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## THE JAVAN RHINOCEROS.

By J. Guy Dollman, B.A., Assistant Keeper, Department of Zoology.

A SPECIMEN of the Javan Rhinoceros (Rhinoceros sondaicus) shot in the Kroh Forest, Perak, Malay States, in January of this year by Mr. Arthur S. Vernay, and presented by him to the Natural History Museum, has now been mounted at the donor's expense, and has been placed on exhibition in the southeast corner of the New Whale Room as a part of the exhibition of the Game Animals of the Empire. The specimen is of exceptional interest, being a very old female and showing that the horn, which was formerly thought to be developed only in the male sex, is found in the female sex in a rudimentary condition. The only other complete female specimen of this rhinoceros in the Museum collection is the one shot and presented by Mr. T. R. Hubback, and this exhibit shows no trace of a real

horn such as is found in the present specimen.

There are three rhinoceroses occurring in Asia: the Great Indian Rhinoceros (Rhinoceros unicornis), an animal confined to the plains of Northern India, distinguished by the possession of a single horn and the fact that the fold of skin behind the shoulders does not pass over the back; the Javan Rhinoceros (Rhinoceros sondaicus), another one-horned species, in which the fold behind the shoulder passes right over the back; the Sumatran Rhinoceros (Rhinoceros sumatrensis), a two-horned species, in which the body is frequently fully haired. latter species is the smallest of the Asiatic rhinoceroses, standing not more than 4 to  $4\frac{1}{2}$  feet at the shoulder, and the length from the muzzle to the root of the tail is only about 8 feet. Sumatran Rhinoceros is found in Sumatra and Borneo, and occurs also on the mainland, extending from the Malay Peninsula northwards to Assam. The Javan Rhinoceros is a considerably larger animal than the Sumatran, but carries a much smaller horn than either the Indian Rhinoceros or the Sumatran. record horn lengths for the three species are as follows: Indian Rhinoceros 24 inches, Javan Rhinoceros 10<sup>3</sup> inches, Sumatran Rhinoceros (front horn)  $32\frac{1}{2}$  inches. All these three specimens are in the Museum collection. The record specimen of Javan Rhinoceros was shot by Mr. Marius Maxwell on April 24, 1910, in the extreme western end of the island of Java; this area has since been declared a game reserve by the Dutch Government, and, so far as is known, few specimens of this rhinoceros still live there.

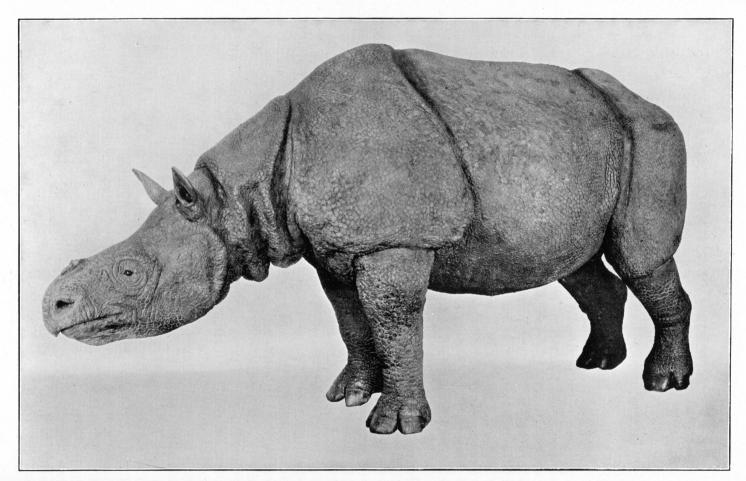


Fig. 1.—The Javan Rhinoceros (Rhinoceros sondaicus).

The specimen as mounted for exhibition.

The specimen shot by Mr. Vernay was an isolated example of the breed and could not have been of any use in perpetuating the species. It has been mounted in the studios of Rowland Ward, Ltd., and shows to advantage the mosaic-like pattern of the skin. Some of the epidermis has unfortunately become displaced during the transport of the specimen, but this defect has been remedied by the taxidermists, who have replaced the loose portions of skin and made the whole animal extremely



Fig. 2.—The Javan Rhinoceros, just after it was shot.

life-like. It is the first fully adult example of this species that the Museum has received in a mounted condition. The only other specimen in the collection is the female referred to above, presented by Mr. Hubback, and a young mounted animal which has been on exhibition for a great many years. Other than these, the species is represented in the Museum collection only by skulls and skeletons.

In addition to the mounted specimen Mr. Vernay has also presented the entire skeleton and skull of this rhinoceros; the skeleton has been preserved with great care and will be of great interest to all those working on this group of ungulates. A

cast of the incipient horn has been prepared and will be available

for study purposes.

Mr. Vernay's expedition to the Malay States included among its personnel Capt. Beresford Holloway, who made a large collection of mammals, fishes, butterflies, and other zoological specimens, which Mr. Vernay has kindly presented to the Museum. The collection contains some interesting monkeys, including a series of the agile gibbon, and the rare langur, *Pithecus femoralis*.



Fig. 3.—The Javan Rhinoceros.
Enlarged view of head, showing mosaic-like pattern of skin.

There are also some interesting Carnivora, the most outstanding of which are a series of lingsangs (Prionodon gracilis), a binturong (Arctictis binturong), and a number of civets and palm civets (Paradoxurus hermaphroditus). Among the Insectivora there are a fine series of the red tree-shrew (Tupaia ferruginea), and a specimen of the rare rat-shrew (Gymnura rafflesii). In addition, there are two specimens of cobego (Galeopterus velans), and amongst the ungulates seven specimens of chevrotain, representing two species, are notable accessions. The series of rodents is rich in squirrels, several examples of

the genera Callosciurus, Rhinosciurus, Ratufa, and Petaurista being included. There are also many specimens of bats, both in spirit and skins, representing the genera Cynopterus, Tylonycteris Taphozous, Scotophilus, and Hipposideros.

The collection of mammals has not yet been worked out, so that it is not yet possible to say whether it contains any novelties. It certainly contains many examples of rare mam-

mals required by the Museum collection.

## WICKEN FEN.\*

By W. H. T. Tams, Assistant Keeper, Department of Entomology.

There are in the British Isles certain places, the names of which conjure up in the mind of the naturalist pleasant pictures of a happy hunting-ground. Such a haunt is Wicken Fen, lying inconspicuous in a wide expanse of apparently dull and uninteresting flat country; and it must be admitted that, to anybody but a naturalist, no spot is more likely to escape the attention of the passing traveller. Wicken village, charming as it is, gives no hint of the treasures to be found in the stretches of level country to the west and south.

Twenty years ago the approach by road to Wicken Fen from Cambridge, whence perhaps most pilgrim naturalists come, was by way of Waterbeach and the Upware ferry, and the approach to a knowledge of the Fen by reading was by way of stepping-stones of scattered information culled from various books and papers. These two avenues of approach have now been greatly improved: the first, by the opening of the new bridge shown in the photograph here reproduced (Fig. 1), and the second, by the comprehensive publication now under review. Collected together in this work we now have such a wealth of information that, while it is not easy to give an adequate idea of all that it contains, it is

<sup>\*</sup> The Natural History of Wicken Fen. (Cambridge: Bowes & Bowes.) Edited by Prof. J. Stanley Gardiner, F.R.S., and A. G. Tansley, F.R.S.

Part I. Pp. 1–64, with map of Wicken and Burwell Fens. 1923. 3s. 6d. Edited by Prof. J. Stanley Gardiner, F.R.S.

Part II. Pp. 65–172, with plates I–IV. 1925. 6s.

Part III. Pp. 173–266, with plate V. 1926. 5s.

Part IV. Pp. 267–384, with plates VI–IX. 1928. 6s.

Part V. Pp. 385–488, with plates X–XIII. 1929. 58

Part VI. Pp. 489–652, with plate XIV. 1932. 7s. 6d.