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Welcome to Little Heath-on-Sea

Around 2.5 million years ago this area was on the boundary western shore line of the North Sea.

This pit is designated **Site of Special Scientific Interest**.

It exposes two beds of flint gravel and an intervening sand. The **lower gravel** represents a marine beach thought to have been deposited at the beginning of the Pleistocene period (2.6 million to 11,700 years ago), when the North Sea extended westwards across south-east England. It rests on clay and sand (Upnor and Reading Beds) over ran irregular Chalk surface at 10 metres depth.

The bed of reddish-brown **sand** was deposited in intertidal areas where the shoreline was slightly higher and further west. The grey clay layers in the sand accumulated in pools as the tide receded.

The **upper gravel** is much younger and was deposited on land in very cold (Tundra) climate, when the ground was deeply frozen and gravel from upslope sludged over the sand when surface layer thawed in summer. It was subsequently let down into large pockets penetrating the sand because the gravel was denser than the thawed and water-saturated sand.

Is the oak-hornbeam-ash-silver birch woodland of Little Heath replaces earlier opened heathland on the gravels. The dells within the woodlands were caused by digging the gravel and sand for road metal and filling sandbags in the First World War. Little heath was left to the National Trust in the early 20th century and now forms part of the Ashridge Estate.

Includes two photos:
1. Dungerness beach, Kent. Similar to Little Heath 2,500,000 years ago.
2. Tundra of western Siberia. Similar to Little Heath 20,000 years ago.

Insert - Significance for the landscape of the Chilterns

Standing here you are about 170 metres above today's sea level, so since the lower gravel was deposited in the early Pleistocene Period the Chiltern Hills have risen by a similar amount. However, the deposits visible in this pit are not typical of the Chilterns. Elsewhere the Chalk forming the almost flat Chiltern plateau has a cover of reddish-brown-clay-with-flints up to 15 metres thick. This was formed from a layer of much older deposits (the Upnor and Reading Beds, dated to about 56 million years ago) weathered at times before or since the lower gravel was deposited.

Includes a photo of Little Heath Pit with three distinct layers identified labelled as upper gravel, sand and lower gravel.

Ashridge Estate - Little Heath Pit
To find out more, call in to the Ashridge Visitor Centre, or phone our Rangers on: 01442 841800

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