East Midlands Geological Society

60th Anniversary 1964-2024

Field Trips 2024

Tuesday 16 April 2024, 10.30 - 4.00pm

GEOLOGICAL WALK AROUND SHEFFIELD'S GRAVES PARK AND BOTANICAL GARDENS

Leaders: Andy Howard and Mike Allen

Former quarry in Greenmoor Rock, Graves Park. (Inset: Fossil lycopod trunk, Sheffield Botanical Gardens)

For booking instructions see our website at

www.emgs.org.uk/#fieldtrips

SUMMARY:

The morning visit to Graves Park will demonstrate examples of the stratigraphy and sedimentation of Pennine Lower Coal Measures (early Westphalian - Langsettian) sandstones and associated strata in the south Yorkshire coalfield, including fluctuations in sediment source over time. As well as some good exposures of these strata, Graves Park also shows excellent examples of the typical, geologically- influenced landforms and topography seen in northern England's coalfields. The Park was used for many years by the British Geological Survey as a training ground for its mapping geologists, and some of the techniques used for geological mapping in urban and peri-urban settings will be demonstrated.

The same Coal Measures succession seen at Graves Park also underlies the Sheffield Botanical Gardens to be visited after lunch. Late Carboniferous forests were dominated by lycopods or giant clubmosses. Modern lycopods are small plants but in Carboniferous times they grew to over 30m. Many lycopod trunks have been unearthed in the Sheffield area by mining and building operations – the example in the Botanical Gardens was found in 1875 by railway navvies in the Chapeltown area north of the city. It was previously displayed in High Hazels Park at Darnall in the east of the city, before being moved to this site in the 1980's. It is now the centrepiece of an 'Evolution Garden' that offers a brief introduction to the rise of the plant kingdom through geological time, with modern descendants and information plaques to guide visitors through this fascinating history.

The field trip is suitable for both amateur and experienced geologists.