

**GLA 49: Fairlop Quarry Complex (Hainault Quarry), Potential RIGS
(Incorporating SGI 16, Fairlop Water)**

London Borough of Redbridge, TQ 462 896

Ownership: Brett Lafarge. Permission to visit required from owner.

Fairlop Quarry Complex

The Fairlop Quarry Complex covers a wide area that has been quarried for Boyn Hill Gravel over many years. As the quarries are worked out they are then backfilled and restored, mostly for agricultural use. Fairlop Water (TQ 4572 9072) remains a public open space with a golf course, a windsurfing, sailing and angling lake and an artificial boulder climbing area. There is also a bar and restaurant.

When the working quarry (TQ 462 896) was visited by members of the London Geodiversity Partnership in July 2011 it was in its last days of operation. An adjacent plot was scheduled to begin operations in August 2012. The Hainault Road depot/processing plant is part of the Fairlop complex.

Boyn Hill Gravel

The Boyn Hill Gravel is one of the earliest of the Thames Terraces, deposited about 350,000 years ago, MIS 11 ([Marine Isotope Stage 11](#)). In the Lower Thames it is also known as Orsett Heath Gravel. In this location the unquarried surface is between 25 and 30 m above sea level which is consistent with the elevation of the Boyn Hill/Orsett Heath Gravel found elsewhere along the Thames Valley. It is about 6 m thick in this area (see BGS Special Memoir, pp. 59-65). The majority of the clasts are of flint, a very hard form of the mineral silica that originated as layers within the chalk. This is true for all the Thames gravels in the Greater London area but subtle differences of the percentage of rounded pebbles to non-rounded ones (1:12.5) and the very small percentage of 'exotic' pebbles distinguishes the different Thames Terraces (< 9%)¹. No mammal bones have been recorded from Fairlop but elsewhere bones of cave bear, large fallow deer, small mole, giant beaver and rabbit have been found. This particular suite of bones is typical of the Mammal Assemblage Zone first recorded at Swanscombe further east. Clactonian and Acheulian flint artefacts are also associated with gravels of this age.

Other quarries in the area

The earlier terrace of Black Park Gravel is also quarried by Brett Lafarge at Mark's Warren (GLA 37, around 400,000 years old, OIS 12-11) whilst younger Taplow Gravel is quarried by them close to the Thames at the South Hall Farm/Spring Farm Complex (GLA, 47, around 200,000 years old, OIS 6-8). A diagram detailing the staircase of the Thames Terraces can be found under that entry and in the section under London's Geology on the LGP website (www.londongeopartnership.org.uk/londongeology.html). Apart from one quarry in the Colne Valley in west London these are the only working quarries remaining in the whole of the Greater London area.

Access

Arrangements to visit the current working quarry must be made with Brett Lafarge. Access to the recreational site at Fairlop Water is open to the public and detailed on their website (www.vision-rcl.org.uk/fairlop_home.html).

References

¹ Bridgland, D.R. 1994. The Quaternary of the Thames. Chapman and Hall, Table 3.2.

A remaining bund of Boyn Hill Gravel at the working quarry in the Fairlop complex, July 2011

Source: London's foundations, page 213 (Diana Clements. July 2011)



Site Map

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Source: London's foundations, page 217

