

Mongabay Series: **Asian Rhinos**

Despite numerous challenges, rhinos are thriving in India's Jaldapara National Park

1 May 2017 / **Moushumi Basu**

When anti-poaching measures tighten elsewhere in India, poachers turn to Jaldapara, home to the country's second-largest population of greater one-horned rhinos.

- *Jaldapara National Park in the northern fringe of West Bengal hosts more than 200 one-horned rhinos.*
- *Growing demand for rhino horn means poaching is a rising threat, especially when anti-poaching measures in neighboring Assam State prompt poaching networks to seek new targets.*
- *In addition to extensive anti-poaching patrols, the park's management is relying on cooperation with residents of nearby villages to protect the park's wildlife.*
- *The park now shares 40 percent of ecotourism revenue with community-based Joint Forest Management Committees, trains former offenders as wildlife protectors and is developing other projects to integrate the welfare of communities and wildlife.*

JALDAPARA NATIONAL PARK, India: The floodplains of the River Torsa, along the Eastern Himalayan foothills, are a world of their own. Rolling meadows of long swaying grasses stretch for miles, teeming with biodiversity. Further along, **Sal**, **Sissoo** and **Khair** trees tower over lush green forests, while hilly rivulets and ponds nestle amid dense undergrowth.

It is late afternoon as we drive through the narrow, rickety jungle paths delineating the grasslands. Our vehicle suddenly stops short in its track. Barely three feet away is a hulking grey animal with knobby skin and commanding gait. Slowly grazing past the dense thickets, it occasionally raises its head, as if to flaunt its enviable snout. What we see before us is the greater Asian one-horned rhino (***Rhinoceros unicornis***), roaming free in the Jaldapara National Park in the northern fringe of West Bengal.

According to the most recent census in 2015, the 216.5-square-kilometer (83.6-square-mile) park harbors 204 rhinos, a dramatic rise since 1985 when just 14 rhinos were known to survive in the park.

Jaldapara's rhino population has grown in tandem with the rhino population in India as a whole, which grew from fewer than 50 in 1910 to 1,250 in 1980 and more than 3,500 by 2015. The vast majority —2,401 as of 2015 — live in Kaziranga National Park in neighboring Assam state, but Jaldapara now hosts the second-largest rhino population in India.

Pradeep Vyas, West Bengal's chief wildlife warden, credits the turnaround to significant improvement in the park's protection mechanisms, better habitat conditions and strengthened relationships with nearby communities.



The entrance to Jaldapara National Park in West Bengal. Photo by Moushumi Basu.

Countering poachers

Jaldapara's conservation success story has not come easily. Burgeoning demand for rhino horn, prized on the international market for its use in traditional medicines and as a luxury good, has made the park a target for poachers.

“We lost three rhinos in 2014 after a fairly long gap. But what came as a sudden jolt, was how the last two incidents occurred in quick succession on August 11 and August 16, in the adjacent

rhino ranges,” Bimal Debnath, Assistant Wildlife Warden, JNP told Mongabay. The streak continued in 2015 with four more poaching cases — two each in the park’s Jaldapara West and Chilapata ranges.

2016 was, however, a year of zero poaching for the park’s keystone species.

According to Bhaskar JV, Divisional Forest Officer, Jaldapara Wildlife Division, the fluctuation in the number of poaching cases likely reflects shifts in poaching networks’ targets within India. “There is always a growing demand of rhino horns in the international market,” he explained. “Kaziranga National Park has always been the first target for the rhino horn poachers. However, when protection mechanisms became stringent there, especially after the deployment of Central Forces, poachers began striking other close by rhino bearing areas as Jaldapara.”

Such threats are minimized by the management through regular patrolling. The park has 130 kilometers (80.7 miles) of patrolling paths, which are covered on foot or by vehicle. The management also has a retinue of 59 captive elephants, of which 35 are presently being used to cover difficult areas. Patrolling is particularly intensified during moonlit nights when visibility in the forest is clear — thus making it easier for poachers to enter without torches or flashlights.



Evening

at Jaldapara National Park. Photo by Jonoikobangali via [Wikimedia Commons](https://commons.wikimedia.org/wiki/File:Jaldapara_National_Park.jpg).

Twenty-one protection watch towers and five anti-poaching camps enable forest staff to maintain a round-the-clock vigil. Another four watch towers have come up during the past few months after the recent poaching incidents.

The park management has also established central monitoring system through e-patrolling. Forty-nine GPS-enabled mobile phones have been given to beat offices, patrolling teams and range officers, allowing the park headquarters to monitor the position of patrolling teams in real-time, and to track the distances and areas each team is able to cover and identifying difficult-to-cover stretches.

Areas of particular concern are periodically scanned by all available manpower. And, as a show of strength, select areas are patrolled jointly by forest personnel, police and para-military forces in order to flush out suspected poachers.

Rangers also pay special attention to rhino middens or dung heaps. The socially minded pachyderms are known for their areas of “community defecation,” which are particularly vulnerable to poachers and thus tracked regularly.

Between 2014 and 2016, park officials and local authorities made 44 arrests in connection with rhino poaching, against which 14 cases were lodged. The most high-profile of these was the conviction of notorious poacher Chhattar Miya. According to Debashish Sharma, Miya was one of the masterminds in the 2014 poaching cases in Jaldapara, having connections with poaching syndicates in Assam and the Northeastern states. He is currently serving three years’ imprisonment for a case of rhino poaching committed in 2014.

In another case, five people were arrested, including three locals and two outsiders, in October 2015. One of them was found to be from Churachandpur, a district along the Myanmar border in Manipur — an area notorious for cross-border wildlife trade. It was a joint effort with local police, whereby an automatic rifle and cartridges were seized along with a rhino horn. “With such kind of recovery and arrests, we realized that poachers from Northeast/Assam are already making inroads to North Bengal. Their modus operandi, then, was luring some of our naive, local villagers with easy money, for gaining access to the landscape,” said Bhaskar.



An rhino midden (dung heap) in Jaldapara National Park. These areas of community defecation are particular targets for poachers. Photo by Moushumi Basu.

However, according to Debnath, in the last few months poachers have begun adopting a different strategy. Instead of directly approaching villagers to engage them for assistance in poaching, Debnath said poachers are now being observed posing as tourists or cattle grazers and reaching out to villagers with pleas of getting acquainted with the landscape.

An uptick in raids and arrests of poachers, and community outreach efforts by park officials, may be behind this increased wariness. In October 2016, the park management thwarted a poaching attempt leading to the arrest of four suspected persons and seizure of an AK-47 rifle and 46 live cartridges. Debashish Sharma, then the Assistant Conservator of Forest, Chilapata, who led the team said their suspicious activities were tracked for a month, on the basis of which the raids were conducted.

The recovery was significant — it was the first time such sophisticated weapons were seized near Jaldapara, although their use in Kaziranga has been known for years. The first arrest was made Oct. 18, 2016 by park management. Based on their input, police made two more arrests in November, Sharma said, including one suspect from Assam state.

“Such successive raids and arrests have certainly acted as strong deterrents in keeping the poachers at bay, since the past one and half years in JNP,” said Sharma.



Wallowing rhinos in Jaldapara National Park. Photo by A. J. T. Johnsingh, WWF-India and NCF via [Wikimedia Commons](#).

Community relations

Vyas, Chief wildlife Warden for West Bengal, attributes this to a strong intelligence network being developed with the support of local communities living near the park. “Rhinos come as close as 100 meters to human habitations and villages, hence without the cooperation of local people it is impossible to protect them,” he said.

The park management is seeking to win over the trust and confidence of the neighboring villagers by integrating their welfare with rhino conservation through various ecotourism schemes.

This is in sharp contrast to Assam’s Kaziranga National Park, which has recently been mired in controversy over its relations with the local communities.

Jaldapara’s management is also slowly turning the erstwhile poachers and wildlife offenders into protectors. “By engaging them in various conservation initiatives and utilizing their know-how,

experiences and contacts, we have been able to bust poaching gangs or preempt such attempts,” said Debnath.

The support of local communities is coordinated through 63 Joint Forest Management Committees (JFMC) with a total of 11,000 members from nearby communities. Various activities are being developed to involve as many of them in incentivized rhino and other wildlife protection activities.



Visitors explore the park on elephant-back. Photo by Jayanta Debnath via [Flickr](#).

Around 200,000 tourists visit the park each year. In the past, the forest department shared 25 percent of ecotourism revenue with JFMCs. From January 2017 onwards (following the order of West Bengal Forest Ministry), this amount has been raised to 40 percent to ensure more economic benefits to the local communities, Debnath said.

Youths from local villages are also being trained as forest guides. “They know the forests like the palms of their hands. While earning their bread and butter by showing the tourists around, they also keep tab on the landscape, uncanny activities or rhino sightings,” said Sharma.

The park has trained 65 such persons. Alomati Karzee, a 32-year-old widow and mother of two children is so far only female in the group. Karzee admits she used to be involved in illegal logging in the park, leading a group of 15. “Lack of means of livelihood and family sustenance compelled us to commit such offenses, but since the past few years, I have completely given up timber poaching and also trying to revert back my other accomplices to wildlife and forest protection,” she said.

The local villagers are also operating vehicles used by the tourists for rhino safaris in an arrangement with the forest department. Thirty-four such safari jeeps are operating in JNP which enables the villagers to get directly paid by the tourists.

More such ways of involvement with local communities are being worked out, particularly with the village women. Six folk-culture teams with 120 women have been formed in three villages in the most vulnerable rhino ranges of Chilapata, Kodalbasti and Jaldapara West. “This way we not only get to revive our dance and music by presenting them before the outside world, but it also supplements our family income,” said Roshni Subba, one of the artists of the team.

According to Bhaskar, the idea behind such initiatives is build connections between local communities and the park, which has a rather challenging landscape. Jaldapara has an unusual shape, resembling a pair of trousers, giving it a long boundary of 165.2 kilometers (102.7 miles), of which 10.28 kilometers (6.3 miles) is shared with the neighboring country of Bhutan. The border with Bangladesh is just 20 kilometers (12.4 miles) away from JNP.

National Highway 31C, which connects West Bengal to Assam and the Northeastern states, cuts through 5 kilometers (3.1 miles) of the park. Another highway, 31D, runs for about 18 kilometers (11.2 miles) within the rhino sensitive zone of Chilapata in JNP.

The River Torsa, flowing down from Tibet and Bhutan, virtually bisects the park. In addition, the park is flanked by a railway line, 13 tea plantations, 46 revenue villages and 12 forest villages.

“However, be it cases of rhino straying, new faces lurking around or their suspicious activities, across this vast landscape, local communities are now prompt in reporting — thus helping us to keep track over the tough terrains,” said Bhaskar.

Park authorities are also taking steps to manage potential sources of human-wildlife conflict.

The unicorns here largely occupy about 70 square Kilometers (27 square miles) of the park’s 216.5 square kilometer expanse area. These preferred ranges host two dozen varieties of sought-after fodder, including Chepti (*Themrda Sp.*), Dhansi (*Digitaria ciliaris*), Malsa (*Saccharum longisetosum*), Nal (*Arundo donax*), and Purandi (*Alpinia malaccensis*).



Wallowing ponds like this one, flanked by grasslands and undergrowth, are popular spots for rhinos and other herbivores. Photo by Moushumi Basu.

With natural availability of water from Torsa River and other streams as Malangi, the park is endowed with 48 water holes and wallowing ponds that are extensively used by the megaherbivores. Indian bison or gaur, Asian elephants, hispid hare, sambar, deer, leopards and varied species of birds also thrive in the Jaldapara forests.

However, the increasing herbivore population within the park's limited area is resulting in depletion of natural fodder sources and a rise in non-fodder plants. As a result, rhinos and other animals occasionally stray out of the park and into nearby villages in search of food.

As part of its plan, the management cultivates around 100 hectares of fodder per year in and around the park. Debnath has also called for a detailed study into the consumption versus availability of fodder in the park. "Fodder management is essential to check straying of rhinos and other herbivores from outside the park, thereby reducing the risks of man-animal conflicts and poaching too," he said.

Looking ahead, Debnath calls for exploring more innovative income-generating options for local communities, whom he regards as the natural sentinels of the forest. Ecotourism, he said, is a rapidly developing global market with tremendous potential to usher economic development among local communities, thus emerging as a sustainable conservation tool as well.

“The park’s entry fee, for instance, can be compounded with some ‘value added charges’ by including cultural shows, organizing ethnic food festivals, putting up handicraft stalls — which would be owned and managed solely by the local communities,” he suggested.

Pilot activities started with women’s folk teams in the rhino sensitive ranges can be replicated in other parts of the park as well. This way, by securing their livelihood options, biotic pressures within the forest can be reduced significantly, ensuring long-term protection of forests and wildlife.

Beneficiaries as Alomati and Roshni could not be happier with such suggestions. “We survive if rhinos survive. They are after all, the backbone of our living. We would certainly protect them at all costs,” said the beaming duo.