

## Update on Napton Industrial Estate – former brick pit LGS 58



LGS 58 'Napton Industrial Estate' looking north from the access from Brickyard Lane

On 22<sup>nd</sup> March 23025 Kate and Gareth visited Local Geological Site (LGS) 58 'Napton Industrial Estate' in response to a request to assess its current condition and report on whether preservation of a geological site could be incorporated into planning decisions pertaining to proposals to build on the site with a housing development. This is an important part of the work undertaken by WGCG to support county council planning decisions to protect our geological heritage.

The LGS is located to the west of Napton-on-the-Hill, 5km east of Southam. The site is the remains of an abandoned brick pit and associated brick firing kilns that has a long history of exploitation, appearing on Ordnance Survey maps since 1886, but closed in 1973. At the height of production, an impressive quarry face was active.

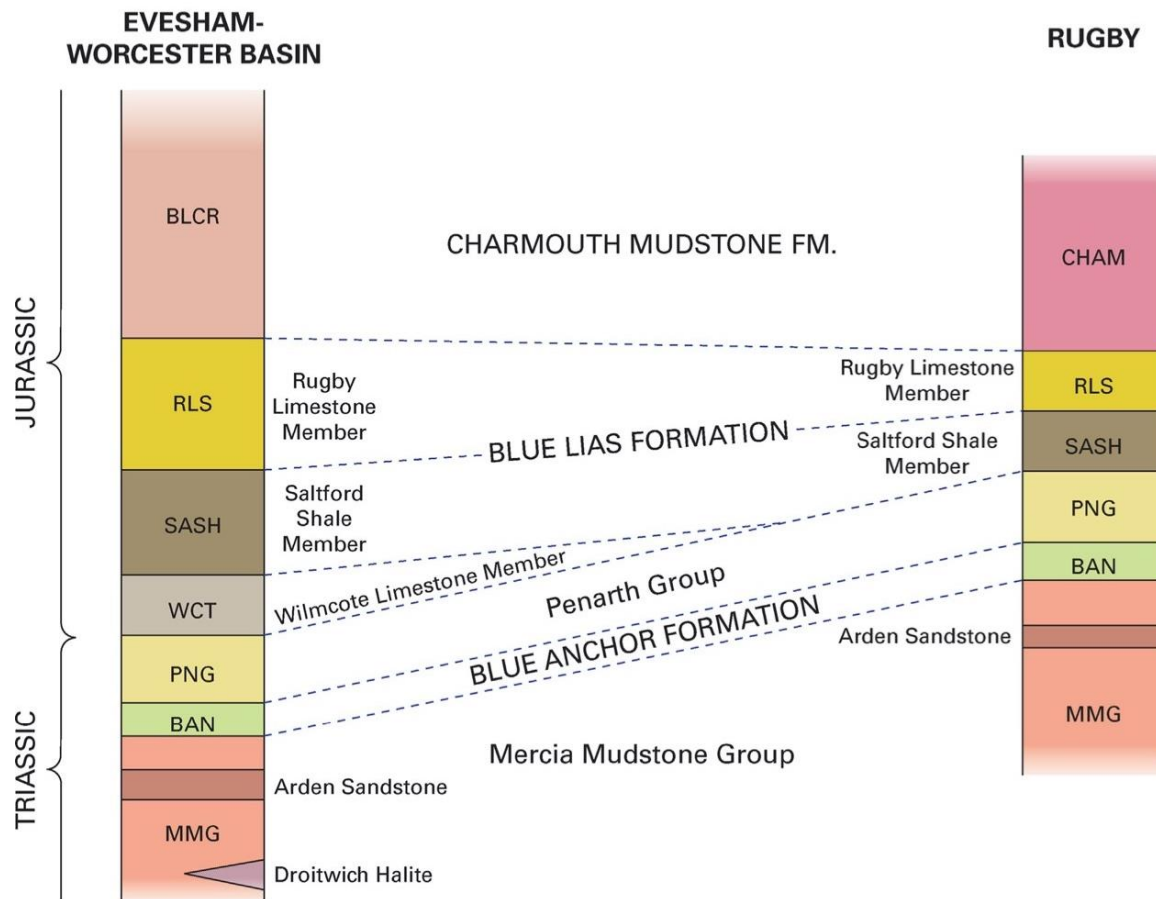


Napton brick pit during active quarrying.



Exposures are expansive but also highly weathered.

Napton-on-the-Hill brick pit exposes a section in the Charmouth Mudstone Formation [BGS Lexicon of Named Rock Units - Result Details](#) . In the area around Southam, the Lower Jurassic sediments (the so-called 'Lias') of Hettangian to Sinemurian age (200Ma to 190Ma) are present. They are dated from their high-resolution ammonite fossil fauna which also serves to provide the basis for correlation. The Charmouth Mudstone Formation comprises a thick sequence, up to 140m in thickness, of dark grey laminated shales, and dark, pale to bluish grey mudstones, locally containing concretionary and tabular limestone beds with sporadic phosphatic or ironstone (sideritic mudstone) nodules. Thin beds of organic-rich paper shales are developed at some levels whilst thin silty or fine sandstone beds are also present in the lower part of the sequence. This is the same material which Mary Anning famously searched for fossils in the Lyme Regis – Charmouth area of Dorset.



Stratigraphy of the Lias in the area around Napton-on-the-Hill.

The Charmouth Mudstone Formation is very fossiliferous and it wasn't long before fossils were found in the loose rock lying across the quarry long wall. Belemnites, ammonites and gryphaea are all easily found. This LGS is interesting in that buff brown fossiliferous limestone is also present. This was very fossiliferous, but again, only shell fragments were identified.

It is remarkable is that it has remained exposed for at least 25 years. On biostratigraphic grounds the bivalve-rich limestone at the top is possibly the BGS 85' Marker Member, a useful regional datum and likely evidence for a shallowing pulse, foreshadowing more general shallowing evidenced by the succession in the old quarry above.



The grey mudstone and brown limestone were both fossiliferous.

Although the exposure is expansive it is also very weathered which obscures most of its depositional features. A good bit of digging and scraping is required to reveal fresher mudstones.

There are remnants of old brick and tileworks buildings in the floor of the pit. There's a dump of broken tiles, brick and other waste in front of the LGS face - a good place to find complete or near-complete tiles with the windmill stamp - well worth a look.

There are a couple of reasonably accessible accounts of the geology - Sylvester-Bradley and Ford's Geology of the East Midlands, and the Lower Jurassic Stratigraphy Geological Conservation Review volume.

<https://warwickshireias.org/napton-brickworks/>

At the time of writing WGCG is in the process of formulating a response to the local planning authority regarding how this geological site could be usefully incorporated into any future housing development. One idea could be to recommend a small nature reserve which includes a mudstone face as a particular habitat for reptiles and mammals.

If you would like to be involved in surveying some of Warwickshire's 101 LGS sites – or any other part of the WGCG activities – please contact [WarwickshireGCG@gmail.com](mailto:WarwickshireGCG@gmail.com) for more information and details volunteering opportunities.

Gareth Jenkins, Stuart Burley, Jon Radley, March 2025