Woolly Mammoths by Dr Chris Thomas.

This talk dealt with the interrelationships between changes in climate, changes in the landscape and changes in the population of Mammoths & Man, covering three million years.

Chris started the talk telling how a chance visit to the Norris Museum in St Ives to fill in some spare time turned into an interest over many months. The exhibit that got Chris intrigued was a tangle of ginger hair labelled as “Mammoth Hair” .... ”40,000 years old”. Chris having before looked at other animal fur under a microscope was intrigued; he wanted to know if the label was correct. He spoke to the curator and thereby started the quest. After much comparison microscopically with known hair samples he confirmed it really was Woolly Mammoth hair. So how did it get to St Ives? After discussion and searches throughout the museum stock the envelope in which the sample had come to the museum was found but with scant information. Further detective work found that the hair sample donated to The Norris- had come from a complete mammoth found in the ice of Siberia back in 1901 to 1902 and is well documented as the Berezovka mammoth still on display in the museum in St Petersburg.

Several ice ages have been experienced by the earth. Within each ice age there are variable very cold periods of around 100,000 years called glaciations where more of the earth was covered by ice. During warmer periods known as interglacials the ice recedes temporarily (geologically speaking).

In five different glaciations periods in the last half a million years the ice covering Britain varied both in depth and in how much of the landmass was covered. For example in one our climate was similar to Siberia whereas in the last one named the Devensian the South of England up to the Wash & Midlands remained ice free. During the warmer interglacial periods, for example the Ipswichian Britain’s temperatures were more like the Mediterranean. Thus different elephants or mammoths crossed the land bridge between what is now Britain & Europe into this area at different times. Movement by animals or humans was also restricted with the rise & fall of the ocean which varied by up to 100m. Chris simulated, by way of the audience executing a Mexican wave, the movements of the ice sheets up and down the area that was to become The British Isles.

Over millions of years the rocks in this area were thus laid down, eroded by ice or water to leave us with the geology we have. Recent river erosion and gravel extraction have yielded fossils of these different times. The Norris Museum has a range of mammoth & elephant fossils including 33 from Huntingdonshire, generally from along the Great Ouse valley. Just under a half came from Fenstanton. Cambridge University researchers identified here (i) The Ipswichian period which yielded straight tusked elephants, giant deer, giant wild cattle (aurochs), red and fallow deer preyed on by wolves and bear, along with frogs, rodents, beetles, pollen and wood and (ii) the final glaciations period with woolly mammoths, bison, horse and of man’s re-colonisation as evidenced by hand axes and flint scrapers finds from along the Great Ouse. As the final glaciers melted away the woolly mammoth disappeared whilst humans established themselves in this region.