

## GLA 43 Springfield Park, Hackney

Grid Reference Main Park entrance TQ 345 873	Site Type: Public park on east facing slope down to the River Lea
Site Area (hectares): 13.58	Current use: Recreational land with information centre & café
Site ownership: London Borough of Hackney	Borough: London Borough of Hackney
Field surveyors: Diana Clements Last visited: Diana Clements	Date: 2009 Date: 2019
Current geological designation: Local Geological Nature Reserve; RIGS	Other designation: LNR; Borough Grade I SINC (Springfield Park)
<b>Site Map</b>	OS Topography © Crown Copyright



### Stratigraphy and Rock Types



Time Unit: Pleistocene	Rock unit: Langley Silt Member, Maidenhead Formation
Rock Type: brickearth	Details: fine clay containing chalk; pebble stringers & laminations
Time Unit: Pleistocene	Rock unit: Hackney Gravel Member, Maidenhead Formation (beneath Langley Silt)
Rock Type:	Details: predominantly flint gravel within range base 6-15m, top 16-18m above floodplain of River Lea
Time Unit: Eocene	Rock Unit: London Clay Formation, Thames Group
Rock Type: Clay, silt, sand	Details: Fine, clayey silt, clay.

### Site Description

Springfield Park was designated London's only Geological Nature Reserve in 1997. It is on the west bank of the River Lea and slopes down to the tow path. The name Springfield is the key to the reason for its designation with the spring line along the junction of the Hackney Gravels and underlying London Clay emerging along the slope. A small pit within the park supplied sufficient clay for the building of the three villas originally there (now only one remains). There are fine views from the top of the park over the wide Lea Valley to the Epping Forest Ridge on the far side. In 1999 the interpretation boards for the geology that were placed at several sites disappeared but to be replaced as part of the renovations. A leaflet *Wild about Springfield Park* (available at <https://hackney.gov.uk/springfield-park>) includes a section on the geology.

The London Geodiversity Partnership has ensured these geological interpretations are retained in the park with a geotrail to be published once the renovations are completed. It will include information on the melting Anglian ice sheet, which created the valley.		
<b>Assessment of Site Value</b>		
<b>Geodiversity topic:</b> lithostratigraphy, sedimentology; geomorphology.		
<b>Access and Safety</b>		
<b>Aspect</b>	<b>Description</b>	
Safety of access	On street car parking is adjacent to the park and there is also access from the towpath of the Lea. Park is open daily 24 hours a day. Buses 253 and 254 run along Clapton Common to stop 'Jessam Avenue'. The main entrance is a short walk along Springfield.	
Safety of exposure	There are well-marked footpaths throughout the park but actual exposures are mostly not seen. Instead the geology is inferred by the topography with springs near the break of slope and with plants denoting the springs that bubble up lower down in the grassy slopes, particularly on Wilson's Hill.	
Permission to visit	Open access.	
Current condition	The park is well maintained with rough grass areas allowing access to the position of several of the springs. There is an excellent view over the Lea Valley. Conservation of boards and leaflets need to be regularly assessed. In 2019 renovations to Springfield Mansion and in the park were underway. There is to be a new café, toilets and Visitor Centre.	
Current conflicting activities	none	
Restricting conditions	Vegetation, limited exposures	
Nature of exposure	Natural slope allowing geomorphological interpretation.	
<b>Culture, Heritage &amp; Economic</b>		
<b>Aspect</b>	<b>Description</b>	<b>Rating</b>
Historic, archaeological & literary associations	Created as a geological nature reserve in 1997 backed by information leaflets and interpretation boards initiated by Eric Robinson of the Geologists' Association. Brick pit on old maps	7
Aesthetic landscape	Footpaths through woods and meadows and around ponds used by local community; good views over London. Green Flag Award.	9
History of Earth Sciences	unknown	2
Economic geology	Brick pit for use on site. Over-burnt bricks used in walls around trees within parks.	4
<b>GeoScientific Merit</b>		
Geomorphology	Steep eastward-sloping bank of the River Lea with spring lines denoting changes in morphology. Wide nature of the Lea Valley carved during the retreat of the Anglian Ice Sheet can be observed.	6
Sedimentology	None visible	4
Palaeontology	None recorded	
Igneous/mineral/ Metamorphic Geology	none	0
Structural Geology		
Lithostratigraphy	Only location demonstrating Langley Silt & Hackney Gravel. Geological nature reserve has interpreted the different lithologies from clues in the landscape – spring lines, vegetation, small exposures	6
Potential use	education; interpretation panels & leaflet exists but LGP needs to ensure that the geological aspects are maintained. Could be included in a possible Geotrail in the Lea Valley as well as around the Park itself.	
Fragility	Draining of springs for other amenity users	
<b>Current Site Value</b>		
Community	Valuable green space. The Capital Ring runs through the site.	9



Education	Plenty of potential for geological education; Hackney has published a geotrail devised by LGP and information board on the geology.	9
<b>Geodiversity value</b>		
RIGS: As this is already a geological nature reserve it deserves protection as a designated RIGS. It is the only location with Langley Silt and Hackney Gravel. Spring line prominent.		6
<b>GLA 43 Springfield Park, Hackney</b>		
		
<p style="text-align: center;">Beneath the break of slope, wet patches with willow trees</p>		
		
<p style="text-align: center;">View across the Lea Valley down Wilson’s Hill. Vegetation near the base of the slope probably indicates a layer of septarian nodules in the underlying London Clay.</p>		
<p style="text-align: center;">Photos: Diana Clements</p>		