



INDIA

PANDA

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Return of the Rhino

An initiative to have free-ranging rhinos in the Indian Terai after four decades

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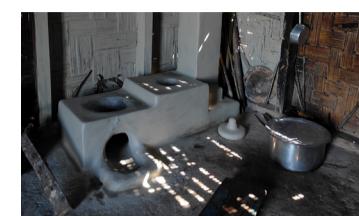
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EDITORS' NOTE

The most common misconception about WWF-India is that it is exclusively dedicated to wildlife conservation. While there is a thriving flock of biodiversity programmes, it is not the only area of focus. WWF-India works on empowering communities, educating and engaging the youth, promoting green energy and sustainability in business and agriculture, besides preserving habitats and mitigating human-wildlife conflict. The stories in this edition of Panda present a glimpse of this work spectrum.

A responsible tourism initiative in western Arunachal Pradesh is bridging conservation and livelihoods by promoting heritage food, homes and crafts of the local communities among visitors. In West Bengal, an innovation in stoves is reducing the fuelwood dependency of forest-fringe villages that live close to red panda habitat. Citizen science is an effective way to not only cast a wider net of observation but also engage people from all walks of life. The first Hyderabad Annual Tree Survey sprouted useful insights about urban biodiversity with the help of 170 volunteers. Meanwhile, training a new batch of Kerala's forest officers in odonate identification and documentation helped shine the light on smaller and often-ignored bioindicators.

On the wildlife front, a groundbreaking rhino conservation programme in Dudhwa Tiger Reserve has seen a milestone: the free-ranging of three rhinos after four decades. In the high-altitude terrain of Ladakh, surveys and camera traps have captured some intriguing pack dynamics of Himalayan wolves.

If the last few years have proven anything, it is that our fate as a species is connected with the health of the planet and its various ecosystems. Aptly, WWF-India's programmes approach conservation in an integrated and holistic manner.

— Sumeet Keswani & Kaveri Jain

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RETURN OF THE RHINO

An initiative to have free-ranging rhinos in the Indian Terai after four decades has been undertaken. This milestone has taken extensive planning and teamwork.

By Somreet Bhattacharya
Manager – Communications, WWF-India

It takes an army of well-trained officials to free a rhino in the wild. Forest department staff and a team of WWF-India took on the challenge to make history on a cold November morning. A decision had been taken earlier in the year to free-range the greater one-horned rhinoceros in the Dudhwa Tiger Reserve (DTR) for the first time in four decades.

The rhino once roamed across vast swathes of north-eastern and northern India, from Assam to parts of the Indus Valley. But extensive poaching led to its near extinction, with just 200 individuals recorded in the early 1900s. Relentless conservation efforts helped the rhino bounce back. But the species was limited to parts of Assam and North Bengal in India. In 1984, a pioneering project translocated five rhinos—two males and three females—from Assam to a fenced rehabilitation area in Dudhwa, followed by another batch of four females the next year. In 2018, four rhinos were moved to another fenced area to establish a second population and expand their range. The populations thrived in their protected spaces, but free-ranging rhinos in DTR would take time and comprehensive threat assessments.

In November 2024, three rhinos—a male and two females aged between 12 and 20 years—were selected from around 46 animals that had thrived within the fenced areas over the past 40 years. The historic release of these three animals would be a mammoth collaborative effort between the UP Forest Department, the Assam Forest Department and WWF-India—and would involve more than 100 people, including field staff, government officials, veterinarians, monitoring teams and species experts.

The selection of the rhinos was based on a robust monitoring protocol initiated by WWF-India with the support of Experis IT Pvt Ltd (Manpower Group) and DTR staff. The effort identified each rhino's morphological features, compiled all of its data, and monitored its preferred habitat, dietary selection, behaviour and social groups. "We were monitoring the rhinos for nearly two months. There were around a dozen animals identified based on their age and health condition; three were selected for the release. It is essential for the free-ranging animals to be able to survive in the comparatively new surroundings," says Amit Sharma, WWF-India's National Lead for Rhino Conservation.

The release aims to re-establish a viable rhino population by increasing its habitat range, reducing the risk of inbreeding and increasing the genetic diversity of this species within DTR. The free-ranging rhinos will be able to interact with rhinos from Nepal that frequent the tiger reserve, a significant step towards species recovery in the region. This also benefits the larger Terai region shared by India and Nepal. Known for its robust agricultural productivity, the Terai is referred to as the "food basket" of the area. It also sustains large populations of other keystone species like the Bengal tiger and the Asian elephant. But the densely populated region faces extreme ecological pressure due to habitat loss and human activity. The presence of rhinos helps vegetation like grasses thrive, which aids the sustenance of smaller mammals and birds.

Dr Lalit K Verma, Field Director of the Dudhwa Tiger Reserve, has been monitoring the operation and says that the presence of rhinos around wetlands will benefit the biodiversity. "The rhino is a keystone species that helps other species like the endangered barasingha or swamp deer and smooth coated otter to survive, as they depend on the wetlands. It provides ecosystem services to the habitat by forming puddles and excreting nutrients into the soil," says Verma.

The release took meticulous planning. Stretches of grasslands were identified and cordoned off for securing the rhinos after tranquilisation. Dr Mudit Gupta, WWF-India's Senior Landscape Coordinator for the Terai Arc Landscape, explains that the operation required coordination between the tracking teams, veterinarians and the logistics team since the rhinos had to be collared, medically examined and then transported to the release site in specially designed cages. "We had to make sure there were no injuries or mishaps. There were multiple rehearsals so that everyone knew their role," adds Gupta. Another challenge was to lift the tranquilised rhinos into cages for transportation. "It takes a team of people to slowly turn the animal onto a sledge, which is then dragged into the cage before the animal is revived from anaesthesia by an experienced veterinarian. The entire operation has to be done carefully and before the effect of the sedatives wears off," says Sharma.

It is also essential to keep an eye on the rhinos that have been released. Dr. G Areendran, Director of the Tech for Conservation division at WWF-India, has been leading the post-release monitoring effort. Apart from a GPS device, the collars fitted around the necks of the rhinos also have a VHF transmitter that emits radio signals so that the animals can be located physically. "So far, the animals have been within the range that they were released in and presumably exploring their new surroundings," he says.

WWF-India will work with the UP Forest Department to continue monitoring these rhinos and support conservation efforts. The learnings from this release will hopefully lead to even more rhinos roaming freely in the Terai.



One of the three rhinos released from the fenced rehabilitation area in the Dudhwa Tiger Reserve.

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A cage was specially designed to carry tranquilised rhinos safely to the site of the release.

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