

KEY TO THE PLAN OF THE GARDENS.

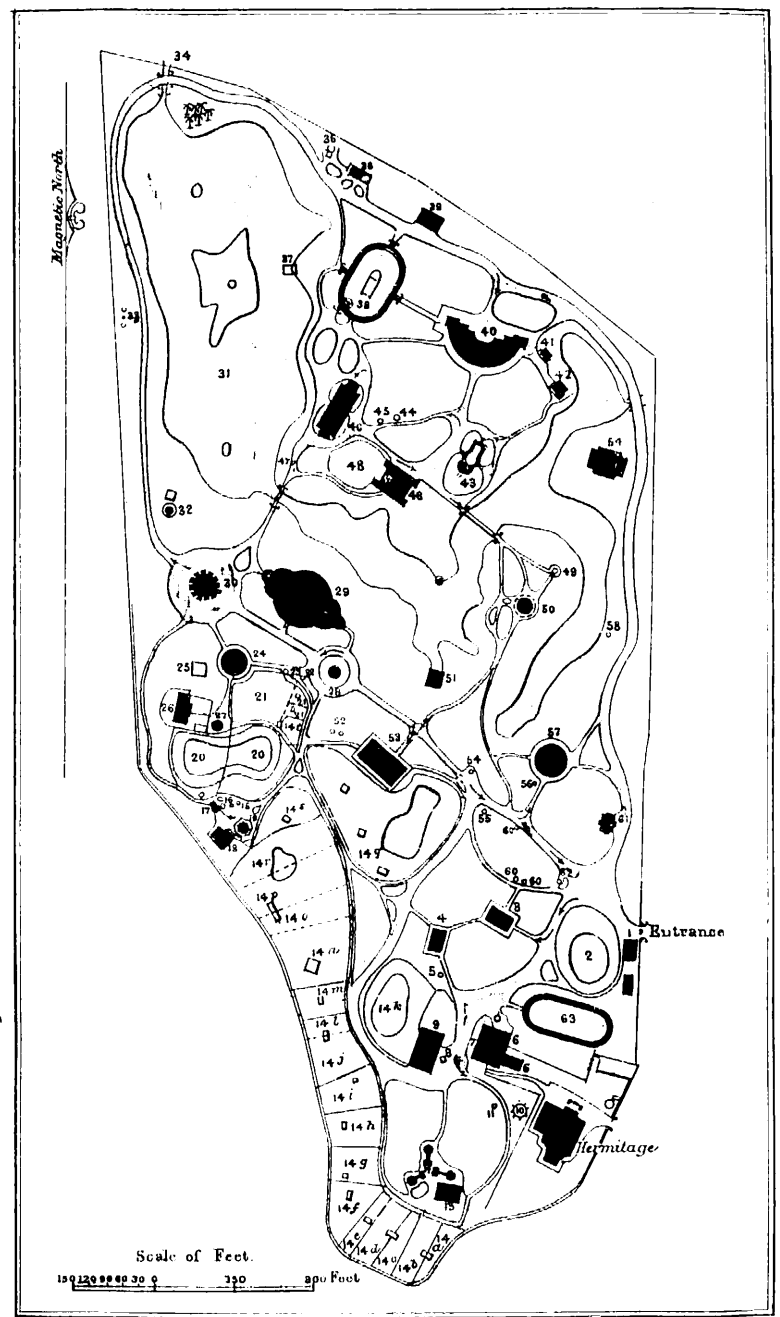
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Guide to the Calcutta Zoological Gardens
 by John Anderson M.D. F.R.C., 1883

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| 1. Entrance Lodge | 28. Schwendler Memorial |
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| 17. Thatched Cottage | 53. Gubbay House |
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| 23. Squirrel Cage | 61. Restaurant |
| 24. Mullick House | 62. Malbrouck Cage |
| 25. Thatched Pavilion | 63. The Rink |
| 26. Superintendent's House | |
| 27. Parakeet Aviary | |

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ANDERSON, J.



Scale of Feet.

150 120 90 60 30 0 30 60 90 120 150 Feet

occurs in India proper) being placed alongside *R. lasiotis*, the differences that exist between the two forms can be well observed, and this, indeed, is the only satisfactory way to determine species, for mere written descriptions are apt to be more or less misleading, and the identification of species from isolated parts of animals is frequently most disappointing in its results. It will be observed that the Chittagong animal has much larger ears than the Malayan female, that the fringe of hairs on the ears is longer, softer and more drooping, and also that the whole skin of the animal is much smoother, and that the hair is a rich reddish-brown, instead of black. The difference in size between the ears of these two double-horned species is a feature that also serves to separate the Indian one-horned Rhinoceros from the Burmo-Malayan one-horned species.

The Rhinoceroses exhibited in this enclosure, like their kith and kin generally, are very fond of water, but especially of muddy hollows in which to lie; and their highest bliss seems to be, to rest undisturbed after feeding in a slimy ooze that leaves a coating of mud on their coarse skins, forming an effectual protection to them against the irritating attacks of noxious insects. No sooner was *R. lasiotis*, whose familiar name is Muni Begum, introduced into this enclosure than she set herself to dig a hole, which she accomplished with her fore-feet, scraping out the earth and throwing it behind her. As it was during the rains she arrived, the hole was soon filled with water, so that when she lay down only a small portion of her body remained uncovered, and the exposed part was so smeared with mud and the animal so still, it was sometimes difficult to detect her presence

in her wallow. These animals in their natural state live almost exclusively on the leaves and the smaller branches of trees, such as the various species of fig, and the jack-tree; and, here, their taste as far as possible is consulted, but it is found to be a costly one, as jack and fig-trees are not easily purchased, so that their food has to be supplemented with grain.

At present there are no examples in the Gardens of either of the two Asiatic species of one-horned Rhinoceroses, but as the Garden has already had both species, and as the Committee are making efforts to obtain other specimens, it may be as well to indicate here their leading external characters and distribution. There has been a misapprehension in the past regarding the relative size of these species, as they have been spoken of as the Greater and the Lesser one-horned Rhinoceroses; this, however, is incorrect, as both the species apparently attain similar dimensions. The most striking external characters separating the two are the size of the ears, as already mentioned, and the difference between their hides, and this latter feature is very marked.

The Rhinoceros from the Bengal Sundarban has its hide covered over most regularly with a mass of closely-set tubercles, this being the species which has the smaller ears and which is supposed to be the Lesser Rhinoceros, and identical with *R. sondaicus* of Java and the adjoining islands; whereas the other rhinoceros, that is, *R. unicornis*, the true Indian Rhinoceros, has its hide covered with tubercles, but instead of being closely set together and uniform in size, they are generally separated from one another except on the limbs, and vary much in size, those on the hind quarters being very large. There is

pair of the black-haired, two-horned Rhinoceros from Malacca, it was found necessary to divide the enclosure.

The specimen of *R. lasiotis* is an adult female which was caught near Chittagong, on the estate of Begum Latifa Khatum of Ramu, and the following account of its capture appeared in the *Englishman* of the 17th June 1832:—

"This rhinoceros was captured by the Begum's retainers. A *shikaree* had gone out to hunt, and when he had reached some paddy fields, he was told by the ryots, who were there at work, that an animal had come out from the jungle, on to the fields, and that it was neither a gyal, a buffalo, nor an elephant. The *shikaree* at once sent a message to the Begum, asking that assistance might be sent to capture the animal, and, in a short time, a large number of people had arrived armed with sticks. The locality to which the beast had retired presented facilities for its capture, as it was a small isolated hill or *teelah* separated from the high range of mountains to the east. The *shikaree* arranged his men between the *teelah* and the main range with instructions not to allow the animal to escape in that direction, but that if it made for an adjoining jheel, or for an open slope towards the village, it was to be allowed to pass by either of these ways, as it would be possible to noose it in the jheel, and to capture it if it went to the village. The animal, however, refused to show itself, and did not come out of the dense jungle, but the would-be-captors were aware that it was moving round the *teelah*, and at length the *shikaree*, by climbing a tree, was able to make out that it was a rhinoceros. They then tied a number of ropes to the branches of the trees, letting them hang down as

nooses, in the course the animal was following. In a short time their labour was rewarded, as it ran its head first into one noose, and then into another, tearing them away, however, from the trees, and, in its excitement, rushing out on to the open slope leading to the village, dragging the ropes after it. By this time it was somewhat exhausted, for it fell in a muddy hollow where it was immediately surrounded, secured by ropes and ultimately dragged into the village. Three days afterwards, the male made its appearance from the same *teelah*, but unfortunately an effort made to capture it did not prove successful. The female rapidly became tame and tractable, and was introduced into the Zenana, where it soon established itself as a favourite, more especially with the children, who used to ride as safely on its back as the London children did on Jumbo. Begum Latifa Khatum, when she became aware that the Committee for the Management of the Calcutta Gardens were in quest of Rhinoceroses, with very great self-denial, public spirit and liberality, made up her mind to part with the favourite of the Zenana, and telegraphed to the Committee that it was her intention to present this rhinoceros to the Gardens."

This individual is the second known example of the species, the first having also been a female and having likewise been captured in the neighbourhood of Chittagong, in 1809, from whence it was taken to London, where it was purchased for the Zoological Gardens, at Regent's Park, for £ 1,250, and where it still lives. The male of the species is not known.

The other two-horned Rhinoceros, *R. sumatrensis*, of the Malayan region (the one two-horned Rhinoceros

an arrangement in lines along the sides. The males of this, as also of the other species, are provided with long formidable, curved and downwardly-directed canine teeth in the upper jaw, these structures taking the place of horns as weapons of offence and defence. A peculiar structural feature has been observed in one of the Malayan members of this group, and it is this, *viz.*, that the superficial tendinous portions of the muscles over the pelvis and part of the loins become ossified, forming a kind of subcutaneous bony shield, the function of which is unknown, unless it may serve the purpose of a fulcrum for the muscles of these parts, giving the animals great power of forward progression from their hind-quarters. The males of these seemingly gentle little deer are so combative amongst themselves, that it is impossible to keep the different species in one enclosure, and as there is not sufficient space here, another, *Tragulus kanchil*, has to be kept in the Surnomoyee House. The *Tragulids*, or deerlets, have certain features in their anatomy which separate them from the true deer, and these characters are to be found in the construction of their limbs. As in the Swine, the bones which go to form the cannon-bone of true Ruminants are separate in these deerlets.

Immediately adjoining the little house of these deer and its enclosure is

An Aviary

devoted to Doves, and containing usually the following species:—

- Carpophaga bicolor*, Nutmeg fruit-pigeon;
Treron viridis, Parrot fruit-pigeon;

- Columba vitiensis*, White-backed pigeon,
Turtur sacanensis, Spotted Turtle dove;
Turtur dussumieri, Eastern Turtle dove;
Turtur dussumieri, Common Turtle dove;
Turtur dussumieri, Dwarf Turtle-dove;
Chalcophaps indica, Green-winged dove;
Columba nana, Blue-banded pigeon.

Turning to the left from this house and retracing its steps slightly, the visitor will reach

The Peafowl Aviary

in which there are two species, *Pavo cristatus*, the common Peafowl of India, and *Pavo syriacus*, the Peafowl of Burma and the countries to the south-east of Burma. The Peafowl of the latter regions is distinguished by its beautiful green and gold colour and the almost absence of blue in the plumage. The finest specimens of the peafowl are generally to be found roaming at liberty in the Gardens, as neither of these species thrive in confinement.

Passing on in the same direction, and thus returning to the Hog-deer enclosure, the visitor has now on his left hand

The Rhinoceros Enclosure.

This enclosure measures 120 feet in length, by 116 feet in breadth, and has a tank, 100 feet long, by 20 to 30 feet broad, to be surrounded by an iron railing, protected internally by a rustic wooden palisade made of unbaulked posts and cross-bars, and it is divided at its middle into two portions by a similar palisade crossing the tank. This enclosure was at first entirely given up to *Rhinoceros indicus*, but the Committee, having acquired a

by it to the prow of the boat, and when their services are required they are slipped like dogs.

There has been frequently exhibited in the Gardens an otter belonging to the sub-genus *Aonyx*, so named because the claws are small and more resemble nails than claws. It is also a much smaller animal than the common otter, and is peculiar to Southern Asia. As the Indian otters are not well understood, living specimens are always most acceptable, and the Committee intend to erect more otter houses along the margin of the lake.

The visitor will now proceed onwards for a few yards and will find a flight of steps leading up to the large walled oval enclosure on his left that forms the airing ground to

The Buckland House

which was originally constructed for rhinoceroses, but is now inhabited by Tapirs. The outer aspect of the wall has had an embankment thrown up around it to the height of nearly three feet, the top of this embankment constituting a path which runs round the enclosure, and from this the visitor looks down upon the animals below. At the end next the lake, this path is interrupted by the house for the shelter of the animals, which has its outer gate facing the lake, its inner gate opening directly into the enclosure which has a tank for the use of the animals. The enclosure is planted with trees and the tank is luxuriant with reeds.

The first rhinoceros that inhabited this enclosure was an example of the common one-horned species, the *Rhinoceros unicornis*. This animal was presented by the late Maharajah of Dumraon. It was at first thought that there would be insuperable difficulties in bringing it

to Calcutta as it had been 45 years in confinement in a small house. The task of bringing the Rhinoceros to the Gardens was entrusted to Mr. Rutledge, the dealer in animals. When he arrived at Dumraon and informed the people in charge of the Rhinoceros, that he had come to remove it, they were incredulous of his ability to do so, and were much astonished on the following morning to find it quietly standing outside its house with its limbs manacled. It was walked to the Railway Station without any difficulty and placed in a truck and brought to Howrah, whence it was walked over night to the Gardens.

This Rhinoceros was always fed at one place out of a stone trough, from which a good deal of grain used to fall while it was eating, and, during the first cold weather, it was observed to have a constant companion in a Widgeon which was believed to be one of a number of birds that had been let loose upon the lakes. It was also observed that this bird disappeared at the end of the cold weather. The following notes regarding it appeared in the Calcutta *Englishman* of November 14, 1881:—
“The Widgeon, which has annually visited these Gardens for the last four cold seasons has again returned; it having been observed for the first time this year on the 7th of November, one week earlier than the date of its arrival last year. As usual, it has taken up its abode in the Rhinoceros enclosure, to which it was doubtless originally attracted by the quiet seclusion of the spot, perhaps, also, by the plentiful supply of food. Considering how remarkably timid wild ducks usually are, flying off at once on the slightest alarm, it is surprising that this male bird has from the very first been distinguished by the absence of timidity, and has evinced this character more and