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ZOO OUTREACH ORGANISATION

HISTORICAL RECORDS OF THE RHINOCEROS (*RHINOCEROS UNICORNIS*) IN NORTHERN INDIA AND PAKISTAN

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Abstract

There are only very few reports of Rhinoceroses from the northern states of India. The Indian Rhinoceros lived along the River Ganges from Delhi in the west until 1650, to Mirzapur, Patna and Rajmahal in the east until 1850. The animal also existed in the foothills of the Himalaya just south of the Nepal border, and incidentally stragglers from Nepal are still sighted there. The Rhinoceros was noted in the hills of Uttar Pradesh, at Pilibhit up to the 1870s, at Kotdwara near Hardwar in 1789, and further west in the 14th century. The four records from the Indus Valley of Pakistan and across the Khyber Pass in Afghanistan, dating up to the 16th century, are summarized.

Keywords

Indian Rhinoceros, Rhinoceros unicornis, historical distribution, India, Pakistan

Introduction

"The *ganda* exists in large numbers in India, more particularly about the Ganges," the traveller Alberuni (1910) wrote around 1030. *Ganda* is the local name for Rhinoceros. The same general and unspecified area of distribution is echoed by a few writers in the 16th and 17th centuries, for instance by Jovius (1571), van Linschoten (1596), Philippe (1669), Schouten (1676), and Grew (1681).

The Indian Rhinoceros, *Rhinoceros unicornis* Linnaeus, 1758, today occurs in the *terai* of southern Nepal and in parts of the Indian states of West Bengal and Assam and adjoining regions of northeastern India (Choudhury, 1985; Menon, 1995). Its range is restricted to the alluvial plain habitats: riverine grasslands with grass up to 8m tall and swampy areas bordered by different kinds of forests (Laurie *et al.*, 1983). In most recent publications, the historical (say, 16th century) distribution of the Indian Rhinoceros is shown to have extended in a broad sweep from northeastern India through the length of the Ganges Valley of northern India westwards all the way to the upper Indus Valley of Pakistan. Generally, River Ganges is taken as the southern limit of its former distribution, while the western limit lies either in north Pakistan (1550) or near the western border of Nepal (1870).

Earlier, I presented details of records of the Rhinoceros in northeastern India and the eastern parts of Bihar (Rookmaaker, 1980), and I collected the available evidence, both paleontological and literary, of Rhinoceros occurrences in those parts of India and Pakistan, which are now outside the present range of the species (Rookmaaker, 1984). In the latter paper it was mentioned that there appeared to be no reports of the Rhinoceros in northern India in the 17th and 18th centuries. This is certainly remarkable given the fact that the area was generally accessible and often visited by European travellers. The Indian Rhinoceros was once found further west in the Indus Valley of Pakistan, maybe even across the border into Afghanistan (Rookmaaker, 2000). Although presumably all records from northern India refer to *Rhinoceros unicornis*, it may be remembered that the Sumatran Rhinoceros, *Dicerorhinus sumatrensis* (Fischer, 1814), has been known in northeastern India and the Javan Rhinoceros, *Rhinoceros sondaicus* Desmarest, 1822, was the only species inhabiting the Sunderbans of Bangladesh and India up to the vicinity of Calcutta until about 1925 (Rookmaaker, 1998b). In this paper, I will review some old and some new data concerning the occurrence of the Rhinoceros in the northern Indian states of Bihar, Uttar Pradesh, Himachal Pradesh and Jammu and Kashmir as well as summarize the reports of the animal in the Indus Valley.

The records of the Rhinoceros in northern India are set out

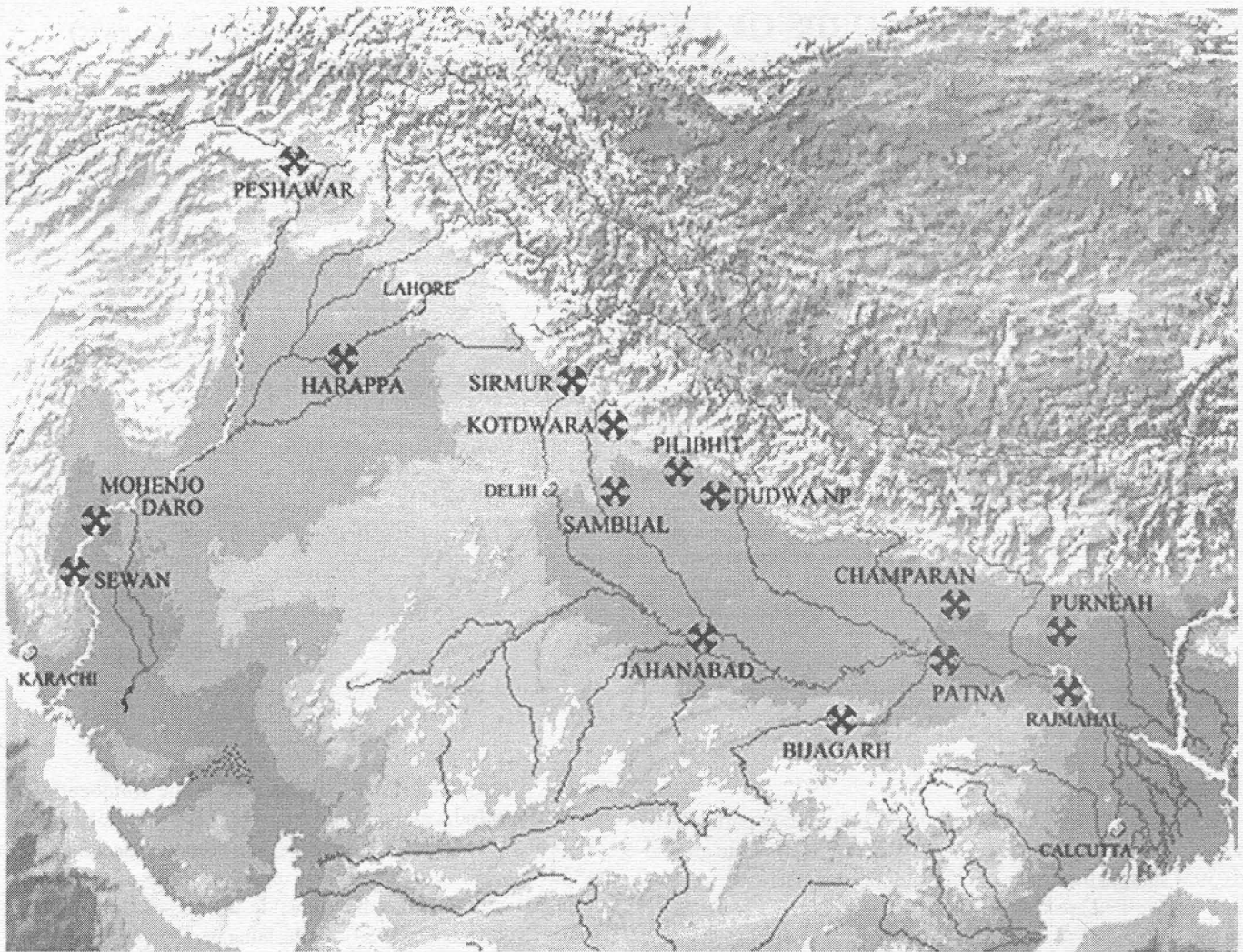


Figure 1. Important and known historical localities of *Rhinoceros unicornis* in the present Pakistan and India.

below in two parallel sets, each ranging from east to west. The first set follows the River Ganges from the Rajmahal Hills in eastern Bihar to regions around Delhi. The second set follows the more northern *terai* region of the Himalaya from Purneah in the east to Pakistan in the west. The various sources mention place names in all kinds of variants, often as if everybody would know their geographic position, while they are absent from detailed modern maps. The more important names can be found on the map in Figure 1.

Records along the River Ganges

Rajmahal Hills (Bihar)

These hills were once covered by forests, which were full of wild animals. On 4 January 1666, the French traveller Jean-Baptiste Tavernier (1605-1689) passed the town of Rajmahal and remarked

that “it was formerly the residence of the Governors of Bengal, because it is a splendid hunting country” (Tavernier, 1676; 1924). In an imaginary journey through India, Pennant (1798) too assured that the governors liked to settle in Rajmahal “on account of the quantity of game of chase, which the neighbourhood offered.”

The presence of the Rhinoceros in the Rajmahal Hills of eastern Bihar is recorded by several commentators of the 19th century. Jerdon (1874) mentioned it from “the northern edge of the Rajmahal Hills near the Ganges”, while Baker (1887) knew it from “the base of the Rajmahal Hills, especially near Sikrigully.” In contrast, Williamson (1807) stated much earlier that “the Rhinoceros is seldom found on the western side of the Ganges, though the jungles there are fully competent to afford abundant

shelter”.

Thomas Daniell (1749-1850) and his nephew William Daniell (1769-1837), two British artists, worked in India from September 1788 to May 1793. They made a long journey up the Ganges from Calcutta to Delhi and Agra, and back, between October 1788 and November 1791. William kept a journal during most of this trip, used by Archer (1980) to describe the events. On 8 October 1788, the Daniells reached the Ganges in their boat, and on their left they could see the Rajmahal Hills “covered with thick jungle where tigers, rhinoceros and wild elephant lurked”. This list of animals must have been based on tales heard from people in Calcutta or during the voyage. The Daniells reached Rajmahal the next day. During their stay, they made a one-day excursion to a nearby waterfall, the Moti Jharna or Fall of Pearls, about 21 miles from Rajmahal and two miles from Sikragali Hill: “on the way William was thrilled to see the footprint of a rhinoceros” (Archer, 1980). Unfortunately, nobody cared to elaborate.

In 1820, a hunt was organized near the Governor-General’s camp, about 12 miles above Rajmahal. The party sighted three or four Rhinoceroses, one of which was shot dead by Captain Brooke of the Commissariat Department (Cockburn, 1884, from the *Bengal Hurkara* of 14 December 1820). This is the only record of a rhinoceros killed in this area. When you follow the Ganges upstream from Rajmahal, you soon come to a good landing place called Sicra Gulley (Daniell), Sikrigully (Baker) or Sakrigali (current spelling). The writer Fanny Parks (1850: 398) passed here in November 1844 and noted that there should be a lot of animals in the area, like “bears, tigers, rhinoceroses, leopards, hogs, deer of all kinds.” She didn’t see any of these herself.

The rhinoceros disappeared from the Rajmahal Hills in the course of the 19th century, according to contemporary statements to the effect that it would be “fast verging on extirpation” (Blyth, 1862), that “it has become extinct in my own time in the forests of Rajmahal” (Yule, 1863) and that it had “deserted those places altogether” although it was numerous fifty years earlier (Baker, 1887). Some authors even put a date to it, being “about 1850, or rather later” (Blanford, 1891) or “since 1843” (V. Ball in Tavernier, 1924). There was no consensus about the specific identity of the rhinoceros found in the Rajmahal Hills. Blyth (1862), Jerdon (1874) and Sclater (1891) referred the animals to *Rhinoceros sondaicus*, while Blanford (1891) preferred *Rhinoceros unicornis*. One wonders on which evidence these various assertions were based (see Discussion).

Patna (Bihar)

Around 1670, the English traveler Bowrey (1905) mentioned the occurrence of the rhinoceros in “Pattana”. When an Indian Rhinoceros arrived in London in June 1739, a poster was sold to the public with a representation of the animal (Clarke, 1986; Rookmaaker, 1998a). It was dedicated to “Humffreyes Cole Esq.

Chief of the Hon’ble East India Company’s Factory at Patna, in the Empire of the Great Mogul, for the favour he has done the curious in sending it over to England”. Maybe Mr. Cole caught the animal near Patna, maybe it came from elsewhere.

Williamson (1807) mentioned two rhinoceroses kept by local gentlemen early in the 19th century. One was owned by Augustus Cleveland, District Officer at Bhagalpur “which I believe did not live very long”; the other by Mr. Young of Patna, which “used occasionally to walk about the streets, and was for a long time considered perfectly innocent; but, if my information be correct, was latterly found to be vicious, and was in consequence destroyed”. Another incident narrated by Williamson (1807) happened at the end of 1788 “two officers belonging to the troops cantoned at Dinapore, near Patna [= Danapur, a western suburb of Patna], went down the river towards Monghyr to shoot and hunt. They had encamped in the vicinity of Derriapore, and had heard some reports of a ghendah, or rhinoceros, having attacked some travellers many miles off. One morning, just as they were rising, about daybreak, to quest for game, they heard a violent uproar, and on looking out, found that a rhinoceros was goring their horses, both of which, being fastened by their head and heel-ropes, were consequently either unable to escape or to resist ... The incident just described may be deemed the more curious, as it has been scarcely ever known that a rhinoceros has appeared on the western bank of the Ganges; to which it was probably carried by some inundation, perhaps of an island in the Gogra [Ghaghra River], and landed promiscuously wherever it found means to escape from the violence of the current”.

The plate accompanying this description, engraved after a sketch by Samuel Howitt (1765-1822), actually showed a specimen exhibited in Pidcocks Menagerie in London from 1799 to 1800 (Rookmaaker, 1998a).

The Calcutta Zoo received a female Indian Rhinoceros on 7 April 1877, presented by the Maharajah of Dumraon (Anonymous, 1878). Dumraon is a town west of Patna. It could be, of course, that the Maharajah bought the animal outside his own region.

Mirzapur (U.P.)

Cockburn (1883) found at least two rock paintings or petroglyphs of rhinoceros in caves in the southern Mirzapur District. A poor representation was in a shelter “at village Roun in Pergunnah Burhur”, a much better one in “Ghormangur cave”. Both the shelter and the cave were in the vicinity of the fortress of Bidjeygurh or Bijagarh (U.P.), on the Son River (south of the Ganges). The age of the paintings is unknown, but they were relatively recent, maybe 17th or 18th century.

When the Moghul Emperor Zahiruddin Mohammed Babur (1483-

1530) was in nearby Chunar in 1529, he heard a man say "that in an island close to the edge of the camp, he had seen a lion and a rhinoceros. Next morning we drew a ring round the ground; we also brought elephants in readiness, but no lion or rhinoceros was roused" (Babur, 1922).

Kora Jahanabad (U.P.)

While traveling from Agra to Patna on 2 December 1665, Tavernier (1676; 1924) was in a place called Gianabad, which is the present Kora Jahanabad, some 50km south of Kanpur (U.P.): "*je vis un rhinocéros qui mangeoit des cannes de ce millet qu'un petit garçon de neuf ou dix ans lui présentoit. M'estant approché il me donna aussi des épis de millet, & à l'instant le rhinocéros vint à moy ouvrant la bouche par quatre ou cinq fois*" [Translated: I saw a rhinoceros eating stalks of this millet, which a small boy nine or ten years old presented to him. On my approaching he gave me some stalks of millet, and immediately the rhinoceros came to me, opening his mouth four or five times]. The tameness of the animal may indicate that it was a captive animal, but why one would be kept in such a strange place is not explained.

Sambhal and Aligarh (U.P.)

In 1590, the Moghul Emperor Akbar (1556-1605) said that the Rhinoceros was found in the "Sarkar of Sambal", which should be at Sambhal, a town east of Delhi. It is remarkable that he recorded the animal just from this one locality (Akbar, 1949). His son Emperor Jahangir (1569-1627) hunted a rhinoceros in the Nuh Forest near Aligarh (Jahangir, 1914). One would expect this to have been a wild animal. When, however, the English traveller Coryat (1616) visited Jahangir's court in 1615-1616, then at Ajmer (Rajasthan), he saw two "unicornes ... brought hither out of the countrie of Bengala". Why would one bring animals from the other side of the country when they are available in a nearby forest?

Records along the base of the Himalaya

Purneah District (Bihar)

The rhinoceros was known in Purneah (Simson, 1886); on the Kosi River of the Nepal-Himalaya (Schlagintweit, 1880); on the banks of the Koasee River "some forty or 50 years ago" (Baker, 1887); and on the Kosi and at Patharghatta (Manners-Smith, 1909). The collection of the Indian Museum in Calcutta included a specimen of *Rhinoceros unicornis*: "a stuffed and bones of feet, male, Purneah District, G.W. Shillingford, 1871" (Sclater, 1891). A skull of *Rhinoceros unicornis* was in the collection of the Bombay Natural History Society: "a skull of male, presented by Mr. J. Shillingford, Purneah" (Anonymous, 1887). Maybe all this material belonged to a single specimen. I cannot find more about G.W. or J. Shillingford, but they must have lived in Purneah.

Champaran District (Bihar)

The rhinoceros was occasionally found in Champaran District

and adjoining areas like Saharsa, Bihar (Mukherjee, 1963), Gorakhpur, U.P. (Baldwin, 1877), and on the banks of Bagmati, north of Muzaffarpur (Manners-Smith, 1909). Even Emperor Babur may have meant this general region when he recorded (before 1530) the existence of the rhinoceros "on the banks of the Saru [Sirwu] River in Hindustan" (Babur, 1922), where the Saru apparently means the Ghaghra River in north-eastern U.P. Alternatively, Babur may have echoed the passage in the travel account of Ibn Battuta written before 1356, in which the latter accompanies Sultan Muhammad-bin Tughluq to the city of Bahrayij on the banks of the River Saru (Gibb, 1971, who in a note places this ancient town on the banks of the River Ganges). During that trip, Ibn Battuta relates that they "entered a thicket of canes and a rhinoceros came out of them against us. It was killed and the man brought its head, and though it is smaller in size than an elephant yet its head is many times bigger than an elephant's head" (Gibb, 1971).

A rhinoceros was shot in Champaran in 1939 (Ara, 1954) and another in 1960 (Dutta, 1991). On 28 March 1982 a male *Rhinoceros unicornis* (called Raju) arrived in the Patna Zoo, said to have been caught in the Champaran Forest (Wirz-Hlavacek et al., 2001). It is quite likely that these records refer to specimens wandering from the Chitwan National Park on the Rapti River in southern Nepal.

Pilibhit (U.P.)

Baldwin (1877) mentioned the rhinoceros in Pilibhit district. According to Hewett (1938), the last rhinoceros was shot near the boundary of Pilibhit district by R. Drummond in the early 1870's (Martin & Martin, 1980). Hewett could hardly have spoken from personal experience, and one wonders what happened to the specimen. Several sources refer to the presence of rhinoceros in Rohilkhand, all following Jerdon (1874), who had heard reports from (unidentified) sportsmen (Blanford, 1891; Mukherjee, 1963). Although Pilibhit is part of Rohilkhand, the latter applies to a much wider region in northern Uttar Pradesh.

Somewhat further to the east along the Nepal terai, on the Indian side of the border, two reserves are inhabited by the Indian rhinoceros. The animals in Dudhwa National Park were translocated from Pobitara Sanctuary (Assam) in 1984 (2 males and 2 females) and from Chitwan National Park, Nepal in 1985 (4 females). Up to 1994, eight calves were born and five animals died (Menon, 1995; Suman, 1995). Still further east is the Katarniaghat Sanctuary, 40km from Nanpara, U.P., where four animals migrated from Nepal were known in 1994 (Menon, 1995).

Kotdwara (U.P.)

The artist William Daniell and his companions arrived in Kotdwara (he called it "Coaduwar Gaut"), about 45km east of the town of Hardwar, on 18 April 1789 (Archer, 1980). Two days later, the party unexpectedly met with a fine male rhinoceros,

standing on the opposite side of a small stream. Long after their return to England, William Daniell published a series of seven volumes entitled *The Oriental Annual; or Scenes in India* (1834-1840) with engravings originating from the Daniells' journeys in India, and text written by Rev. Hobart Caunter. In the second volume dated 1835, the encounter with the 'Kotdwara Rhinoceros' is vividly remembered: "The elephant is found in the lower regions of the mountains, and so is the rhinoceros, though less frequently. Of the latter animal we were fortunate enough to obtain a view, which is by no means a usual thing, as it is not gregarious like the elephant, and therefore much more rarely met with. We had turned the angle of a hill that abutted upon a narrow stream, when, on the opposite side of the rivulet, we saw a fine male rhinoceros; it was standing near the edge of the water with its head slightly bent, as if it had been just slaking its thirst in the cooling stream. It stood, apparently with great composure, about two hundred yards above us, in an open vista of the wood. Mr. Daniell, under the protection of a lofty intervening bank, was able to approach sufficiently near it to make a perfect sketch of it; after which, upon a gun being fired, it deliberately walked off into the jungle. It did not appear in the least intimidated at the sight of our party, which remained at some distance, not at all excited by the discharge of the gun" (Daniell & Caunter, 1835). This is the only definite record of a rhinoceros anywhere in northern Uttar Pradesh west of Nepal. Two drawings and an engraving of this animal are now known to exist (Rookmaaker, 1999a,b).

From northwestern India to the lower Indus Valley

Northwestern India

In the *Tarikh-i-Mubarak-Shahi* for 1387, we find that prince Muhamed Khan "went to the mountains of Sirmor and spent two months in hunting the rhinoceros and the elk" (Yule & Burnell, 1903). Sirmor, a capital in those days, should be the current small town of Sirmur, west of the River Yamuna, in southeastern Himachal Pradesh. Further to the west, on the frontier of Kashmir, Timur recorded for 1398 in his *Zafar-Namah*, "they kill several rhinoceros with sables and lances" (Yule & Burnell, 1903). It is unexpected that there are so few records for the large area stretching from U.P. to the Indus River – maybe the rhinoceros was exterminated here at an early date.

Peshawar and the Khyber Pass

There are only four sources, one cultural and three literary, referring to the rhinoceros in the Indus Valley. These sources are ancient and difficult to interpret without an understanding of the context. I have discussed them earlier (Rookmaaker, 2000) and interested readers should refer to this paper for quotes *in extenso*. There were two references to the rhinoceros in the upper Indus Valley in the region of Peshawar. First, there are the recollections of Emperor Babur in *Babur-Nama*, an illustrated manuscript of which was discussed and translated by Suleiman (1970). On 16 February 1519, Babur hunted the rhinoceros, which

he called *karg*, near Sawati on the east bank of the Indus River (Suleiman, 1970). Another hunt was organized in the vicinity of Peshawar on 9 and 10 December 1526 and although the animal was pursued over a long distance, the arrows were unable to penetrate its hide (Suleiman, 1970). When Babur tried to summarize the knowledge about the rhinoceros, he mentioned several localities in the northern part of the Indus Valley.

Another rhinoceros was encountered by Sidi Ali Reis, member of a prominent Turkish family. In 1556, he travelled from Peshawar across the Khyber Pass and reached a village called Djushai (locality not known). He wrote that there, "in the mountains we saw two rhinoceroses [he used *kerkedans*], each the size of a small elephant, they have a horn on their nose about two inches long" (Vambéry, 1899; Rookmaaker, 2000). As Sidi Ali probably crossed the pass before he met the *kerkedans*, this must have taken place in the extreme east of Afghanistan, in territory which can hardly be called a normal habitat for *Rhinoceros unicornis*.

The lower Indus Valley

The only written source about a rhinoceros in the lower Indus Valley is found in the narratives of Ibn Battuta (born in Tangier, Morocco in 1304), who travelled from Kabul, Afghanistan towards the lower Indus Valley in 1333. He reached the lower course of the River Indus at a spot located about 50-100km north of Siwasitan or Sehwan in the district of Larkana, Pakistan. Here he recorded that "after crossing the river of Sind called Banj Ab, we entered a forest of reeds, following the track which led through the midst of it, when we were confronted by a rhinoceros. In appearance it is a black animal with a huge body and a disproportionately large head" (Gibb, 1971).

The rhinoceros was known to the people of the ancient Indus Civilization or Harappan Culture, which flourished in the vast river plains and adjacent areas of the present Pakistan and western India between the years 2600 and 1900 BC. Among the objects excavated at the Harappan settlements of Mohenjo-Daro on the Indus River, there were many square seals made of stone and engraved with symbols and animal motifs. A small number of these seals represent a single-horned rhinoceros (Rookmaaker, 2000). The animal is also represented in a number of clay pottery models, said to be "in every case a child's handiwork" (Marshall, 1931; Rookmaaker, 2000). In view of the abundance of the seals and the pottery objects in the various excavations, we must assume that the people of the Harappan culture were acquainted with the rhinoceros, even that they knew the animal well. It is likely that they could encounter them near their settlements in the Indus Valley either in the lower part of the valley or possibly slightly more to northwards where Harappa is located.

Discussion

Following the course of the River Ganges, there are several records of the rhinoceros. Most of these are old and vague, and maybe each one considered separately could be questioned and dismissed. However, viewed as a total, the occurrence of the animal is hard to deny. The rhinoceros lived on both sides of the river, but there is no evidence that its range extended far southwards in historic times, or in the last four centuries. The animal gradually disappeared starting from the western regions around Delhi and Agra, which can be illustrated by the latest dates when the animals were recorded: Sambhal (1590), Aligarh (1625), Kora (1665), Mirzapur (1700), Patna (1800) and Rajmahal Hills (1850).

The species of rhinoceros which lived along the southern edge of the Himalaya certainly was *Rhinoceros unicornis*, as there is evidence in the form of a few specimens as well as Daniell's drawings of 1789. For regions along the River Ganges, especially in the Rajmahal Hills of eastern Bihar, the presence of the Javan Rhinoceros (*R. sondaicus*) cannot be totally discounted. That species lived in the Sundarbans region and has been documented near the southern suburbs of the town of Kolkata (Rookmaaker, 1998b). However, as far as the Rajmahal Hills are concerned, there is no evidence of any kind which could help us to decide about the identity of the rhinoceroses resident in that region. Let me assume that they belonged to *R. unicornis* until a case for *R. sondaicus* can be more successfully argued.

The presence of the Indian Rhinoceros in the Himalayan foothills was to be expected considering its current distribution in parts of southern Nepal. It is generally considered that the more recent records (say for the last hundred years) in areas bordering Nepal refer to stragglers rather than to resident populations. This is likely to be correct. On the western side, the two records for Kashmir and Himachal Pradesh at the end of the 14th century are quite vague and circumstantial. As the rhinoceros was recorded even further west in the Indus Valley in the 16th century, it is impossible to argue that these old reports cannot be based on fact. The actual sighting of a rhinoceros (with a drawing as evidence) as late as 1789 in Kotdwara, roughly in a place now covered by the eastern side of Rajaji National Park, is surprising. However, it would seem to substantiate the possibility of the animal's continued existence in the Himalayan foothills west of the Nepal border until around 1850.

The various reports can now be summarized. The Indian Rhinoceros lived in the plains on the River Ganges from Rajmahal in the east to Delhi and Hardwar in the west. It became extinct in this region in the first half of the 19th century. It also occurred along the southern side of the Himalaya until roughly the same period, while more recent sightings refer to animals wandering south from Nepal.

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