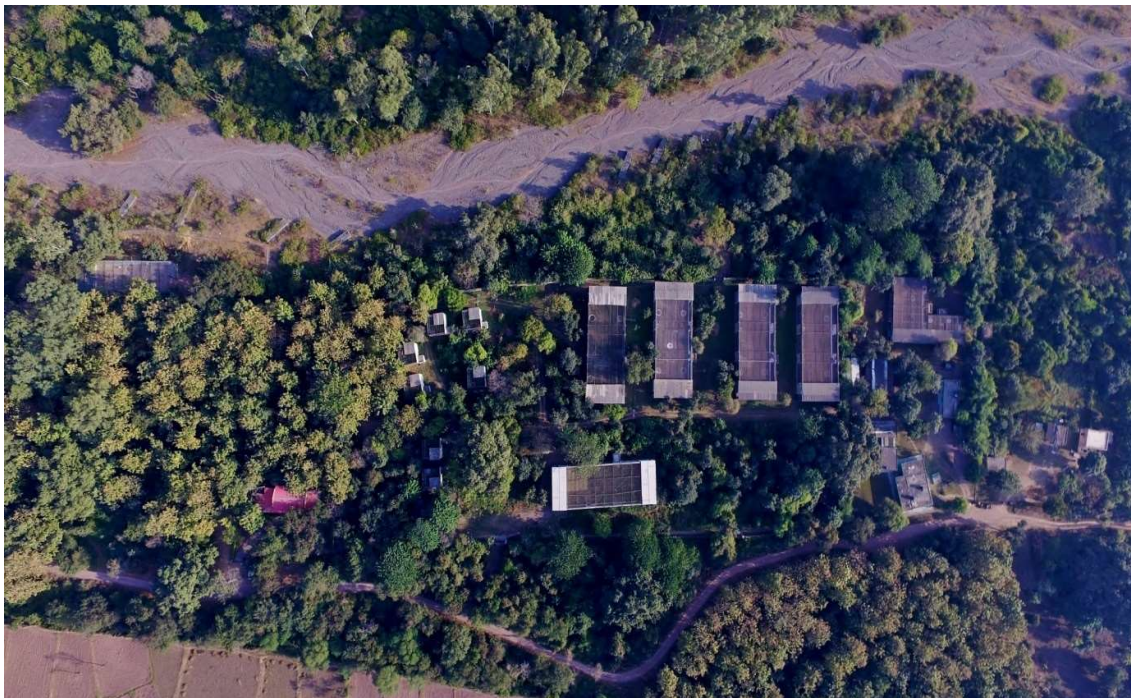


**Vulture Conservation Breeding Centre  
Pinjore, Haryana**

**Annual Report for the year  
2017-18**



**Arial view of Vulture Conservation Breeding Centre, Pinjore, Haryana**



**Haryana Forest Department**



**VCBC, Pinjore, Haryana**



**Bombay Natural History Society**

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A White-backed vulture nestling hatched at the centre

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

The Vulture Conservation Breeding Centre, Pinjore, located at Jodhpur village on the edge of the Bir Shikargaha Wildlife Sanctuary is a collaborative project of the Forest Department, Haryana and Bombay Natural History Society. The centre was established to save the three Critically Endangered Gyps species of vultures viz. White-backed vulture, *Gyps bengalensis*, Long-billed vulture, *Gyps indicus* and Slender-billed vulture, *Gyps tenuirostris*, from looming extinction. The main objective of the centre is to keep and breed 25 pairs of each of the three species and release 100 pairs of each of the species, within ten years from the beginning of the release programme. The release programme was initiated during 2015-16.

The centre has a Governing Council which is chaired by the Addl. Chief Secretary, Department of Forests, Government of Haryana. The Chief Wildlife Warden is the Member Secretary.

During the breeding season of 2017-18, a total of 30 vulture nestlings hatched including 4 Slender-billed Vulture.

The 10th meeting of the Governing Council of Vulture Conservation Breeding Centre (VCBC), Pinjore was held under the Chairmanship of Mr. S. N. Roy, IAS, Addl. Chief Secretary, Govt. of Haryana, Forest & Wildlife Department at Committee Room, 6th floor, New Secretariat, Haryana, Chandigarh on 10 May 2018

13 Vultures were kept in the pre-release aviary out of which 8 White-backed Vulture will be released in the wild. Six of them were 3-5 years captive bred birds and two were wild caught adults. Five birds which were flight less were also housed to attract free ranging birds. The pre-release aviary of dimensions 90x30x17' was constructed in September 2015 on one acre land of Haryana Forest Department adjoining the Vulture Centre.

A temporary aviary of 100x30x18' was constructed to house the fledglings of 2016-17 as there was space constraint. This aviary had 21/2' of brick wall all around followed by safety netting on top supported by iron pipes.

The monitoring of habitat in a radius of 100 km from the centre continued. The information was collected on the free ranging vulture population, food availability to vultures, prevalence of various veterinary NSAIDs and any other threat to vultures. The recent pharmacy surveys showed that the small ampoules for human use were still being misused in treating livestock. Though the vulture safe drug meloxicam was becoming more popular, other untested NSAIDs like nimesulide were also becoming popular. Nimesulide was likely to be toxic as in a recent study it was found to be associated with visceral gout in dead vultures. Aceclofenac which was also being used as pro-drug of diclofenac gets converted into diclofenac within couple of hours of administration. The drug ketoprofen was also found to be toxic to Gyps vultures in South Africa.

The project to do safety testing of various veterinary NSAIDs on Himalayan Griffon

was initiated in November 2017. The phase-2 of the safety testing of tolfenamic acid was in progress and thus so far has been found to be safe for vultures. 13 Himalayan Griffons were shifted to the quarantine facility at Nandpur village about 5 km from the centre and were kept in three different aviaries made up of safety netting held by iron pole structure. Three aviaries were of 20x20x16' and one was smaller.

The Ministry of Environment, Forests and Climate Change provided funding for the running cost of Vulture Conservation Breeding Programme, Pinjore, through the 'Recovery Programme for saving critically endangered species and habitats' of centrally sponsored scheme of Government of India along with an assurance that this funding will be provided annually.

The Vulture Programme also received funding from the Royal Society for the Protection of Birds, U.K.

The Chief Wildlife Warden, Haryana was the Project Leader of the Programme. Dr. Vibhu Prakash was the Project Manager and was assisted by, Dr. Mandar Dilip Kulkarni, Centre Manager, Ms. Nikita Prakash, Scientist 'C', Drs. Avinash Timung, Debasish Saikia and P. Ravichandran, Veterinarians, Mr. Prakash Mehta, Mr. Vinayak Kaul, Ms. Purbasha Bannerji and Ms. Tabassum were Research Biologists, Mr. Lalit Sharma was the technical assistant, Mr. Niranjana Dalei, Administrative Officer, Mr. Balakram Sharma, Administrative Assistant, Mr. Kapil Sinhmar, Assistant and Mr. Jaikishan Sharma, Supervisor. There were seven vulture keepers and two driver cum vulture keeper to assist in the smooth functioning of the centre.

**Vibhu Prakash, Ph.D.**  
**Officer in-charge**  
**Vulture Program**



A Long-billed vulture nestling hatched at the centre

## **2. History of the Rescue Centre**

The Jatayu Conservation Breeding Centre is a joint project of the Bombay Natural History Society (BNHS) and the Haryana Forest Department. It is a collaborative initiative of a Government agency and a Non-Governmental Organisation, to save the three species of vultures, the White-backed, Long-billed and Slender-billed, from looming extinction.

The VCBC, earlier known as Vulture Care Centre, was established in September 2001 with the UK Government grant of the Darwin Initiative for the Survival of Species, to investigate the dramatic declines in India's *Gyps* species of vultures. The centre was inaugurated in the year 2003 by the British Minister for Nature, Mr. Elliot Morley.

Subsequent to the release of the South Asia Vulture Recovery Plan in February 2004, the centre was renamed Vulture Conservation Breeding Centre (VCBC) as conservation breeding became the main objective of the centre.

**The centre was recognised as a rescue centre for vultures in the year 2007 by the Central Zoo Authority.** The centre was renamed Jatayu Conservation Breeding Centre following the decision taken in the 6th governing council meeting of the centre.

The centre is situated at the base of the Shivalik ranges of Himalayan foothills. It lies on the outskirts of the Bir Shikargaha Wildlife Sanctuary, 8 km from Pinjore, off the Chandigarh-Shimla highway. It spreads over 5 acres of Haryana Forest Department's land in village Jodhpur. The centre is ideally located away from human habitations, and yet is easily accessible from the main city so the day to day requirements of the centre can be easily organised.

## **3. Vision**

To become a living example of saving critically endangered bird species from extinction with ex-situ conservation programme.



## Mission

To release 100 pairs each, of the three species of vultures, in the next fifteen years, to establish and secure viable wild populations of resident *Gyps*, in an environment free of diclofenac and other poisons.

## **5. Objectives**

To establish a founder population of 25 pairs of each of the three endangered vulture species viz. White-backed vulture, Long-billed vulture and Slender-billed vulture.

To produce a population of at least 200 birds of each of the three species, to be reintroduced in the wild.

To rescue injured wild resident *Gyps* vultures and include them in the ongoing conservation breeding programme after recovery.

## **6. About us**

<b>S.No.</b>	<b>Particulars</b>	<b>Information</b>
<b>Basic Information about the Rescue Centre</b>		
1	Name of the Rescue Centre	<b>Vulture Conservation Breeding Centre</b>
2	Year of Establishment	<b>2007</b>
3	Address of the Rescue Centre	<b>B-3, Forest Complex, Pinjore 134102, Haryana</b>
4	State	<b>Haryana</b>
5	Telephone Number	<b>+91 90538 93940</b>
6	Fax Number	<b>NA</b>
7	E-mail address	<b>v.mathur@bnhs.org</b>
8	Website	<b>www.bnhs.org</b>
9	Distance from nearest	Airport: approx. 30km from Chandigarh International Airport Railway Station: 15km from Kalka Railway Station Bus Stand: 10km from Pinjore Bus Stand
10	Recognition Valid upto (Date)	<b>5th May 2019</b>

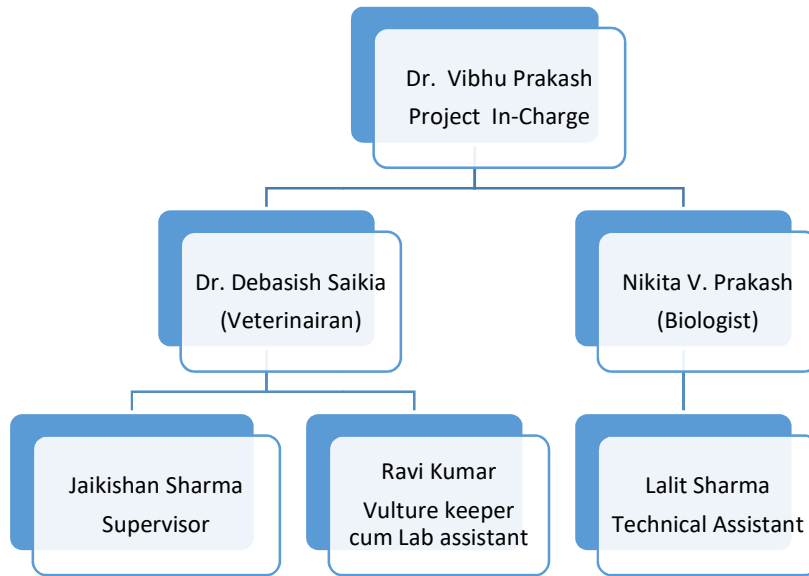
<b>S.No.</b>	<b>Particulars</b>	<b>Information</b>
11	Area (in Hectares)	<b>2.0234282</b>
<b>Management Personnel of the Rescue Centre</b>		
12	Name with designation of the Officer in-charge	<b>Vibhu Prakash, Ph. D. Principal Scientist/Deputy Director</b>
	Name of the Veterinary Officer	<b>Dr. Debasish Saikia, B.V.Sc.</b>
	Name of the Curator	<b>Dr. Debasish Saikia, B.V. Sc.</b>
	Name of the Biologist	<b>Nikita V. Prakash</b>
	Name of the Compounder/ Lab Assistant	<b>Ravi Kumar</b>
<b>Owner / Operator of the Rescue Centre</b>		
13	*Name of the Operator	<b>Chief Wildlife Warden, Haryana</b>
14	Address of the Operator	<b>Haryana Forest Department, C-18, Van Bhavan, Sector 6, Panchkula 134109, Haryana</b>
15	Contact details/Phone number of Operator	<b>0172-2561224</b>
16	E-mail address of Operator	<b>apccfwl@gmail.com</b>



**Vulture Conservation Breeding Centre, Pinjore, Haryana**



## 7. Organizational Chart of the Rescue Centre



## 8. Human Resources deployment for management of Rescue Centre (Officer in-charge to Animal Keeper - Sanctioned posts, in-position and vacant posts)

### Human Resources of the Rescue Centre\*

Sl.No.	Designation	Number of Sanctioned Posts	Names of the incumbent
1.	Officer in-charge	1	Vibhu Prakash
2.	Veterinarian	1	Debasish Saikia
3.	Biologist	1	Nikita V. Prakash
4.	Technical Assistant	1	Lalit Kumar
4.	Supervisor	1	Jaikishan Sharma
5.	Vulture Attendants	8	Tek Singh, Ravi Kumar, Devidutt Sharma, Manohar Lal, Sukhdev, Lekh Raj, Ganesh Dutt, Md. Mansur
6.	Driver cum vulture attendant	1	Md. Qasim,
7.	Night watchman	1	Prakash Chand

\*Please give abovementioned information in respect of all Rescue Centre personnel, from the Officer in-charge up to the Animal Keeper.

## 9. Capacity Building of Rescue Centre personnel

Sl.No.	Name and designation of the Rescue Centre personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	Mandar D. Kulkarni	ZIMS Workshop	One day	Chhatbir Zoo, Patiala, Punjab
2.	Nikita V. Prakash	ZIMS Workshop	One day	Chhatbir Zoo, Patiala, Punjab

## 10. Rescue Centre Advisory Committee

**a. Date of constitution:** 2nd May 2006

**b. Members:** The following are the members of the Governing Council

- I. Addl. Chief Secretary, Health and Family welfare, Govt. of Haryana, Chandigarh
- II. Principal Chief Conservator of Forests, Van Bhawan, Plot no. C-18, Sector 6, Panchkula
- III. Addl. Director General (Wildlife), Govt. of India, Ministry of Environment, Forests & Climate Change, New Delhi.
- IV. The Member Secretary, MoEF&CC, Central Zoo Authority, B-1 Wing, 6th Floor, Pt. Deendayal Antyodaya Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.
- V. The Director, Wildlife Institute of India, Chandrabani, Dehradun.
- VI. Drug Controlling Authority, SCO 94, Sector 5, Panchkula.
- VII. Director, Animal Husbandry, Pasu Dhan Bhawan, Ways no. 9-12, Sector 2, Panchkula.
- VIII. Director, Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Road, Mumbai.
- IX. Mr. Chris Bowden, Director, Vulture Programme, Royal Society for the Protection of Birds, Sandy, U.K.
- X. Ms. Jemima Parry-Jones, Director, international Centre for the Birds of Prey, U.K.
- XI. Mr. Nick Lindsay, Director, International Zoo Programme, Zoological Society of London, U.K.
- XII. Vice Chancellor, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana.

XIII. Dr. Vibhu Prakash, Principal Scientist & Dy. Director, BNHS, Vulture Conservation Breeding Centre, B-3, Forest Complex, Pinjore, Haryana.

**c. Dates on which Meetings held during the year:** 10th Governing Council meeting was held on 10th May 2018

#### 11. Health Advisory Committee of the Rescue Centre

**a. Date of constitution:** Not formally constituted but since inception, 2004 the following committee supervises the health of birds

**b. Members:** Centre in-charge, Centre Veterinarian, Chief Veterinary Officer of Zoological Society of London (ZSL)

**c. Dates on which Meetings held during the year:** Annual health check 16-18th October 2017

#### 12. Statement of income and expenditure of the Rescue Centre

SI No	Item of Work	Grant Received	Expenses	Cash Balance
			Apr 17- Mar 18	31.03.2018
	<b><u>Non-Recurring Activities</u></b>			
1	Construction of colony aviary housing nestlings hatched at the centre			
	<b>Sub Total</b>	<b>27.28</b>	<b>00</b>	<b>27.28</b>
	<b><u>Recurring Activities</u></b>			
2	Aviary Maintenance	5.06	00	5.06
3	Staff (for Vulture Breeding Programme)	44.59	44.54	.05
4	Vulture Food (289 Vultures to be fed 5 kg of goat meat each per week and extra meat to be provided to vultures at the onset of breeding season)	104.46	104.34	.12
5	Utilities & Misc (Electricity, Water, Communication, Chemicals, lab supplies minor equipment etc)	20.73	20.73	.0028
6	Travelling cost of Vulture Breeding Programme staff	6.22	0.81	5.41
	<b><u>Release and Monitoring programme of Vultures:</u></b>			0.00
7	Staff for Monitoring Programme of Vultures (Coordinator-1, Biologist-3, Local Assistants-3, Accounts)	14.31	14.28	0.032
8	Travel & transportation of Monitoring staff (hiring of vehicle)	5.96	5.86	0.10
9	Lodging & boarding of monitoring staff	5.96	1.84	4.12

10	Meetings with stakeholders / school children / farmers and workshops for untrained veterinarians and paravets.	8.29	0.00	8.29
11	Awareness materials (DLP Projectors with screen, speaker for projector, laptop inverters, banners, posters and handbills	2.07	0.00	2.07
12	Equipments (PTT - Platform Transmitter Terminal)			0.00
13	Stationery (postage, stationery, communication expenses etc.)	0.20	.19	0.11
14	Communication expenses (telephone cost, faxes, internets etc.)	1.03	1.03	0.004
15	Reports and Publication	1.55	0.32	1.23
16	Food for Vultures (wild vultures) – 15x20x240/monthx12	08.32	00	08.32
17	Miscellaneous (includes buying medicines, collecting carcass tissue samples etc.)	9.37	3.36	6.00
18	BNHS administrative fee (15% of the total cost)	40.46	29.60	10.86
	<b>Sub Total</b>	<b>305.96</b>	<b>226.95</b>	<b>79.01</b>
	<b>Grand Total</b>		<b>226.95</b>	<b>79.01</b>

### 13. Daily feed Schedule of animals

Sl.No.	Species	Feed item	Quantity/ vulture		Day of fasting
			Winter	Summer	
1.	White-backed vulture	Goat meat	4kg	4kg	Fed twice a week on Monday and Friday
2.	Long-billed vulture	Goat meat	5kg	5kg	Fed Twice a week on Monday and Friday
3.	Slender-billed vulture	Goat meat	5kg	5kg	Fed twice a week on Monday and Friday



#### 14. Vaccination Schedule of animals

Sl.No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
	-	-	-	-	<b>No vaccination has been done till now although the centre would like to vaccinate its birds against avian influenza but permission to import the vaccines could not be obtained.</b>

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

Sl.No.	Species	Drug used	Month
1.	<b>White-backed vulture</b>	<b>No de worming is done but endo parasite load is monitored by routine faecal sample analysis. This is because the birds have to be reintroduced in the wild.</b>	
2.	<b>Long-billed vulture</b>	<b>Do</b>	
3.	<b>Slender-billed vulture</b>	<b>Do</b>	

## 16. Disinfection Schedule

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1.	White-backed vulture	Incubator and brooder room, Nursery, holding, colony aviaries	Lime and F10	Once in 15 days
2.	Long-billed vulture	Incubator and brooder room, Nursery, holding, colony aviaries	Lime and F10	Once in 15 days
3	Slender-billed vulture	Incubator and brooder room, Nursery, holding, colony aviaries	Lime and F10	Once in 15 days



**Disinfecting water trough with lime**



**F10, a strong and safe disinfectant**

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

Sl.No.	Name	Designation	Date of Health Check up	Findings of Health Check up
1.	Mr. Jaikishan Sharma	Supervisor	13/06/2018	Found medically fit
2.	Tek Singh	Vulture Attendant	12/06/2018	Found to be medically fit
3.	Ravi Kumar	Vulture Attendant	11/06/2018	Found to be medically fit
4.	Devidutt Sharma	Vulture Attendant	12/06/2018	Found to be medically fit
5.	Manohar LaL	Vulture Attendant	11/06/2018	Found to be medically fit
6.	Sukhdev	Vulture Attendant	12/06/2018	Found to be medically fit
7.	Lekhraj	Vulture Attendant	12/06/2018	Found to be medically fit
8.	Ganesh Dutt	Vulture Attendant	11/06/2018	Found to be medically fit
9.	Mohammed Mansur	Vulture Attendant	15/06/2018	Found to be medically fit
10.	Mohammed Kasim	Driver cum Vulture Attendant	15/06/2018	Found to be medically fit
11.	Prakash Chand	Vulture Attendant	12/06/2018	Found to be medically fit except for Bronchiectasis and pleural thickening on left side basal region of lungs which is probably because of habit of smoking.

## 18. Development Works carried out in the Rescue Centre during the year

a. A purely temporary aviary of dimensions 100x30x18' was constructed near the breeding



aviaries. The aviary is largely made of safety netting and iron poles. The roof was also of green safety netting. The aviary had double protection but the gallery had safety netting all around. There were a few trees within the aviary and perching facilities were given at various heights. Two water troughs were also provided.

The aviary will act as a holding aviary for juveniles and they will be shifted to colony aviary once it is constructed and they reach breeding age.

## b. Four new high definition CCTV cameras

Four new high definition CCTV cameras were installed, one in each Colony aviary, of Bosch make. The cameras are of 2.43M pixels, Lens focal length 30X Zoom 4.3mm-129mm (F1.6-F5.0), Electronic Shutter Speed 1/25 sec to 1/15,000 secs. The funding was provided by Central Zoo Authority.



## 19. Important Events and happenings

a. The breeding season of vultures at the centre commenced from the month of September, just as it would in the wild. The established pairs in the Colony Aviaries began defending their nest ledges and perch together most of the time. They copulate frequently on the nest ledges, collect nesting material and build nests. During the year 2017-18, all the three species attempted breeding at the centre.





**A 2 week old White-backed vulture nestling**

**A total of 30 nestlings including 16 Long-billed, 10 White-backed, and 4 Slender-billed hatched successfully.**

A total of 40 fertile eggs were laid of which 30 eggs (16LBV, 10WBV, 4SBV) hatched. Of the 30 eggs, 20 eggs (10LB, 8WB, 2SB) were of first clutch and 10 eggs (6LB, 2WB, 2SB) were of second clutch.

A total of 19 nestlings have fledged successfully as on 8th June 2018 of which 9 are LBVs, 7WBVs and 2SBVs. The rest are young and will fledge by the end of June 2018.

b. **10th Governing council meeting** was held on 10 May 2018 under the Chairmanship of Mr. S. N. Roy, IAS, Addl. Chief Secretary, Govt. of Haryana, Forest & Wildlife Department at Committee Room, 6th floor, New Secretariat, Haryana, Chandigarh.

The following action points were noted during the meeting

I. Since nimesulide along with the meloxicam is becoming a popular drug in veterinary treatment, it was decided that the Director, Indian veterinary Research Institute should be requested to urgently carry out the safety testing of the veterinary nimesulide on Himalayan Griffon to prevent the possible delay in the Vulture Release Programme from the Vulture centre at Pinjore.

II. Aceclofenac, a pro-drug of diclofenac poses the same risk to vultures as diclofenac does. Hence it was agreed to draft a letter along with scientific facts on veterinary aceclofenac for the Chairman who in turn would write to the Drug Controller General of India to consider a ban on the drug

III. The Departments of Food and Drug Administration and Animal Husbandry should be requested to initiate urgent measures to ensure no diclofenac is used in treating cattle and livestock as human formulations of vulture toxic drugs were still being used for treating cattle as per a recent pharmacy survey.

IV. Department of Food and Drug Administration should be urged to ensure that the NSAIDs are sold only on prescription as they are Schedule H drugs, in order to prevent their misuse in treating cattle.

V. The Department of Animal husbandry should take immediate action to follow best practice in treating livestock and cattle and over-dosing should be prevented as over-dosing poses a serious threat to the vultures.

VI. Department of Animal Husbandry, Government of Haryana should take urgent steps to ensure that the cattle and livestock are treated only by qualified veterinarians.

## 20. Seasonal special arrangements for upkeep of animals

I. High quality shade cloth were laid on top of all aviaries to provide additional shade. This cloth brings down the temperature by 5°C.



II. Instead of only 2 water troughs filled in winter months, all 4 water troughs are filled during peak summer months of May, June, July and August to keep the birds cool and hydrated.

III. New nest cots, perches, stumps, sand are provided in all aviaries before the onset of breeding season for successful breeding.

## 21. Research Work carried out and publications

Safety testing of Tolfenamic acid was carried out on vultures in collaboration with Indian Veterinary Research Institute, Bareilly, Uttar Pradesh and Haryana Forest Department. The research is ongoing and publication will be brought out at the end of the research.

## 22. Rescue and Rehabilitation of wild animals.

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	
	<b>None</b>				<b>None</b>	
	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	Date and Place of rehabilitation in their habitat	Reasons for housing in the zoo, if not released in their habitat



#### 24. 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 findings
1.	<b>Slender-billed vulture, H28</b>	<i>Gyps tenuirostris</i>	Unknown	30th March 2017	Massive internal hemorrhages and also hemorrhages in cerebellum due to traumatic shock.

#### 25. Status of the compliance with conditions stipulated by the Central Zoo Authority

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
1.	10.5(2)	Water sample to be tested	One month		The vultures are given potable municipal water supply for drinking and is fit for human consumption. The samples have been sent for testing and the reported is awaited.
2.	10.5(5)	Perches and shelves should be cleaned and disinfected regularly	Regular basis	Not pending as they are cleaned once every 15 days.	Done
3.	10.9(3)	Acquisition of rescued birds	Immediately as and when rescued	Not pending	No bird was rescued during the year
4.	10.5(3)	Shifting of birds from one centre to other	At the earliest		15 vultures including 5 White-backed vultures and 10 Long-billed vultures were transferred to VCBC Bhopal on 5th October 2016.

