

LOCAL GEOLOGICAL SITES

CHELMSFORD DISTRICT



ChG5 Fultons Farmhouse Boulder, Bicknacre

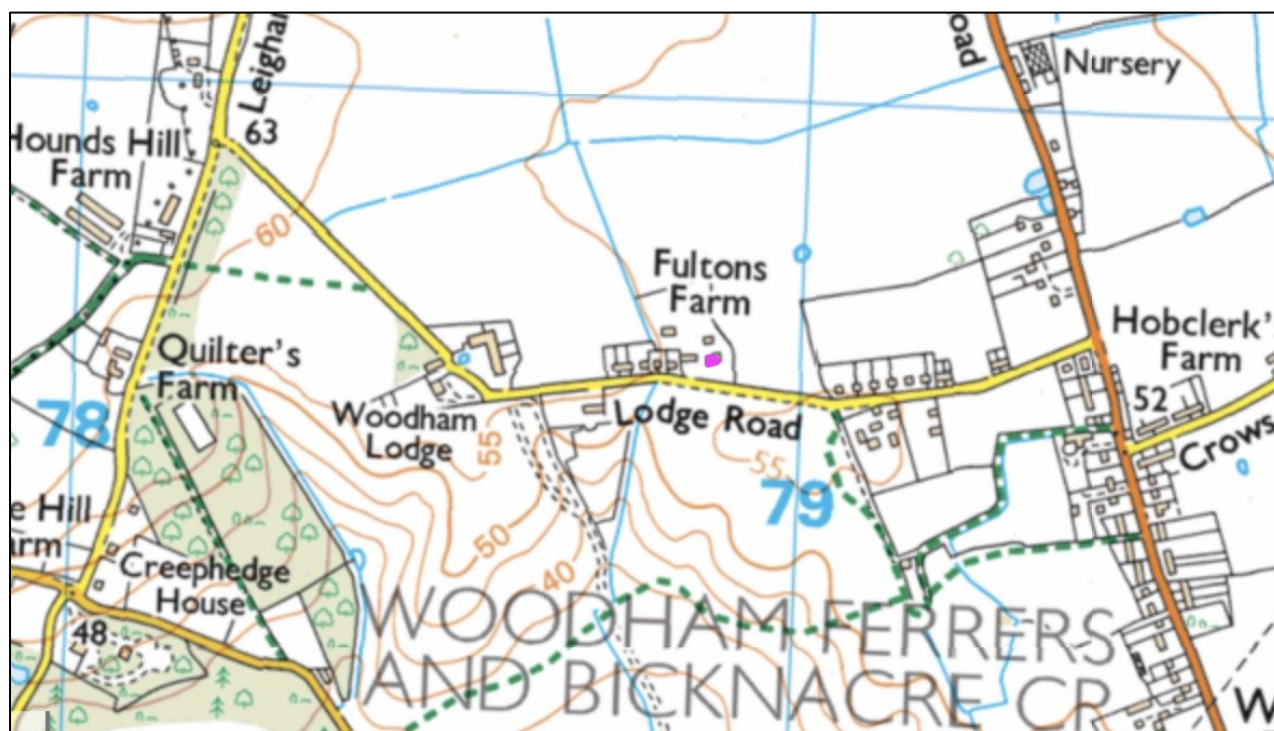
Site location: Basalt boulder next to the garage of Fultons Farmhouse

Grid Reference: TL 788 006

Status: Privately owned.

Summary of the geological interest:

Basalt boulder, 90 centimetres (3 feet) long. Large erratic boulders of basalt are very rare in Essex. The actual size of the boulder is 90cm x 60cm x 35cm. This boulder was probably transported from the north by the Anglian ice sheet about 450,000 years ago. Bicknacre is close to the southern limit of the ice sheet.



Site Assessment. Local Geological Sites (LoGS) in Essex are assessed using criteria based on DEFRA guidance. This site has been assessed and qualifies under these criteria. An assessment form is used which asks key questions under four value categories: scientific, educational, historical and aesthetic.

Scientific interest and site importance

Stones such as this boulder are known as glacial erratics and were carried to Essex by the Anglian Ice Sheet that covered almost the whole of Britain during the coldest period of the Ice Age, some 450,000 years ago. At this time Essex was situated at the southern edge of the ice sheet, which was up to 2 kilometres (over a mile) thick in places. Its extent is known because it has left behind evidence of its existence in the form of a rock called boulder clay, or till. A great thickness of Boulder clay exists across north and central Essex except in river valleys where it has been removed by erosion.

As the ice moved it ground up and carried along pieces of the rocks over which it passed, just as glaciers and ice sheets do today, and when the ice melted an unsorted clayey residue called boulder clay, or till, was left behind. Boulder clay also contains larger boulders transported long distances by the ice and called glacial erratics. By matching rock types with known outcrops in other parts of Britain and further afield, geologists can establish the direction of ice movement across the country from its origins in Scotland or Scandinavia.

Reference: Lucy 2003a