The Grant Museum of Zoology: Special Publications

The Grant Museum of Zoology Special Publications series was established to publicise the research and activities of the Grant Museum of Zoology and its history.

Publications pertaining to the Museum's history, individuals associated with the Museum or its activities (such as past members of staff, collectors, donors, etc) and collaborators involved in innovative projects (such as resident artists, installations, temporary exhibitions, etc) are invited to publish in the Grant Museum Special Publications. In the first instance authors should submit proposals to the Museum.

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Kingdom in a Cabinet

A guide to the animals of the Grant Museum

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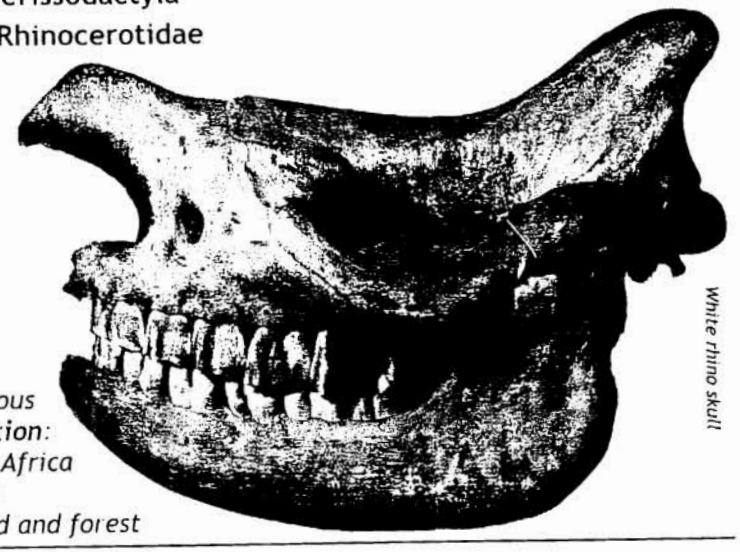
Museum houses a large collection of perissodactyls. In 1901, a collection of legs from fossil horses were purchased from a dealer in Prague by the Curator Alfred Minchin. There are few series of fossils that demonstrate a correlated evolutionary progression as well as those from the horse family. These specimens have been used to teach evolutionary theory in the University; they show how horses have changed since they first appeared, and obvious links can be made between the animals and their past environments. From about 55 million years ago, the first horse *Hyracotherium* was only 30cm tall. It lived in dense forests, where large animals could not move freely. As the forest opened up over the Oligocene Period and grasslands spread, horses evolved into taller creatures. Their toes started to shrink away, eventually leaving only the elongated middle digit we see in today's horses.

Male horse skull

Rhinoceros

Class: Mammalia
Order: Perissodactyla
Family: Rhinocerotidae



White rhino skull

Diet:
Herbivorous
Distribution:
Asia and Africa
Habitat:
Grassland and forest

Conservation

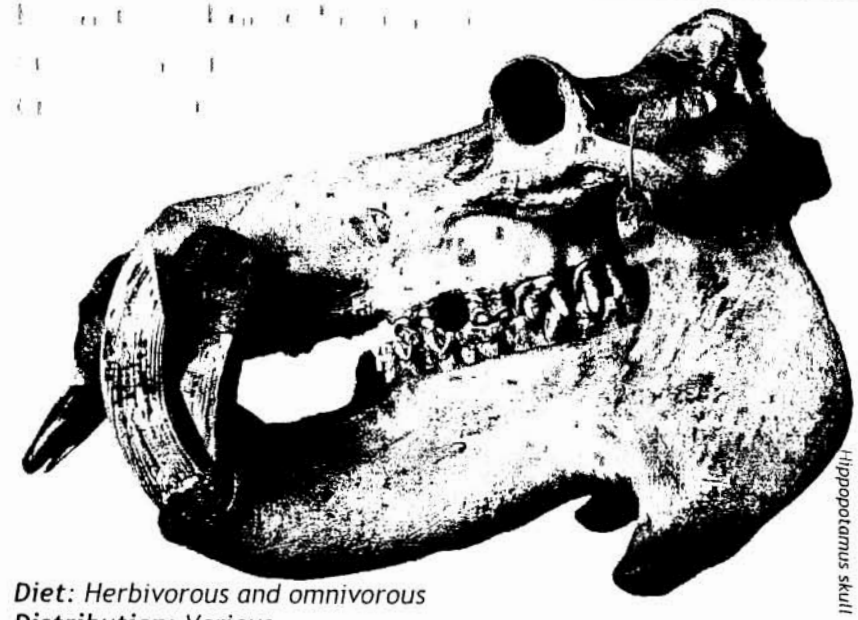
All five species of rhino are endangered or critically endangered: there are around 60 individuals remaining of the Javan rhino, fewer than 300 Sumatran rhinos, and all species together only number 12000. The main threat to rhino survival is poaching for their horns, which are used in oriental medicines. In the 1990s one kilogram of rhino horn could fetch around £30,000. 97.5% of the global population of black rhinos has been killed since the 1960s. Rhinos are now heavily protected, but still suffer great losses through poaching. There are several fenced sanctuaries for them and other populations are constantly kept under armed guard. Another solution is to saw off the rhino's horn under anaesthetic. This does not cause any pain and removes the temptation for poachers.

Reg Harris with the Indian rhino skeleton

Rhinos in the Grant Museum

Since the Museum has been housed in its current location in the Darwin Building, the impressive one-horned Indian Rhino skeleton has acted as the centrepiece, towering over the rest of the specimens. This skeleton was donated to the Museum from the University of London Loan Collection in 1910-1911 along with 78 other specimens.

Although rhinos' horns are not part of the skeleton, in the past the Indian Rhino has been displayed with its horn attached, as can be seen in the photograph above. Here the Museum Curator Reg Harris is repairing some damage suffered when the animal was returned from the Zoology Department's war-time evacuation to Wales.



Hippopotamus skull

Diet: *Herbivorous and omnivorous*
Distribution: *Various*
Habitat: *Various*

Natural History

Most modern hoofed mammals are artiodactyls. The group includes pigs, camels, cattle, antelope, deer, hippos, giraffes and pronghorns. Modern molecular genetic sequencing has shown that this group gave rise to whales and dolphins. Artiodactyls appeared around 50 million years ago.

Many artiodactyls are ruminants. This means that they have a complex stomach with three or four chambers, the first of which houses cellulose-digesting bacteria. Without them the animals cannot digest tough plant material. It is the ruminants that regurgitate their food to chew the cud. Most artiodactyls are herbivorous and have ridged grinding teeth to chew plant matter. Pigs