

Kaimur Wildlife Sanctuary: A Living Museum of Nature

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ABSTRACT

Nestled in Kaimur and Rohtas districts of Bihar, Kaimur Wildlife Sanctuary is one of the state's largest protected forests and is rightly known as a "Living Museum of Nature". Its diversity landscapes of Sal, Bamboo, and mixed deciduous forest provide refuge to a rich variety of plants and wildlife while supporting the livelihoods of nearby communities. Beyond its natural beauty, the sanctuary is home to ancient forts, prehistoric rock painting, and the historic Mundeshwari Temple, reflecting unique blend of ecological and cultural heritage. This article explores the geography, history, and rich biodiversity of Kaimur Wildlife Sanctuary, highlighting its importance in conserving Bihar's natural wealth and inspiring greater appreciation and protection of this remarkable landscape.

INTRODUCTION:

Kaimur Wildlife Sanctuary is often described as "Nature's Living Museum" because it preserves an exceptional variety of natural, ecological, and historical treasures in their original environment. Kaimur is a dynamic ecosystem in which plants, animals, rivers, forests, and geological formations continue to interact and evolve naturally. It is the home to many rare

and endangered flora and fauna. Often referred to as the "**green lungs of Bihar**". Kaimur Wildlife Sanctuary not only protects hundreds of species of plants and animals but also supports local communities and maintains ecological balance. The government of Bihar has granted approval to develop this sanctuary into state's second tiger reserve, making a significant impact towards strengthening

wildlife conservation in this region (TNPSC Thervupettagam. 2026, January 3).

GEOGRPHICAL DISTRIBUTION

Situated in Kaimur and Rohtas District of Bihar. One of the largest sanctuaries in the state and is extended in area of 1,509.96 km² (581.07 sq mi) in the plateaued landscape of Kaimur Range and is situated between the Son River and Karmanasa River (Wildlife Institute of India & Wildlife Trust of India, 2010). The major forest types found are Tropical Dry, Mixed Deciduous, Dry Sal Forests, Boswellia Forests and Dry Bamboo Brakes.



Fig.1: - Forest cover map of Bihar highlighting Kaimur Wildlife Sanctuary

HISTORY

The Kaimur Wildlife Sanctuary was established in the year 1982, primarily to protect the rich biodiversity of the Kaimur range, which is part of the Vindhya Hills. The area has historical significance, as it is believed to have been a part of ancient trade routes and has remnants of various dynasties, including the Mauryas and the Guptas. The Kaimur Hills are the unconquered home of two forts and the ancient Mundeshwari Temple, one of the oldest Hindu temples in India (Bhushan et al., 2024). The area is culturally rich with prehistoric rock paintings, stone inscriptions and monuments.

RICH FLORA

The entire area of Kaimur District is divided into the Tropical deciduous forests (moist and dry). Kaimur District has not that much dense forest, but half of it is open forest, also the other half is moderately dense (FSI, 2021). The Kaimur Wildlife Sanctuary is a hotspot of biodiversity that contains dense green forests with major species like Sal, Bamboo and Khair. These tree species are important for commercial value and for yielding timber, fodder, fuelwood, fruits, local livelihoods and shelter for animals, birds, reptiles (Chandra, et al., 2023). Below is the tabular representation of majorly found tress in Kaimur Wildlife Sanctuary. (Table 1)

Table 1: - Scientific name of trees with their uses found in Kaimur Wildlife Sanctuary.

Common Name	Scientific Name	Importance / Uses
Sal	<i>Shorea robusta</i>	Dominant forest tree; excellent timber; provides habitat for wildlife; prevents soil erosion.
Khair	<i>Senegalia catachu</i>	Produces catechu (katha); durable timber; medicinal uses controls soil erosion.
Babul	<i>Vachellia nilotica</i>	Fuelwood, fencing, gum, fodder, medicinal bar and nitrogen fixation.
Teak	<i>Tectona grandis</i>	High-quality timber for furniture, construction, boats and doors.
Bamboo	<i>Dendrocalamus strictus</i>	Used for house construction, handicrafts, paper industry, fencing and wildlife shelter.
Salai	<i>Boswellia serrata</i>	Produces medicinal resin (Indian

		frankincense); used in Ayurveda.
Tendu (Kendu)	<i>Diospyros melanoxylon</i>	Leaves used for bidi making; edible fruits; woods used as food.
Jamun	<i>Syzygium cumini</i>	Edible fruits; food for birds and mammals; seeds used in traditional diabetes.
Amla	<i>Phyllanthus emblica</i>	Rich source of Vitamin C; medicinal uses; edible fruits; important in Ayurveda.

The sanctuary also contains many medicinal plants, shrubs, grasses, climbers, and seasonal herbs, which contribute to its high biodiversity.

AMAZING FAUNA

The main animals found are Indian leopards, Bengal tigers, sloth bears, Samber deer, Indian pangolins, Four-horned antelopes, Chitals, Wild boar and various species of insects, butterflies and reptiles. During winters the numbers of migratory birds from the Central Asian region increases.



Fig.2: - Animals of Kaimur Wildlife Sanctuary

Below is a tabular representation of the major fauna of Kaimur Wildlife Sanctuary and their ecological significance. (Table 2)

Table 2: - List of Major fauna of Kaimur Wildlife Sanctuary

Major animal species		
Common Name	Scientific Name	Ecological Significance
Bengal Tiger	<i>Panthera tigris tigris</i>	Apex predator; maintains ecological balance by regulating herbivore populations.
Indian Leopard	<i>Panthera pardus fusca</i>	Controls populations of medium-sized mammals and maintains biodiversity.
Wild Boar (Indian Boar)	<i>Sus scrofa cristatus</i>	Helps in seed dispersal and soil aeration through rooting activity.
Indian Pangolin	<i>Manis crassicaudata</i>	Controls ant and termite populations; an indicator of healthy forests.
Sloth Bear	<i>Melursus ursinus</i>	Disperses seeds and controls insect populations, especially termites.
Sambar Deer	<i>Rusa unicolor</i>	Important prey species for large carnivores; aids seed dispersal.
Chital (Spotted Deer)	<i>Axis axis</i>	Major herbivore maintaining grassland dynamics and serving as prey for predators.
Four-horned Antelope (Chousingha)	<i>Tetracerus quadricornis</i>	A vulnerable herbivore contributing to vegetation balance.
Important Bird Species		
Common Name	Scientific Name	Ecological Significance
Indian Peafowl	<i>Pavo cristatus</i>	National bird of India; controls insects and small reptiles; seed disperser.
Grey Partridge	<i>Ortygornis pondicerianus</i>	Controls insect populations and disperses seeds.
Malabar Pied Hornbill	<i>Anthraceroceros coronatus</i>	Excellent long-distance seed disperser; keystone forest species.
White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Controls fish, amphibian, and insect populations.
Migratory Birds		
Common Name	Scientific Name	Ecological Significance
Lesser White-fronted Goose	<i>Anser erythropus</i>	Indicator of healthy wetlands; globally vulnerable.

Ferruginous Duck	<i>Aythya nyroca</i>	Wetland health indicator; near threatened.
Baer's Pochard	<i>Aythya baeri</i>	Critically endangered; reflects wetland conservation status.
Lesser Adjutant	<i>Leptoptilos javanicus</i>	Scavenger maintaining ecosystem cleanliness; vulnerable.
Reptiles		
Common Name	Scientific Name	Ecological Significance
Indian Cobra	<i>Naja naja</i>	Controls rodent populations; an important predator.
Common Krait	<i>Bungarus caeruleus</i>	Regulates populations of rodents and other snakes.
Indian Rock Python	<i>Python molurus</i>	Large predator that maintains ecological balance by controlling prey populations.
Fish		
Common Name	Scientific Name	Ecological Significance
Rohu	<i>Labeo rohita</i>	Important native freshwater fish maintaining aquatic food chains.
Catla	<i>Catla catla</i>	Supports nutrient cycling and aquatic biodiversity.
Mrigal	<i>Cirrhinus mrigala</i>	Bottom feeder helping recycle organic matter.

CONSERVATION CHALLENGES

1. Habitat Degradation and Encroachment

- Agricultural Expansion:** The sanctuary has suffered extensive forest loss (over 30% in dense canopy cover since the late 1970s), driven primarily by local agricultural conversion and population pressures.
- Habitat Fragmentation:** Continuous movement corridors for animals connecting Kaimur to neighboring sanctuaries (like Chandraprabha in Uttar Pradesh) are highly threatened by human infrastructure and illegal logging (Bhushan and Sen, 2025).
- Invasive Species:** Unchecked growth of weeds like *Lantana camara* degrades the

understory, depriving herbivores of native food sources.

2. Poaching and Organized Crime

- Interstate Syndicates:** Situated near the Uttar Pradesh border, KWS deals with organized, interstate poaching networks that target key species like leopards, chinkaras, and nilgai.
- Resource Constraints:** The forest department grapples with inadequate staffing and monitoring capacity, making it highly difficult to patrol an expansive 1,342 km² footprint.

3. Community Reliance and Conflict

- Traditional Livelihood Pressures:** Local Scheduled Tribe (ST) communities (e.g., Cheru, Kharwar) and Scheduled Caste (SC) groups have historical, centuries-old dependencies on the forest for fuelwood, fodder, and Non – Timber Forest Products (NTFPs) like Mahua and Tendu leaves.
- Caste-Driven Vulnerability:** Marginalized groups often bear the brunt of resource exclusion, making it difficult to find alternative livelihoods outside the protected zone.

MITIGATION STRATEGIES

To address these issues, conservationists and the Bihar government are promoting co-benefits for nature and the community (John, 2026).

- Livelihood Diversification:** Shifting local reliance away from woodcutting by promoting sustainable ecotourism and NTFP value addition.
- Habitat Restoration:** Conducting targeted weed removal and promoting native plant species to naturally sustain herbivores.
- Community Engagement:** Emphasizing joint forest management to bridge the gap

between strict ecological protection and the socioeconomic needs of Adivasi populations.

ECOTOURISM POTENTIAL OF KAIMUR WILDLIFE SANCTUARY

The study concludes that Kaimur Wildlife Sanctuary possesses high ecotourism potential because of its unique combination of natural, ecological, and cultural resources (John, 2026).

A. Rich Biodiversity: The sanctuary supports diverse tropical dry deciduous forests with species such as Sal (*Shorea robusta*), teak, bamboo, and medicinal plants. Wildlife includes leopard, sloth bear, wild boar, chital, nilgai, sambar, four-horned antelope, reptiles, butterflies, and numerous resident and migratory birds. This biodiversity makes the sanctuary suitable for wildlife observation, birdwatching, nature photography, and environmental education.

B. Scenic Landscapes: The sanctuary offers numerous natural attractions, including: Dense forests, Rocky plateaus and hills, Rivers and streams, Waterfalls such as Telhar Waterfall, Lakes including Manjhar Lake, Karamchat and Jagdahwahan Dam areas. These landscapes provide opportunities for trekking, camping, nature walks, photography, and eco-adventure tourism.

C. Cultural and Historical Heritage: Ecotourism can be combined with the cultural heritage of the region through attractions such as Mundeshwari Temple and Gupteshwar Cave and as well as Indigenous Traditions, Handicrafts Local, and folklore. This combination of natural and cultural tourism can boost visitor interest and create added income for local communities.

CONCLUSION

Kaimur Wildlife Sanctuary is more than a protected forest—it is Bihar's living natural heritage. Its forests, rivers, waterfalls, wildlife, and ancient history together create a landscape that deserves admiration and protection. Every visitor, student, and citizen can contribute to conserving this remarkable ecosystem so that future generations may also experience the beauty and richness of Kaimur.

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