BULMER BRICK AND TILE WORKS QUARRY, ESSEX, UK.
ERMS Field Trip 21st August 2004.

At the present time only a handful of brickworks are in operation. The Bulmer Brick and Tile Company's brickworks at Bulmer Tye in the north of the county of Essex, near Sudbury, (over the county border in Suffolk), currently makes bricks from a sandy clay near the base of the London Clay mostly for renovating historic buildings. The bricks are hand-made in the traditional manner and coal is still used as the fuel in the kilns.

The port of call on this field trip was the Bulmer Brick and Tile Works in the village of Bulmer on the Essex-Suffolk county border. This brickworks produces specialist bricks to the requirements of the sector of the building industry that deals with the preservation and conservation of old buildings. The starting place for activities was the quarry, which boasts a small outcrop of London Clay. The London Clay is a prominent Eocene deposit of 50 – 54 million years of age. Dramatically exposed on the Isle of Sheppey, Kent, in natural coastal exposures, it can be a very fossil-productive sediment. Inland exposures are not common and usually appear as a result of quarrying activity; this is one such instance.

In this view two heaps of clay can be seen that have been left to weather before being processed. The brown heap in the centre came from the level at which the photographer was standing. The darker heap to the left hand side and slightly to the rear is the "blue" London Clay that has been recently excavated. Weathered surfaces of London Clay usually turn brown as they oxidize. On examining the London Clay heaps, a shark's tooth or two were picked up by a couple of members.

Just below the top soil were lighter coloured horizontal bands in the sediment. These are volcanic ash bands which are believed to be a continuation of those that outcrop at Wrabness where they occur above the 'Harwich Stone Band'. These same "Ash Bands" outcrop at Walton-on-the-Naze and Harwich but there was no evidence to suggest the presence of the Harwich Stone Band in the Bulmer quarry.

<u>Left:-</u> Peter Minter is in the middle of a small group of members explaining the strategy behind the excavations. Note the continuation of volcanic ash bands at the rim of the quarry face. The London Clay was about 2m below the base where the group was standing. Nearby, a small pit descended to this level but water obscured the clay.

A little detour was taken to two small pits, long since filled with water. At one end of the larger of these there was a seam of clay suitable for tile making! It turns out this was the mottled clay of the 'Reading Beds', a formation that appears below the London Clay stratigraphically.

After lunch a visit was made to Hill Farm, near Gestingthorpe. On the bend in the old sunken lane about 100m from the farmhouse lays a series of “Sarsen Stones”.

<u>Left:-</u> fairly worn sarsen showing a mammilated surface.

<u>Right:-</u> Another well worn sarsen stone. The size of this was very similar to the others, roughly 1.2 to 1.5m in length. The black dot on the stone is a camera lens cap

From the positioning of these and other smaller stones in the lane, it is suspected they were placed there by the farmer.

On the land is evidence of Roman buildings and over the years the site has been excavated by the Cooper family. From this they have developed a small museum of the artefacts and published a couple of books on artefacts found. Mr Cooper senior gave a short talk explaining the site, the finds and time scale of Roman occupation. It was also stated there was some evidence to support an Iron Age settlement at the site, this being in the form of some flint finds, including an arrow head, so it is not surprising to learn that this site has undergone human occupation from times way back to the present day. In one of their barns all the odd artefacts that have been found have been laid out for display. Included are fossils, flints and other artefacts from the boulder clay.

Members marched across the fields to see an almost circular depression, some 2.5m deep and 5 to 6m diameter. This hole appeared in Spring 2002. Members were asked about a possible cause. Sink-hole or swallow-hole were suggested. There was almost universal agreement that this was caused by dissolution of the chalk not far below. From nearby borehole data chalk was encountered at 19.5m.