

**Vulture Conservation Breeding Centre, Pinjore, Haryana**  
**Annual Report for the year**  
**2018-19**



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**A Long-billed vulture nestling hatched at the centre**

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

The Jatayu Conservation Breeding Centre, Pinjore, located at Jodhpur village on the edge of the Bir Shikargaha Wildlife Sanctuary is a collaborative project of the Forest and Wildlife 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 house 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 and Wildlife, Government of Haryana. The PCCF and Chief Wildlife Warden, Haryana is the Member Secretary.

The breeding of vultures was very good during the season of 2018-19. The highest ever number of, 47 vulture nestlings hatched including 3 of Slender-billed vulture. A total of 336 vultures were housed at the centre, the highest number ever held in any Gyps vulture conservation breeding facility anywhere in the world.



The monitoring of habitat in a radius of 100 km from the centre for the reintroduction programme was continued. The undercover pharmacy revealed low prevalence of vulture toxic drug, diclofenac and the vulture safe drug, meloxicam appeared to be a drug of choice. The food availability for vultures was good in terms of cattle carcass availability. Fairly good populations of free ranging vultures including Himalayan Griffon and White-backed vulture were sighted throughout the year, near the centre as well as at carcass dumps.

A workshop on the 'Vulture Conservation and Reintroduction Programme' was jointly organised by the Haryana Forest Department and Bombay Natural History Society. The workshop was held on 14<sup>th</sup> and 15<sup>th</sup> February 2019 at Red Bishop Tourist Complex, Panchkula. The Chief Guest of the workshop was the Honorable Mr. S.N. Roy, IAS, Addl. Chief Secretary, Forests and Environment, Government of Haryana. 'Jatayu solicits the judicious use of veterinary drugs for its survival' was the theme of the workshop. The workshop was largely to update the various stake holder Departments of vulture conservation in the neighboring States about the impending vulture release programme of



the centre as well as to solicit their help in making it a success by ensuring minimum use of vulture toxic drug, diclofenac, encouraging use of the drug meloxicam, monitoring free ranging vulture populations and food availability to vultures. The officials and staff of Forests & Wildlife, Animal Husbandry Department, Drug Controlling Authority and Members of Drug and Chemists Association from Haryana and neighboring States attended the workshop.

The tenth meeting of the Governing Council of Jatayu Conservation Breeding Centre (JCBC), Pinjore was held under the Chairmanship of Mr. S. N. Roy, IAS, Addl. Chief Secretary, Forests, Government of Haryana on 10<sup>th</sup> May 2019, at the New Secretariat of Haryana in Chandigarh. Based on the recommendations of the meeting, the Chairman wrote to the Drug Controller General of India requesting him to consider the ban on the veterinary NSAID, aceclofenac as it was a pro-drug of diclofenac which gets converted into diclofenac on administration.

There are at least 12 veterinary NSAIDs in the market, of which only meloxicam is considered safe to vultures. The MoEF&CC has given a project to Indian Veterinary Research Institute and BNHS to safety test all the veterinary molecules of NSAIDs available in the market. The Safety testing of tolfenamic acid, a veterinary NSAID, was initiated in the year 2017 on Himalayan Griffon. This year Phase 2 period 2 & 3 of the project was carried out during the month of March 2019 at JCBC in collaboration with Indian Veterinary Research Institute (IVRI), Izzat Nagar, Bareilly, Uttar Pradesh and Haryana Forest Department. Thirty five Himalayan Griffons were caught and after a health check and observing a quarantine period of 25 days, they were dosed with tolfenamic acid. The birds were housed at the quarantine facility which is 5 km from the centre. Dosing birds for safety testing started

from 7th April 2019. Twelve birds were dosed with tolfenamic acid about 13 times the normal veterinary dose (this was based on the maximum level of exposure obtained from carcass sampling) and four birds were used as control birds were dosed with Benzoic alcohol-the carrier fluid. The uric acid levels were monitored real time and most of the birds did not show any elevation of uric acid levels.

The scientific manner of conducting the conservation breeding programme of vultures, resulting in its success, has encouraged many forest training institutes, universities and schools to send their staff and students to the centre to understand the principles of conservation breeding programme. The JCBC has conducted several training programmes and demonstrated the best practices for a successful breeding programme. In 2018-19, training was imparted to two batches of officers from Telangana State Forest Department and Maharashtra State Forest Department as well as the Indian Army, for one week to understand the management practices involved.

The Ministry of Environment, Forests and Climate Change provided funding of Rs. 1.92 crores, for the running cost of Jatayu 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. Some funding also came from our tried and tested, long standing funding agency, the Royal Society of 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 Ms. Nikita Prakash, Scientist 'C', Drs. Debasish Saikia Veterinarian, , Mr. Lalit Sharma Mr. Niranjan Dalei, Administrative Officer, Mr. Balakram Sharma, Administrative Assistant, Ms. Palak Thakur, Accounts Assistant, Mr. Kapil Sinhmar, Assistant and Mr. Jaikishan Sharma, Supervisor. There were nine vulture keepers and one driver cum vulture keeper to assist in the smooth functioning of the centre.

This report covers the period from 1<sup>st</sup> April 2018 to 31<sup>st</sup> March 2019.

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



## 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 6<sup>th</sup> 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.

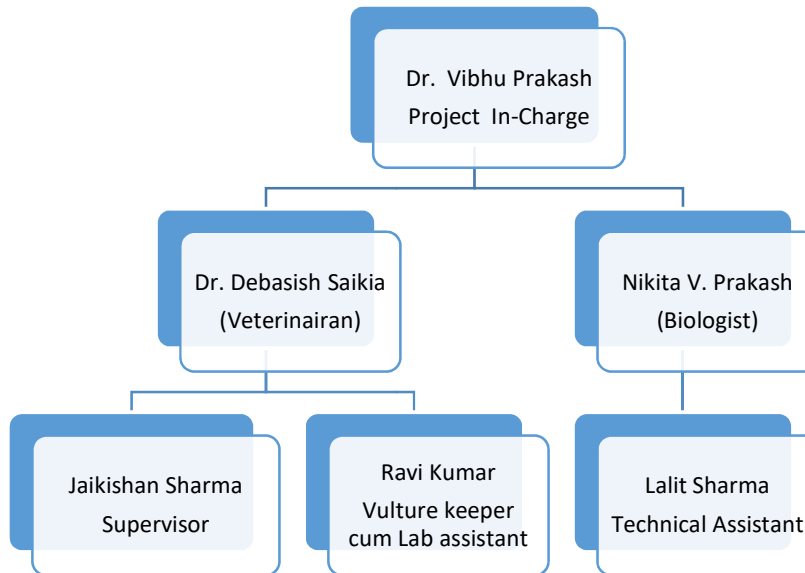
## **6. About us**

<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 up to (Date)	<b>5th May 2019</b>

S.No.	Particulars	Information
11	Area (in Hectares)	2.0234282
<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>pccfwlhry@gmail.com</b>



## 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 above mentioned 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

**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.

X. Mr. Nick Lindsay, Director, International Zoo Programme, Zoological Society of London, U.K.

XI. Vice Chancellor, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana.

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

**a. Dates on which Meetings held during the year:** 11<sup>th</sup> Governing Council meeting was held on 17th May 2019

### **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 22-25<sup>th</sup> October 2018

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

#### **Expense statement of Jatayu Conservation Breeding Centre, Pinjore, Haryana, April 2018 to 31 March 2019**

A total of Rs. 313.52 Lakhs were spent during the period April 2018 to March 2019. The maximum expenses of Rs 105.49 Lakhs incurred were for freshly slaughtered goats offered to vultures. Goat meat is expensive and costs Rs. 227/- kg. This is being done to make sure that the vulture food does not have diclofenac in it. The expense on utilities is high because of travel and running costs at the centre. The project accounts are audited as a part of BNHS accounts.

The project received a total amount of Rs. 313.52 Lakhs for running the centre and for the reintroduction programme. A total of 192.69 Lakhs were received from Haryana Forest Department from the project "Recovery Programme for saving critically endangered species and habitat", of Centrally Sponsored Scheme –Integrated Development of Wildlife Habitats—Haryana during the financial year 2018-19. A sum of Rs. 79.01 Lakhs was the under spent from the same scheme during the financial year 2017-18. The total contribution from the Royal Society for the Protection of Birds, U.K. was Rs. 41.82 Lakhs. The entire sum of Rs. 313.52 was utilised during the financial year 2018-19.

### 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	4kg	4kg	Fed Twice a week on Monday and Friday
3.	Slender-billed vulture	Goat meat	4kg	4kg	Fed twice a week on Monday and Friday

**Twice a week provision of Food for Vultures  
at VCBC, Pinjore, Haryana**



#### 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
<b>1.</b>	<b>White-backed vulture</b>	<b>No de-worming is done but endoparasite load is monitored by routine faecal sample analysis. This is because the birds have to be reintroduced in the wild.</b>	<b>NA</b>
<b>2.</b>	<b>Long-billed vulture</b>	<b>Do</b>	<b>NA</b>
<b>3.</b>	<b>Slender-billed vulture</b>	<b>Do</b>	<b>NA</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



Scrubbing all aviary walls to remove accumulation of faeces and disinfecting with lime.



### 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

### Replacing bamboos lined in all aviaries



All aviaries in the centre are lined with bamboos which cover the iron weld mesh. Lining of bamboos prevent vultures from getting hurt in case they collide into the iron weld mesh accidentally, as well as provide isolation to the birds from on going human activity. All the bamboos were laid some 15 years

back and required replacing due to breakage and soiling. A total of 50,000 bamboos were replaced with fresh ones.

## 19. Important Events and happenings

### a. Highest number of chicks hatched at the centre



This year a record of 47 chicks hatched at the centre. The highest number was 39 so far which was recorded during the years 2014-15 and 2015-16. The high success is attributed to increase in number of nesting pairs and success in double clutching and chick swapping. A total of 27 Long-

billed, 17 White-backed and 3 Slender-billed hatched during the breeding season.

## **Breeding at the centre**

The breeding season of vultures commenced from the month of September, just as it would in the wild. The established pairs in the Colony Aviaries begin 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 2018-19, all the three species attempted breeding at the centre.

**A total of 47 nestlings including 27 Long-billeds, 17 White-backed, and 3 Slender-billeds hatched successfully.**

A total of 43 pairs including 24 of Long-billed vulture, 12 of White-backed vulture and 7 of Slender-billed vulture were recorded during the breeding season of 2018-19.

A total of 57 fertile eggs, 28 of first clutch ( 16L, 8W, 4S), 28 of second clutch (14L, 10W, 4S) and 1WB egg of third clutch were laid of which 47 eggs (27LBV, 17WBV, 3SBV) hatched. Of the 47 eggs hatched, 23 eggs (15LB, 7WB, 1SB) were of first clutch and 23 eggs (12LB, 9WB, 2SB) were of second clutch, and 1 WB egg of third clutch.

A total of 24 nestlings have fledged successfully as on 16<sup>th</sup> May 2018 of which 16 are WBVs, 7LBVs and 1SBV. The rest are young and will fledge by the end of June 2019.

### **b. Minutes of the 11<sup>th</sup> Governing Council Meeting of Vulture Conservation Breeding Centre, Pinjore held on 17<sup>th</sup> May 2019 from 1100 hrs at Committee Room, 6<sup>th</sup> Floor, New Secretariat, Chandigarh**

The 11<sup>th</sup> meeting of the Governing Council of Vulture Conservation Breeding Centre (VCBC), Pinjore was held under the Chairmanship of Sh. S.N. Roy, IAS, Addl. Chief Secretary to Govt. of Haryana, Forest & Wildlife Department, on 17<sup>th</sup> May 2019 in Committee Room, 6th Floor, New Secretariat, Chandigarh.

The meeting commenced at 11:00 hours and the following were present:

1. Mr. Anil Hooda, IFS, Principal Chief Conservator of Forests (HoFF), Haryana Van Bhawan, Plot No. C-18, Sector-6, Panchkula.
2. Mr. V.S. Tanwar, IFS PCCF& CWLW, Haryana and Member Secretary, Haryana
3. Mr. Suresh Dalal, IFS, Secretary, Forests, Government of Haryana, New Secretariat, Chandigarh
4. Mr. Vinod Kumar, IFS, Ad. PCCF (Administration)
5. Mr. M.L. Rajvanshi, IFS, Conservator of Forests (Wildlife), Panchkula, Haryana
6. Dr. Shiva Kumar, Wildlife institute of India, Chandrabani, Dehradun.
6. Mr. M. L. Ahuja, Drug Controlling Authority, Haryana SCO-94, Sector-5, Panchkula.
7. Director, Animal Husbandry, Pasu Dhan Bhawan, Ways No. 9-12, Sector-2, Panchkula.
8. Lala Lajpat Rai University of Veterinary and Animal Sciences, Hissar.
9. Dr. Vibhu Prakash, Principal Scientist & Dy. Director, BNHS, Vulture Conservation Breeding Centre, B-3, Forest Complex, Pinjore, Haryana.

The Chairman welcomed the members to the 11<sup>th</sup> meeting of the Governing council and requested the Mr. Tanwar, IFS, PCCF&CWLW, Haryana and Member Secretary to start the proceedings. The Member Secretary gave a brief introduction to the project.



The Member Secretary took up the first agenda which was on the circulation and comments on the minutes of the 10<sup>th</sup> Governing Council meeting. The minutes were circulated to all the members but no comments were received. So the Chairman accepted the minutes without any changes after taking the consensus of the members.

The second agenda was on the Action Taken Report on the last meeting minutes. The following actions were suggested.

**1. Action:** The NSAID, nimesulide had shown strong indications to be toxic to vultures, and it was decided that the Director, Indian Veterinary Research Institute, Bareilly would be requested to urgently carry out its safety testing on Himalayan Griffon. A draft of the letter along with the scientific evidence should be sent to the Chairman as soon as possible.

**Action Taken:** The Demi-Official letter was sent to Director, Indian Veterinary Research Institute, Izzatnagar, Bareilly by the Chairman. The IVRI is already carrying out the safety testing of tolfenamic acid on Himalayan Griffon and would take up the safety testing of nimesulide after the study on tolfenamic acid is completed. However, there was no response from Director, IVRI and a reminder has been sent.

**Action recommended by the Council: An urgent reminder should be sent to the Director, IVRI regarding carrying out the safety testing of the drug nimesulide on Himalayan Griffon. (Action: Member Secretary and Vibhu Prakash)**

**2. Action:** Aceclofenac, which is a pro drug of diclofenac, poses the same threat as diclofenac does to vultures and its use is not banned in the veterinary market. It was agreed that a draft letter along with the scientific facts should be submitted to the Chairman, who would write to the Drug Controller General of India to consider a ban on the drug aceclofenac for veterinary use.

**Action Taken:** The Demi-Official letter was sent to Drug Controller General of India, New Delhi by the Chairman. There has been no response from Drug Controller General's Office and a reminder has been sent.

**Action Recommended by the Council:** The Drug Controller of Haryana said that he would take up the matter with the Drug Controller General of India in the next meeting at Delhi. He would produce all scientific evidence and present it to DCGI. The Chairman decided to wait for the outcome of the meeting and he requested the Drug Controller to keep him informed.

**3. Action:** It was observed in the recent pharmacy survey that human formulations of Vulture toxic drugs are still being sold and used for treating cattle. It was proposed to request the Departments of Food and Drug Administration, Haryana and Animal Husbandry, Haryana to initiate urgent measures to ensure no diclofenac is used in treating cattle and livestock.

**Action Taken:** The Demi-Official letters were sent to Director General, Animal Husbandry, Haryana and Drug Controller of Haryana requesting them to prevent the use of Vulture toxic drugs in treating cattle. There was no response from the Departments but a reminder has been sent.

**Action recommended by the Council:** An urgent reminder should be sent to the Director General, Animal Husbandry and Drug Controller of Haryana from the Governing Council. (Action: Member Secretary and Vibhu Prakash) Drug Controller however informed that they are taking action on this point.

**4. Action:** The Departments of Food and Drug Administration, Haryana is requested to ensure that the NSAIDs are sold only on prescription to prevent their misuse in treating cattle. The NSAIDs are schedule-H drugs under Drug and Cosmetic Act and should be sold on .prescription only.

**Action Taken:** The Demi-Official letter was sent to Drug Controller of Haryana, by the Chairman. However, there was no response and a reminder has been sent.

**The Drug Controller of Haryana informed the meeting that they are taking steps to make sure that the NSAIDs are sold on prescription.**

**5. Action:** It was observed during the study of prevalence of the drugs in cattle carcasses that overdosing of NSAIDs is rampant in treatment of cattle and these huge concentrations of drugs pose a serious threat to vultures and other scavengers. The Department of Animal Husbandry should take immediate actions to follow best practices in treating livestock and cattle and over dosing should be avoided.

**Action Taken:** The Demi-Official letter was sent to Director General, Animal Husbandry, Government of Haryana by the Chairman. However, there was no response from Director General but a reminder has been sent.

**Action recommended by the Council:** An urgent reminder should be sent to the Director, General of animal Husbandry requesting him to ensure no overdosing of NSAIDs in the treatment of livestock (Action: Member Secretary and Vibhu Prakash)

**6. Action:** It was emphasized that urgent steps should be taken to ensure that the cattle are treated only by qualified veterinarians.

**Action Taken:** The Demi-Official letter was sent to Director General, Animal Husbandry, Government of Haryana by the Chairman. However, there was no response from Director General but a reminder has been sent

**Action recommended by the Council:** **An urgent reminder should be sent to the Director, General of animal Husbandry requesting him to ensure no overdosing of NSAIDs in the treatment of livestock (Action: Member Secretary and Vibhu Prakash)**

The third agenda was on the Progress Report of the centre. The Member Secretary gave a brief introduction to the Vulture Conservation Breeding Programme at Pinjore. He said that he was very happy to announce that 47 chicks, the highest number, hatched this year at the centre and that it is housing a total of 336 birds at the centre which is the highest number ever held by any conservation breeding facility anywhere in the world. He highlighted the overall progress made by the programme over the years and also explained the roles played by Bombay Natural History Society (BNHS); Forest Department, Haryana and Royal Society for Protection of Birds (RSPB); in making the project successful.

The Member Secretary then requested Dr. Vibhu Prakash to give the progress report of Vulture Centre for the period of 2018-19. Dr. Vibhu Prakash gave a power point presentation of the progress report. During the current breeding season 47 nestlings were hatched, which is the highest ever hatched at the centre. Of these 47 nestlings that fledged, 17 were of White-backed Vulture, 27 were of Long-billed Vulture and 3 of Slender-billed Vulture. The chick hatching with double clutching and chick swapping, was the highlight of this breeding season.

He said that reintroduction programme will be initiated by the end of this year. Four Satellite Transmitters from Geo Track company of USA, each weighing 22 gm were ordered for and Four GSM tags from E-Obs, Germany were also ordered. The transmitters were expected to arrive within a month. The birds would be released with the transmitters in November or December 2019 when the wintering Himalayans would be in good numbers. In all eight White-backed Vultures would be released from the pre-release aviary of which six would be captive bred vultures and two wild caught adults. All the birds were between 2-5 years old.

The habitat monitoring for the presence of free ranging vultures, food availability, prevalence of various veterinary NSAIDS, was being carried out to ensure safe environment for reintroduced vulture. The habitat monitoring was carried out in a radius of 100km from the centre. The studies had revealed that prevalence of vulture toxic drug diclofenac had come down, there was enough food and a fairly good population of free ranging White-backed Vulture and Himalayan Griffons. The single dose vials of human formulations of diclofenac were still being misused in treating cattle, posing a threat to vultures. Strong advocacy and awareness programmes were carried out to minimise the use of diclofenac in treating cattle.

Mr. Vinod Kumar wanted the Vulture Centre to work on the in-situ conservation of vultures as well. Dr. Prakash responded by saying that there is no other conservation problem with

vultures except for NSAID poisoning and nothing much could be done as far as in-situ conservation is concerned.

The financial report was part of the annual progress report. A total of Rs. 313.52 lakhs was received and all of it was spent during financial year 2018-19 for the Breeding and Reintroduction Programme. Maximum expense of 105.49 Lakhs was spent on Vulture food. Most of the funding came through the Centrally Sponsored Scheme of Government of India through its Species Recovery Plan. The funding was shared in a ratio of 60:40 by MOEFCC, GOI and Haryana Forest Department.

For the current financial year a budget of Rs. 440.49 Lakhs was submitted.

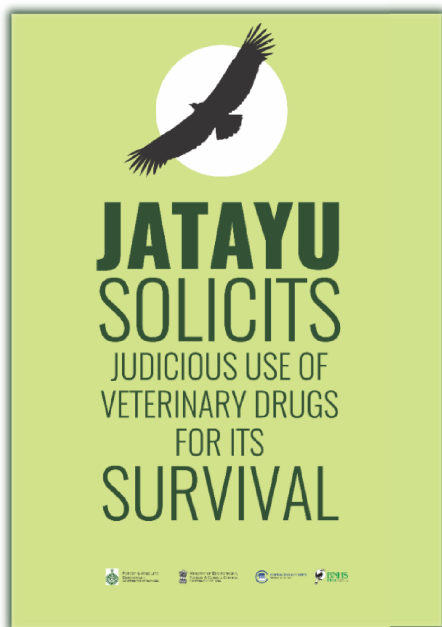
Sh. S.N. Roy, IAS, Addl. Chief Secretary to Govt. of Haryana, Forest & Wildlife Department, advised the following action points for the release programme:

1. It was observed that the drugs, ketoprofen and nimesulide which were found to be toxic to vultures are purchased by the Department of Animal Husbandry, Government of Haryana. It was decided to request the Director General of Animal Husbandry to prevent the government purchase of these drugs for the veterinary use as they are toxic to vultures. The Chairman will write to the Director General of Animal Husbandry requesting him to stop the government purchase of these drugs. A draft letter would be sent to Chairman for further action. **(Action: Member Secretary and Vibhu Prakash).**

The meeting ended with a vote of thanks to the Chair.

#### **c. Workshop on Vulture Conservation and Reintroduction Programme, 14-15th February 2019, Red Bishop Tourist Complex, Panchkula, Haryana**

A workshop on the “Vulture Conservation and Reintroduction Programme” was jointly organised by the Haryana Forest Department and Bombay Natural History Society. The workshop was held on 14<sup>th</sup> and 15<sup>th</sup> February 2019 at Red Bishop Tourist Complex, Panchkula. The Chief Guest of the workshop was the Honorable Mr. S. N. Roy, IAS, Addl. Chief Secretary, Forests, Government of Haryana.



Mr. V.S. Tanwar, IFS, PCCF and CWLW, Haryana initiated the proceedings with a warm welcome to the Chief Guest, dignitaries, and all the participants present for the workshop. He also welcomed the representatives of other departments from the various neighbouring states. He briefed the participants about the decline in vulture population and explained about the significance of the workshop in context of the reintroduction programme. To conclude with, he revealed the

theme of the workshop ***'Jatayu solicits the judicious use of veterinary drugs for its survival'***.

The formal introduction to the workshop was given by Dr. Vibhu Prakash, Deputy Director and Principal Scientist, BNHS. He presented a brief background of the history and the cause of the crash seen in the population of vultures. He then highlighted the present status of vultures in our country and then presented an outline of the workshop. He emphasized that it was extremely important to strictly implement the ban on veterinary use of diclofenac, and also listed a few drugs that were toxic to vultures but their use was legal. Briefly, he recommended a ban on the veterinary use of aceclofenac, which was the pro-drug of diclofenac, and the judicious use of drugs such as ketoprofen and nimesulide, which have been found to be toxic to vultures.

The introduction was followed by an address to the delegates by Dr. Anil Hooda, IFS, PCCF (HoFF), Haryana Forest Department, who spoke about the reduction in the insect population and species diversity in general, and said that the decline in vulture population, like other species, was only because of the ignorance of humans. He spoke about his childhood days when vultures were so common and seen in flocks over a carcass, and highlighted on how they are hardly seen today even at carcass dump sites. He acknowledged the importance of the workshop as it would serve as a platform to conduct deliberations on various issues that have been a hindrance in conservation of the species. He stressed that it was important to ensure that all the factors which could negatively affect the vultures were first nullified before planning to release vultures back in the wild.

The gathering was then addressed by Dr. Mrs. Amarinder Kaur, IFS, PCCF cum MD, Haryana Forest Development Corporation. She said that vulture conservation was a continuous and long-term process. She stressed that because no previous studies of this kind were carried out on these species of vultures, the releases should be considered as part of a learning process, and requested the media to take any failures as part of the same process. She also suggested that further awareness was necessary to spread the information of the ban on multi-dose vials of diclofenac to various groups of people.

Finally, the Chief Guest, the Honorable Mr. S.N. Roy, IAS, Additional Chief Secretary, Forests

and Environment, Government of Haryana addressed the delegates and congratulated the level of work and dedication put forth by the BNHS team on vulture conservation. He was satisfied to know that there was a programme of such importance in the state of Haryana. He assured that funds would never



be a problem for the programme. He also stressed on the importance of spreading awareness on vulture conservation to the neighbouring states, where the released vultures could travel to.

The vote of thanks to the Chief Guest and other delegates was delivered by Mr. M.L. Rajvanshi, IFS, Conservator of Forests, Panchkula. He thanked all the previous speakers, Mr. V.S. Tanwar, Dr. Anil Hooda, Dr. Mrs. Amarinder Kaur and honorable Chief guest, Mr. S. N. Roy for their valuable words and their support for Vulture Conservation and Reintroduction Program. He then reiterated the purpose of the workshop and thanked all the participants of the workshop for taking time off their schedules and attending the workshop.

**20. Seasonal special arrangements for upkeep of animals**

I. Once again 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	
	None				None	
	None	None	None	None	Date and Place of rehabilitation in their habitat	Reasons for housing in the zoo, if not released in their habitat

### 23. Annual Inventory of animals

Form – II

[See Rule 11(1)]

Part – A

#### Inventory Report for the Year : 1st April 2018-31st March 2019

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		
1.	Long-billed vultures	Gyps indicus	17	17	110	144	0	0	23*	0	0	0	0	0	0	0	0	0	0	0	17	17	133	167
2.	White-backed vultures	Gyps bengalensis	14	15	65	94	0	0	11*	0	0	0	0	0	0	0	0	0	0	0	14	15	76	105
3.	Slender-billed vultures	Gyps tenuirostris	5	5	28	38	0	0	3*	0	0	0	0	0	0	0	0	0	0	0	5	5	31	41
	Total		36	37	203	276	0	0	37*	0	0	0	0	0	0	0	0	0	0	0	36	37	240	313

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

Where

23\* 7 nestlings of April 2018 + 16 nestlings of March 2019

11\* 4 nestlings of April 2018 + 7 nestlings of March 2019

3\* 2 nestlings of April 2018 +1 nestling of March 2019

37\* 13 nestlings of April 2018 + 24 nestlings of March 2019

Part – B

Other than Endangered Species: Not Applicable

S.N o.	Anim al Name	Scienti fic name	Opening Stock as on				Births			Acquisitio n			Disposal			Death			Closing Stock as on					
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	T					

### 1. 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>No mortalities recorded during the period</b>				

### 1. 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 vulture are given potable municipal water supply for drinking and sample has been given for testing. Report 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	Not pending	No bird was Shifted from one centre to other.