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Species fact sheets:

Asian Rhinoceros

Indian rhinoceros



Mysterious, often unseen, and very low in numbers, two out of three remaining species of Asian Rhinoceros hover on the brink of extinction.

Hunted for their horn - a highly prized commodity in traditional Asian medicines - and decimated by the destruction of their lowland rainforest habitat, many Asian rhinos now hover on the brink of extinction. As one of WWF's flagship species, the Asian Rhino is considered an essential species within the complex ecosystems it inhabits. The loss of the rhino would damage many other animals and plants that rely on it to uproot old vegetation, overturn soil, and expose new growth and food sources. The Asian Rhino are amongst the world's most endangered large land mammals. In 2005, less than 3,000 are known to exist in the wild with one species numbering less than a 100 individuals.



Young Indian rhinoceros

At a glance:

Common Name

Habitat

Location

Status

Indian rhino, Javan rhino, lesser one-horned rhino; Sumatran rhino;
Tropical and Subtropical Grasslands, Savannas, and Shrublands
Western Indonesia, Eastern Indochina, Southern Asia,
Sumatra, Borneo
(Indian Rhino): IUCN - Endangered
(Sumatran Rhino): IUCN - Critically Endangered
(Javan Rhino): IUCN - Critically Endangered





Indian rhinoceros Royal Chitwan National Park, Nepal

There are three species of Asian Rhinoceros:

The Sumatran Rhino: Listed as Critically Endangered, the Sumatran rhino is the smallest rhino in the world. It once ranged from north-eastern India through Indochina, Malaysia and the islands of Sumatra (Indonesia) and Borneo (Malaysia and Indonesia), but is thought to have lost at least half of its population in the decade from 1985 to 1995. Today, their population is estimated at less than 300 individuals in small pockets of Sumatra (Indonesia), peninsular Malaysia and Borneo (Sabah, Malaysia), making it the most endangered rhino in the world. The Borneo population is considered to be a distinct sub-species (the Borneo Sumatran Rhino), numbering between 20 and 30 animals.

The Indian Rhino: Also known as the Greater One-Horned Rhinoceros, this rhino is enjoying the greatest conservation success. The Indian rhino's original range extended from Pakistan all the way through India, Nepal, Bangladesh, Bhutan and Myanmar. In 1975, only 600 rhinos remained. By 2002, conservation efforts had resulted in the swelling of Indian rhino populations to 2,400 in the Terai Arc Landscape of India and Nepal, and the grasslands in Assam, northeast India. This success aside, however, the Indian rhino is still listed as endangered as only two populations number more than 100.

The Javan Rhino: The Javan Rhino is also known as the Lesser One-Horned Rhinoceros, and is probably the rarest large mammal species in the world. Fewer than 60 individuals are thought to survive in the wild, and none are in captivity. The Javan rhino historically roamed from north-eastern India through Myanmar, Thailand, Cambodia, Laos, Vietnam, and Sumatra and Java (Indonesia). Today, only 60 remain in Ujung Kulon National Park in Java, and no more than 10 survive in Cat Tien National Park in Vietnam.

What are the problems facing Asian Rhinoceros?

Poaching

By far the greatest threat to rhino populations in Asia is poaching. Rhino horns are highly prized in traditional Asian medicine as a cure for a variety of illnesses such as nosebleeds, strokes, convulsions and fevers. As a result, poachers continue to kill the animals to take the horn despite increased surveillance and prosecution.

Rhino horn is not like cattle-horns, which grow from the bone. Rhino horn grows from the skin and is made of keratin—the same fibre found in fingernails and hair. In traditional Asian medicines, the horn is ground into a fine powder, or manufactured into tablets.

Habitat Loss

Like elephants, a rhinoceros needs a lot of space to survive. The Asian rhinoceros is between 2 and 3.8 m (6.6 to 12.5 ft) long, 1.3 to 1.7 m (4.3 to 5.6 ft) tall at the shoulder, and weighs between 600 and 2,700 kg (1,323 to 5,952 lbs). Even with their physical bulk, rhinos can reach a speed of 45 km/ hour (28 miles/ hour) when charging.

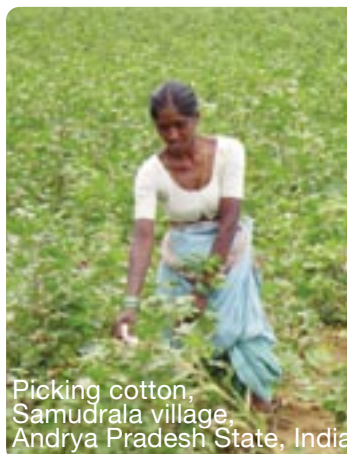
As conservation efforts have begun to have considerable success, humans have come into conflict with rhinos over living space. The Indian rhino has grown in number from 600 to 2,400 since 1975, with the largest population, 1,700 individuals, in India's Kaziranga National Park. At the same time, tree growth has reduced the rhinos' grassland habitat, and concurrent human population growth has led to conflict with rhinos over the remaining available non-forest areas. In this reduced living space, rhinos have destroyed farm crops and caused some human casualties, and humans have retaliated against the animals.

For the rhinos living in tropical areas, the same problem exists with slightly different parameters. In Vietnam, Java and Sumatra, the issue precipitating conflict with humans is not that trees are reducing grassland, but that defoliation and land-clearing are reducing tropical rhinos' forest habitat.

In southern Vietnam, over a quarter of a million people live in the buffer zone around Cat Tien National Park, home to the last 10 Vietnamese Javan rhinos in the world. The area was badly defoliated by Agent Orange during the Vietnam War in the 1960s and '70s and continues to lose natural forest cover at a shocking rate.

Similarly, deforestation for farming and plantation crops is severely threatening Sumatran Rhino habitats in Indonesia.

Finally, as human populations grow and spread, rhino herds become isolated and fragmented. That means reproduction and mixing of gene pools becomes more and more difficult.



Picking cotton, Samudrala village, Andhra Pradesh State, India



Local resident carrying off grass harvested from Terai Arc Habitat, Nepal

What is WWF doing to reduce threats to Asian Rhinoceros in the wild?

WWF created the Asian Rhino and Elephant Action Strategy (AREAS) out of the recognition that conservation success for these endangered large mammal species and their habitats will only be possible through a wide-ranging approach that goes beyond protecting isolated areas and addresses issues of land-use practices.

Through AREAS, WWF is working with law-makers and law-enforcement agencies to actively patrol rhino habitats to prevent poaching, and to pursue, capture and prosecute any currently active poachers. WWF also works with communities to reduce human-rhino conflict through the relocation of rhinos from crowded habitats, and through the creation of buffer-zones around protected areas and between forests and human settlements and farms.

Other examples of WWF's work to preserve Asian rhinos are:

In the Terai Arc Landscape in India and Nepal, rhino conservation has enjoyed enormous success (see Focus Ecoregion).

In India, the largest population of Indian rhinos (approximately 1,700) live in Kaziranga National Park. WWF is working with local stakeholders to secure the habitat corridor between Kaziranga National Park and Karbi Anglong so that rhinos have access to higher areas during floods.

In Cat Tien National Park in Vietnam, WWF and the Vietnamese government are working together to preserve the remnant population of 10 Javan rhinos - the only Javan rhinos to have survived outside Java (Indonesia). Thanks to WWF's efforts, Cat Tien National Park is now benefiting from increased management and protection, biological monitoring and research, redrawn boundaries, and the involvement of the local community in understanding and recognising their unique environmental inheritance.

Between Kinatangan and Sebuku Sembakung, is the area known as the Heart of Borneo which straddles both Malaysia and Indonesia. WWF is working with local landholders, agri-businesses and the government to stop the conversion of more than 2 million hectares (6 million acres) of forest to oil palm and timber plantations. The destruction of this forest would very probably lead to the poaching of the remaining Sumatran rhinos in the area. WWF hopes to use forest concession holders, forest certification and forest restoration as tools in this effort.

In Bukit Barisan Selatan National Park, on the Indonesian island of Sumatra, the critically endangered population of 60 to 85 Sumatran rhinos face increasing threat from the conversion of forest to cash crops on both the eastern and western sides of the park. WWF is operating with park officials to collect population data on the 20 to 40 remaining Sumatran rhinos and other endangered wildlife in the area, and with local communities to halt deforestation and preserve and restore the habitat.

In Ujong Kulon National Park, on the island of Java, Indonesia, WWF funds anti-poaching patrols to protect the park's population of 50 to 60 Javan rhinos - the largest population of Javan rhinos in the world. WWF and its partners also help the park's staff monitor the rhinos through camera traps and fecal DNA analysis. WWF is also working with local communities to create awareness and generate alternate means of livelihoods.

Throughout all rhino habitats, WWF monitors the illegal trade in rhino horns, funds anti-poaching patrols and supports intelligence networks in strategic locations. At the same time, WWF works with practitioners of traditional Asian medicine to find and promote alternatives to using rhino horns.

Sumatran rhinoceros



The Terai Arc Landscape: India and Nepal

The Terai Arc Landscape (TAL) covers 49,500 km² (19,107 square miles) in the lowland Himalayas from the Bagmati River in Nepal's east to India's Yamuna River in the west. The Terai Arc Landscape covers 11 protected areas from Parsa Wildlife Reserve in Nepal to India's Rajaji National Park.

A new landscape approach to conservation beyond protected areas was introduced to prevent wildlife from being isolated into small 'islands' when it became apparent that forest cover and grasslands would be rapidly lost to settlements and agricultural fields. Loss of habitat is the most pressing problem facing rhinos in this landscape as their numbers grew alongside a human population boom. For instance, rhinos in Royal Chitwan National Park in TAL - Nepal have increased fivefold in number since 1960. The park that now has the second-largest population of the Greater One-horned Rhinoceros in the world also faces enormous pressure as this district has a human population of over 400,000.

In order to increase genetic diversity and protect the species from catastrophic losses due to disease or a

natural disaster, WWF and its partners embarked on a program to relocate rhinos from densely populated parks to other reserve areas. This also served to spread the resource burden across a greater space. Since 1986, WWF has helped to translocate 87 rhinos from Royal Chitwan National Park to Royal Bardia National Park and Royal Shuklaphanta Wildlife Reserve, all in TAL - Nepal.

Recognising that conservation success in TAL needed the active involvement of local people, WWF works with communities and stakeholders to address sustainable livelihoods, capacity building and conservation awareness. We also support extensive anti-poaching patrols and informer networks within the community to nab poachers. WWF believes communities must safeguard their natural resources, and this has been implemented through projects like community management of forests.

Strong partnerships with the government, International Non-Government Organisations, and community-based organizations have been fostered. This has generated synergy in biodiversity conservation that has been instrumental in policy formulation, reform and advocacy.



Indian rhinoceros Chitwan National Park, Nepal

Find out more...

These fact sheets have been designed to give a broad overview of some of the threats faced by the featured species, whilst giving an example of WWF's work and solutions on the ground. For more detailed information on the species, WWF's programmes and the work we do, please visit www.panda.org/species.

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