

Teesdale u3a Monthly Meeting October 2025

A Lost Rural Industry: Excavation beside the A1

Report by Celia Chapple

It was a full house for our October monthly meeting when Richard Annis FSA, retired Senior Archaeologist with Archaeological Services Durham University, gave an illustrated and informative talk on the lost industrial brick sites in County Durham.

He began by showing us some C19th and C20th century maps and more recent aerial photography indicating how widespread the brick sites were. Some of the villages, farm names and field titles have changed. For example, on an 1819 map, Bowburn (neighbouring Crowtrees Farm) didn't exist; an 1850 Ordnance Survey map clearly shows Crowtrees Farm with evidence of extensive buildings, and a 2008 aerial photograph shows formed brown grass patches indicating past activity. In 1839, evidence shows that the Burkett family owned the Crowtrees site.

The company, Amazon, applied to build a distribution warehouse on the Crowtrees site, and due to the existing archaeological evidence, Amazon was required to pay for a full survey. At first, shallow trenches uncovered 'wasters', useless broken bits of brick and tile. Deeper trenches discovered clay pipelines, a T-shaped building, moulding workshop and two driving sheds. Such clamp firings leave telltale black areas on the soil. Onsite clay was used and layers of green bricks (unfired) and coke and whins were built as an oven, fuelled from below, and left for a month to 'cook'. An oven was dismantled after each firing. The Burketts found that it was cheaper to do local business, and pan tile roofs were in demand as the need for pit miners' houses increased. However, the brick works was disused by the 1890s. Why did this happen?

Cone shaped ovens, called Scotch kilns, were easier and quicker to use. The water used in this kiln process helped farmers with flooding issues. They utilised the steam, combustion gases and smoke being released at the top, and the rows of narrow firing holes below reduced and controlled the air flow. A Scotch kiln could take only a week to fire a batch. Accordingly, the price for bricks and tiles dropped causing the Burkett family to cease production.

A small patch of unusually shaped tiles was found, some with curved ends, others with regular holes. These were malting kilns with underground flues, brick channels for moving hot air underneath for barley grain processing. There was an iron floor and workers wore clogs to stem the heat. There was also some evidence for a circular kiln, overlain with a Newcastle kiln, which had developed a more effective down-draft to maintain heat.

Richard recommended a book, *Brick Works of the North East* by Peter J Davison, 1986. If you would like to scout out a site, one way to recognise a brick and tile site is the pond which clay extraction has left.

There is a painting of Crowtrees colliery by the artist J. Wood (c. 1840) held in the Beamish Museum collection.



From ADS (Archaeology Data Service)