

C-2

MISCELLANEOUS PAPERS

RELATING TO

INDO-CHINA.

A27 / 107 A

REPRINTED FOR THE STRAITS BRANCH OF THE
ROYAL ASIATIC SOCIETY

*FROM DALRYMPLE'S "ORIENTAL REPERTORY," AND THE
"ASIATIC RESEARCHES" AND "JOURNAL" OF THE
ASIATIC SOCIETY OF BENGAL.*

VOL. II.

33

LONDON:
TRÜBNER & CO., LUDGATE HILL.

1886.

[All rights reserved.]

CONTENTS OF VOL. II.

	PAGE.
XXXV. Catalogue of Mammalia inhabiting the Malayan Peninsula and Islands. By Theodore Cantor, M.D.	1-64
XXXVI. On the Local and Relative Geology of Singapore. By J. R. Logan, Esq.	64-112
XXXVII. Catalogue of Reptiles inhabiting the Malayan Peninsula and Islands. By Theodore Cantor, M.D.	112-257
XXXVIII. Some Account of the Botanical Collection brought from the Eastward, in 1841, by Dr. Cantor. By the late W. Griffith	257-278
XXXIX. On the Flat-Horned Taurine Cattle of S.E. Asia. By Ed. Blyth, Esq.	278-297
XL. Note, by Major-General G. B. Trementheere	297-299
General Index	301-6
Index of Vernacular Terms	307-9
Index of Zoological Genera and Sub-Genera occurring in Vol. II.	310-11

MISCELLANEOUS ESSAYS.



XXXV.

CATALOGUE OF MAMMALIA INHABITING THE MALAYAN PENINSULA AND ISLANDS.

Collected or observed by THEODORE CANTOR, M.D., *Bengal
Medical Service.*

[“Journal of the Asiatic Society of Bengal,” vol. xv. pp. 171-203, 241-279.]

QUADRUMANA.

SIMIADÆ.

Gen. PITHECUS, *Geoffroy.*

PITHECUS SATYRUS, *Geoffroy.*

- SYN.—*Simia Satyrus*, Linné.
Simia Agrias, Schreber.
Singe de Wurmb, Audebert.
Papio Wurmbii, Latreille.
Pithecus Satyrus, Desmarest.
Simia Wurmbii, Kuhl.
Orang Pandak, Raffles.
Simia Satyrus,
Simia Abelii, } apud Fischer.
Simia Wurmbii, }
Simia Satyrus, apud Ogilby.
Satyrus rufus, Lesson.
Pithecus Satyrus, apud Martin.
Simia Satyrus, apud Schinz.
“Orang ‘Utan” of the Malays.¹

HAB.—*Borneo, Sumatra.**

¹ [See above, vol. i. pp. 172-178, and 301-318.]

* Localities printed in *italics* signify those from whence the animals of the catalogue were obtained; in ordinary type those previously given by authors.

GEN. RHINOCEROS, *Linné.*

RHINOCEROS UNICORNIS, *Linné.*

- SYN.—*Rhinoceros indicus*, Cuvier.
Rhinoceros asiaticus, Blumenbach.
Rhinoceros inermis, Lesson.
 “Bádak” of the Malays of the Peninsula.

HAB.—*Malayan Peninsula.*
 Bengal, Assam, Nipal.

RHINOCEROS SONDAICUS, Cuvier.

- SYN.—*Rhinoceros sondaicus*, Cuvier } apud Horsfield.
 “Warak,” “Bádak” }
Rhinoceros javanensis, F. Cuvier apud Schinz.

HAB.—*Malayan Peninsula.*
 Java.

This, as well as the former species, appears to be numerous on the Malayan Peninsula.

A *two-horned* *Rhinoceros* is stated by the Malays to inhabit, but rarely to leave, the densest jungle. The Museum of the Asiatic Society possesses a skull, and also a head with the skin on, of *Rhinoceros sumatranus*, Raffles, from the Tenasserim Provinces, in which locality the existence of the species has been recorded by Dr. Helfer and Mr. Blyth. This fact would seem to corroborate the statement of the Malays, and the habitat of *Rhinoceros sumatranus* may reasonably be expected to be hereafter found to extend over the neighbouring Malayan Peninsula. As such it has indeed been enumerated by Capt. Begbie, the author of “*Malayan Peninsula*,” &c., Madras, 1834. In Lieut.-Colonel Low’s “*History of Tenasserim*” (“*Journal Royal Asiatic Society*,” vol. iii. 1836) is figured the head of a young *Rhinoceros*, which, from the considerable protuberance between the eyes, appears to represent a two-horned (probably the present) species.

Gen. TAPIRUS, *Linné.*

TAPIRUS MALAYANUS, Raffles.

- SYN.—*Tapirus malayanus*, apud Horsfield.
Tapirus indicus, Fred. Cuvier.
Tapirus sumatranus, Gray.
 Me des Chinois, Remusat (young?) apud Gray: List.
Tapirus bicolor, Wagner apud Schinz.
 “Bádak,” “Kúda Ayer,” “Tennú” of the Malays of the Peninsula.

HAB.—*Malayan Peninsula.*
 Sumatra, Borneo.

The body of a new-born male, found in Province Wellesley in August 1844, was shortly after its death carried over to Pinang. As described by Colonel Farquhar, it was of a beautiful black velvet colour, with purple reflections, with numerous small and other larger irregular spots on the body, arranged in longitudinal stripes, above of a rich gamboge, beneath and on the inner side of the extremities paler yellow. The under-lip was white. The shrivelled remains of the black funiculus umbilicalis were upwards of four inches in length. The fur very short, dense, and velvety; the separate hairs, of either of the two prevailing colours, slightly curly. Dimensions:—

Length from the apex of the nose to the root			
of the tail	1 foot	10 inches.	
of the head	0 "	7 "	
of the tail	0 "	1 $\frac{1}{2}$ "	
of the ear	0 "	1 $\frac{1}{8}$ "	
Diameter of the head from vertex	0 "	5 "	
Height of the shoulder	0 "	8 $\frac{1}{2}$ "	
" " haunch	0 "	9 "	

The animal, from which a sketch was taken on its arrival at Pinang, was the property of the Rev. R. Panting, A.M. The skin, imperfectly preserved, has lately been deposited in the Museum of the Asiatic Society.

On the 16th of May 1845 I obtained a living young female Tapir, captured in Keddah a few days previously. Though still in its infantile garb, it was older than the preceding. The ground colour was a brownish-black, like worn-out velvet; the spots, stripes, and the posterior part of the abdomen were of a dirty-white. The separate hairs were longer and curly; the hairy ears retained numerous white spots on the margins and external surface. The lips were blackish, with numerous short distant bristles, which also appeared round the nostrils, on the ridge of the nose, above and below the eyes, on the cheeks, and on the throat. Two black mammæ were situated between the hind legs, three and a half inches behind the large naked cicatrix of funiculus umbilicalis. Dimensions:—

Length from the apex of the nose to the root			
of the tail	3 feet	4 $\frac{3}{8}$ inches.	
of the head	1 foot	0 "	
of the tail	0 "	1 $\frac{3}{8}$ "	
of the ear	0 "	5 $\frac{1}{8}$ "	
Diameter of the head from vertex	0 "	5 $\frac{1}{8}$ "	
Height of the shoulder	1 "	4 "	
" " haunch	1 "	6 "	
Greatest circumference round the body	2 feet	6 "	
Circumference at the root of the ear	0 "	6 "	

Dentition:—

Incis. $\frac{6}{6}$; Canin. $\frac{0-0}{1-1}$; Mol. $\frac{3-3}{3-3}$

From the first, although fresh from its native wilds, this young Tapir showed a remarkably gentle disposition. The daytime it spent in sleeping in a dark recess of the portico of my house, though it would rouse itself if noticed. Towards sunset it became lively, would bathe, feed, saunter abroad, and with its lengthened nose examine objects in the way. Within a few days after its arrival it commenced to exhibit a marked partiality to the society of man, not indeed to its keeper in particular, whom it scarcely had discrimination enough to distinguish, but to anybody who happened to notice or caress it. Towards sunset it would follow a servant on the green in front of the house, and punctually imitate his movements, whether standing, walking, or running. If the man suddenly hid himself, the Tapir would hasten to the spot where it had lost sight of its leader, look about in all directions, and, if unsuccessful in discovering him, express its disappointment by a peculiar loud whistling. On the re-appearance of the man it expressed its pleasure by rubbing its side against his legs, running between them, occasionally giving out a short singular sound, resembling that produced when the larger woodpeckers tap the trees, but more sonorous. When of an evening it heard the voices of people in the verandah above the portico, it exhibited strong marks of impatience till let loose, when of its own accord it would, awkwardly enough, ascend a flight of stairs leading to the verandah. It would then quietly lie down at their feet, and by stretching its limbs and shaking its head, express the satisfaction it derived from being caressed; and it was only by compulsion that it could be made to leave the company. Its food consisted of plantains, pine-apples, mangustins, jambu, leaves of *Ficus pipul*, sugar-cane, and boiled rice, of which latter it was particularly fond if mixed with a little salt. Its drink was water, and also milk and cocoanut oil, which latter taste the Tapir possesses in common with the Orang-útan. It delighted in bathing, and was otherwise cleanly. When roaming about the garden (its walk was like that of the elephant) it would select a spot with soft earth, and like a cat form with its hind legs a small excavation, and again cover it. The whole body has a peculiar and by no means offensive exhalation, somewhat resembling that noted of *Arctictis Binturong*. Indeed, this is so tenacious that although the skin of the individual above described has been preserved more than a twelvemonth, and kept in a strongly camphorated case, the odour is still perceptible.

On the 27th of June 1845 the subject of the preceding notice expired after two days' illness from inflammation of the lungs,

brought on by the strong southerly winds prevailing throughout the Straits of Malacca during the season, which in man produce a slight influenza, in animals frequently terminating fatally. The few adult Tapirs which occasionally have been kept in confinement by residents in Malacca have acquired the character of being hardy animals. During the short period that the present lived in my possession no perceptible change appeared in its growth, but a striking alteration took place in its colours. Nearly all the white spots on the head, nape of the neck, and back of the ears gradually disappeared, and the upper part only of the margin of the ears remained white, which colour it retains in the adult animal. On the posterior part of the back and sides the black and white stripes were in a state of progressing obliteration; their hairs had faded to a brownish colour, and were about being replaced by a shorter and less dense fur of the fresh white hairs, which were to form the characteristic permanent white mark, already appearing in outline, when death terminated the unfinished process of nature.

Vertebrae: cervical seven, of which the atlas and epistrophæus the largest; dorsal twenty, lumbar four, sacral seven, caudal three.

Sternum: the anterior extremity cartilaginous, sharply keeled, arched, continued over manubrium, composed of two rounded angularly joined pieces, as far as the second pair of ribs; corpus composed of five pieces, of which the two posterior, in a pair, are connected by cartilage.

Costæ veræ, eight pairs; spuria, twelve pairs = twenty pairs. The last spurious rib is rudimentary, and absent on the left side.

Femur, five and two-eighth inches long; the large bony subtrochanteric process, described by Sir Everard Home, is developed, though partly cartilaginous, measuring one inch in length at the base.

Liver of moderate size, each lobe divided into two portions of nearly equal size.

Gall-bladder: none.

Spleen: tongue-shaped, flattened, with cutting margins, seven and half inches in length, one and six-eighths in breadth.

Pancreas: in a state not to admit of accurate examination.

Kidneys: three and six-eighth inches in length, one and six-eighths in breadth.

Renes succenturiati: none.

Urinary bladder: very large.

Stomach: capacious. Its dimensions in the state in which it appeared, distended with food, were—

Length along the smaller curvature	. . .	o	foot	5 $\frac{2}{3}$	inches.
" " greater	" "	I	"	9 $\frac{1}{8}$	"
Circumference from cardia round fundus		I	"	o	"
" round pylorus	o	"	3 $\frac{1}{2}$	"

The internal surface smooth, villous.

Where the duodenum joins the pylorus it is considerably widened.

Length of the intestinal canal:—

Small intestines	27 feet 7 inches.
Large „	6 „ 4 „
Cæcum	0 „ 6 „
Average circumference of small	0 „ $2\frac{3}{4}$ „
„ „ large	0 „ $3\frac{1}{2}$ „

Cæcum sacculated, with a longitudinal band on either side. Distended with fæces as it appeared, the greatest circumference close to the fundus was one foot one and a half inch.

In the adult Tapir dissected by Sir E. Home, and which was, according to Mr. Yarrell, eight feet in length, the relative proportion between the length of the intestinal canal and that of the body was as eleven to one. In the present young female the relative length of the intestinal canal is proportionally less than in the adult, being less than as ten to one.

SOLIDUNGULA.

Gen. EQUUS, Linné.

EQUUS CABALLUS, Linné.

The horse (“Kuda,” of the Malays) appears not to be indigenous in the Peninsula. The few ponies, which the wealthier use for ordinary purposes, are imported either from Siam, Burma, or Sumatra. The Malays either travel by water, or prefer the elephant as a locomotive more dignified than the horse.

RUMINANTIA.

Gen. MOSCHUS, Linné; TRAGULUS, Brisson.

TRAGULUS KANCHIL, Gray: List.

SYN.—Chevrotain adulte } Buffon apud Cray.
 Chevrotain de Java }
 Javan Musk, Shaw.

Moschus Palandok, Marsden.

Moschus Kanchil, Raffles.

Pelandok, Raffles.

Moschus fulviventor, Gray.

“Kanchil” or “Pelandok” of the Malays of the Peninsula.

HAB.—Singapore, Pinang, Lencavy Islands, Malayan Peninsula. Sumatra, Java.

In some individuals the back is nearly black. The colour and distribution of the marks of the chest and abdomen are also liable to individual variations, one of which gave rise to the supposed species, *Moschus fulviventer*. The animal is by the Malays indiscriminately denominated "Kánchezil" and "Pelándok;" the latter denomination is sometimes *par excellence* applied to the young, and this circumstance in all probability gave rise to the supposed species *Moschus Pelandok*. The species is astonishingly numerous. In Prince of Wales Island any number may be procured within a short notice, at the rate of one Spanish dollar per dozen. Knowing the partiality of these deer to the leaves of the sweet potato plant (*Convolvulus batatas*), the Malays either use traps baited with this vegetable, or lie in ambush on moonlight nights in fields where it is cultivated, and disable the intruders by throwing sticks at their legs. In confinement, in its native climate, the animal becomes rather delicate, though it occasionally survives, and even breeds. The female has four mammæ, and one or two young at a time. The new-born measures eight and six-eighth inches in length, of which the head is three inches, the tail one inch. The skin of the upper parts is of a pale blackish colour, scantily covered with short, fine, brown hairs. The abdomen and inner side of the limbs are pale yellow; the throat and chest have the dark marks of the adult, but paler. The largest adults measure from the apex of the nose to the root of the tail one foot six and a half inches; the tail three inches in length.

TRAGULUS JAVANICUS, Pallas.

- SYN.—*Moschus javanicus*, Gmelin.
Moschus javanicus, Pallas apud Raffles.
 Napu, Raffles.
Moschus indicus, Gmelin } apud Gray.
Cervus javanicus, Osbek }
Moschus Napu, Fred. Cuvier.
 "Nápu" of the Malays of the Peninsula.

- HAB.—*Malayan Peninsula*.
 Sumatra, Java, Borneo.

On the Malayan Peninsula the species appears to be far less numerous than the preceding. The canines of the female are very small. The four mammæ are situated at the posterior part of the abdomen, a little in front of the hind legs. The anterior pair are half an inch apart; the posterior two-eighths of an inch apart. The two pairs are half an inch distant from each other. In an adult female, measuring from the apex of the nose to the root of the tail two feet four and two-eighth inches, the tail five inches, the intestinal canal was of the following dimensions :—