

Digits speak

India's total forest cover is 21.71 per cent of its total geographical area and the target is to reach 33 per cent. The Forest Survey of India defines 'forest cover' as all land with minimum one hectare of tree patches and canopy density above 10 per cent. A break-up of the current forest cover includes:

Very Dense Moderately Dense Forest: **3.04**% Forest: **9.33**%

Forest: 9.34%

Source: India State of Forest Report 2021

Compiled by Anubhuti Sharma

India needs
environmental literacy...
Now, powerful dam lobbies
are finding acceptance...
Even our normal political
discourses lack
objectivity

MK Prasad, Campaigner of Save Silent Valley (1932-2022)

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Scrub:

78.29%



HOLD NO BARS

The Brown-Headed Barbet, raising a call barring none.

Garqi Mishra

f there is ever a bird that can rival even a hulk in roaring aloud, then that birdy has to be the Brown-Headed Barbet. This little creature's blaring decibels can screech through the morning silence and can knock anyone out of their afternoon siesta as well. Its challenging, almost enticing, avian call proceeds like: tur-r-r-r kutrook-kutrook-kutrook.

But barely a glance at this handsome can assure you that its personality is even more influential. The 'barbet' has earned its family name from the barb-like whiskers around the base of its beak. This peachy-pink bill is heavy in structure. It contrasts with the Barbet's grassgreen body. The short and slender tail looks disproportionately small in comparison to the body of the barbet. In his/her under-

tail area are noticeable its dull bluish coverts (the small and soft feathers that cover the base of tail feathers). Surprisingly, the barbet can change the colour around its eye from a bright lemon-yellow to dark orange within seconds.

Further, there are white streaks spread over its brown head, neck, breast, and upper back. These white streaks discontinue towards its shoulders, belly, and flanks (sides of lower belly). But the presence of white speckles on the shoulders of the Brown-Headed Barbets differentiates them from their close relatives, Lineated Barbets.

Nonetheless, the Brown-Headed Barbets make



a gorgeous couple. Both husband and wife are identical and are found widely across the Indian subcontinent. They often migrate seasonally to lower elevated areas, and even nest in urban spaces and gardens. In fact, they are highly territorial in nature and guard their nests aggressively. Frugivorous in diet, they feed upon wild ficus figs, such as banyan and peepal, along with a few other drupes, berries, flower petals, and nectar. At times, they also consume insects to fulfill their protein requirements.

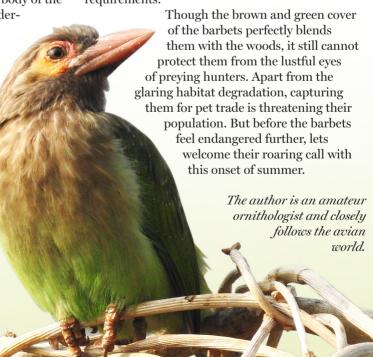


PHOTO: ATHIYA MAHAPATRA



MOVEMENT IS LIFE

A simple, lucid explainer on the 'what' and 'why' of wildlife corridors.

Akshat Jain

SO. WHAT IS A WILDLIFE CORRIDOR?

In simple terms, a corridor is a relatively narrow strip of any natural habitat, such as a forest, that has managed to survive and is still suitable for wild animals to move between two or more large forest blocks. These corridors keep forests from turning into isolated islands of biodiversity amidst a sea of human habitation, agriculture, mines, roads, railways, canals, industries, and other infrastructure.

The function and form of a corridor differs from species to species. Say for example, a young male tiger may use a corridor to disperse onto newer territory, a herd of elephants may use a suitable patch of forest as a corridor regularly as it falls along their ancient migratory route, while a group of arboreal hoolock gibbons may use the tall trees along a corridor as a highway to get to the other side of the forest to feed. The undisputed fact remains that without unhindered physical connectivity, long term survival of wildlife populations is heavily ieopardised.

Source: Wildlife Conservation Trust, a Mumbai-based NGO

nen I was little, my grandparents used to tell me stories about how they left their small village in Rajasthan to travel to the big city of Jaipur for better opportunities. Today, I have left Jaipur for the even bigger city of Delhi to try my luck. I am sure all of you know of family members and friends who have migrated for studies, jobs, or marriage. All of us witnessed the plight of lakhs of people who migrated back to their villages on foot during the lockdown imposed in response to COVID-19. All these people had come to cities for livelihood and they all went back when their livelihood dried up. Migration is necessary for us humans, sometimes for some work and sometimes just for the heck of it—to simply go to a new place and meet new people.

Migration is just as important for animals. Not a very long time ago, the Indian subcontinent was covered in vast swathes of forests Animals roamed around freely from one part of the landmass to another. A tiger or elephant in the Deccan could have easily travelled unobstructed to far off regions and they did. As human population boomed and development projects to service this population increased, the forest cover reduced. The situation now is that there are pockets of forests all over the country which are separated from each other by human settlements and related infrastructure. These interceptions are difficult for animals to traverse. Even a simple thing such as a highway Haldibari corridor, near is a major obstacle to a wild Kaziranaa National Park animal. In the attempts that Photo credits: WWF-India they make to cross these roads,

many animals die due to speeding vehicles. There are many issues which crop up when animals are forcefully isolated in small unconnected forests. Their populations are not able to expand because of increasing food demand from a limited place and their inability to migrate elsewhere to meet this requirement. The extent of inbreeding also increases which weakens their

in Assam

PAs and Corridors Deer using the Kanchanjuri corridor and rhino using the

A Map of Forests, Protected Areas (PAs) and Tiger Corridors in India. Source: National Tiger Conservation Authority, Ministry of **Environment and Forests**

> hough central India harbours nearly 35 per cent of the country's tiger population, not a single sub-population of tigers in the region is genetically viable on its own. Thus, for their long-term survival, these populations need to be able to interact with each other. This may be through immigration and emigration which is possible only through the network of wildlife corridors.

> > Source: Wildlife Conservation Trust, a Mumbai-based NGO

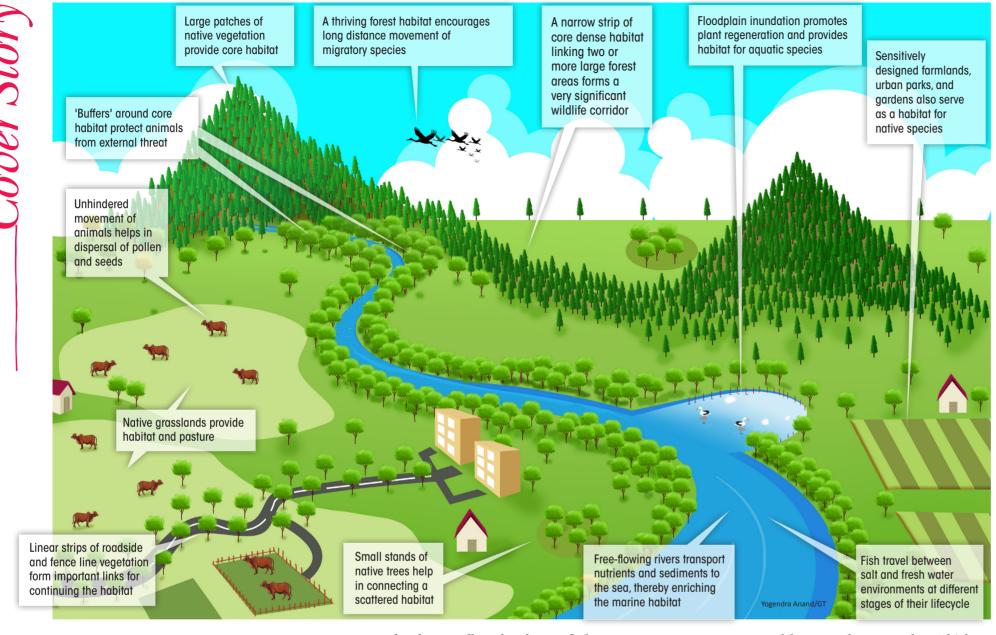
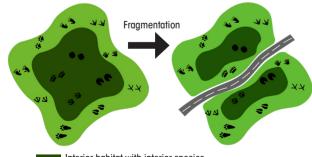


Illustration of loss of core habitat (or interior habitat) caused by road construction cutting through a patch of habitat



Interior habitat with interior species

Edge habitat with edge species
Interior habitat and interior species decrease
Edge habitat and edge species increase

gene pool and eventually makes them unfit for survival. If someone was to isolate a village and prohibit any people from ever migrating for better future prospects, the village would soon perish. In the same way, animals restricted to small forests die off from lack of migration.

This is where wildlife corridors enter the picture. As human habitation and development is expanding, our scientists and government have come up with a solution. They recommend to make or maintain forest paths connecting one forest to another which the animals can traverse and use to migrate.

Further, it is important to understand that these corridors are not mere paths which animals

use to travel from one place to another. A highway becomes a centre of a town or village whose economy revolves around the traffic facilitated by it. It is a myth that wildlife corridors aren't biodiversity-rich and pose as mere bridges or linkages for the wildlife to pass. Research shows that tiger densities in several wildlife corridors in India are comparable to or better than that of some of the tiger reserves themselves! Also, tiger corridors serve as habitat for several other species such as wolves, hyenas, ratel, pangolins, birds, and reptiles.

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SOME IMPORTANT WILDLIFE CORRIDORS IN INDIA

KAZIRANGA-KARBI ANGLONG CORRIDOR

AREA: 25,000 sq. km

STATES: Assam, Meghalaya and Nagaland

ANIMALS: Large mammals such as tigers, elephants and rhinos

SPECIAL FEATURE: Helps animals survive during floods

Source: Sentinel Assam

TERAI ARC LANDSCAPE, LOWER HIMALAYAN REGION

AREA: 49,500 sq. km

STATES: Uttarakhand, Uttar Pradesh and Bihar (also cuts into the low-lying hills of Nepal)

ANIMALS: Royal Bengal Tiger, Asian Elephant, Indian Rhino, antelope, deer, sloth, Himalayan black bear, yellow throated marten, Indian pangolin, Gangetic dolphin and gharial

SPECIAL FEATURE: Covers 14 different Protected Areas in two countries

Source: IUCN

KANHA-PENCH CORRIDOR, SATPUDA-MAIKAL LANDSCAPE

AREA: 16,000 sq. km

STATE: Madhya Pradesh

ANIMALS: Tiger, wild dog, sloth bear, leopard, hyena, jackal, sambhar and gaur

SPECIAL FEATURE: Connects Kanha and Pench national parks which are home to around 120 tigers, which is one of the most important population of tigers in India.



A tiger using the animal underpass on NH44, which runs through the Kanha-Pench Corridor. Photo credits: Planet Outlook.

JUNGLE LOST

A third of India's recorded forest area is missing from the government's latest assessment, the *India State of Forest Report 2021* released recently. A massive 25.87 million hectares of forest has not been assessed at all. So, does this forest even exist? Is it encroached upon? Or is it just degraded; so degraded that no forest can be counted here?