

Current Affairs Revision

Category: Species & Environment · Entries: 11

July 12, 2026

Environment and Ecology

Uttar Pradesh

Species & Environment

Government Initiative

India Conducts Massive Tree-Planting Campaign Across States

NEWS ITEM

A massive tree-planting campaign was conducted across India, with major drives in **Uttar Pradesh, Gujarat, Madhya Pradesh and New Delhi**. Uttar Pradesh launched a State-wide **Vriksharopan Maha Yagya** from Gorakhpur and reported planting over **35.27 crore saplings** in a single day under the theme **“Ek Ped Maa Ke Naam.”**

PRELIMS FACTS

- A massive tree-planting campaign was conducted across India.
- Uttar Pradesh Chief Minister **Yogi Adityanath** launched the **Vriksharopan Maha Yagya** from **Gorakhpur**.
- He planted the sacred **Triveni** of **Neem, Peepal and Banyan** near the Link Expressway.
- Uttar Pradesh planted over **35.27 crore saplings** in a single day.
- The plantation exceeded the State target of **35 crore** by **27.89 lakh saplings**.
- Uttar Pradesh Governor **Anandiben Patel** planted a white sandalwood sapling at **Jan Bhawan**.
- The campaign was carried out across all **18 divisions and 75 districts** of Uttar Pradesh.
- Uttar Pradesh's cumulative plantation for the year stood at **40.29 crore saplings**.
- The Forest Department completed the largest target of **15.50 crore saplings**.
- Home Minister **Amit Shah** launched a plantation drive in **Gandhinagar**, Gujarat, with over **1.25 crore saplings** planted across his Lok Sabha constituency.
- Gandhinagar's green cover target is **20% by 2029**.
- Madhya Pradesh launched a plantation drive in **Indore**, targeting **21 lakh saplings** and **51,000 rainwater harvesting units**.
- India has set a target of achieving **net zero carbon emissions by 2070**.

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Science and Technology

Health

Species & Environment

Science & Technology

Deadly Bird Virus PaBV-4 Identified for First Time in India

NEWS ITEM

A team of scientists has identified and genetically characterised **Parrot Bornavirus-4 (PaBV-4)** in India for the first time. The virus was found among captive **psittacine birds** and is linked to **Proventricular Dilatation Disease (PDD)**, a largely fatal viral disease affecting the digestive and nervous systems of birds.

PRELIMS FACTS

- **PaBV-4** has been identified and genetically characterised in India for the first time.
- The study was led by **Pankaj Deka** and **Sangeeta Das** of the **Assam Veterinary and Fisheries University, Guwahati**.
- The study was published in **Scientific Reports**.
- Researchers tested **83 psittacine birds** from **13 species** in aviaries in **Assam, Karnataka and West Bengal**.
- The study period was **2020-2024**.
- Bird species included African grey parrot, ochre-marked parakeet, yellow-collared macaw, eastern rosella, blue-crowned hanging parrot, rainbow lorikeet and scarlet-chested parrot.
- The birds were divided into three groups: birds with clinical signs of PDD, healthy cage mates of suspected cases and birds that had died of suspected PDD.
- Infection was detected in almost **88% of dead birds** and **19% of apparently healthy cage mates**.
- Researchers found no patterns linking genetic clusters to host species, geography or time.
- The findings highlight risks to conservation programmes based on breeding captive birds.

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Species & Environment

Government Initiative

National CAMPA Approves Conservation Projects for Four Species

NEWS ITEM

The governing body of **National CAMPA** approved four new conservation projects for **river dolphins, snow leopards, wild water buffalo and Indian rhinoceroses**. The new scheme has an initial corpus of **₹3,000 crore over five years**.

PRELIMS FACTS

- The governing body of **National CAMPA** approved four new conservation projects.
- The species covered are **river dolphins, snow leopards, wild water buffalo and Indian rhinoceroses**.
- The new scheme has an initial corpus of **₹3,000 crore over five years**.
- The river dolphin project includes studies on conservation and recovery action plan.
- **Project Snow Leopard Phase-II** includes the second cycle of population estimation.
- A conservation action plan has been approved for the **Indian Rhinoceros**.
- A pan-India conservation approach has been approved for the **wild water buffalo**.

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Economy

Species & Environment

Science & Technology

AEL and Dioxcycle Tie Up for Low-Carbon Chemical Manufacturing

NEWS ITEM

Adani Enterprises Ltd. (AEL) has entered into a long-term agreement with French clean-technology company **Dioxcycle** to develop and scale low-carbon chemical production in India. The initiative will begin with a pilot facility at an Adani Group site to produce **formic acid** using captured carbon dioxide and renewable electricity.

PRELIMS FACTS

- **Adani Enterprises Ltd. (AEL)** has signed a long-term agreement with **Dioxcycle**.
- **Dioxcycle** is a French clean-technology company specialising in chemical manufacturing.
- The project aims to develop and scale **low-carbon chemical production** in India.
- The first pilot facility will be set up at an **Adani Group site**.
- The pilot will produce **formic acid** using **captured carbon dioxide** and **renewable electricity**.
- Formic acid and its derivatives are used in textiles, agriculture and manufacturing.
- The tie-up combines Dioxcycle's electrochemical manufacturing technology with Adani Group's clean-energy and infrastructure capabilities.

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Economy

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Infrastructure

Uncertainty Over Parandur Greenfield Airport Project

NEWS ITEM

A Ground Zero report highlighted uncertainty over the proposed **Parandur greenfield airport project** in Tamil Nadu. The project, planned as a second airport for Chennai, has reportedly been put on hold without an official announcement, leaving protesting residents of **Ekanapuram** relieved but residents of other affected villages uncertain about their land and future.

PRELIMS FACTS

- The **Parandur airport project** is a proposed greenfield airport project in Tamil Nadu.
- It was planned as a **second airport for Chennai**.
- The project was announced in **2022**.
- **Ekanapuram** is one of the key villages opposing the project.
- The report states that the project has been put on hold, but without an official announcement.
- Residents of Ekanapuram feared displacement, loss of agricultural land and impact on wetlands and water bodies.
- Land acquisition reportedly began in surrounding villages in **July 2025**.
- Ekanapuram was avoided during acquisition due to strong local resistance.
- Residents of other villages where land has been acquired remain uncertain about return of land, compensation and future livelihood.
- Aviation and industry experts argue that Chennai needs additional airport capacity for long-term growth.
- Environmental and social concerns include wetlands, drainage, water bodies, agricultural land, compensation and rehabilitation.

July 4, 2026

Environment and Ecology

Places in News

Species & Environment

Government Initiative

Tiger Population Rises Fourfold in Nameri Tiger Reserve

NEWS ITEM

The tiger population in **Nameri Tiger Reserve** in Assam increased from **3 tigers in the 2022 All India Tiger Estimation** to **12 tigers by end-2025**, as validated by the **Wildlife Institute of India**. The recovery also includes the return of tigers to **Sonai Rupai Wildlife Sanctuary** after more than two decades.

PRELIMS FACTS

- **Nameri Tiger Reserve** is located in **Assam**.
- Nameri's area mentioned in the report is **344 sq km**.
- Nameri shares a boundary with **Pakke Tiger Reserve** in **Arunachal Pradesh**.
- Assam has four tiger reserves: **Nameri, Kaziranga, Manas** and **Orang**.
- **Kaziranga** and **Manas** are **UNESCO World Heritage Sites**.
- Nameri's tiger population increased from **3 in the 2022 AITE** to **12 by end-2025**.
- The 2025-end estimate was validated by the **Wildlife Institute of India**.
- Tigers returned to **Sonai Rupai Wildlife Sanctuary** after more than two decades.
- **Sonai Rupai** had seen local extinction of tigers in the early 2000s.
- **Kaziranga** is noted for one of the highest tiger densities in India.

July 3, 2026

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Places in News

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700-Year-Old Banyan Scientifically Dated in Munger

NEWS ITEM

A banyan tree in **Munger, Bihar** has been scientifically dated to around **700 years** using **radiocarbon dating**. The finding identifies it as the oldest accurately dated **banyan tree**, based on scientific evidence rather than folklore or local traditions.

PRELIMS FACTS

- The banyan tree is located in **Munger, Bihar**.
- Its estimated age is around **700 years**.
- The species identified is **Ficus benghalensis**.
- The study used **radiocarbon dating** with **Accelerator Mass Spectrometry**.
- The research was led by **Dr. Trina Bose** of the **Birbal Sahni Institute of Palaeosciences**.
- The study was published in **Quaternary Research**.
- The finding suggests that the tree may be a surviving remnant of an older natural forest in the area.

July 1, 2026

Environment and Ecology

Indexes & Reports

Species & Environment

India Adds Over 1,000 New Species to its Flora and Fauna Database in 2025

NEWS ITEM

India has enriched its biodiversity by adding 709 animal species and 353 plant taxa to its national database in 2025. Unveiled by the Union Environment Minister, the latest discoveries confirm India's position as a premier mega-diverse country, with Kerala leading in new animal finds and Arunachal Pradesh topping plant discoveries.

PRELIMS FACTS

- **Fauna Additions (2025):** 709 animal species added, bringing India's total officially recorded faunal biodiversity to 1,05,953 species.
- **Top States (Fauna):** Kerala recorded the highest animal discoveries (98), followed closely by West Bengal (76) and Karnataka (67).
- **Highest Animal Group:** Hymenoptera (sawflies, wasps, bees, and ants) saw the highest number of additions (106) among the fauna.
- **Flora Additions (2025):** 353 plant taxa were added to the database.
- **Top States (Flora):** Arunachal Pradesh led the plant discoveries (49), followed by Uttarakhand (39).
- **Notable Fauna Discoveries:** Include **Myotis himalaicus** (Himalayan bat) and **Lycodon irwini** (Irwin's wolf snake).
- **Notable Flora Discoveries:** Include **Polystichum siangense** (a fern from Siang, Arunachal Pradesh) and **Heridium indicum** (a wild edible tooth-fungus).

June 30, 2026

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Places in News

Species & Environment

Radio-Tagged White-Rumped Vulture Electrocuted in Tamil Nadu

NEWS ITEM

A captive-bred, radio-tagged **white-rumped vulture** was electrocuted in Tamil Nadu's Nilgiris district after coming into contact with a power line. This tragic incident marks the failure of the first attempt to reintroduce a captive-bred bird of this endangered species into the South Indian wild landscape.

PRELIMS FACTS

- The deceased bird marks the **first attempted reintroduction** of a captive-bred white-rumped vulture into the South Indian landscape.
- **Tadoba-Andhari Tiger Reserve**, where the bird was initially released, is Maharashtra's oldest and largest national park, located in the Chandrapur district.
- Conservationists emphasize the need for **bunch-cabling and insulating power lines** across critical wildlife habitats like the Sigur plateau to prevent such fatalities.
- The **Bombay Natural History Society (BNHS)** is a leading non-governmental organization in India engaged in conservation research and manages multiple Vulture Conservation Breeding Centres (VCBCs).

June 30, 2026

Science and Technology

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Do Animals Understand Death? Scientists Test Cockatoos

NEWS ITEM

Researchers have conducted a unique touchscreen-based study on **Goffin's cockatoos** to test if animals can understand "permanent non-functionality"—a basic cognitive step toward understanding death. The study suggests that while animals may not grieve exactly like humans, they might possess the mental tools to realize when something has irreversibly stopped working.

PRELIMS FACTS

- The cognitive study involving touchscreen interactions to test the understanding of permanent non-functionality was conducted on **Goffin's cockatoos**.
- **Antonio J. Osuna-Mascaró** and **Susana Monsó** proposed the "**minimal concept of death**," which strips away the need for human-like grief and focuses on recognizing that a body has irreversibly stopped functioning.
- Independent researchers caution that understanding the non-permanence of inanimate objects (like digital buttons or food rewards) does not automatically equal understanding the death of a living, social being.

June 28, 2026

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Molecular Solar Thermal (MOST): Storing Sunlight as Chemical Energy

NEWS ITEM

Researchers have developed a novel method to capture and store solar energy in a molecular form using 'photo-switches'. This **Molecular Solar Thermal (MOST)** technology utilizes specific molecules that change shape upon absorbing sunlight, storing the energy to be released later as heat for domestic or industrial use.

PRELIMS FACTS

- **India's Solar Capacity:** Current land-based solar capacity is ~150 GW, while rooftop solar capacity stands at 23 GW.
- **PM Surya Ghar Mufti Bijli Yojana:** Subsidizes typical home grid-connected solar installations, bringing costs down to approximately ₹30,000 per kW.
- **Silicon Panels vs. MOST:** Silicon crystals free electrons using red/near-infrared light (400-1,100 nm), whereas MOST molecules like 2-pyrimidone absorb UV light (below 500 nm).
- **Inverters:** Required in standard solar setups to convert the direct current (DC) produced by panels into usable alternating current (AC) for households.