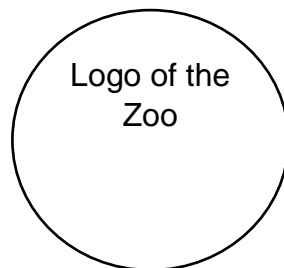


# BIOLOGICAL PARK ITANAGAR

Annual Report for the year  
2017-18



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## **Report of the Officer-in-charge**



### **Director's Short Report**

In Arunachal Pradesh perhaps the journey of Wildlife management in captivity started in the year 1978 with a small rescue facility in Naharlagun. The idea behind setting up of this centre was to provide minimum veterinary facility for the displaced, injured and orphan animals and ultimately rehabilitate the animals back to the wild.

Importance of having a permanent holding facility particularly those animals considered unfit for release in the wild due to one or other reason was gradually realized by the department and thus the rescue centre had to be upgraded & shifted to Itanagar and given the status of a small Zoo duly recognised by CZA. It has an area of 250 Ha, located within the Itanagar Wildlife Sanctuary. But extensive zoo display area is about 40.0 Ha only.

The Biological Park Itanagar has very limited animals in its exhibits but majority of them belongs to rare and endangered group of species. It has also already earned the reputation of being the first Indian Zoo to breed Hoolock Gibbon in captivity. The breeding programme launched during April 2007 has successfully bred a couple of young Gibbons. Breeding of Hoolock Gibbon in Biological Park Itanagar is seen as one of the unique conservation success stories ever achieved by any Indian Zoo, which was otherwise considered unbreedable in captivity.

In the year 2016-17, Biological Park, Itanagar has achieved tremendous improvement in terms of Zoo inmates' health & hygiene and their naturalistic housing type. The assets for visitors' recreational amenities were also improved magnificently during the year under report.

Further, it has beautiful hilly natural land scrapping, because of which natural flow of drainage/garbage is possible without any problem from the zoo. Biological Park, Itanagar is in pristine environment.

The annual report for the year 2016-2017 of Biological Park, Itanagar provides all zoo enthusiasts and others about various aspects of management as well as developmental activities undertaken in the zoo. I am optimistic that Biological Park, Itanagar will continue to develop & grow as one of the best managed zoos' of the Country in times to come.

Above all, Shri. Raya Flago, Curator, full time officer of Biological Park and his team members along with zoo veterinarian Dr. T. Sorang and his staff deserve appreciation for their hard work in accomplishing the overall development of the zoo. I also extend my thanks to all senior officers of department of Environment & Forest Government of Arunachal Pradesh, CZA, local committee members, stake holders etc for their support and cooperation in successfully managing Itanagar zoo in a best possible manner under the given situation.

Shri. Joram Dopum,

Director,

Biological Park, Itanagar.



### **From the desk of Curator, Biological Park, Itanagar, A.P.**

The year 2017-18 was very memorable in the history of Biological Park, Itanagar, popularly known as "Itanagar Zoo" as first ever Annual Report of the Zoo was prepared under my leadership. Also

for the first time the zoo was converted as per naturalistic looks and all the enclosures were improved as per latest concept of Ex-situ management.

Again it was a great year as we witness record number of visitors as well as record revenue collection. Enclosure enrichment and landscaping had been given importance during the year. Animal health management was accorded top priority. The most important achievement was perennial supply of water to zoo inmates due to improvement of water supply system.

Lastly, it gives immense pleasure to record my appreciation to my Director Shri Joram Dopum all my colleagues, supporters, service providers of Zoo, both print and electronic media, Dr R. Kemp, PCCF, WL & BD and Chief Wildlife Warden, Shri Omkar Singh, PCCF & HOFF, Govt of AP, CZA and all my esteemed visitors for their continued support and cooperation.

RAYA FLAGO

CURATOR

BIOLOGICAL PARK, ITANAGAR

## **1. History of Biological Park, Itanagar**

A small rescue centre was established in Naharlagun during 1978 to deal with the problem of displaced and injured animals. This small rescue facility gradually became the epicenter for displaced and orphaned animals coming from all parts of the state. Having realized the importance of a permanent holding facility particularly those animals unfit to release in the wild due to one or other reason, the department decided to upgrade the rescue centre to a full- fledged Zoological Park in 1987, with the broader objective of education recreation, conservation breeding programme and rescue and rehabilitation of Wild animal. Now, Itanagar Zoo has an approved master plan by CZA and with the approval of Master Plan the name of Itanagar Zoo was also been changed to Biological Park, Itanagar considering the richness of floral species in the park area.

The Biological Park, Itanagar has very good ecological parameters including topography, forest coverage, acoustic, natural perennial streams, and pollution free atmosphere which are suitable for different species of animals and birds. It is 3 Km away from Itanagar, the capital city of Arunachal Pradesh.

The unique configuration represented with the characters of rain fed areas of foot hills of Arunachal Pradesh. The Eastern boundary of the Zoo is Chimpu River adjoining to Dokoso River on the Southern side of Park. The Northern boundary passes through hill ridge and Western boundary passes through a stream joining Dakoso river and located within Itanagar Wildlife Sanctuary. The area has been curbed out from the sanctuary and handed over the zoo authority. The entire area is hilly broken and undulating crisscrossed with perennial streams. The beauty of the park is due to its tropical evergreen forest, hillock and natural streams.

## **2. Vision of Biological Park, Itanagar :**

The Zoo was basically started for rescue and recreation, however with the advancement of time, the need to protect and conserve global biodiversity and wildlife was realized, therefore it was shifted to present location with the following visions:

I. A scientific institution engaged in Animal Welfare, Research, Conservation, Education and Sustainability.

II. Best business practice, being efficient, focused on productive motive with close attention paid to planning, ecologically sound design and pollution free environment.

III. Outstanding "Value for Money" for all who visit the zoo. Providing fun, entertainment and learning.

**Strategy of the zoo:**

1. **Conservation;** To focus resources on securing sustainable populations of indigenous endangered species of the state and their habitats through conservation breeding and integrated zoological programmes.

2. **Animal Welfare and Husbandry:** To further advance best practice animal Husbandry and welfare that ensures physical and psychological well being of the animal collection.

3. **Research:** To be a recognized and credible resource for the wildlife research community and enable significant contributions in the field of conservation medicine and by offering support and facilities to increase scientific knowledge that will benefit conservation of wildlife.

4. **Recreation:** To provide unique botanical, wildlife and cultural experiences that delights the visitor.

5. **Education:** To provide exemplary learning opportunities that positively influences people's understanding, values, and impact on the natural world.

6. **Sustainability:** To promote sustainable practices in all aspects of the Zoo's operation.

### 3. Mission

#### **Mission Statement:**

1. To act as Rescue Centre by receiving and keeping orphaned, seized, rescued and injured wild animals.

2. Develop amongst the visitors an understanding about the ecological linkages with the life supporting processes of nature and the need for keeping them intact by adopting sustainable life styles and living in harmony with nature.

3. Develop amongst visitor's sympathy for wildlife and motivate them to support the cause of conservation of wildlife.

4. Compliment the national effort in conservation of wildlife through planned coordinated conservation breeding of endangered wild animal species of the region.

5. Enhancing the role of the zoo in conservation of wildlife through collaborated research aiming at attaining management skilled for in-situ population and carrying out advocacy for protecting the wild animals and their natural habitat

### 4. Objective

The Biological Park, Itanagar was established with the following objectives:-

1. Ex-situ conservation breeding of critically endangered wild animals of the State.

2. Scientific research on wild fauna and flora.

3. Rescue and rehabilitation of wild animals in distress.

4. Educating people about wild animals and the need for their conservation.

5. Providing recreation for Zoo visitors

### 5. About us

S.No.	Particulars	Information
<b>Basic Information about the Zoo</b>		
1	Name of the Zoo	<b>Biological Park Itanagar</b>
2	Year of Establishment	<b>1987</b>
3	Address of the Zoo	<b>Director, Biological Park, Itanagar P/O. R.K. Mission, Pin 791123, Arunachal Pradesh.</b>

<b>S.No.</b>	<b>Particulars</b>	<b>Information</b>
4	State	<b>Arunachal Pradesh.</b>
5	Telephone Number	<b>1. Director – 9436040147 2. Curator – 9436630791 3. Vety.Officer - 9436272895</b>
6	Fax Number	<b>0360 - 2244416</b>
7	E-mail address	<b>1. <a href="mailto:deputychief1998@rediffmail.com">deputychief1998@rediffmail.com</a> 2. <a href="mailto:rayaflago@gmail.com">rayaflago@gmail.com</a> 3. <a href="mailto:sorangtadap@gmail.com">sorangtadap@gmail.com</a></b>
8	Website	<b><a href="http://www.arunchalforests.gov.in">www.arunchalforests.gov.in</a></b>
9	Distance from nearest	<b>Airport:</b> Lilabari Airport (69.8Km)
		<b>Railway Station:</b> Naharlagun(12.8Km)
		<b>Bus Stand:</b> Ganga Main Market (3 Km)
10	Recognition Valid upto (Date)	
11	Category of zoo	<b>Small Zoo</b>
12	Area (in Hectares)	<b>250 Hectares</b>
13	Number of Visitors (Financial Year)	Adult : 62,410 Nos.
		Children : 5300 Nos. (Free entry)
		Total Indian : 67,710 Nos.
		Total Foreigners : 30Nos.
		Total Visitors: 67,40 Nos.
14	Visitors' Facilities Available in Zoo	<b>Proper Toilets, Resting Sheds at different locations, Decorative Benches, Chairs, desk etc.</b>
15	Weekly Closure Day of the Zoo	<b>Every Tuesday</b>
<b>Management Personnel of the zoo</b>		

<b>S.No.</b>	<b>Particulars</b>	<b>Information</b>
16	Name with designation of the Officer in-charge	<b>Shri Joram Dopum, Director, Biological Park, Itanagar.</b>
	Name of the Veterinary Officer	<b>Dr Sorang Tadap, Vety.Offocer.</b>
	Name of the Curator	<b>Shri Raya Flago, Curator</b>
	Name of the Biologist	<b>Ms Mary, Biologist.</b>
	Name of the Education Officer	<b>Shri Raya Flago, Curator cum Education Officer.</b>
	Name of the Compounder/ Lab Assistant	<b>Shri S.K. Saikia,</b>
<b>Owner / Operator of the Zoo</b>		
17	*Name of the Operator	<b>PCCF and Principal Secretary, Department of Environment &amp; Forests, Govt. of Arunachal Pradesh.</b>
18	Address of the Operator	<b>O/o PCCF, Itanagar, P/o Itanagar, Pin - 791111.</b>
19	Contact details/Phone number of Operator	<b>9436050316 0360 – 2212310 0360 – 2291193 (Fax)</b>
20	E-mail address of Operator	<b>Pccfnsecy-arn[at]nic[dot]in</b>

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

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

*I. in the case of a firm or other association of individuals, any one of the individual partners or members thereof; or*

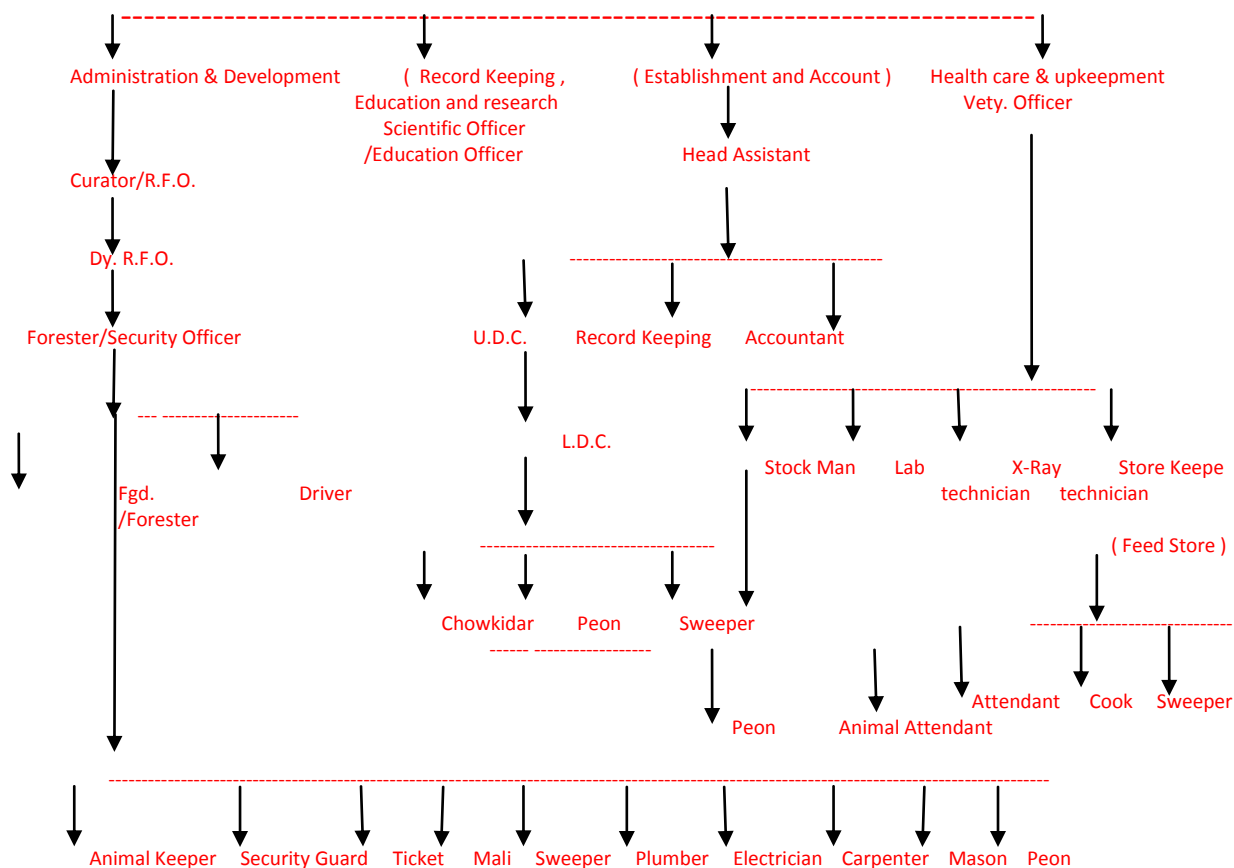
*II. in the case of a company, any director, manager, secretary or other officer, who is in-charge of and responsible to the company for the affairs of the zoo; or*

*III. In case of zoo owned or controlled by the Central Government or any State Government or Union Territory Administration or any Trust or Society funded by the Central Government or a State Government or a Union Territory Administration, the Secretary of the concerned Department of that Government, or as the case may be the Union Territory Administration, shall be deemed to be the Zoo Operator.*

## **6. Organizational Chart**

Director  
↓





## 7. Human Resources

### Manpower of the Zoo\*

Sl. No	Designation	Number of sanctioned Posts	Name of incumbent
1	Director	1	Joram Dopum
2	Deputy Director	0	Vacant
3	Veterinary Officer	1	Dr Sorang Tadap
4	Range Forest Officer/Curator	1	Raya Flago
5	Scientific /Education Officer	0	Raya Flago
6	Dy. RFO	1	Pema Chundup
7	Stock man/ Vety. Field Assistant	1	S.K. Saikia
8	Research Assistant	0	Vacant
9	Forester	4	1. S.C. Paul      2. Nabam Tacho 3. Rajen Baruah   4. Tadar Bandey
10	Forest Guard	2	1. Teli Kulo      2. Pema Ladon
11	Office superintendent	1	1
12	Accountant	1	1
13	Senior Clerk	1	1
14	Junior clerk cum computer Assistant	1	1
15	Stock man	1	1
16	Lab. Assistant	0	Vacant
17	X- ray technician	0	Vacant
18	Driver (LV & HV)	1	1
19	Peon	2	2
20	Animal attendant	9	1. R. Phukan      2. Md.Abdul Munaf

			3. Bai Bame 4. Passang Simi 5. Tajar Haning 6. Yamdo Lalik 7. Nabom Ramsing 8. Dungda Taniang 9. Tashi Boje
21	Animal keeper	30	30
22	Chowkidar - office and Guest house	2	2
23	Sweeper	0	0
24	Welder	0	0
25	Masonry	0	0
26	Carpenter	0	0
27	Electrician	0	0
28	Plumber	0	0
29	Black- smith	0	0
30	Mali	0	0
31	Pump operator	0	0
32	Cook	0	0
33	Night guard	14	14
34	Daily wages	4	4
35	Handyman	1	Suresh Borik
36	Forest watcher	2	1. L. Jamik 2. Tech Nitter
37	Game watcher	1	Taw Yezi
38	Veterinary	3	1. S.K Saikia (Stockman) 2. Chuku Asinta (Medical Attendant) 3. Tadar Yamin (Peon)
	<b>Total</b>	<b>85</b>	<b>85</b>

\*Please give above mentioned information in respect of all zoo personnel, from the Officer in-charge upto the Animal Keeper.

### 8. 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
			From	To	
1.	Raya Flago, Curator	Middle level zoo officials training programme on latest technical know-how of zoo management.	11/12/2017	14/12/2017	Central Zoo Authority (CZA), New Delhi.
2.	Sorang Tadap Veterinary Officer	1. Interactive session of Zoological Information Management System (ZIMS) and Data entry in the software by CZA	29/05/2017	30/05/2017	Sepahijala Zoological Park Tripura
		2. Training workshop on capacity building of Indian Zoo Veterinarians on animal health management in captivity by CZA in collaboration with National Zoological Park Smithsonian USA	16/09/2017	19/09/2017	National Zoological Park, New Delhi

		3. Interactive session of Zoological Information Management System (ZIMS) and Data entry in the software by CZA	19/03/2018	20/03/2018	Assam State Zoo cum Botanical Garden Guwahati
3.	Animal Attendant				
	a) Md. Abdul Munaf	Training For zoo keepers on regional basis on record keeping and marking of the animals in captivity	02/01/2017	08/01/2017	Region at Sepahijala Zoological Park, Sepahijala, Agartala, Tripura
	b) Probin Bora	One week training for zoo keepers	20/11/2017	25/11/2017	State Environment & Forest Training Institute/ Nagaland Zoological Park Dimapur
	c) Tajar Haning	Training For zoo keepers on regional basis on record keeping and marking of the animals in captivity	02/01/2017	08/01/2017	Region at Sepahijala Zoological Park, Sepahijala, Agartala, Tripura

**9. Zoo Advisory Committee – Nil**

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

**10. Health Advisory Committee – Nil**

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

**11. Statement of income and expenditure of the Zoo**

Month	Adult	2 & 3 Wheeler	Still Camera	LMV	HMV	Foreigner	Total Amount (Rs)
April 17	4500	150	30	127		1	1,38,600.00
May 17	8000	450	384	150		2	2,65,900.00
June 17	5800	400	260	50		2	1,77,000.00
July 17	2900	260	55	90			1,03,500.00
Aug 17	3800	340		110			1,26,000.00
Sept.17	3200	200		90		8	1,01,000.00
Oct.17	3500	324	35	160		6	1,38,500.00
Nov.17	3400	134		95		11	1,04,000.00
Dec.17	5750	382	10	183			1,90,000.00

Jan. 18	10,200	506	33	427			3,61,800.00
Feb. 18	4900	300	19	125			1,52,400.00
March 18	6460	360	25	185			2,05,200.00
<b>Total</b>	<b>62410</b>	<b>3806</b>	<b>851</b>	<b>1792</b>		<b>30</b>	<b>2063900.00</b>

## 12. Daily feed Schedule of animals

Sl.No.	Species	Feed item	Quantity		Day of fasting
			Winter	Summer	

Sl. No.	Species	Feed items	Qty. Per No.		Day of fasting
			1	2	
			Winter	Summer	
01.	Barking Deer and Goral	Concentrated Feed	0.5 kg.	0.5 kg.	Once daily
		Sweet Potato	0.2 kg.	0.2 kg.	
		Chana ( gram)	0.2 kg.	0.2 kg.	
		Banana(Ripe)	4 nos.	4 nos.	
		Green Fodder	Ad lib	Ad lib	
02.	Sambar	Concentrated Feed	2 kg.	2 kg.	Once daily
		Sweet Potato	0.3 kg.	0.3 kg.	
		Chana ( gram)	0.3 kg	0.3 kg	
		Banana(Ripe)	6 nos.	6 nos.	
		Green Fodder	Ad lib	Ad lib	
03.	Himalayan Black Bear	Banana	12 nos.	12 nos.	Salt @ 15 kg. per month for washing, leaning & sanitation.
		Cucumber	0.5 kg.	0.5 kg.	
		Seasonal fruits like Mango, Pears, P/Apple	0.250 kg.	0.250 kg.	
		Atta ( for bread)	0.7 kg.	0.7 kg.	
		Rice (Cooked)	0.4 kg.	0.4 kg.	
		Sweet Potato ( boiled)	0.4 kg.	0.4 kg.	
		Pumpkin ( boiled)	0.5 kg.	0.5 kg.	
		Carrot, Tomato, Green Pea	0.250 kg.	0.250 kg.	
Green Maize	2 nos.	2 nos.			
04.	Monkey	Banana	4 kg.	4 kg.	For twice daily.
		Cucumber	0.4 kg.	0.4 kg.	
		Seasonal fruits like Mango, Pears, Guava, P/Apple, Bogori etc.	0.2kg.	0.2kg.	
		Rice (Cooked)	0.2 kg.	0.2 kg.	Salt- 15 kg. per month for the purpose of
		Atta	0.2 kg.	0.2 kg.	
		Pumpkin ( boiled)	0.4 kg.	0.4 kg.	
		Chana ( gram)	0.2 kg.	0.2 kg.	

		Green Maize	1 nos.	1 nos.	sanitation, washing, cleaning etc .
		Sweet Potato ( boiled)	0.2 kg.	0.2 kg.	
		Green Maize	0.4 kg.	0.4 kg.	
		Cabbage	0.1 kg.	0.1 kg.	
05.	Civet	Minced meat (mutton or Chicken)	0.1 kg.	0.1 kg.	For twice feeding daily.
		Banana	2 nos.	2 nos.	
		Sweet Potato	0.2 kg.	0.2 kg.	
		Mango, pears, Pumpkin & Other available seasonal Fruits	0.2 kg.	0.2 kg.	

Sl. No.	Name of the species	Feeding items	Qty. Per No.		Remarks
			Winter	Summer	
06.	Jackal	Beef & minced chicken in every fortnight	0.3 kg.	0.3 kg.	Once daily
07.	Jungle Cat , Leopard Cat etc.	Mutton Minced chicken in every fortnight	0.2 kg. 0.2kg.	0.2 kg. 0.2kg.	Twice per month
08.	Eagles, Wood-Owl	Minced meat (mutton or Chicken)	0.250 kg.	0.250 kg.	
09.	Fishing Owl	Live fish (magur)	0.250 kg.	0.250 kg.	
10.	Python	Live chicken	2 nos. each Weighing 2 kg.	2 nos. each Weighing 2 kg.	Twice per month
11.	Bengal Tiger (Adult)	Beef Live chicken (dressed) in every fortnight Salt	10 kg. 15 kg. 20 kg.	10 kg. 15 kg. 20 kg.	Once daily & one day fasting in a week For sanitation & washing cleaning of cubicles.
12.	Bengal Tiger (Sub-adult)	Beef Live chicken (dressed) in every fortnight	5 kg. 7 kg.	5 kg. 7 kg.	One day fasting in a week
	Bengal Tiger (Cub)	From the 5th months age ( dressed) Chicken 6th months dressed chicken 7th month dressed chicken Beef 8th to 9th month age Chicken	 1.250 kg.  2.5 kg.  3 kg. 2 kg.  4 kg.	 1.250 kg.  2.5 kg.  3 kg. 2 kg.  4 kg.	

		Beef	3 kg.	3 kg.	
		10 to 12th month age			
		Chicken	2 kg.	2 kg.	
		Beef	6 kg.	6 kg.	
13.	Common Leopard	Beef	5 kg.	5 kg.	One day fasting in a week
		Live chicken(dressed) in every fortnight.	7 kg.	7 kg.	
14.	Clouded Leopard	Mutton	2.5 kg.	2.5 kg.	One day fasting in a week
		Chicken (live) (dressed) in every fortnight.	3 kg.	3 kg.	

Sl. No.	Name of the species	Feeding items	Qty. Per No.		Remarks
			Winter	Summer	
15.	Hoolock gibbon	<b>Morning :</b>			Twice feeding daily
		Banana	4 nos.	4 nos.	
		Soaked Chana	0.150 kg.	0.150 kg.	
		Apple	1 no.	1 no.	
		Orange/citrus fruit	1 no.	1 no.	
		Cucumber			
		Water-melon, Pears etc.	0.3 kg.	0.3 kg.	
		Egg/Silk work	1 no. each	1 no. each	
		<b>In the evening</b>			
		Rice mixed with pumpkin(boiled)	0.3 kg.	0.3 kg.	
		Litchi, Guava, Plum	0.250 kg.	0.250 kg.	
		Grapes, pine apple	100 gm.	100 gm.	
Mango	1 no.	1 no.			
Green pea, Carrot	0.250 kg.	0.250 kg.			
16.	Slow- loris	Apple	0.2 kg.	0.2 kg.	Alternate day
		Banana	2 nos.	2 nos.	
		Mango	.2 kg.	.2 kg.	
		Sweet Potato (boiled)	0.1 kg.	0.1 kg.	
		Mince meat/Egg (boiled)	1 no.	1 no.	
17.	Gharial	Live Fish (Magur, Singi) required Qty. To introduce into the pond	1 kg.	1 kg.	Each daily
18.	Tortoise	Live Fish Goroi	0.200 kg.	0.200 kg.	
19.	Porcupine	Banana	2 nos.	2 nos.	
		Chana	0.1	0.1	
		Sweet Potato	0.1	0.1	
		Cabbage	0.2500 kg	0.2500 kg	
		Carrot	0.2 kg	0.2 kg	

		Cucumber, Pears Pumpkin	0.3 kg	0.3 kg	
20.	Hornbill	Fish/Chicken/Liver	250 gm.	250 gm.	On alternate day
		Banana	2 nos.	2 nos.	
		Apple	0.250 kg	0.250 kg	
		Bogori, Plum, Pear Guava, Mango, P/apple & Tomato etc.	0.050 kg	0.050 kg	

Sl. No.	Name of the species	Feeding items	Qty. Per No.		Remarks
			Winter	Summer	
21.	Peafowl	Paddy	0.2 kg.	0.2 kg.	
		Chana	0.050 kg.	0.050 kg.	
		Cabbage	0.1 kg.	0.1 kg.	
		Poultry feed	0.1 kg.	0.1 kg.	
		Garlic	0.025 kg.	0.025 kg.	
22.	Goose	Paddy	0.2 kg.	0.2 kg.	
		Chana	0.1 kg.	0.1 kg.	
		Duck feed	0.2 kg.	0.2 kg.	
23.	Parakeet, Mynah, Barbet	Banana	1 no.	1 no.	
		Apple	.050 kg.	.050 kg.	
		Green maize	1 no.	1 no.	
		Green chilli	0.010 kg	0.010 kg	
		Paddy	0.020 kg	0.020 kg	
		Chana	0.015 kg.	0.015 kg.	
		G/Pea	0.050 kg.	0.050 kg.	
		Ground nut	0.025 kg.	0.025 kg.	
24.	Jungle Fowl & Pheasants	Paddy	0.1 kg.	0.1 kg.	
		Chana	0.015 kg.	0.015 kg.	
		Poultry feed	0.050 kg.	0.050 kg.	
25.	Dove	Paddy	0.020 kg.	0.020 kg.	
		Chana	0.015 kg.	0.015 kg.	
26.	Duck, Morhen & Teals	Paddy	0.050 kg.	0.050 kg.	
		Chana	0.015 kg.	0.015 kg.	
		Duck Feed	50 to 100 gm.	50 to 100 gm.	

Sl. No.	Name of the species	Feeding items	Qty. Per No.		Remarks
			Winter	Summer	
27.	Red Jungle fowl	G.V leaves	0.020gm.	0.020gm.	
		Bread	0.010 gm.	0.010 gm.	
		Kima Bason/egg	0.050/0.5	0.050/0.5	

			no. gm.	no. gm.	
		Mixed dana	0.010 gm	0.010 gm	
		Garlic	0.002 gm.	0.002 gm.	
		Guawa	0.020	0.020	
		Sattu	0.025	0.025	
28.	Blue and yellow Macaw	Banana	1 no.	1 no.	Except May, June & July (Crt. W.e.f. 1 <sup>st</sup> Nov to 31 <sup>st</sup> Mar )
		G.nut	0.050 kg.	0.050 kg.	
		Papaya	0.050 kg.	0.050 kg.	
		Chilies	0.005 kg.	0.005 kg.	
		Maize Crusted	0.050 kg	0.050 kg	
		Apple	0.050 kg.	0.050 kg.	
		Carrot/Cucumber	0.050 kg.	0.050 kg.	
	Seasonal diet :	Peas Green	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Dec to 30 <sup>th</sup> Apr
		Ber	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Feb to 30 <sup>th</sup> Mar
		Chicku	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Feb to 30 <sup>th</sup> Apr
		Guawa	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Oct to 30 <sup>th</sup> Jan
		Water melon	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Apr to 30 <sup>th</sup> Jun
		Melon	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> May to 30 <sup>th</sup> Jun
		Pears	0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Jul to 30 <sup>th</sup> Sep
Bhutta		0.050 gm.	0.050 gm.	W.e.f 1 <sup>st</sup> Jun to 30 <sup>th</sup> Jul	
29.	Pheasants	Lettuce	50gm.	50gm.	
		C. Maize	50 gm.	50 gm.	
		Onion	10 gm.	10 gm.	
		Mousambi	30 gm.	30 gm.	
		Green vegetable	50 gm.	50 gm.	
		Garlic	05 gm.	05 gm.	
		Apple	30 gm.	30 gm.	
		Marble chips	10 gm.	10 gm.	
		Mutton heart	20 gm.	20 gm.	
		Wheat	50 gm.	50 gm.	
		Sattu(Gram)	10 gm.	10 gm.	
		Egg	1.5 pcs.	1.5 pcs.	

Sl. No.	Name of the species	Feeding items	Qty. Per No.		Remarks
			Winter	Summer	
30.	Himalayan Palm Civet	Bun	1 pc.	1 pc.	
		Egg	1 pc.	1 pc.	
		Banana	4 pcs.	4 pcs.	
		Apple	500 gms	500 gms	
		Mutton	100 gms.	100 gms.	
31.	Slow Loris	Bun	1 pc.	1 pc.	
		Egg	1 pc.	1 pc.	
		Banana	3 pcs.	3 pcs.	



		Apple	500 gms	500 gms	
		Mutton	100 gms.	100 gms.	
32.	Langur	Gram	100 gm.	100 gm.	
		Banana	4 pcs.	4 pcs.	
		Ground Nuts	200 gm.	200 gm.	
		Potato	100gm.	100gm.	
		Green Vegetables	100gm.	100gm.	
		Boiled Egg	1 pc.	1 pc.	
		Apple	200gm.	200gm.	
		Bun	1pc.	1pc.	
		Seasonal fruits			
		Tomato	400 gm.	400 gm.	
33.	Emu	Onion	0.100gm.	0.100gm.	
		Garlic	0.050 gm.	0.050 gm.	
		G.V leaves	0.500 gm.	0.500 gm.	
		Mixed dana	0.500 gm	0.500 gm	
		Kima Bason	0.250 gm.	0.250 gm.	
		Banana	10 nos.	10 nos.	
		Gram soaked	0.500 gm.	0.500 gm.	
		Egg boiled	1 no.	1 no.	
		Marble chips	0.050 gm	0.050 gm	
34.	Red Panda	Bun	1 pc.	1 pc.	
		Egg	1 pc	1 pc	
		Banana	4 pcs.	4 pcs.	
		Sugar	20 gm.	20 gm.	
		Apple	500 gm.	500 gm.	
		Milk ( Amul)	500 MI	500 MI	
		Bamboo leaves	3 kg.	3 kg.	

### 13. Vaccination Schedule of animals

Sl.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
1	Tigers	1. Rabies 2. Canine Distemper	1. Raksharab-1ml im 2. Megabvac 6 – 1ml IM	Annually	
2	Common leopards	1. Rabies 2. Canine Distemper	1. Raksharab-1ml im 2. Megabvac 6 – 1ml IM	Annually	
3	Clouded leopards	1. Rabies 2. Canine Distemper	1. Raksharab-1ml IM 2. Megabvac 6 – 1ml IM	Annually	

### 14. De-worming Schedule of animals

Sl.No.	Species	Drug used	Month
1	Carnivores	Fenbendazole, Albendazole, Praziquantel and	Quarterly

		Pyrental pamoate	
2	Hervibores	Fenbendazole, Albendazole and Ivermectin	Quarterly
3	Reptiles	Fenbendazole, Albendazole, Ivermectin	Quarterly
4	Birds	Fenbendazole, Albendazole	Quarterly

### 15. Disinfection Schedule

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Carnivores	All enclosures	Gluteraldehyde Potassium permanganate solution	Biweekly
2	Hervibores	All enclosures	Gluteraldehyde Potassium permanganate solution	Biweekly
3	Reptiles	All enclosures	Gluteraldehyde Potassium permanganate solution	Biweekly
4	Birds	All enclosures	Gluteraldehyde Potassium permanganate solution	Biweekly

### 16. Health Check-up of employees for zoonotic diseases

Sl.No.	Name	Designation	Date of Health Check up	Findings of Health Check up

17. Development Works carried out in the zoo during the year - paste photo with caption

18. Education and Awareness programmes during the year - paste photo with caption

19. Important Events and happenings – paste photo with caption

20. Seasonal special arrangements for upkeep of animals – Nil.

21. Research Work carried out and publications – No research related works carried out during the period of report.

22. Conservation Breeding Programme of the Zoo –

**BRIEF REPORT ON HOOLOCK GIBBON ( HOOLOCK LEUCONEDYS)**  
**CONSERVATION BREEDING PROGRAMME, BIOLOGICAL PARK, ITANAGAR**

The need for ex-situ conservation of wild fauna as one of the main objectives for management of zoos was realized by the GOI soon after independence and then Indian Board for Wildlife now (the National Board for Wildlife) made important recommendations in this regard. The national wildlife action plan (2002-2016) also lays emphasis on the role of zoos for ex- situ breeding of endangered species of wild fauna and their rehabilitation in the wild as per the IUCN guidelines for reintroduction.

To give direction and thrust to the management of zoos in the country, the **National Zoo Policy** was framed and adopted by the Government of India in the year 1998. The main objective of the zoos under the National Zoo Policy is to complement and strengthen the national efforts in conservation of rich bio-diversity of the country, particularly the wild fauna. This objective can be achieved by supporting the conservation of endangered species by giving species, which have no chance of survival in the wild, at least through coordinated breeding under ex-situ conditions and raise stocks for rehabilitating them in the wild, as and when it is appropriate and desirable.

Today when wildlife habitats are under severe pressure and a large number of species of wild animals have become endangered, the Zoos have not only to sustain their own population, but also have to work to augment the depleting populations of endangered species in the wild.

The CZA has identified as many as 63 endangered schedule - I species of wild fauna for the purpose of initiating conservation breeding in India. Considering the animal population in stock and minimum health care facilities besides trained man power, the Biological Park Itanagar has been considered as the coordinating zoo for the conservation breeding programme of Hoolock gibbon and three endemic pheasant species of Arunachal Pradesh. Viz, Sclater Monal, Tibetan eared pheasant and Temminck tragopan.

The Biological park Itanagar has now 19 Hoolock gibbons as on date. *Animals are housed in off display naturalistic enclosure since March 2007. Tall trees inside the enclosure provide shelter and food to the animals.* We have emphasized on providing more and more space with sufficient vegetation. The scatter tree canopy are connected with rope and one can see the Hoolock gibbon swinging from one tree to another showing their acrobatic behavior which they do in the wild. Natural behaviour viz, brachiating, bipedal walk, running, hanging and swinging can be seen in all the enclosures. We have taken special care with regard to feeding of the animals. Besides, seasonal fruits, we encourage wild fruit, foliage and silk worms to supplement the protein requirement of the animals. The Hoolock Gibbon being arboreal in nature, feeding became extremely difficult for us in the beginning. They are reluctant to come down to the ground for feeding. Thus, we had no idea to go about. Nothing is available in literature for our reference and guidance. **We are the first zoo to attempt the captive breeding initiative of this species in India.**

We did not want to force the animal to come down to the ground for feeding which we think would be against their ethics. The machans were constructed on the tree branches and provide the food there itself. The animal attendant climbed to Machan with the help of a ladder and leaves the food there. In the beginning the Gibbon were very scared and did not accept the food readily. But fortunately our idea paid off and ultimately the male Gibbon came down and to our great joy he picked up his first food from the machan but not before scanning the surrounding area. Encouraged by the daring action of the male Gibbon rest also followed and this is how we over came the feeding problem of the Hoolock Gibbon in the Breeding centre. The prime goal of this project is to rear the animal with minimum human contact to avoid imprinting which could be detrimental in the post release stage.

**Breeding Behaviour:** No record is available on the breeding behaviour of Hoolock Gibbon as of yet. Hoolock Gibbon being one of the highly evolved primates, its behaviour pattern is very unique and easy to record. The first report of mating was recorded during November 2007. The breeding season commences from early November and continues till June. We are in the eleventh year of our project and we hope to unveil many mystery, which otherwise would never be known to the conservation world. It was believed, mating is restricted only during early rainy season and young one born November to February which has to be reviewed now. Breeding period starts from the month of November till early June as is evident from the instant birth of first captive bred Eastern Hoolock Gibbon here in the Conservation Breeding Centre, Biological Park Itanagar India.

We never expected to see the result of our hard work so quickly but on 5<sup>th</sup> July 2008, we feel contented with what “Rukmini” and “Lagdeer” has gifted every one of us by giving birth to first ever captive born Gibbon here in the Conservation Breeding Centre Itanagar.

This news spread like wild fire in the zoo and in the department. Information has already been conveyed to the CZA New Delhi who has extended their hearty congratulation to the zoo management for earning the distinction of breeding Eastern Hoolock Gibbon first in the world.

No zoo across the globe has been successful in breeding this species in captivity though as per inventory reports many zoos have been housing Hoolock Gibbon more than 20 years in captivity.

This project needs to be carried forward with utmost sincerity and commitment so that our objective of securing a long term survival of this beautiful animal through conservation breeding programme is ultimately realized in true sense. At present there are 19 (nineteen) Hoolock gibbon at Biological Park, Itanagar which is pride of our State.

**23. Animal acquisition / transfer / exchange during the year – to be provided VO**

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

**24. Rescue and Rehabilitation of wild animals carried out by the Zoo- to be provided VO**

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

**25. Annual Inventory of animals**

Form – II  
[See Rule 11(1)]  
Part – A

Inventory Report for the Year :

Endangered Species\*

Sl. No.	Animal Name	Scientific name	Opening Stock as on				Births			Acquisition			Disposal			Death			Closing Stock as on			
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T

\*Animals under Schedule I and Schedule II of the Wild Life (Protection) Act, 1972  
Part – B

**Other than Endangered Species**

S.No.	Animal Name	Scientific name	Opening Stock as on				Births			Acquisition			Disposal			Death			Closing Stock as on			
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T

**26. 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

**27. 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

**28. List of free living wild animals within the zoo premises**

- Mammals – Barking deer, Jackal, Leopard cat, Flying squirrel, Squirrel, Flying fox etc.
- Birds – Red jungle fowl, Racket tail Drongo, Myena, Jungle crow, Owls, Kingfisher etc.
- Reptiles – King cobra, Python, Cat snake, Rat snake, Viper, Monitor Lizard etc.

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