

KHADGA

THE FORMIDABLE RHINOCEROS



Rhinoceros

Praised & damned, ridiculed & venerated, feared & elevated – this powerful creature has evolved over the ages and today finds itself struggling to survive the onslaught of poachers and a diminishing habitat.

There is an amusing fable by Rudyard Kipling that imaginatively describes the Rhinoceros got the folds of his skin. However, in the process of telling the story, he says of the animal – “...he had no manners the, and he has no manners now, and he never will have any manners.” This comment actually reflects the animal’s temperamental & aggressive behaviour. But Kipling is not alone in deriding the rhino. People from many cultures have also tended to attach all sorts of stigma to the unfortunate creature. For example, folk tales of Myanmar describes the beast’s aggressive & oft dangerous capabilities of eating fire as well as its enemies and in Laos the Rhino is associated with evil spirits.

But then there is the flip side too. In Java & Sumatra there is a belief that if one keeps a Rhino Horn in water it will protect a person from witchcraft & in ancient Cambodia the animal has been elevated to the status of a vehicle of the God of Fire [Agni Devata] which can be seen at Angkor Vat. In India, in spite of the impressive strength & size, the role of the rhinoceros has been somewhat inferior to other creatures in the history of animal in art & the lore. Because it is notoriously ill-humoured & possesses enormous strength. As a result, its very survival has been threatened by indiscriminate hunting. Today it is one of the endangered species & nobody seems to appreciate the fact that the rhinoceros actually represents a significant link in the chain of eco-diversity in North Eastern India.

According to records of the 6TH Century such as the edicts of King Asoka, animals like the rhinoceros, parrots, mynas, white doves, domestic doves & all the quadrupeds which are neither useful nor edible should not be killed. However, Rhino fights were great entertainment during Chandragupta Maurya’s time.



Indian Rhinoceros at Kaziranga National Park

The Great One-Horned Indian Rhinoceros, *Rhinoceros Unicornis* Linnaeus 1758, known as Khadga [meaning Sword] in ancient Indian Literature, is the second largest land mammal in India & the fourth largest in the world. Even though this name is common in Sanskrit, there are references to Parasvat in Vedic text, which some scholars claim to be the oldest name for the Rhinoceros. However, ancient author's introduced Ganda – another word for the animal.

Actually, the word Rhinoceros has Greek origins [Rhis = Nose & Keros = Horn], literally meaning the creature with a horn on its nose. Extending to a length of 35 cm. or so, it is not a true horn but a core of bone with a sheath of Keratin mass covering it. As a result, it is not fused to the skull in any way but rests on a bony cushion & can be dislodged with a severe blow, a new one emerging from the same location. Since it is not a bone, after the death of the creature it degenerates. This is why the skull of a rhinoceros does not have a horn on its nasal bone. Unlike its African cousins who keep their horns well sharpened as weapons of defence, the Indian Rhino does not seem to use its horn for any particular purpose. Self defence is not an issue really because the sheer size [5 ft. 6 – 7 inches tall & 13 feet long] & weight [a couple of tons] of this creature make it formidable enough to cope with any threat.



Mohanjodaro Rhinoceros Seal

The Indian Rhinoceros is one of the oldest land mammals existing in India. It possesses several primitive characteristics, providing an opportunity for evolutionary biologists to understand the

evolutionary processes in land mammal. The earliest ancestors of the rhinoceros appeared for the time about fifty million years ago in North America & emigrated to Myanmar & India via Central Asia. Some of the Rhino's ancestors such as Baluchitherium, Indricotherium & Paraceratherium that were found in Mongolia & Baluchistan were giant rhinos. In fact, the Baluchitherium was 17 feet high & 27 feet long. Cousins of the Indian Rhinoceros live far away across the subcontinent in Africa or in Southeast Asia and have different names, owing to their anatomy & taxonomy. The White or Square-lipped & Black rhinoceros belong to Africa while the two-horned Sumatran & the Lesser One-horned Javan Rhinoceros are found in South & South East Asia.



Mother & Calf



Beels provide lifeline to the fauna at Kaziranga

Some of the earliest true rhinos in the Indian sub-continent have been found in the Shivalik Hills of Northwest India, along the Narmada River in Central India, in the Ghataprabha River Karnataka, in Limestone Caves near Betamcherla in Andhra Pradesh, in Coimbatore District in Tamil Nadu & in the Manjra Valley near the city of Latur in Maharashtra. In the long story of art, the Rhinoceros appears in prehistoric painted forms in the rock shelters at Bhimbetka, as well as at several other rock shelter locations in Madhya Pradesh, as Terracotta figurines, on square seals, amulets & copper tablets from Indus Valley Civilization around 2000 BC.

Rhino hunting continued through out the history of India. Their former range along the base of the Himalayas to Peshawar until the 15TH – 16TH Century is further known to us from the accounts of rhino hunt in the northwest by Mughal Emperor Babar. There is a frequent mention of Rhinoceros in Babur Nama, indicating that Babar pursued it more as a game by the end of the 16TH Century Rhinoceros became a common element in Mughal Paintings. Hamza Nama refers to it as the vehicle of the villains. Thus the story in Hamza Nama dictates that several rhinos are slain by the heroes to prove the point. We do come across the reference to rhinoceros hide used to cover war elephants of Akbar, Rhino hide used in a coat of mail was called Khadga – Kavacha in ancient times. Its use for making shields was prevalent right up to the 18TH Century in Rajasthan. However, as we enter into the later part of 18TH Century, its distribution is referred more or less to the present range except that they are in great abundance. It is thus not surprising that a French Map dated 1781 declares North Bengal & Assam as 'Contree de Rhinoceros'.

It surely tells us the interest Europeans have had in Indian Fauna & we are also reminded of the export of a Rhinoceros to Europe in the regime of Roman Emperor Titus [AD 79 – 81]. In the 16TH Century a painting of Rhino by the famous German Artists Albrecht Durer Rhino was again exported to Portugal in 1553 AD; as a gift to Pope Leo X. During medieval times about 30 animals were brought to Europe.



Miniature painting of Rhinoceros hunt

Today, the Indian One-horned Rhino is confirmed to North Bengal, Assam & Nepal Terai. In fact, the Kaziranga National Park in the District of Golaghat in Assam is its largest abode. This park became a World Heritage Site in 1985 & represents the single largest area [430 Sq. Km.] with the most natural habitat for the conservation of biological diversity within the northeast Brahmaputra Valley which is considered to be perhaps one of the most complex ecosystem of the world. Kaziranga & the neighbouring areas help us understand the dynamic of the ecosystem that has enabled rhino to survive.

It is important to mention here that Kaziranga is home to a number of rare & threatened species. The Park provides an amazing habitat range, from floodplains to grasslands to hilly evergreen forest. Besides Rhino, Water Buffalo, North-Eastern subspecies of Swamp Deer, Tiger, Indian Elephant, & avifauna [480 species] are provided with an entire range of habitat from floodplains to grasslands to hilly evergreen forest communities. Beels [vast expanses of permanent water bodies or lakes] that cover over 5 % of the total area of the park provide powerful life lines, along with the tributaries of the Brahmaputra, that support the diverse flora & fauna, tall & short grasses account for more than 60 % of the total area while the woodlands occupy about 28 %.



Khadga Revelsin his habitat

The Orang, Manas, Pabitora, Sonai-Rupai Sanctuaries as well as the Deosur, Kukrakata, Panidephing, Kuruwa in the vicinity in Assam along with Jaldapara & Garumara Sanctuaries in West Bengal are the other 'extended homes' of the rhinoceros in India. Chitawan National Park in Nepal is the last bastion outside India, sheltering a Rhino population of over four hundred. Wildlife management has successfully helped them grow in numbers despite the damage caused by poaching & increased destruction of their habitats by nature as well as the spread of human settlements.

Swampy areas with extensive grasslands are the preferred habitats of the rhinoceros but in Nepal it also inhabits the low hills of woodland forests that also include grasslands & numerous streams. Even though the grass is its main stay, occasionally during the lean period it also feeds on water hyacinth, fruits of some trees & tender leaves of shrubs & seedlings of several species of trees. They do not migrate long distances except when rivers are in spate & vast sheets of flood water force them to seek shelter away from their actual home range. If the two animals are seen together, they must surely be either calf & its mother or the male & a female rhino mating.

There are dedicated Wildlife Experts who have extensively examined the flora of the sanctuaries that provide a home to the rhinoceros & work towards maintaining the balance of nutritional properties of the Rhino's diet. Their protection against epidemics, the enhancement of their nutritional requirements in addition to their security against poaching by dedicated field biologists & security guards aims to keep them within the safe limits of the park rather than letting them wander in search of food & exposing them to Poachers. Conservation Action Plans of the Government of India & Nepal for the Great One-Horned Rhinoceros struggle to restore the population that today estimates about 446 in Nepal & 2000 in India. The Rhinoceros is now an endangered species listed in the Red Book of the International Union for Conservation of Nature & Natural Resources [I. U. C. N.]. It is a multidisciplinary approach pursued by a number of scientists who are studying behavioural ecology & biology of rhinoceros, with respect to the local landscape that supports their population. It only ensures better understanding of the animal which can ensure its future in India.

These formidable creatures have evolved over a vast stretch of time, facing challenge after challenge to persist. Today's 'rhino-perspective' faces a major concern for its survival in the midst of a myth driven craze for its horns & increasing environmental deterioration & human interference.



Posing For Snapshots