LOCAL GEOLOGICAL SITES TENDRING DISTRICT



TeG5 Gants Pit (site of), Dovercourt

Site location: Spring Meadow Primary School and playing field

Grid Reference: TM 2408 3127

Status: Primary School site

Summary of the geological interest:

Gants Pit is a classic site of geological and archaeological interest with potential for education and research. It was the richest site for Palaeolithic hand-axes in Essex. It is a disused and infilled gravel pit which is now occupied by a primary school and playground. Any significant excavations on the site should be recorded.



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

Gants Pit in Dovercourt is famous as the richest site for Palaeolithic hand-axes in Essex. It was situated on the west side of the junction of the main Harwich Road and Parkeston Road and is named after the former tenant of Pound Farm, Mr. W. Gant, who leased the land. It is sometimes referred to as Pound Farm Pit. The site is now levelled and occupied by Spring Meadow Primary School and playing field.

The first discoveries were made in 1908 by a Lieut.-Colonel W. Underwood who, while walking in the area, noticed gravel being worked at this spot which was a farm field overlooking the Stour valley. He suspected that it was a likely spot for flint implements and interviewed the workmen. They informed him that they knew nothing of such objects but had collected a large number of bones, which they had sold to a passing rag and bone merchant! Underwood searched the piles of gravel on the floor of the pit and did indeed find evidence of worked flints. He returned to the pit on a later occasion with representative examples of Palaeolithic implements for the men to see, and asked them to look out for such things. This proved to be great success and over 150 hand-axes were found in just three years.

The site was independently discovered by the Essex amateur geologist and prehistorian Samuel Hazzledine Warren who took a particular interest in the hand-axes and managed to persuade the workmen to write in pencil on the implements the depth at which they found them. The results of this exercise demonstrated that the implements were found throughout the 9 foot (3 metre) depth of the pit but they had a greater surface patina the higher up they were in the gravel. This showed the weathering effect of the percolation of ground water over thousands of years. A few of the hand-axes were very slightly rolled but most were in fresh condition with no abrasion, which meant that the river had not transported them very far.

Warren therefore concluded that this was the debris of an important Palaeolithic living site that had been washed by the river into a bank of gravel and sand. The pit ceased working in the 1920s. The site is now levelled and occupied by Spring Meadow Primary School and playing field. There has, however, recently been renewed interest in the site and investigations were carried out in 2001 by a team of archaeologists and geologists led by David Bridgland. This was following up on an observation that gravel with Palaeolithic flakes was exposed in the foundations for a southern extension of the school in the 1980s. Several Palaeolithic flakes were recovered in 2001, leading to further excavations in 2006 when three trenches were dug using a JCB excavator in different parts of the site. One trench revealed fragments of fossil mammal bone and a number of Palaeolithic artefacts, which appears to confirm that the mammal fauna and the artefacts came from the same gravel. These investigations established the approximate extent of the gravel remaining beneath the site, which may hold further information about the climate and wildlife of the area when these early humans were living here. It is also hoped to establish an accurate age for the site. The results also found that the original gravel pit was quite small, probably no larger than the footprint of the main school buildings, which makes the large number of hand-axes found all the more remarkable. The investigations were hampered by waterlogged conditions at the base of the trenches that reached the impervious London Clay bedrock. A surprising discovery, however, was made at the base of the trench at the eastern corner of the site. Here was found a thin remnant of Red Crag, consisting of sand with numerous fossil shells, lying on top of London Clay.

A total of 208 hand axes have come from Gants Pit. Some of them were large and beautiful, and many were magnificently worked, their colour ranging from yellowish brown to lightish blue. The mammal bones found represented species such as beaver, rhinoceros, straight-tusked elephant, fallow deer, red deer and ox (aurochs). The gravel that contained the

implements and bones appears to be a local terrace gravel from the Stour valley, banked up against the much older Oakley Gravel, which is of Thames-Medway origin.

Material from Gants Pit is distributed around several museums including Ipswich, Colchester, Norwich, Cambridge, Oxford and the Natural History Museum in London. The majority of the hand-axes are in the British Museum.

References: Underwood 1913, Wymer 1985 (p.237-238), Bridgland 1994 (p.363), Bridgland 2006.

One of over 200 Palaeolithic hand axes that were found in Gants Pit. Illustration © Essex County Council

