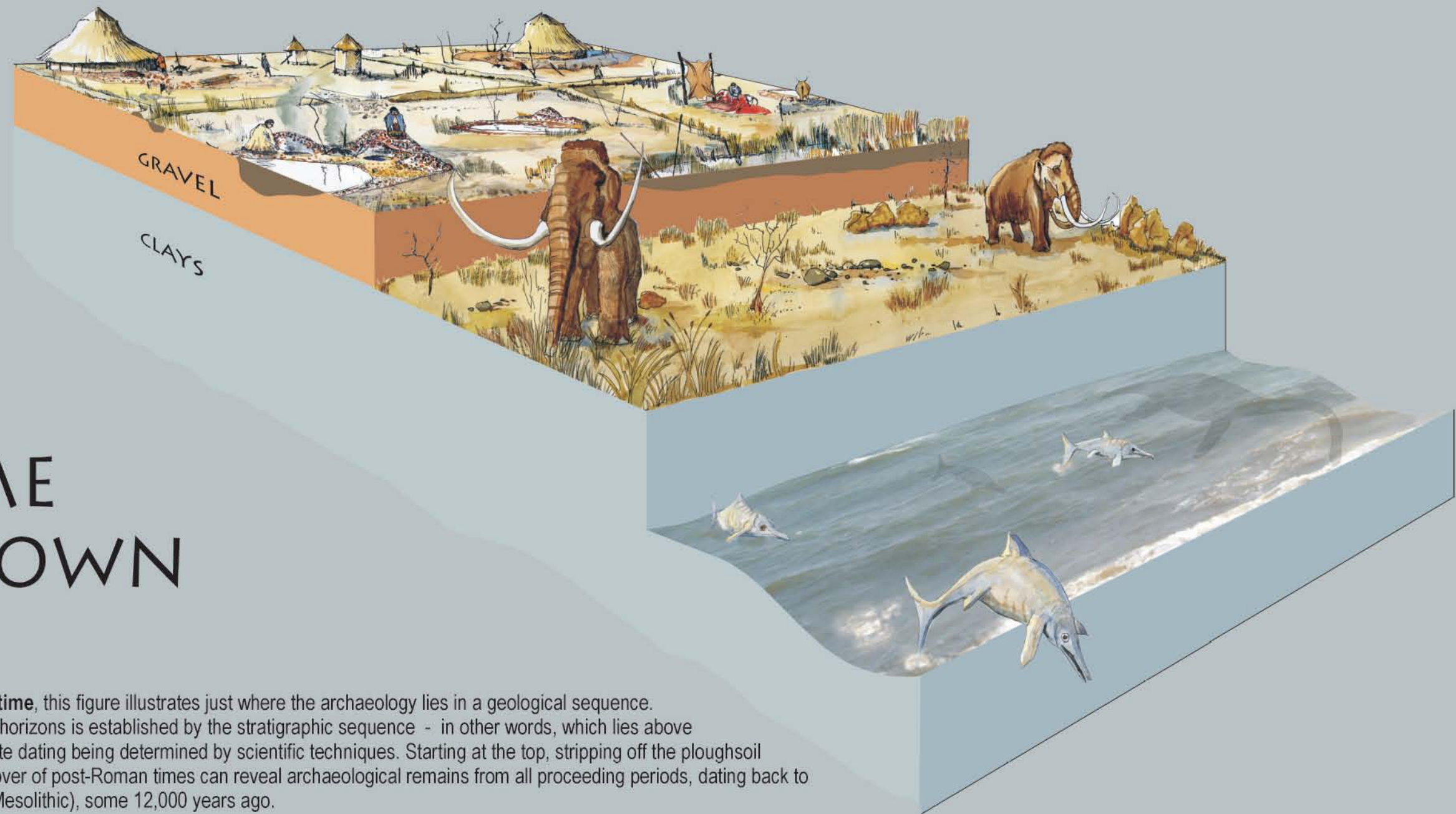


QUARRY ARCHAEOLOGY

DEEP TIME DOWN



Stepping back through time, this figure illustrates just where the archaeology lies in a geological sequence. The relative age of these horizons is established by the stratigraphic sequence - in other words, which lies above which - with their absolute dating being determined by scientific techniques. Starting at the top, stripping off the ploughsoil and alluvium flood clay cover of post-Roman times can reveal archaeological remains from all preceding periods, dating back to the Late Stone Age (the Mesolithic), some 12,000 years ago.

The traces of occupation lie on and are dug into the top of the gravel terraces. The archaeological material is largely found in 'cut' features, that is in pits, wells, postholes and ditches. Only occasionally, when sealed by deeper deposits, do associated horizontal layers such as floor surfaces, upcast banks and buried soil or finds spreads survive eradication by recent agriculture. In this case there can be a sequential build-up of 'culture horizons' (e.g. a Roman floor sealing an Iron Age ditch that in turn cuts through a Bronze Age house).

The gravels themselves are the result of glacial run-off and tills that were laid down from as long as 400,000 years ago. Within these are found the remains of Pleistocene mammals such as mammoths and woolly rhinoceroses. Stone tools dating to the Upper and Middle Palaeolithic are also recovered, although they are often derived from elsewhere and have been carried by water.

In the Whittlesey quarries, the gravels cover heavy clays that were deposited by the seas of the Jurassic era (starting some 200 million years ago). These horizons have long been renowned for the discoveries of Plesiosaurs and Ichthyosaurs skeletons.