

# LOCAL GEOLOGICAL SITES

## UTTLESFORD DISTRICT



### UfdG12 Coopers End Farm Boulders, Duddenhoe End

**Site location:** Entrance to a plant hire company at Coopers End Farm

**Grid Reference:** TL 4649 3596

**Status:** Publicly accessible

**Summary of the geological interest:**

Large boulder of Hertfordshire puddingstone by the entrance to a plant hire company at Coopers End Farm. It has since been joined by other boulders, mainly of sarsen. One of the sarsen stones has a fine collection of root holes.



**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**

The boulder of puddingstone at Coopers End Farm is of large size (1.6 metres x 1.4 metres x 55 cm) and is unusual as the base of the stone is without pebbles and therefore similar to a sarsen stone.

Hertfordshire puddingstone is a rock known as a silcrete, it was formed around 55 million years ago when the climate of Britain was hot and a layer of pebbles beneath the surface of the ground became cemented with quartz. They are thus very resistant to erosion and have survived the rigours of the Ice Age.

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.

There are also several sarsen stones here. The largest has fine root holes (see photo below).



*The Coopers End Farm boulders in 2020*



*Root holes in the sarsen stone*



*The large puddingstone*