Geology fact sheet:

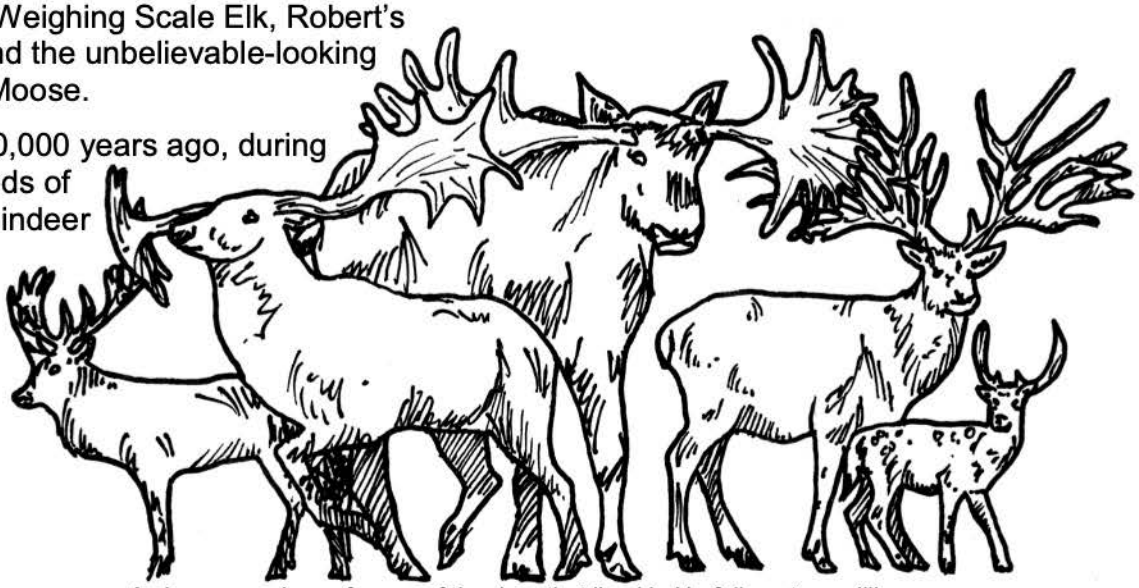
Deer

Today six species of deer live wild in the UK. If you look hard enough, you can find them all somewhere in Norfolk. However, only Red Deer and Roe Deer are considered 'native' – having made it here without the help of us humans.

Fallow Deer are generally considered an 'introduced' animal, as the Normans brought them here in the 11th century. However, they used to roam the UK before an especially cold period in the last Ice Age wiped them out – so perhaps we should think of them as being 're-introduced'?

If you were on Norfolk's Deep History Coast half a million to a million years ago, you would have seen many more types of deer nibbling on the grass and munching on the leaves nearby. As well as familiar Red, Roe and Fallow Deer, there would have been Giant Deer, Bush-antlered Deer, Weighing Scale Elk, Robert's Fallow Deer, and the unbelievable-looking Broad-fronted Moose.

From around 60,000 years ago, during the colder periods of the Ice Age, Reindeer would have mingled with Woolly Mammoths on the Norfolk tundra!



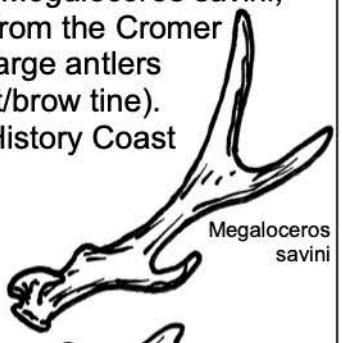
A size comparison of some of the deer that lived in Norfolk up to a million years ago.

Giant Deer

Formerly known as the 'Irish Elk', the name Giant Deer is now used for this group, as these animals were neither exclusively Irish, or closely related to living species of Elk! From DNA analysis, we now know that they were probably more closely related to Fallow Deer.

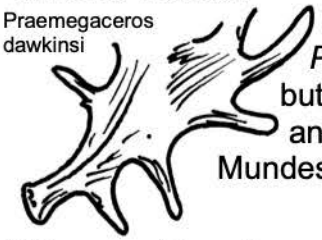
Megaloceros giganteus, the largest species of Giant Deer stood over two metres (seven foot) at the shoulder and had the largest antlers of any deer. Amazingly, just like deer today, the males grew their huge antlers new once every year in just four months.

Three species of extinct deer from Norfolk are known as Giant Deer: *Megaloceros savini, Praemegaceros dawkinsi* and *Praemegaceros verticornis. M.savini* from the Cromer Forest-bed Formation stood around 1.8 metres at the shoulder with large antlers that do not form a palm-like or 'palmate' shape (except for on the first/brow tine). Fossils from this species are commonly found throughout the Deep History Coast of North Norfolk.



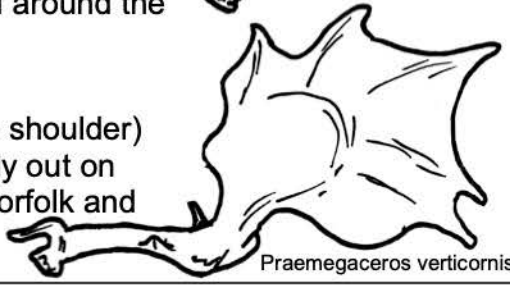
Megaloceros savini

Praemegaceros dawkinsi



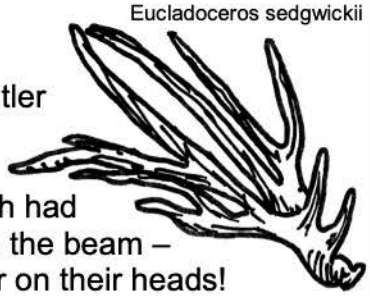
P. dawkinsi was slightly smaller than *M. savini,* but had thick backwards-pointing palmate antlers. It has been previously found around the Mundesley/Walcott area of the coast.

Whereas, *P. verticornis* (again around 1.8 metres at the shoulder) had large heavy antlers which spread almost horizontally out on either side of the skull. It is most often found in South Norfolk and North Suffolk.

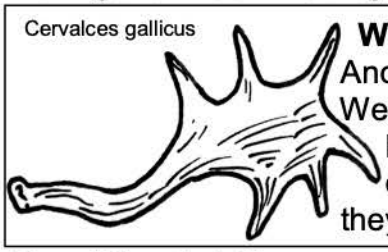


Praemegaceros verticornis

Bush-antlered and Comb-Antlered Deer


Eucladoceros sedgwickii

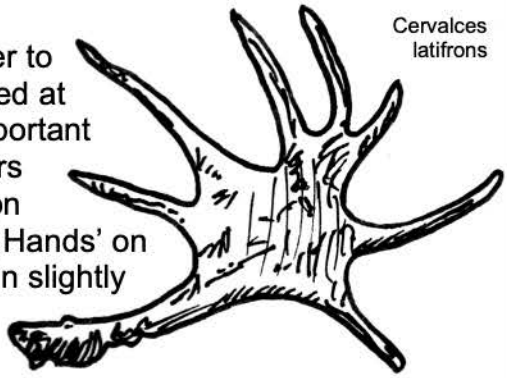
One species of Bush-antlered Deer is found in Norfolk: *Eucladoceros sedgwickii.* It was first found in Bacton and had a 9-foot (2.75 metre) antler span. The Comb-antlered Deer, *Eucladoceros tetraceros* is found in both the Cromer Forest-bed Formation and the Crag Formations of Weybourne and the Runtons. As their English names suggest; they both had widely spread antlers with a mass of flattened branches spreading from the beam – making them look like they had either two bushes or two giant combs or on their heads!


Cervalces gallicus

Weighing Scale Elk (sometimes called the Gallic Moose)

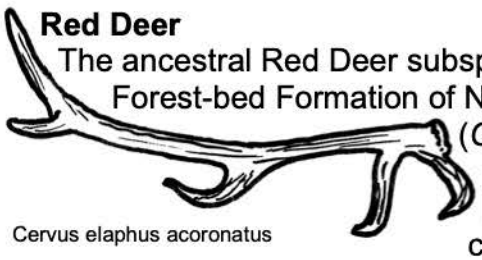
Another deer with a very descriptive colloquial Norfolk name – the Weighing Scale Elk (*Cervalces gallicus*). Slightly smaller than modern Elk/Moose (*Alces alces*), they have antlers with a long beam which curve gently outwards from the skull (making them look as though they have old-fashioned weighing scales on their heads!).

Broad-fronted Moose


Cervalces latifrons

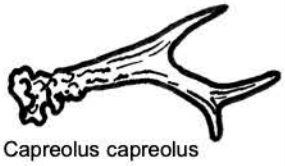
This striking looking animal was probably the largest deer ever to have existed. The first *Cervalces latifrons* fossil was discovered at Happisburgh in 1874, and forms part of the internationally important geological collections of Norwich Castle Museum. Their antlers have straight beams which expand into a very broad palmation (looking somewhat like a pair of outstretched arms with 'Jazz Hands' on the end of them!). They were probably solitary animals living in slightly more open countryside (similar to the Elk/Moose of today). The antlers were probably only used for display purposes.

Red Deer


Cervus elaphus acoronatus

The ancestral Red Deer subspecies (*Cervus elaphus acoronatus*) is found in the Cromer Forest-bed Formation of Norfolk. Often slightly larger than modern British Red Deer (*Cervus elaphus scoticus*) – possibly due to less hunting pressure from humans. Their antlers were similar to modern Red Deer, but with a simple fork at the end instead of a crown.

Roe Deer


Capreolus capreolus

This small deer (*Capreolus capreolus*) is found relatively often in the Cromer Forest-bed Formation, as well as later deposits. A near perfect Roe jawbone was found alongside the West Runton Mammoth skeleton in 1995.

Fallow Deer and Robert's Fallow Deer

In 2013 a new species of extinct deer was discovered amongst the fossil collections at Norwich Castle Museum. The species was given the name *Dama roberti*, or 'Robert's Fallow Deer' in honour of the original discoverers of the fossil remains. Unlike the closely related modern Fallow Deer (*Dama dama*), which have palmate, many-pointed antlers, Robert's Fallow Deer antlers are long, relatively straight and unforked. It is this unique antler shape that helped to determine Robert's Fallow Deer as a separate, new species. This deer fossil is just part of a collection of rocks and fossils that is held by Norfolk Museums Service, which has been deemed by Arts Council England as being 'of international importance'.

Dama dama*, modern Fallow Deer (left) and* Dama roberti*, 'Robert's Fallow Deer' (right).*

NORTH NORFOLK DEEP HISTORY COAST

Norfolk Museums Natural History