

GLA 72 Monken Hadley Common

Grid Reference West end TQ 2520 9725
East end TQ 270 968

Site Type: large public common

Site Area (hectares): approx. 70

Current use: Wooded recreational land on London Loop

Site ownership: Vested in the Church Wardens of St Mary the Virgin

Borough: London Borough of Barnet

Field surveyors: Diana Clements, Peter Collins, Theresa Ball

Date: 2015

Current geological designations:

Other scientific:

Site Map OS Topography © Crown Copyright



The Site Map shown edged in red is indicative only of the general location of the Survey and is not to be taken as accurately representing the entirety of the Monken Hadley Common

Stratigraphy and Rock Types

Time Unit: Quaternary	Rock unit: Stanmore Gravel Formation, Crag Group
Rock Type:	Details: Gravel and sand, clayey near base. Gravel mostly composed of flints, up to 150mm in diameter, with a little quartz, quartzite and Lower Greensand chert in the fine fractions. Matrix of orange-brown, pale grey, red mottled clay and sandy clay, with pockets of coarse sand. Locally with layers of silt, clay or peat. Interpreted as offshore or beach gravels (Ellison et al 2004), or possibly fluvial (Bridgland 1994)
Time Unit: Quaternary	Rock unit: Dollis Hill Gravel Member Sudbury Formation, Kesgrave Catchment Subgroup
Rock Type:	Details: Gravel, sandy and clayey in part, with some laminated silty beds. Sand and gravel, locally with lenses of silt, clay or peat and organic material
Time Unit: Eocene	Rock Unit: London Clay Formation with Claygate Member at top, Thames Group
Rock Type: Clay, silt, sand	Details: Fine, sandy, silty clay/ clayey silt, clay.

Site Description

Along the length of Monken Hadley Common four different lithologies have been recognised but only 2 can readily be examined without excavating. Stanmore Gravel overlies London Clay at the west end of the common. It can be seen in small erosion exposures within a pit on the open area of the Common. There is a spring line at approximately the junction with the London Clay which has carved a gully. There is a question of why the gravel is not underlain by Claygate beds at this point (120-125m). At the east end of the Common the Claygate beds are shown between 85-95m and further west along the Stanmore Gravel Ridge around Arkley they are shown to underlie the gravel at about 125m. This would bear further investigation.

At the east end of the Common the Junction of the London Clay and the Claygate beds is shown at c.85-90 m and above that the junction with the Dollis Hill Gravel, at c.95 m. Ponds at the low point and the stream 'cliffs' from bottom pond (Jack's Lake) provide exposures of London Clay but exposures of the other lithologies are difficult to see. At the top of the

hill the ground levels out and feels more spongy. Sponginess and pebbles encountered by digging suggest presence of Dollis Hill gravel. The Claygate/London Clay junction may be inferred by the break of slope. The bridge over the Pymmes Brook is made of contorted bricks implying the Claygate beds were exploited locally for brick making. All three of these lithologies are encountered in the adjacent Trent Park (LB Enfield).

Assessment of Site Value

Geodiversity topic: lithostatigraphy, sedimentology; geomorphology.

Access and Safety

Aspect	Description
Safety of access	Access at the western end is via the open space between Camlet Way and Hadley Common Road. There is a car park at the foot of Baker's Hill. London Loop Section 16 passes through the Common. For the eastern end, Bus 384 runs along Northfield Road and Castlewood Road. Alight at the junction of Northfield Road and Castlewood Road by a road bridge over Pymmes Brook towards Jewish Community Secondary School. Immediately after crossing the brook, turn right onto Pymmes Brook Trail and onto the Common and the London Loop.
Safety of exposure	There are well-marked footpaths throughout the Common but actual exposures are limited to temporary exposures and erosion around the small disused gravel pit (west end) and fish ponds (east end)
Permission to visit	Open access.
Current condition	The Common is well maintained with a range of habitats including Jack's Lake at the head of the Pymms Brook trail
Current conflicting activities	none
Restricting conditions	Vegetation, limited exposures
Nature of exposure	Natural habitat containing 4 different rock units.

Culture, Heritage & Economic

Aspect	Description	Rating
Historic, archaeological & literary associations	The Monken Hadley Common website www.monkenhadleycommon.net gives details of the history of the Common. It is the only part of the former Enfield Chase which remains as common land to this day.	5
Aesthetic landscape	Footpaths through woods and around lake used by local community.	6
History of Earth Sciences	None known	0
Economic geology	Small pit in Stanmore Gravel (west end). Overburnt bricks at the east end imply local brickmaking from the Claygate Member	6

GeoScientific Merit

Geomorphology	Ridges and valleys provide potential for identifying the different lithologies from clues in the landscape – spring lines, vegetation, break of slope and small exposures. The absence of Claygate Member at the west end needs investigation.	4
Sedimentology	Exposures of London Clay beneath Jack's Lake and eroded surface revealing Stanmore pebbles at west end but other lithologies are a bit difficult to find unless excavations are made.	3
Palaeontology	None recorded	
Igneous/mineral/ Metamorphic Geology	none	
Structural Geology	The possibility of a fault between Arkley and Hadley and the west and east ends of the common need investigating to explain the absence of Claygate Member at the west end	2
Lithostratigraphy	Designated as the area contains 4 distinct rock units	4
Potential use	Education; Geological points of interest could be added to the London Loop and the Pymms Brook trail.	
Fragility	Natural overgrowth	

Current Site Value		
Community	Valuable woodland and green space.	8
Education	The common is on the London Loop and Pymms Brook Trail	6
Geodiversity value		
Recommended LIGS: The different lithologies at either end of the common provide geological interest both for walkers on the London Loop and Pymms Brook Trail and education possibilities for local schools. Research opportunities to explain the lack of Claygate Member at the west end.		4
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Photos: Diana Clements



West end: Stanmore gravels beneath the acid-loving gorse surrounding old pit



East end: London Clay beneath the weir from Jack's Lake; over-burnt bricks on the bridge over Pymms Brook coming from Jack's Lake – an indication of local brickmaking probably from the silty Claygate beds.