

2. WORLD' MIGRATORY SPECIES – ENVIRONMENT

The global decline in migratory wildlife has reached a critical threshold, as highlighted in the 2024 State of the World's Migratory Species report. This first-of-its-kind comprehensive assessment serves as a stark warning ahead of the CMS COP 15 in Brazil, scheduled for March 23, 2026.

1. Background- The Phenomenon of Migration

Migration is a biological necessity for many species to survive, involving seasonal movements between breeding and non-breeding grounds. These journeys often span thousands of miles and cross multiple international borders, making migratory animals uniquely vulnerable. They do not belong to a single nation but are a shared global heritage, requiring a "Range State" approach—where every country along the migration path collaborates for their protection.

2. Definitions and Key Concepts

Term	Definition and Context
Migratory Species	Animals that move cyclically and predictably across one or more national jurisdictional boundaries due to seasonal changes or food availability.
Bonn Convention	Another name for the CMS, named after the German city where it was negotiated. It is the only global treaty specializing in migratory species.
Range State	Any nation that exercises jurisdiction over any part of the range of a migratory species, or a state whose flag vessels take that species outside national jurisdictional limits.
Flyway	A geographic path or "highway" in the sky used by bird populations during their annual migrations between breeding and wintering grounds.

3. Key Highlights of the 2024 Global Report

The report analyzed 1,189 species listed under CMS and linked data to 3,000 additional migratory species.

Widespread Decline- Approximately 49% of CMS-listed migratory species are currently experiencing population declines.

Extinction Risk- 24% of these species are now classified as facing extinction.

Recent Acceleration- In the last two years alone, the risk of population decline has surged by 5%, and the extinction risk has crept up by 2%.

The "Invisible" Decline- Of the 1,189 listed species, a staggering 582 species are showing a downward trend in their numbers.

4. Major Threats to Migratory Wildlife

Migratory species face a "triple whammy" of threats across their entire journey-

Direct Overexploitation- Includes unsustainable hunting, illegal fishing, and the wildlife trade.

Habitat Loss- The destruction of wetlands, forests, and grasslands used as "stopover sites."

Infrastructure Fragmentation- Linear barriers like roads, railways, high-tension fences, and pipelines act as physical walls, preventing animals from reaching their destination.

Disease (The H5N1 Factor)- The highly pathogenic Avian Influenza (HPAI) has jumped from birds to mammals. Highly vulnerable species include the African Penguin, Humboldt Penguin, Peruvian Pelican, and the Red-Crowned Crane.

5. The Framework of CMS (Bonn Convention)

CMS functions under the United Nations Environment Programme (UNEP) and classifies species into two primary Appendices-

Feature	Appendix I (Endangered)	Appendix II (Cooperation)
Status	Species threatened with extinction.	Species with unfavorable status needing agreements.

Protection	Requires strict protection; hunting/capturing is prohibited.	Focuses on international management and collaboration.
Example Groups	103 Birds, 28 Terrestrial Mammals, 26 Fish.	Species that would benefit significantly from international truces.
Obligation	Conserve/restore habitats and remove obstacles.	Range States must conclude formal agreements for conservation.

6. India's Role and Contribution

India is a critical hub for migratory species, particularly as a core part of the Central Asian Flyway (CAF).

Signatory- India has been a party to CMS since 1983.

Specific MoUs- India has signed non-legally binding agreements for the conservation of-

1. Raptors (Birds of Prey)
2. Dugongs (Sea Cows)
3. Siberian Cranes
4. Marine Turtles

Iconic Migrants in India- The country provides temporary refuge to the Amur Falcon (Nagaland is the 'Falcon Capital'), Asian Elephant, Great Indian Bustard, and the Olive Ridley Sea Turtle.

Global Biodiversity Hub- Despite having only 2.4% of the world's land, India hosts 8% of global biodiversity, making its conservation efforts vital for the CMS success.

7. Definitions of IUCN Red List Categories

The CMS report relies heavily on IUCN (International Union for Conservation of Nature) data to assess risk levels.

1. **Extinct (EX)**- No reasonable doubt that the last individual has died.
2. **Critically Endangered (CR)**- Facing an extremely high risk of extinction in the wild.
3. **Endangered (EN)**- Facing a very high risk of extinction in the wild.
4. **Vulnerable (VU)**- Facing a high risk of extinction in the wild.

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