

Geology of London : special memoir for 1:50000 geological sheets 256 (north London), 257 (Romford), 270 (south London), and 271 (Dartford) (England and Wales)

Ellison, R.A.; Woods, M.A.; Allen, D.J.; Forster, A.; **Pharaoh, T.C.;** King, C.. 2004 *Geology of London : special memoir for 1:50000 geological sheets 256 (north London), 257 (Romford), 270 (south London), and 271 (Dartford) (England and Wales)*. Nottingham, UK, British Geological Survey, 114pp. (Memoir (Sheet) British Geological Survey (England & Wales)).

Full text not available from this repository. ([Request a copy](#))



Official URL: <http://www.bgs.ac.uk>

Abstract/Summary

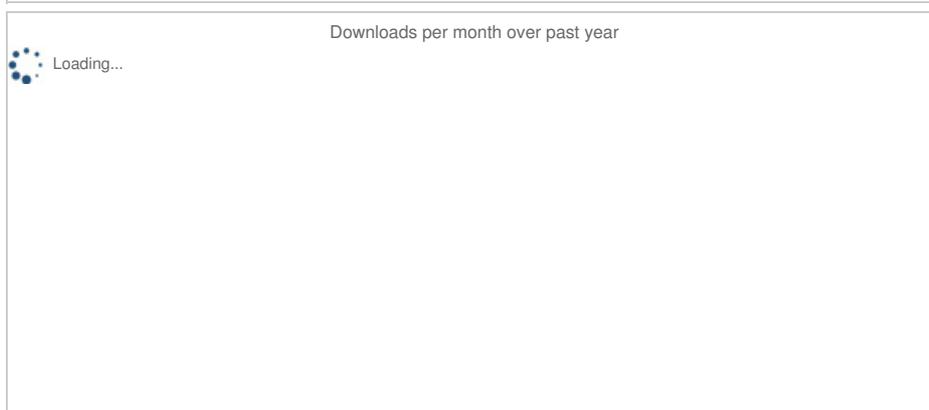
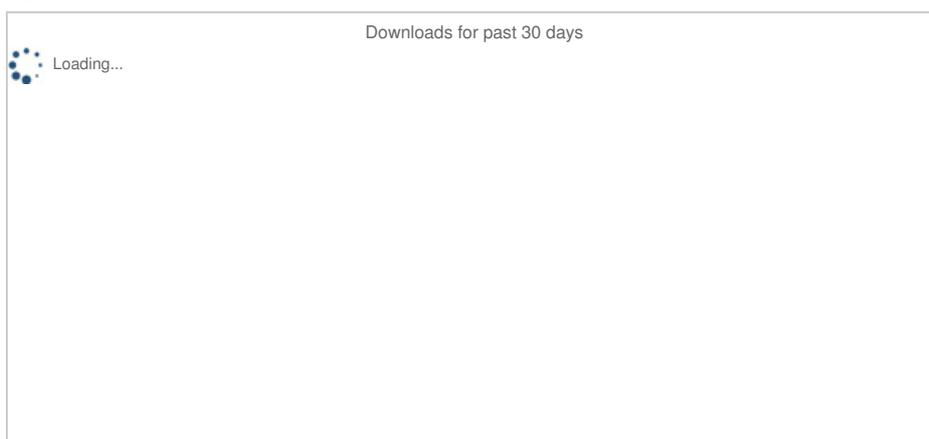
This book brings together information that results from research on the ground beneath the streets of London. It describes the geological strata, how they came to be there, and how they impinge on the life of those who live and work in the city, in its maintenance and sustainable development. The development of London is intimately tied to the ground conditions. The original settlement was originally located at a crossing point on the River Thames in an area of dry land where sand and gravel banks were surrounded by rather boggy marshland. A ready supply of gravel and brick clay helped with the early infrastructure development, and much later the extensive underground tunnel network grew because of the ease of excavating the London Clay. Water was always readily available, initially from riverside springs and later, in larger volumes, from underground Chalk. This explanation of the strata that underlie London gives an insight into the geological history of the last 500 million years. Over the past 200 years, boreholes have explored the deeper layers and countless geologists have systematically recorded the near-surface strata in quarries and excavations. The geological history includes periods of earth movement, inundations by the sea, the development of coastal mudflats and the effects of great ice ages. Exploration for oil and gas in the North Sea has benefited from an understanding of the rocks beneath London, and their geological history. Effective use of water resources, efficient ground investigation for new buildings and infrastructure, and sustainable planning and development are all founded on the use of information about the condition and structure of the ground. This book provides the background information for the maintenance of good practice in these activities, and illustrates some aspects of the ground that have in the past caused difficulties. Environmental concerns such as the legacy of contamination, sea level rise as a consequence of global climate change, and the recycling of water are issues that will increase in importance in this century. Basic data, fundamental for dealing with these concerns are presented in this book, and on the associated 1:50 000 scale geological maps for London.

Item Type:	Publication - Book
Programmes:	BGS Programmes > Geology and Landscape Southern
ISBN:	0852724780
Additional Information. Not used in RCUK Gateway to Research.:	This item can be purchased from BGS Sales email sales@bgs.ac.uk
Date made live:	27 Feb 2015 12:01 +0 (UTC)
URI:	http://nora.nerc.ac.uk/id/eprint/509917

Actions (login required)



Document Downloads



[More statistics for this item...](#)

 [Tools](#)

© NERC Open Research Archive, powered by EPrints 3.4

The London Clay is well developed in the London Basin, where it thins westwards from around 150 metres (492 feet) in Essex and north Kent to around 4.6 metres (15 feet) in Wiltshire.[1] though it is not frequently exposed as it is to a great extent covered by more recent Neogene sediments and Pleistocene gravel deposits. One location of particular interest is Oxshott Heath, where the overlying sand and the London Clay layers are exposed as a sand escarpment, rising approximately 25 metres (82 feet). This supported a thriving brick industry in the area until the 1960s. (2004). Geology of London: Special Memoir for 1:50,000 Geological sheets 256 (North London), 257 (Romford), 270 (South London) and 271 (Dartford) (England and Wales). British Geological Survey.