

Tigers use corridors to traverse India-Nepal border

17DFR Tiger who crossed the line | Photo Credit: [17DFR Tiger who crossed the line](#)

Borders don't faze these tigers: over a decade, at least 11 tigers moved from India into Nepal's protected areas through the Terai, a landscape comprising agricultural areas and protected forest-grasslands in the Himalayan foothills. This reaffirms that tiger conservation requires not just protected areas but corridors too — especially across large landscapes — to ensure habitat connectivity and in turn, population growth.

Habitat loss

With protected areas becoming isolated due to habitat loss and conversion, large mammals including tigers have to now traverse human-dominated areas to disperse to new territories. North India's Terai Arc Landscape, which shares a 700-km border with Nepal, spreads across more than 50,000 sq. km and has one of the world's highest human population densities. Apart from agricultural fields and rural settlements, it also comprises 16 protected areas (five in Nepal and 11 in India) and six major trans-boundary corridors which connect Indian wild habitats with Nepal's.

To test how effectively these corridors aid tiger movement, scientists from WWF-India and WWF-Nepal camera-trapped tigers for 38,319 days in the protected areas, covering an area of more than 9,000 sq. km in multiple surveys between 2005 and 2016. Identifying individual tigers, they found that at least 11 tigers used these corridors to re-colonise Nepal, thus aiding the recovery of tiger populations which had declined drastically in the mid 2000s due to severe poaching pressures.

Growth rates of the tiger population in Nepal's Suklaphanta and Bardia national parks show that tiger numbers were far higher than would have been possible from just reproduction by the existing population. Connecting the locations that individual tigers were photographed from, the team found that one tiger had moved across an area of 248 sq. km, as opposed to the usual 20-sq. km-area in the Terai.

"This speaks volumes about the need to protect large landscapes, even agricultural ones which serve as crucial corridors," says Pranav Chanchani, National Coordinator for Tiger Conservation, WWF-India. "Till the 1930s and 1940s, the now-fragmented protected areas were contiguous. But with increasing human settlement large parts of the Terai were cleared and patches that would have been corridors destroyed."

Planned development near the protected areas — including two roads — could endanger the already-fragmented habitat, say the authors. They suggest that the tiger populations need to be conserved as a 'metapopulation', that is, populations that are physically separate, but interact with one another as animals migrate between them, helping populations persist over the years.

Jaggi Vasudev's Rally for Rivers claims they will, but this is not based on the most nuanced science

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