4. Hygrocybe Pellucida - Environment

Kawal's new resident is a newly discovered mushroom. The rare fungal species Hygrocybe pellucida, known for indicating healthy ecosystems, has been recorded for the first time in Telangana's Kawal Tiger Reserve. This sighting extends its range beyond Kerala, where it was first identified in 2024.

Context - The rare fungal species Hygrocybe pellucida has been recorded for the first time inside Telangana's Kawal Tiger Reserve, extending the species' known range.

Hygrocybe pellucida

Hygrocybe pellucida is a species of fungus in the genus Hygrocybe, commonly referred to as wax caps.

Key characteristics

Fruit bodies are typically bright and waxy in appearance, often showing vivid colors characteristic of wax-cap fungi. The visible mushroom (cap, gills, stipe) has a glossy or greasy-looking texture that gives the group its "wax cap" name. Morphological traits (cap shape, gill attachment, spore characteristics) distinguish H. pellucida from other Hygrocybe species.

Habitat and ecological significance

Grows in unimproved, nutrient-poor habitats such as natural grasslands and mossy forest floors. Thrives in low-input ecosystems that have not been intensively fertilized, ploughed, or otherwise altered. Presence of wax-cap fungi like H. pellucida is considered an indicator of a healthy, undisturbed ecosystem and high conservation value for the habitat.

Recent discovery and range extension

First described as a new species from the family Hygrophoraceae in Kerala (recently identified). The new sighting in Kawal Tiger Reserve (Telangana) expands the species' known geographical distribution, indicating either a wider native range or previously undocumented populations.

Kawal Tiger Reserve

Location and geographic setting - Located in the state of Telangana, along the catchment and banks of the Godavari River. Falls within the Deccan Peninsula–Central Highlands biogeographic zone. Serves as an important forest tract in central-southern India.

Corridor and landscape connectivity - Functions as a crucial wildlife corridor linking Tadoba-Andhari Tiger Reserve (Maharashtra) with Indravati Tiger Reserve (Chhattisgarh). This connectivity supports tiger dispersal and genetic exchange among landscape populations, enhancing long-term viability of large mammals.

History and legal status - Originally declared as Kawal Wildlife Sanctuary; it was upgraded and notified as a Tiger Reserve by the Government of India in 2012.

Hydrology and river systems - An important catchment area for the Godavari and Kadam rivers; these river systems flow through and around the reserve, sustaining local hydrology and riparian habitats.

Biome and vegetation - Dominated by Southern Tropical Dry Deciduous Forest type. Key tree species include Teak and Bamboo, along with species such as Anogeissus latifolia (axlewood) and other associated dry-deciduous flora.

The forest composition supports both dry-season forage and monsoon regeneration.

Fauna and biodiversity value

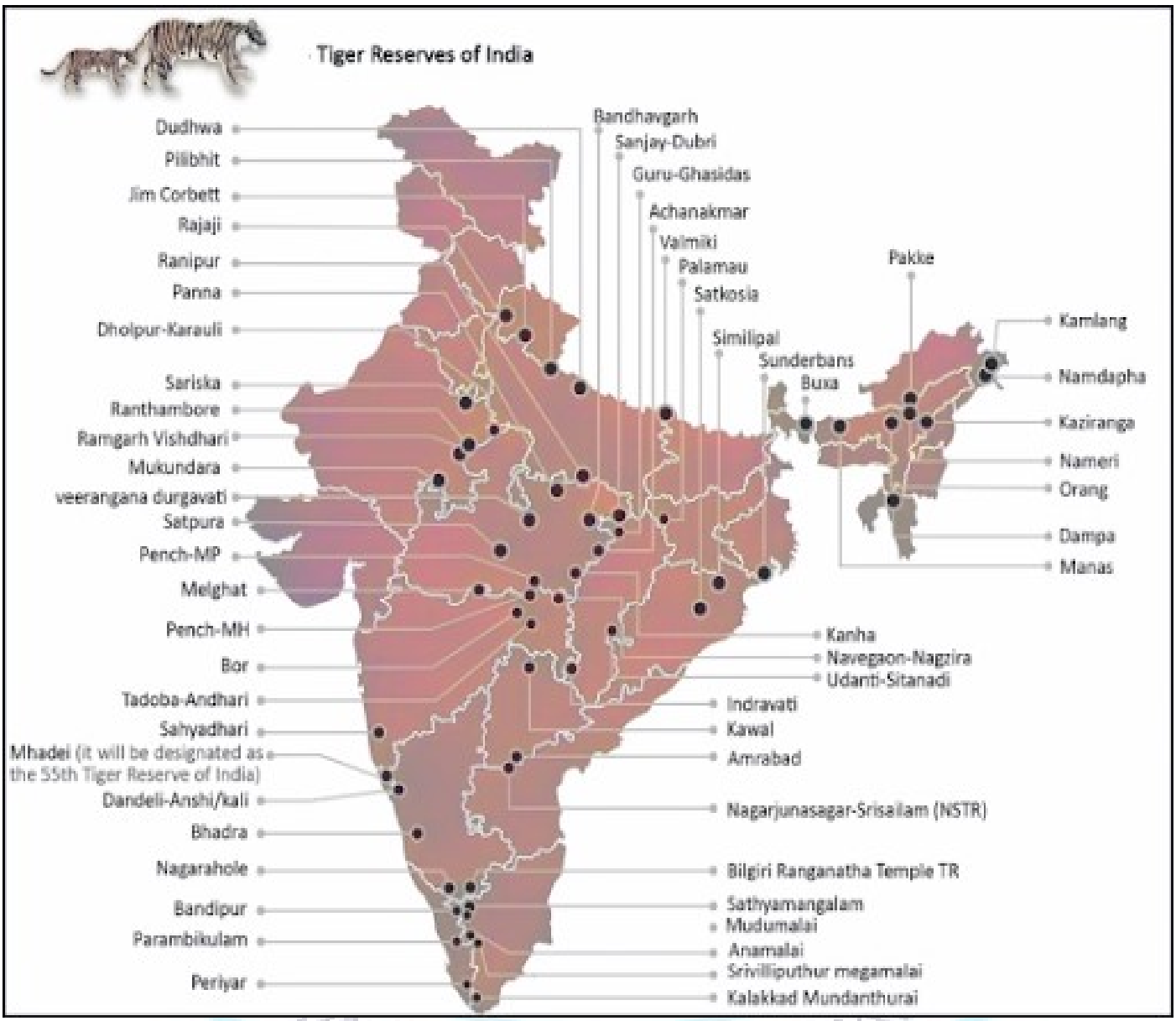
Tiger habitat - supports resident and transient tiger populations.

Herbivores - includes nilgai, chousingha (four-horned antelope), sambar, spotted deer and other ungulates that form the prey base for large carnivores.

The reserve's mosaic of forest, grassland, and riparian zones also supports diverse smaller mammals, birds, reptiles, and invertebrates — making it a site of significant conservation importance.

Conservation Significance (combined insight)

The detection of Hygrocybe pellucida within Kawal highlights the reserve's intact, low-nutrient microhabitats and underscores its value not only for charismatic megafauna like tigers but also for lesser-known indicator taxa. Protecting such habitats maintains ecological processes, supports biodiversity at multiple trophic levels, and preserves environments where sensitive fungi and other bioindicators can persist.



Source - https - //www.newindianexpress.com/cities/hyderabad/2025/Oct/19/kawals-new-resident-is-a-newly-discovered-mushroom