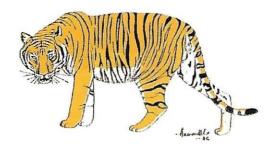
THE MAMMALS OF NORTH EAST INDIA

Text, line drawings & maps

by

ANWARUDDIN CHOUDHURY

M.A., PH.D., D.SC







GIBBON BOOKS AND THE RHINO FOUNDATION FOR NATURE IN NE INDIA

Supported by



	Rhinoceros unicornis	Rhinoceros sondaicus	Dicerorhinus sumatrensis
Shoulder height (m)	1.6-1.95	1.47-1.7	1.0-1.3
Horns	1	1	2
Horns in females	+	-/+	+
Length of horn (cm)	20-100	10–26	25-79 (front)
Conspicuous hair on body	=	-	+
Skin fold	Prominent	Prominent	Not prominent
Skull: greatest length (cm)	56-62.5	44–55	47–57

Table 2.38 The main characters of the NE Indian species of the family Rhinocerotidae.

ORDER PERISSODACTYLA

The Order Perissodactyla or the odd-toed ungulates consists of three very distinct families, the rhinoceroses (rhinocerotidae), horses (equidae) and the tapirs (tapiridae). Of these, the first two are represented in NE India. The ungulates or hoofed animals are divided into two orders, depending upon the arrangement of their toes. In the odd-toed ungulates, the third or middle toe of the foot is the most prominent. The rhinoceroses have also distinctive 'horns'. The evolution of perissodactyls was reviewed by Prothero & Schoch (1989). Corbet & Hill (1992) and Grubb (1993) provided a recent taxonomic and geographic reference.

Family Rhinocerotidae Rhinoceroses

Rhynocerotidae Gray, 1821: 306; type genus Rhinoceros L.

Distribution confined to Africa and SE Asia, Of the four genera, two (Rhinoceros and Dicerorhinus) are represented in NE India as well as Asia with three species. A detailed review on the classification of Asian rhinos was by Groves (1967b) while phylogenies for the family were proposed by Groves (1983) and Prothero et al. (1986). Penny (1987) had provided comprehensive

popular account of all living rhinos. Khan (1989) had provided account on current status and conservation. Status of all the species in Assam was briefly reviewed by Choudhury (1997a).

RHINOCEROS

Rhinoceros Linnaeus, 1758: 56; type species R. unicornis L.,

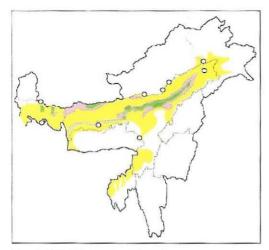
155(127). Rbinoceros unicornis Great Indian one-horned rhinoceros, Greater one-horned rhinoceros

R. unicornis Linnaeus, 1758: 56. ? Assam, [India].

SYNONYMS. asiaticus, indicus, jamrachii, stenocephalus.

LOCAL NAMES. Gorh (A), Charak (Adi, Mising), Gondar(B).

DISTRIBUTION & STATUS (Map 2.154). It mainly occurs in Assam and northern W Bengal with records of stray animals elsewhere. Altitudinally it may occasionally ascend higher hills also. A carcass of a poached animal was recovered on 11 November 2012 at 815m in Karbi Anglong, which was killed in November 2011 (as confessed by the poachers). Arunachal Pradesh. No resident population but almost every year, a few animals stray into, mostly from Kaziranga NP of Assam. Some recent records were from Pakke WS (latest in 2009), Papum RF, Drupong RF, Panir RF (Choudhury 1997h), Doimukh RF and Kimin (Papum Pare district; in 2007).



Map 2.154 Rhinoceros unicornis.

Assam. Found in the floodplains of the Brahmaputra R and in terai grassland of the duars (Choudhury 1985, 1996a). Largest concentration (c. 2200) is in Kaziranga NP. Other significant populations are in RG Orang NP (c. 100), Pabitora WS (c. 90; the highest density anywhere [Choudhury 2005a]) and Manas NP (22; mostly translocated animals). A few are occasionally met with in Burhachapori WS, Laokhowa WS and Pani-Dihing BS. Stray animals wander across the central and upper Brahmaputra Valley, especially in winter. The most frequented areas are Majuli and adjacent areas of Lakhimpur and NE Golaghat. One rhino had travelled at least 200km from Pabitora WS to Goalpara from where it was captured for translocation to Dudhwa NP in Uttar Pradesh in 1984. On a few occasions an odd rhino had entered Tezpur Town. Two rhinos were there in Doboka RF, Nagaon district in 1960s.

Meghalaya. One stray record from Jaintia Hills in early 1970s, which came from Assam's Nagaon district. Northern W Bengal. Occurs in two discrete populations in two protected areas of Jalpaiguri district: Jaldapara WS (160 rhinos) and Gorumara NP (42). There was a record of a straggler from Chapramari WS in 1996. The same animal also wandered inside Darjeeling district (AUC).

EXTRALIMITAL. Nepal and Dudhwa NP (reintroduced in 1984). Wanderers from Assam's Manas NP to Bhutan. A female rhino from Gorumara NP had wandered into N Bangladesh in March 1989 (had to be physically brought back).

REMARKS. Laokhowa WS in Assam was an important rhino area but most animals fell to poachers in the early 1980s. Similarly, Manas NP has lost bulk of its rhinos to the poachers between 1989 and 1993. Earlier, there were small permanent populations in Sonai-Rupai WS and in Lakhimpur district of Assam, both close to Arunachal Pradesh. It is also known as the Indian rhinoceros. CITES: Appendix I; IUCN: VU; WPA: Schedule I.

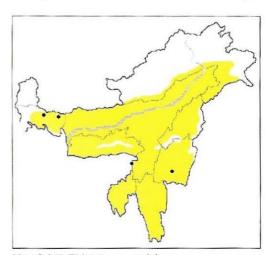
156(128). Rhinoceros sondaicus Javan rhinoceros, Smaller one-horned rhinoceros

R. sondaicus Desmarest, 1822: 399. Sumatra, [Indonesia] (Sody, 1946); usually given as Java.

SYNONYMS. annamiticus, floweri, inermis, javanicus, nasalis.

SUBSPECIES. 156a. R. s. annamiticus Heude, 1892: 75, 113, pl. xixA. Locality unknown, presumably Annam, Vietnam.

DISTRIBUTION & STATUS (Map 2.155). It is extirpated in NE India since the first years



Map 2.155 Rhinoceros sondaicus.

of 20th century. Its historic range extended from W Bengal (Sunderbans and N Bengal) and Bhutan to Java. Assam. One shot by Gordon Fraser, a tea planter in undivided Sylhet district (now in Bangladesh, then a part of Assam) (Rookmaker 1980; Wood 1930). A part of Sylhet district is with present Assam which is now Karimganj district. Manipur. Higgins (1934) saw a skull in 1913 of one shot on the Khuga R in Churachandpur district. He also reported killing of 2-3 in the past 20 years by the Kukis in lower valley of the Barak near Tipaimukh but could not confirm the exact species. A young rhino was shipped from Calcutta to London (for Berlin Zoo) in 1874 was from the district of 'Mooneypoor' (=Manipur) (Rookmaaker 2002). Northern W Bengal. Kinloch (1904) wrote that the Javan rhinoceros existed in the Bhutan duars. A young female was shot by J. A. Møller from Denmark at Moraghat in Jalpaiguri district in northern W Bengal on 24 February 1881. Its skull (missing the premaxillae and some teeth) is still preserved in the Zoological Museum of Copenhagen. Shebbeare (1953) mentioned that J. W. A. Grieve shot one early in the 20th century in the Buxa Forest Division, also in northern W Bengal.

EXTRALIMITAL. Till recently occurred only in Java and Vietnam (Khan 1989). With the extinction of small Vietnamese population in April 2010, the only surviving rhinos are in Udjung Kulon NP in Java, Indonesia.

REMARKS. A detailed account on the species is given by Sody (1959) while on NE India by Rookmaaker (2002). Skeleton in ZSI from Jessore district in Bangladesh, which was obtained by J. H. Barlow in 1834. CITES: Appendix I; IUCN: CR.

DICERORHINUS

Dicerorhinus Gloger, 1841: 125; type species R. sumatrensis Cuvier = R. sumatrensis Fischer. Conserved by Opinion 1080 (1977).

= Didermoceros Brookes, 1828: 75. Rejected by Opinion 1080 (1977).

157(129). Dicerorbinus sumatrensis

Sumatran rhinoceros, Asian two-horned rhinoceros

Rhinoceros sumatrensis Fischer, 1814: 301. Bencoolen district, S Sumatra, [Indonesia]. Conserved by Opinion 1080 (1977).

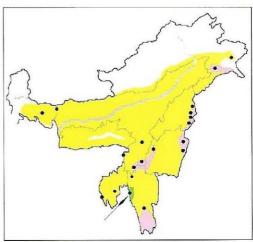
SYNONYMS. blythii, harrissoni, lasiotis, niger.

LOCAL NAMES. Shoun (Khiamniungan Naga), Selho (Tangkhul Naga), Ke-kyang (Yumchunger Naga).

SUBSPECIES. 157a. D. s. lasiotis

R. lasiotis Buckland, 1872: 89. Chittagong, E Bengal (now Bangladesh).

DISTRIBUTION & STATUS (Map 2.156). It is extirpated from most of NE India in the last century. However, stragglers were reported from India-Myanmar border (Choudhury 1997b) and also India-Bangladesh border. The most recent being in 2009. Arunachal Pradesh. There were two definite records, at Nam Tsai, c. 27°30'N, 97°00'E in 1895 (Henri 1898), and in Noa-Dihing R, c. 27°20'N, 96°20'E in about 1953 (Shebbeare 1953), former probably in present Lohit district while latter in Changlang district (in or around Namdapha NP). In the adjacent areas of Myanmar, there are reports of continued occurrence from Hukawng Valleyin 1990s (Choudhury 1997b).



Map 2.156 Dicerorhinus sumatrensis.

Assam. Present in small numbers till the first few decades of the 20th century. In 1967, a stray rhino was recorded in the evergreen hill forest of Sonai RF of Cachar district in S Assam, which was in all probability a sumatrensis (Choudhury 1997b) although Forest Department thought it to be R. sondaicus. Till 1890, the species was infrequently encountered in the Katakhal and Inner Line RFs of Hailakandi district in S Assam (Late Abdul Majid Choudhury, pers. comm.). There is a river in these forests known by the name of rhinoceros (Gondachara [Gonda=rhino], a tributary of the Dhaleswari R). It was occasional in NC Hills in 1930s (Milroy 1935). Shooting of an animal in Brahmaputra Valley is mentioned by Ansell (1947).

Manipur. Common in 1930s (Milroy 1935). Subsequently it was believed to be extinct till stragglers were reported from Ukhrul district (Choudhury 1997b). Villagers of Konkan encountered stray rhinos as recently as early 1990s. In the 1970s one shot by the Tangkhul Naga tribe of Khamsong village, NE of Ukhrul town. A part of a skin was seen in Kaikao village, Tamenglong district (24°51'N 93°27'E) in 2001, which was reportedly shot from Barak basin in around 1930s (AUC).

Meghalaya. Reported from Khasi Hills (mentioned as Cossyah Hills [Anderson 1872]) and Garo Hills (Pollok 1879).

Mizoram. Common in 1930s (Milrov 1935). Subsequently it was believed to be extinct. Stragglers were there probably till 1960s with an exceptional record in 2009 when the hunters and villagers in Bangladesh's Chittagong Hill Tracts chased one, which crossed over to Dampa TR. It was stalked by them up to India-Bangladesh border and they returned when the animal had crossed over to India (Suprio Chakma, pers. comm.). Former abundance in this state is evident from Shakespear (1929), who wrote on the valleys of the Mat and Kolodyne rivers and the peak of Darjow Klang (5700ft), all in southern Mizoram, 'These valleys were full of bird and wild animal life. The author remembers while the stockaded post at Lengleh (now called Lunglei) was in

course of construction, a two-horned rhinoceros, a couple of tigers and a Malayan sun bear were shot on different occasions by men of the escorting parties in the valley below'. In a memorial stone laid near Siatlai village in Saiha district, it has been mentioned that late H. Hmokha of Zyhno village had killed 'one hundred' rhinoceroses.

Nagaland. Not mentioned in Mukherjee, A. (1982). Stragglers were reported from Saramati area (Choudhury 1997b). At the turn of 20th century, a rhino was killed by Khiamniungan Nagas near Noklak in Tuensang district. Its skull is still preserved in the village (Choudhury 2005b). In 1967-68 a rhino was reported from Saramati on the lower slopes of this 3826m peak (S. Hukiye, pers. comm.). In 1994, the Yimchunger Nagas of Fakim area near Saramati reported seeing a 'dwarf' rhino. One came down just below Saramati in November 1999. Some villagers of Thanamir in Kiphire district also saw the animal.

Northern W Bengal. Inglis et al. (1919) mentioned that it no longer occurs in Jalpaiguri district although one shot on the Sankosh R (eastern boundary of the district) in 1864. He further said that 'in his Settlement Report Sunder says a rhinoceros was shot in Dalgaon forest'.

Tripura. In February 1876, a male rhino was killed 20 miles (32km) S of Comillah (now in Bangladesh) (Manson 1876) and its head was preserved in the Museum of the Royal College of Surgeons of London until its destruction during the World War II. It was thought that it had strayed down from the hilly tracts (Rookmaaker 2003). There is a township named after the species, viz., Gondachara in Dhalai district indicating its past occurrence in the area.

EXTRALIMITAL. Myanmar to Vietnam and south to Sumatra and Borneo (Khan 1989).

REMARKS. Included in the genus Didermocerus (Brookes 1828; Ellerman & Morrison-Scott 1951). Although believed to have become extinct in the Indian Subcontinent in the first half of 20th century, a rhino was killed in 1967 near Cox's Bazar in Chittagong district of Bangladesh (Cubitt & Mountfort 1985) and stragglers are still encountered in Nagaland (up to 1999), Manipur (up to 1990s) and Mizoram (up to 2009). CITES: Appendix I; IUCN: CR.

Family Equidae Horses

Equidae Gray, 1821: 307; type genus Equus L.

Distributed in Africa and Palaearctic. Of about seven species, only one occurs marginally in NE India. Groves & Willoughby (1981) reviewed the classification of Equidae. Only one genus, Equus is recognised (Groves 1986, Corbet & Hill 1992) although often another genus, Hemionus for the Asian asses is recognised.

EQUUS

Equus Linnaeus, 1758: 73; type species E. caballus L. Conserved by Opinion 271 (1954).

158. Equus kiang Kiang, Tibetan wild ass

Equus kiang Moorcroft, 1841: 312; 'eastern parts of Ladakh, Kashmir' [Jammu & Kashmir, India].

SYNONYMS. equiodes, holdereri, kyang, nepalensis, polyodon, tafeli.

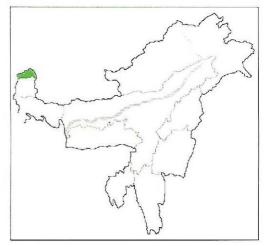
LOCAL NAMES: Kiang (Tibetan).

SUBSPECIES. 158a. E. k. polyodon Asinus polyodon Hodgson, 1847a: 469. Hundes district of Tibet, [China].

DISTRIBUTION & STATUS (Map 2.157). It is found only in a small area of Sikkim. Sikkim. Occurs in the N Sikkim district in the cold desert areas. Recorded in Chho Lhamu, Chulung Valley, Gyamchhona, Kerang and Yumchho. The assess move between India and China through passes such as Bamchho La, Chhulung La and Sesse La (Avasthe & Jha 1999).

EXTRALIMITAL. Ladakh (India), N Nepal and Tibet (China).

REMARKS. Regarded as a ssp. of E. hemionus (Ellerman & Morrison-Scott 1951, Schlawe 1986). Bennett (1980) and Groves & Mazak (1967) treated it as a sull species. CITES: Appendix II; IUCN: LC; WPA: Schedule I.



Map 2.157 Equus kiang.



Kiang Equus kiang grazing, N Nepal.

Photo: Madhu Chhetri



Great Indian one-horned rhinoceros *Rhinoceros unicornis* in Kaziranga NP, Assam. The park has three-fourth of the world population of this species.



Great Indian one-horned rhinoceros in Pabitora WS where its densest concentration is found (left); in RG Orang NP, Assam (centre), and in Jaldapara WS, northern W Bengal (right).



Great Indian one-horned rhinoceros in Pabitora WS grazing with cattle, a potential threat in the form of competition for food and spread of disease.



Skull of a Sumatran rhinoceros *Dicerorhinus sumatrensis* in Noklak village, Nagaland.

All photos: Anwaruddin Choudhury