MISSION X FOR UPSC

XTERRA

WEEKLY

Weekly Current Affairs Compilation · 15-23 August 2026 · 8 Topics

Grouped by theme for faster revision — Protected Areas in the News, Species & Biodiversity Watch, and Environmental Governance & Global Watch. Every topic includes a Prelims Memory Bank for instant recall.

"innovation in learning"

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PROTECTED AREAS IN THE NEWS

Cauvery Wildlife Sanctuary — Anti-Poaching Camps Bombed After Encounter Killings

WHY IN NEWS

Days after forest personnel shot dead three suspected poachers in an encounter at the Cauvery Wildlife Sanctuary's Hanur range on 14 August 2026, unidentified persons used gelatin explosives to blow up three anti-poaching camps in the sanctuary, prompting a state-level investigation ordered by Karnataka Chief Minister D.K. Shivakumar.

3 ANTI-POACHING CAMPS BLASTED WITH GELATIN EXPLOSIVES

CONNECT TO STATIC SYLLABUS

- **Wildlife (Protection) Act, 1972**
  Legal basis for anti-poaching enforcement powers within sanctuaries
- **Karnataka-Tamil Nadu elephant corridor network**
  Cauvery WLS links to Tamil Nadu's Cauvery North and South sanctuaries
- **Protected-area enforcement vs community rights**
  A recurring tension around anti-poaching camps on sanctuary fringes

PRELIMS MATRIX

Location	Chamarajanagar, Mandya & Ramanagara districts, Karnataka
Established	14 January 1987, under Section 18, Wildlife (Protection) Act, 1972
Area	~1,027.53 sq km (expanded from 510.52 sq km in 2013)
Key fauna	Elephant, crocodile, otter, hump-backed mahseer
Incident	Encounter killing of 3 suspected poachers, Hanur range, 14 Aug 2026
Follow-up attack	Gelatin/dynamite blasts on 3 anti-poaching camps, 15 Aug 2026

UNIQUE FACT FOR PRELIMS

The Cauvery river itself forms the sanctuary's boundary and gives it its name, and the sanctuary is a critical stronghold for the hump-backed mahseer, a critically endangered freshwater fish found almost nowhere else, alongside its better-known elephant and crocodile populations.

PRELIMS MEMORY BANK

Cauvery WLS: Karnataka, ~1,027.53 sq km, est. 1987 | **3 suspected poachers killed in encounter, Hanur, 14 Aug 2026** | **Anti-poaching camps blown up with gelatin explosives, 15 Aug** | **Key fauna: elephant, crocodile, hump-backed mahseer**

EXAM TRAP

Don't confuse the Cauvery Wildlife Sanctuary in Karnataka with the separate Cauvery North and Cauvery South Wildlife Sanctuaries in Tamil Nadu — the three form a contiguous cross-state protected network but are distinct, separately notified sanctuaries.

PRELIMS MODEL MCQ

With reference to the Cauvery Wildlife Sanctuary, consider the following statements:
1. It is located in Karnataka.
2. It was established under Section 18 of the Wildlife (Protection) Act, 1972.
3. The Cauvery North and South Wildlife Sanctuaries in Tamil Nadu are the same protected area as the Cauvery Wildlife Sanctuary in Karnataka.

How many of the statements given above is/are correct?

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 the trap — the Cauvery North and South sanctuaries in Tamil Nadu are distinct, separately notified protected areas that merely connect with Karnataka's Cauvery Wildlife Sanctuary, not the same sanctuary. Statements 1 and 2 are accurate.

SPECIES & BIODIVERSITY WATCH

New Herb Species Leucas droupadiae Discovered on Tamil Nadu's Coast

WHY IN NEWS

Botanists from Annamalai University and Government Siddha Medical College have identified a new herb species, Leucas droupadiae, growing on the sandy coastal dunes of Cuddalore district, Tamil Nadu, and named it in honour of President Droupadi Murmu.

156th KNOWN LEUCAS SPECIES — NAMED FOR PRESIDENT MURMU

CONNECT TO STATIC SYLLABUS

- **Plant taxonomy & type specimens**
  Comparison against global herbaria (Kew, Natural History Museum London) confirmed its novelty
- **Coastal sand dune ecosystems**
  Fragile halophytic habitats along the Coromandel Coast
- **IUCN Red List categories for newly described species**
  New discoveries often receive only a provisional "Data Deficient" classification

PRELIMS MATRIX

Species & IUCN status	Leucas droupadiae; provisionally Data Deficient
Appearance	Unbranched upright stem, ~15 cm tall; shallow fibrous roots
Distinguishing feature	Golden-yellow nutlet fruit with irregular dark brown spots
Family & genus	Lamiaceae; the 156th known Leucas species
Location found	Coastal dunes, Cuddalore district, Tamil Nadu
Key threat	Habitat loss from grazing and eucalyptus plantation expansion

UNIQUE FACT FOR PRELIMS

Leucas droupadiae stands as a single unbranched stem rather than the creeping, branched growth habit typical of its 155 known Leucas relatives, and is currently known from only one specific location, making its long-term survival genuinely uncertain.

PRELIMS MEMORY BANK

Leucas droupadiae = new herb, Cuddalore coastal dunes, TN

Named after President Droupadi Murmu

Distinguishing trait: golden-yellow spotted nutlets

Provisionally Data Deficient; known from one location only

EXAM TRAP

Don't assume Leucas droupadiae is already IUCN Red List assessed — it currently carries only a provisional "Data Deficient" label from the discovering researchers, pending a formal Red List evaluation.

PRELIMS MODEL MCQ

With reference to Leucas droupadiae, consider the following statements:
1. It was discovered on the Coromandel Coast of Tamil Nadu.
2. It belongs to the family Lamiaceae.
3. It has been formally assessed and confirmed as Data Deficient by the IUCN Red List.

How many of the statements given above is/are correct?

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 the trap — the "Data Deficient" label is a provisional classification proposed by the discovering researchers, not a completed formal IUCN Red List assessment. Statements 1 and 2 are accurate.

ENVIRONMENTAL GOVERNANCE & GLOBAL WATCH

Major Oil Spill Threatens Iran's Hara Mangrove Forests

WHY IN NEWS

Satellite images have revealed a major oil spill off the southern coast of Qeshm Island threatening Iran's ecologically vital Hara mangrove forests in the Persian Gulf, contaminating water, damaging roots, and endangering the fish and wildlife these UNESCO-recognised mangroves support.

1972 — YEAR HARA WAS DESIGNATED A UNESCO BIOSPHERE RESERVE

CONNECT TO STATIC SYLLABUS

- **Mangrove ecology & "Blue Carbon" ecosystems**
  Hara sequesters significantly more carbon than terrestrial forests
- **India's own mangrove comparisons**
  Sundarbans, Bhitarkanika, Gulf of Kutch and Pichavaram offer a domestic parallel
- **UNESCO Biosphere Reserves**
  An international conservation designation shared by Hara and several Indian sites

PRELIMS MATRIX

Location	Around Qeshm Island & the Strait of Hormuz, southern Iran
Dominant species	Grey mangrove (Avicennia marina), locally called "Hara"
Designation	UNESCO Biosphere Reserve since 1972 (Hara Protected Area)
Current threat	Major oil spill off Qeshm's southern coast, revealed via satellite imagery
Ecological role	Nursery for shrimp, crabs and fish; major migratory bird hub
Carbon role	A "Blue Carbon" ecosystem, sequestering more carbon than terrestrial forests

UNIQUE FACT FOR PRELIMS

Avicennia marina, the sole tree species forming the Hara forests, has specialised salt-filtering roots that let it thrive in seawater far too saline for ordinary land plants — the same adaptation that makes mangroves worldwide such effective natural coastal buffers.

PRELIMS MEMORY BANK

Hara mangrove forest = Qeshm Island, Persian Gulf, Iran

Dominant species: Avicennia marina (grey mangrove)

UNESCO Biosphere Reserve since 1972

Threatened by a major oil spill, revealed mid-Aug 2026

EXAM TRAP

Don't assume "Blue Carbon" refers to ocean water in general — the term specifically refers to carbon captured and stored by coastal ecosystems like mangroves, seagrasses and salt marshes, not open-ocean carbon generally.

PRELIMS MODEL MCQ

With reference to the Hara mangrove forests, consider the following statements:
1. They are located around Qeshm Island in the Persian Gulf.
2. Avicennia marina is the dominant mangrove species forming the Hara forests.
3. The Hara mangrove forests are located along India's coastline.

How many of the statements given above is/are correct?

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 the trap — Hara is located in Iran's Persian Gulf, not along India's coastline; India's own comparable mangroves include the Sundarbans, Bhitarkanika and Pichavaram. Statements 1 and 2 are accurate.

SPECIES & BIODIVERSITY WATCH

Giloy Used in Ayurvedic Support for CDV-Infected Tigress in Kanha

WHY IN NEWS

In Madhya Pradesh's Kanha Tiger Reserve, veterinarians have used Giloy (Tinospora cordifolia), a common Ayurvedic climbing herb, as a supportive immune-boosting treatment for a young tigress battling canine distemper virus (CDV), one of the most dangerous viral diseases affecting wild carnivores.

0 KNOWN CURE FOR CANINE DISTEMPER VIRUS — SUPPORT ONLY

CONNECT TO STATIC SYLLABUS

- **AYUSH systems & medicinal plants**
  Giloy is a flagship herb in Ayurvedic and folk medicine
- **Canine Distemper Virus in wild carnivores**
  A recurring threat that has killed dozens of tigers in Kanha through 2026
- **Cross-species disease spread**
  Unvaccinated free-ranging dogs are the main CDV vector to wild felids

PRELIMS MATRIX

Species & family	Tinospora cordifolia (Giloy/Guduchi/Amrita); family Menispermaceae
Growth habit	Climbing shrub on other trees; cultivated by stem cutting (May-June)
Distribution	Native to India; also found in China, Australia, tropical Africa
Used for	Immune-boosting/adaptogenic support in Ayurvedic and folk medicine
Current case	Supportive treatment for a CDV-infected young tigress, Kanha Tiger Reserve
CDV toll in Kanha	Part of a wider 2026 outbreak; dozens of tiger deaths reported in the state

UNIQUE FACT FOR PRELIMS

Giloy is also known as "Amrita," believed in Hindu tradition to be the ambrosia of the god Indra, and virtually every part of the plant — stem, root and leaves — is used in Ayurvedic medicine, though the stem is considered to hold the most beneficial compounds.

PRELIMS MEMORY BANK

- Giloy = Tinospora cordifolia; family Menispermaceae
- Used as supportive treatment for CDV-hit tigress, Kanha TR
- Also called Guduchi, Amrita; a climbing shrub
- CDV spreads mainly via unvaccinated dogs; no known cure

EXAM TRAP

Don't assume Giloy is a cure for Canine Distemper Virus — CDV has no known cure; Giloy is being used only as a supportive, immune-boosting adjunct alongside standard veterinary care, not as a standalone treatment.

PRELIMS MODEL MCQ

With reference to Giloy and its recent use in Kanha Tiger Reserve, consider the following statements:
1. Giloy (Tinospora cordifolia) belongs to the family Menispermaceae.
2. Canine Distemper Virus has a well-established cure in veterinary medicine.
3. Giloy is native to India and also found in China, Australia and parts of Africa.

How many of the statements given above is/are correct?

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

Answer: 1 and 3 only

Approach
Statement 2 is the trap — CDV has no known cure; treatment remains supportive only. Statements 1 and 3 are accurate, established facts about Giloy.

PROTECTED AREAS IN THE NEWS

Rare Melanistic Leopard Cub Spotted Near Senchal Wildlife Sanctuary

WHY IN NEWS

A black melanistic leopard cub has been spotted close to the Senchal Wildlife Sanctuary in the Darjeeling hills, drawing attention to one of India's oldest wildlife sanctuaries and its role as a habitat corridor in the eastern Himalaya.

1915 — ONE OF INDIA'S OLDEST WILDLIFE SANCTUARIES

CONNECT TO STATIC SYLLABUS

- **Melanism in wild cats**
  A genetic pigment variation seen in leopards, distinct from the "black panther" myth
- **Protected-area vintage & extensions**
  Senchal is one of India's oldest sanctuaries, linked to Singalila National Park
- **Darjeeling's water-biodiversity link**
  The sanctuary's two lakes supply the town's drinking water

PRELIMS MATRIX

Location	Darjeeling district, West Bengal
Established	1915, one of India's oldest wildlife sanctuaries
Area & elevation	38.6 sq km; 1,500-2,600 m elevation
Key fauna	Indian leopard, Himalayan black bear, barking deer
Recent sighting	Black melanistic leopard cub spotted close to the sanctuary
Landscape link	South-eastern extension of Singalila National Park

UNIQUE FACT FOR PRELIMS

Senchal's two lakes have supplied Darjeeling town's drinking water for over a century, making this one of the rare Indian sanctuaries where a core wildlife habitat and a town's municipal water source are one and the same protected landscape.

PRELIMS MEMORY BANK

Senchal WLS: Darjeeling, WB; est. 1915, one of India's oldest

Area 38.6 sq km; elevation 1,500-2,600 m

Black melanistic leopard cub sighted nearby

South-east extension of Singalila National Park

EXAM TRAP

Don't assume melanistic leopards are a separate species from ordinary leopards — "black panther" is simply a melanistic colour variant of the same leopard (or jaguar) species, caused by excess dark pigment, not a distinct taxon.

PRELIMS MODEL MCQ

With reference to Senchal Wildlife Sanctuary, consider the following statements:
1. It is one of the oldest wildlife sanctuaries in India, established in 1915.
2. It is a south-eastern extension of Singalila National Park.
3. A melanistic leopard is a genetically distinct species from the common Indian leopard.

How many of the statements given above is/are correct?

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 the trap — melanism is a colour-variant trait within the same leopard species, not a separate species. Statements 1 and 2 are accurate.

ENVIRONMENTAL GOVERNANCE & GLOBAL WATCH

India's Registration Committee Moves to Restrict Glyphosate Use

WHY IN NEWS

India's Registration Committee decided at its 474th meeting that glyphosate use should be restricted to trained personnel or Pest Control Operators (PCOs), citing occupational health hazards, though the final regulatory decision now rests with the Department of Agriculture and Farmers Welfare.

474th REGISTRATION COMMITTEE MEETING RESTRICTS GLYPHOSATE USE

CONNECT TO STATIC SYLLABUS

- **Insecticides Act, 1968 & the Registration Committee**
  Statutory basis for regulating pesticide use in India
- **Precautionary principle in environmental regulation**
  The RC explicitly invoked this principle in reaching its decision
- **Herbicide-tolerant crop debate**
  Unrestricted glyphosate use is linked to illegal HT cotton cultivation in India

PRELIMS MATRIX

Chemical	Glyphosate, a broad-spectrum herbicide
Registered use in India	Tea plantations and non-cropped areas only
Latest decision	RC's 474th meeting (30 July 2026), announced 13 August 2026
New restriction proposed	Use only through trained personnel/Pest Control Operators (PCOs)
Legal status	Matter remains sub judice before the Delhi High Court
Final authority	Department of Agriculture and Farmers Welfare (DA&FW)

UNIQUE FACT FOR PRELIMS

The International Agency for Research on Cancer has classified glyphosate as a "probable human carcinogen," yet India has never imposed an outright ban — successive restriction orders have instead been legally challenged and stayed, leaving its regulatory status unsettled for years.

PRELIMS MEMORY BANK

- RC restricts glyphosate use to trained PCOs, 474th meeting
- Registered in India only for tea & non-cropped areas
- Matter remains sub judice, Delhi High Court
- Final call rests with Dept of Agriculture & Farmers Welfare

EXAM TRAP

Don't say glyphosate has been "banned" in India based on this decision — it remains a restriction recommendation on who may apply it, not a ban on the chemical itself, and even that restriction awaits the Agriculture Ministry's final view.

PRELIMS MODEL MCQ

With reference to glyphosate regulation in India, consider the following statements:
1. Glyphosate is registered for use in India only in tea plantations and non-cropped areas.
2. The Registration Committee's August 2026 decision imposes a nationwide ban on glyphosate.
3. The matter of glyphosate regulation remains sub judice before the Delhi High Court.

How many of the statements given above is/are correct?

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

Answer: 1 and 3 only

Approach
Statement 2 is the trap — the RC's decision restricts glyphosate use to trained personnel/PCOs; it does not impose an outright ban, and even this restriction awaits the Agriculture Ministry's final view. Statements 1 and 3 are accurate.

SPECIES & BIODIVERSITY WATCH

IIT Mandi Develops Sea-Urchin-Inspired Coating for Bone Implants

WHY IN NEWS

Researchers at IIT Mandi have developed a nature-inspired dual-layer coating for 3D-printed bone implants, using microscopic hydroxyapatite structures that mimic the spiny surface of a sea urchin to fight bacterial infection while improving bone integration.

5 RESEARCHERS BEHIND IIT MANDI'S SEA-URCHIN-INSPIRED COATING

CONNECT TO STATIC SYLLABUS

- **Echinodermata & pentaradial symmetry**
  Sea urchins' basic body plan, a recurring General Science topic
- **Biomimicry in materials science**
  Nature-inspired engineering solutions, a recurring Science & Tech theme
- **3D printing in biomedical applications**
  Customisable, patient-specific implant technology

PRELIMS MATRIX

Class & symmetry	Echinoidea (phylum Echinodermata); adults show pentaradial symmetry
Appearance & habits	Spiny, globular body with a hard calcareous "test"; moves via tube feet
Ecological role	Grazes algae; important prey for starfish, sea otters, triggerfish
Bio-inspired application	Hydroxyapatite needle clusters mimicking urchin spines on implants
Published in	Chemical Engineering Journal, IIT Mandi study, Aug 2026
Dual benefit	Mechanically disrupts bacteria + improves bone-implant integration

UNIQUE FACT FOR PRELIMS

The IIT Mandi coating works by physically damaging bacteria on contact with its microscopic spiny structure, offering a way to fight implant infections without relying on antibiotics or antibacterial chemicals — a design principle borrowed directly from the sea urchin's own defensive spines.

PRELIMS MEMORY BANK

Sea urchins = class Echinoidea; pentaradial symmetry

IIT Mandi: sea-urchin-inspired coating for bone implants

Coating mechanically disrupts bacteria, aids bone integration

Published in Chemical Engineering Journal, Aug 2026

EXAM TRAP

Don't lump sea urchins together with starfish or sea cucumbers as "the same group" loosely — all three belong to the phylum Echinodermata, but sea urchins form their own distinct class, Echinoidea, separate from Asteroidea (starfish) and Holothuroidea (sea cucumbers).

PRELIMS MODEL MCQ

With reference to sea urchins and the IIT Mandi study, consider the following statements:
1. Sea urchins belong to the phylum Echinodermata.
2. Adult sea urchins typically exhibit pentaradial (five-fold) symmetry.
3. The IIT Mandi coating uses antibiotics to prevent bacterial infection on implants.

How many of the statements given above is/are correct?

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 the trap — the coating works by mechanically disrupting bacteria through its spiny microstructure, explicitly avoiding reliance on antibiotics. Statements 1 and 2 are accurate.

SPECIES & BIODIVERSITY WATCH

Long-Tailed Marmot — The Golden Marmot of the Trans-Himalaya

WHY IN NEWS

The long-tailed marmot, also called the golden marmot, has featured recently in UPSC current-affairs coverage as a high-altitude rodent found in Ladakh and Jammu & Kashmir, valued ecologically as a key prey base for endangered carnivores like the snow leopard in the Trans-Himalayan landscape.

3,200-4,850m ELEVATION RANGE OF THE LONG-TAILED MARMOT IN INDIA

CONNECT TO STATIC SYLLABUS

- **Trans-Himalayan cold-desert ecosystem**
  Alpine meadows and rocky slopes above 3,000 m
- **Prey-base ecology & snow leopard conservation**
  Marmots are a critical food source for high-altitude predators
- **India's two marmot species**
  Long-tailed marmot vs Himalayan marmot, distinguished by range and elevation

PRELIMS MATRIX

Species & IUCN status	Marmota caudata; Least Concern (IUCN)
Appearance	Golden-buff to orange-brown coat, robust body, long tail; up to 9 kg
Behaviour & habits	Diurnal, social, hibernates in winter; herbivorous grazer
Habitat & range in India	Alpine meadows/rocky slopes, 3,200-4,850 m, in Ladakh and J&K
Distinguished from	Himalayan marmot (Marmota himalayana), found at generally higher elevations
Ecological role	Important prey species for snow leopards and other Trans-Himalayan carnivores

UNIQUE FACT FOR PRELIMS

A long-tailed marmot's body weight can swing dramatically across the year — it may weigh as little as 1.5 kg in spring right after hibernation, then reach up to 9 kg by autumn, with more than a quarter of that autumn weight being pure fat reserves for winter survival.

PRELIMS MEMORY BANK

- Long-tailed/golden marmot = Marmota caudata; IUCN Least Concern
- Found in Ladakh & J&K, 3,200-4,850 m elevation
- Key prey base for snow leopard in Trans-Himalaya
- Distinct from the Himalayan marmot (Marmota himalayana)

EXAM TRAP

Don't confuse the long-tailed marmot with the Himalayan marmot — India has two distinct marmot species, and while both occur in the Trans-Himalaya, they differ in typical elevation range and are separate species, not two names for the same animal.

PRELIMS MODEL MCQ

With reference to the long-tailed marmot, consider the following statements:
1. It is also known as the golden marmot.
2. It is listed as Least Concern by the IUCN.
3. The long-tailed marmot and the Himalayan marmot are the same species found only in Ladakh.

How many of the statements given above is/are correct?

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 the trap — India has two distinct marmot species, the long-tailed marmot and the Himalayan marmot, which differ in range and typical elevation; they are not the same species. Statements 1 and 2 are accurate.