

5 water bodies in urgent need of plan for revival: Forest dept

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NEW DELHI: Delhi's forest and wildlife department has told the National Green Tribunal (NGT) that five of the 19 water bodies under its jurisdiction have either completely dried up, are being dumped with sewage, or are encroached upon, and need interventions and an action plan for revival. The remaining 14 water bodies are full of water and will be preserved in their natural form, the department has said.

Three of the five water bodies are in Garhi Mandu, northeast Delhi, Rajokri, south Delhi, Sikarpur, southwest Delhi, and two are in Mukhmelpur, northwest Delhi.

The department made the submission to NGT after it sought details and present status of all water bodies from Delhi's landowning agencies, including the forest department, after taking suo motu cognizance of a news report in April last year on disappearing water bodies in the Capital.

5 water bodies in danger

In its response dated February 13, the report shared on Sunday said that the forest department analysed data from all four of its forest divisions in Delhi, finding a total of 19 water bodies. Of these, 14 had substantial water and were being maintained adequately.

The remaining five have been identified as requiring action, stating a specific timeline for revival will depend on the budget's availability.

In its report, NGT said the water body in Garhi Mandu had water left only in a small patch in a corner. "An action plan for the revival of the water body is being prepared. The plan will be ready in three months," said the report.

Both the water bodies in Rajokri and Sikarpur were found to be completely dry, with the department saying it will take adequate steps to replenish the water bodies with water again.



Revival plans

Of the 19 water bodies under forest & wildlife dept, five will be taken up for revival in coming months

Garhi Mandu: Only a little water left in small patch. Revival plan in 3 months

Rajokri: Fully dry. Revival plan in coming months

Shikarpur: Fully dry. Revival plan in coming months

Mukhmelpur water body No. 1: Encroachments found. Letters sent to DM (north) and DDA to remove them

Mukhmelpur water body No. 2: Full of sewage. Letter to irrigation & flood control dept to begin bio-remediation

1,367
Water bodies
in Delhi (on paper)

674
Water bodies
in Delhi (in reality)

At Mukhmelpur, two water bodies were discovered, with one found to be significantly encroached upon and the other receiving large quantities of sewage. To act on the encroachment, the department said letters were issued to the district magistrate (north) and the Delhi Development Authority (DDA).

"Once the exercise of demarcation is carried out, the process for removal of encroachment and restoration of the water body will be initiated," said the report, adding that for fixing the problem of sewage in the second water body, a letter has been written to the Irrigation and Flood Control Department (I&FC), which will then initiate bio-remediation.

10 created recently

Of the 19 water bodies, 10 were "created" between 2023 and 2024 by the forest department in Asola Bhatti Wildlife Sanctuary

in south Delhi.

This was done by first carrying out a contour study to identify locations where water would naturally accumulate.

"Work began in November 2023 to construct these 10 water bodies and by June 2024 was completed. These water bodies began to fill up as soon as the monsoon arrived. The elevation of the area, along with the contouring done, means any rainwater that would otherwise go to waste earlier, is now diverted to these water bodies," a senior forest department official had said last year.

The report said that the water bodies are being maintained regularly, with action plans for their maintenance already in place. All 10 presently have water.

The combined capacity of the 10, created in Sahoarpur, Satbari and Maidangarhi, is 80 million litres. The average depth is around three metres, with an

average size of around 1 acre.

"Four each were created at Satbari and Sahoarpur, while two were created at Maidangarhi," a forest official said.

Missing water bodies

Delhi's State Wetland Authority (SWA) had in December told NGT that of the 322 water bodies identified by Geospatial Delhi Limited (GSDL) using satellite imagery in the city, only 43 were found during ground truthing. Further, of the 1,045 water bodies identified through revenue records, only 631 were detected on the ground. So, only 674 of Delhi's 1,367 water bodies were found on the ground, with the remaining all encroached upon.

"A substantial number of water bodies are not identifiable through satellite imagery, which means that either they are illegally filled in or have been encroached upon, but no effective action has been taken by

concerned authorities for restoration thereof," SWA had said.

Delhi's water bodies come under multiple landowning agencies, including DDA, Municipal Corporation of Delhi (MCD), Delhi Jal Board (DJB), Public Works Department (PWD) and the Archaeological Survey of India (ASI), among others.

Of the 674 water bodies that exist on ground, SWA data showed that the most — 216 — are in southwest Delhi.

However, on paper, the district should have 330 water bodies. North Delhi has the second highest number of extant water bodies at 143 out of 275 on record, followed by northwest Delhi where 104 out of 167 water bodies were found.

The district with the least number of existent water bodies is east Delhi, where only six water bodies were found on ground as compared to the 50 mentioned in records.

Rhino census uncertain

Nepal's rhino census conducted in an interval of every five years now faces an uncertain future with the suspension of USAID, one of the major donors for the project, by the Donald Trump administration. The Department of National Parks and Wildlife Con-



servation, which has been carrying out the census in collaboration with various agencies, is now facing a financial crunch and is unable to continue the work. An agreement had been reached with USAID's 'Jal Jungle project' for the purchase of the necessary equipment for conducting the rhino census, but the census has become uncertain now that the project is suspended.

Elephant healthcare workshop held in Kaziranga

CORRESPONDENT

KAZIRANGA, March 2: To acquire an in-depth knowledge of various aspects of issues pertaining to elephant health including anatomy, physiology, behavioural aspects, and management of diseases, an international elephant healthcare workshop was held in Kaziranga. It was organized by the Wildlife SOS in collaboration with the State Forest Department and attended by 28 veterinarians from February 27 to 28.

According to the information received from the Kaziranga National Park authority, the health camp provided an in-

depth understanding of elephant physiology, anatomy, behaviour, disease management, and practical medical procedures. Distinguished experts such as Dr Susan K Mikota (director, Veterinary Programmes and Research, Elephant Care International), USA, Dr Willem Schaftenaar (research associate, Elephant Care International), Netherlands, Dr NS Manoharan, additional director, Veterinary Service (Retd), Tamil Nadu and Dr Bhaskar Choudhury, manager and head veterinarian, Wildlife Trust of India led the various treatment procedures on pain management, wound care, gastrointes-



tinal issues and foot care, to name a few. The initiative aimed to procure deep knowledge about practical applications in elephant conservation and

healthcare.

The practical training camp at Kaziranga served as an extension of the workshop, allowing participants to implement their

learnings while treating the elephants. Teams of veterinarians and experts examined both the departmental and private elephants at Kaziranga National Park to provide direct medical care, while demonstrating best practices in diagnosis and treatment. This hands-on approach ensured the application of advanced veterinary techniques in diverse environments, further strengthening conservation efforts.

The participants have moved to the Merapani reserve forest in the Golaghat forest division for further training and shall conclude their task in the Manas National Park on March 6.

Crackdown has helped curb illegal parrot trade in city

Illegal sale of Alexandrine and rose-ringed parakeets in Chennai has significantly reduced over the years. Over the past decade, the Forest Department has stepped up efforts to curb this trade

Geetha Srimathi

CHENNAI

Fridays in Chennai are known not only for movie releases, but also for the busy Pallavaram market where almost everything is sold – from household goods and clothing to antique trinkets, plants and pets, including exotic birds.

However, during a visit to the *sandhai* on Friday, this correspondent found no trace of one of the most commonly bought pet birds – the Alexandrine parakeet. For years, parrots were not even considered wildlife by many as they were commonly kept as pets. Their ability to mimic words made them household favourites. However, parakeets native to India are protected under Schedule I of the Wildlife Protection Act, 1972, which makes it illegal to keep them in cages.

The illegal sale of Alexandrine parakeets and rose-ringed parakeets in Chennai has significantly declined over the years. Sales typically peak between January and March, during the breeding season. According to sources,



Tight vigil: The launch of the Tamil Nadu Wildlife Crime Control Bureau in 2022 further strengthened surveillance and enforcement of rules. GETTY IMAGES/ISTOCKPHOTO

gypsies poached these birds from Andhra Pradesh, sometimes younglings directly from nests, and brought them to Chennai in trains and buses.

Over the past decade, the Forest Department has stepped up efforts to curb this trade. The launch of the Tamil Nadu Wildlife Crime Control Bureau (TNWCCB) in 2022 further strengthened surveillance and enforcement of rules.

An official from the TNWCCB said systematic efforts, including tracking networks, patrolling border areas and warning traders of strict legal consequences helped curb the illegal parrot trade in Chennai. Gypsies would

sell the birds to key traders, who then transferred them to middlemen. These middlemen sold the parrots to customers at markets such as Broadway and Pallavaram. Each bird used to be sold for ₹2,500. Earlier, sales happened openly.

Things have changed now. This year, officials of the TNWCCB directly warned traders against selling the birds. Compared to a few years ago, the transport and sale have vastly reduced, the TNWCCB official added.

A trader at the Pallavaram market told *The Hindu* that there was no longer any sale of parakeets as they were Indian birds,

and there could be legal trouble. However, another trader admitted to having a few Alexandrine parakeets with him, and that he was struggling to sell them.

Shravan Krishnan of the Besant Memorial Animal Dispensary, who has worked alongside the Forest Department, recalled how nearly 300 birds were often crammed into tiny cages, poorly fed or left without food.

Once rescued, they require weeks of care. Volunteers hand-feed and rehabilitate them before releasing them back into the wild.

Public awareness has also played a key role in reducing the demand. Supriya Sahu, Additional Chief Secretary to the Departments of Environment, Climate Change, and Forests, said that earlier, no specialised agency tracked this trade, making enforcement difficult. However, extensive awareness campaigns encouraged people to voluntarily surrender nearly 730 captive parrots.

Efforts are under way to eradicate the few remaining pockets of trade, a TNWCCB official said.

3 arrested for smuggling monitor lizards' genitals

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Pic for representational purposes



The monitor lizard is a Schedule 1 protected animal

Pune: The state forest department arrested three individuals for smuggling 151 genital parts of monitor lizards on Sunday morning at 10.30am. All three accused were nabbed in Solapur.

One of the three accused, a resident of Sarai, was caught by forest officials while he was going to the Solapur railway station in a car. He was transporting the smuggled genitals to the station to sell the parts. Upon further investigation, officials realised that this was not his first time selling these parts.

He gave information on the other two accused people, who were then nabbed from Solapur.

The monitor lizard is a Schedule 1 animal under the Wildlife Protection Act 1972. Hunting and selling a monitor lizard is a punishable offence with a fine of Rs10,000 and can lead up to seven years of imprisonment.

The three accused will be produced before court and kept in custody for further

her investigation.

The state forest department received an anonymous tip regarding the individuals transporting the genitals to sell at the railway station in Solapur. Accordingly, surveillance was increased at the station all morning.

When the man (arrested first) reached the station, the informant identified the accused who was present there with the goods. The department immediately arrested him and seized the material.

"These parts of the monitor lizard are generally

used for multiple purposes all over Maharashtra, including black magic. The lizard's skin is used to make an instrument at Saswad near Pune as well," said Rohan Bhate, honorary wildlife warden, Satara.

The department then identified the two others who aided him in securing and selling these objects, after which they were all arrested.

An offence was registered against the three under sections 2/2, 9, 39, 40, 48A, 49A and B, 50, 51, 57 of the Wildlife Protection Act, 1972.

Barda declared second lion habitat

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Ahmedabad: Under Project Lion, the state govt has officially announced that Barda Dungar Sanctuary is the second habitat of the Asiatic lion. The govt stated, "Barda has emerged as a second home for lions, and today 17 lions, including six adults and 11 cubs, inhabit the Barda area."

In 1993, during a workshop on the Population and Habitat Viability Assessment (PHVA) of the Asiatic lion, Barda had been included as one of the sites for reintroduction of lions. The Gujarat forest department said Barda Sanctuary has a settled population of eight lions and planned to develop it as a 'second home' for lions under this project. Recently, due to the natural spread and successful breeding of Asiatic lions, Barda Wildlife Sanctuary has emerged as a second habitat for the species.

March 3, World Wildlife Day 2025, is themed 'Wildlife Conservation Finance: Investing in People and Planet,' and underscores the role of sustainable funding in conservation

efforts. Project Lion is planned with the aim of the conservation and expansion of the Asiatic lion population, ensuring their long-term survival through strategic habitat management and community participation.

The project, along with Project Cheetah, Project Dolphin, Project Elephant and Project

Tiger, will be reviewed at the meeting of the National Board for Wildlife at Sasan on Monday. The foundation of Project Lion was laid on Independence Day on August 15, 2020, by Prime Minister Narendra Modi in his address from the Red Fort. Project Lion, according

to the Union forest ministry, is a 10-year project with a total budget of Rs 2,927.71 crore.

It aims to ensure the well-being of Asiatic lions, whose population, according to a 2020 estimation, is 674 animals spread across 53 talukas in nine districts, covering nearly 30,000 sq km in Gujarat. Under this project, for the monitoring of wildlife health, the govt has allocated 20.24 hectares of land in New Pipaliya, Junagadh. The govt has begun work on the National Referral Centre for Wildlife Health.

A high-tech monitoring centre and a state-of-the-art veterinary hospital have been established in Sasan to monitor wildlife in the Gir region.

To prevent lion accidents on railway tracks in the Greater Gir region, a standard operating procedure (SOP) has been developed in collaboration with the railway, significantly reducing such incidents.

A total of 237 beat guards, including 75 women, were appointed in 2024 under the project to strengthen conservation efforts. Also, 92 rescue vehicles have been deployed for wildlife emergency response, rescue of wild animals and ensuring timely medical care.

The govt outlined work carried out under the project and stated that machans (raised platforms) have been given to farmers to reduce human-wildlife conflict. Some 11,000 machans have been built, helping farmers protect their crops while ensuring their safety and coexistence with lions. The construction of parapet walls around 55,108 open wells to prevent wildlife from accidentally falling in has reduced wildlife fatalities.

Project Lion include habitat and population management, wildlife health, human-wildlife conflict mitigation, local community participation, tourism development, scientific research, etc.

WORLD WILDLIFE DAY

Conservation delivers: Emus to gaurs, Bondla zoo preps for scores of newborns

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Panaji: As people around the globe celebrate the planet's biodiversity with World Wildlife Day on March 3, the Bondla Wildlife Sanctuary in Goa — the state's sole zoo — is gearing up for an exciting new chapter in its conservation efforts amid the wildlife breeding season.

The arrival of new life is expected in the coming weeks.

The zoo currently has one pair of wild dogs, with pups expected in April; besides three male and four female jungle cats; four male and five female jackals; and two male



WORLD WILDLIFE DAY: Bondla zoo is part of an ex situ conservation effort for gaur

and two female emus.

Visitors can also look forward to welcoming jackal pups, jungle cat kittens, wild

dog pups, and emu chicks. The zoo plays a crucial role in protecting and nurturing the future of these species through its

captive breeding programme.

Under the Central Zoo Authority (CZA), the zoo at Bondla currently participates in ex situ (outside a natural location) conservation of the state animal, gaur (Indian bison).

This is in cooperation with the notified conservation centre, Sri Chamara-jendra Zoological Gardens, Mysuru Zoo. The Bondla Wildlife Sanctuary is a participating zoo in the initiative. As a result, the gaurs bred in Goa can be channelised through the Mysuru zoo for international animal exchange.

► **'Lot of stimuli', P 2**

► **From P 1**

In 2019, we exchanged a sloth bear with the Mysuru zoo and they exchanged it with the Leipzig Zoological Garden, Germany, for an African cheetah," a zoo official said. "As a result, the sloth bear born at the Bondla Wildlife Sanctuary is now in Germany." The Bondla Wildlife Sanctuary currently houses 12 gaurs — eight females and four males — and is expected to have a new birth this month.

The ex situ conservation method involves conserving wildlife species in a habitat that mimics their natural living conditions. The CZA's aim is to "conserve the genetic diversity of the species and restock or reintroduce the species to re-establish self-

sustaining population in its natural wild habitat."

"There is a lot of stimuli given in the form of enrichment, space, diet, and veterinary care to the animals to create a suitable atmosphere for breeding," the zoo official said. "There are a range of activities to keep the animals engaged, such as scattering insects or rodents to simulate their habitat and stimulate hunting. In the case of birds, we have also provided vegetation cover and nesting material to them so that the females can build their own nests to lay eggs."

March 3 was declared United Nations World Wildlife Day. On this day, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was signed in 1973.

'Lot of stimuli given to facilitate breeding'

Elderly man killed in wild boar attack in Kannur

TIMES NEWS NETWORK

Kozhikode: An elderly man died reportedly after being attacked by a wild boar in Kannur on Sunday morning.

AK Sreedharan (70), of Mokeri, had reportedly gone to his farm when he was attacked by a wild boar at Muthiyangavayal in Pattiam panchayat around 8.30am. Although he was rushed to a hospital, his life couldn't be saved.

Locals found Sreedharan severely injured, reportedly with wounds all over his body and deep injuries to his chest and legs, sources said. He had gone to water the plantains in his farm.

Two other people sustained injuries while trying to escape after seeing boars in a nearby location too. Although the area has been facing a wild boar menace, the animals rarely attacked humans he-

A report on the matter has been sought from the collector and the forest department, said forest minister AK Saseendran

re, sources said.

Later, a boar was found dead in the area. It is suspected that agitated residents had beaten it to death.

Meanwhile, forest minister AK Saseendran said that he received information about the elderly man's death. He expressed condolences and assured all assistance to the family. The attack occurred in an area where such wild animal attacks usually don't occur and so there wouldn't have been precautions, he said.

The exact details of how it hap-

pened are being verified and action will be initiated accordingly, he added.

Saseendran said that panchayats were given the power to shoot and kill wild boars, and if there was such an issue, they could have done it. A report on the matter has been sought from the collector and the forest department, he said.

Church slams govt for rise in human-wildlife conflicts

Meanwhile, Pathanamthitta diocese of Syro-Malankara Church on Sunday read pastoral letters condemning the rise in the instances of human-animal conflicts.

The letter reportedly criticized govt for lack of proactive measures to control wildlife attacks. The letter also reportedly said that the govt's carelessness on the subject was painful.

Expired injection kills bison during translocation in Ch'garh

Raipur: The death of a female bison in Jan 2025 while being translocated from Barnawapara Wildlife Sanctuary to Guru Ghasidas-Tamor Pingla Tiger Reserve in Chhattisgarh has taken a dramatic turn with evidence suggesting the animal may have been a victim of negligence, reports **Partha Behera**.

Documents obtained by **TOI** reveal the bison was administered an expired antidote, leading to its death. Chief conservator of forests (wildlife) Satovisha Samajdar confirmed that veterinary expert Dr Rakesh Verma, who administered the Activon injection post-translocation, did not check its expiry date.

Forest dept seizes 151 monitor lizard parts



Monitor lizards penises are sold by illegal traders as aphrodisiac or as the root of a rare plant which has magical properties.

HT Correspondent

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SOLAPUR: The Solapur unit of the state forest department on Sunday arrested three members of a gang with hemipenes of 151 monitor lizards.

Additional principal chief conservator of forest (West), Clement Ben, said the forest team had received an intelligence tip-off, based on which their team maintained vigilance. The wildlife team spotted the gang in a car when they were going to sell and stopped them to search. The team found

151 hemipenes of monitor lizards with accused. Investigations have found that his gang had done such crimes earlier. Ben said this part of the monitor lizard is sold as an aphrodisiac.

The monitor lizard is a protected species under Schedule I of the Wildlife Protection Act, 1972, the highest level of legal protection in India. Killing, poaching, and smuggling of monitor lizards can attract a penalty of ₹10,000 and imprisonment of up to seven years. An official said this case implies that the gang killed 151 monitor lizards.

PM Modi to tour Gir today, will chair NBWL meeting

Will Also Meet Women Workers Of Forest Dept

TIMES NEWS NETWORK

Gandhinagar: Prime Minister Narendra Modi will chair a meeting of the National Board of Wildlife (NBWL) at Sasan in Junagadh on Monday after taking a tour of the Gir sanctuary. March 3 is observed as World Wildlife Day.

The NBWL has 47 members, including the Chief of Army Staff, members from different states, representatives from NGOs working in this field, chief wildlife wardens and secretaries from various states. Sources in the govt said that after the meeting, the PM is scheduled to interact with women forest staffers at Sasan.



PM Narendra Modi at the Sasan helipad on Sunday

An official statement said that the 2025 theme of World Wildlife Day is 'Wildlife Conservation Finance: Investing in People and Planet.' Currently, there are approximately 30,000 square kilometres of lion habitat across 53 talukas in nine districts of Gujarat. The statement added that as part of a central govt project, a National Referral Centre for Wildlife Health is being established on over 20.24 hectares of land at New Pipaliya in Junagadh district. In addition, a

high-tech monitoring centre and a state-of-the-art hospital for wildlife tracking have been constructed in Sasan.

Welcoming the PM to Gir sanctuary, Rajya Sabha MP Parimal Nathwani posted on X, "The lion of the nation, and proud son of Gujarat, PM Modi, is visiting the land of the Asiatic lions. His visit to Sasan Gir will strengthen wildlife conservation efforts on #WorldWildlifeDay. His vision continues to shape a sustainable future for India's

wildlife." He added, "PM Modi had previously made key announcements on World Lion Day and his visit is expected to bring further initiatives and new developments."

The govt said that in 2024, 237 beat guards (162 men and 75 women) were recruited in Gir to patrol protected areas and safeguard lion habitats. The 'Gir Samvad Setu' programme is conducted to address minor issues of local people in Gir, with 300 such programmes organised so far. An SOP with the railways has been formed to prevent accidents due to lion crossings on railway lines in the Greater Gir area, the statement added.

The govt statement said that after the lion poaching incident in 2007, Gujarat govt established the Greater Gir Wildlife Protection Task Force Division in Junagadh to monitor wildlife crimes, gather intelligence and strengthen the protection of Asiatic lions and other wildlife in the lion habitat.

Veterinarian, RRT rescue leopard caught in snare

TIMES NEWS NETWORK

TOI



The male leopard, around 2 years old, has been released deep inside Wayanad Wildlife Sanctuary

fully sedated and then shifted into the cage, which was brought to the site beforehand, said forest officers.

Mohandas then examined the animal carefully and it was given supportive fluids. After its condition stabilized, the co-

untry-made snare that was entwined around the animal's stomach was cut and removed. Later on, the animal was revived by giving an antidote. Further, it was taken to Vythiri Forest Station and kept under observation. Forest officers said that, for the time being, the animal was externally stable and active and further details can be known only after the observation time ends.

Plantation labourers spotted the leopard while it was struggling to break free from the snare on Sunday morning. The snare could have been set up by some residents to catch smaller animals like wild boars, sources said. Forest department launched a probe into the incident. The animal was later released deep inside Wayanad Wildlife Sanctuary.

Kozhikode: Forest officials found a leopard ensnared in a country-made trap at Nedumbala Estate in Meppadi, Wayanad, on Sunday morning. The male leopard, around 2 years old, was darted and rescued by the officials by afternoon.

Department sources said the operation to rescue the wild animal began around 1pm after Dr Ajesh Mohandas, AFVO (assistant forest veterinary officer), Wayanad Wildlife Sanctuary and a rapid response team from WWS arrived at the spot. The whole area was cordoned off to avoid any public intrusion.

The first tranquilizer dart was shot at 1.42pm, followed by a manual top-up after 20 minutes. The animal was success-

AVIAN PARADISE

PTI



Painted storks at Keoladeo National Park, in Bharatpur district of Rajasthan

SHIELD AGAINST BIGGEST THREAT TO CULTIVATION GLOBALLY

'Breakthrough' in fight against fruit flies

DEBRAJ MITRA

Calcutta: A recent study has offered a "breakthrough" in the fight against fruit flies, formidable pests considered among the biggest threats to fruits and vegetables.

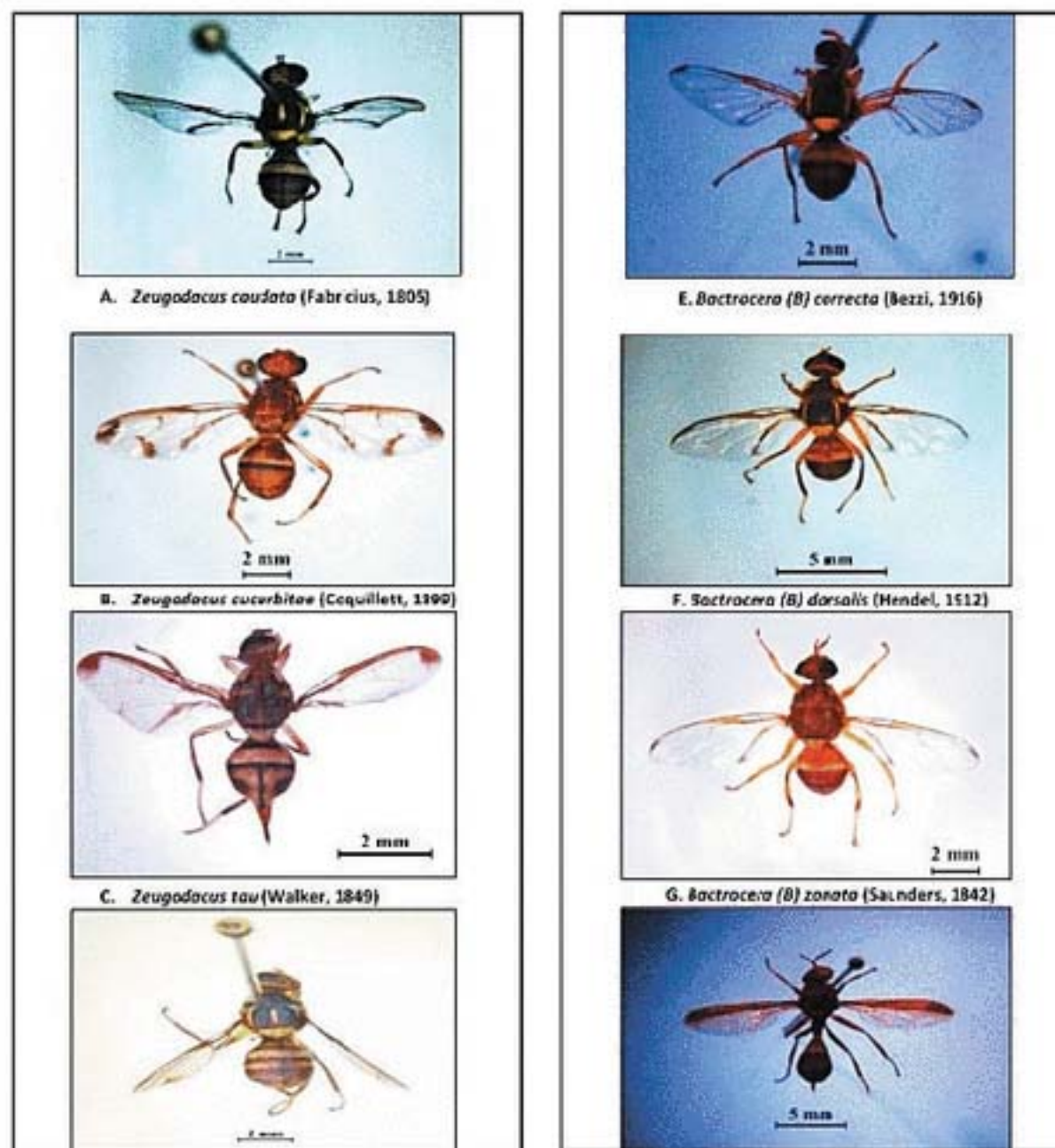
Researchers have, for the first time, sequenced specific gene regions from a set of fruit fly species found on cucurbitaceous crops like pumpkins, cucumbers and gourds. The discovery offers hope for targeted pest-control using genetics instead of the large-scale use of chemical pesticides.

Fruit flies (Tephritidae) pose a significant threat to global agriculture, impacting crop yields, food security and international trade. A collaborative study led by researchers from the Calcutta-headquartered Zoological Survey of India (ZSI), University of Calcutta and other institutions focused on eight species of fruit flies collected from various districts in Bengal where agriculture is a vital livelihood source.

"The team sequenced mitochondrial COI gene regions from the fruit fly species.... Analysis revealed 30 uniquely variable sites at nucleotide positions thereby offering a crucial target for species-specific interventions," said a spokesperson for the ZSI.

The "mitochondrial COI gene region" refers to a specific segment of DNA located within the mitochondria of an organism. Mitochondria are membrane-bound cell organelles. Much like organs in the human body, an organelle is a subcellular structure that has one or more specific jobs to perform in the cell.

The study has recently been pub-



The eight species of fruit flies collected from various districts in Bengal that were studied

lished in *BMC Genomics*.

Dhriti Banerjee, director of ZSI, highlighted the importance of this research. "Fruit flies are devastating pests. In Bengal, where over 70 per cent of rural households depend on agriculture, our work is critical. This new method will protect crops and reduce our dependence on

chemical pesticides," she said.

"By enabling targeted pest-control measures, we can minimise environmental damage and empower agricultural professionals with precision tools, moving away from broad-spectrum approaches that can harm non-target species. The research offers a promising

path towards sustainable and effective fruit fly management," she said.

Fruit fly infestations pose a significant threat to global agriculture and food security. The damage is caused either directly by the larvae of the fruit flies or indirectly from harmful micro-organisms or decomposers that enter the fruits and vegetables through the egg-laying holes made by the female fruit flies. They cause economic losses amounting to billions of dollars annually. Many countries face trade restrictions because of these pervasive pests.

"The new research offers a breakthrough tool in the fight against fruit flies. This novel method enables rapid, accurate, and reliable species identification, facilitating earlier interventions and mitigating crop damage during outbreaks. This is particularly vital in the context of growing concerns about global food security," said the ZSI spokesperson.

The researchers — Ankush Mitra, Pubali Mitra, Pradosh Mahadani, and Subrata Trivedi — believe their findings will be instrumental in safeguarding agricultural productivity.

Calcutta University professor Madhusudan Das, who was part of the study, said: "With increasing population, the demand for healthy food continues to grow. So, ensuring sustainable agricultural practice is more important than ever. By identifying specific fruit fly species with precision, more sustainable pest control strategies can be implemented. This would also align with the global push towards reducing chemical pesticides, promoting healthier ecosystems and preserving biodiversity."

Climate change: Punjab sees decline in migratory birds for past six years

HARPREET BAJWA @ New Delhi

THE number of migratory birds that fly in from Siberia, Russia, Kazakhstan and Northern Europe to escape the cold winters and reach six protected wetlands in Punjab, including Harike Wildlife Sanctuary north India's largest wetland, is almost the same as last year. However, their numbers have constantly been decreasing for the past six years.

Earlier, the winter season lasted longer, and the birds from these countries stayed here for five to six months, now they hardly stay for about two months. As per the census carried out this year by the Punjab Forest and Wild Life department at Harike north India's largest wetland, this year 55,059 birds of 89 species were spotted against last year's 50,529 of 81 species. But in 2023, their number stood at 65,624 and they belonged to 84 species. In 2018 and 2019, as many as 94,771 birds of 94 species and 1,23,128 birds of 83 species arrived at



the wetland site, respectively.

In Kanjli Wetland Conservation Reserve, 20 species and 443 birds were recorded this year as compared to 23 species and 669 birds last year.

In Keshopur-Miani Community Reserve, 78 species with 13,676 birds have been recorded this year as compared to 10,857 birds of 66 species last year. While at Ropar Conservation Reserve the bird count was 1,486 of 44 species this year and last year 1,755 birds and 20 species spotted, and at Nangal Wildlife Sanctuary this year the bird count was 2,411 and 36 species and last year it was

2,400 and 32 species.

Principal Chief Conservator of Forests and Chief Wildlife Warden, Punjab, Dharminder Sharma said, "The change in climatic conditions across the globe might be the reason for migratory birds from those parts of the world choosing other destinations besides reshuffling of species."

Gitanjali Kanwar, Senior Coordinator, Aquatic Biodiversity, World Wildlife Fund-India, said, "The winter season has been very brief as compared to previous years. Earlier, the winters would start around October and continued till March."

Farmer dies in wild boar attack in Kerala

KANNUR: A 75-year-old farmer was killed in a wild boar attack in Panoor, near Kannur, on Sunday morning, police said.

The victim, Sreedharan, was attacked at around 9 am while visiting his farm. Hearing his screams, locals rushed to the spot and found the wild boar still attacking him. Though he was rushed to a hospital in Thalassery, he reportedly succumbed to his injuries. After the inquest proceedings were completed by the Kathirur police, a post-mortem was conducted at the Pariyaram Government Medical College Hospital, according to an official release.

AGENCIES

| missing birds |

Flamingos leave early, upsetting enthusiasts

Rambhau Jagtap

SATARA

Mayni Lake in Satara district is known as a major bird-watching spot. Flamingos travel thousands of miles every year to reach this lake. However, this year, with the arrival of early summer, the flamingos have turned away, which has disappointed bird lovers. These birds used to arrive at the Mayni Lake around Diwali and used to stay for about

three to four months. This period used to be a treat for bird watchers due to the rare sightings of flamingos. But this year, everyone missed this rare sighting of flamingos at Mayni Lake.

Flamingos, foreign guest birds, used to migrate to the lake areas of Mayni, Yeralwadi, and Khatav. This tradition had been going on for many years. Bird lovers from Sangli, Kolhapur, Karad, and Satara used to come here to see the fla-

mingos. After staying overnight, they would appear in the lake area as soon as dawn broke in the morning. They would sneak along the banks of the lake to see the flamingos. Suddenly, a flock of flamingos would appear in the lake, and the bitter cold would disappear somewhere. They would happily observe the birds for hours and capture their images on their cameras.

Meanwhile, it is being observed that the flamingos

that had entered other water bodies in the state have now started their return journey. Therefore, bird lovers are upset that flamingos will no longer be coming to Mayni Lake. However, there is a demand from bird lovers and observers to study why these birds have turned their backs on this location this year and they want relevant authorities to take concrete measures in this regard.



Gudalur foresters arrest two poachers

**B. RAVICHANDRAN | DC
OOTY, MARCH .2**

The vigilant foresters have averted a major poaching bid by arresting two persons from Kerala who were planning to hunt gaur and sambar deer in Pandalur limits in the western Nilgiris.

According to the district forest division at Gudalur, after they received a tip-off, forest officials increased

patrolling and alerted local forest check posts on Thursday night. During search operations, they intercepted a vehicle and seized sharp weapons and ammunition. Further questioning revealed that the duo, identified as C. Reji (46) and M. Rahmath Ali (37, hailing from Vazhikadavu in Kerala, were planning to hunt wild animals, specifically Sambar deer and Indian Gaur in the western

Nilgiris.

The officials seized their mobile phones, recovering vital evidence linking the suspects to a larger network involved in hunting of wild mammals for meat. The investigation led to the identification of more individuals connected to the crime.

Authorities shared the details of suspects with the Nilambur (Kerala) and other forest division officials in the Nilgiris to

extend the investigation. The two accused were remanded in judicial custody in Pandalur. The case is under further investigation and the forest department is continuing its efforts to combat wildlife poaching in the region.

Local forest authorities have urged the public to report any suspicious activities related to poaching and wildlife crimes.

Hisar gets first Community Reserve for protection of wildlife, ecology

DEEPENDER DESWAL
TRIBUNE NEWS SERVICE

Spread on 150 acres on panchayat land at Chaudhariwali village in Adampur

HISAR, MARCH 2

The government has set up a Community Reserve to protect the rich biodiversity of the region, including traditional conservation practices, at Chaudhariwali village of the district. A notification was issued under the Wildlife (Protection) Act, 1972, on February 21.

The reserve is spread on about 150 acres on panchayat land in Chaudhariwali village located in the Adampur block.

This is the first wildlife community reserve in the district. Environmentalists and the local Bishnoi community people have welcomed the decision. The reserve will provide protection to various wildlife species, including deer, peacocks, spiny-tailed lizards, desert foxes, wild cats, jackals, bird species, and turtles.

The gram panchayat, led by sarpanch Kuldeep Delhi, had submitted the proposal to the government. The proposal was backed by digital mapping, a detailed project report, and recommenda-



The reserve will provide protection to various wildlife species, including deer, peacocks, spiny-tailed lizards, desert foxes, wild cats, jackals, bird species, and turtles. COURTESY: VINOD KADWASRA

tions from the Deputy Commissioner and the former Adampur MLA, Bhavya Bishnoi. The report, prepared by wildlife conservationist Vinod Kadwasra, spans over 100 pages and documents the region's flora and fauna.

Kadwasra said he and the then Hisar IGP, Amitabh Singh Dhillon, had initiated discussions with villagers in 2020 regarding the establishment of a community

reserve. However, the proposal did not materialise due to administrative delays. The region was home to indigenous plant species, such as desi kikar, khejri, ker, and wild ber, which supported the local ecosystem, he said.

The reserve will remain under the ownership of the panchayat, but land-use changes will no longer be permitted. Under the Act, a management committee

will be formed, comprising at least five village representatives, along with a District Wildlife Officer as secretary. The committee will oversee conservation efforts and submit preservation plans to the government.

Future initiatives include the construction of water reservoirs, measures to control stray dogs that threaten deer population, grassland development for herbi-

vores, and reforestation projects to revive native plant species, he said.

Sarpanch Kuldeep Delu said a village meeting would be held to form the management committee for the reserve.

Principal Chief Conservator of Forests Vineet Garg said the initiative served as a model for other districts and states, highlighting the crucial role of community-driven conservation efforts.

Modi visits Vantara animal rescue zone

Jamnagar, March 2: Prime Minister Narendra Modi on Sunday morning visited Vantara, an animal rescue, conservation and rehabilitation centre in Gujarat's Jamnagar district.

Vantara, spread over 3,000 acres, is located at the Reliance Jamnagar refinery complex.

It is a rescue centre dedicated to the welfare of captive elephants and wildlife, providing sanctuary, rehabilitation and medical care to animals rescued from abuse and exploitation. The centre also works towards empowering local communities by providing sustainable livelihoods and training in humane animal care practices.

It is home to more than 2,000 animals across 43 species, supported by advanced veterinary equipment, enclosures

PM GREETES PEOPLE AS RAMZAN STARTS

New Delhi, March 2: Prime Minister Narendra Modi greeted people on the start of the holy Islamic month of Ramzan on Sunday.

He said on X, "As the blessed month of Ramzan begins, may it bring peace and harmony in our society."

mimicking natural habitats, and a team of over 2,100 staff, as per the facility's website.

The PM will later offer prayers at Somnath temple in Gir Somnath district. He will then chair a meeting of the Shree Somnath Trust that manages the renowned place of worship. The PM is the chairperson of the Trust.

— PTI

More youths turn up at wings bird race

SAALINI LOKESH | DC
HYDERABAD, MARCH 2

The 17th Wings Bird Race attracted 40 persons, including nine young birders, reflecting the growing interest in birdwatching. A rare sighting of the Malabar whistling thrush added excitement to the event.

Organised by Deccan Birders, The Yuhina Canopy, and Birds of India, the race began around 6 am at Begumpet. Incidentally, the event was held on the eve of Monday's World Wildlife Day celebrations.

The teams went to different birding spots in and around the city with binoculars and field guides to spot and record

the maximum birds that they could before returning in the evening.

This year's winners were the youngest participants, Team Hawks, a group of kids including Rishi Reddy Kalliath, Sejal, Samyutha Kalidindi, Adya Chandrashekar, and Akash Nagururu.

Dr Karthikeyan Vasudevan, chief scientist at CCMB, has been attending these events for several years as a life member of Deccan Birders. "It's great to see people of all ages, kids, school teams, and senior citizens participating with equal enthusiasm," Dr Vasudevan told *Deccan Chronicle*.

"Children spotted over 100 birds today, which



Over 40 bird watchers join the spotting of birds with binoculars during 17th Wings Bird Race.

shows that Hyderabad has both a rich bird population and young nature enthusiasts," he said.

The Hyderabad Bird Race is part of a nationwide initiative started by Sunjoy Monga in Mumbai

that has expanded into several cities.

"This is my second time at the bird race, although I have been birdwatching for around six years now. I hoped to see more birds, but we couldn't cover too many places. Still, it felt wonderful to spot around 93 species," said a fully ecstatic 12-year-old Rishi Reddy.

Akash N., 11, was thrilled after his first birdwatching experience.

"It was real fun! My favourite bird is the Malabar whistling thrush. It has blue wings, a black body, and a bright blue forehead," he shared excitedly. Geetanjali Ramachandra, a participant, spoke about the challenges faced during the event.

INDUS-ERA FARMERS DOMESTICATED WILD BOARS

Pig ancestors, 5,000 years ago

G.S. MUDUR

New Delhi: A genetic study has revealed that farmers in India's Gangetic plains who lived during the same period as the Indus Valley Civilisation domesticated wild boars — giving rise to one of the three distinct pig lineages found in the country today.

Scientists have found evidence of independent pig domestication in the Gangetic plains from around 5,000 years ago, possibly by the same farmers who began rice cultivation, challenging earlier proposals that pigs arrived in the subcontinent from elsewhere in Asia.

Their research suggests that pigs across central and northern India belong to a lineage that emerged from the domestication event in the Gangetic plains, while pigs in northeastern India form a second lineage that originated in China. Pigs on the Nicobar Islands make up the third lineage.

"Our study of the ancestry of pigs in India is an offshoot of our earlier research on the Nicobarese island-



A wild boar in Bihar. File picture

ers," Gyaneshwar Chaubey, a population geneticist at the Banaras Hindu University (BHU) who supervised both studies, said.

Chaubey and his colleagues, in earlier research published last year, traced the ancestry of present-day Nicobarese islanders to Austroasiatic populations in Southeast Asia and estimated that they had arrived on the islands some 5,000 years ago.

"The new results sug-

gest that the Austroasiatic people who had sailed into the Nicobar Islands also brought lots of pigs with them," Chaubey said. "The pigs proliferated on the islands while remaining genetically isolated, representing a distinct lineage."

Earlier pig genome studies by other research groups had suggested that wild boars had originated in Southeast Asia 4.5 million to 4 million years ago and spread across the rest of

Asia and into Europe 2 million to 2.5 million years ago.

A combination of archaeological and genetic studies has suggested that pig domestication had occurred at multiple sites — East Asia, the Tibetan plateau, and West Asia.

In their new study, Chaubey and his colleagues analysed 239 segments of pig genomes to explore the origins and evolution of Indian pig breeds. They combined their genetic analysis with evidence from rock art and cultural practices that continue today.

The new evidence supports the theory of domestication by local farmers along the Gangetic plains during the same period as the Indus Valley Civilisation, said Shailesh Desai, a research scholar at BHU and first author of the study, published on Friday in the journal *Genome Biology and Evolution*.

The scientists also surveyed rock art across northern Indian sites where wild boars or pigs are depicted from around 8,000 years ago.

CONTINUED ON PAGE 4 ►

Wild boar

► FROM PAGE 1

A field survey in the tribal areas of northern and central India suggested that the pre-historic practice of sacrificing pigs to deities continued today.

"Our findings suggest that a well-developed farming society that cultivated rice and bred pigs existed parallel to the Indus Valley Civilisation," Chaubey said. "It is intriguing that those farmers of the Gangetic plains remain poorly understood in contrast to their contemporary farmers in the Indus Valley."

The scientists analysed pig genome samples from Assam, Chhattisgarh, Uttarakhand, Uttar Pradesh and the Nicobar Islands, comparing them with pig genomes from elsewhere in the world. Pigs in south India were not sampled in the study and their lineage affinity remains unclear for now.

The Nicobar pigs also "illustrate the connection between animal domestication and ancient human migration patterns", said study team member Alessandro Achilli, from the University of Pavia in Italy.

PM offers prayers at Somnath temple

AHMEDABAD, DHNS: Prime Minister Narendra Modi on Sunday visited Somnath temple in Gir Somnath district on the second day of his three-day Gujarat visit.

“I had decided that after the Maha Kumbh at Prayagraj, I would go to Somnath, which is the first among the 12 Jyotirlingas. Today, I felt blessed to have prayed at the Somnath Mandir. I prayed for the prosperity and good health of every Indian. This temple manifests the timeless heritage and courage of our culture,” the PM posted on X.

The prime minister is also the chairman of the “Shree Somnath Trust,” which manages the famous temple.

Earlier in the day, Modi visited Vantara, an animal rescue and rehabilitation centre in Jamnagar, run by Reliance Industries and Reliance Foundation.

On the last day of this visit, the PM is scheduled to preside over a meeting of the National Board of Wildlife at Sasan Gir, in the Gir Wildlife Sanctuary.

BOWING TO ALMIGHTY | Modi prays for health, prosperity of all, says he had resolved to visit shrine after conclusion of Kumbh

PM visits wildlife hubs: Somnath, Gir & Vantara

Melvyn Thomas

AHMEDABAD

Prime Minister Narendra Modi is currently undertaking a 3-day trip to Gujarat. On Sunday morning, he arrived in Somnath by a helicopter after a visit to Vantara, an animal rescue, conservation and rehabilitation centre established by Anant Mukesh Ambani in Jamnagar.

Situated in the Reliance Jamnagar refinery complex, this expansive 3,000-acre facility focuses on the rescue and rehabilitation of captive elephants and various wildlife. It provides sanctuary, medicare, and sustainable livelihood initiatives for local communities. On his trip to Vantara, Modi was joined by Reliance Industries chairman Mukesh Ambani, along with his wife Nita, their son Anant and daughter-in-law Radhika.

Vantara is a sanctuary for more than 200 rescued elephants. The remarkably clever and sociable creatures flourish in the environment, participating in a range of activities like tackling puzzles, discovering new scents, and interacting with enrichment tools.

In a post on X, Modi said the visit was part of his resolve to worship Lord Somnath after the conclusion of the Maha Kumbh in Prayagraj.

“Ekta ka Maha Kumbh (Maha Kumbh of Unity) in



Prayagraj was completed with the efforts of crores of countrymen. I had resolved in my heart like a servant that after the Maha Kumbh, I would worship Shri Somnath, the first of the 12 jyotirlings.”

“Today, by the grace of Somnath Dada, that resolution has been fulfilled. I dedicate the successful achievement of the Maha Kumbh of Unity on behalf of all the countrymen to the feet of Shri Somnath Bhagwan. I prayed for their health and prosperity,” he said.

The PM commenced a 3-day visit to Saurashtra in his

home state of Gujarat on Saturday evening, with crowds gathering along the roads to see him as he made his way from Jamnagar Air Force Station.

Modi, serving as the chairman of Shri Somnath Trust, founded by notable figures such as Sardar Vallabhbhai Patel, Kanhaiyalal Munshi and Jam Saheb, participated in the darshan-pujan and aarti of Somnath Dada, following the traditional scriptural rituals in the temple. He performed rituals according to traditional scriptures for over 10 minutes. The PM paid a floral tribute to

the statue of Sardar Patel in the temple grounds.

Upon Modi's arrival, a significant crowd assembled in Sasan to have a glimpse of the PM. The premier made a helicopter journey from Somnath to Sasan. The atmosphere in Gir was filled with chants of Modi-Modi. He made a night halt at Sasan Gir and will have the opportunity for a lion 'darshan' at 6am on Monday. Following this, senior officials from the forest department are expected to convene a significant conference. After the conference, Modi will head to Rajkot, then to Delhi.

Report flags threat to birds, biodiversity and tribal hamlets

THIRUVANANTHAPURAM, DHNS: The proposed Wayanad tunnel project poses risks to endangered bird species, biological diversity and tribal hamlets, the Kerala government's State Environmental Appraisal Committee (SEAC) pointed out.

The SEAC also warned of cancelling the environmental clearance unless the corporate environmental responsibility aspect of the project is revised to incorporate measures addressing the socio-economic vulnerability of the affected tribal population.

According to the SEAC report, four tribal colonies are located within 500 metres to 1.5 km of the proposed tunnel road. The Aranama-la Kattunaikka colony, with 27 families, has been identified as project-affected. Also, 32 tribal individuals from Mammikkunnu, Kuppachi, Kalladi and Aranamala colonies in Wayanad are situated close to the proposed tunnel road.

The report pointed out that the proposed project area is home to endangered bird species such as Banasura Chilappan and Nilgiri Sholakili. Five bird species are under

threatened categories as per the IUCN Red List, with three being classified as vulnerable. Fourteen species are endemic to the Western Ghats, and 29 species are under Schedule-I and 155 species under Schedule-II of the Wildlife Protection Act, 1972. The project area is known for its rich biological diversity, with part of the Nilgiri biosphere reserve falling within a 10-km radius of the project alignment.

The SEAC recommended that institutions like the Salim Ali Centre for Ornithology and Natural History conduct detailed monitoring of Banasura Chilappan in the sky islands above the proposed tunnel to determine any genetic vulnerability of the species due to disturbances caused by the tunnel.

It also recommended that the government establish the Appankappu elephant corridor to facilitate the movement of elephants from the Camel Hump Mountains in South Wayanad and Kozhikode, and the Nilambur North Forest Divisions, towards the larger forested landscape of Nilambur South Division, Karimpuzha Sanctuary and Silent Valley National Park.

FROM GRANDSTAND TO THE FRONTLINES

Rethinking wildlife conservation in India

Despite growing awareness, conservation efforts are being undermined by lack of action on the ground

SANJAY GUBBI

As another World Wildlife Day passes, it is an opportune moment to reflect on the past and assess the current state of wildlife conservation in India. Conservation efforts gained prominence only after the enactment of the Wildlife Protection Act in 1972. From then until the mid-1980s, a handful of influential individuals—those with access to power and decision-making circles—led efforts to frame policies, designate protected areas, and safeguard habitats. Their dedication laid a strong foundation, bringing several species and ecosystems back from the brink of extinction.

In the 1990s and early 2000s, conservation expanded beyond this small circle, drawing in passionate individuals and grassroots organisations driven by their love for wildlife. This era saw numerous battles to protect habitats through government engagement, policy advocacy, and legal challenges. Some conservationists also turned their attention to the growing menace of illegal wildlife trade. While professional wildlife research institutions emerged during this period, many adopted a cautious stance—preferring to focus on scientific inquiry rather than direct intervention in conservation crises. They critiqued policies and lamented habitat loss but distanced themselves from the difficult, hands-on task of saving species in distress.

The mid-2010s marked another shift. With changing economic dynamics and the rise of social media, wildlife conservation became a fashionable pursuit, coinciding with the boom in safari tourism, wildlife photography, and eco-activism. While increased public interest should have been a boon, it diluted the core mission. Conservation increasingly took on softer approaches—artwork, glamorous wildlife photography, social media posturing, plastic cleanup drives, candlelight vigils, and online petitions—diverting focus from the critical task of protecting habitats and species.

A recent encounter exemplifies this trend. A young man, eager to introduce himself as a vulture conservationist, proudly presented a small vulture-themed sticker, explaining that distributing these would raise awareness and help protect the species. While his intentions were noble, the reality is that India's vulture population has been

decimated primarily by nonsteroidal anti-inflammatory drugs administered to livestock and the depletion of carrion, their primary food source. Without addressing these threats, no amount of stickers will alter the grim fate of these critically endangered birds.

Today, conservation efforts are scattered across various activities, from urban outreach programmes to the installation of solar-powered pumps that draw water into forest lakes. While well-intentioned, some of these measures harm wildlife. For



instance, year-round artificial water sources disrupt the natural mortality patterns of species like elephants and tigers, whose populations are regulated by nature's cycles. Similarly, there has been an explosion of bird and butterfly inventory groups. But if these groups do not actively work to protect habitats, their meticulous species lists will soon become relics of the past.

Habitat destruction and poaching remain the twin evils plaguing India's wildlife. These, in turn, fuel human-wildlife conflict, exacerbating tensions between local communities and conservation efforts. Meanwhile, new threats loom—such as the large-scale introduction of invasive species or habitat manipulation—yet, few are willing to address these pressing concerns. Many non-governmental organisations prioritise maintaining a neutral stance, but neutrality in the face of destruction is complicity.

Take, for example, the escalating human-elephant conflict in the Western Ghats in Karnataka's Hassan district. Once a peaceful elephant habitat, the region has been irrevocably altered by mini-hydel power projects and infrastructure expansion, displacing elephants and pushing them into unfamiliar territories such as Puttur and Sulya. A scientific study has unequivocally linked the rise in conflict to these so-called "green energy" projects. Yet, a prominent NGO working in the region chooses to overlook this inconvenient truth, opting instead for softer conservation efforts while sidestepping

the root cause—habitat destruction. Ironically, the same organisation once campaigned against capturing problem elephants but now turns a blind eye to their daily capture and electrocution, all while receiving funds under the pretext of protecting them. Is this a case of misplaced priorities or sheer convenience?

India ranks second only to Brazil in forest loss. If we fail to address this existential crisis, all other conservation efforts will amount to little more than spectatorship in the face of destruction. Wildlife conservation is not for the faint-hearted—it is fraught with complexities, opposition, and, at times, controversy. Failures are inevitable, but so too are victories. What matters is the relentless pursuit of the goal: protecting wildlife and their habitats.

Though well-intentioned, the young vulture enthusiast likely lacked proper guidance in prioritising critical conservation actions. Perhaps conservation leaders, directly or indirectly, steered him toward superficial activities—well-meaning but ineffective in bringing real change.

Today, more people instruct others on conservation—often without first-hand experience—than there are individuals willing to fight on the frontlines. The economic beneficiaries of wildlife far outnumber those who battle tirelessly to protect biodiversity. Ecologists churn out research papers but disclaim responsibility for saving wildlife; organisations prioritise diplomacy over action; modern environmentalists are engrossed in soft campaigns with little tangible impact; governments are preoccupied with economic development, and all the while, India's natural heritage continues to be decimated.

So, who will bell the cat?

We need a society—and a civil society movement—that understands wildlife conservation holistically and is deeply sensitive to the looming ecological disasters. If we fail to act now, we risk following the trajectory of some European nations, where wilderness has been all but lost. Future generations may only encounter near-domesticated species, travelling abroad to witness ecosystems that once thrived within our own borders. As more World Wildlife Days come and go, will we continue to observe the decline of our species from the safety of the grandstands? Or will we take the bold steps necessary to halt this tide of destruction?

Thanks to the dedication of committed individuals working alongside the government, some species and habitats have been saved. However, safeguarding these victories is crucial. But we must also confront our failures and recalibrate our approach before it is too late.

(The writer is a conservationist and author of Leopard Diaries)

Rhino census uncertain

Nepal's rhino census conducted in an interval of every five years now faces an uncertain future with the suspension of USAID, one of the major donors for the project, by the Donald Trump administration. The Department of National Parks and Wildlife Con-



servation, which has been carrying out the census in collaboration with various agencies, is now facing a financial crunch and is unable to continue the work. An agreement had been reached with USAID's 'Jal Jungle project' for the purchase of the necessary equipment for conducting the rhino census, but the census has become uncertain now that the project is suspended.

Two smugglers arrested with 405 rare turtles in UP's Mainpuri

MAINPURI: A joint team of the Uttar Pradesh Police and the forest department seized 405 rare Indian flapshell turtles from suspected wildlife smugglers, officials said on Sunday. Acting on a tip-off, a team from the Kanpur unit of the police's Special Task Force (STF), Mainpuri Forest Range, and the Wildlife Control Bureau, Gorakhpur, intercepted a car on the Usrahaar-Kishni Road on Saturday and arrested Bareilly natives Amit Yadav and Kuldeep Chaturvedi. Two other accused - Santosh and Roop Singh - managed to escape, the police said. Forest department sub-inspector Shivam Pathak told PTI that smuggling of rare turtles was rampant from the Mainpuri, Etawah and the Auraiya forest ranges. The smugglers transported the turtles to Udham Singh Nagar in Uttarakhand, from where they were sent to China, he said.

Two years on, Kuno's cheetahs still play a losing Hunger Game

Vanishing prey and fierce competition from leopards keep cheetahs on edge

DEEPAK PATEL & PUJA DAS
New Delhi, 2 March

More than two years after cheetahs were reintroduced in India, a scarcity of prey and fierce competition from leopards for the same food sources remain major concerns for senior officials monitoring the cheetahs' survival and well-being, *Business Standard* has learnt. Declared extinct in India in 1952, cheetahs were reintroduced at Kuno National Park in Madhya Pradesh with the translocation of eight from Namibia on September 17, 2022, followed by 12 from South Africa on February 18, 2023. Currently, there are 26 cheetahs in the national park after 10 died since their reintroduction in India, according to government sources.

"Prey augmentation with antelopes needs to be explored on a priority basis both in Kuno and Gandhi Sagar Wildlife Sanctuary... Limiting factors in the context of prey revival in Kuno need to be identified," observed the summary record of the 10th meeting of the Cheetah Project Steering Committee (CPSC), held on August 23 last year.

During the meeting, it was noted that Kuno's old sanctuary area — spanning 350 square (sq.) kilometre (km) — serves as a stronghold for spotted deer, with a density of 17.5 animals per sq. km. In contrast, the rest of the protected area, covering 400 sq. km, has a much lower deer density of just 1.5 per sq. km.

This is not the first time the CPSC, established in May 2023, has raised concerns about the low prey density for cheetahs. In fact, in its very first meeting on May 30, 2023, the committee concluded that the "augmentation of natural prey is required in an ongoing manner".

When *Business Standard* asked CPSC Chairman Rajesh Gopal about the steps taken in the last six months to address the issue of insufficient prey for cheetahs, he said multiple actions are ongoing. These include actively increasing the prey population by translocating animals to Kuno and implementing "in-situ revival" — a process that involves creating protected enclosures where species like deer can breed and multiply without immediate threats from predators. He also noted that the released cheetahs are regularly making



natural kills, suggesting that the situation is improving.

Last October, the government announced that cheetahs would also be introduced into an in-situ enclosure at Gandhi Sagar. However, they have not been released yet, as the enclosure is still being prepared. The plan is to get 20 sub-adult cheetahs from Kenya and South Africa. All necessary approvals have been given, and authorities are in the process of arranging funds, augmenting the prey base, and ensuring proper accommodation. Once these aspects are taken care of, India is expected to bring them in by March, a government official said last December.

India sources cheetahs from Namibia, Somalia, South Africa, Sudan, and Tanzania.

The National Tiger Conservation Authority, the Ministry of Environment, Forest and Climate Change (MoEFCC), and the Madhya Pradesh government did not respond to queries sent by *Business Standard* on February 26 regarding this matter.

The CPSC has convened 12 times so far, including the latest meeting on February 19. *Business Standard* has reviewed the summaries of the first 11 meetings. Government sources told the newspaper that the issue of prey shortage was also discussed at the recent February 19 meeting.

Since the CPSC's inception in May 2023, concerns about insufficient prey for cheetahs in Kuno have surfaced repeatedly in its meetings, as officials and experts grapple with the challenge of ensuring a stable ecosystem for the reintroduced big cats.

At its fourth meeting on August 10, 2023, a member praised the work done by field teams at Kuno but expressed concern

over the lack of prey. Another member agreed, observing that "the prey density was not sufficient".

At the fifth meeting on September 4, 2023, the committee concluded that "the efforts ongoing for building up prey numbers should continue".

During the sixth meeting on October 27, 2023, the CPMC chairman said that no cheetahs would be released from larger enclosures into the wild until the prey base had reached an optimum level. The committee also noted that Kuno may be experiencing the 'Allee effect', a biological phenomenon where a population declines further if it falls below a critical threshold, making recovery difficult. In Kuno's case, an already low prey population, such as deer, was further declining due to predation by leopards and other natural factors. If the prey base shrinks too much, it may struggle to recover naturally, worsening food scarcity for cheetahs.

To address this, the committee advised the Wildlife Institute of India team to study successful prey revival strategies used elsewhere, particularly efforts to restore prey populations for mountain lions in Canada. At this meeting, the CPSC also underscored the need to develop a strong prey base at Gandhi Sagar, where cheetahs are scheduled for release.

At the seventh meeting on December 13, 2023, a member emphasised that "active prey augmentation through translocation cannot continue indefinitely" and must be complemented by in-situ prey base development. A prey base assessment at Kuno found that "prey base assessment at Kuno indicates 17 prey ani-

THE FAST & THE FAMISHED

Prey shortage issue raised in multiple CPSC meetings

August 10, 2023: A member said prey density was not sufficient

September 4, 2023: Committee concluded efforts for building prey numbers should continue

October 27, 2023: The chairman said no cheetahs will be released until prey base improves

December 13, 2023: A member noted translocation cannot continue indefinitely

June 18, 2024: A member suggested blackbucks should be considered for augmenting prey base

August 23, 2024: A member informed mass blackbuck capture is underway to strengthen prey base

mals per sq. km, with hotspots harbouring around 30-35 prey animals per sq. km. The leopard population is high (26 per 100 sq. km)."

At this meeting, the CPSC chairman highlighted that a sizeable portion of Kuno's habitat is not ideal for spotted deer due to its elevation and distance from water sources.

By the ninth meeting on June 18, 2024, the committee was informed that "grass revival" had been undertaken over an area of around 5,000 hectares, involving an expenditure of ₹3.75 crore. While acknowledging the "paucity" of prey, a member advised forest authorities to "refrain" from feeding live goats to cheetahs. Another member suggested that blackbucks should also be considered for augmenting the prey base and underlined the need to scale up grassland restoration efforts.

At the 10th meeting, a member informed the committee that "efforts are underway for mass capturing of blackbucks" to strengthen the prey base.

The death of 10 cheetahs in Kuno could be primarily attributed to habitat loss due to agricultural expansion, a decline in their prey base from overhunting, human-wildlife conflict, and complications arising from the recent reintroduction programme, including issues with the climate and potential infections from radio collars fitted to monitor them — leading to a lack of suitable space and food sources for the reintroduced cheetahs, according to experts involved in the cheetah reintroduction project. However, the MoEFCC had earlier said their deaths were due to natural causes.

Villagers in the Pench Tiger Reserve claim they were defrauded of forest land rights

Say forest officials first charged them for “encroaching” on forestland, then “tricked” them into signing away land-rights claims in lieu of being freed from the charges

SUKRITI VATS
mailbag@mid-day.com

PAYING a penalty is not a thing of pride. But in December 2022, Hansraj Chaitram Inwate, 62, a resident of Maharashtra's Pench Tiger Reserve buffer zone, eagerly awaited a receipt against the fine imposed on him by the forest department for “encroaching” forestland. The Forest Range Officers of the Paoni buffer zone had told Hansraj that the fine receipt could serve as evidence of his occupation of the forestland, helping him secure rights over the land his family had cultivated for 35 years.

The Forest Rights Act of 2006 (FRA) aims to grant titles of forestland and resource rights to forest-dwelling communities, if they prove occupancy or dependence on the forestland from before 2005. Claimants must provide at least two forms of evidence, such as village elders' testimonies, public documents, government-authorised records, or traditional structures like wells and burial grounds. Encroachment fine receipts are also regarded valid evidence.

More than two years later, Hansraj claims he had been misled. “I had no idea the document I signed stated we were voluntarily giving up our land rights claims. We have been fooled by the forest officials,” said Hansraj, who had 2 acres of land and five family members to support. However, forest department officials say the receipts were issued after confirming evidence of encroachment through Google imagery and verification from official sources.

Documents accessed by this correspondent revealed that at least 56 individuals across 16 villages under different group gram panchayats (when two or more villages are grouped under one gram panchayat) were made to sign away their land rights.

Many villagers, including Hansraj, were in the process of filing land-rights claims under FRA in 2024. While they were collecting the requisite evidence, the forest department charged them for encroaching on the land and imposed a fine. The villagers paid the fine and signed the receipts thinking that these would validate their claims. Little did they know that the fine receipts declared that



Hansraj Inwate with the encroachment receipt

they “voluntarily abandoned” their claim to forest land in lieu of being freed from the encroachment charges.

The forest department's ruse was discovered when Hansraj and a few others from the neighbouring villages went to the sarpanch of their group gram panchayat and found what was written on the fine receipt. At this point, they were left with no avenue to file the claims or access their lands. Hansraj who used to cultivate rice, cotton and toor dal (pigeon pea) was left with no source of livelihood.

In the next year and a half, some still tried to file claims and demanded titles from their respective sarpanches prompting the forest ranger's office to issue a letter dated August 26, 2024, to six group gram panchayats. The letter stated that encroachment charges were issued and later dismissed after villagers “voluntarily abandoned” their land. The letter cited Section 66 of the Indian Forest Act, 1927, which empowers officials to prevent encroachment.

Before the enactment of FRA, most tribals were considered encroachers on forestland even if they had lived inside the forest for generations. The 2006 law provides protection to tribals from such harassment by formally recognising their traditional land rights. In this case, however, the forest officials not only made a case of encroachment against tribals for the land they had claimed under FRA but used it to trick villagers into abandoning their claims.

“This kind of intervention by the forest department amounts to obstruction of the FRA recognition process. Such actions are

illegal. These are constitutional rights that cannot be taken away arbitrarily,” said Tushar Dash, an independent FRA researcher, noting instances where a nearly identical approach was used to undermine the FRA.

Prabhu Nath Shukla, deputy conservator of forests and deputy director at Pench Tiger Reserve, denied the allegations. “We had to install pillars to demarcate the area under the forest department's jurisdiction. Many villagers were unaware they were residing on our land. We will only act against those whose FRA claims have been rejected,” he said.

Struggles with FRA claims

While luxury tourism thrives in Pench Tiger Reserve's buffer zone, promising opulence in the wilderness, villagers face an uncertain future. In 2015, Hansraj's village, Wagholi, filed for Community Forest Rights (CFR) over 351.16 hectares of forestland. CFR grants local communities rights to collectively use, manage, and conserve forest resources like tendu leaves, mahua flowers, feedstock, and wild vegetables. Legal recognition was crucial to avoid future harassment by forest officials.

CFR claims must be approved by the Gram Sabha, Sub-Divisional Level Committee (SDLC), and Divisional Level Committee before land titles are issued. In 2018, Wagholi's CFR claim was rejected.

Notably, the village has a devasthan (temple) on forestland, which is included in the CFR claim. The temple's walls bear the date ‘February 1, 2001’ as proof of longstanding use. However, the villagers had no idea that the temple's existence could be used as proof to validate their CFR claims. “The tehsildar and SDO told us we didn't submit the two required pieces of evidence. Even Gram Sabha members didn't know how to handle the process,” said Praveen Uikey, sarpanch of the Pipariya group gram panchayat.

The locals then resolved to file Individual Forest Rights (IFR) claims using proper evidence but it took years due to a lack of awareness of the procedures. Most families occupied 1



Wagholi village's Community Forest Rights claim was rejected in 2018



The temple's walls bear the date ‘February 1, 2001’ as proof of longstanding use

to 3 acres of land. In 2022, when the forest department conducted their survey, around seven to eight families from Pipariya gram panchayat paid fines of ₹1000 each—₹500 more than the stipulated amount—believing that it would serve as evidence for their claims.

Hansraj's receipt, written in Marathi, stated he “has built something on the forest land and hence, in order to be free of legal charges, he is agreeing to give up land rights and pay a nominal fine of ₹500.”

Villagers fight back

Hansraj said, “I just wanted the recommendation from the forest range officer. If I was educated, I couldn't have read and understood what was written in such small letters.” He has been trying to retract his statement for two years.

Villagers claimed forest officials threatened to evict them if they continued cultivating land. They were also barred from collecting forest produce, leaving them without access to land or means to submit claims. Despite this, some attempted to

file claims. The forest department's August 2024 letter also stated, “encroachment holders are submitting forest rights claims to their respective Gram Panchayats. Such forest right claims should not be accepted.”

The villagers' plight reflects findings from a recent report by Call for Justice, an NGO, that highlighted widespread ignorance of FRA procedures.

Official Speak

Jayesh Tayade, Range Forest Officer, Paoni UC, said, “We have not issued encroachment receipts against those who have pending FRA claims. The receipts were signed following hearings, only after the villagers admitted to encroachment. The statement about ‘giving up land rights’ was a preventative measure under Section 66 of the Indian Forest Act 1927.” Section 66 of the Indian Forest Act 1927 gives the power to prevent the commission of offence (cutting down trees in a forest, setting fire to a forest, altering, moving, destroying, or defacing a forest boundary mark).

“The receipts were issued

after confirming evidence of encroachment through Google imagery and verifying through Gram Sabha, SDO, and the collector if they had applied for the FRA or not. We believe they occupied the forest land territory in 2015-16, and not before 2005 as stipulated in the Act.

Many of these people already have 10-15 acres of cultivable land. They sometimes encroach on one or more acres in the forest area to acquire more and then ask for rights, but are unable to produce evidence. Why would they have paid the fine, if they didn't believe they were encroachers?”

Tayade added that if the claimants have evidence to prove occupation they can approach him and he would assist them with the filing process. He also talked about how the villagers keep encroaching on the land after it is freed up and said that they are politically influenced.

The writer is from landconflictwatch.org, a data-research project that maps and analyses ongoing land conflicts in India

‘This kind of intervention by the forest department amounts to obstruction of the Forest Rights Act (FRA) recognition process. Such actions are illegal. These are constitutional rights that cannot be taken away arbitrarily’

Tushar Dash, independent FRA researcher

Water of Ganga river unfit for bathing at several places in Bihar: Economic Survey

PATNA: The water of the Ganga river in Bihar is not fit for bathing at most places in the state due to the presence of a higher value of “bacteriological population”, according to the Bihar Economic Survey 2024-25.

The Bihar State Pollution Control Board (BSPCB) monitors the water quality of the Ganga at 34 locations in the state on a fortnightly basis, officials said.

According to the Economic Survey recently tabled in the state assembly, “The water quality of Ganga indicates the presence of a higher value of bacteriological pop-

ulation (total coliform and faecal coliform). This is mainly due to the discharge of sewage/domestic waste water from cities located on the banks of Ganga and her tributaries.”

The survey cited the latest water quality test results of the BSPCB.

“The other parameters... pH (acidity or basicity), dissolved oxygen and bio-chemical oxygen demand (BOD) have been observed within the prescribed limit in the river and her tributaries in Bihar, indicating that water is fit for aquatic life, wildlife propagation, fisheries and irrigation,”

it said.

Important towns located on the banks of the river include Buxar, Chapra (Saran), Dighwara, Sonapur, Maner, Danapur, Patna, Fatuha, Bakhtiyarpur, Barh, Mokama, Begusarai, Khagaria, Lakhisarai, Manihari, Munger, Jamalpur, Sultanganj, Bhagalpur and Kahalgaon.

Reacting to the report, D K Shukla, Chairman of the BSPCB, told PTI that the presence of a higher value of bacteriological population in the Ganga river is a matter of concern.

“Faecal coliform bacte-

ria are found in excreta that contaminates water through untreated sewage. The higher the level, the higher is the presence of disease-causing pathogens in water. According to the CPCB standards, the permissible limit of faecal coliform is 2,500 MPN/100 ml,” Shukla said.

At most places, the presence of total coliform and faecal coliform in the Ganga is much higher, indicating it is not fit for bathing, he said.

The BSPCB is taking measures to ensure that sewage treatment plants (STP) in the state function properly, the senior official said. AGENCIES

Wayanad tunnel project okayed despite risks

Area close to recent landslide sites

DH EXCLUSIVE

ARJUN RAGHUNATH
THIRUVANANTHAPURAM
DHNS

The Kerala government's State Environmental Appraisal Committee (SEAC) has given environmental clearance for the Wayanad tunnel road project, which could considerably reduce the travel time between Kerala and Karnataka.

The SEAC met on Saturday and gave the clearance despite citing serious ecological issues, including the fact that the project area was under ecologically sensitive areas close to the recent landslide sites near Meppadi in Wayanad.

It listed out 25 conditions — like the setting up of four ground vibration monitoring systems and an environment management committee regularly monitoring the work — to mitigate the adverse impact of the project, according to the minutes of the meeting accessed by *DH*.

After last year's landslide at Mundakkai and Chooralmala, environmentalists protested strongly against the project as it was close to the landslide spots.

The SEAC earlier deferred its decision several times, seeking additional details on the project's environmental impacts.

It seemed to be under pressure to give a clearance to what is one of the flagship projects of the CPM-led UDF government.

The 8.75-km tunnel project, with a total cost of Rs 2,043.74 crore, was conceived as an alternative to the popular Thamarasserry ghat road. The proposed tunnel road stretches from Meppadi in Wayanad to Anakampoyil in Kozhikode.

"The tunnel alignment passes through highly fragile terrain prone to landslides, where massive destructive landslides occurred during 2019 and 2024 and stressed the need to have an elaborate environmental management plan," pointed out the SEAC — chaired by R Ajayakumar Varma — in its report.

"The project area falls in the



Hairpin curves of a winding road on the Western Ghat mountain range in Kerala's Wayanad district.

The tunnel road once commissioned will reduce the travelling distance between the districts by nearly 19 km, from a present 73 km to 54 km, between Kalpetta and Calicut.

Vellarimala village in Wayanad and the Thiruvambady village in Kozhikode, which are categorised as ecologically sensitive areas," it added.

A 5.76-km stretch of the tunnel passes through forestland, and 17.263 hectares of forestland is required for the project. There is every possibility of aggressive human-wildlife conflict, said the committee.

The first condition the SEAC

laid down while giving the clearance was that the project activities should be implemented by adopting the most appropriate safeguards and in agreement with the spirit of precautionary principles, as the proposed project area is known for its terrain fragility.

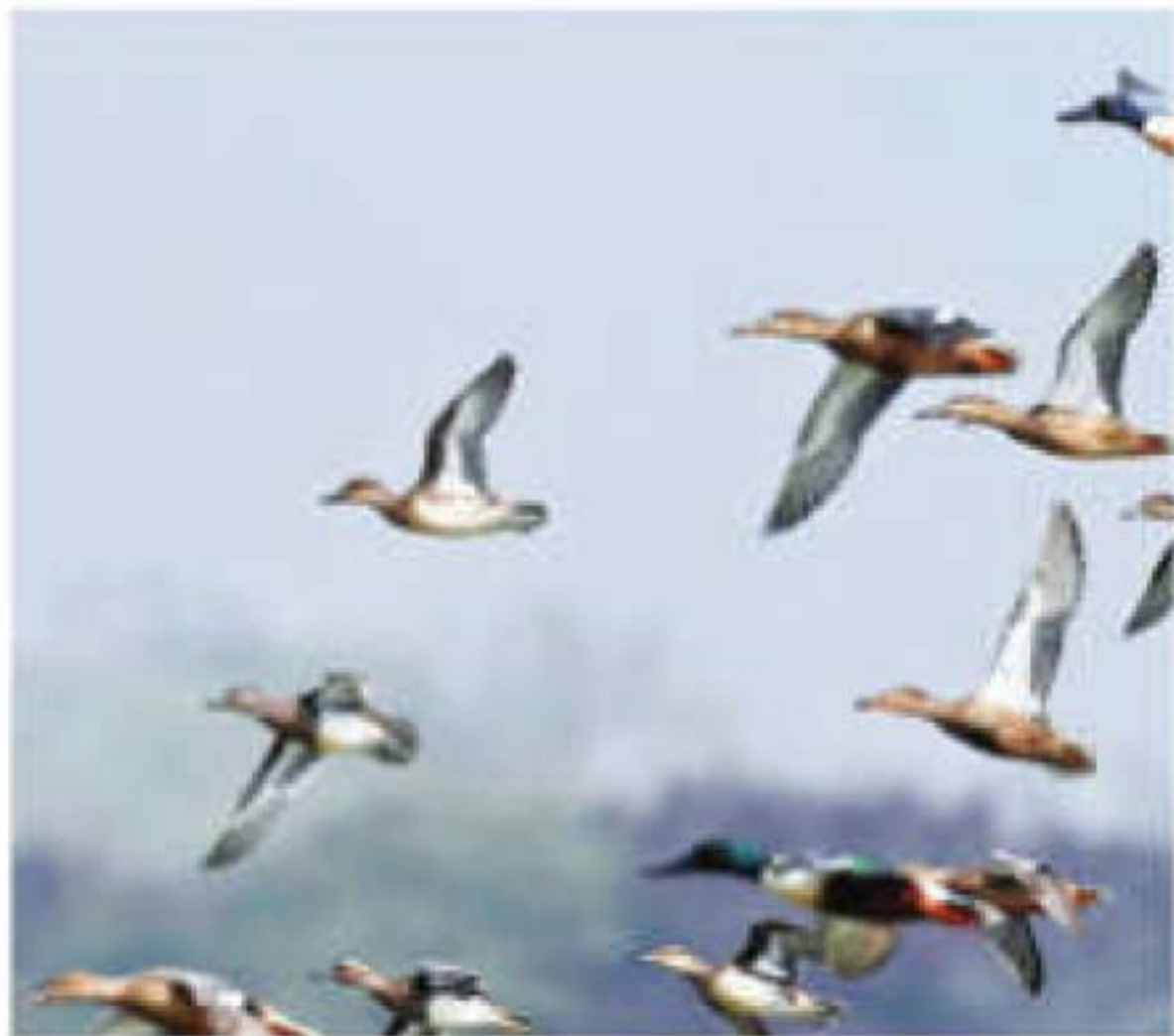
The other key conditions are to carry out micro-scale mapping of landslide-vulnerable zones, setting up of automated weather stations, and use of tunneling methods that do not cause any vibration on the ground. The SEAC will carry out a review every six months.

The Kerala government has appointed KITCO Ltd as the project proponent and Konkan Railway Corporation Limited is the implementing agency.

The Statesman

New Delhi, 3 March 2025


THUMBNAILS

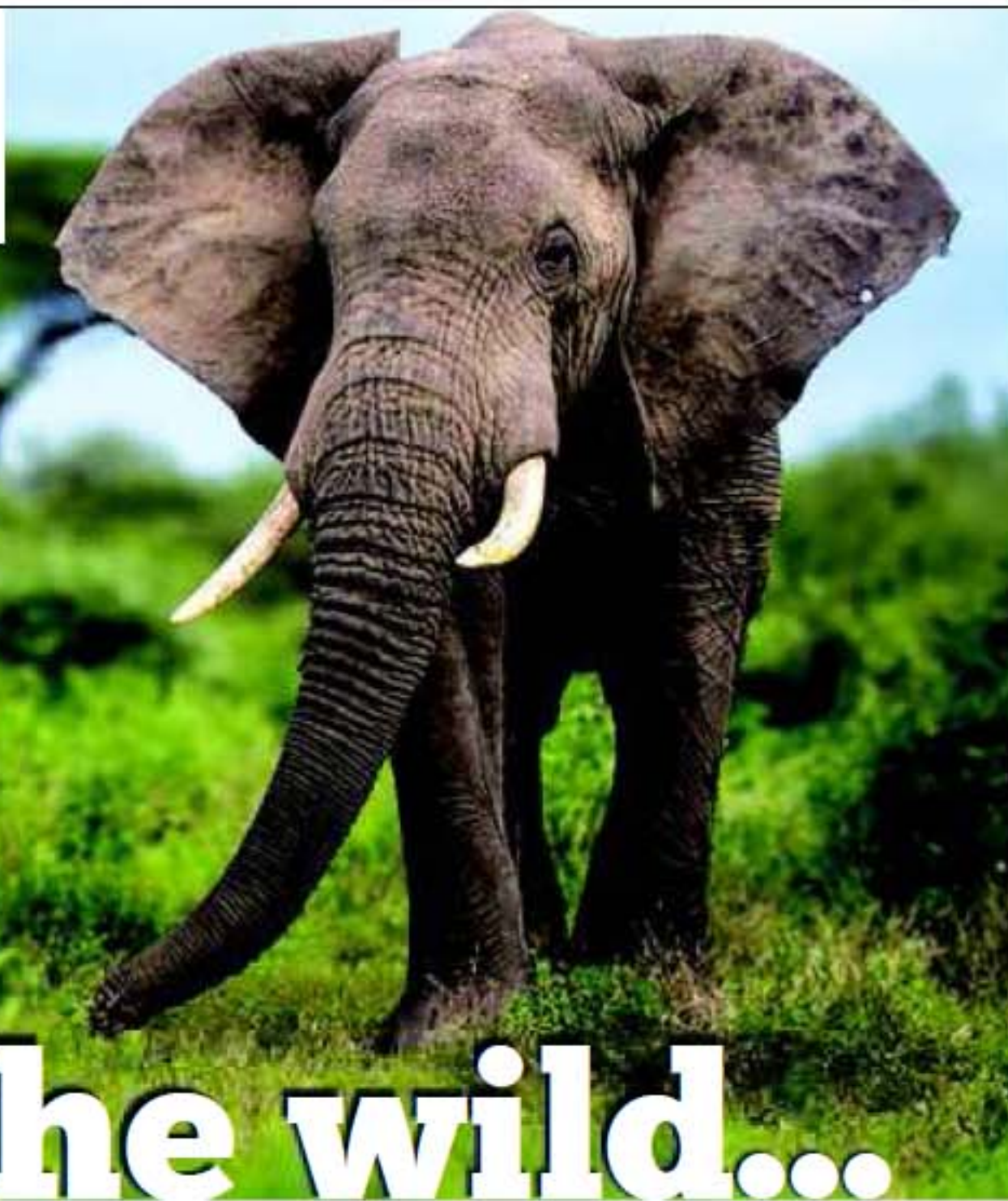


A flock of Mallards and American Wigeon (migratory birds) seen at Pobitora Wildlife Sanctuary in Morigaon on Sunday. ■ ANI

SEEDS OF CHANGE

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Call of the wild...

Every year March 3rd is observed as World Wildlife Day to draw attention to the status of wildlife worldwide. Over a million species is now said to be on the threshold of extinction. The International Union for Conservation of Nature's Red List records more than 8,000 species of wild flora and fauna as critically endangered and over 30,000 species as endangered or vulnerable. Taking into consideration these estimates, it has become increasingly important to relook and revise actions towards reversing the fate of key species of flora and fauna.

It has been predicted that by the time today's children grow up, wild elephants on the African continent may cease to exist. With only 400,000 elephants left, and 30,000 to 40,000 lost to poachers every year, the population's prognosis is dire, according to the African Elephant Status Report. The IUCN compiled report said that resurgence in poaching in the past decade coupled with habitat loss also poses a long-term threat to elephants. The report found that there were some 111,000 fewer elephants now than a decade ago in the continent.

The scenario is equally distressing for the Asian elephant. Their numbers have decreased to half of what it was in the last century in their last bastions in India, Sri Lanka and Bhutan. Loss of habitat spelt doom for the mega fauna. Rapid deforestation and fragmentation has resulted in isolated elephant populations with very limited resources. What would normally serve as food for elephants is now utilised by humans. Large stretches of the elephant's habitat have been cleared for

agricultural and other developmental activities and much of their migratory pathways are also taken over leading to confrontations and conflict between man and animal. The man-elephant conflict—that has taken a heavy toll on either side—is a fall out of the shrinkage of elephant habitat. Habitat destruction has been identified as the root cause for extinction of wildlife species.

The conversion of grassland, savannah, forest and wetland habitats, the over exploitation of wildlife, introduction of non-native species and climate change are the factors of this rapid decline. Pollution by heavy metals, organic wastes, removal of sand from riverbeds has spoilt the river ecosystem. While poaching of animals for their organs used in traditional medicine poses a major threat to birds, mammals, plants and reptiles, introduction of exotic species has been affecting a significant number of many bird and plant species.

Shrinking wildlife numbers are an indicator of the tremendous impact and pressure we are exerting on our planet. When the natural habitat of animals is destroyed, it leads to a decline in their primary food supply and breeding and nesting grounds and their numbers get drastically reduced. Plant species number dwindles when the natural habitat is destroyed and the species that controls the pests that attack them are lost, their survival is at risk.

Around 8000 species of plants and a few hundred species of animals provide for maintaining health and security of human and livestock. As such, protection of species has become extremely important. We also need to remember that there has been significant scientific, cultural, aesthetic and ethical value attached with the conservation of species apart from the simple fact that they offer us livelihood support.

A call to action

This World Wildlife Day 2025, **DR DEBA KUMAR DUTTA** lays emphasis on the need for a sustainable future. debakumerdutta@gmail.com



World Wildlife Day, observed on March 3 each year, reminds us of the urgent need for wildlife conservation. We are currently facing an unprecedented biodiversity crisis, with 73 per cent of monitored wildlife populations lost between 1970 and 2020, according to World Wildlife Fund's *Living Planet Report 2024*. Freshwater species have suffered the most severe decline (85 per cent), followed by terrestrial species (69 per cent) and marine species (56 per cent).

Overharvesting, habitat destruction, and climate change have driven this decline, with global food systems playing a major role. In regions like Assam and Northeast India – known for their rich biodiversity – the challenge is particularly pressing. Protecting these species is crucial to maintaining ecological balance and preserving our natural heritage.

Conservation cannot happen in isolation. Every individual can make a meaningful impact by adopting sustainable habits, advocating for wildlife protection, and actively participating in conservation efforts. Here are seven effective actions to help safeguard wildlife and ecosystems.

Embrace sustainable habits

Robert Swan famously said, "The greatest threat to our planet is the belief that someone else will

save it." Every individual must take responsibility for minimising their ecological footprint. Simple actions such as conserving water, reducing plastic waste, and lowering energy consumption contribute to wildlife preservation.

Supporting local products through the Vocal for Local movement reduces carbon footprints while strengthening sustainability. However, economic growth must align with environmental responsibility. Initiatives like Advantage Assam 2.0 involve large-scale investments, some of which may impact wildlife habitats. Civil society must remain vigilant to ensure development does not come at the cost of ecological degradation.

A responsible consumer

Consumer choices play a significant role in wildlife conservation. Deforestation, habitat destruction, and illegal wildlife trade are often driven by demand for certain products.

In Assam and Northeast India, forest resources are frequently used without considering their source or legality. Consumers must verify the legal status of products like timber, stone, and soil to ensure sustainability. Certifications such as Fair Trade, Rainforest Alliance, or the Forest Stewardship Council (FSC) can help make ethical choices.

The consumption of exotic meats is another concern, often seen as a status symbol in urban

areas. This demand fuels illegal wildlife trade, pushing species towards extinction and violating wildlife protection laws. Making informed purchasing decisions can significantly reduce these threats.

Conservation organisations

Many scientific organisations and grassroots groups work tirelessly to protect endangered species, yet they often struggle with limited funding. In India, direct contributions to wildlife conservation remain minimal beyond corporate CSR initiatives.

As India moves toward *Viksit Bharat* – a vision of sustainable development – wildlife conservation must be an integral part of national progress. By donating to reputable conservation organisations, individuals can help bridge funding gaps and support critical research, rescue operations, and habitat protection efforts. A *Viksit Bharat* is not just about economic prosperity but also about a future where Nature and development coexist.

Educate the public

Education is a powerful tool for fostering conservation awareness. People can learn about wildlife through local media, cultural programs, and community discussions. Assam's *Bhramyaman Nat* (mobile theatre) can play a crucial role in raising awareness through storytelling and performances.

Joining conservation organisations and participating in awareness campaigns amplifies impact. Social media is another powerful tool – sharing success stories, infographics, and conservation messages can inspire others to take action.

Ethical ecotourism

Tourism is a powerful driver of economic growth, but it must be ethical and sustainable. Zurab Pololikashvili, UN Tourism Secretary-General, emphasises that responsible tourism strengthens solidarity and development.

The United Nations' Global Code of Ethics for Tourism outlines ten principles for responsible travel, ensuring that tourism benefits local communities while preserving cultural and ecological integrity. By supporting ethical ecotourism, travellers can enjoy meaningful experiences while directly contributing to conservation and community well-being.

Engage in Citizen Science

Wildlife conservation is not limited to researchers – citizen science allows everyone to contribute valuable data. Platforms like eBird, iNaturalist, Big Bird Day, and The Great Backyard Bird Count enable individuals to record and share wildlife observations, helping scientists track biodiversity trends. Participating in citizen science fosters a sense of responsibility and ownership over local and global biodiversity. It also bridges the gap between science and society, making conservation efforts more inclusive and impactful.

Advocate for Policy Change

Effective policies play a crucial role in wildlife conservation. Strong laws and policies can protect endangered species and ensure sustainable resource management. Citizens can influence policy by supporting wildlife-friendly legislation, engaging with policymakers, and raising public awareness. Advocacy efforts can drive systemic change, making conservation a national priority.

Every small effort contributes to the larger goal of wildlife conservation. Whether through mindful consumer choices, supporting conservation groups, or engaging in citizen science, individuals can make a lasting impact. On this World Wildlife Day, let us commit to protecting our planet's biodiversity. By working together, we can ensure that future generations inherit a world rich in wildlife and natural beauty.

Research team discovers two more species of jumping spiders in wildlife sanctuary in Kerala

Sarath Babu George
THIRUVANANTHAPURAM

A collaborative research involving the University of Kerala reported the discovery of two new species of jumping spiders belonging to the genus *Epidelaxia* from the Shendurney Wildlife Sanctuary in the State. This was the first time the genus had been recorded from India, extending its known range from Sri Lanka to other parts of the subcontinent.

The research team behind the find included Asima A. and G. Prasad from the Department of Zoology of the University of Kerala; John T.D. Caleb from Sa-

veetha Medical College & Hospitals, Chennai; and Mathew M.J. from the Centre for Arachnology Research at Bharata Mata College, Kochi. Their work, published in the February issue of *Zootaxa*, a peer-reviewed journal, not only added two new species to the region's checklist but also shed light on the rich biodiversity of the Western Ghats.

The two new species, *Epidelaxia falciformis* sp. nov. and *Epidelaxia palustris* sp. nov., were discovered during field expeditions to Kulathupuzha in Kollam in December 2022 and April 2023.

These are distinctively



Epidelaxia falciformis sp. nov. and *Epidelaxia palustris* sp. nov. from the Shendurney Wildlife Sanctuary. SPECIAL ARRANGEMENT

characterised by their striking physical features, which include a prominent yellow triangular-shaped mark on the prosoma (the front part of the body) of females and unique traits



of the copulatory organs in both males and females. Males of *E. falciformis* have a brown carapace with a yellow-brown stripe, while males of *E. palustris* feature a pale brown band

along the side of their bodies. The females exhibit similar colouration, with the added feature of white orbital setae around their eyes.

Size variation

The researchers added that the species varied slightly in size, with *E. falciformis* measuring 4.39 mm while the *E. palustris* measured 4.57 mm (males) and 3.69 mm (females). These spiders were described as highly adapted to their environment, inhabiting the dense foliage of the Western Ghats. The genus was previously considered endemic to Sri Lanka.