

LOCAL GEOLOGICAL SITES

BRENTWOOD DISTRICT



Brentwood: Thorndon Country Park North

Site location: entrance off Avenue Road

Grid Reference: TQ 604 915

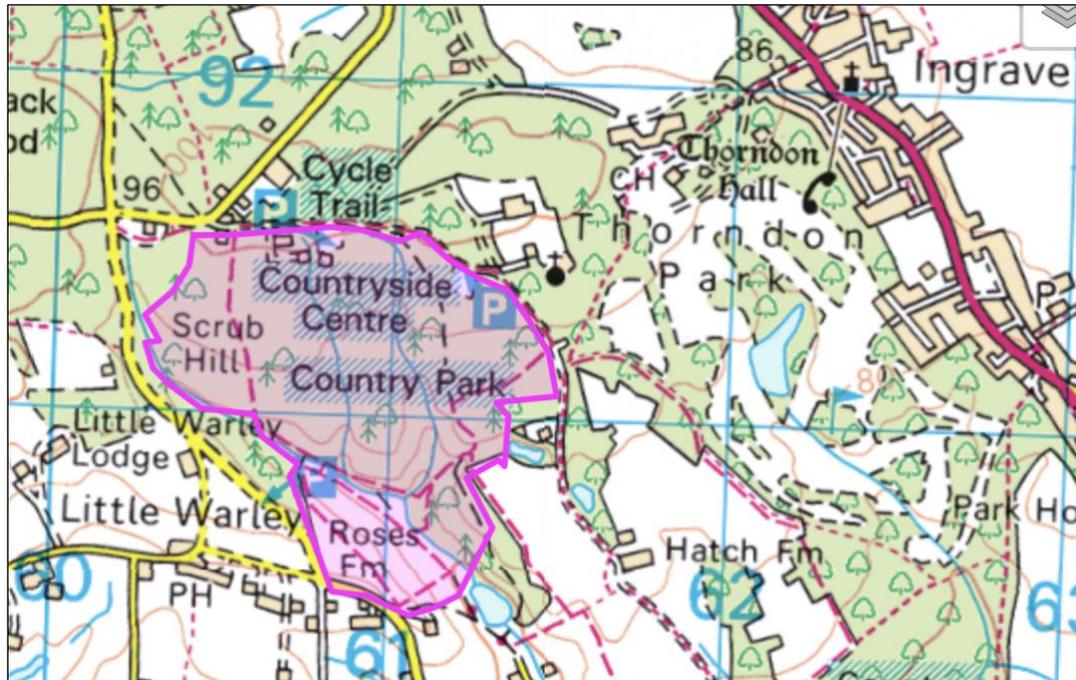
Status: Publicly accessible

Summary of the geological interest:

Country park with varied landforms and outcrops of London Clay, Claygate Beds, Bagshot Sand and glacial gravel. There are two exposures of glacial gravel. The exposure in Thorndon Country Park is very fine and was cleaned and re-excavated in 2021. This site is important because in few other places in the district can glacial deposits be seen. The gravel provides a rare opportunity to study the evidence of the Anglian ice sheet, which, at its greatest extent, reached as far south as Brentwood and Hornchurch.

Thorndon Park North also has some interesting landforms. To the south the spread of glacial gravel is dissected by several streams, which have cut through the Claygate Beds exposing the underlying London Clay. It is possible to follow steeply sloping paths which pass over different rock types and appreciate the horizontal nature of the strata. Small exposures of the Claygate Beds and the London Clay have been dug in the side of a stream where diapiric movement of the London Clay may also be observed. There is an exposure of Bagshot Sand as a pile of dumped material where the fine, well-sorted nature of the deposit may be seen.

There is a way-marked geological trail with a guide available in the Visitor Centre or to download via a QR code.



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.



The way-marked geological trail begins at the fossil stump of a Jurassic tree outside the Visitor Centre



The cleaned and re-excavated section in Glacial Outwash Gravel with renewed signage.