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Monarch Butterfly Population Surges 64% — Largest Recovery Since 2018

23 March 2026

SUBJECTS COVERED

ENVIRONMENT

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WHY IN NEWS

Mexico’s Ministry of Environment and Natural Resources (Semarnat), the National Commission of Natural Protected Areas (Conanp), and WWF Mexico announced on March 18, 2026, that the eastern monarch butterfly population in Mexican overwintering forests increased by 64% during the 2025-2026 season — the largest recovery since 2018.

Monarch Butterfly Population Recovery — Hope Amid a Long-Term Decline

Key Data

PARAMETER	2024-25	2025-26	CHANGE
Forest area occupied by colonies	1.79 hectares	2.93 hectares	+64%
Forest degradation	9.21 acres	6.30 acres	-32%
Consecutive year of growth	1st	2nd	Sustained recovery

The 2.93 hectares occupied this season represents the **largest recovery since 2018** and marks the second consecutive year of population growth.

The Great Monarch Migration

The eastern monarch butterfly (*Danaus plexippus*) undertakes one of the most spectacular migrations in the animal kingdom:

- **Distance:** Up to **4,800 km** one-way
- **Route:** Southern Canada and northern United States to central Mexico
- **Duration:** August-November (southward); March-June (northward, multi-generational)
- **Destination:** Oyamel fir forests in the mountains of Michoacan and the State of Mexico
- **Altitude:** 2,400-3,600 metres in the Trans-Mexican Volcanic Belt
- **Generations:** The southward migration is completed by a single “super generation” that lives 8-9 months; the return north takes 3-4 generations

The butterflies cluster on oyamel fir trees in densities of up to **10 million per hectare**, creating one of nature’s most breathtaking spectacles.

Reasons for the 2025-26 Recovery

The population surge is attributed to multiple factors:

- 1 **Favourable breeding conditions in the US** — Spring and summer 2025 were less dry than 2024, leading to greater egg production and larva survival rates
- 2 **Milkweed availability** — Reduced drought meant more milkweed (*Asclepias* spp.), the sole food plant for monarch caterpillars, was available
- 3 **Nectar during migration** — Higher rainfall produced more flowering plants along migration routes, providing critical nectar fuel
- 4 **Reduced forest degradation** — Habitat loss in Mexican overwintering sites decreased by approximately 32%

The Long-Term Crisis

While the 64% annual surge is encouraging, the broader picture remains alarming:

PERIOD	AREA OCCUPIED	STATUS
1996-97 (peak)	18.19 hectares	Historical high
2013-14 (lowest)	0.67 hectares	All-time low
2023-24	0.90 hectares	Near-record low
2024-25	1.79 hectares	Recovery begins
2025-26	2.93 hectares	+64%, best since 2018
Conservation target	6.00 hectares	Long-term goal

The eastern monarch population remains **down by more than 80-90% since the 1990s**. The 2.93 hectares is still less than half of the 6-hectare conservation target.

Threats to Monarchs

THREAT	IMPACT
Habitat loss	Agricultural expansion destroying milkweed habitat in the US Midwest
Herbicide use	Glyphosate-resistant crops have eliminated milkweed from farmland
Climate change	Altered temperature and precipitation patterns disrupt migration timing
Illegal logging	Degrades overwintering habitat in Mexican forests
Extreme weather	Winter storms and droughts kill overwintering populations

Conservation Status

- **IUCN Red List: Endangered** (listed July 2022) — specifically the migratory subspecies
- **CITES:** Not listed (no international trade regulation)
- **US Endangered Species Act:** Listing was found “warranted but precluded” in 2020; under review
- **Canada:** Listed as Endangered under the Species at Risk Act

Monarch Butterfly Biosphere Reserve

The primary overwintering site is protected as the **Monarch Butterfly Biosphere Reserve**:

- **Location:** Michoacan and State of Mexico, Mexico
- **Area:** 56,259 hectares
- **UNESCO World Heritage Site:** 2008
- **Core zones:** 13,551 hectares (no entry except for research)
- **Buffer zones:** 42,707 hectares (sustainable forestry allowed)

India Connection — Migratory Species Conservation

India is a party to the **Convention on Migratory Species (CMS)**, also known as the Bonn Convention. While monarchs do not migrate to India, the monarch case offers lessons for India’s own migratory species:

- **Amur Falcon:** Migrates from Siberia to Southern Africa via Nagaland
- **Bar-headed Goose:** Central Asian Flyway
- **Olive Ridley Sea Turtle:** Nests at Gahirmatha (Odisha)

The **CMS COP14** (held in Samarkand, Uzbekistan, February 2024) adopted the first-ever **State of the World’s Migratory Species** report, highlighting that 44% of migratory species show declining populations.

UPSC RELEVANCE

Monarch butterfly IUCN status, migration route, overwintering site, UNESCO World Heritage status, CMS/Bonn Convention.

MAINS GS-3:

International conservation of migratory species; role of climate change in biodiversity loss; lessons from monarch conservation for India's migratory species management.

★ FACTS CORNER — KNOWLEDGEPEDIA

MONARCH BUTTERFLY (DANAUS PLEXIPPUS):

IUCN Status: Endangered (listed July 2022)

Migration: Up to 4,800 km (Canada/US to Mexico)

Overwintering site: Oyamel fir forests, Michoacan and State of Mexico

Food plant (caterpillar): Milkweed (Asclepias spp.)

Lifespan: Regular generation 2-5 weeks; migratory “super generation” 8-9 months

2025-26 SEASON:

Area occupied: 2.93 hectares (+64% from 1.79 ha)

Largest recovery since 2018

Announced: March 18, 2026 by Semarnat, Conanp, WWF Mexico

Forest degradation: 6.30 acres (down from 9.21)

MONARCH BUTTERFLY BIOSPHERE RESERVE:

Location: Michoacan and State of Mexico, Mexico

Area: 56,259 hectares

UNESCO World Heritage Site: 2008

Core zones: 13,551 ha; Buffer zones: 42,707 ha

LONG-TERM TREND:

1996-97 peak: 18.19 hectares

2013-14 low: 0.67 hectares

Conservation target: 6.00 hectares

Current: 2.93 hectares (down ~84% from peak)

CONVENTION ON MIGRATORY SPECIES (CMS/BONN CONVENTION):

Adopted: 1979 (Bonn, Germany)

Entered into force: 1983

Parties: 133 countries (India is a party)

COP14: February 2024, Samarkand, Uzbekistan

Secretariat: Bonn, Germany

OTHER RELEVANT FACTS:

44% of CMS-listed migratory species show declining populations (State of World's Migratory Species 2024)

India's Central Asian Flyway covers 30 countries

India hosted CMS COP13 in Gandhinagar, Gujarat (2020)

Sources: [WWF](#), [Down to Earth](#), [Mexico News Daily](#)

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