Vulture Conservation Breeding Centre, Pinjore, Haryana

Annual Report

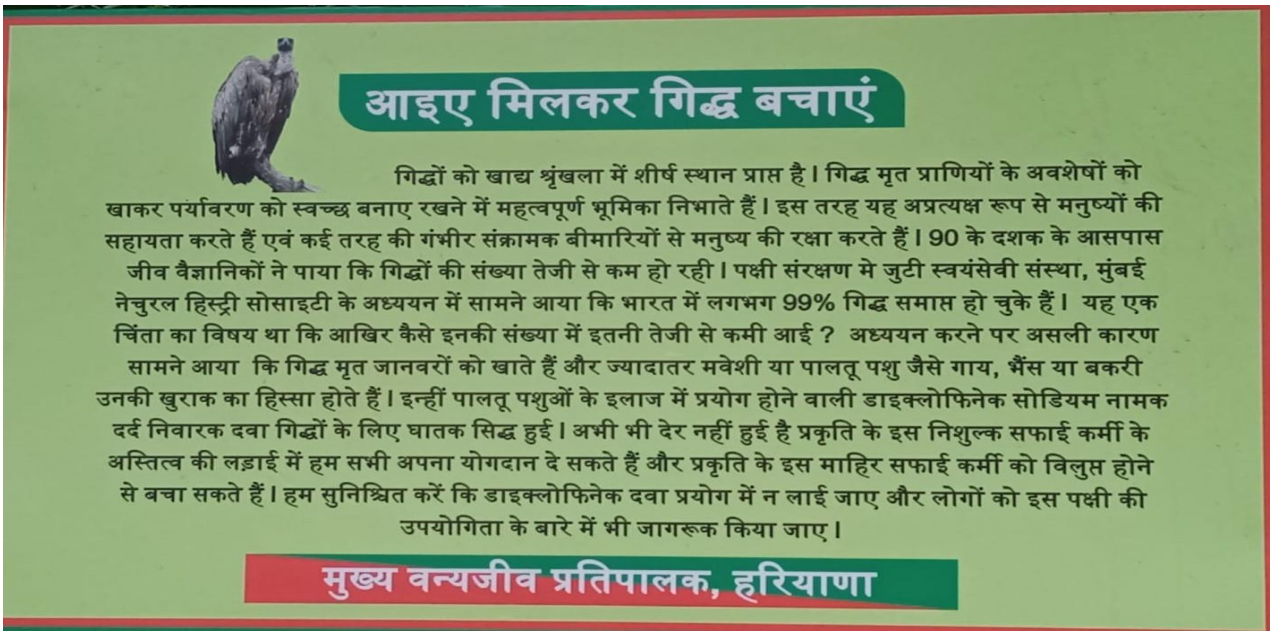
1st April 2024 - 31st March 2025

CONTENTS

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 and Wildlife Department, Haryana, and the Bombay Natural History Society. The centre was established to save the three Critically Endangered Gyps species of vultures namely, the White-rumped 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 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 chaired by the Additional Chief Secretary, Department of Forests and Wildlife, Government of Haryana. The Principal Chief Conservator of Forests and Chief Wildlife Warden, Haryana, serves as the Member Secretary.



a. Vultures at the Centre

The highest number of vultures anywhere in the world was housed at the Vulture Conservation Breeding Centre. By the end of March 2025, there were 348 vultures at the centre, including 216 Long-billed Vultures (LBV), 71 White-rumped Vultures (WRV), and 61 Slender-billed Vultures (SBV). A total of 28 vulture nestlings fledged this year, of which 8 were of White-rumped Vultures, 18 of Long-billed Vultures and 2 of Slender-billed Vultures.

b. Breeding at the Centre

Successful breeding at VCBC Pinjore was noted in 2008, and intensive breeding by artificial incubation was undertaken in 2010, followed by double clutching in 2011 and chick swapping in 2014. As a result, VCBC Pinjore hatched and fledged over 400 vulture nestlings between 2010 and 2024.

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 were observed defending their nest ledges and remain perched together most of the time. During the year 2024-25, all the three species attempted breeding at the centre. There were 14 pairs of White-rumped Vultures, 25 pairs of Long-billed Vultures and 8 pairs of Slender-billed Vultures which laid an egg. A total of 31 nestlings hatched in 2024-25 of which 9 were of WRV, 20 LBV and 2 SBV.

In the year 2024-25, emphasis was laid on releasing them into the wild to reduce expenses due to the severe funding crunch faced by the programme. Twenty-five WRV were released into the wild for reintroduction from Jatayu Conservation Breeding Centre, Pinjore, Haryana, by the Haryana Forest Department and Bombay Natural History Society.

Nestlings at the centre

c. Financials

The entire funding for the centre comes from the MoEFCC, Government from its Centrally Sponsored scheme for the Endangered species through the Haryana Forest Department. This year an Annual Plan of Operation of Rs. 431.021 Lakhs was submitted but an amount of Rs. 411.394 Lakhs was sanctioned.

Income and Expenditure Statement of the year 2024-25 for JCBC, Pinjore (Unaudited)		
Sr.no	**Description**	**Amount in INR (in Lakhs)**
1	Grant sanctioned by MoEFCC through Centrally Sponsored Scheme (F.No. 13-7/2020WL dated. 26.06.24)	411.394
2	Total Amount received by Haryana Forest Department for the grant of Centrally Sponsored Scheme (CSS) for JCBC, Pinjore in two installments	205.698
3	Total food cost of vultures paid by Forest and Wildlife Department	352.291
4	Total amount received from Haryana Forest Development Corporation dtd. 25.03.2025	10.182
5	Total money received by BNHS for the grant of Centrally Sponsored Scheme (CSS) for JCBC, Pinjore in two installments 04.08.2024 and 20.02.2025	205.698
6	Total amount received by BNHS from CSS grant MoEFCC, Haryana Forest & Wildlife Department and, Haryana Forest Development Corporation	568.171
7	Expenses incurred from April-2024 to March-2025	596.365
8	Total likely deficit	28.194

All the expenses related to vulture food (meat) were paid by Haryana Forest and Wildlife Department from the funds received through the Centrally Sponsored Scheme of MoEFCC.

The team

1. The Chief Wildlife Warden, Haryana is the Project Leader of the Programme.
2. The Wildlife Inspector is the Deputy Manager of the Programme.
3. Hemant Bajpai,Centre Manager
4. Dr. Raghavendra Sharma, Senior Veterinarian
5. Jeff Francis, Conservation Biologist
6. Arindam Aditya, Conservation Biologist
7. Niranjan Dalei, Administrative Officer
8. Jaikishan Sharma,Supervisor
9. Balakram Sharma, Accounts Assistant
10. Lalit Kumar,Technical Assistant
11. Sukh Dev, Vulture keeper
12. Devi Dutt, Vulture keeper
13. Ravi Kumar,Vulture keeper
14. Tek Chand, Vulture keeper
15. Manohar Lal, Vulture keeper
16. Mansoor, Vulture keeper
17. Yuvaraj, Vulture keeper
18. Prakash Chand,Night watchman
19. Rajnish, Vulture keeper cum Driver
20. Ved Prakash,Vulture keeper

This report covers the period from1st April 2024 to 31st March 2025.

Hemant Bajpai
Centre Manager
JCBC Pinjor

2. History of the Rescue Centre

The Vulture 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-rumped, 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 6thGoverning 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.

4.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-rumped 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.

White-rumped vultures equipped with GPS-GSM tags kept in release aviary at JCBC Pinjore.

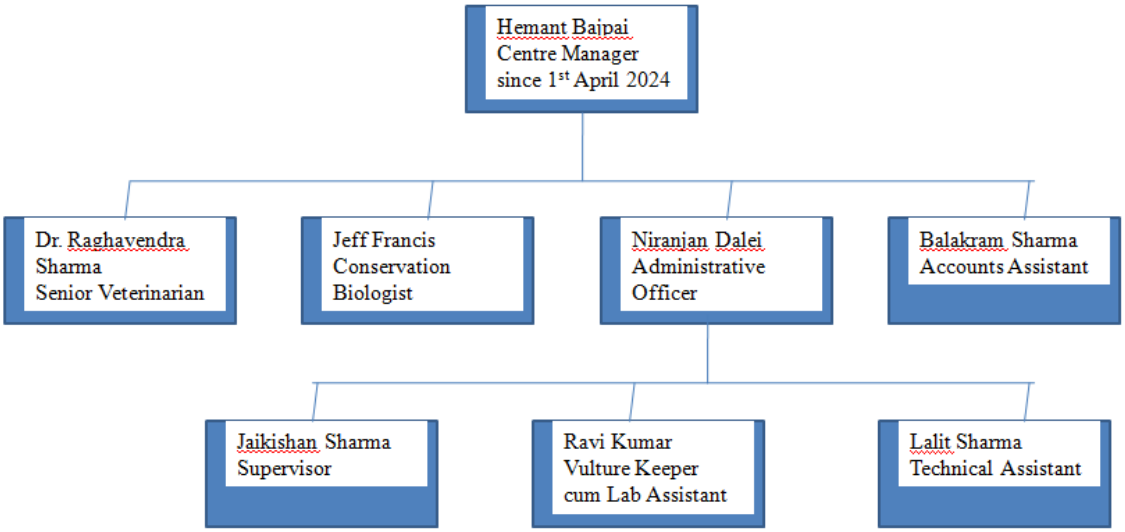
6. About us

Sr. No.	Particulars	Information
Basic Information about the Rescue Centre		
1	**Name of the Rescue Centre**	Jatayu Conservation Breeding Centre
2	**Year of Establishment**	2007
3	**Address of the Rescue Centre**	B-3, Forest Complex, Pinjore 134102, Haryana
4	**State**	Haryana
5	**Telephone Number**	+918955497966
6	**Fax Number**	NA
7	**E-mail address**	**vcbcpinjore@bnhs.org**
8	**Website**	www.bnhs.org
9	**Distance from nearest**	Airport: approx. 30km from Chandigarh Airport
		Railway Station:15km from Kalka Railway Station
		Bus Stand:10km from Pinjore Bus Stand
10	**Recognition Valid up to (Date)**	7th June 2025
11	**Area (in Hectares)**	2.0234282
Management Personnel of the Rescue Centre		
12	**Name with designation of the Officer in-Charge**	Hemant Bajpai, Centre Manager
	Name of the Veterinary Officer	Dr. Raghavendra Sharma
	Name of the Curator	Hemant Bajpai
	Name of the Biologist	Jeff Francis
	Name of the Compounder/Lab Assistant	Ravi Kumar
Owner/Operator of the Rescue Centre		
13	*Name of the Operator	Chief Wildlife Warden, Haryana
14	Address of the Operator	Haryana Forest Department, C-18, Van Bhavan, Sector 6, Panchkula 134109, Haryana

15	Contact details/Phone number of Operator	0172-2561224
16	E-mail address of Operator	pccfwlhry@gmail.com

An overview of Jatayu Conservation Breeding Centre, Pinjore

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)

Sl.No.	Designation	No. of sanctioned Posts	Names of the incumbent
1.	Officer in-charge	1	Hemant Bajpai
2.	Veterinarian	1	Dr. Raghavendra Sharma
3.	Curator	1	Hemant Bajpai
4.	Biologist	1	Jeff Francis
5.	Technical Assistant	1	Lalit Kumar
6.	Accounts Assistant	1	BalakRam Sharma
7.	Administrative Officer	1	Niranjan Dalei
8.	Supervisor	1	Jaikishan Sharma
9.	Vulture Attendants	7	Tek Singh, Ravi Kumar, Devi dutt Sharma, Manohar Lal, Sukhdev, VedPrakash, Yuvaraj
10.	Driver cum vulture attendant	1	Rajnish
11.	Night watchman	2	Prakash Chand, Mansoor

9. Capacity Building of Rescue Centre personnel/ Biologist

Sr. 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	Ravi Kumar	Keeper's training	7-10th March 2025	Gorakhpur Zoo, Uttar Pradesh
2	Jeff Francis	Zoo Biologist	24-26th October 2024	Indira Gandhi Zoological Park, Andhra Pradesh

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-1Wing, 6th Floor,Pt. Deendayal Antyodaya Bhawan, CGO Complex, Lodhi Road,NewDelhi-110003.
v. The Director, Wildlife Institute of India, Chandrabani, Dehradun.
vi. Director, Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Road, Mumbai.
vii. Vice Chancellor, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana.
viii. Project Manager, VCBC, Pinjore
ix. PCCF (Wl) and CWLW, Member Secretary

b. Dates on which Meetings held during the year: No meeting could be held

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: No meeting could be held

12. The 15th meeting of the Governing Council of Jatayu Conservation Breeding Centre, (JCBC)

The 15th Governing Body meeting of JCBC Pinjore was held on 23rd May 2024 at the Haryana Civil Secretraiat in Chandigarh, Chaired by Sh. Anand Mohan sharan, IAS, Additional Chief Secretory to Government of Haryana, Environment, forest and Wildlife.

Sh. Vineet Kumar Garg, IFS, PCCF & CWLW, Haryana, who also serves as the Member Secretary of the Governing body. The meeting noted the absence of representatives from MoEF7CC, WII and LUVAS, which led the Chairman to direct a proposal for reconstitution of the Governing Body potentially replacing some of the outdated members and including experts relevant to the project's need.

A brief report on the activities of the Jatayu Conservation Breeding Centre, Pinjore was presented which was approved by the Chair.

The Meeting highlighted the Centre's continued leadership in vulture conservation through successful breeding, fledging, and reintroduction efforts. Key achievements included the first wild fledging of acaptive-bred White-rumped vulture pair, the record fledging of eight Slender-billed vultures, and the transfer of 60 vultures to support release and genetic management across India.

Members acknowledged the progress made despite significant financial limitations, which have impacted core activities such as health checks, incubation, and staffing. The Governing Body approved the Annual Action Plan for 2024–25 and emphasized the need for consistent releases, long-term monitoring, and timely funding support.

The meeting concluded with a strong reaffirmation of the Centre's critical role in national vulture recovery efforts and the importance of securing sustained financial and institutional support.

13. Statement of income and expenditure of the Rescue Centre

Income and Expenditure Statement of the year 2024-25 for JCBC, Pinjore (Unaudited)		
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8	Total likely deficit	28.194

14. Daily feed Schedule of animals

Sl. No.	Species	Feed item	Quantity/vulture		Day of fasting
			Winter	Summer	
1.	**White-rumped 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**

15. Vaccination Schedule of animals

Sl. No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ Quantity used	Periodicity	Remarks
	-	-	-	-	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.

16. De-worming Schedule of animals

Sl. No.	Species	Drug used	Month
1.	White-rumped vulture	No de-worming is done but endoparasite load is monitored by routine faecal sample analysis. This is because the birds have to be Re-introduced in the wild.	NA
2.	Long-billed vulture	No	NA
3.	Slender-billed vulture	No	NA

17. Disinfection Schedule

Sl. No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1.	White-rumped 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

18. 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	No health check could be conducted	NA
2.	Tek Singh	Vulture Attendant	No health check could be conducted	NA
3.	Ravi Kumar	Vulture Attendant	No health check could be conducted	NA
4.	Devidutt Sharma	Vulture Attendant	No health check could be conducted	NA
5.	Manohar LaL	Vulture Attendant	No health check could be conducted	NA
6.	Sukhdev	Vulture Attendant	No health check could be conducted	NA
7.	Prakash Chand	Vulture Attendant	No health check could be conducted	NA
8.	Mansoor	Vulture Attendant	No health check could be conducted	NA
9.	Yuvaraj	Vulture Attendant	No health check could be conducted	NA
10.	Rajneesh	Vulture Attendant cum Driver	No health check could be conducted	NA
11.	Ved Prakash	Vulture Attendant	No health check could be conducted	NA

19. Reintroduction of 25 White-rumped vulture at JCBC Pinjore.

The Vulture Release Program at the Jatayu Conservation Breeding Centre, Pinjore, held on December 17, 2024, was graced by the Hon'ble Chief Minister of Haryana, Sh. Nayab Singh, as the Chief Guest. The event began with a warm welcome extended to the Chief Guest by Sh. Anand Mohan Sharan, IAS, ACS, EF&W, and the gathering of distinguished dignitaries, including Hon'ble Environment, Forests & Wildlife Minister Sh. Rao Narbir Singh and local MLA Shrimati Shakti Rani Sharma.

Following the welcome, Sh. Rao Narbir Singh addressed the audience, applauding JCBC's commendable efforts in vulture conservation. He recognized the success of previous vulture releases and assured full support and cooperation from the state government to sustain and strengthen these conservation initiatives. His speech underscored the importance of protecting vultures, which play a critical ecological role, and emphasized the state's commitment to environmental conservation.

Sh. Kishore Rithe, Director BNHS, then gave a detailed presentation on the activities of JCBC through an engaging video. The presentation provided insights into the various

challenges faced by the centre in conserving critically endangered vulture species and highlighted its remarkable achievements over the years. The video showcased JCBC's vital role as a leader in vulture conservation and reintroduction programs in India.

A booklet documenting JCBC's role, conservation activities, and achievements was released by the Chief Guest and other dignitaries. This moment marked another milestone in acknowledging the centre's dedicated work in vulture conservation.

In his keynote address, Hon'ble Chief Minister Sh. Nayab Singh emphasized the ecological significance of vultures and applauded the relentless efforts undertaken by BNHS and JCBC in their conservation. He assured the gathering of the Haryana Government's full support for future conservation programs. Additionally, the Chief Minister requested BNHS to collaborate with the state to initiate habitat conservation and conservation breeding programs for other endangered bird species in Haryana, further strengthening the state's biodiversity conservation efforts.
Sh. Vineet Kumar Garg, IFS, PCCF & CWLW, delivered the vote of thanks, expressing heartfelt gratitude to the Chief Guest, dignitaries, and all stakeholders for their presence and continuous support. The event continued with a guided tour of JCBC, where Sh. Kishore Rithe provided detailed information about the vultures housed at the centre, their pre-release aviaries, and the scientific protocols followed for their rehabilitation and care.

The highlight of the program was the much-anticipated release of vultures into the wild. At the release site, Hon'ble Chief Minister Sh. Nayab Singh inaugurated the soft release by opening the pulley gate, allowing the vultures to soar into the open sky. This symbolic moment marked a major step towards the successful reintroduction of critically endangered vultures into their natural habitat.

The event at JCBC Pinjore not only celebrated the ongoing success of vulture conservation but also reinforced the collaborative efforts between the Haryana Government, BNHS, and local leadership. It highlighted the ecological importance of vultures, the need for continued conservation efforts, and the commitment to protecting Haryana's biodiversity for future generations.

Release of captive-bred vultures in to the wild and release of Jatayu Booklet by Hon'ble Chief Minister Sh. Nayab Singh Saini

20. Budget and funding for the Centre for the period 1st April 2024- 31st March 2025 and challenges faced

The entire funding for the centre comes from the MoEFCC, Government from its Centrally Sponsored scheme for the Endangered species through the Haryana Forest Department. This year an Annual Plan of Operation of Rs. 431.021 Lakhs was submitted but an amount of Rs. 411.394 Lakhs was sanctioned.

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A Long-billed vulture nestling at the centre

MoEFCC.

21. Seasonal special arrangements for upkeep of animals

High quality shade cloth was laid on top of all aviaries to provide additional shade. This cloth brings down the temperature by 5ºC. Routine husbandry and care included topping up of water troughs every day, cleaning of troughs every third days and changing the water was carried out. 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.

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

Annual Health check of vultures:

Annual health examination of vultures at JCBC, Pinjore was conducted from 6th Sept to 12th Sept, 2024.The main objective of annual health check of vultures was to found out the health status of vultures and provide veterinary care to needy vultures. Annual health check included detailed clinical examination and collection of blood for estimation of hematological parameters and biochemical parameters. Colony Aviary I, Colony Aviary II, Colony Aviary III, Colony IV, Colony Aviary V, Colony Aviary VI, Green aviary, holding aviary VIII, big holding aviary and Pre-release aviary were evaluated in seven days.

Detailed clinical examination includes examination of pectoral and femoral muscles, measurement of body weight, visualization of eyes and nare and palpation of crop, legs, abdomen, cloaca etc. for any kind of abnormalities, examination of feet for presence of bumble foot and presence of ectoparasites on the body. Any kind of abrasion occurred during trapping was treated with soframycin ointment. If ectoparasite load was found to be more then Frontline (ectoparasitic drug) sprayed on both wings.

HAEMATOLOGY

Blood was collected from medial metatarsal vein and stored in EDTA vacutainer. Two blood smears were prepared immediately from last few drops of blood from the syringes after transferring to the vacutainer. 3ml of blood was separately transferred to sterilized clot activator tube from the syringe aseptically before haematology from each sample for biochemistry. The blood was collected from 61 LBV, 51 WBV and 23 SBV.

Haematological parameters for estimation were packed cell volume (PCV), haemoglobin (Hb), total erythrocyte count (TEC), total leucocyte count (TLC), differential leucocyte count (DLC), mean cell volume (MCV), mean cell haemoglobin (MCH) and mean cell haemoglobin concentration (MCHC).

Packed Cell Volume (PCV):

Microcentrifuge Method: - Microcapillary tubes were filled up to 3/4th length by heparinised blood and sealed one end with soap. Centrifugation was done by keeping sealed end towards periphery of the rotor head at 8000-10000 rpm for 5 minutes.

Reading of capillary tubes was taken by PCV reader scale.

Haemoglobin Estimation (Hb)

Haemocue machine method: – Haemocue machine is digitalized machine which display the estimated haemoglobin results on the screen of the machine. A drop of blood was taken in a specially designed cuvette and inserted the cuvette with blood into the Haemocue machine and reading was taken from displayed screen.

Total Erythrocyte Count (TEC)

Neubauer Hemocytometer Method: - Aliquot was prepared by adding 20 microliter blood to 4 ml normal saline to make 1:200 dilution. Then aliquot was allowed to mix gently by rolling in blood mixer for 5 minutes. Hemocytometer was charged with aliquot and the red blood cells were counted in 5 squares (5× 16 =80 smallsquares) under the 40X microscope.

Calculation = Number of RBC counted / 100 × 10^{12} /L

Total Leucocyte Count (TLC)

Neubauer Hemocytometer Method: - 100 microliter of blood was added to 1.9 ml 1% Ammonium oxalate solution to get 1:100 dilutions. The aliquot was mixed for 7 minutes in blood mixer and then kept undisturbed for 5 minutes. The hemocytometer was charged with diluted blood and WBCs were counted in 4 squares (4× 16= 64 small squares) under the 40X microscope.

Calculation = Number of WBCs counted / 20 × 10^9 / L

Differential Leucocyte Count (DLC)

Diff Quick Method: - First fix the blood smear in methanol and then serially stain in Stain-A and Stain-B for 10 seconds and 1-2 min. examine the smear under oil immersion.

Table 1: Hematology report of White-backed vultures:

Sr. No.	Species	Aviary	Date	RBC Count (x10^{12}/L)	Hb(g/dl)	WBC Count (x10^9 /L)
1	White-rumped vulture		6th Sept to 12th Sept,2024			
Average				2.27	15.3	11.2

Maximum	3.91	18.9	18.5
Minimum	1.8	11.2	9.9

Table 2: Hematology reports of Long-billed vultures:

Sr. No.	Species	Aviary	Date	RBC Count ($x10^{12}$/L)	Hb(g/dl)	WBC Count ($x10^9$/L)
1	Long billed		6th Sept to 12th Sept,2024			
Average				2.132	15.61	14.04
Minimum				1.8	13.1	11.4
Maximum				2.4	19.3	17.1

Table 3: Hematology reports of Slender-billed vultures:

Sr. No.	Species	Aviary	Date	RBC Count ($x10^{12}$/L)	Hb(g/dl)	WBC Count ($x10^9$/L)
1	Slender-billed		6th Sept to 12th Sept,2024			
Average				2.3	17.2	12.4
Maximum				2.4	18	16.2
Minimum				2.2	16.5	10.8

Table 1: Health reports of Long- billed vultures

Number of Vultures	Date	Name of vulture	Scientific name	Body weight(kg)	Ectoparasites	
222	6th Sept to 12th Sept,2024	Long billed	Gyps indicus		Infestation	Treatment
		Average weight		5.035	Grade 0	Not recommended
		Maximum weight		6.5	Grade 1	Recommended
		Minimum weight		3.1	Grade 2	Recommended

GRADE FOR LOAD OF ECTOPARASITE

1. Grade "O" for no ectoparasitic infestation
2. Grade "1" for mild ectoparasitic infestation with necessary treatment

3. Grade "2" for considerable ectoparasitic infestation with treatment recommendation
4. Grade "3" for high ectoparasitic infestation with highly recommended treatment.

Table 2: Health reports of White-backed vultures

Number of Vultures	Date	Name of vulture	Scientific name	Body weight(kg)	Ectoparasites	
97	6th Sept to 12th Sept,2024	White-backed	Gyps bengalensis		Infestation	Treatment
		Average weight		4.63	Grade 0	Not recommended
		Maximum weight		6.8	Grade 1	Recommended
		Minimum weight		3.4	Grade 2	Recommended

GRADE FOR LOAD OF ECTOPARASITE

1. Grade "O" for no ectoparasitic infestation
2. Grade "1" for mild ectoparasitic infestation with necessary treatment
3. Grade "2" for considerable ectoparasitic infestation with treatment recommendation
4. Grade "3" for high ectoparasitic infestation with highly recommended treatment.

Table 3: Health reports of Slender-billed vultures

Number of Vultures	Date	Name of vulture	Scientific name	Body weight(kg)	Ectoparasites	
62	6th Sept to 12th Sept,2024	Slender-billed	Gyps tenuirostris		Infestation	Treatment
		Average weight		5.25	Grade 0	Not recommended
		Maximum weight		6.7	Grade 1	Recommended
		Minimum weight		3.4	Grade 2	Recommended

GRADE FOR LOAD OF ECTOPARASITE

1. Grade "O" for no ectoparasitic infestation
2. Grade "1" for mild ectoparasitic infestation with necessary treatment
3. Grade "2" for considerable ectoparasitic infestation with treatment recommendation
4. Grade "3" for high ectoparasitic infestation with highly recommended treatment.

22. ARTIFICIAL INCUBATION

During the 2024-25 breeding season, six White-rumped vulture eggs and three Slender-billed vulture eggs were taken from the nest for artificial incubation. All the eggs were weighed first and candled before placing them in the incubators. BrinseaOctogon incubators were used for the artificial incubation process. Initially the incubator temperature was set at 36.6°C and adjusted according to the weight gain/loss. Similarly, the initial humidity was set at 35 % and was adjusted according to the weight gain/loss. The temperature and humidity were monitored every at one hour interval. The weighing of the eggs was done every third day and candling was done every sixth day.

White-rumped vulture eggs undergoing artificial incubation

Nest Number	Egg laid date	Days of artificial incubation	Status	Remarks
White-rumped Vulture				
N29	12-11-2024	45	Hatched	Chick healthy
N9	16-11-2024	48	Hatched	Chick healthy
N31	14-11-2024	49	Hatched	Chick healthy
PRA	24-11-2024	50	Hatched	Chick healthy
N14	12-11-2024	64	Infertile	Failure
N16	13-11-2024	63	Infertile	Failure
Slender-billed Vulture				
N13	02-12-2024	44	Hatched	Chick healthy
N24	08-12-2024	67	Failed to hatch	Failure
N6	20-12-2024	62	Infertile	Failure

The vulture eggs were collected for the 2024-2025 breeding season and artificially incubated in November. The artificial incubation for both species yielded mixed outcomes. For White-rumped vultures, six eggs were incubated. Four successfully hatched, resulting in healthy chicks (N9, N29, N31, and PRA). However, two eggs (N14 and N16) were deemed to be infertile once the necropsy was conducted.

In the case of Slender-billed vulture, three eggs were incubated. One egg successfully hatched, resulting in a healthy chick (N13), while one egg (N24) failed to hatch after completing the incubation period. The last egg (N6) was deemed to be infertile once the necropsy was conducted.

In summary, the White-rumped showed a 66% success rate, with four healthy chicks, while the Slender-billed showed only a 33% success rate, with only one healthy chick. This underscores the need for further investigation and refinement of incubation techniques to enhance success rates for both species.

N29WRVCA2 and N9WRVCA2 White-rumped vulture nestlings inside the brooder box

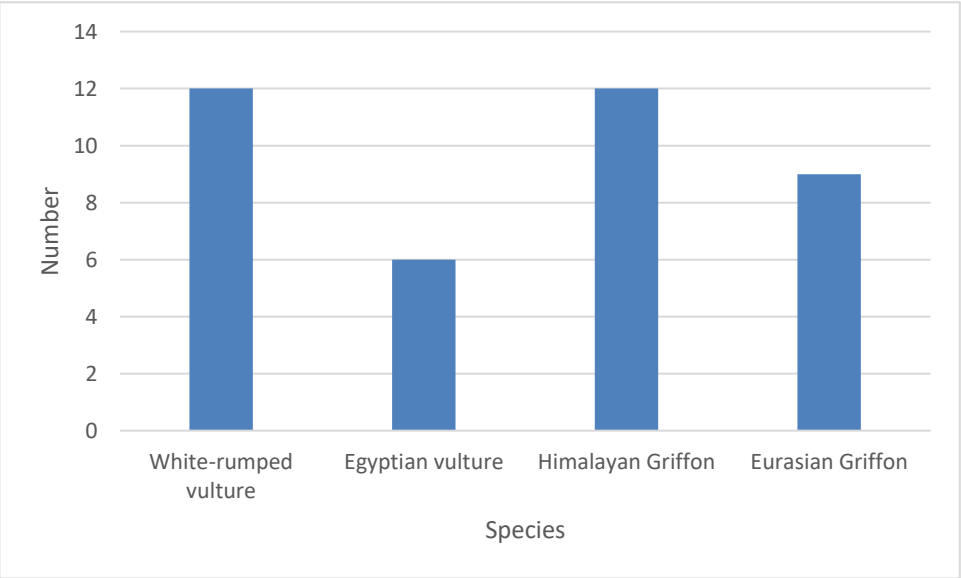
N31WRVCA2 and PRAWRVCA2 White-rumped vulture nestlings inside the brooder box

23. Population and distribution of vultures in Vulture Safe Zone, Haryana

Road Transects Method

The status and distribution of various species of vultures in the Vulture Safe Zone, Haryana was monitored regularly during the period May 2024 to March 2025 with JCBC, Pinjore as the centre of the zone. The monitoring was done using the road transect method along predetermined routes that covered a large part of the Vulture Safe Zone. The road transect method is a standard method that indicates the presence of vultures in the region, as well as the minimum population of vultures. The foraging population of vultures was also monitored regularly at carcass dumps in the Vulture Safe Zone where the vultures would congregate to feed.

The road transect method was employed on the state and national highways along the predetermined routes, covering several districts and a variety of habitats. The surveys indicated that the population of vultures in the state was low. Furthermore, there was a significant variation in the number of vultures that were seen between the road transects. Only four species of vultures were spotted during the road transects, namely, white-rumped vulture, Egyptian vulture, Himalayan griffon, and Eurasian griffon. The White-rumped vulture was the most common, followed by the Himalayan griffon vulture. During winters, due to migratory species the number of sightings are more compared to the other seasons. Surveys need to be conducted over a longer period to get better information on the trend in vulture population.

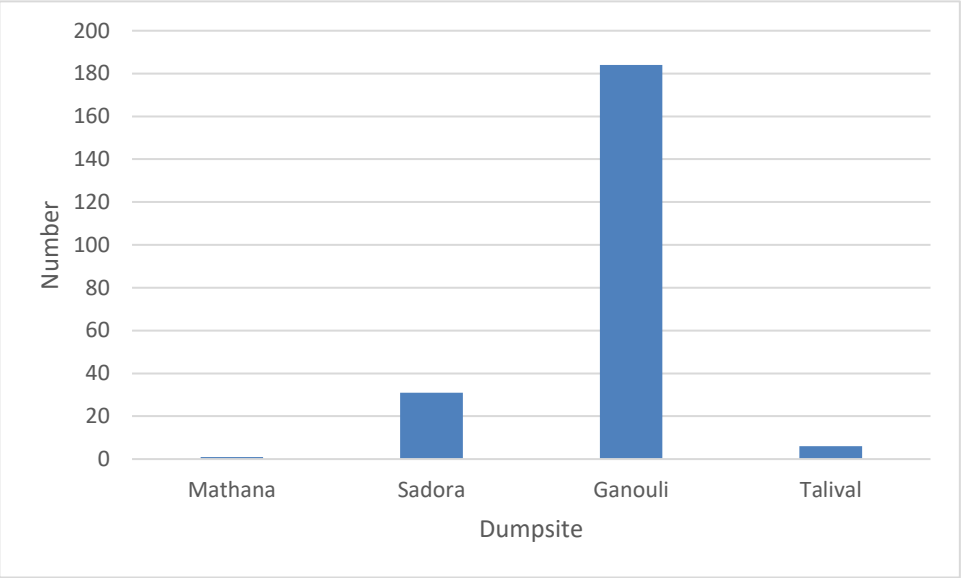


Number of vultures recorded during the road transects

Total count method at food concentration sites for vultures

In this, the identified carcass dump in the Vulture Safe Zone was visited once every month, and data on the numbers of different species of vultures feeding on carcasses at the site and perched or soaring around the site were recorded. The counts were carried out quickly to prevent duplication of counts. Four carcass dumps, Mathana, Sadora, Ganouli, and Talival dumps were monitored once every month from May 2024 to March 2025. Data was collected on the species richness and diversity of vultures at the carcass dump.

In all the dumps only Egyptian vultures were spotted and no other species were recorded. Maximum number of Egyptian vultures were recorded from Ganouli dump and least was recorded from Mathana dump.



Number of Egyptian vultures recorded at dumpsites

Evaluation of the availability of food for vultures in VSZ Haryana

Food is a critical resource for the survival of any living organism. Therefore, while working on the conservation of species, it is important to regularly monitor the availability of food for the species, and to check whether the available food is sufficient to sustain the existing population of the species in the region.

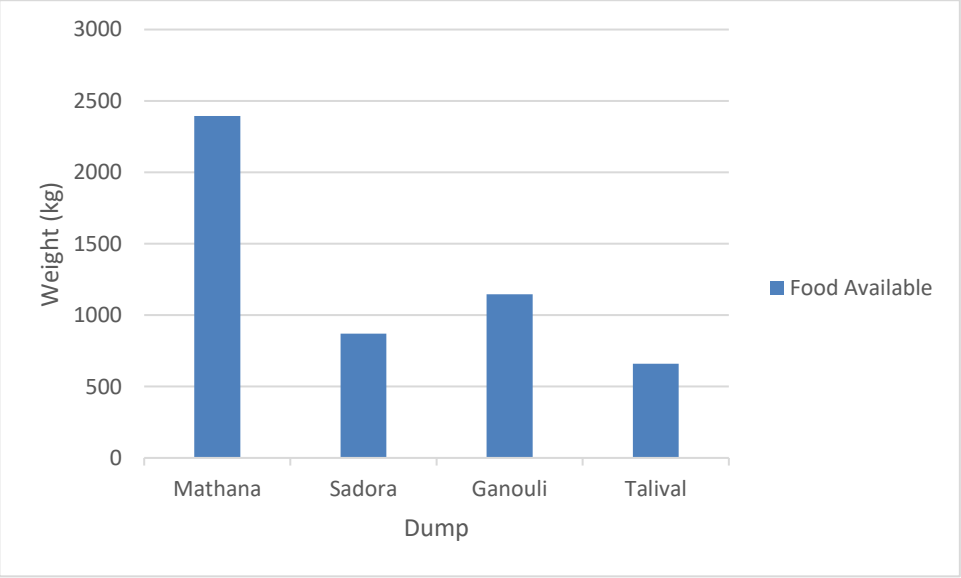
Vultures, being obligate scavengers, are completely dependent on carrion for their food. They feed on the carcasses of large wild and domestic herbivores, including gaur,

sambar, chital, nilgai as the wild herbivores, and cattle, buffalo, horse, camel, goats, and sheep as the domestic herbivores. Any living organism requires food at about 5% of its body weight per feed to sustain its normal physical growth and physiological functions. Therefore, an average resident Gyps species of vulture, weighing around 5 kgs, will require approximately 90-100 kg of meat per year, excluding the weight of bones and hide.

During the road transects and dump surveys between May 2024 till March 2025, no cattle carcasses were recorded.

Availability of food for vultures at food concentration sites:

Four concentration site for vultures were monitored regularly. A total of 4890 kg food was available for vultures for consumption between May 2024 and March 2025 (after excluding the weight of hide and bones: 40% of the total weight) during the study period. Mahana dump had the highest and Talival had the least food available for the vultures to feed on. This estimate is only based on a sample and the actual food availability could be higher.



Amount of food available for vultures at respective dumps

Discussion and conclusion

It was observed that there was a highly irregular availability of food for vultures in the form of cattle carcasses in the open throughout the year in the study area. This was

because the major cities in the state had adopted the method of carcass burial to maintain better hygiene. This was also probably the effect of the decline in vulture population, as this shift in carcass disposal methods would not have been needed if the population of vultures had not declined. A common pattern observed at the food concentration sites was that the cattle carcasses were buried and not left out in the open after skinning them.

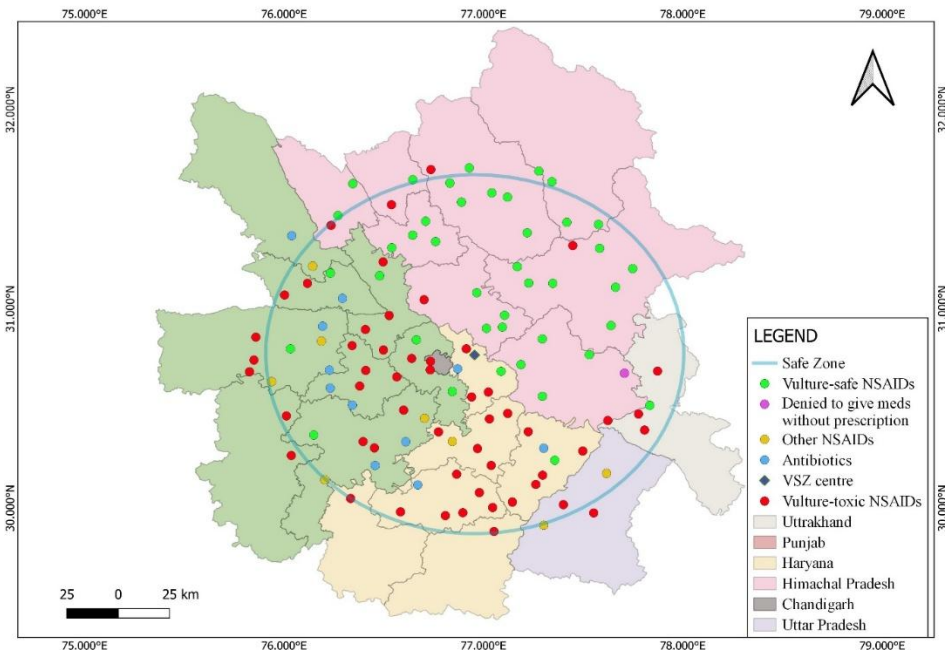
The existing populations of vultures that are dependent on carcass dumps and should encourage the authorities to continue with the practice of scientifically disposing cattle carcasses in the open after ensuring that they have not been treated with the vulture-toxic NSAIDs. Regular studies are needed in the future to continuously monitor the availability of food for vultures in the region.

24. Monitoring the Prevalence of Veterinary NSAIDs in the Vulture Release Zone, Pinjore

India's vulture populations have experienced catastrophic declines due to exposure to toxic non-steroidal anti-inflammatory drugs (NSAIDs) used in livestock treatment. Among these drugs, diclofenac was identified as the primary cause of this crisis, resulting in renal failure in vultures consuming contaminated livestock carcasses. Despite the ban on veterinary diclofenac in 2006, illegal use persists, compounded by the availability of other toxic NSAIDs such as aceclofenac, ketoprofen, and nimesulide.

The Jatayu Conservation Breeding Centre, Pinjore, has been actively breeding vultures in captivity to counter this decline. As part of its reintroduction program, it is crucial to assess the safety of the Vulture Safe Zone (VSZ), a 100 km radius surrounding the centre. This study aims to monitor the prevalence of NSAIDs in the VSZ and evaluate their potential threat to vultures.

The VSZ includes parts of five Indian states and one Union Territory (UT): Haryana, Punjab, Himachal Pradesh, Uttarakhand, Uttar Pradesh, and Chandigarh (UT). These regions represent diverse ecological and veterinary practices and are critical for understanding the availability of NSAIDs. The survey covered 112 blocks and district headquarters, with data collected from 115 pharmacies.



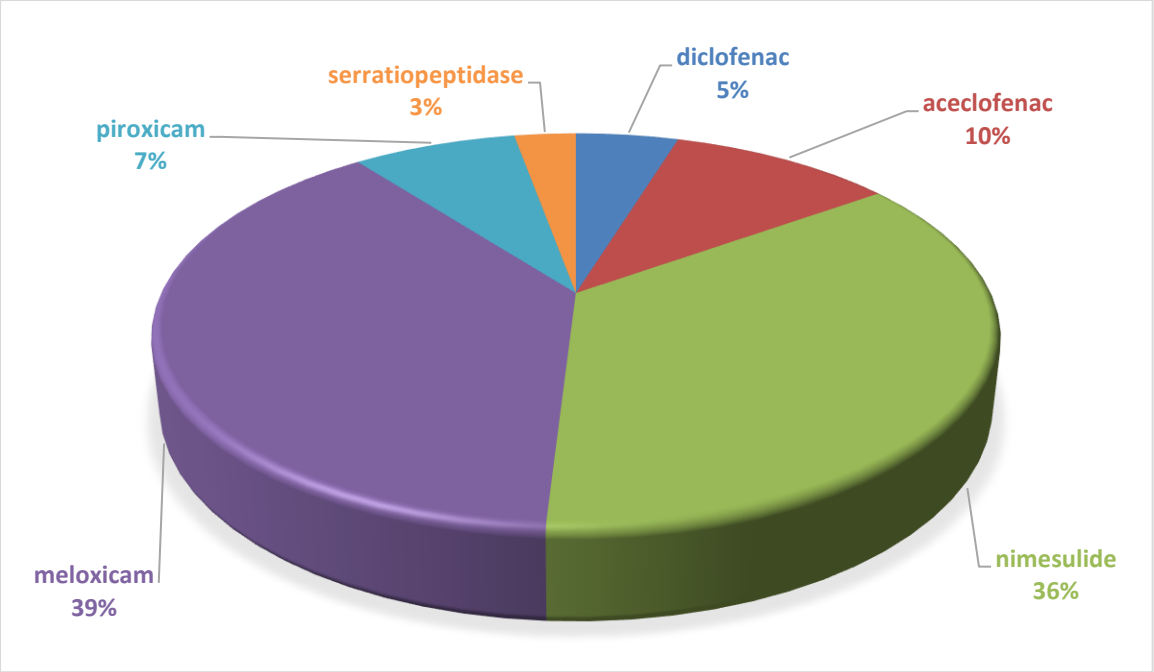
Prevalence of various NSAIDs in Vulture Safe Zone, Pinjore.

The pharmacy survey was conducted undercover from August to November 2024. Trained personnel posed as cattle owners seeking pain relief medication for injured livestock, a strategy that ensured unbiased responses from pharmacy owners.

Each block's largest pharmacy known for veterinary drug sales was selected. During visits, the surveyors purchased the first drug offered without suggesting alternatives. No data was recorded inside the pharmacies to avoid suspicion; instead, details such as location, GPS coordinates, and drug type were noted post-survey.

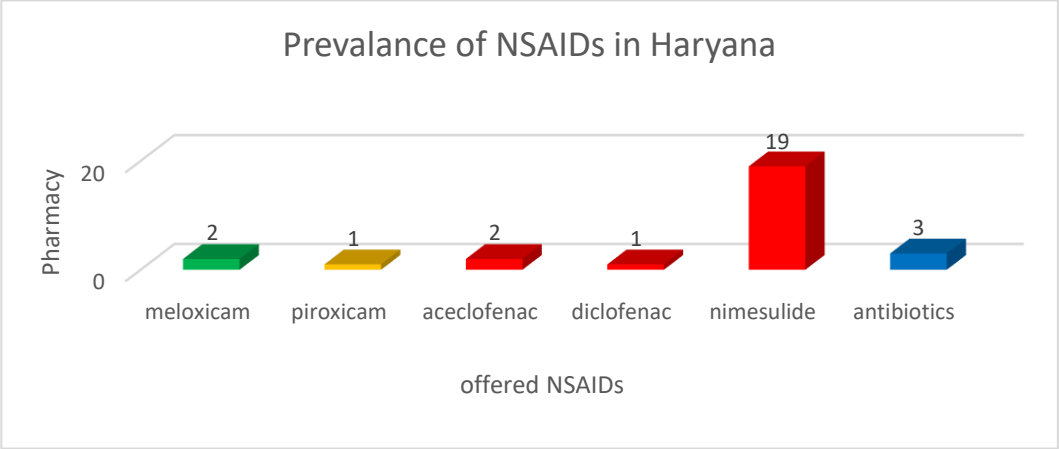
Of the 115 pharmacies surveyed, 92.17% (n=106) offered NSAIDs. Among these, 50.94% (n=54) offered toxic drugs for vultures, 38.67% (n=41) provided meloxicam (a vulture-safe drug), and 10.37% (n=11) sold drugs with unknown safety profiles.

- Diclofenac: Found in 5% (n=5) of pharmacies; all were human formulations
- Aceclofenac: Found in 10% (n=11), primarily in human formulations.
- Nimesulide: Found in 36% (n=38), making it the most prevalent toxic NSAID.
- Meloxicam: Found in 39% (n=41), indicating its potential as a safer alternative.
- Other NSAIDs: Piroxicam (7.54%, n=8) and Serratiopeptidase (2.83%, n=3).



Prevalence of various NSAIDs in Vulture Safe Zone, Pinjore.

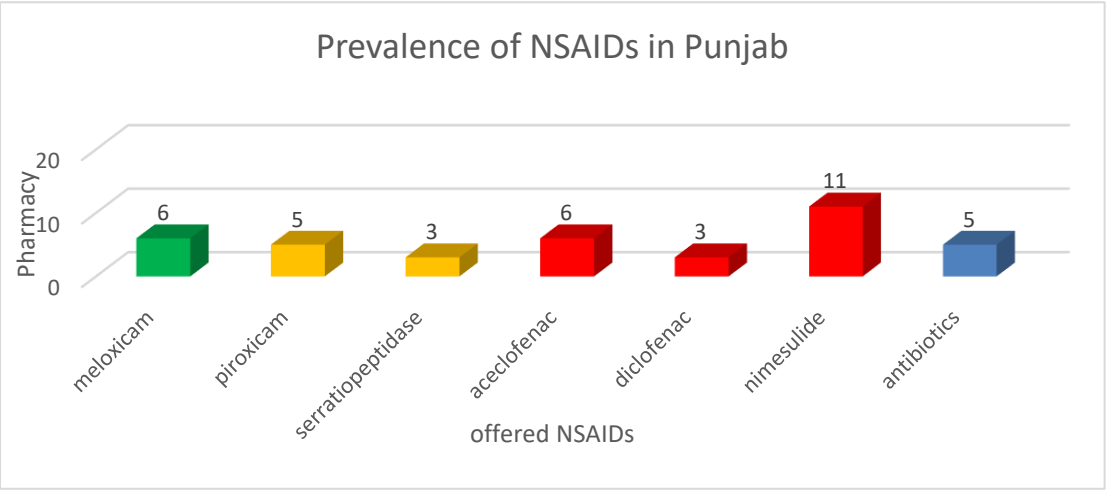
Haryana recorded one of the highest prevalences of toxic NSAIDs. Of the 28 pharmacies surveyed, 88% stocked drugs harmful to vultures, with nimesulide being the most common (76%, n=19). diclofenac and aceclofenac were also found, although less frequently. Only 8% of pharmacies offered meloxicam, highlighting a significant gap in the availability of safe alternatives.



Frequency of various drugs offered by pharmacies in targeted blocks of Haryana.

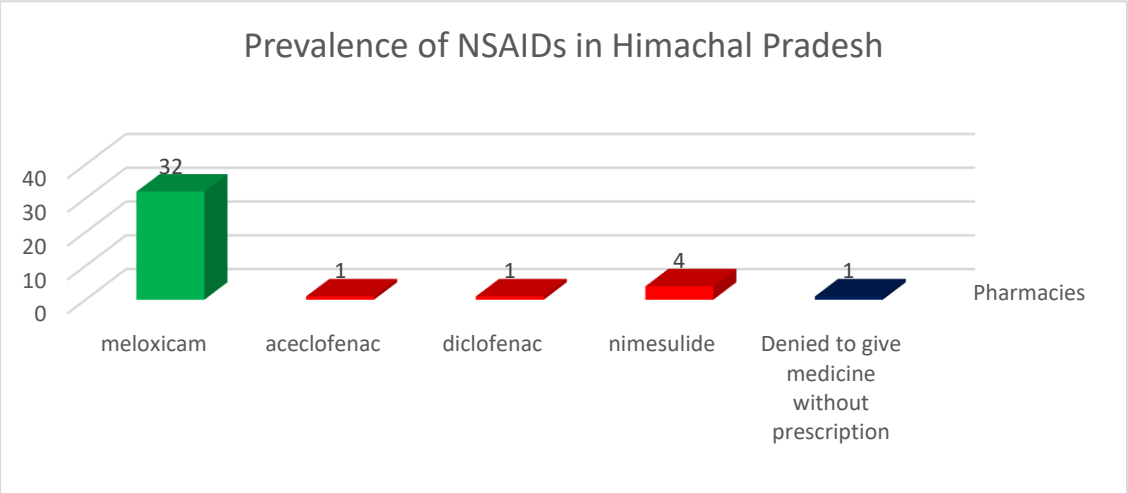
In Punjab, 39 pharmacies were surveyed, with 58.82% stocking toxic NSAIDs. diclofenac was found in 8.82% of pharmacies, while aceclofenac was present in 17.64%. nimesulide was found in 32.35% of pharmacies, making it a prominent concern. Only 17.64% of pharmacies offered meloxicam, showing the need for increased awareness and

promotion of safer drugs.



Frequency of various drugs offered by pharmacies in targeted blocks of Punjab.

Himachal Pradesh was the safest state in the VSZ, with 84.21% of the 39 pharmacies stocking meloxicam. Only 15.78% of pharmacies stocked toxic NSAIDs, primarily aceclofenac and diclofenac. This highlights the success of regulatory measures and awareness campaigns in the state.



Frequency of various drugs offered by pharmacies in targeted blocks of Himachal Pradesh.

Uttarakhand

In Uttarakhand, only four pharmacies were surveyed, but 75% stocked toxic NSAIDs like aceclofenac and nimesulide. The remaining pharmacy offered meloxicam. This small sample indicates localized risks that require further investigation.

Uttar Pradesh (West)

The survey in Uttar Pradesh focused on Saharanpur district, where 50% of the four pharmacies stocked nimesulide, and 50% offered piroxicam. The findings suggest the urgent need to address the availability of these toxic drugs in the region.

Chandigarh (UT)

The single pharmacy surveyed in Chandigarh stocked aceclofenac in human formulations, indicating misuse for veterinary purposes. This underscores the need for stricter regulatory oversight.

The survey reveals that the VSZ remains a challenging environment for vulture conservation due to the availability of toxic NSAIDs in most states except Himachal Pradesh. Nimesulide's prevalence, found in 35.84% of pharmacies, represents the most significant threat due to its unregulated use. Despite bans, diclofenac and aceclofenac continue to be misused, particularly in Haryana and Punjab.

Meloxicam, the only vulture-safe NSAID, is underutilized, with significant regional disparities in its availability. Himachal Pradesh serves as a model for effective regulation and awareness, showing that safe alternatives can replace toxic drugs when supported by targeted interventions.

Recommendations

The study highlights that nimesulide, a widely available NSAID, is present in 35.84% of pharmacies in the Vulture Safe Zone (VSZ), making it one of the most prevalent toxic drugs for vultures. Despite its documented toxicity, nimesulide has not been banned for veterinary use in India. Research indicates that nimesulide residues in carcasses are fatal to vultures, causing kidney failure similar to the effects of diclofenac. This is supported by studies like Cuthbert et al. (2016), which emphasize the need for immediate regulatory actions to prevent its use in livestock. Given its widespread availability and usage in states like Haryana, Punjab, and Uttar Pradesh, banning nimesulide is essential to mitigate its threat to vulture populations.

Although veterinary formulations of diclofenac were banned in 2006, its human formulations continue to be misused for livestock treatment, as evident in 4.71% of pharmacies surveyed. Aceclofenac, a prodrug that metabolizes into diclofenac in cattle,

was also found in 10.37% of pharmacies, despite its ban in 2023. These findings indicate gaps in regulatory enforcement. States like Haryana and Punjab reported significant misuse of these NSAIDs, highlighting the need for stricter monitoring. Research shows that even small concentrations of diclofenac and aceclofenac in carcasses can be lethal to vultures (Oaks et al., 2004; Green et al., 2004). To ensure the safety of the VSZ, regulatory authorities must enforce existing bans, impose stricter penalties for violations, and monitor the sale and distribution of human formulations of these drugs.

The survey results reveal that meloxicam, the only NSAID proven safe for vultures, is available in 38.67% of pharmacies, with Himachal Pradesh showing the highest prevalence (84.21%). Promoting meloxicam as the preferred NSAID for veterinary use is crucial for reducing the risk to vultures. Studies (Fourie et al., 2015) confirm that meloxicam does not harm vultures when ingested through treated carcasses, making it a viable alternative to toxic NSAIDs. Awareness campaigns and subsidies for meloxicam can encourage its adoption among veterinarians and livestock owners. Himachal Pradesh serves as a model, demonstrating how increased availability of meloxicam can significantly reduce the prevalence of toxic NSAIDs in the region.

The findings underscore a lack of awareness among veterinary practitioners, pharmacy owners, and livestock farmers about the lethal impact of NSAIDs on vultures. For instance, the continued sale of diclofenac and aceclofenac in Punjab and Haryana indicates that stakeholders are either unaware of or disregarding existing bans. Awareness campaigns should educate stakeholders on the ecological importance of vultures and the consequences of using toxic NSAIDs. Training programs and community outreach efforts, supported by government agencies and conservation organizations, can promote informed decision-making and compliance with regulations.

The study emphasizes the need for ongoing monitoring to assess the prevalence of NSAIDs in the VSZ. Periodic pharmacy surveys, like the one conducted in this study, are essential for tracking compliance with bans and identifying emerging threats. The survey revealed significant regional differences, with Himachal Pradesh showing high compliance and Haryana demonstrating a critical need for intervention. Regular monitoring can help authorities detect trends, assess the effectiveness of conservation measures, and adapt strategies accordingly. For instance, the increase in meloxicam availability in Himachal Pradesh reflects the positive impact of targeted efforts, which

can be replicated in other regions.

Conclusion

The recommendations provided are directly informed by the findings of the survey and supported by scientific research. Banning nimesulide, enforcing diclofenac and aceclofenac regulations, promoting meloxicam, raising awareness, and conducting regular monitoring are essential steps to create a safe environment for vultures in the VSZ. By addressing the identified threats and implementing these measures, India can ensure the successful reintroduction of vultures from the Jatayu Conservation Breeding Centre, Pinjore, while contributing to the global efforts to conserve these critically endangered species.

25. Awareness programmes for vulture conservation

Vulture Conservation and Reintroduction Programme Workshop

On August 6, 2024, a significant workshop titled "Vulture Conservation and Reintroduction Programme" was organized at the Jatayu Conservation Breeding Centre (JCBC) in Pinjore, Haryana. This workshop was jointly organized by the Haryana Forest and Wildlife Department and the Bombay Natural History Society (BNHS), bringing together experts, government officials, and stakeholders from various states to discuss and strategize the conservation and reintroduction of vultures in India. The backdrop of this workshop is rooted in the alarming decline of vulture populations in India since the 1990s. The primary cause of this decline has been attributed to the adverse effects of certain veterinary drugs, including diclofenac, ketoprofen, and aceclofenac, which are lethal to vultures when ingested through carcasses. This crisis led to a dramatic reduction of over 99% in the vulture population, prompting immediate and concerted conservation efforts to prevent the extinction of these crucial scavengers. The Bombay Natural History Society (BNHS) took the lead in addressing this crisis, supported by the Haryana Forest and Wildlife Department. Their joint efforts led to the establishment of the Vulture Care Centre in Pinjore in 2001, which was later upgraded to the Jatayu Conservation Breeding Centre (JCBC) in 2005. Today, JCBC stands as one of the largest and most successful vulture conservation programs in Asia, housing 384 vultures of various species and playing a pivotal role in breeding and reintroduction efforts across India.

The workshop on Vulture Conservation and Reintroduction Programme concluded with closing remarks from Mr. Vineet K. Garg, PCCF-CWLW, Haryana, and Mr. Kishor Rithe, Director, BNHS. Both speakers emphasized the importance of sustained collaboration and collective efforts in achieving the goals of vulture conservation and reintroduction. The workshop ended with a felicitation ceremony, recognizing key participants for their contributions, followed by a vote of thanks delivered by Mr. Prakash Mehta, Conservation Officer, BNHS. The workshop marked a significant step forward in the ongoing efforts to save India's vulture populations, highlighting the need for continued vigilance, cooperation, and innovation in conservation strategies.

Participants of the Vulture Conservation and Reintroduction Programme Workshop

International Vulture Awareness Day 2024 Program

To celebrate International Vulture Awareness Day 2024, a series of competitions and awareness programs were organized at four government senior secondary schools in the villages of Bhorian, Mallah, Thapli, and Chikan, located around the Jatayu Conservation Breeding Centre. The event aimed to raise awareness about the importance of vultures in the ecosystem and engage the younger generation in conservation efforts. A drawing and essay writing competition was held. A total of **160 students** from grades 6 to 12 participated in both categories, with **20 students from each school** competing. The competitions were designed to encourage creativity while raising awareness about vulture

conservation.

A guided tour of the Jatayu Conservation Breeding Centre was organized for the students and teachers. This visit allowed the participants to gain hands-on knowledge about the vulture conservation efforts being carried out at the centre, further solidifying their understanding of the importance of protecting these critically endangered species. The International Vulture Awareness Day 2024 events were a resounding success, with active participation from students and support from conservation experts. The competitions and presentations not only raised awareness about the critical role vultures play in maintaining the balance of the ecosystem but also inspired young minds to contribute to conservation efforts in their communities.

The involvement of BNHS and the Haryana Forest and Wildlife Department ensured the smooth execution of the event, highlighting the collaborative effort needed to save vultures from extinction. The event reflects the commitment of all stakeholders toward creating a sustainable future for these vital scavengers.

Participants of the International Vulture Awareness Day 2024

Forest Department is the custodian of wildlife and is responsible for the implementation of Wildlife Protection Act, 1972. A visit to the centre is part of the curriculum of Forest Academies of the country. As a result, the centre gave extensive information on vulture conservation to various Forest Academies of the country.

The awareness programmes conducted during 2024-25 are summarized below:

Sr. No.	Date	Name of the Educational Institute	Type of The Institute	State	No. of Participants
1	24-06-2024	Wildlife Institute of India, Dehradun	PG College	Uttarakhand	21
2	26-06-2024	Forest Training Academy, Chandrapur,	FTI	Maharashtra	41
3	03-07-2024	Forest Training Academy, Haldwani	FTI	Uttarakhand	34
4	04-07-2024	Forest Training Academy, Sunder Nagar	FTI	Himachal Pradesh	36
5	04-07-2024	Forest Training Academy, Chandrapur,	FTI	Maharashtra	32
6	02-08-2024	Forest Research Institute, Dehradun	PG College	Uttarakhand	43
7	07-09-2024	GSSS-Chikan	Sr. Sec. School	Haryana	83
8	07-09-2024	GSSS-Thapli	Sr. Sec. School	Haryana	68
9	06-09-2024	GSSS-Bhorian	Sr. Sec. School	Haryana	122
10	06-09-2024	GSSS-Mallah	Sr. Sec. School	Haryana	186
11	13-09-2024	Govt. PG College for Women, Panchkula	PG College	Haryana	27
12	18-09-2024	Govt. Senior Sec. School, Pinjore	Sr. Sec. School	Haryana	103
13	18-09-2024	Forest Training Institute, Haldwani	FTI	Uttarakhand	39
14	21-09-2024	Forest Training Institute, Haldwani	FTI	Uttarakhand	41
15	24-09-2024	Forest Training Institute, Haldwani	FTI	Uttarakhand	41
16	01-10-2024	Bramhrishi College for Education, Viratnagar	College	Haryana	122
17	03-10-2024	Government Degree College, Barotiwala	College	Himachal Pradesh	108
18	04-10-2024	Government Senior Secondary School, Parwanoo	Sr. Sec. School	Himachal Pradesh	102
19	05-10-2024	Government Middle School, Kambli-Parwanoo	Middle School	Himachal Pradesh	78
20	08-1-2024	CENTRAL ACADEMY FOR STATE FOREST SERVICE, COIMBTORE	FTI	Tamil Nadu	54
21	14-10-2024	GOVT. MODEL SANSKRITI SENIOR SEONDRY SCHOOL-BILASPUR	Sr. Sec. School	Haryana	244
22	18-10-2024	ARUNA ASAF ALI GOVT. P.G. COLLEGE KALKA	PG College	Haryana	108
23	19-10-2024	SEPIENT SENIOR SECONDARY SCHOOL-PINJORE	Sr. Sec. School	Haryana	124
24	29-11-2024	P.C. Senior Secondary School, Pinjore	Sr. Sec. School	Haryana	137
25	29-11-2024	Government Middle School, Firozpur, Pinjore	Middle School	Haryana	47
26	30-11-2024	Government Senior Secondary School, Bitna, Haryana	Sr. Sec. School	Haryana	68
27	28-12-2024	College of Forestry, Navsari Agriculture University, Navsari	College	Gujarat	42
28	22-01-2025	GSSS-Pratha, Block: Dharampur	Sr. Sec. School	Himachal Pradesh	122
29	23-01-2025	Govt. Politechnic college-Morni	College	Haryana	122
30	23-01-2025	GSSS-Morni	Sr. Sec. School	Haryana	102
31	28-01-2025	Vishvaniketan Sr. Sec. School-Viratnagar	Sr. Sec. School	Haryana	62
32	29-01-2025	Govt. Highschool-Nayagaon, Block:Pachhad, Dist.: Sirmaur	Sr. Sec. School	Himachal Pradesh	64
33	30-01-2025	GSSS-Kaloh, Block: Pachhad, Dist.:	Sr. Sec. School	Himachal Pradesh	107

		Sirmaur			
34	02-01-2025	GSSS-Mandhana-Haryana	Sr. Sec. School	Haryana	134
35	17-02-2025	Central Academy for State Forest Service, Coimbatore	FTI	Tamil Nadu	44
36	15-02-2025	Govt. PG College, Sec-1, Panchkula	PG College	Haryana	44
37	27-02-2025	Govt. Middle School-Manakiya	Middle School	Haryana	44
38	03-04-2025	LBS Ayurvedic medical College, Bilaspur	College	Haryana	250
Total					**3246**

26. 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**

27. Annual Inventory of animals

Form–II

[See Rule 11(1)] Part – A

Inventory Report for the Year: 1st April 2024-31st March 2025

Endangered Species*

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
Long-billed vultures Gyps indicus	31	31	162	224	0	0	21	0	0	0	0	0	0	3	6	0	104	100	32	236
White-rumped vultures Gyps bengalensis	19	19	61	99	0	0	9	0	0	0	13	12	0	1	2	0	39	30	11	80
Slender-billed vultures Gyps tenuirostris	8	8	50	66	0	0	2	0	0	0	0	0	0	1	3	1	32	29	2	63
Total	58	58	273	389	0	0	32	0	0	0	13	12	0	5	11	1	175	159	45	379

***Animals under Schedule I and Schedule II of the Wildlife (Protection) Act, 1972**

28. 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.	White-rumped vulture, Nest 28	Gyps bengalensis	Unknown	21-05-2024	Not to be ascertained
2	Slender-billed Vulture, A58	Gyps tenuirostris	Male	22-05-2024	Visceral gout
3	Long-billed vulture, Nest 12CA4	Gyps indicus	Female	20-06-2024	Hypovolemic shock
4	Long-billed vulture, X18	Gyps indicus	Female	25-06-2024	Visceral gout
5	Long-billed vulture, X10	Gyps indicus	Female	25-06-2024	Visceral gout
6	Long-billed vulture, X15	Gyps indicus	Male	25-06-2024	Visceral gout
7	Slender-billed vulture, A57	Gyps tenuirostris	Male	24-07-2024	Visceral gout
8	Slender-billed vulture, XX85	Gyps tenuirostris	Female	25-07-2024	Visceral gout
9	Slender-billed vulture, L91	Gyps tenuirostris	Female	28-07-2024	Visceral gout
10	White-rumped vulture, N51	Gyps bengalensis	Female	05-08-2024	Visceral gout
11	Long-billed vulture, H81	Gyps indicus	Male	03-11-2024	Multiple organ failure
12	Long-billed vulture, X76	Gyps indicus	Female	11-11-2024	Visceral gout
13	Long-billed vulture, H85	Gyps indicus	Female	03-12-2024	cardiac arrest
14	Slender-billed vulture, G07	Gyps tenuirostris	Female	15-01-2025	Traumatic shock
15	White-rumped vulture, Z39	Gyps bengalensis	Female	03-03-2025	Multiple organ failure
16	Long-billed vulture, B32	Gyps indicus	Female	05-03-2025	liver failure
17	Long-billed vulture, XX92	Gyps indicus	Male	31-03-2025	Visceral gout

29. Compliance with condition 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
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 during the year

Released captive-bred vultures feeding with their wild counterparts.