

# Skeleton of a Hippopotamus



**About 120,000 years old, found in Allenton, Derby  
The name hippopotamus derives from the ancient Greek  
Hippo (horse) and potamus (river) - 'river horse'.**

## **Setting the scene**

Imagine the scene: you're surrounded by tall reeds on the shore of a swampy river. Away from the river the land slopes gently upwards to low hills, covered in lush grass and open woodland. The air is warm and humming with the sound of millions of insects. From your hiding place in the reeds you are astonished to see gigantic elephants approaching the water to drink.

All of a sudden the water near you erupts in boiling foam and the head of a hippopotamus rears up, its huge gaping mouth bristling with fearsome looking tusks.

You could be forgiven for thinking that you had been transported to modern Africa, but the river is the Derwent, very close to where Derby now stands – and the time is 120,000 years ago.

## **The Allenton Hippo - Discovery**

In March 1895, workmen digging a well for drinking water in the yard of the Crown Inn at Allenton, then a country hamlet 3 miles south of Derby, found some large bones. They also found 'a strong unpleasant smell' and so the well was abandoned. The bones were shown to two local geologists HH Arnold Bemrose and R M Deeley who were so excited by them that they organised a scientific excavation to see what else could be found.

Over three days they unearthed more remains, and a total of 127 bones and fragments were found, about 3 metres below the surface. Two of the bones belonged to an elephant and a rhinoceros. The rest formed an incomplete skeleton of a hippopotamus. Most of the bones belonged to one young adult hippopotamus. After the bone fragments were pieced together they made about 50 complete or nearly complete bones of one young adult hippo. Because the bones were relatively undisturbed it was deduced that the hippo died where it was found.

Bemrose and Deeley were meticulous in their excavation. The bones were numbered in the order they were found, and their positions noted as accurately as possible. The sediment in and around the bones was sieved, and plant remains were recovered from it, which were microscopically examined. The plant remains indicated a moist meadow or swampy ground and a temperate climate at the time the hippo lived. The sediments in which the bones were found indicated a silted up river channel.

## **What happened to the rest of the skeleton?**

Bemrose and Deeley said that when the Crown Inn was built in 1878 'some large bones were found when a well was dug and the cellars were excavated. They were not preserved, but were sold by the labourers and probably destroyed.' Perhaps some of these bones belonged to the hippo. And perhaps more bones lie waiting to be discovered beneath the buildings of the Crown Inn.

## **Boulton Moor Finds**

More hippo bones, and those of six other large animal species, were found in 1973 during excavations for a new sewerage pipeline at Boulton Moor, just a mile away from Allenton.

As well as hippo bones, there were bones from straight-tusked elephant, narrow-nosed rhinoceros, spotted hyena, brown bear, red deer and ox or bison – they were also dated to about 120,000 years ago. Red deer is the only species that still lives in Britain today.

These bones came from the same geological layer - called the Allenton Terrace - as the Allenton hippo. The Allenton Terrace is a layer of river-deposited 'gravels' about 6m above the current river level, on the south side of the Derwent, stretching from Derby to Elvaston. It formed the floor of the river floodplain, before the Derwent cut down to its present level. The Allenton Terrace formed about 120,000 years ago, during the so-called Ipswichian interglacial within the great Ice Age.

The climate would have been warmer than it is now. The river Derwent would have been wide and meandering, fringed by swamp-land, with higher ground of meadow and open woodland. Hippo, gigantic straight-tusked elephants, rhinoceros, spotted hyena, brown bear, red deer, ox and bison were the characteristic animals of this period. Humans do not appear to have lived in what is now the UK during this period.

## **Hippopotamus facts**

The Allenton hippo is the same species of hippo that lives in sub-Saharan Africa today.

Hippos are amphibious, spending up to 16 hours per day in water, during the hot daytime. They can sleep underwater and will automatically bob up to the surface and breathe every 3 to 5 minutes. They live in large groups of up to 200 individuals, and give birth in water. Their closest living relatives are whales, porpoises and pigs.

Despite their fearsome dental equipment hippos are entirely vegetarian, feeding on grass, roots and herbs. They come to land to graze at night-time, and often walk very long distances to find food. Their tusks are used for defence against predators, and during fights with rival males. They can be extremely aggressive especially if they feel threatened, and are regarded as one of the most dangerous animals in Africa. After elephants and white rhinoceros, hippos are the third largest land animal, weighing up to 4 tons. They can run at 30km per hour and can easily outrun humans.

Hippo populations are currently in decline and are now classified as vulnerable. Threats include habitat loss through water being diverted for agriculture, and poaching for their meat and teeth.