

Critically endangered Asian Giant Tortoise has been Successfully Reintroduced into the Zeliang Community

On August 2025, ten critically endangered Asian Giant Tortoises were successfully reintroduced into the Zeliang Community Reserve in Nagaland's Peren district, led by the Nagaland Forest Department and the India Turtle Conservation Programme (ITCP). The effort is a significant conservation milestone, with local youth enlisted as "Tortoise Guardians" to monitor and protect the released reptiles.

The reintroduction process

- **Captive breeding:** The ten tortoises released were born in 2019 and bred at the Nagaland Zoological Park in Dimapur, which holds India's largest captive population of the species.
- **Aided by local youth:** The conservation project engaged local Naga tribal youths from the community, training them as "Tortoise Guardians" to monitor the animals, assist with data collection, and raise awareness to curb poaching.
- **Telemetry tracking:** The tortoises were tagged with very high-frequency (VHF) transmitters. This allows the joint project team to study their dispersal and survival rates within the deep rainforests.
- **"Soft release" method:** Initially, the animals were placed in a large, fenced enclosure to help them acclimate to the wild. The barrier was removed once the monsoon arrived, allowing the tortoises to disperse naturally.

Ecological importance

The reintroduction is a major step in restoring the local ecosystem, as the Asian Giant Tortoise is considered a "keystone species".

- **Forest regeneration:** The tortoises, known as the "small elephants of the forest," help regenerate the forest by dispersing seeds.
- **Ecosystem health:** They play a crucial role in maintaining forest health by scavenging and turning over soil.

Addressing the threats

The species, which had nearly vanished from Nagaland over a decade ago, faces primary threats from hunting for consumption, habitat loss due to slash-and-burn cultivation (jhum), and habitat degradation. This reintroduction directly addresses these issues by involving the local communities. Village leaders and local youth, who were once part of the problem, are now integral to the solution.

Explanation of Exam Oriented Key Terms

01

Asian Giant Tortoises

The Asian giant tortoise (*Manouria emys*) is the largest land tortoise in mainland Asia and is considered one of the world's oldest tortoise lineages. Known for its critical role in tropical forest ecosystems, it is a species of significant conservation concern.

Scientific classification

- **Scientific Name:** *Manouria emys*
- **Subspecies:** It has two known subspecies: *Manouria emys emys* and *Manouria emys phayrei*.

Habitat and distribution

- **Distribution:** Found in the tropical and subtropical forests of India (primarily the Northeast states like Nagaland and Arunachal Pradesh), Bangladesh, Myanmar, Thailand, Malaysia, and Indonesia.
- **Habitat:** Prefers dense, moist lowland and hill forests, which are rich in leaf litter and undergrowth. It thrives in humid conditions.
- **Specific Indian Habitats:** Notable populations in India exist in the Nengpui Wildlife Sanctuary (Mizoram), Nongkhylllem Wildlife Sanctuary (Meghalaya), and the North Cachar Hills (Assam).

Biological characteristics

- **Size:** Can grow up to 60 cm in length and weigh over 35 kg.
- **Diet:** A herbivore that feeds on leaves, fruits, mushrooms, tubers, and decomposing plant matter. Some reports suggest it may also consume small invertebrates and frogs.
- **Nesting:** Uniquely, it is the only tortoise species known to build and guard an above-ground nest. The female constructs a large mound of leaf litter, lays up to 50 eggs, and then guards the nest against predators.
- **Longevity:** Can live for 80 to 100 years.

Ecological role

- **Keystone Species:** As a keystone species, it is vital for its ecosystem. It contributes to forest regeneration by acting as a seed disperser and aids in soil aeration through its digging.
- **Nickname:** It is often called the "small elephant of the forest" due to its ecological role in scavenging and seed dispersal on the forest floor.

Conservation status and threats

- **IUCN Status:** Critically Endangered.
- **CITES Status:** Listed under Appendix II.
- **Indian Wildlife (Protection) Act, 1972:** Schedule IV.

Major Threats

- **Hunting:** Poaching for its meat and the illegal pet trade is a significant threat.
- **Habitat Loss:** Deforestation, slash-and-burn agriculture, and other human activities destroy its forested habitats.
- **Anthropogenic Disturbances:** Infrastructure development and large-scale bamboo cutting remove vital food sources.
- **Slow Reproduction:** The tortoise's long maturation period and slow reproductive rate make it difficult for populations to recover from losses.

02

India Turtle Conservation Programme (ITCP)

The India Turtle Conservation Programme (ITCP) is a countrywide initiative led by the Turtle Survival Alliance (TSA) Foundation India in partnership with the Government of India and various state Forest Departments. The program focuses on conserving freshwater turtles and tortoises and their habitats across the country, especially in the Ganga-Brahmaputra plains.

Collaborators and partners

- **Spearheaded by:** Turtle Survival Alliance Foundation India (TSA India).
- **Government partners:** Ministry of Environment, Forest and Climate Change, Government of India, and various state Forest Departments.
- **Other partners:** The Wildlife Conservation Society (WCS)-India also collaborates on specific projects.

Key objectives and activities

- **Conservation and research:** Conducts conservation, research, and community outreach programs focused on freshwater turtles, tortoises, and their habitats.
- **Ex-situ breeding:** Supports captive breeding efforts to reintroduce critically endangered species back into the wild, often collaborating with zoological parks.
- **Reintroduction programs:** Implements reintroduction strategies, such as the "soft-release" method, to help rehabilitated tortoises and turtles acclimatize to their new environment and develop site fidelity.
- **Monitoring:** Uses technologies like VHF-based telemetry to monitor released animals and collect data on their dispersal and survival.
- **Community involvement:** Mobilizes local communities, engaging them in conservation efforts, such as protecting habitats and monitoring released animals. Youths are trained as 'tortoise guardians' to assist in data collection.
- **Anti-trafficking efforts:** Works to minimize illegal trade by building the capacity of enforcement agencies. The program is an important partner in anti-trafficking operations like "Operation Save Kurma," launched by the Wildlife Crime Control Bureau (WCCB).
- **Awareness campaigns:** Raises public awareness about the ecological roles of turtles and tortoises through citizen science initiatives like the "Indian Turtle Conservation Action Network (ITCAN)" and events on World Turtle Day.

Recent projects and achievements

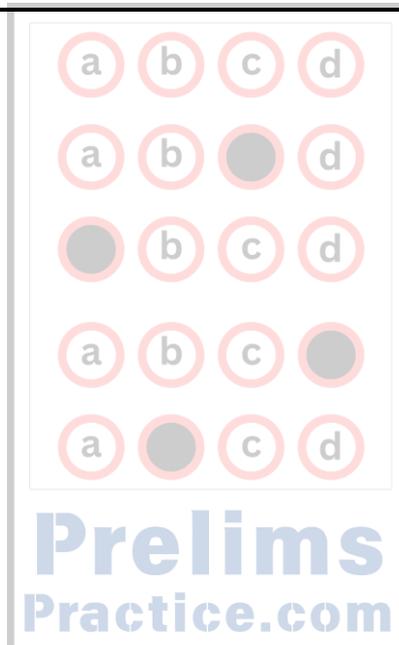
- **Asian Giant Tortoise (*Manouria emys*):** In August 2025, ITCP partnered with the Nagaland Forest Department to reintroduce ten captive-bred tortoises into the Zeliang Community Reserve in Nagaland. These tortoises are equipped with VHF transmitters for monitoring.
- **Red-crowned Roofed Turtle (*Batagur kachuga*):** In April 2025, ITCP collaborated with the Namami Gange program and the Uttar Pradesh Forest Department to reintroduce 20 of these critically endangered turtles into the Haiderpur Wetland in the Ganga river system. This species was believed to be locally extinct in the Ganga for 30 years.

- **Conservation reserve in UP:** In early 2024, the Uttar Pradesh government and TSA India announced plans to establish a turtle conservation reserve in the Sarju River, a Ghaghra tributary, which is known for its high turtle diversity.

Important turtle species

The program is involved in the conservation of several endangered and critically endangered freshwater turtle and tortoise species, including:

- Asian Giant Tortoise (*Manouria emys*)
- Red-crowned Roofed Turtle (*Batagur kachuga*)
- Leith's Softshell Turtle (*Nilssonia leithii*)
- Black Softshell Turtle (*Nilssonia nigricans*)
- Indian Star Tortoise (*Geochelone elegans*)



Practice Questions:

1. Consider the following statements:

Statement I: The reintroduction of the Asian Giant Tortoise into the Zeliang Community Reserve is a significant step toward biodiversity restoration and community-led conservation.

Statement II: The Asian Giant Tortoise plays a crucial role as a keystone species in forest ecosystems through seed dispersal and forest floor management, and the project actively involves local communities in protection and monitoring.

Which of the statements given above are correct?

- a) Both Statement I and Statement II are correct and Statement II explains Statement I
- b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- c) Statement I is correct but Statement II is not correct
- d) Statement I is not correct but Statement II is correct

Answer: a

Explanation: Statement I is correct- The reintroduction of the critically endangered Asian Giant Tortoise is a key conservation effort that demonstrates successful community-led initiatives in the region. **Statement 2 is correct-** The tortoise's ecological role as a seed disperser and forest cleaner makes it a keystone species, and its reintroduction helps restore forest health. Local community involvement, including training "tortoise guardians," is a central and successful aspect of the project, making it community-led. **Statement I is the correct explanation of Statement II-** The success and significance of this biodiversity restoration effort (Statement I) are directly linked to the ecological importance of the species and the successful strategy of involving the local community (Statement II).

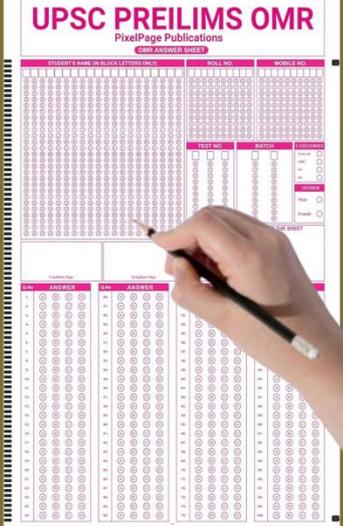
For More Practice Questions, visit:

www.prelimspractice.com



Prelims
Practice.com

TARGET PRELIMS 2026



PRELIMS PRACTICE PROGRAM

| | | | |
|--|---|--|--|
| <p>Subject Wise Practice Module</p> <p>2,000+ Practice Questions ₹ 600 99 Only</p> <p><small>Art, Culture & Heritage Ancient & Medieval History Modern History Physical Geography Human Geography Mapping Indian Polity Indian Governance International Organisations Environment & Ecology Economy Science & Technology</small></p> | <p>Current Affairs Practice Module</p> <p>2,000+ Practice Questions ₹ 600 99 Only</p> <p><small>Press Information Bureau The Hindu Indian Express Press Trust of India Business Line Business Standard Times of India</small></p> | <p>Contemporary Issues Practice Module</p> <p>1,000+ Practice Questions ₹ 350 69 Only</p> <p><small>Press Information Bureau- (PIB) The Hindu Indian Express Press Trust of India Rajya Sabha TV Times of India Lok Sabha TV</small></p> | <p>Essential Editorials Practice Module</p> <p>1,000+ Practice Questions ₹ 350 69 Only</p> <p><small>The Hindu Indian Express Times of India Business Line Business Standard Times of India The Sunday Guardian MINT</small></p> |
|--|---|--|--|

LIVE Classes



Current Affairs



Contemporary Issues



Essential Editorials

www.prelimspractice.com

Class Discussion Space

| | | | |
|---|---|---|---|
| a | b | c | d |
| a | b | ● | d |
| ● | b | c | d |
| a | b | c | ● |
| a | ● | c | d |

Prelims
Practice.com