What did Ivan Margary ever do for me?

AN EXCAVATION OF THE ROMAN GREENSAND WAY AT PLUMPTON

By David Millum

An account of an evaluation project of the Sussex Greensand Way at Ashurst Farm, Plumpton which confirmed Margary’s inferred alignment and revealed information about the structure of the Roman road.

INTRODUCTION

Most of us take for granted that we can open an Ordnance Survey map and follow the dotted lines of the Roman roads across the landscape. But how many of us really consider the enormous achievement of plotting these routes from scratch and how much we owe the pioneers who unlike us were faced with a map devoid of interpreted data? In Sussex this leads us inevitably to the work of Ivan Margary (1896-1976), and his seminal volume, Roman Ways in the Weald, a work still relevant to current research despite being published in 1948.

Margary’s work gave me the inspiration for my evaluation project on part of the ‘Sussex Greensand Way’, a Roman road running from Hardham, on Stane Street in the west, to Barcombe in the east (Fig. 1), as the section between Streat and Green Cross, Plumpton (Fig. 2) still remained ‘inferred’ rather than proven (Margary, 1948, 38).
This article is my attempt at imparting the requisite level of archaeological evidence on my Ashurst Farm excavation whilst producing a readable account of the human aspects of a modest archaeological project.

THE PRE-EXCAVATION WORKS

A thorough desk-based assessment and walk-over survey highlighted a little used hay meadow, Cart House Field (TQ358154), on the Plumpton to Streat ridgeway as an ideal site for geophysical surveying and subsequent excavation (Fig 2). This field was of interest as it was recorded in the East Sussex Historic Environment Record (ESHER) as containing a discovery of Roman pottery and tile (Garrett, 1976) which might suggest when the road was in use. Unfortunately even such reliable sources as the ESHER and Sussex Archaeological Collections can be misleading as Richard Wells confirmed to me recently that his find was made at the Plumpton villa site, a kilometre to the south (Fig. 3).

A GLIMPSE BELOW THE SURFACE – FEBRUARY 2009

The relatively short grass of the hay meadow in February gave an excellent opportunity to carry out the geophysical survey using a Geoscan Research RM15 resistance meter. The results were well worth the effort as a fairly clear linear feature could be seen across the bottom of the plot encouragingly close to Margery’s suggested road line. The white horizontal feature above this was resolved as a Victorian water pipe and on consulting the 1841 tithe map the dominant vertical feature proved to be a removed field boundary (Fig. 4).
From these results it appeared that the remains of the Roman road were on Margary's suggested line and could be confirmed by excavation. An area which appeared to have the most definite markings on the geophysical plot was therefore chosen for the location of a 1m wide evaluation trench (Fig. 4).

Fig. 4. The resistance survey results with road line (outlined in red), water pipe (blue), former field boundary (yellow) and proposed evaluation trench (green).
The project’s aims could only be fully resolved by excavation as I wanted to establish the construction of the road as well as its precise location and orientation. This would also allow me to offer a range of fieldwork experience to local archaeological students and involve the local community.

IN THE TRENCH – 11TH-30TH MAY 2009

SOME NOTES ON METHODOLOGY

Excavation was undertaken by hand as having inspected the adjacent ploughed field it appeared that the archaeology could be very shallow. Modest resources and a three week timescale limited the initial trench to 12 x 1m on a north/south alignment across the suspected road line (Fig. 5).

Fig. 5. Eight volunteers pitched in on the fourth day on site as Brighton and Hove Archaeological Society arrived in force.

In order to cause as little damage as possible, excavation was to the top of the intact archaeology except where it was imperative to section features in order to interpret the site. The method followed general stratigraphic principles with each discrete layer, cut and important interface, being given individual context numbers.

The health and safety of the site personnel and visitors was particularly important as my aim of involving the local community resulted in a trickle of sightseers which turned into a steady flow at weekends.
“SO WHICH BIT IS THE ROAD?”

Whilst all who worked on the site were pleased with what we managed to uncover some of our visitors seemed less impressed with ‘So which bit is the road?’ being a favourite enquiry.

The subsoil included around 20% of disturbed fist sized flint cobbles across the south six metres of the trench which became denser and more compact in a consolidated redder and sandier layer beneath of approximately 100mm deep (Fig. 6). This was of particular significance as neither context resembled the natural soil for the area and was not present in the northern half of the trench where the yellowish-brown, almost stoneless, subsoil, characteristic of the Kingston Soil associations expected on the lower greensand, predominated.

Fig. 6. Photograph showing the flints in the southern section of the trench (2m & 250 mm scales).

In the centre of the trench a narrow linear feature at an oblique angle to the road, was discerned. It appeared to have a semicircular SW end and disappeared beneath the baulk to the NE. It contained a few largish flints at its base and one sherd of post-Roman pottery. A 200mm wide, single-depth, band of flints was revealed within the barren northern section which ran parallel to the suggested road alignment. At first it was thought to be an intact section of the road, a filled ditch, or possibly a later field drain. It appeared to be on an intersection course with the oblique trench about half a metre to the east of the excavation and so a 2.5x1m side extension was excavated to uncover this area. The aim was to show if one feature cut the other and thereby determine their precedence. The new trench proved remarkably barren at the anticipated crossing point with the band of flints petering out just beyond the previous baulk whilst the oblique ‘trough’ proved to be just 1.25m long (Fig. 7). Both these features remain the subject of
conjecture although the ‘trough’ did appear to cut, and therefore post-date, the sandy layers of the road.

The four metres of trench north of the flint band were also proving disappointing until we discerned a slight change in colour and compaction in the last metre. Careful excavation revealed a shallow linear of concave section 500mm wide by 125mm deep, running parallel to the road and 4.5m from its northern edge (Fig. 7). This feature appeared consistent by its location and alignment to being the northern boundary ditch for the road.

The side extension had a surprise in store at its southern end as we discovered a roughly semi-circular feature of about 800mm diameter. Where this “pit” was truncated by the southern baulk some firmly embedded sherds of pottery were discovered, 500mm below ground level and 400mm from the new east baulk. A soil sample was collected and subsequently wet sieved with the resultant charcoal retained for possible future analysis. The cut of this pit through the road layers was clearly visible in the new south section. These pot sherds proved to be our most intriguing artefacts being basic local flint-tempered course-ware spot dated by Luke Barber to the late 11th to early 13th century.

Excavation now concentrated on the adjacent area at the base of the trench where cambered layers of compacted sand and gravel, 150-200mm deep, overlaid a single 40mm layer of firmly embedded flint. This layer sloped down to what we subsequently interpreted as the northern gutter of the metalled road (Figs 8 & 9) and was the only consolidated area of packed flint encountered in this otherwise badly disturbed structure. This meant that defining either, the original depth of the road, or any repair work, was not possible.

A 3m extension to the southern end of the trench failed to establish a definite south edge to the metalled area as the archaeology was too disturbed. However there was a change in texture from the compacted redder sandier layer to a more dispersed flint layer at approaching 6 metres south of the northern gutter which was consistent with this being the southern edge of the central agger.

Fig. 7 Multi-layer plan of the extended 16m excavation.
Fig. 8. The north edge of the cambered road area showing compacted flint metalling (15), gutter (22), trough (6) and pit (17) (250mm scales) (photograph: L. Fisher).

Fig. 9. East section of the west baulk showing the over-burden of disturbed contexts (1 & 2) and sand and gravel layers (4 & 19) above the cambered flint layer (15) and gutter (22) at the north edge of the central metalled area.
FROM THE FINDS TRAYS

Whilst artefacts from all periods were carefully recorded and retained for post-excavation analysis, no definite Roman artefact was identified (Table 1) with the prehistoric worked flint and the early medieval pottery sherds being subjected to greater analysis and description.

<table>
<thead>
<tr>
<th>Material</th>
<th>No.</th>
<th>Weight (grams)</th>
<th>Contexts</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prehistoric worked flint</td>
<td>38</td>
<td>651</td>
<td>Upper contexts 1 &amp; 2</td>
<td>Divided into black, brown and grey</td>
</tr>
<tr>
<td>Medieval Pottery</td>
<td>82</td>
<td>556</td>
<td>Predominantly Contexts 2 &amp; 17 but also 1 &amp; 6</td>
<td>Sherds spread over 2 but grouped in 17</td>
</tr>
<tr>
<td>Post-medieval Pottery</td>
<td>23</td>
<td>132</td>
<td>Contexts 1 &amp; 2</td>
<td>Found exclusively in disturbed upper soil layers excepting one sherd in 17</td>
</tr>
<tr>
<td>Ceramic Building Material</td>
<td>101</td>
<td>947</td>
<td>Context 1 &amp; 2</td>
<td>Mostly post-medieval only two pieces that could be Roman</td>
</tr>
<tr>
<td>Glass</td>
<td>9</td>
<td>25</td>
<td>Context 1 &amp; 2</td>
<td>Post-medieval</td>
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<td>Fire-cracked flint</td>
<td>1</td>
<td>33</td>
<td>Context 1</td>
<td>Top soil</td>
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<tr>
<td>Iron items</td>
<td>9</td>
<td>124</td>
<td>Context 1 &amp; 2</td>
<td>Disturbed layers</td>
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<tr>
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<td>23</td>
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<tr>
<td>Iron slag</td>
<td>7</td>
<td>119</td>
<td>Context 1 &amp; 2</td>
<td>Disturbed layers</td>
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<tr>
<td>Coal</td>
<td>1</td>
<td>2</td>
<td>Context 1</td>
<td>Top soil</td>
</tr>
<tr>
<td>Clay pipe stem</td>
<td>2</td>
<td>3</td>
<td>Context 1</td>
<td>Top soil</td>
</tr>
</tbody>
</table>

Table 1. General list of artefacts collected in the excavation

PREHISTORIC WORKED FLINT

A total of 38 pieces of prehistoric worked flint were collected, weighing a total of 651g. Of these 23 were debitage but 15 showed signs of retouching and/or utilisation. Fifty percent were of a fine black flint and formed the greater part of the Mesolithic assemblage whilst those of late prehistoric type were predominantly grey or brown. This suggested to me that whilst the later flint could have been acquired reasonably locally, the Mesolithic knappers had carried their purer material from a more distant and prospected source.

EARLY MEDIEVAL POTTERY

Eighty two sherds of early medieval pottery were recovered of a coarse, hard texture with multi-coloured 0.5 to 2mm grit inclusions exposed on both surfaces. Whilst this assemblage did include several rim and base sherds including 24% of the rim of a 240mm diameter cooking pot (Fig. 10) it has not been possible to determine a date more precise than a probable general period of mid 11th to late 12th century (Luke Barber pers. comm.).
Fig. 10. Rim and base sherds of the early medieval pottery. No.1, a 240mm diameter cooking pot, has inset images of the internal and external surfaces. The multi-coloured grit tempered fabric ranged from a brown to pale brown core (Munsell 7.5YR 4/3 to 10YR 6/3) with reddish brown to light brown exterior (Munsell 5YR 5/4 to 7.5YR 6/4) and red to pink interior surfaces (Munsell 2.5YR 5/6 to 7.5YR 7/4).

The 25 sherds from Context 17 included a close grouping which suggested a more strategic deposition of rubbish into this pit than the wider scattering in other contexts which inferred dispersal by ploughing or manuring. These artefacts added another period of interest to a site where no early medieval finds had been recorded previously.

A PERSONAL INTERPRETATION

The limited timescale prohibited further excavation to discover the full extent of the probable pit (17) but the trench location was accurately recorded and therefore can be revisited in the future. My main regret is not having the time to continue the excavation down to subsoil across the full width of the road as recommended, as a secondary stage, by Margary (1948, 34) although this would have meant destroying the compacted flint layer at the road’s northern edge.

The stratigraphic method allowed us to see in plan as well as in section evidence for the construction of the road in the series of sand and grit layers on a flint base laid on an agger constructed in the natural soil, despite the disturbed nature of the structure. Time and effort spent trying to find the expected roadside ditches proved conclusively that they were never there as presumably the shallow gutter provided sufficient drainage on a road passing along a ridge of slowly permeable greensand.
Our discovery of the modest northern boundary ditch was significant as these outlying features are often hard to detect (Davies, 2002, 71). Geophysics and dowsing indicated a similar ditch to the south and although this was not discernible in the excavation I believe the road was symmetrical with a central metalled area of approaching 6m wide. This equates quite closely to 20 Roman pedes, the most common width of metalling according to Davies (2002, 74). This would give a total width of the road including side lanes and boundary ditches of 16m.

It has been observed on other roads that all three lanes can be metalled when traffic pressure or soil conditions necessitate (Davies, 2002, 71). The evidence from this section of the Greensand Way suggests that, despite being an important east-west route, the 6m metalled surface was deemed adequate for the wheeled and winter users allowing the side lanes to remain un-metalled for use by foot and hoofed traffic.

The main Roman road network should be viewed in terms of a modern rail or motorway system, providing fast and straight routes between major civic and military centres. Whilst the primary network was built for military use during the period of conquest, the Greensand Way would have been part a second phase built to facilitate trade and thereby generate needed commodities and income for the Empire. The road accessed two important resources, forming a southern link for the arterial roads servicing the iron industry of the High Weald and flanking the agricultural producers north of the Downs. Its building would have had a pronounced social and economic impact on the local area, connecting formerly circumscribed communities to the wider world and instigating the foundation of new settlements and the relocation of others.

Margary (1948, 20) suggested that roads that continued in use during the late-Roman and subsequent periods are likely to be less well preserved due to a lack of maintenance and this could account for some of the damage to this section. Its shallow depth has also made it susceptible to plough damage and erosion, although Mr White, a former owner of the farm, confirmed that this field had escaped post-war deep-ploughing. Another cause for its poor structure, particularly at the southern side, could be the construction of the ridgeway just to the south, in order to provide a more direct route to the medieval parish church at Streat, as the Roman road would have offered a convenient supply of building material.
IN CONCLUSION

I had resolved to keep the aims of the project modest and thereby achievable as it was my first solo directorship and fulfilled a requirement of my M.A. in Field Archaeology at the University of Sussex.

Margary’s road alignment between Streat and Plumpton is now proven and the basic construction and preservation information has been collected and recorded with a report lodged in the society’s museum at Barbican House and with the ESHER. Evidence for activity during other periods both prehistoric and medieval has been discovered opening new avenues for future research. But arguably the real value of the project was the involvement of the wider community by actively encouraging local residents, of all ages, to come and take part or just inspect. This action was fully justified on seeing the obvious delight mixed with concentration on the face of the project’s youngest volunteer (Fig. 11).

Fig. 11. Making it all worthwhile; Adrian gains his first experience of archaeological excavation (photograph: R. Barter).

In the early 1970s I had visited the exposed section of the London-Lewes road at Holtye. This first experience of the archaeology of Roman roads fostered a lifelong interest in the rail-like network. And so we arrive back at Ivan Margary, for although I didn’t know it then, it was inevitably Margary, who had mapped and then excavated this section of road.

All who study archaeology know its fascination and it is our responsibility to spread the joy and knowledge of our subject at every opportunity; for in a way, that’s really what Ivan Margary did for me!
Acknowledgements
My thanks to Peter and Collette Haynes for the field, Rob Wallace (The Culver Archaeological Project) for the equipment, Luke Barber for spot dating the pottery, Bertie Haken for the flint analysis and to all who helped or just visited and made this a truly memorable experience.

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