

The Roman slates of Groby reviewed after the Bradgate / Ferrers Lodge exposure of June/July 2016.(Leicester University Field School - 2nd year)

Guillotine shaping



(Figure 1 - David Ramsey)

The precise guillotine cut edges and modifications to the face of this Groby slate found at the Roman town of Margidunum, Nottinghamshire,

close to the A46, should have attracted attention earlier as these straight lines cannot be cut with simple hand tools.. A similar slate found at Bradgate in Spring 2016 had the added refinement of a chevron cut on the lower half of the slate one cm from the edge hence this review of previous slate material..

A theory put forward in the Leicestershire Industrial History Society Bulletin No :18 (2007) that the Groby slate quarries at both Home Farm and Upper Parks Farm Groby, **not** the Swithland slate quarries, might well be the source of **all** Roman /Charnwood slates in the local area appears sound thinking. The recent archaeological excavations in Bradgate Park, seasons 2015(University of Leicester, First Field School) and 2016 (U of L Second Field School) in addition to the Community dig at Castle Hill, Beaumont Leys, 2016 have underlined this theory.. All the sites have yielded more slate material drawn from Home Farm, Groby and all seemingly drawn from large stocks prepared for use, some 800 years, or more, earlier!

The time scale of slate quarry usage in Leicestershire based on the evidence gathered so far is, the Groby quarries, throughout the Roman occupation until circa 1500, then Woodhouse, quarry. with the distinctive purple or mauve slate short term and finally Swithland in the 17th century, the latter date corresponding with the first leases granted by the Earl of Stamford for slates in Charnwood. This time line does not forget the trade in second hand slates as the closure of the religious houses took place during the 1540's and later. This recycled material was offered until mention is made of Woodhouse slate being used in the improved Leicester market shops by the Robert Herrick of Beaumanor in the early 17th century.

What has proved to be a most interesting development this year 2016 is the realization that the Roman slates were produced, not with simple hand tools but by bench and cleaver devices . This would allow a far greater control of the pressure required to cut a straight edge and offering scope for an almost factory like production line; thus holding stock in advance of purchase. This method of production would enable the carrier to avoid lengthy periods spent at the point of sale at Groby or Markfield.. It is these stockpiles of slates at Home Farm which were sought by later visiting collectors. Although well down in the ground

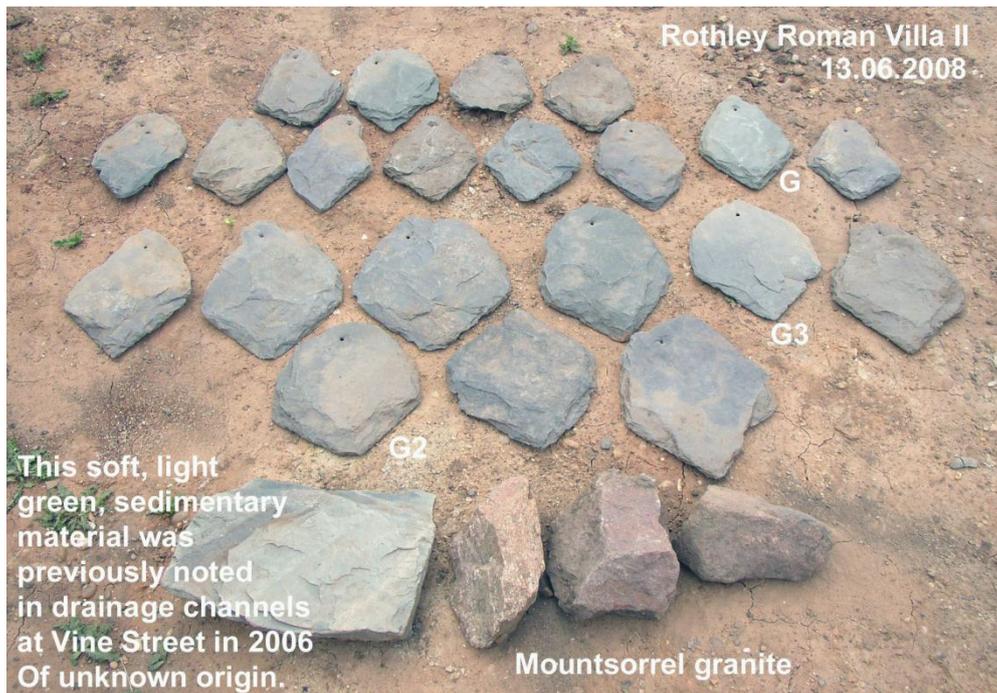
after centuries of non disturbance, those seeking slates are returning, and believing that a search of the site is worth the effort, over and over again, rather than cutting new material. The mystery is how was the soft iron tempered by the Romans to give a cutting edge so hard that it would cut the roofing slates. Were they introducing carbon into the iron to acquire a sharper, more durable cutting edge on the cleaver blades?

I had previously come across the bench and cleaver method of manufacture when writing, **“Whetstones and Goats: The unexplained”** for the Leicestershire Historian (No 44 of 2008) The article illustrates how whetstones from Whittle Hill (SK 498159) were squared into rectangular shapes to fit a similar wooden box prior to sales in the 18th/19th centuries.



A Roman cleaver (Internet photograph) a type used for preparing roofing slates., breaking bones and butchering flesh. (Figure 2)

The whetstone fissure at Whittle Hill was very small and by the 1860s the supply of material had become very limited locally. At the same time whetstones from overseas were being imported at keen prices and fine quality so the manufacture and local craft and trade died.



A reexamination of the Rothley Roman slates, shows how the action of cutting by the cleaver can be deduced. Some slates are clean cut at the edge while other examples show signs of the blade sliding sideways before making the cut.

(Figure 3 - David Ramsey)

Fixed to a bench, or table top, the pressure available to the operator using the cleaver is considerable, controlled and precise.. The slate can be presented to the blade whilst held with one hand and applying pressure with the other hand

Estimated thickness of the slates between 1 to 2 cms. The thickness suggests that the cleaver cutting edge has been removed, re tempered and sharpened again and again.

The Magidunum slate is dampened to highlight the smoothed texture of the upper surface (Figure 1) The slate has obviously been prepared from many angles with an excellent well tempered blade.

Surprisingly (Figure 1) is a demonstration slate and not a standard size.

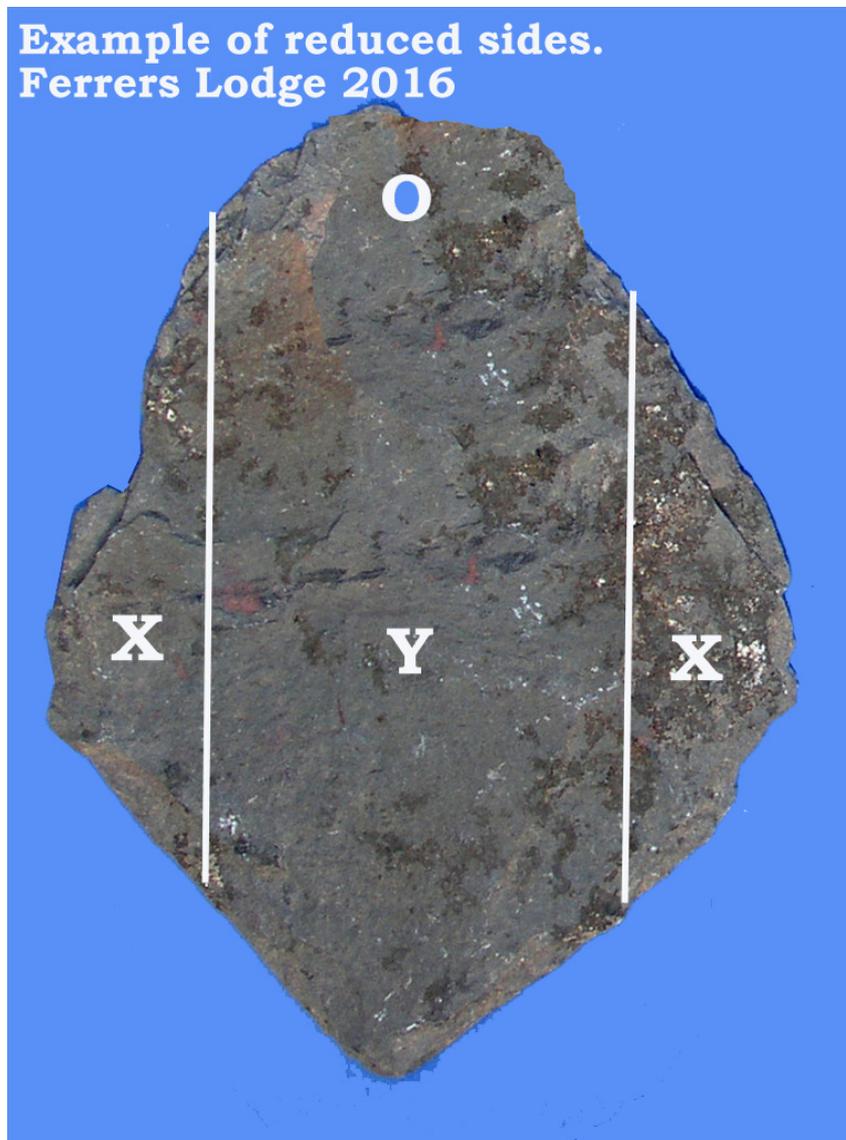
A second similar sized slate was recovered from this years Ferrers Lodge site in Bradgate, no doubt carried to site as a curiosity as it differs so markedly to the normal slate profiles and should be seen as a demonstration item..



(Figure 4 - David Ramsey + Photoshoph 3))

The cleaver was not found at Groby but substantial renovations

at Home Farm have been approved for 2017 and these works may prove to be archaeologically rewarding.



(Ramsey Figure 5)

A small number of slates from the Ferrers Lodge site of 2016 (Bradgate Field School 2nd season) showed signs of re manufacture from the original product. The waist at 'X' had been deliberately reduced to leave Y. as the preferred medieval roof slate.

Home Farm, Groby Map Reference SK 511084

Upper Perks, Groby Map Reference SK 497092

The Director of the Field School - Dr. Richard Thomas.

David Ramsey 08.11.2016

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