



Tiger Translocation for Genetic Diversity

[Source: HT](#)

Why in News?

Recently, the **Odisha** government translocated a **tigress named Jamuna** from [Tadoba Andhari Tiger Reserve](#) in Maharashtra to the [Similipal Tiger Reserve \(STR\)](#) in Odisha.

- Translocation was aimed at **enhancing genetic diversity** in Similipal, where there are concerns about **inbreeding** due to a **small population**.

What are Key Facts About this Translocation?

- **Previous Translocation Attempts:** In **2018**, a tigress named **Sundari** was relocated to [Satkosia Tiger Reserve, Odisha](#).
 - The [National Tiger Conservation Authority \(NTCA\)](#) gives approval for the translocation project.
- **Translocation of Black Tigers:**
 - **Population:** The Odisha Tiger Estimation conducted in **2024** found a total **24 adult tigers** in Similipal, with a notable presence of **pseudo-melanistic tigers**.
 - STR is the **only habitat** where these **black tigers** are found in the wild.
 - **Inbreeding Concerns:** The high number of **pseudo-melanistic tigers (13 out of 24 adults)** in Similipal raises concerns about **inbreeding and lack of genetic flow**, prompting the need for **external genetic input**.
 - **Future Initiatives:** Plans are in place to establish a **melanistic tiger safari in Similipal**, which would be the first of its kind in the world.

Note:

- **Black or pseudo-melanistic tigers** exist because of a **genetic trait** that creates a **unique phenotype** and indicates a **lack of genetic diversity**.
 - They are characterised by **wide and merged stripes**

What are the Key Facts About Similipal Tiger Reserve?

- **Location:** Similipal tiger reserve and national park is located in **Odisha's Mayurbhanj district**.
 - It was designated as a **tiger reserve** under [Project Tiger](#) in **1973**.
 - In **2009**, [UNESCO](#) included **Simlipal National Park** in its list of [Biosphere Reserve](#).
- **Geography:** **Joranda and Barehipani waterfalls** and **Khairiburu and Meghashini peaks** are located in Simlipal national park.
 - **Burhabalanga, Palpala Bandan, Salandi, Kahairi, and Deo rivers** pass through it.
 - It is named after the **'Simul' (Silk Cotton) tree**.
- **Biodiversity:** Forest type is primarily dominated by [tropical moist deciduous forests](#).
 - **Mammals:** [Tigers](#), [leopards](#), sambar deer, barking deer, gaurs, jungle cats, wild boars,...

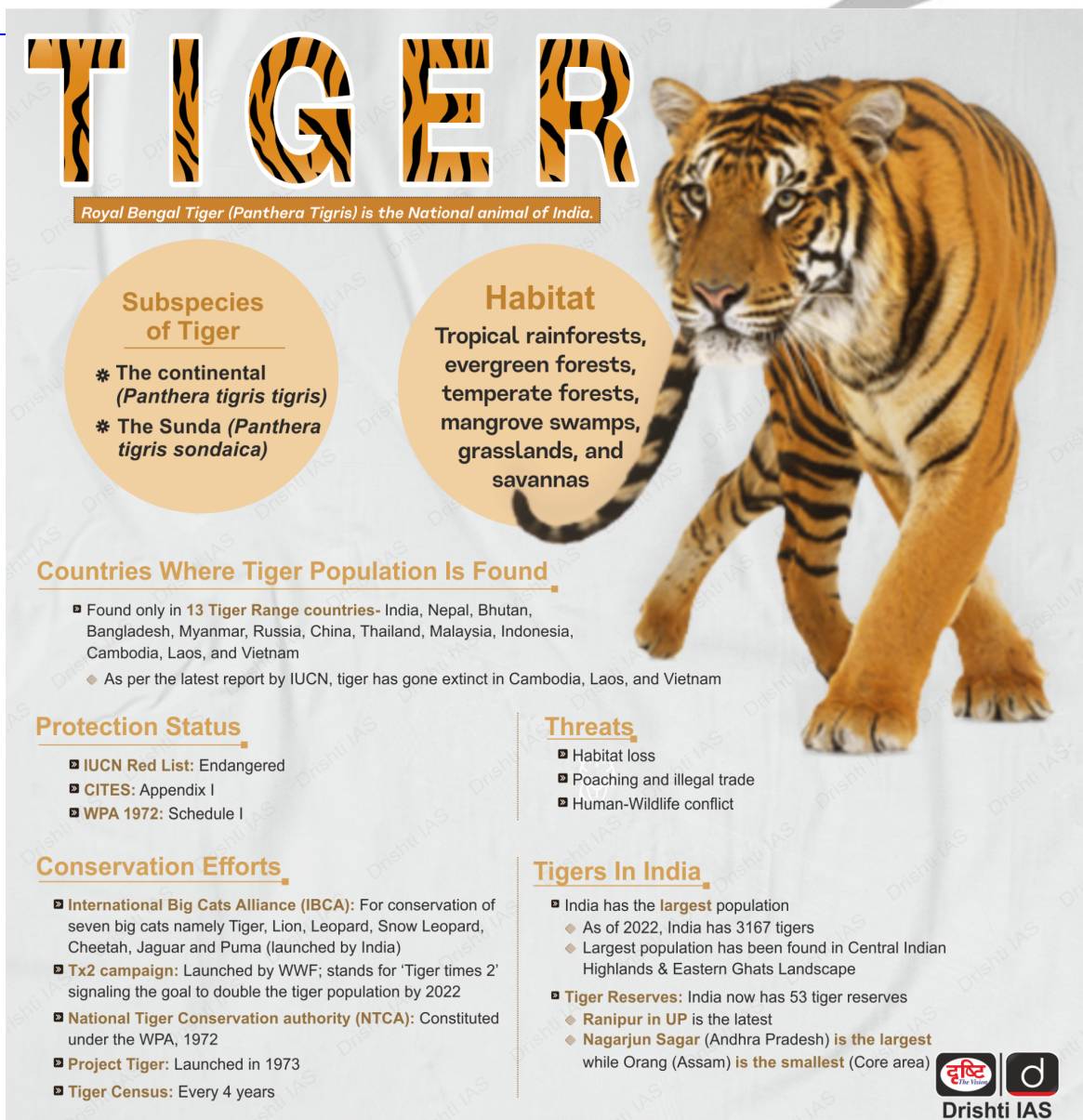
four-horned antelopes, giant squirrels, and common langurs.

- **Avian Species:** **Grey hornbills**, Indian pied hornbills, and **Malabar pied hornbills**.
- **Reptile:** **Mugger crocodiles** inhabit Khairi and Deo Rivers.
- **Indigenous Population:** It is inhabited by indigenous tribes like **Kolha, Santhala, Bhumija, Bhatudi, Gondas, Khadia, Mankadia, and Sahara**.
 - The tribals worship **sacred groves** called **Jharia**.

What are the Key Facts About Tadoba Andhari Tiger Reserve?

- **Location:** It is situated in **Maharashtra** and is the **oldest and largest national park** in the state.
 - **Tadoba/Taru** is the **local deity** revered by the tribal people in the area.
 - **Andhari** is derived from the **Andhari river** which flows through the reserve.
- **Geography:** It contains two primary lakes, **Tadoba Lake and Kolsa Lake**, along with the **Tadoba River**.
- **Biodiversity:**
 - **Flora:** **Teak, semal, tendu**, beheda, karaya gum, mahua madhuca, **arjun, bamboo** etc.
 - **Fauna:** Tigers, Indian leopards, sloth bears, gaurs, nilgai, **dholes**, small Indian civets, sambars, **spotted deer, barking deer, and chital**.

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The infographic features the word 'TIGER' in large, stylized letters with a tiger-stripe pattern. To the right is a detailed illustration of a tiger walking. Below the title, a caption states: 'Royal Bengal Tiger (Panthera Tigris) is the National animal of India.' Two circular callouts provide details: 'Subspecies of Tiger' lists 'The continental (Panthera tigris tigris)' and 'The Sunda (Panthera tigris sondaica)'; 'Habitat' lists 'Tropical rainforests, evergreen forests, temperate forests, mangrove swamps, grasslands, and savannas'. A section titled 'Countries Where Tiger Population Is Found' lists 13 countries and notes that tigers are extinct in Cambodia, Laos, and Vietnam. 'Protection Status' includes IUCN Red List (Endangered), CITES (Appendix I), and WPA 1972 (Schedule I). 'Threats' include habitat loss, poaching, and human-wildlife conflict. 'Conservation Efforts' mentions the IBCA, Tx2 campaign, NTCA, Project Tiger, and Tiger Census. 'Tigers In India' notes India has the largest population (3167 in 2022), with Ranipur in UP being the latest and Nagarjun Sagar in Andhra Pradesh being the largest, while Orang in Assam is the smallest. The Drishti IAS logo is in the bottom right corner.

TIGER

Royal Bengal Tiger (*Panthera Tigris*) is the National animal of India.

Subspecies of Tiger

- * The continental (*Panthera tigris tigris*)
- * The Sunda (*Panthera tigris sondaica*)

Habitat

Tropical rainforests, evergreen forests, temperate forests, mangrove swamps, grasslands, and savannas

Countries Where Tiger Population Is Found

- Found only in 13 Tiger Range countries- India, Nepal, Bhutan, Bangladesh, Myanmar, Russia, China, Thailand, Malaysia, Indonesia, Cambodia, Laos, and Vietnam
- As per the latest report by IUCN, tiger has gone extinct in Cambodia, Laos, and Vietnam

Protection Status

- IUCN Red List: Endangered
- CITES: Appendix I
- WPA 1972: Schedule I

Threats



- Habitat loss
- Poaching and illegal trade
- Human-Wildlife conflict

Conservation Efforts

- International Big Cats Alliance (IBCA):** For conservation of seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma (launched by India)
- Tx2 campaign:** Launched by WWF; stands for 'Tiger times 2' signaling the goal to double the tiger population by 2022
- National Tiger Conservation authority (NTCA):** Constituted under the WPA, 1972
- Project Tiger:** Launched in 1973
- Tiger Census:** Every 4 years

Tigers In India

- India has the largest population
 - As of 2022, India has 3167 tigers
 - Largest population has been found in Central Indian Highlands & Eastern Ghats Landscape
- Tiger Reserves:** India now has 53 tiger reserves
 - Ranipur in UP is the latest
 - Nagarjun Sagar (Andhra Pradesh) is the largest while Orang (Assam) is the smallest (Core area)

 
Drishti IAS

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. Among the following Tiger Reserves, which one has the largest area under “Critical Tiger Habitat”? (2020)

- (a) Corbett
- (b) Ranthambore
- (c) Nagarjunasagar-Srisaïlam
- (d) Sundarbans

Ans: (c)

Q. Consider the following protected areas: (2012)

1. Bandipur
2. Bhitarkanika
3. Manas
4. Sunderbans

Which of the above are declared Tiger Reserves?

- (a) 1 and 2 only
- (b) 1, 3 and 4 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

Ans: (b)