwardsi</i> )	VC
2.	Jungle cat	( <i>Felis chaus</i> )	R
3.	Eastern mole	( <i>Talpa micrura</i> )	C
4.	Indian mole rat	( <i>Bandicota bengalensis</i> )	C
5.	Bandicote Rat	( <i>Bandicota indica</i> )	VC
6.	Common fruit bat	( <i>Pteropus giganteus</i> )	VC

### BIRDS

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> )	VC
9	Lesser Whistling Teal or Tree Duck	( <i>Dendrocygna javanica</i> )	VR
10	Pariah Kite	( <i>Milvus migrans govinda</i> )	VR
11	Shikra	( <i>Accipiter badius dussumderi</i> )	R
12	Red Jungle fowl	( <i>Gallus gallus murghi</i> )	R
13	White breasted Waterhen	( <i>Amaurornis phoenicurus boliocephalus</i> )	C
14.	Bronze winged Jacana	( <i>Metopidius indicus</i> )	C
15	Indian Blue Rock Pigeon	( <i>Columba livia intermedia</i> )	C
16	Indian Spotted Dove	( <i>Streptopelia chinensis</i> )	VC
17	Rose-ringed Parakeet	( <i>Psittacula krameri</i> )	VR
18	Indian Koel	( <i>Eudynamys scolopacea</i> )	VC
19	Common Crow-Pheasant or Coucal	( <i>Centropus sinensis</i> )	VC
20	Eastern Spotted Scops Owl	( <i>Otus spilocephalus</i> )	VR
21	Barn Owl	( <i>Tyto alba</i> )	VC
22	Indian Jungle Nightjar	( <i>Caprimulgus indicus</i> )	C
23	Lesser Pied Kingfisher	( <i>Ceryle rudis</i> )	VR

24	Indian Small Blue Kingfisher	( <i>Alcedo atthis bengalensis</i> )	VR
25	Eastern White breasted Kingfisher	( <i>Halcyon smyrnensis perpulchra</i> )	C
26	Indian Small Green Bee-eater	( <i>Merropos orientalis</i> )	C
27	Indian Roller or Blue Jay	( <i>Coracias benghalensis</i> )	C
28	Small Green Barbet	( <i>Megalaima viridis</i> )	R
29	Yellow fronted Pied or Mahratta Woodpecker	( <i>Picoides mahrattensis</i> )	R
30	Larger Golden backed Woodpecker	( <i>Chrysocolaptes lucidus</i> )	C
31	Indian Golden Oriole	( <i>Oriolus oriolus</i> )	C
32	Indian Black headed Oriole	( <i>Oriolus xanthornus</i> )	C
33	Indian Black Drongo	( <i>Dicrurus macrocercus</i> )	VC
35	Black-headed or Brahminy Myna	( <i>Sturnus pagodarum</i> )	R
36	Indian Pied Myna	( <i>Sturnus contra</i> )	R
37	Indian Myna	( <i>Acridotheres tristis</i> )	VC
38	Northeastern Tree Pie	( <i>Dendrocitta vagabunda</i> )	VC
39	Indian House Crow	( <i>Corvus splendens</i> )	VC
40	Indian Jungle Crow	( <i>Corvus macrorhynchos culminates</i> )	VR
41	Large Cuckoo-shrike	( <i>Coracina novaehollandiae</i> )	R
42	Bengal Red whiskered Bulbul	( <i>Pycnonotus jocosus</i> )	R
43	Orissa Red vented Bulbul	( <i>Pycnonotus cafer</i> )	C
44	Striated Babbler	( <i>Turdoides subrufus</i> )	R
45	Orissa Jungle Babbler	( <i>Turdoides striatus orissae</i> )	VC
46	Indian Tailor Bird	( <i>Orthotomus sutorius</i> )	VR
47	Yellow Browed Leaf Warbler	( <i>Phylloscopus inornatus</i> )	R
48	Indian Magpie Robin	( <i>Copsychus saularis</i> )	C
49	Indian White Wagtail	( <i>Motacilla alba</i> )	R
50	Forest Wagtail	( <i>Motacilla indica</i> )	VR
51	Indian Purplerumped Sunbird	( <i>Nectarinia zeylonica sola</i> )	R
52	Indian Purple Sunbird	( <i>Nectarinia asiatica</i> )	C
53	Indian White-eye	( <i>Zosterops palpebrosa</i> )	R
54	Indian Baya	( <i>Ploceus philippinus</i> )	VR

### REPTILES

1	Land Monitor lizard	( <i>Varanus bengalensis</i> )	VC
2	Indian Python	( <i>Phython molurus</i> )	C
3	Russels Viper	( <i>Daboia russelli</i> )	C

4	Banded krait	( <i>Bungarus fasciatus</i> )	R
5	Common Indian Krait	( <i>Bungarus caeruleus</i> )	R
6	Indian Cobra Binocellate	( <i>Naja naja naja</i> )	R
7	Cobra Monocellate	( <i>Naja naja kaouthia</i> )	R
8	Rat Snake	( <i>Ptyas mucosus</i> )	VC
9	Common Indian Broze back or tree snake	( <i>Dendrelaphis tristis</i> )	C
10	Checkered keel back	( <i>Xenochrophis piscator</i> )	C
11	Chameleon	( <i>Chameleon zeylanicus</i> )	C
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

Status : VR- Very Rare / R- Rare / VC- Very Common / C- Common

## Butterflies of Indira Gandhi Park Zoo

### FAMILY PAPILIONIDAE

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

### FAMILY PIERIDAE

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

**FAMILY NYMPHALIDAE**

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

**FAMILY LYCAENIDAE**

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>Psuedozizeeria 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

### FAMILY HESPERIIDAE

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 maevis</i>	O
84	RICE SWIFT	<i>Borbo cinnara</i>	O
85	SMALL BRANDED SWIFT	<i>Pelopidas mathias</i>	C

Status : VC- Very Common / C-Common / O-Ocassional / R - Rare / I-Indeterminate

## ODONATE FAUNA OF INDIRA GANDHI PARK ZOO & DEER PARK, ODISHA

### SUBORDER : ANISOPTERA

#### FAMILY - AESHNIDAE

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



**FAMILY - GOMPHIDAE**

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)

**FAMILY - LIBELLULIDAE**

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>Rhodothermis 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>Tamea basilaris</i> (Palisot de Beauvois, 1805)
32	Black Marsh Trotter	<i>Tamea 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

**FAMILY - MACROMIIDAE**

37	Common Torrent Hawk	<i>Epophthalmia vittata</i> Burmeister, 1839
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## SUBORDER : ZYGOPTERA

## FAMILY - COENAGRIONIDAE

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

## FAMILY - LESTIDAE

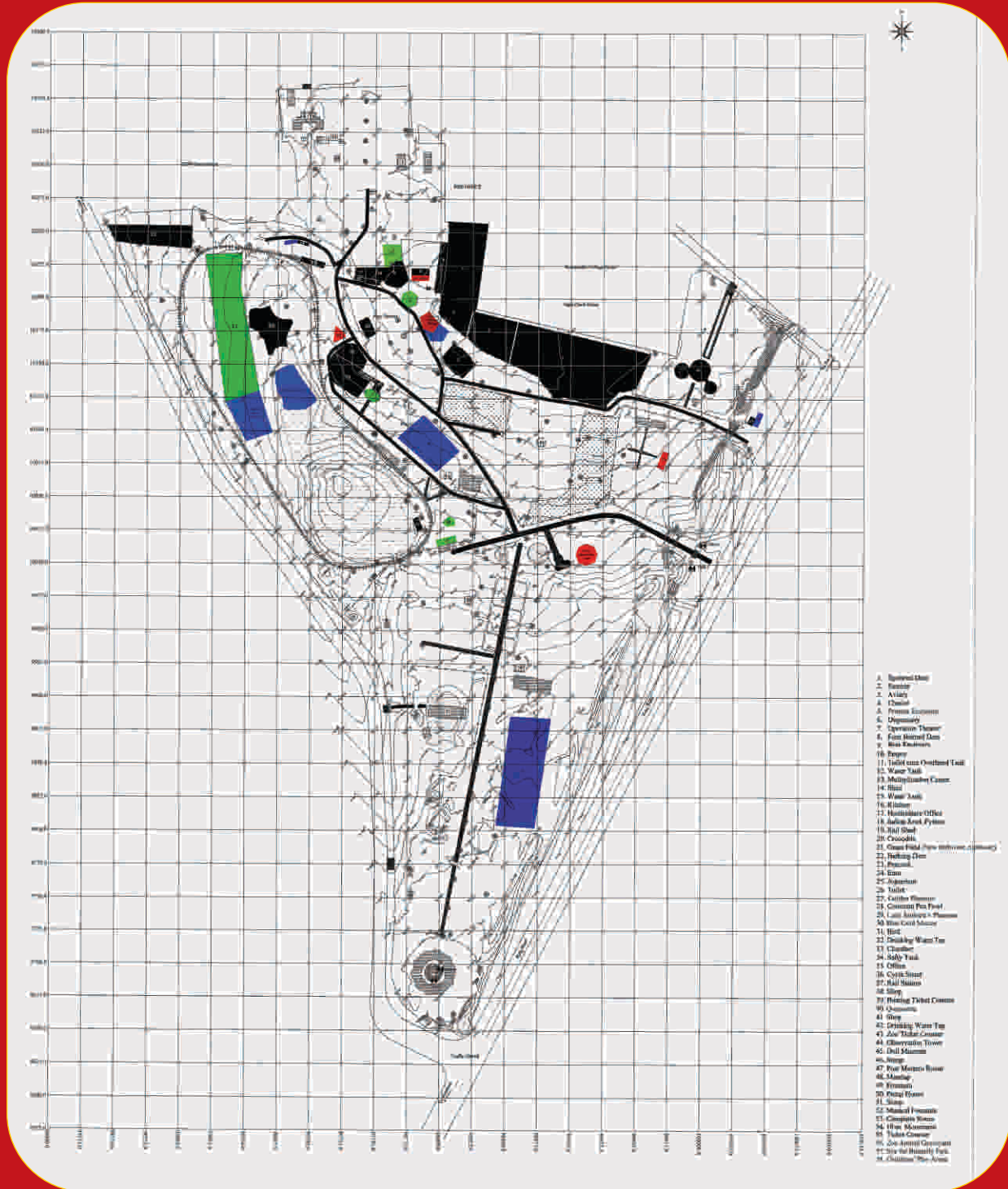
51	Brown Spreadwing	<i>Lestes umbrinus</i> Selys, 1891
52	Emerald-striped Spreadwing	<i>Lestes viridulus</i> Rambur, 1842

## FAMILY - PLATYCNEMIDIDAE

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)



# LAYOUT MAP OF INDIRA GANDHI PARK ZOO





INDIAN PEAFOWL

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