

BURMA,
ITS
PEOPLE AND PRODUCTIONS;
OR,
NOTES ON THE FAUNA, FLORA AND MINERALS
OF
TENASSERIM, PEGU AND BURMA.

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It is a common, and in my opinion pernicious plan to anoint an elephant's head with oil, as it not only darkens the colour of the skin and renders it more receptive of heat, but clogs the pores. A far preferable plan, I can certify by long experience, is to give a coat of pipe-clay or whitening over the elephant's head before he goes out. This on drying turns white, and keeps the head cool, enabling the animal to travel much later in the day than he otherwise would, and in comparative comfort. As, however, the Mahout cannot use a moiety of the pipe-clay in his curry, it is a plan which never fails to be strenuously objected to. It is an excellent and most humane one nevertheless. *Crede experto.*

Order UNGULATA.

a. *Perissodactyla. Toes uneven in number.*

Family **Rhinocerotidæ.**

RHINOCEROS, Linnæus.

Feet with three toes. Head with one or two horns behind the nose. Dentition variable. Molars complex, and characteristic of the species.

R. SONDAICUS, F. Cuv.

The lesser one-horned Rhinoceros. Kyan-hsen. 'Elephant Rhinoceros.'

Mr. Blyth's remarks on the Rhinoceroses of Burma are so interesting that I quote them at length:

"The Lesser one-horned Rhinoceros. So far as I have been able to satisfy myself, this is the only single-horned Rhinoceros of the Indo-Chinese and Malayan countries, its range of distribution extending northward to the Gáro hills, where it co-exists with the large *R. indicus*, and to eastern and Lower Bengal. It would appear to be the only Rhinoceros that inhabits the Sunderbans, occurring within a few miles of Calcutta; and yet I know of but one instance of its having been brought to Europe alive, and then, it was not recognized as differing from *R. indicus*, which latter is not uncommonly brought down the Bráhmáputra from Assam, and sent to Europe from Calcutta. There is reason, also, to believe that *R. sondaicus* is the species which was formerly hunted by the Moghul Emperor Báber on the banks of the Indus. Southward it inhabits the Malayan Peninsula, Sumatra, Java, and Borneo. It is about a third smaller than *R. indicus*, from which it is readily distinguished by having the tubercles of the hide uniformly of the same small size, and also by having a fold or plait of the skin crossing the nape, in addition to that behind the shoulder-blades. In *R. indicus* the corresponding fold does not thus meet its opposite, but curves backward to join—or nearly so in some individuals—the one posterior to the shoulders. A fine living male, before referred to, was exhibited for some years about Great Britain, and was finally deposited in the Liverpool Zoological Gardens, where it died, and its preserved skeleton is now in the anatomical museum of Guy's Hospital, Southwark. Two passable figures of it from life are given in the 'Naturalists' Library,' where it is mistaken for the huge *R. indicus*."

Dr. Mason writes thus of this species: "The common single-horned Rhinoceros is very abundant. Though often seen on the uninhabited banks of large rivers, as the Tenasserim, they are fond of ranging the mountains, and I have frequently met with their wallowing-places on the banks of mountain streams two or three thousand feet above the plains. They are as fond of rolling themselves in mud, as a hog or a buffalo. The Karens when travelling have quite as much fear of a rhinoceros as they have of a tiger. When provoked, the rhinoceros, they say, pursues his enemy most unrelentingly, and with indomitable perseverance. If to escape his rage the huntsman retreats to a tree, the beast, it is said, will take his stand underneath for three or four days in succession, without once leaving his antagonist. There are seasons when the rhinoceros is very dangerous and ferocious, attacking everything that comes near its haunts, yet it is believed the stories related of them are exaggerated. In the Latin Vulgate the rhinoceros is put where unicorn is read in the English Bible, and

a similar rendering has been adopted in several Indian versions, though unsupported by any philological considerations. The Hebrew name '*reem*' bears no resemblance to the name of the rhinoceros in any of the countries adjacent to Judæa. In Persian it is called '*kary*.' The Southern Karens say there is a third species of rhinoceros in the jungles, which is distinguished from both the others by its skin being covered with small tubercles, and above all by its eating fire. Wherever it sees fire it runs up and devours it immediately. I once lost my way among the hills and valleys of Palaw and Katay, and on obtaining a Karen, who lived in that region, for a guide, he laid special charge on every member of the party to follow him in silence, for a fire-eating rhinoceros had been recently seen, and it always came to noises, instead of fleeing from them as most animals do." Dr. Mason goes on to state that a similar dislike for fire is well known in the black African rhinoceros, and has been recorded by Blyth of *R. Sumatrensis*, and it may not improbably exist in other species of the genus. The habit of attacking a fire and trampling it out (the eating part of the performance being probably an embellishment) may have originated in the sagacity of the animal or to the mixed operation of fear and rage combined, as a savage dog will pursue and bite the stone thrown at it; and in time an act wholly unconnected with the natural economy of the animal, and developed by an accidental circumstance, may, by the operation of the laws of heredity, have become converted into an instinct. This idea receives some support by the behaviour of bees. When preparing to smoke off a swarm of bees from their comb in the jungle, especial care is taken by the Burmans not to allow the flame to rise, or to 'crackle,' as the bees are said to be at once roused to fury by the sound of flames, and to attack every one within reach. Doubtless experience has taught them the danger to their home which attends a crackling fire in the wood, and they at once resort to the weapon of offence with which they are provided. A rhinoceros is actuated by precisely the same sentiment, and he rushes to the detested fire and tramples it beneath his feet as he would a living enemy.

R. LASIOTIS, Schlater,
R. Crossii, Gray.

Ear-fringed two-horned Rhinoceros.

Blyth inclines to unite this species and *R. Crossii*, Gray, which has an anterior horn sometimes 32 inches long. Blyth remarks: "In the Rhinoceroses of this type the hide is comparatively thin, and is not tessellated or tuberculated, nor does it form 'a coat of mail,' as in the preceding, but there is one great groove (rather than fold or plait) behind the shoulder-blades, and a less conspicuous crease on the flank, which does not extend upwards to cross the loins, as represented in F. Cuvier's figure; and there are also slight folds on the neck and at base of the limbs; the skin being moreover hairy throughout. There is also a second horn placed at some distance behind the nasal one. Until recently the existence of more than one species was unsuspected. In 1868 a young female was captured in the province of Chittagong, and on its arrival in the London Zoological Gardens, early in 1872, was believed to represent the *Rhinoceros sumatrensis* of Bell and Raffles; but soon afterwards another two-horned Rhinoceros was received at the same establishment from Malacca, obviously of a different species, which proved to be the veritable *R. sumatrensis*. Since its arrival, it has now (1873) considerably increased in size, and it probably is not yet quite full-grown. As compared with *C. sumatrensis*, it is a considerably larger animal, with much smoother skin, of a pale clay colour, covered with longer and less bristly hair, the latter of a light brown colour, as seen in the mass. The ears are placed much further apart at the base, and are not lined with hair as in the other, but are conspicuously fringed with long hair; and the tail is much shorter and largely tufted at the end. The horns are worn away, but if the species be truly assigned to *C. crossii*, the anterior would grow very long and curve to a remarkable extent backwards, while the posterior horn would probably be short. A second specimen of an anterior horn, almost as fine as the one first described, has recently turned up among the stores of the British Museum; and I found a smaller anterior horn of *R. crossii* in the Museum of the London Royal College of Surgeons, confirmatory of its peculiar

shape. In this group the horns are remarkably slender except at the base, and of much more compact texture than in other rhinoceros horns. I have reason to believe that this is the two-horned species which inhabits the Arakan hills, those of northern Burma, and which extends rarely into Assam; and I think it highly probable that the skull figured in Journ. As. Soc. B. xxxi. p. 156, pl. iii. f. 1, represents that of *C. crossii* (sen *R. lasiotis*), in which case the range of the species would extend into the Tenasserim provinces. A detailed notice of the individual sent to London has been given by Dr. Anderson (P.Z.S. 1872, p. 129)."

The skulls of a male and female of this species procured by myself on the coast near Koranji Island, in 1866, are now in the British Museum. A curious fact elicited during the transport of the Chittagong specimen, was her inability to swim. In crossing the Sungoo River she had to be towed across between two elephants, for she was unable to do more than just keep her head above water by paddling with the fore feet like a pig (see Proc. Zool. Soc. Lond. 1872, pp. 493 and xxiii).

R. SUMATRENSIS, Bell.

R. Jacanus, F. Cuv. Very young.

R. Blythii, Gray.

Kyan.

The Sumatran Rhinoceros is much smaller than the preceding species, with a harsh and rugose skin, which is black, and clad with bristly black hairs; the ears less widely separated at base, and filled internally with black hairs; the muzzle anterior to the nasal horn much broader; and the tail conspicuously longer, tapering, and not tufted at the end. Horns attaining considerable length, and curving but slightly backwards, as represented in Journ. As. Soc. Bengal, xxxi. p. 156, pl. iv. f. 1.

In the Proc. Zool. Soc. for 1873 (p. 104), an account is given by Mr. Bartlett of the birth of a young one of this species, and from observations recorded in this case, the period of gestation would seem to be about thirty weeks. The newly-born calf was 3 feet in length, 2 feet high, and weighed a little over 50 lbs. The plate (*l.c.*) suggests the idea of the young animal being in poor condition, which may be accounted for by the fact of its mother having just performed the voyage from Singapore, and this may account for the early death of the calf, accelerated by the stupid exposure of the young one to cold and rain on shipboard. *Rhinoceros Sumatrensis* is the ordinary two-horned Rhinoceros of Tenasserim and the Malay countries, and would seem to be replaced in Arakan by *R. lasiotis*, which perhaps also spreads into Assam and Tenasserim.

'Kyan' is the generic name for a Rhinoceros in Burma, from a root, according to Dr. Mason, signifying "to be firm in structure or mind," and its horns and blood are extravagantly valued by the Chinese for their medicinal properties.

As regards the occurrence of *R. indicus*, Cuv., in Burma, Blyth thus sums up the evidence *pro* and *con*.

"According to Helfer, the *R. indicus*, in addition to *R. Sondaicus*, inhabits the northern portion of the Tenasserim Provinces; and Mason asserts that a single-horned Rhinoceros from the Arakan jungles was purchased by the London Zoological Society, and lived for many years in the Regent's Park; the species in that case was undoubtedly *R. indicus*. Again, according to a writer in the Oriental Sporting Magazine (July, 1832, p. 301), both species of one-horned Rhinoceros occur in Burma, and he cites, as his authority for the statement, a writer in the first series of the same periodical (vol. ii. p. 35), mentioning that his said authority appears to be 'a thorough sportsman and no mean naturalist.' I nevertheless hesitate, upon present evidence, to admit the great Indian Rhinoceros into the list of Burmese animals."

Family Tapiridæ.

TAPIRUS.

Four toes in front, three behind. Snout produced into a short fleshy mobile trunk. Hair short and close.

Dentition, I. 2; C. 2; P.M. 2; M. 2.