

Thorndon Country Park in the Ice Age

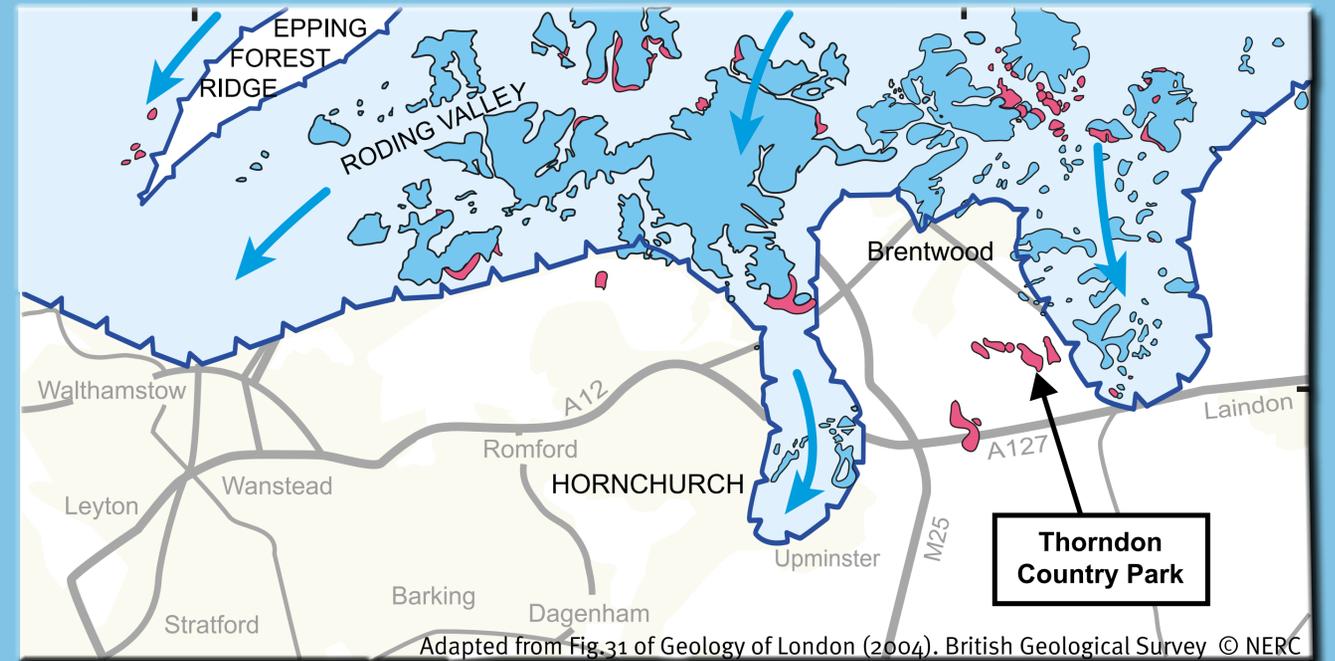
About 450,000 years ago, in the middle of the Ice Age, almost the whole of Britain was buried beneath a giant ice sheet. This spread out from the mountains of Wales and Scotland where it was probably over a mile thick. What is now Brentwood was situated at the southern edge of this ice sheet and here colossal torrents of meltwater issued from beneath the ice.

Sand and gravel that had been scraped off the land by the moving ice was carried away by the meltwater and spread across the landscape. Later, after the ice had retreated, new rivers created new valleys, removing most of this gravel and leaving patches of it isolated on high ground. One of the largest expanses in south Essex of this glacial sand and gravel is at Thorndon Country Park.



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Rivers of meltwater issuing from an ice sheet in Iceland. Thorndon Country Park would have looked very similar about 450,000 years ago.



Estimated maximum extent of the ice sheet in the Brentwood area during the Anglian Glacial Stage, about 450,000 years ago. Deposited by the ice sheet was boulder clay, or till (shown in blue) and glacial sand and gravel (shown in red). Arrows indicate direction of ice flow.

This cliff of glacial sand and gravel was created by Country Park staff and volunteers in 2011 at the edge of an old gravel pit that was probably last worked in the 1930s. It provides evidence of the climate and environment of south Essex some 450,000 years ago – a period known as the Anglian Glacial Stage, which was the most severe of the Ice Age's many cold periods.

The pebbles in the gravel have had a long and eventful history, having been 'recycled' from previous geological deposits. Most are very well-rounded, proving that they were originally formed on an ancient beach many millions of years ago. Almost all the pebbles are of flint but some are of rock-types from the north of England and Scotland, providing evidence of the source of the ice. There is also evidence here of the most recent glaciation of Britain, 20,000 years ago - in the top half of the cliff several long pebbles are in a near vertical position due to constant freezing and thawing of the ground.

Please respect this feature and do not remove pebbles from the cliff.

