Woolly Mammoth

Woolly mammoths are extinct relatives of today's elephants.

Woolly mammoths lived during the last ice age, and they may have died off when the weather became warmer and their food supply changed. Humans may also be partly responsible for their disappearance due to hunting. Although the word "mammoth" has come to mean "huge," woolly mammoths were probably about the size of African elephants. Their ears were smaller than those of today's elephants. This was probably an adaptation to the cold climate that kept their ears closer to their heads and kept them warmer. Their tusks were very long, about 15 feet (5 meters) and were used for fighting and digging in the deep snow. Mammoths were herbivores and ate mostly grass, but also ate other types of plants and flowers.

Recent research

Geneticists have sketched out the woolly mammoth's family tree using ancient DNA found preserved in Siberia.

The extinct beasts are more closely related to Asian elephants than to African elephants, the researchers found, and the three species diverged within a surprisingly short period of time.

Michael Hofreiter of the Max Planck Institute in Leipzig, Germany, and his colleagues used bone fragments to reconstruct the mitochondrial genome of the mammoth.

Mitochondrial DNA is passed from mother to offspring, which makes it useful for tracing the lineage of a species. The DNA revealed that woolly mammoths had more genetic similarities to modern Asian elephants than to the African species, though not by much, Hofreiter's team reports. The DNA also showed that elephant species split from each other more quickly than had been thought.

Modern elephants and woolly mammoths share a common ancestor that split into separate species about 6 million years ago, the study reports. At that time African elephants branched off first. Then just 440,000 years later, a blink of an eye in evolutionary time, Asian elephants and mammoths diverged into their own separate species. Hofreiter says that this close timing may have an interesting parallel among primates, which include humans.