MISSION X FOR UPSC

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WEEKLY

Weekly Current Affairs Compilation · 22 - 28 September 2026 · 7 Topics

A global water stress alert, a new parasitoid wasp from Assam, a leucistic cormorant in Telangana, black carbon's stubble-burning trail, the Tokay Gecko trafficking racket, India's first e-methanol plant, and the musk deer's forgotten breeding promise.

"innovation in learning"

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7 topics, grouped by theme for faster revision

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GLOBAL ENVIRONMENTAL GOVERNANCE

State of Global Water Resources 2025 (WMO)

WHY IN NEWS

The World Meteorological Organization released its State of Global Water Resources 2025 report in September 2026, warning of swings between drought and flood, shrinking freshwater reserves and accelerating glacier melt across the world's river basins.

34% of monitored groundwater stations were below or much below normal in 2025, up from 25% in 2024

CONNECT TO STATIC SYLLABUS

- **GS I: Geography**
  Hydrology, drainage systems and glacial melt as physical geography themes tested via current reports.
- **GS III: Environment**
  Water security, groundwater depletion and climate change linkages, a recurring Mains theme.
- **GS II: International Relations**
  Role of WMO and UN specialized agencies in global environmental governance.

PRELIMS MATRIX

Released by	World Meteorological Organization (WMO), a UN specialized agency
Glacier loss, 2025	408 ± 132 gigatonnes worldwide
Sea level contribution	1.1 ± 0.4 mm from glacier melt alone
Drier river discharge	About 36% of global catchment area below normal
India finding	Persistent groundwater deficits, 2022 to 2025, sharpest in the northwest
India driver	Water intensive irrigated cropping and over abstraction via tube wells

UNIQUE FACT FOR PRELIMS
WMO's water reporting series began after the 2021 State of Climate Services report flagged water as the sector most exposed to climate risk, leading to an annual dedicated water report from 2022.

PRELIMS MEMORY BANK

WMO = UN agency | 34% stations stressed | 408 Gt glacier loss | NW India worst hit

EXAM TRAP
Do not confuse this WMO report with the UN World Water Development Report (UNESCO, released every March on World Water Day). The WMO report focuses on hydrological monitoring data; the UNESCO report is thematic and policy-oriented.

PRELIMS MODEL MCQ

Consider the following statements regarding the State of Global Water Resources 2025 report:

1. It is published annually by the World Meteorological Organization.
2. It reported that groundwater stress at monitored stations worldwide increased between 2024 and 2025.
3. It found that northwestern India recorded surplus groundwater levels during 2022 to 2025.

A 1 and 2 only
B 2 and 3 only
C 1 and 3 only
D 1, 2 and 3

Answer: 1 and 2 only

APPROACH
Statement 3 is false and reversed: the report flagged persistent groundwater deficits, not surplus, in northwestern India. Eliminate any option carrying statement 3.

SPECIES & WILDLIFE WATCH

New Parasitoid Wasp: Oxyserphus narendrani

WHY IN NEWS

Scientists from the Zoological Survey of India described a new parasitoid wasp species, Oxyserphus narendrani, from Dibru-Saikhowa National Park in Assam in September 2026, extending the genus's known range into the Oriental biogeographic region for the first time.

1st record of the wasp genus Oxyserphus from the Oriental biogeographic region

CONNECT TO STATIC SYLLABUS

- **GS III: Biodiversity**
  Taxonomic discoveries and species description as an indicator of unexplored biodiversity.
- **GS I: Geography**
  Biogeographic realms and how new records redraw known species distribution.
- **Prelims: Protected Areas**
  Dibru-Saikhowa National Park profile, frequently tested for its swamp forest and feral horses.

PRELIMS MATRIX

IUCN status	Not evaluated; newly described in 2026
Identification	Black head, brownish black body, contrasting yellow legs
Distinguishing feature	Single horizontal groove on thorax; distinct wing spot shape; short ovipositor sheath
Behaviour	Parasitoid; larvae develop inside a host insect and eventually kill it, unlike ordinary parasites
Ecological role	Natural pest control agent by regulating host insect populations
Discovery site	Dibru-Saikhowa National Park, Dibrugarh and Tinsukia districts, Assam

UNIQUE FACT FOR PRELIMS

Dibru-Saikhowa National Park, where the wasp was found, holds the largest salix swamp forest in northeastern India and was originally notified to protect the white-winged wood duck; it is also home to feral horses descended from a World War Two army camp.

PRELIMS MEMORY BANK

Oxyserphus = wasp genus | First Oriental region record | Found in Dibru Saikhowa NP | Parasitoid, not parasite

EXAM TRAP

A parasitoid ultimately kills its host, while a true parasite typically does not. This distinction is a favourite prelims trap when a question describes wasp or fly larvae developing inside another insect.

PRELIMS MODEL MCQ

With reference to the recently discovered wasp species Oxyserphus narendrani, consider the following statements:

1. It was discovered in Dibru-Saikhowa National Park, Assam.
2. Its discovery marks the first record of the genus Oxyserphus from the Oriental biogeographic region.
3. It is classified as a true parasite that coexists with its host without killing it.

A 1 and 2 only
B 2 and 3 only
C 1 and 3 only
D 1, 2 and 3

Answer: 1 and 2 only

APPROACH

Statement 3 is incorrect: a parasitoid, unlike a true parasite, eventually kills its host. That single word distinction eliminates every option pairing statement 3 with the others.

SPECIES & WILDLIFE WATCH

Leucistic Great Cormorant Sighted in Telangana

WHY IN NEWS

A rare leucistic Great Cormorant, with much of its plumage lacking normal pigmentation, was photographed at Ameenpur Lake near Hyderabad on 23 September 2026, drawing attention to leucism as distinct from albinism in birds.

23 Sep **2026, date a leucistic Great Cormorant was recorded at Ameenpur Lake, Telangana**

CONNECT TO STATIC SYLLABUS

- **GS III: Biodiversity**
  Leucism and albinism as genetic pigmentation conditions occasionally tested in prelims.
- **Prelims: Wetlands**
  Ameenpur Lake, a designated biodiversity heritage site, recurring in Telangana-related current affairs.
- **GS I: Geography**
  Wetlands as stopover habitats for resident and migratory waterbirds.

PRELIMS MATRIX

Species	Great Cormorant, Phalacrocorax carbo
IUCN status	Least Concern
Identifying features	Long neck, hooked bill, dark plumage with less water repellent feathers than most waterbirds
Behaviour	Pursuit diver; hunts fish underwater using powerful legs and webbed feet
Distinctive habit	Spreads wings to dry plumage after diving, since feathers wet easily
Condition noted	Leucism, partial loss of feather pigment, with eye colour normal unlike in albinism

UNIQUE FACT FOR PRELIMS

Ameenpur Lake in Telangana was declared India's first Biodiversity Heritage Site notified for a lake in 2016, a status later withdrawn and contested, keeping it a recurring current affairs site.

PRELIMS MEMORY BANK

Great Cormorant = Least Concern | **Leucism, not albinism** | **Ameenpur Lake, Telangana** | **Wing spreading to dry**

EXAM TRAP

Leucism causes patchy or overall pale plumage but normal eye colour; albinism removes pigment entirely, including from the eyes, which appear pink or red. A question describing normal eye colour with pale feathers points to leucism, not albinism.

PRELIMS MODEL MCQ

Consider the following statements regarding the Great Cormorant and its recently reported leucistic sighting:

1. The Great Cormorant is listed as Least Concern on the IUCN Red List.
2. Leucism causes complete loss of pigment including in the eyes, identical to albinism.
3. The bird was sighted at Ameenpur Lake near Hyderabad in September 2026.

A 1 and 3 only
B 2 and 3 only
C 1 and 2 only
D 1, 2 and 3

Answer: 1 and 3 only

APPROACH

Statement 2 is incorrect: leucism generally spares eye pigmentation, unlike albinism which removes it entirely, giving pink or red eyes. Eliminate any option pairing statement 2 with the rest.

SPECIES & WILDLIFE WATCH

Tokay Gecko Trafficking Crackdown

WHY IN NEWS

Assam police and forest staff foiled a wildlife smuggling attempt in Guwahati, rescuing dozens of Tokay Geckos being trafficked on the false belief that their body fluid cures cancer, reviving scrutiny of the illegal gecko trade in India's northeast.

26 **Tokay Geckos worth about Rs 3 crore rescued from smugglers in Guwahati, Assam**

CONNECT TO STATIC SYLLABUS

- **GS III: Biodiversity**
  Wildlife trafficking networks and the gap between national protection and international IUCN listing.
- **Prelims: Wildlife Protection Act**
  Schedule classification under the amended Wildlife (Protection) Act, 1972.
- **GS III: Internal Security**
  Organised wildlife crime as a facet of environmental and economic security.

PRELIMS MATRIX

Species	Tokay Gecko, Gekko gecko
IUCN status	Not evaluated on the IUCN Red List, which weakens international enforcement
India legal status	Schedule IV of the Wildlife (Protection) Act, 1972; violation can draw up to three years imprisonment
Appearance	Large nocturnal gecko with blue grey skin and orange or red spots; strong adhesive toe pads
Behaviour	Nocturnal insect hunter; toe pads let it cling to and hang from almost any surface
Range	Nepal eastwards to New Guinea, including India's northeast and West Bengal, in rainforest tree cover

UNIQUE FACT FOR PRELIMS

Traffickers extract the gecko's body fluid with syringes to sell as a supposed cancer cure in parts of East Asia, a claim with no scientific basis, meaning entire wild populations are being drained for a myth.

PRELIMS MEMORY BANK

Tokay Gecko not on IUCN list | **Schedule IV, WPA 1972** | **Trafficked for false cancer cure** | **Toe pads = strong adhesion**

EXAM TRAP

A species being absent from the IUCN Red List does not mean it is unprotected; the Tokay Gecko is not IUCN-evaluated yet still carries Schedule IV protection domestically. Do not assume IUCN silence equals no legal protection.

PRELIMS MODEL MCQ

Consider the following statements about the Tokay Gecko (Gekko gecko):

1. It is listed under Schedule IV of the Wildlife (Protection) Act, 1972 in India.
2. It is evaluated and listed as Endangered on the IUCN Red List.
3. It is trafficked partly due to unproven claims about the medicinal value of its body fluid.

A 1 and 3 only
B 2 and 3 only
C 1 and 2 only
D 1, 2 and 3

Answer: 1 and 3 only

APPROACH
Statement 2 is false: the Tokay Gecko is not evaluated on the IUCN Red List at all, so it cannot carry any IUCN category including Endangered. This eliminates every option containing statement 2.

SPECIES & WILDLIFE WATCH

Musk Deer: A Breeding Programme That Never Began

WHY IN NEWS

A Central Zoo Authority assessment report highlighted that India has never operationalised a sustained captive breeding programme for the endangered musk deer, even as poaching for its musk pod continues to threaten wild populations in the Himalayas.

0 captive breeding centres for musk deer currently active in India despite decades of plans

CONNECT TO STATIC SYLLABUS

- **GS III: Biodiversity**
  Ex-situ conservation failures and species without active breeding programmes despite IUCN threat status.
- **Prelims: Protected Species**
  Musk deer's legal protection and state animal status, a recurring factual pointer.
- **GS III: Wildlife Crime**
  Poaching driven by high value wildlife products, comparable to rhino horn or tiger parts.

PRELIMS MATRIX

IUCN status	Alpine Musk Deer, Moschus chrysogaster, Critically Endangered; other Himalayan musk deer Endangered
Legal protection	Schedule I, Wildlife (Protection) Act, 1972; state animal of Uttarakhand
Appearance	Small, hornless deer with a pair of elongated protruding canine tusks in males; brown coat
Behaviour	Solitary, shy, and active mainly at dawn and dusk in high altitude forest and alpine scrub
Threat driver	Poached for the musk pod, a gland secretion valued in perfumery, worth more than its weight in gold
Breeding history	Kedarnath centre (1982) failed by 2006; Kufri, Almora and Chamoli centres also did not succeed

UNIQUE FACT FOR PRELIMS
Only the male musk deer produces musk, secreted from an abdominal gland to attract mates, which is why poachers target males specifically, skewing the sex ratio of surviving wild populations.

PRELIMS MEMORY BANK

Musk deer = Schedule I | State animal of Uttarakhand | Only males produce musk | No active breeding centre

EXAM TRAP
Musk deer are hornless; do not confuse them with antlered deer species. Their canine tusks, not horns or antlers, are the distinguishing weapon-like feature, a detail often flipped in prelims distractors.

PRELIMS MODEL MCQ

Consider the following statements regarding the musk deer:

1. It is the state animal of Uttarakhand and is listed in Schedule I of the Wildlife (Protection) Act, 1972.
2. Both male and female musk deer produce musk from an abdominal gland.
3. It possesses a pair of elongated canine tusks instead of horns or antlers.

A 1 and 3 only
B 2 and 3 only
C 1 and 2 only
D 1, 2 and 3

Answer: 1 and 3 only

APPROACH
Statement 2 is incorrect: musk is produced only by males, which is precisely why poaching pressure falls disproportionately on the male population. This eliminates every option pairing statement 2 with the rest.

CLEAN ENERGY & POLLUTION

Black Carbon and the Stubble-Burning Trail

WHY IN NEWS

A 2026 study led by IIT Delhi in Kheral village, rural Punjab, used aethalometer modelling to show crop residue burning is a major contributor to black carbon pollution, with plumes travelling across the Indo-Gangetic Plain and reaching Delhi.

48% **average share of black carbon from biomass burning in rural Punjab during the burning season**

CONNECT TO STATIC SYLLABUS

- **GS III: Environment**
  Short-lived climate pollutants (SLCPs) like black carbon versus long-lived greenhouse gases such as CO2.
- **GS III: Agriculture**
  Stubble burning as an externality of mechanised paddy harvesting in Punjab and Haryana.
- **Prelims: Pollutants**
  Source apportionment methods, aethalometer and Positive Matrix Factorisation, occasionally referenced in explanatory notes.

PRELIMS MATRIX

What it is	Black carbon, a short lived climate pollutant from incomplete combustion of biomass and fossil fuels
Biomass burning share	48% average during the burning season; over 90% during active burning hours
Other sources	Power plants 24%, traffic 20.2%, industry and waste incineration the remainder
Climate impact	Absorbs solar radiation and converts it to heat; accelerates snow and glacier melt when deposited on ice
Health impact	Penetrates deep into lungs; linked to cardiovascular and respiratory illness
Spread pattern	HYSPLIT modelling shows Punjab plumes travel across the Indo-Gangetic Plain to Delhi

UNIQUE FACT FOR PRELIMS
Black carbon stays in the atmosphere for only days to weeks, unlike carbon dioxide which persists for centuries, making its reduction one of the fastest available levers for near-term climate mitigation.

PRELIMS MEMORY BANK

Black carbon = short lived pollutant | **48% from biomass burning** | **Accelerates glacier melt** | **Reaches Delhi via wind**

EXAM TRAP
Black carbon is not a greenhouse gas in the conventional sense; it is an aerosol that warms the atmosphere by absorbing sunlight, distinct from gases like methane or CO2 that trap outgoing infrared radiation. Do not club it under greenhouse gases in a statement-based question.

PRELIMS MODEL MCQ

With reference to black carbon, consider the following statements:

1. It is classified as a short lived climate pollutant.
2. A 2026 IIT Delhi study found stubble burning contributed an average of about 48% of black carbon in rural Punjab during the burning season.
3. Black carbon is a greenhouse gas that traps infrared radiation in the same manner as carbon dioxide.

A 1 and 2 only
B 2 and 3 only
C 1 and 3 only
D 1, 2 and 3

Answer: 1 and 2 only

APPROACH
Statement 3 misclassifies black carbon: it warms the atmosphere by absorbing sunlight as an aerosol particle, not by trapping infrared radiation as greenhouse gases do. Drop any option with statement 3.

CLEAN ENERGY & POLLUTION

India's First Port-Based E-Methanol Plant at Kandla

WHY IN NEWS

The foundation stone was laid in September 2026 for a Rs 2,300 crore e-methanol plant at Kandla, Gujarat, a joint venture of Deendayal Port Authority and Assam Petro-Chemicals Ltd, positioning India as a green marine fuel supplier on the Asia-Europe shipping corridor.

150 MT per day, planned e-methanol output once India's first port-based plant at Kandla is complete

CONNECT TO STATIC SYLLABUS

- **GS III: Energy Security**
  Green hydrogen derivatives and India's push into alternative marine fuels.
- **GS III: Environment**
  Shipping decarbonisation and IMO emission-reduction targets for the maritime sector.
- **GS III: Infrastructure**
  Port-based green fuel hubs as part of India's National Green Hydrogen Mission.

PRELIMS MATRIX

What it is	E-methanol, a synthetic zero-carbon fuel made from green hydrogen and biogenic CO2
Location	Kandla Port, Gujarat, one of India's three designated Green Hydrogen Hubs
Investment	Rs 2,300 crore; Deendayal Port Authority holds 76%, Assam Petro-Chemicals Ltd 24%
Capacity plan	Phase I 50 MT per day by January 2027; Phase II adds 100 MT per day by March 2027
Cost edge	Expected production cost near $750 per tonne versus a global rate of about $1,300 per tonne
Jobs	Over 3,500 direct and indirect jobs projected

UNIQUE FACT FOR PRELIMS

E-methanol is produced by combining green hydrogen with captured biogenic carbon dioxide, so the fuel's carbon is recycled rather than newly extracted from fossil sources, making it close to carbon neutral over its lifecycle.

PRELIMS MEMORY BANK

First port based e-methanol plant | Kandla, Gujarat | Rs 2,300 crore JV | Feeds Asia Europe shipping route

EXAM TRAP

E-methanol is not the same as green hydrogen itself; it is a derivative fuel synthesised from green hydrogen and biogenic CO2. A question testing definitions may try to equate the two, which is incorrect.

PRELIMS MODEL MCQ

With reference to India's first port-based e-methanol plant, consider the following statements:

1. It is being set up at Kandla Port in Gujarat as a joint venture involving the Deendayal Port Authority.
2. E-methanol is synthesised using green hydrogen and biogenic carbon dioxide.
3. Its projected production cost is expected to exceed the prevailing global market rate for methanol.

A 1 and 2 only
B 1 and 3 only
C 2 and 3 only
D 1, 2 and 3

Answer: 1 and 2 only

APPROACH

Statement 3 reverses the reported cost advantage: the plant's e-methanol is projected to cost less than the global rate, not more. Eliminate any option that includes statement 3.