

# LOCAL GEOLOGICAL SITES

## UTTLESFORD DISTRICT



### Ugley Green Puddingstone

**Site location:** By the village pump, Ugley Green, near Stansted Mountfitchet

**Grid Reference:** TL 5242 2712

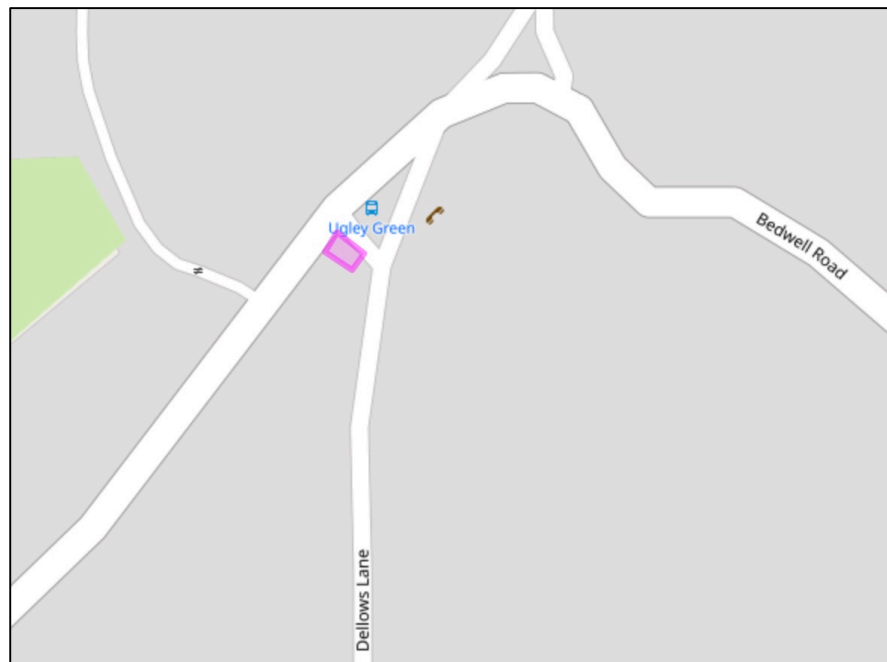
**Status:** Accessible at all times

#### **Summary of the geological interest:**

Beside the green, next to the village pump at Ugley Green, is a large, colourful boulder of Hertfordshire puddingstone 1.2 metres long. It was formerly situated on the village green.

Hertfordshire puddingstone is a unique type of rock containing well-rounded flint pebbles bound together with quartz 'cement'. It is named after its resemblance to a plum pudding and the fact that it can be found in Hertfordshire 'in-situ'. The cement and pebbles are homogeneous and both equally hard, which makes puddingstone a very tough rock and very resistant to erosion.

Hertfordshire puddingstone boulders are known as 'erratics' and were probably carried here first by an early course of the River Thames, and then by the Anglian Ice Sheet which covered almost the whole of Britain during the coldest period of the Ice Age, some 450,000 years ago.



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

### ***Scientific interest and site importance***

Hertfordshire Puddingstone was formed around 55 million years ago when the climate of Britain was hot and a layer of sand beneath the surface of the ground became cemented with quartz. The formation of silcretes (which includes sarsens and puddingstones) has been the subject of recent scientific debate. Research has compared the conditions under which sarsens and puddingstones may have been formed with the present day climate in the Kalahari Desert and parts of Australia.

The boulders of Hertfordshire puddingstone that are found in Essex most probably originated in Hertfordshire and were brought to Essex by the Thames when it flowed far to the north of its present course.

Erratic boulders link geology, archaeology and social history. Isolated erratic boulders are of historic interest as there is usually speculation about if, when and why particular stones were moved to their present position. According to a local resident this stone was originally situated on the village green.



The puddingstone boulder at Ugley Green. *Photo: G. Lucy*