

Barkway Chalk Pit



Barkway Chalk Pit is an important geological site revealing interesting events which occurred during the Anglian Glacial period. It also provides valuable habitats for wildlife within a rural agricultural landscape, such as scrub and remnant chalk grassland.

Geology

This unique site provides evidence for the advance of Anglian age ice sheets approximately 450,000 years ago.

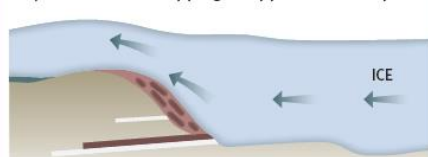
a. Impinging of ice against lower scarpfoot feature formed by Chalk Rock.



b. Progressive incorporation of chalk rafts by proglacial deformation and incorporation into subglacial deformable wedge.



c. Impinging of heavily laden ice against major scarp feature. Subglacial deformation of chalk raft/till sequence and overtopping of Upper Chalk scarp.



d. Ice retreat giving rise to downscarp movement.



The distribution of Chalk rafts within till between Therfield and Barkway



These vast glaciers which came from the north and east “bulldozed” rafts of chalk on to each other and formed the chalk masses we see here today stacked at a 40° angle.

These blocks of ice damaged the “Middle Chalk” which originally formed low escarpments to the north of Royston. They were pushed southwards by the ice sheets and tilted, leaving a layer of glacial till/clay between the chalk blocks you can see in the chalk face today.

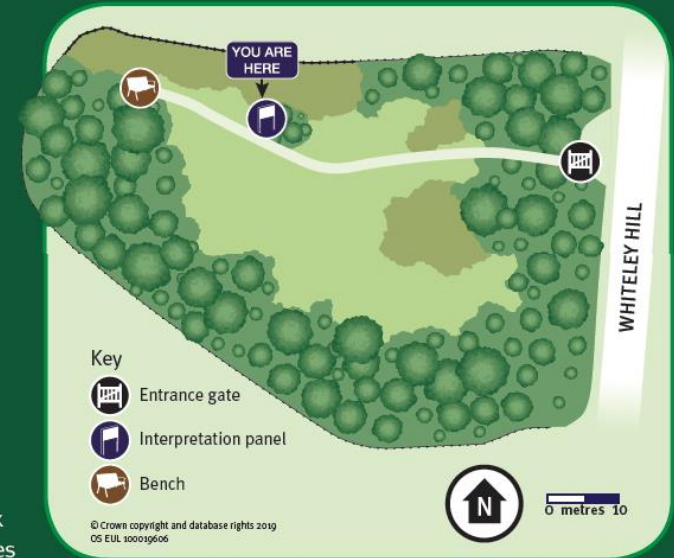


History

Originally, the chalk pit was excavated to provide chalk for improving local farmland, but chalk extraction finished in Victorian times and it was subsequently used as the village rubbish dump. This explains the many old Victorian glass bottles which can be found on the site.

Chalk grassland

Chalk grassland is a specialised and fragile habitat present in small remnant patches at Barkway Chalk Pit. This threatened habitat is lime rich and nutrient poor which results in a profusion of flowering plants such as cowslip, wild basil and salad burnet. It also supports a wide range of other wildlife, including butterflies like the common blue.



In an effort to maintain species diversity, volunteers work annually to cut and remove the nettles. Stinging nettles and brambles thrive in nutrient rich areas, removing them decreases soil fertility thereby encouraging rarer species.

If you would like to find out about volunteering, or running educational trips, please visit the CMS website at www.hertfordshire.gov.uk/cms

If you would like to find out more about the geology or get involved with the Hertfordshire Geological Society please visit www.hertsgeolsoc.ology.org.uk/



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