



# Colchester Archaeological Group NEWSLETTER

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*The Longshed, Woodbridge. Carving and the scale model of ship*

## Chairman's Report

Hello fellow members, I hope our somewhat changeable weather at present has still allowed you to get out into the fields/garden/pub etc. It has certainly made for "interesting" days at the Fordham dig.

As will be mentioned later, National Grid are pressing on with their plans for over five hundred, one hundred and fifty foot tall pylons to scar Norfolk, Suffolk and Essex. The fight goes on.

In the summer newsletter last year (I think) it was mentioned that the treasure laws, relating to metal detecting were being tightened up, they are/will be made law this month, so all you current or would be detectorists might be advised to have a squint through them. I believe "treasure" now does not just mean gold coins or hoards of bronze or silver ones; it can also include non-metallic finds.

Our AGM will be held on the 2<sup>nd</sup> of October and a general meeting on the September the 5<sup>th</sup>, I mention the latter because Roger Cook, our current vice chair will be standing down, so if any members would like to put themselves down for the position, please contact our hon. Secretary Sue Keen.

On that note, my tenure as chairman should also officially end at the September meeting (though previous chairs have served longer than three years), this situation has been previously mentioned at committee meetings, I can still hear the tumble weed rustling as it rolls across the ground!

Mike Hamilton-Macy. (Chairman).

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## Events

Since the last newsletter I have run 3 trips, all collecting members by minibus from Colchester Park and Ride. We have found this to be convenient for members from the city and further afield as it's served by bus from the station and city centre, but not so popular with P&R staff who have "discouraged" our minibuses from stopping. We've become increasingly speedier at hopping on board!

### Lullingstone Roman Villa, Kenton February 11<sup>th</sup> 2023

On a very cold February day 15 of us sheltered in the Roman Villa at Lullingstone. Although the remains are under cover it felt colder inside than out – if only the hypocaust had still been working! Developed from the first to fourth century, there are some superb mosaics and a remarkable underground "cult room" with a rare wall painting. This is below a room used as a church: wall paintings discovered here (now in the British Museum) are among the earliest evidence of Christianity in Britain.

Finds include many we might dream of at Fordham: bronze vessels, whole pottery jars and the echo of a shoe base with most of the hobnails in situ. Also a decorated lead coffin with dice and gaming counters laid on top, alongside a bone disk carved with a head with snaky hair interpreted as Medusa – reminiscent of the decoration on the plaques from Fordham?



English Heritage allowed us use of their education room for our packed lunches, a chance to warm up before exploring the outside area with circular shrine and site of the mausoleum where the coffin had been found. The setting in the Darent valley is more beautiful and feels more remote than its name suggests. A summer visit with picnics would be very pleasant, though undoubtedly more crowded.

### Saxon Ship, Woodbridge on March 17<sup>th</sup> 2023

The famous Sutton Hoo burial ship is being reconstructed in the Longshed, on the opposite bank of the river Deben from the Royal Burial Ground which we visited in October. Twenty four of us were given small group tours on a rainy day in March. The Sutton Hoo Ship's Company are using traditional methods as much as possible to recreate the full 90-foot length, with a view to rowing her up the Thames and then as far as Northumberland to visit another Saxon kingdom in 2025.

The team are learning from every aspect of the reconstruction. The keel was in place with timbers being attached by enthusiastic volunteers using traditional tools. We saw the plans based on the carefully measured positions of the rivets excavated during the 1939 dig, drawn up with the help of marine archaeologists and naval architects.



Holly mallets



Ship under construction

Mallets used for splitting the oak trunks into planks had been made from the natural branch growth of holly trees. We could smell the fresh split planks of green oak, and slightly less fresh human perspiration! We heard the ancient sound of the specially made, T-shaped axes smoothing the timbers. On display were some experimental carvings of intertwined biting beasts, echoing the designs on the Sutton Hoo helmet and other finds. Contemporary ships from Scandinavia suggest carved decoration along the prow and stern. A real experimental living archaeology project.

Some of us particularly enjoyed the tapestries made locally and depicting the stories of Sutton Hoo which are displayed on the upper gallery. We also enjoyed pizzas and drinks from the Woodyard restaurant next door. There are a few good cafes and shops in the vicinity – well worth a day out.

There is a lot of detailed information on the project on their website ([saxonship.org](http://saxonship.org))

### **Museum of Archaeology and Anthropology & Fitzwilliam Museum, Cambridge on May 19<sup>th</sup> 2023**

13 of us were collected from Colchester Park and Ride with our driver standing up well to the usual verbal joust from staff. Having lost John and Gill to the pleasures of the Botanical Gardens, the rest of us were dropped right outside the Museum of Arch & Anth where we had 1.5 hours to explore. The small ground floor is densely packed with local archaeological finds, including a cup from Colchester depicting lucky horses and chariots. (photo) The labelling of artifacts was not as clear as it could be, with several members commenting that a numbering system would be an improvement.

The middle and top floors hold artefacts from round the world including vast totem poles from Canada and New Zealand which must have been very difficult to transport. Several Benin Bronzes have been redisplayed with obviously problematic colonial connotations.



undeciphered Cypro-Cretan script



Extraordinary minoan pottery

A short walk to the Fitzwilliam Museum saw us reunited for a sociable lunch in their modern café. We were disappointed that the special exhibition themed minestrone was unavailable, especially as they had promised our exhibition tickets would give us 10% off! A few of us enjoyed an accidental yoyo lift adventure, before we all visited the special exhibition “Islanders: The Making of the Mediterranean”. This displayed some extraordinary finds from ancient Crete, Sardinia and Cyprus, comparing the preclassical cultures, exploring their myths and creativity and highlighting trading links, migrations and technological developments.

Avoiding the lift, we had time to explore the permanent collections and ubiquitous shop before boarding our ready chariot for the long wynd home through the Suffolk countryside.

At this stage we are thinking of a September trip to Grimes Graves if it has reopened by then. Adam Wightman has indicated he would be willing to lead a tour. Any other ideas would be welcomed.

Lucy Jack

### **Winter lecture programme 2023 -2024**

I am currently finishing off the latest lecture programme filling in the last few spots. This year the first four talks of the year will be in person only at Roman Circus House. There will then be another four lectures on ‘Zoom only’ leading up to the Christmas party. After Christmas, the January lectures will again be ‘Zoom only’, and then we return to Roman Circus House for the final four lectures. I have been grateful to Tim & Geoff for all their help over the last couple of years getting the technology sorted but having to do it on a weekly basis has become a strain hence the change to relieve the pressure on them. We wanted to keep the zoom element for some lectures as it gives me an opportunity to reach further afield for speakers and means you don’t have to turn out on a cold and dark winter’s night. I have tried to put together a varied programme which I hope you will enjoy.

We start the season with a talk on the Secrets of the Mary Rose by Phillip Roberts. Phil gained his doctorate in Early Modern History at Southampton University. He has been a lecturer for the Mary Rose trust since 2002. He

is a well-renowned historian, researcher lecturer and author. His most recent book titled 'Cardinal Wolsey – For King & Country' is now available to buy from all good booksellers. Next, Carolyn Wingfield Curator of Saffron Walden Museum is talking to about the archaeology of Northwest Essex with a sample of the collections at the museum. In a change of direction, John King will talk to us about the History & Development of Waterloo Station; a talk he recently gave to the Greater London Industrial Archaeology Society. Our first Zoom only lecture of the year will be on the recent results from the geophysical surveys of Verulamium. Intriguingly called A Roman Palace at Verulamium? There have been a variety of surveys since 2013 revealing a variety of features including houses, roads, pottery kilns and the aqueduct. In 2022, however, the GPR survey revealed a complex of buildings hitherto unsuspected and challenging to interpret. The talk will be given by Kris Lockyear Senior Lecturer in Archaeology at UCL. Some of you are aware and may have also taken part in the new dig at Long Melford which has uncovered iron age and roman remains. Kenneth Dodd who is leading the dig will update us on what has been found to date.

Please note this year we will be charging for the Zoom lectures more details on how this will work to come. I look forward to seeing you all either in person or online, and please remember guests are always welcome so please spread the word.

## **Fordham excavations - update 25 June 2023**

The weather has not been particularly helpful this year, with frosts and snow early in the year followed by a very wet first half of April, and now a summer drought. However, there has been slow progress.

At the north edge of the Phase 2 open area, the northward extension of Trench 5 was investigated for a continuation of the east ditch, without success. Work by Mike, with assistance from others, in the Trench 7 complex has proved more interesting. A natural looking layer of gravel has been removed to reveal several dark grey-brown bands within a uniform orange clay layer, plus several dark circular patches that may be post holes. The orange clay appears to be sterile, whilst the gravel above contained a number of fragments of Iron Age pot and a scatter of sizeable nails.

No further work has been done in Trench T, as the water table has remained stubbornly high until the last month when it is showing signs of slowly receding.

Work continues in Trench 1, beside the east fence. Very little work has been done on Exploratory Trenches (ES) 1 and 2, whereas ES3 has been expanded west and south in order to establish the extent of a disrupted cobble layer, and more work needs to be done. A new ES6 was cut extending along the north edge of Trench 1 to the east fence, where there are signs of the top of the Roman ditch that crosses the site west to the courtyard of the building. The west end of ES6 revealed an orange clay layer, at the east edge of which (middle of ES6) a small slot was cut across a dark linear feature, which has revealed the presence of a modern field drain (the same one that runs along the south side of the building). More recent work at the east end has found a variety of potsherds, some notable nails and a smear of charcoal.

A major development in Trench 1 was the decision to remove more of the topsoil, so a digger was hired for a week to remove another 100mm of (lower) topsoil at the end of March (a fortunately dry period. No structures nor obvious features were revealed during the operation, though fragments of CBM were collected and recorded, and spoil heaps were checked with metal detectors (finding nails and a few small 4<sup>th</sup> century coins). Most of the topsoil was stripped off to reveal interesting layers of subsoil beneath; gravel in the north west corner with a thin and patchy black sandy ferrocrete layer beneath, all overlying orange clay, also covered by a dark clay loam to the east and south. Small accumulations of potsherds were noticed. More recently, work has concentrated on levelling the area around ES4 where two small concentrations of large nails have been found, as well as a variety of potsherds.

In addition, Trench 2 had the northern edge extended north along most of its length, and a new Trench 8 was been created running north from the NW corner of Trench 1. Trench 8 may be showing evidence of the 1984 excavation of the lead coffin. A short trench was dug at the NE corner of Trench 1, which has exposed the top of the Roman ditch aligned WNW to ESE. Trench 3 was deepened, and as it showed no signs of any features (such as a roadway) it was completely back filled.

Trench 1 was left to dry out enough to work after the April rains, so attention was transferred to Trench 2 for the first time for a year. A lot of hard work was put into removing weed growth, particularly bramble shoots, and trying to trowel the surface clean and level. The efforts were successful, as they revealed three different bands of soil running east to west along the trench. A dark grey soil band ran alongside the fence and contained quite a lot of CBM and potsherds, whilst further north was a paler grey sandy clay with few artefacts. In between was a yellow clay layer mottled with grey sandy clay. Work has just begun to investigate the interrelationships of these three layers. The surface cleaning revealed a patchy line of CBM and large flint stones aligned SSE to NNW across Trench 2. This was investigated further and it appears to be a medieval field drain, as most of the CBM is clearly peg tile, and a small section (0.2m deep) found no artefacts present. The feature shows as a faint line on the resistivity survey.

During wet weather, there were several sessions of CBM recording during the wet weather in sheltered accommodation, courtesy of Penny Richards.

Nine new diggers have been welcomed to the pack, and they include three sixth form students and two fairly recent graduate archaeology students. A previous French archaeology student has recently published a paper relating to the bathhouse found in Phase 2 of the excavations (La villa romaine de Fordham (Essex, Royaume-Uni). Thermes et mitre de cheminée inédite Aurore Di Liberto, Franck Lockwood, Jenny Kay, John Mallison, Jonathan Oldham Dans: Annales de Normandie 2022/2 (72e Année) Année), pages 281 à 304 Éditions: Association Les Annales de Normandie ISSN 0003-4134, ISBN 9782902239498, DOI 10.3917/annor.722.0281).

Finally, Dr. Matthew Loughton (Colchester Archaeological Trust) has produced a Preliminary Pottery Report based upon material from Phase 2 excavations. A paraphrased summary follows.

'About 95% of the 220.6kg of pottery (almost 25,000 sherds) was Late Iron Age or Roman. There were 726 sherds (8.1kg) of handmade prehistoric pottery. The Fordham assemblage of late Iron Age-Roman pottery is considerably fragmented with a mean sherd weight (MSW) of only 9g. making its identification difficult and time consuming. Standard kitchen wares account for the bulk of the assemblage and typical local Roman greyware pottery (fabric GX) accounts for c.53% of the sherd count, c.39% of the weight while the various black-burnished wares (fabrics GA, GB, GB BSW, KX, MUC BB2) account for a further c.13% of the sherd count, c.19% of the weight. One noteworthy feature of the Fordham assemblage is the relatively large collection of Central Gaulish and 'Rhenish-type' fine colour-coated wares (fabric CL) (most from Trier) with 235 sherds (675g). For a Roman rural site and villa this is a significant assemblage of Central Gaulish and 'Rhenish-type' fine colour-coated wares. There is an important assemblage of shell-tempered and calcite-gritted wares with 1,290 sherds (12,596 g), mostly of the later Roman period, whereas early material is uncommon. There is good-sized assemblage of Nene Valley colour-coated wares with 681 sherds (5,232g). It is worth noting the absence of any ceramic oil lamps in the assemblage and the absence of the Cam 198 tazza.

Transport amphorae are uncommon with only 88 sherds (6,972g). The low frequency of amphorae at Fordham is typical of most Roman villas and rural sites in Britain. The Samian assemblage consists of 353 sherds (4,138g). The samian from Fordham suggests that there was more intensive activity dating from the mid/late 2nd century AD onwards until the end of the Samian exporting period (c.AD 260). The excavation remarkably produced a small assemblage of North African red slipped (henceforth ARS) ware from Tunisia with 26 sherds (110g). Previous findspots from Essex are rare. The Fordham ARS indicate two phases of importation dating to the second half of the 3rd century AD for the Hayes 45A and the Hayes 48B and the late 4th-early 5th century AD for the sherd decorated with the double-rouletted band from the Hayes 62A/67-68/89. ARS dating from the mid-4th to the start of the 5th c. AD are exceedingly rare. Mortaria are uncommon with a total of 170 sherds (7,877g).

There is a modest assemblage of handmade Anglo-Saxon pottery with 291 sherds (3,578g). This material was found in four fabrics, although fabric F97 (HMSSH), which accounts for a significant proportion of the 'Anglo-Saxon' material, could be of Middle Iron Age date rather than Anglo-Saxon. Medieval and later pottery is uncommon with a total of 37 sherds ( 504g).

A remarkable feature of the assemblage is the small collection of rare late eastern Gaulish samian from Trier and Rheinzabern and the ARS Hayes 45A and 48B and it is possible that this material could represent a single consignment, perhaps a gift, which arrived on the around the mid-3rd century AD. The latest Roman pottery from Fordham indicates occupation until the end of the 4th and into the early 5th century AD. The importation of the late African red slipped ware and the Eifelkeramik/Mayen ware would also coincide with the dating of the decorated bone/antler casket(s) from the site suggesting a relatively high-status settlement with long-distance trading connections during the very end of the Roman period.'

Jonathan Oldham

## ***A Fordham spring clean***

Life isn't always a long drudge of digging and towelling over at the Fordham dig. Just once in a while something exciting happens at the site and today, the 6<sup>th</sup> of June it's time for the Shed spring clean.

It's fair to say that the Shed on site has, over the years, gathered a certain chaotic appearance (Photo of the "before cleaning" shed withheld on Health and Safety Grounds).

It took around 3-4 hours of work through the efforts of Jonathan, Pauline, Penny, Alan C, Dick, and yours truly to complete the task (with support and task "leadership" of our Chairman Mike).

The action now is to maintain a degree of tidiness discipline to extend the time to the next spring clean need...

Neil



# Roman Roads Group: The Magic of the Fosse Way

Geoff Lunn June 2023

I assume that you have all heard of the Fosse Way, and that most of you will know that the Fosse Way (or just “Fosse Way”) was a Roman Road? Many of you will also know that Fosse Way runs in a south-south-westerly direction from the important Roman town of Lincoln (Colonia Lindum), all the way to Exeter (Isca Dumnoniorum) in Devon, a distance of more than 350km. Along the route, the road visits Leicester (Ratae Corieltavorum), Cirencester (Corinium), Bath (Aquae Sulis), and Ilchester (Lindinis), and with the exception of the dog leg from Ilchester to Exeter, the route follows an almost straight line. As with most of our named Roman roads such as Ermine Street, Watling Street, Dere Street etc., Fosse Way got its name not from the Romans, but most likely from the Old English word for ditch ie “Fossa”, which came into common use in the early medieval period, so yet another Roman road whose original name we do not know. Remarkably this ancient route is still in use today over large sections such as the A46 from Leicester to Lincoln, although not quite as straight these days.

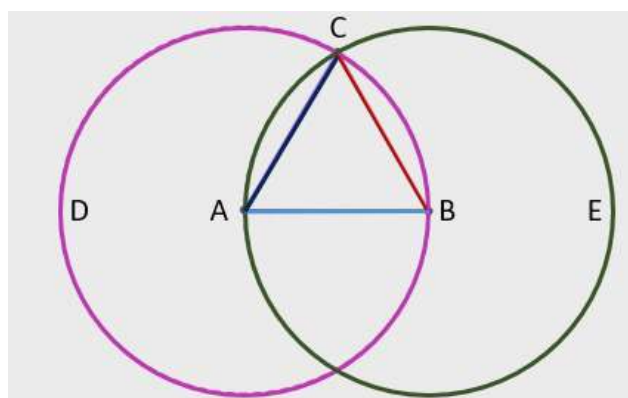
What is not so well known is that Fosse Way appears to have existed for quite some time before the Romans got here, probably as a track, but also probably as an “alignment” or “survey line”, along which a number of Iron Age (or Celtic) settlements and Oppida were created before the Roman towns sprang up in the 1<sup>st</sup> century AD. There are significant Iron Age (IA) sites at Ilchester Mead, Aquae Sulis, Bagendon Oppidum (Cirencester), Offchurch Oppidum, High Cross, Leicester Oppidum, Lindon (Lincoln) and the recently discovered IA complex at Stallingborough on the south banks of the Humber, all in a straight line, within a stone’s throw of the Fosse Way. It seems very likely to me that these sites were positioned along the line of Fosse Way deliberately, otherwise they would not align so closely. (An “Oppidum” is a late IA settlement area often characterised by extensive earthworks – Camulodunum is one of the largest Oppida in Britain)

When the Romans arrived, it also seems likely that they then adopted this “line” and built a number of towns at strategic locations along its route, ignoring Stallingborough (too far out of the way?), and adding a section to Exeter at the southern end. As Graham Robb notes in his book “The Ancient Paths”, “Modern surveyors who have studied the Roman road network insist that before these roads could be made, an extensive survey must have been carried out”. Perhaps the existing Iron Age Fosse Way was used as a survey line by the Romans?

What is also very interesting about the Fosse Way alignment (and so far undocumented as far as I can ascertain), is that if one draws a straight line on a map from Ilchester to Stallingborough, that line sits on a bearing of almost exactly 30° relative to True North (not magnetic north which would have meant nothing to the Romans and the Celts as they did not have magnetic compasses, and anyway, magnetic north is not at true north!).

So, what is significant about the bearing of 30° to True North? Well, the Romans and the Celts before them, and other civilisations before them, knew how to find True North using a sundial (explained in great detail on various websites). Knowing where north is and using a length of rope and some pegs, by drawing large circles on the ground (peg in the centre with rope tied to it, and peg at the end of the rope and walk in a circle scratching a curve in the earth), using simple geometry one can easily construct an equilateral triangle (all sides the same length), with remarkable accuracy.

The equilateral triangle was a sacred shape known to ancient civilisations because of its simplicity (check the “Triquetra” on Google), and the left side of the triangle is on a bearing of 30° with the apex facing north. The right side is on a bearing of 150°, and the base of the triangle lines up exactly East – West (bearing 90°). If the triangle were constructed with the apex facing East, the sides of the triangle would be on bearings of 60°, 120° and 0° (i.e. North – South). Without getting too technical, what this amounts to is that our ancient ancestors were able to find bearings of multiples of 30° (ie 30°, 60°, 90°, 120°etc.) relative to True North just using pegs and rope (so called “peg and line” geometry). This could be done whenever the sun came out, and they also knew how to find north at night by observing the movement of the stars (Polaris by the way was not at True North in those days).



*Constructing an Equilateral Triangle from circles. C points North and A-B is East-West.  
A-C is at 30°East of North, B-C is at 30°West of North*

So, Fosse Way lies along a line which follows the bearing of one side of an equilateral triangle aligned with True North. Interesting. But why is Fosse way located where it is? I have been reading a couple of books about alignments and survey lines recently, both Roman and pre-Roman, one called "The Ancient Paths" by Graham Robb, and the other called "Brittania Surveyed" by Rob Entwistle. Both books are very different, but are also very interesting and thought provoking (and they have nothing to do with Ley Lines by the way!). In The Ancient Paths, Graham Robb suggests an ancient alignment which follows the bearing of the summer solstice sunrise from Sagres (The Sacred Promotory) in Portugal all the way to the Col de Montgenevre or "Matrona Pass" in the Alps, a distance of nearly 1,600km. This route was known as the Heraklean Way or Via Heraklea, and was adopted by the Roman Emperor Domitian for a Roman road along much of its route. I was thus inspired to check the line of Fosse Way to the south west to see if it lined up with anything interesting on the other side of the English Channel, and to my surprise I found that it did indeed line up almost exactly with the most westerly point of Brittany in France (Finistere), but even more surprising it also lines up with Finisterre in Spain, also one of the most westerly points in Spain. Finistere, and Finisterre both mean "end of the earth", and both sites were apparently "sacred", based on extensive archaeological evidence, being as they were the places where the sun finally fell into a generally hostile sea at the end of every day. Note that the still sacred site of Santiago de Compostella is in Finisterre, Spain close to the ancient sites on the headland. Possibly one of the most sacred sites in Britain to the Celts was of course Aquae Sulis at Bath, where the waters gush from an underground spring at a constant 46°C, and the site of Aquae Sulis aligns almost perfectly with Finistere and Finisterre, on a bearing of 30°. A quirk of nature which was observed by someone long ago, and which inspired them to create a continuation of the alignment all the way across Britain to the banks of the River Humber. Or was it? It could just be a coincidence of course.

There are many known iron age sites throughout Britain, and if one were to draw a straight line on a map in any direction, you would be virtually guaranteed to come within a fraction of a degree of such a site. Fosse Way is however an alignment of several very prominent sites, also on a significant bearing, and aligned with at least two very conspicuous sites on mainland Europe. As our own Mike Hamilton-Macy commented "too many coincidences for it to be a coincidence!"

If our ancient ancestors decided to set off in a straight line at exactly 30° to north, using sighting poles set out in a dead straight line from the south end of Fosse Way, (and ignoring the trees and other obstructions along the way), we would expect them to eventually arrive at the Iron Age site at Stallingborough, having followed what we now know as the Fosse Way, and having passed through "Lindon", the future site of Roman Lincoln, right? Wrong I'm afraid! As anyone who sails will know, following a bearing over a long distance will not take you in a straight line, and this is because the earth is not flat, whereas most maps are flat (for convenience). A flat map is a "projection" of a section of the globe, "Mercator Projection" being one of the most popular versions. In Mercator Projection, all lines of Longitude or "Meridians" are drawn parallel (eg from top to bottom of the map), so that bearings relative to north do indeed appear as straight lines. But these lines are not the shortest route between two points on the globe. If you don't believe me, try drawing a straight line on Google Earth Pro between London and Los Angeles (which is actually further south than London), and you will see that the line goes north through the arctic circle rather than straight across the Atlantic. The line on Google Earth Pro is part of a "Great Circle", which is the shortest route between two points on our globe. It is not actually possible to draw a line along a fixed bearing relative to north on Google Earth Pro (except north to south or along the equator of course), and that catches lots of folks out, myself included! So, my alignments drawn carefully on Google Earth Pro were following Great Circles, not bearings or so called "Rhumb Lines".

This is where things get rather more complicated, because what I discovered is that the actual Rhumb Line bearing between Aquae Sulis and Iron Age Lincoln (Lindon) is 31.00° (to within one hundredth of a degree), whereas the Great Circle starting bearing is 30.23°, but ends on a bearing of 31.74°. Assuming that the "surveyors" of the day were able to achieve accuracies of less than one degree over those distances, this suggests that they followed a straight line (Great Circle) rather than a Rhumb Line bearing to Lindon (and Stallingborough). Given that we believe that they did not have magnetic compasses at that time, this is perhaps not surprising, as following a Rhumb Line bearing without a compass is very difficult. But, once they arrived at the other end (on the banks of the Humber perhaps?), it is likely that the surveyors would have taken a back bearing (ie in the direction back the way they came), as a check, and they would then realise that they had wandered off bearing along the route, as the back bearing would measure 28.36°, not 30°.

I hope you are all following this, because I realise that it is getting rather technical, so I will cut a long story short and say that I had to redo most of my bearings on Google Earth Pro, because I believe that the surveyors of the day would realise that Great Circle bearings were of no use to them, especially over the long distances that we are talking about here. With a Rhumb Line bearing relative to North one can check at any stage along the route to see if you are still going in the right direction, and I strongly suspect that is what the surveyors would have wanted. It is actually possible to keep to a Rhumb Line bearing fairly accurately by rechecking using the sundial principle along the route, say every 25km (the rough distance between Colchester and Maldon), and I suspect that is what they did. Note that the first person to prove that the earth is spherical was a chap called Eratosthenes, in 200BC, and from then on surveyors would know that they had to compensate for this in a practical way, probably as I have described above, because otherwise the maths gets rather complicated!



*A Rhumb Line (yellow) and a Great Circle (red) between Los Angeles and London Airports*

A final note on accuracy of bearings. It is astonishing how accurate Roman surveyors could be in setting out long distance alignments, and one assumes that the Celts in the years approaching the invasion of 43AD, with their close relationships to Rome would have had a similar degree of knowledge. I have no idea how old the original alignment of the Fosse Way is, but what I discovered is that the Rhum Line bearing from Finistere in France to Aquae Sulis is actually  $28.53^\circ$ , so almost  $1.5^\circ$  off track. One has to realise that the English Channel sits in the way of this alignment, so I can imagine that with the tools of the day, the ancients who first discovered that Finistere, Finisterre and Aquae Sulis sat roughly on a  $30^\circ$  bearing over more than 1000km might have felt that they had it mapped accurately, and the fact that these sites were all supposedly very sacred might have had some influence on it. It is interesting to note that Aquae Sulis is not actually on the final Roman alignment of Fosse Way, assuming that one uses the bearing from Ilchester Mead Iron Age site to Lindon / Stallingborough (as I think the Romans did). That alignment sits on a bearing of  $30.5^\circ$  to True North, and the bearing from Finistere, France to Ilchester Mead is also within one degree of  $30^\circ$ , so some realignment appears to have taken

place before the Romans used Fosse Way as their survey line. All Rhumb Line bearings quoted here are within  $1^\circ$  of the expected bearing, and mostly within  $0.5^\circ$ , unless noted otherwise as above.

As I mentioned earlier, it seems almost certain to me that the Romans based the Fosse Way road system very conveniently on the pre-existing Celtic alignment, before the Roman towns such as Leicester and Lincoln were conceived, and the fact that some of the major Roman towns along the Fosse Way are not aligned exactly is probably because there were geographic and other reasons to place them where they are – close to the alignment, but in a practical location. The diagram below shows how the Roman Fosse Way (light blue) appears to weave in and out of the  $30^\circ$  survey line (in white), taking in the various Roman towns along the way, but always returning to the alignment. (The red line is the Great Circle line between Lindon and Ilchester Mead). This was all quite exciting to discover, but little did I know that it was only the start of a pattern that was emerging across the whole country.



*Roman Fosse Way (Light Blue) following the  $30^\circ$  alignment from Lincoln to Ilchester*

Where this all started was when I read in Rob Entwistle's book that the Roman road now called Gartree Road heads out of Leicester at exactly  $90^{\circ}$  to the Fosse Way alignment, and heads directly towards Colchester. In fact it sits on a bearing within  $1^{\circ}$  of  $120^{\circ}$  to True North straight to Colchester Balkerne Gate. If I extend the alignment in the opposite direction, to the North West of Leicester, we finally get to Chester (Deva). The bearing from Deva to Colchester via Leicester, a distance of 293km is  $120.13^{\circ}$ , almost exactly the  $120^{\circ}$  expected. This is of course the alignment of the fabled "Via Devana", large parts of which are now missing, but which persists in the memories of antiquarians and other historical writers. Spurred on by this discovery, I started to look for alignments between other major Iron Age sites (especially Oppida, which were very large IA "towns" and which seem to have only been founded late in the IA period). To my astonishment, I found that Camulodunum (Colchester IA Oppidum) aligns perfectly with the right side of an equilateral triangle all the way to Stanwick Camp in North Yorkshire. That is a bearing of  $150^{\circ}$  over a distance of some 340km, between two of the largest Oppida in the country. I then checked to see if a complete equilateral triangle existed between these two points and a third location in South Wales. There is indeed a major Iron Age hillfort near Carmarthen called Merlin's Hill, which sits at the exact location of the south western vertex of an enormous equilateral triangle whose sides are over 340km long, and which is aligned exactly on True North. Further to this, we find that Lincoln Roman town sits almost on the Camulodunum to Stanwick alignment (where the Fosse Way crosses it), and Roman Deva (Chester) sits at the junction of the Via Devana and the alignment from Merlins Hill to Stanwick Camp. To complete the picture, the iron age oppidum of Salmonsbury Camp lies exactly on the same latitude as Camulodunum and Merlins Hill, and is also directly south of Stanwick Camp. You will note that one or two "almosts" are appearing here, and they refer to the bearings to Deva and Lincoln, which are not quite as accurate as the others, and interestingly, they are both Roman centres with little evidence of Iron Age activity. Perhaps the IA traces are yet to be found?

So what does all this mean? You may be aware that modern maps (until the advent of satellite navigation systems) were created using a method called "triangulation". Our own Ordnance Survey maps were drawn up in this way, starting from a baseline at Hounslow Heath, and taking bearings from that line to prominent features in the landscape. It seems to me that the large equilateral triangle between these prominent IA locations might be a similar arrangement by the Celts and later the Romans, to survey Britain in such a way that the road network could then be laid out between towns and forts, knowing with high accuracy where they all are in relation to the survey lines.

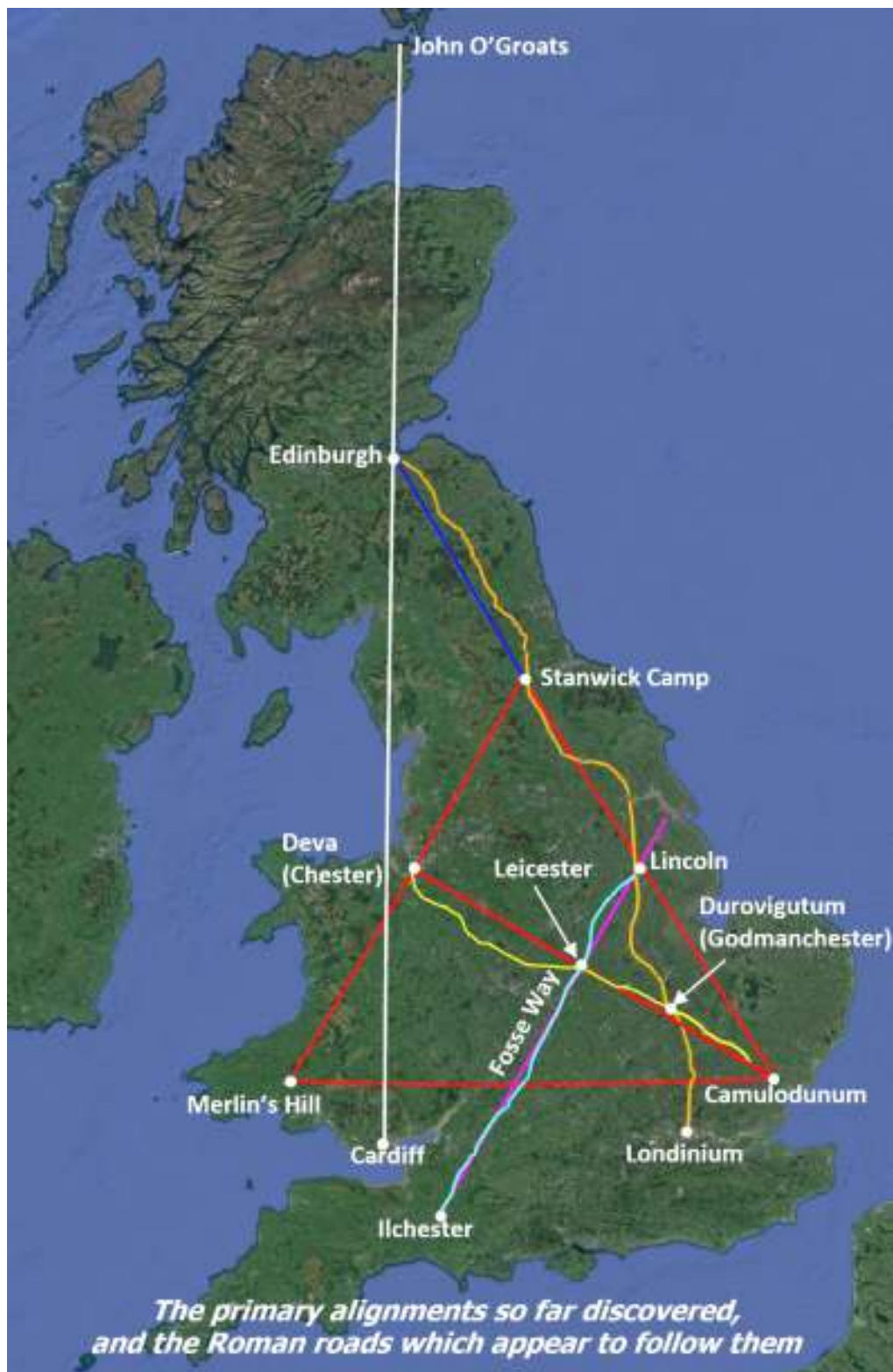
There are several more similar alignments showing up, especially involving major Iron Age sites and Oppida, such as Silchester to Deva ( $329^{\circ}$ ), Verlamion to Bagendon, Cirencester ( $271^{\circ}$ ), and it is often difficult to know where the start or end point is within an Oppidum as they often cover several square kilometers and have no discernible gateways or focal point.

Recently I decided to check where the right side of the large equilateral triangle from Camulodunum to Stanwick Camp might lead to if I extend it northwards. Well, it eventually arrives at Edinburgh, capital of Scotland, so named after Eidyn's Fort which is a late Iron Age site now sitting beneath Edinburgh Castle. The bearing from Camulodunum to Edinburgh Castle is  $29.7^{\circ}$  West of North, so almost exactly the  $30^{\circ}$  of the triangle, over a distance of 525km. If I am not mistaken, this is the survey line for part of Ermine Street and Dere Street – "The Great North Road" (which calls at Lincoln on Fosse Way!). You will also note that the Via Devana from Colchester crosses Ermine Street at Durovigutum (Godmanchester), thereby forming a complete route from Colchester (Colonia Vitricensis) to Cramond Roman Fort (Edinburgh), and on to the Antonine Wall, and avoiding the Fens which were impassable at that time. Head directly south from Edinburgh, and you eventually get to Cardiff. There has always been some debate about which is further west of the two, well, with the help of Google Earth, the IA site which gave rise to the capital city of Wales, "Caerau Hillfort" lies about 3km west of the capital city of Scotland, on a bearing of  $180.37^{\circ}$  to True North. Coincidence, or were those important sites placed there because of their relationship to the position of the sun at midday? And, did the great North Road of Ermine Street and Dere Street originally run from Colchester to Scotland, before Londinium became the more important southern city and Ermine Street was built between Lincoln and London?

I could go on, but we only have limited space and time, so I hope that I have piqued your curiosity a little with these observations, enough to have convinced you that there might be something in all of this and that it is worthwhile pursuing a little further? Who knows what we may find next?

In other news from the Roman Roads Group, I am very pleased to announce that the hitherto unknown Roman road from Holton St Mary to Long Melford discovered last year by the RRG (reported in our last Newsletter) has now been added to the Suffolk HER database, and in addition, the Roman Roads Research Assoc. has awarded the road a new number (this follows on from the work done by Ivan Margary in the 50's (the Godfather of Roman road research in Britain). Henceforth it will be known as RR344X.

Despite good intentions, the RRG were unable to do any further work on Highwoods Park this spring, looking at the possibility that the recently discovered large earthwork in the woods might be a Roman road, due to the



The image above shows some of the primary alignments so far discovered, and the Roman roads which appear to follow them:

The great triangle between Camulodunum, Stanwick Camp and Merlins Fort (Carmarthen) (RED)

The Fosse Way (PURPLE)

The 30° extension from Stanwick Camp to Edinburgh (DARK BLUE)

The North-South alignment between Cardiff and Edinburgh (and on to John O'Groats) (WHITE)

Fosse Way Roman road (LIGHT BLUE)

Dere Street / Ermine Street (The Great North Road) (ORANGE)

Via Devana (known section) (YELLOW)

emergence of an amazing carpet of bluebells in late February. Bluebells are quite rightly a protected species in the UK, so we cannot start trampling over them, and certainly not dig them up looking for Roman roads or anything else for that matter. It is hoped that we can get the required permission to do something later in the year when the plants become dormant.

If you find any of this interesting, or are curious to learn more, membership of the Roman Roads Group is open to all members of CAG, and you are all very welcome to join us – no prior knowledge required, and you are welcome to come along and just listen in. Just let myself or Sue Keen our Secretary know and I will make sure you are added to the list of members.



### **Stop Press!**

I have today just photographed a cropmark for the first time along the route of the Holton – Long Melford Roman from my drone. Seems to make it all the more real rather than just traces on Google Earth.

## **Roman Tile Kiln Discovery**

### **Mike Hamilton-Macy**

Over the last couple of years, CAG member and regular digger at Fordham, Penny Richards, has mentioned that she has seen Roman CBM in a field on the southern outskirts of Wormingford, and suggested that we should take a look.

With the scourge of the proposed electricity pylon scheme in our area looming, we need to point out all the archaeological sites that will be in its path, so we arranged to take a look and also do some metal detecting.

By the way, the site is smack in the middle of the “preferred” pylon corridor.

The land owner was more than happy for us to investigate, he, like other farmers, doesn’t want 50 metre tall pylons spread across his land.

Although there is, indeed, a great deal of CBM in a concentrated area, there was no Roman pottery at all, no Roman, metal artefacts were found either, this is unusual...unless!

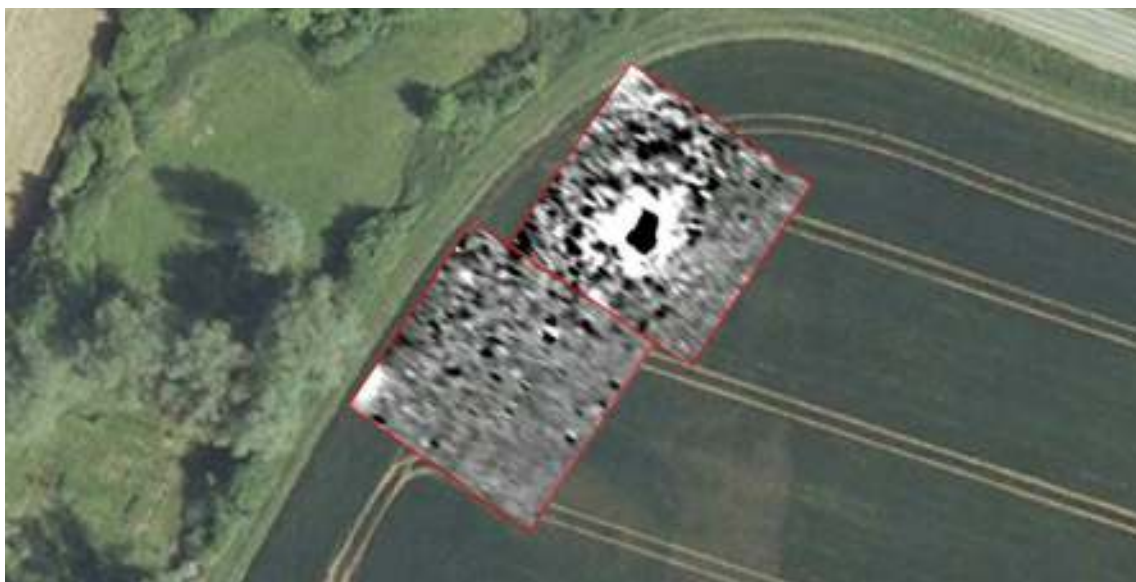
The next step was to look below ground level, so we surveyed a 30 x 30 metre block with a magnetometer over the most concentrated area of visible CBM.

Result: nothing but “noise” from the scattered CMB.

Somewhat surprised and disappointed, we had a bit of a wander around with the magnetometer, next to the area we had just looked at and suddenly the readings rocketed over a patch of ground about ten metres away.

After setting up an adjacent 30 x 30 metre block we surveyed it normally and....bingo, a massive signal was found over an almost 10 metre round area.

Adam Whiteman from CAT, having had our visual report on the site, had suggested that could indicate the location of a tile kiln.



The magnetometry results confirm that, as brick, tile and box flue fragments have been found, this means that somewhere, close by; there must be, at least one, middle to high status roman building.

More work to do in the area methinks, magnetometry results below

## Proposed electricity pylon route update

**Mike Hamilton-Macy**

So, apparently the National Grid have done/are doing archaeological surveying along their proposed pylon route and have now put on line their interactive map showing the exact positions of where the pylons will be placed.

The parish of Fordham will have seven pylons cutting across its south eastern corner.

Three of them will be on top of, or directly impact known archaeological sites!

One will be on top of a Roman building just south of our current dig site!!!

They have so far done a "desktop" survey; the information available on-line for these is wildly out of date and frequently inaccurate.

Why haven't they talked to the people that know what's in the ground?

Colchester Archaeological Trust, Colchester Archaeological Group or Fordham Local History Society for example.

There will also be one practically on top of the newly discovered Roman tile kiln just south east of Wormingford! (Top right of picture).

If you wish to see where the pylons proposed positions will be, this is the link to the interactive map from NG. Just copy and paste it into your browser.

<https://experience.arcgis.com/experience/ba2cbd9ac64c4723847fae8637d50df3/>

Right is the area mentioned, the red marked ones are on, or very, very close to a known site.



## Award Winning Photograph

### Nicholas Balbi makes the cover of The European Archaeologist

In this year's photojournalism competition of The European Archaeologist (TEA) organisation entitled: Archaeologists and our favorite tools. Nicholas was awarded first prize and his drone photo appeared on the cover of their prestige publication.

TEA PHOTOJOURNALISM COMPETITION 2023 WINNER

ARCHAEOLOGISTS AND OUR FAVORITE TOOLS

José Nicolás Balbi (Colchester Archaeological Group, UK)



Nicholas writes: At 3400 meters above sea level in the Peruvian Andes, about 36 kilometres from the nearest town of Andahuaylas, stands a structure called an *Ushnu*. It is a ceremonial centre from the Inka culture. The Inka built an extensive network of roads (the *Qhapac Ñan*) known to tourists as 'the Inka Road,' which runs through the largest empire in the Americas prior to the Spanish Conquest (from 1492). Along this path (and preferably at higher elevations), similar structures were built as temples or administrative centres. They can be found from present-day Ecuador all the way to Argentina.

In the photograph we see this *Ushnu* – determined to have been a place of solar worship based on a series of measurements and orientation observations such as its alignment to the temporal mean equinox – in the background and our small but vital drone whirring in the foreground. Since the structure is located on a summit, the use of the drone to make measurements, videos and photos is invaluable. Having excavated, studied and carried out astronomical measurements throughout this area, I believe that this *Ushnu* is the most representative and beautiful of the many such structures that exist along the route.

Nicholas hopes to be back in this country in August and is looking forward to catching up with everyone and the progress on the Fordham dig.

## Muddy Reports: The Blackwater CITiZAN project

A number of our members took part in the Blackwater Citizan program which has now been disbanded. The aim of the project was to record Mersea's response to the rapid and ongoing coastal change which continues to transform parts of the islands' coast line.

One result of this change is that many places have been lost, as great swathes of marshland, creeks and wildlife have been scoured from the shore. On the other hand though, many places have been found as the mud is stripped away to reveal a rich mosaic of archaeology and ancient remains, spanning thousands of years.

Jim Pullen remarks "that it's a real shame as there is so much more to investigate".

Four of the Citizan reports on the Mersea Island Discovery Programme are now available to read or download (PDF) from the CAG website (*In publications*). They are:

1. Survey of intertidal remains adjacent to scheduled ancient monument 1013832 Tudor Blockhouse East Mersea, Essex. O.Hutchinson & D.Newman. September 2022

2. The intertidal archaeology of Monkey Beach Mersea Island, Essex Coastal and Intertidal Zone Archaeological Network Report. O.Hutchinson. September 2022
3. A mid-Saxon structure in the intertidal zone at Point Clear, River Colne, Essex O.Hutchinson & D.Newman. September 2022
4. A large mid-Saxon timber structure in the intertidal zone Sea View, Mersea Island, Essex Coastal and Intertidal Zone Archaeological Network Report. O.Hutchinson. September 2022

## **Beauty is in the eye of the beholder**

### **Notes on an unusual archaeological find by Francis Nicholls**

*This copper/bronze Roman artifact was found  
by the author  
with a metal detector, near Great Tey,  
Colchester, Essex*

Approx 3.5cm x 2.5cm



Many CAG members will recall visiting the British Museum in 2013 to view the *Life and Death of Pompeii and Herculaneum* exhibition. It is extraordinary to think that some of the displays on show then and many others at the two Roman cities, were locked away from general public view for nearly 200 years, originally under the orders of Charles III of Bourbon, aided by the Catholic Church. Erotica had a complex and multifaceted meaning for the Romans and its significance varied depending on the period, social class and individual perspective.

In ancient Rome, sexuality was seen as an integral part of daily life and was celebrated in art, literature and public events. Erotic art and literature were often used to explore themes of love, desire and sexuality, as well as to depict the human body in a realistic and natural way.

For some Romans, erotica was seen as a form of entertainment and a way to indulge in sexual fantasies. However, for others it had a deeper meaning and was used to explore philosophical and psychological themes. For example, the poet Ovid used erotic themes to explore the dynamics and emotional complexities of love and desire.

At the same time, some Romans viewed erotica as a way to reinforce social norms and values. Erotic art and literature were often used to depict idealized versions of men and women to reinforce traditional gender roles and power dynamics.

Overall, whilst erotica had different meanings for different Romans, it played an important role in shaping their culture and attitudes towards sexuality and the human body.

**And in the same subject images taken by a CAG member in the Fitzwilliam Museum during their visit:**



#### **A rude pot**

Unusual beaker with barbotine decoration. It shows naked women racing chariots pulled by teams of penises, each of which has bird's feet.

Nene Valley or Colchester ware.  
Z 30141

# An investigation arising from the question “Why do so many parishes contain the pre-fix *Great* and *Little*?”

Jem Harrison

This question posed among general discussion at a meeting of the Landscape Archaeological Group gave rise to contributions from around the table and on Zoom, plus its appearance on the agenda in following meetings. What I thought was a question with a simple answer was soon disabused by the different approaches, further questions and apparent anomalies that members put forward. Particular concentrations were noticed in the county, maps were produced leading to further discussion and even more questions, indicating that the simple question may have had a simple answer at first sight, but the ramifications were ongoing. Having contributed to the discussions, I should have anticipated a request to produce something more tangible for the benefit of the group, perhaps an article or a presentation or maybe just a reading list. I protested existing obligations on my time, but my conscience berated me, so what follows is my exploration arising from that simple question.

My immediate thought in response to the question was that estates, such as manors, could be subdivided, perhaps to provide for sons of lords, or gifts to the Church, or to service debts, or various other causes. If the estate was split in half, the two parts could have been referred to as West and East, but as it was more likely that one would be bigger than the other, then Great and Little sufficed, or when written down in the earliest records as Magna and Parva. To test this thought I decided to investigate Great and Little Horkesley.

One of the first things I did when we moved to Great Horkesley over seven and a half years ago, was to visit the Essex Record Office to obtain a copy of the Tithe Map and its schedule. Hours were spent tracing the map, writing in the plot numbers, followed by the field names, and then using colours to show the different landholdings. This was a tedious exercise, frustrated by the murky nature of the photocopy of the original, the mistakes in the typescript of the schedule, and not having enough colours; so, I put it aside to be continued when I could find the motivation. The Great and Little question made me dig out the Tithe Map again to see if I could find any clues. The boundary with Little Horkesley seemed convoluted, but I did not have the Little Horkesley Tithe Map to compare. A visit to Colchester Library enabled me to obtain a copy of the Chapman & Andre map of Essex published in 1777 which is very interesting but lacks boundaries between parishes. I obtained a copy of a map of Essex Hundreds and Parishes from the Essex Record Office, which showed the strange alignment of the boundary, but was too small to discern the reasons. I reached for my copy of OS Explorer Map 196, “Sudbury, Hadleigh & Dedham Vale” 1:25000, i.e., 2.5-inches to the mile, but trying to trace parish boundaries on this is difficult as the tiny dots seem to fade away or are covered in stronger detail, and of course, show modern parish boundaries that are not necessarily the same as ancient ones.

A breakthrough occurred on another visit to Colchester Library where I discovered the Victoria County History for Essex and found the entries for Great and Little Horkesley.<sup>(a)</sup>

These can also be found in British History Online, enabling one to study the VCH at home.<sup>(b)</sup> The entry for Great Horkesley states that “it is a large rectangular parish”, and that “until 1955 the western quarter of the parish was intermixed with Little Horkesley, and the two parishes had presumably once formed a single unit.” Other alterations to the parish boundaries in 1883 and further simplification in 1955 help to explain why it was difficult to trace the boundaries on the modern OS map.

A very good map of Great and Little Horkesley accompanied the VCH Introduction to Great Horkesley, depicting the roads, streams and significant features of the two parishes as well as the boundaries. The boundary between Great and Little Horkesley was shown as a dash-dot-dash-dot line which could be difficult to follow, especially near Kings Farm, so I tried to apply colour to clarify which parts belonged to each parish, as in Figure 1.<sup>(c)</sup> The northern and southern boundaries follow water-courses. Great Horkesley’s boundary with Boxted runs South from the easterly direction of the River Stour, and this north/south alignment has a logic to it, implying that when the manor/parish boundary was set out, someone was accomplished at surveying. One is reminded of the work of the Roman *Agrimensores* and the principles of centuriation in setting out the landscape, the surviving evidence for which is contained in medieval documents, posing questions such as: did those who set out this boundary, perhaps in the 8th - 11th centuries, possess surveying skills, or, was this boundary a survival from a division of Romano-British estates that over the centuries had acquired a few kinks and a plough-line? The contrasting boundary between Little Horkesley and Wormingford is characterised by lots of bends suggesting that it had to adhere to fields that already existed, although a glance at OS maps also suggests that some of the bends were influenced by steep slopes.

The most intriguing aspect of the boundaries is the division between Little and Great Horkesley south of Little Horkesley Hall and Kings Farm in the north, and north of Hammonds Farm and Westwood Park in the south. The water-course whose source appears to be between Vinesse Farm and Westwood Park, and meets the River Stour at Churn Meadow, would appear to be a natural boundary between the two Horkesley’s, suggesting that perhaps Great Horkesley acquired access to Hay Green and the land around Hay Farm sometime after the division into Great and Little, while Little Horkesley’s access to its south-eastern quarter was restricted adjacent to Kings Farm, and perhaps as compensation received land to the east of the water-course leading from



In figure 4, the use of Carucates in Suffolk as opposed to Hides in Essex may not have been of great importance for the compilers of Domesday, because whatever their original meanings, they were in 1086 just the units of assessment for taxation in use in those counties. Since King Alfred's treaty with the Danes in the late ninth century, the law of the Danes would prevail in the East of England, thus the use of Carucates in Suffolk. Danish/Viking attacks continued, as did settlement, and even conquest by Canute in the eleventh century. The Battle of Maldon indicates that Essex did not escape the fury of the Vikings, while place names such as Thorpe and Kirby represent Viking settlement close to the coast.

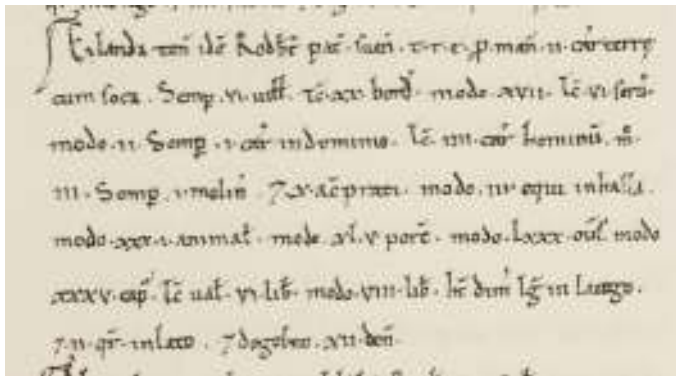


Figure 2; Excerpt from Suffolk Domesday for Eilanda.

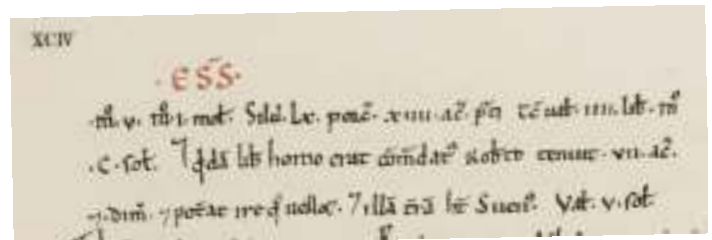
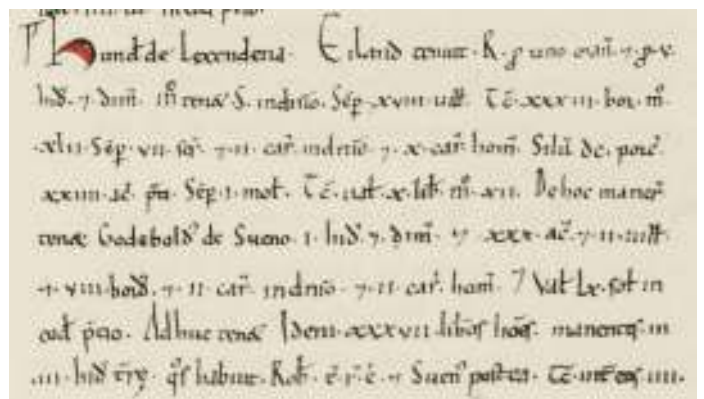


Figure 3; Excerpt from Essex Domesday for Eilanda in Lexden Hundred.

Eilanda, that became Nayland, as an island in the River Stour, one can envisage as forming a useful bridgehead and defensible camp for Viking raiders, from which they could break out to attack adjacent territory. By 1066, and also in 1086, Robert Fitzwymark's customary tenants, his villeins and borders, or villagers and smallholders in the Phillimore translation, gives the impression of a stable but relatively small manor. It is small in comparison with Robert's Eilanda, later Horkesley, in Essex, where in 1086 the total of villagers, smallholders and slaves is 67 compared with 27 in Nayland. The small fall in Nayland's population between 1066 and 1086, while Horkesley grew, plus the difference in the numbers of Hides/Carucates, all emphasise that as an island, expansion in Nayland was restricted and that the Essex side of the Stour offered greater opportunities.

At this point it is necessary to look at the Essex Eilanda entry:

*Robert held Nayland as one manor, for five and a half hides. Now Swein holds it.....*

*....Of this manor Godbold holds from Swein one and a half hides and 30 acres .*

*2 villagers, 8 smallholders....*

*....He also holds 37 freemen who dwell on 3 hides of land, whom Robert had before 1066, and Swein later on.<sup>(h)</sup>*

Eilanda (Nayland) and Eilanda (later Horkesley) were really the same estate, divided between the hundreds of Babergh in Suffolk, and Lexden in Essex. It seems that Nayland was the senior, perhaps the *caput* of the two, not that Robert or Swein would have lived in either as they were great men of their day with many other estates. The Essex Domesday entry reveals that of the 5.5 hides, 1.5 hides plus 30 acres were sublet to Godbold and 3 hides to 37 Freemen, leaving perhaps just 90 acres as Swein's demesne. As Freemen were more commonplace in the Danelaw, the possibility of the 37 in Eilanda (Horkesley) being of Danish descent, in the absence of absolute evidence, is tantalising.

It is in these two sub-lettings of Eilanda (Horkesley) that we can discern the creation of Little and Great Horkesley. In 1127, only 41 years after Domesday, Robert Fitz Godbold, also known as Robert of Horkesley, of Little Horkesley Hall, founded the Cluniac Priory, a sub-priory of Thetford.<sup>(i)</sup> Another gift of land to the priory was made by Henry and Alan Creffield of Great Horkesley, c.1200. If the Godbold family were lords of Little Horkesley, then this indicates that the 37 Freemen may well have been the inhabitants of that part of Eilanda in 1086 that later became Great Horkesley. Although the name Horkesley did not emerge until the twelfth century, its Great and Little components were already evident before the Conquest.

Figure 4; Comparison of quantities for the two Eilandas in Domesday.

	Eilanda Suffolk 1066	Eilanda Essex 1066	Eilanda Suffolk 1086	Eilanda Essex 1086
Carucates	2		2	
Hides		5.5		5.5
Villeins	6	18	6	18
Bordars	20	33	17	42
Slaves	6	7	2	7
Demesne Ploughs	1	2	1	2
Men's Ploughs	4	10	3	10
Mill	1	1	1	1
Meadow	10 acres	24 acres	10 acres	24 acres
Horses			3	
Cattle			31	
Pigs			45	
Sheep			80	
Goats			35	
Woodland	Half a league by 2 furlongs tax 12d	for 600 pigs	Half a league by 2 furlongs 12d tax	for 600 pigs
Value	£6	£10	£8	£12

Figure 5; Godbold and the Freeman; the beginnings of Little and Great Horkesley.

	Godbold 1066	Godbold 1086
Hides	1.5 plus 30 acres	1.5 plus 30 acres
Villeins	2	2
Bordars	8	8
Demesne Ploughs	2	2
Men's Ploughs	2	2
Value	60/-	60/-

	37 Freeman in 1066	37 Freeman in 1086
Hides	3	3
Ploughs	4	5
Mill	1	1
Woodland	for <b>60 pigs</b>	for 60 pigs
Meadow	14 acres	14 acres
Value	£4	100/-

There is another Freeman under Robert Fitzwymar's protection who held 7.5 acres in 1066 and the freedom to go wherever he pleases. Swein of Essex has his land in 1086.

## Acknowledgements;

My thanks to the compilers of the Domesday Book, Chris Thornton and the Victoria County History, British History Online, Open Domesday and the Phillimore translations, without which this article could not have been written.

## References

- (a) A History of the County of Essex, Vol.10, Lexden Hundred (part), including Dedham, Earls Colne and Wivenhoe. Victoria County History, London, (1991).
- (b) 'Great Horkesley: Introduction', in A History of the County of Essex: Volume 10, Lexden Hundred (Part) Including Dedham, Earls Colne and Wivenhoe, ed. Janet Cooper (London, 2001), pp. 219-223. British History Online <http://www.british-history.ac.uk/vch/essex/vol10/pp219-223> [accessed 28 June 2023].
- (c) Figure 1 is my coloured version of the map of Great & Little Horkesley c.1800 included in the VCH entry for Great Horkesley by kind permission of Dr. Chris Thornton, and hopefully, the University of London who hold the copyright to the base map.
- (d) Last year, I took part in a sponsored walk in this area. The walk was supposed to take an hour plus. I took over three hours as I lost my way and went round in a circle! All I can recall was that the landscape was green and pleasant.
- (e) Excerpts from the website Open Domesday by Anna Powell-Smith. Folio images available under the CC-BY-SA licence - credit Prof.J.J.N.Palmer and team.
- (f) A.Rumble, (ed.), J.Plaister and V.Sankaran (translators), Domesday Book, Essex, J.Morris (gen.ed.) History from the Sources, Phillimore, Chichester, (1983).
- (g) A.Rumble, (ed.), M.Hepplestone, B.Hodge, M.Jones, J.Plaister, C.Coutts, F.Bowers, E.Teague (translators), Domesday Book, Suffolk, (part 2), J.Morris (gen.ed.) History from the Sources, Phillimore, Chichester, (1986).
- (h) Taken from Phillimore's Essex Domesday, 24-57.
- (i) Citation: BHO Chicago MLA  
'Little Horkesley: Introduction', in A History of the County of Essex: Volume 10, Lexden Hundred (Part) Including Dedham, Earls Colne and Wivenhoe, ed. Janet Cooper (London, 2001), pp. 233-235. British History Online <http://www.british-history.ac.uk/vch/essex/vol10/pp233-235> [accessed 29 June 2023].

## Postscript;

Having just driven along the narrow lanes of Little Horkesley, my thought that the share-out of land in the area of the convoluted boundaries might have been associated with common grazing may need to be revised. Much of what I observed appears to be very fertile arable land!

Jem Harrison 30th June 2023.

# Keeping the water in the bath

David Grayston

Have you ever wondered how Roman baths retained water? Maybe not, but a metre deep bath had to support a tonne of water per square metre, perched on columns of tiles.

At excavations we see varying lengths of fragile columns of hypocaust tiles and are left to imagine how they are capped off to support a floor. The reconstruction in Castle Museum shows/showed a domestic floor being supported by bridging the columns with large tiles - straightforward.

Supporting tons of water wants a more elephantine and water proof construction.

I happened on the answer in Portugal; at probably the largest archaeologically excavated Roman town in the country, CONIMBRIGA, half way between Lisbon and Porto and a few miles inland, on the old Roman road linking the two.

At Conimbriga you can see exactly how it is done. The town itself is massive, surrounded by cliffs on most sides while the buildings were of high quality, judging by the mosaic floors, columns and baths.

The pictures say a thousand words.

1 The town

2. Our usual view of hypocaust columns.

3. Colchester museum reconstruction

4. Columns arched together for strength. Rows bridged by 'roof ridge tiles' to allow hot air to circulate close to the bath water.

5. 'Roof ridge tiles' spanning piers with opus signinum concrete for bath floor.



1



2



3



4



5



6



7



8



9

6. Bathroom set-up - robust to support the tonnage of water. Walls would have been rendered with waterproof opus signinum; probably some sort of drainage in place.
  7. A complex bath arrangement.
  8. A 'must have' – nothing's new.
  9. 'Des Res'. Beats the 'two up and two downs' built against the Priory Street town wall!
- If you are touring Portugal Conimbrig-a is worth putting on the itinerary.

## Domestic Air Raid Shelters WW2 Colchester

Jonathan Pearsall

I have decided to try and identify the remains of one bit of Colchester's history which probably has not been researched, at least not in a systematic way, and that is the World War 2 domestic air raid shelters. I am interested not so much in the public shelters such as that in Colchester Castle or in school grounds such as at Hamilton School, but shelters for use by private households.



The standard shelter made available by the war time government for private households was the so-called Anderson Shelter. It was of a simple, but effective design of corrugated steel sheeting set in the ground, covered by earth and offering protection at least against a direct bomb hit. The shelters were free for those below a certain income and for others, sold at a modest cost

Despite the passing of time, it appears that a remarkable number of them remain. Abandoned and rotten perhaps but some in use today but adapted for different purposes - often storage in gardens.

It was possible for private individuals to purchase shelters of individual design usually constructed of concrete and brick. I have so far come across three in my near neighbourhood though in fact one of them is not quite what I expected it to be.

*The Maldon Road example is a relatively simple construction of poured concrete, with a central ventilation shaft, steps down and with a sharp left turn into the shelter itself designed to reduce the impact of a blast. It was covered in earth to give extra protection, but with no lighting or power.*



*The Cambridge Road example, to which I have yet to gain access, is much more sophisticated and made of prefabricated concrete sections with ventilation and a separate emergency exit shaft and would not have come cheap. At a distance it looks like the type built, but of a larger size, for the use of airfield personnel if the field was under attack*

The *Shrub End shelter* is set twice as deep as the Maldon Road example with two flights of steps doglegging into the main shelter chamber. There is a steel blast door into the chamber and within it an elaborate ventilation system and some sort of drainage arrangement, power, and lighting. This shelter was clearly designed for safe occupation for some time, whereas the others would be used only for a very short time. This must be an example of a shelter constructed in the post war period as to be nuclear bomb 'proof' or more specifically, to provide shelter from the radiation fallout after the bomb's detonation. The development of the 'A Bomb' and later the 'H Bomb' in the late 40's and into the 50's coupled with a real fear of nuclear war with the USSR, prompted the government to re-establish the Civil Defence Corps and offer advice as to what to do after a nuclear attack. Most would have to rely on hiding under the kitchen table whilst those with the means, could take advantage of shelters designed and built by private companies. It was calculated that two weeks would be sufficient for the radiation levels to have fallen to a level as to allow people to venture out in safety and shelters such as these were designed with this in mind.



I have more research to do on these three examples (and improve the quality of the images!) but in the meantime if readers know of any examples of shelters, or what you think may be or have been shelters, I would be grateful if you could let me know so that I can follow up on them.

Many thanks

Jonathan Pearsall [jonthan.pearsall@ntlworld.com](mailto:jonthan.pearsall@ntlworld.com)

## Colchester Young Archaeologists' Club

Colchester Young Archaeologists' Club is very pleased with our link on the revamped Colchester Archaeological Trust Website. Especially with the picture at the top which shows us with John Mallinson on the site at Fordham. There are other pictures on the site of us at Fordham doing GPR with Tim Dennis, and Magnetometry with Mike-Hamilton Macy.

The Council of British Archaeology, which provides us with DBS checks for our volunteers arranged for a landscape archaeology session for YAC volunteers in Greenwich Park on 10<sup>th</sup> June. The session was led by an archaeologist working for the royal park. Before we went on a tour of the park with him, we looked at images of the park including lidar.

In the park, where there are barrows, we worked on measuring and staking out an area for further investigation, a bit like for field walking. Interestingly, there were a few pieces of flint picked up in the area. The area currently being excavated has revealed a WWII air raid shelter. The magnetometry had revealed its presence. It was good to meet the staff from the CBA and discuss running the club with them. It was also interesting to discuss ideas for projects for the club with the other volunteers. One young lady from Oregon, who runs and after school YAC club took notes on the environmental archaeology session, we had with Val Fryer in 2019. She shared a session

The model of Roman Colchester at Roman Circus House. One of our former members and now a young volunteer, Niles Schilder has joined us for two meetings this year. He asked me if I knew who had drawn out the plans for the model. "Philip" I should think, I replied. 'No,' he said, 'it was me on work experience.'



they had doing cave art with me. A recruit for the CBA will work specifically on the engagement of young volunteers for the club. The CBA is encouraging schools to start YAC after school sessions, these would be overseen by the CBA. A few clubs have started up, but many teachers, although keen in principle are reluctant to add to their workload. I realised, talking to volunteers from other clubs, how fortunate we are to have the support of Colchester Archaeological Group and Colchester Archaeological Trust.

Our meetings so far this year have been at Roman Circus House. We are recruiting more volunteers to try to accommodate the long waiting list we have for membership. One of our new volunteers has taken over the admin and put everything into an online documents file. We are pleased to be able to make all club email communications through our new CAT email address.

We plan another trip to the Essex Coast and will take part in Archaeology Day at Roman Circus House. The family of the late Mark Davies has kindly asked for donations in his memory to Colchester Young Archaeologists' Club.

Barbara Butler

## Obituary

### Mark Davies

Mark Davies passed away, peacefully on Thursday 20th April aged 81. He was a long-standing member of CAG and many other 'history related' organisations around the town, and his experience and knowledge will be sadly missed. Here are three reminiscences from members

#### From John Mallinson

I first met Mark when attending a WEA course he gave in the early 1990's. I can't remember the exact title of the course, but it was something – inevitably – to do with Roman History and Archaeology. There were about 10 of us on the course and we would all usually be assembled when Mark arrived, never quite late, but certainly never early. We would wait patiently while he set up his slide projector and carousel. Sometimes the carousel would already have been loaded with slides, but sometimes we would wait while he loaded the slides from the box he had presumably grabbed as he left home. After a few lectures it became apparent to us that sometimes he did not know what was in the box of slides he had brought – he must have had hundreds of boxes to choose from – until he brought them up on the screen. But whether he knew or not made no difference. He would immediately and effortlessly segue into lecture mode; steady, measured and with all relevant dates, names, places and events instantly recalled. Every slide would prompt a master class in Roman history, the whole talk joined together in a seamless continuum by Mark's favourite conjunction – and-er – delivered seemingly without pause for breath. This ability to talk authoritatively and knowledgeably often at a moment's notice stood CAG in good stead over many years. Whenever a winter lecturer got caught in traffic, fell ill or otherwise was unable to fulfil their commitment, Mark was always there, willingly and unfailingly, to step into the breach. Just one of the many ways he helped and supported the Group over more years than any of us can now remember. He will be sorely missed.

Within Mark's passion for all things Roman lurked an even greater sub-passion - for Roman inscriptions. Mark could not pass one without having to stop, translate and explain. And, inevitably, photograph it. Which was fine when the monument was in a public place, but when in a museum, where the signs said NO PHOTOGRAPHY ..... well, that was a challenge Mark could not resist. A quick look round to check no museum attendant was watching, out would come the camera, and click, another one in the archive. Occasionally he was caught. Lyon archaeological museum boasts a large collection of inscribed stonework – well over 100 items I believe – and plenty of No Photography signs, but Mark quickly set to work as usual. This time he was not lucky and was soon confronted by an arm-waving Gallic museum attendant. Looking suitable contrite and penitent, he put his camera away, and humbly took a severe telling off. Eventually, power-lust sated, the attendant wandered off, and after the briefest of pauses, and a quick look round, out came the camera again, and the photography continued. We, the rest of the group, melted away quickly, not wanting to be caught by association with such a recidivist criminal. Afterwards, and safely outside the museum, Mark was unrepentant and triumphant. "I think I got them all" he quietly exulted.

One of Mark's many regular contributions to CAG activities was his annual summer evening walk, where he took a group of members on a walk round Colchester (and sometimes elsewhere) visiting and talking about points of particular interest based around a specific historical theme. One of the most memorable of these was his walk around the Roman town wall, when he intended to tell us about its construction, modifications, history and current plans for maintenance and improvement. One August (I think) evening about 35 members and friends started at 6.30 from the corner of Crouch Street and Balcerne Hill, aiming to tour the wall clockwise. One and a half hours later we had reached the bottom of Balcerne Hill, having been given a totally absorbing and detailed history of, so it seemed, every stone in the wall on Balcerne Hill. Mark had no intention of speeding up, or failing to give us full value, and it was about 9.30 when the party reached the North-East corner of the wall just outside Castle Park. By this time the group had been reduced to about eight hardy souls – Mark could always out-stamina anyone when it came to Roman History – because the rest had melted away muttering about minor practicalities like getting supper, relieving baby sitters, or just relieving themselves. Totally unfazed, Mark kept on: "Here you can clearly see...." he intoned, indicating some particularly fascinating feature on the wall behind him. Well no Mark, actually we can't because it is 9.30 on an August evening and it is pitch black, and we can barely see you, let alone the wall. Mark eventually reluctantly abandoned the rest of the walk when we reached East Hill. So the mysteries of the Southern section were on that occasion never revealed. Whether Mark went back later and completed the missing section I cannot remember, but if he did, I missed it.

### **From Barbara Butler**

On one of the many weekend trips in which Mark Davies shared his extensive knowledge and research with us, he recounted the filming of Mortimer Wheeler and Magnus Magnussen in the podium vaults of the Temple of Claudius, under Colchester Castle. Magnussen dared to criticise the distinguished archaeologist for calling the Icenic queen "Boadicea." He had a gruff rebuttal from Wheeler, who replied "Nonsense!" Wheeler said he had known the lady most of his life as Boadicea and Boadicea she would remain. In the film clip, which I saw on YouTube. Mark Davies was standing alongside the Magnussen and Wheeler.

Members of Colchester Archaeological Group were privileged to have Mark's expertise on walks and weekends away. His ability to interpret historic remains and the landscape surrounding them was exceptional and memorable, as can be seen in some of the pictures I took on the sites.

On the last weekend away with Colchester Archaeological Group, in 2019, we visited the Roman Gold Mine at Dolaucothly. Most of us put hard hats on to explore the mine itself, including Mark, who, as we approached the exit, was in discussion about the mine with our young, enthusiastic National Trust Guide.

I first met Mark when, as a qualified Blue Badge Guide for Colchester, He trained a group of us to take visitors into the Roman Vaults, on the castle roof and into the prisons. On his tour of the vaults, he indicated where the superstructure of the Temple would have been and showed us signs of the original wooden supports for the front foundation wall.

It was a notable tour because one of our group was very flatulent. The masonry in the vaults ensure good sound reproduction and, like the excellent speaker he was, Mark kept up his narrative and the rest of us suppressed our amusement. When it happened again, Mark memorably said: 'Take no notice it's the micel!' and continued with his tour.

Any questions asked Mark, whilst we were still in the vaults.

"Yes, I have one," I answered, can you tell us what other temples resembled this one?"

"Maison Carre' in Nimes, France, and the Temple of Mars Ultor in Rome."

I still quote Mark on my tours of Colchester Castle.

His lectures were memorable as well. For one of them he researched and located all the Roman mosaics which had been discovered in Colchester, more than fifty of them. It was one of the talks he gave to Colchester



A Selection of pictures of Mark at CAG activities sent in by members



Archaeological Group after our AGM. On others he showed us pictures of excavations. One showed the excavation of the ramparts behind the castle which revealed the remains of the Roman temple precinct wall.

A few years ago, Mark devised a quiz for the Colchester Young Archaeologists' Club which had them exploring castle park, in teams. We finished our tour in Hollytrees Museum, with treats for all the members who took part and extra treats for those who scored the most.

From Mark I learned that a gaoler's daughter at Colchester Castle used to take tours for visitors in the days when the prisons were still in operation.

It was from Mark I also learned that in 1919 Mortimer Wheeler, at that time a serving officer in the British Army in Colchester, explored the vaults with local archaeologist and historian P G Laver. Between them they identified the vaults as being Roman. It was in that year from their measurements and research, the site of the Roman Temple of Claudius was verified and officially identified. Among Mark's many photographs was a picture of Wheeler addressing a conference in the recently roofed castle museum, which was a coup for Wheeler, as the British Museum had wanted the conference to be in London.

Mark was so generous with his vast knowledge and expertise he is already sorely missed by so many of us

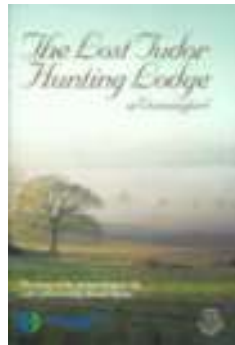
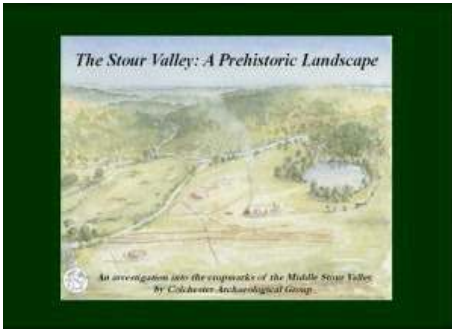
From Anna Moore

In 1998 it was suggested that we revive the weekend trips for CAG members to explore the archaeology of a particular area and I took on the task of organising the first one. I decided on Hadrian's Wall as a suitable destination and asked Mark to come along as our guide to the monument. So it was in March 1999, a King's Coach with about forty passengers set off from Colchester heading north under Mark's direction and I think I can say that during the following four days, no stone in the Wall between Newcastle and Carlisle remained unexamined. Mark's classical background and his work as curator of archaeology at Colchester Castle Museum made him an ideal expert guide. He could stand in front of a monument and information would just pour out of him; not only that, he made it all seem so effortless.

That trip was such a success that, with only a break of a year or so, they continued for over twenty years, until the Covid pandemic put a stop to them (I only organised the first ten before Barbara took over) and Mark was the guide on almost all of them. His speciality was Roman and Romano-British but he could turn his hand to anything archaeological, from prehistoric stone circles to medieval abbeys to nineteenth century industrial monuments.

# CAG Publications

contact CAG Sales – [sales@caguk.net](mailto:sales@caguk.net)



## **The Stour Valley: A Prehistoric Landscape.**

A 40 page summary of investigations by CAG into the cropmarks of the Middle Stour Valley (Bures – Wormingford area). This covers evidence of a Neolithic Cursus, a Long Barrow and Bronze Age rings. Each section of the flood plain is covered in detail with maps, aerial images and explanations. £3.00 plus p&p.

## **The Lost Mansions of Marks Hall – From Demolition to Discovery.**

The story of the CAG Archaeological dig at Marks Hall. 26 colour pages. £5.00 plus p&p.

## **The Lost Tudor Hunting Lodge at Wormingford**

The story of the excavation of a Tudor Hunting Lodge on the Essex/Suffolk border. A4, 24 pages, fully illustrated throughout in colour. A4, 24 pages and fully illustrated throughout in colour. ISBN 978-0-9503905-2-9. £2.00. plus p&p. LIMITED STOCK

## **The Red Hills of Essex**

The Survey of Essex Salt making red hills by CAG published in 1990 is still a key reference book for anyone studying this subject. 100 pages, £5.00 plus p&p.

***The full set of four publications can be ordered for £10 plus p&p.***

## **On-line publications found on our website: [caguk.net/publications](http://caguk.net/publications)**

**Survey of World War Two Defences in the Borough of Colchester by Fred Nash, CAG and Essex County Council, Project report 2007. On-line edition 2020**

The original Report is now divided into five downloadable pdf files from our website:

- (1) Prelims and Contents
- (2) Introduction, History to Appendices Site Grading and Inventory and map of Defence sites,
- (3) Section A: Sites Records SMR 8913-10961
- (4) Section B: Site Records: SMR 10962-20511
- (5) Section C: Site Records SMR 20512-21159

**The report of the Middle Bronze Age burials and Anglo-Saxon ditch excavations by the Colchester Archaeological Group in 2003-5 at Teybrook Farm, Great Tey by Laura Pooley and Howard Brook**

**Four of the Citizen reports on the Mersea Island Discovery Programme are now available to read or download (PDF):**

1. Survey of intertidal remains adjacent to scheduled ancient monument 1013832 Tudor Blockhouse East Mersea, Essex. O.Hutchinson & D.Newman. September 2022
2. The intertidal archaeology of Monkey Beach Mersea Island, Essex Coastal and Intertidal Zone Archaeological Network Report. O.Hutchinson. September 2022
3. A mid-Saxon structure in the intertidal zone at Point Clear, River Colne, Essex O.Hutchinson & D.Newman. September 2022
4. A large mid-Saxon timber structure in the intertidal zone Sea View, Mersea Island, Essex Coastal and Intertidal Zone Archaeological Network Report. O.Hutchinson. September 2022

**Also found on our website the annual CAG Bulletins from 1958 to 2016**

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Please use the contact emails above and mark for the attention of specific committee member

### Notices

The Group's annual AGM will be on Monday 2<sup>nd</sup> October 2023

Membership fees. As agreed at the AGM the membership fees from the 1st October are: Single member £15.00. Student member £10.00. Joint members £25.00

A copy of the 2023/24 Membership renewal form can be found on the CAG website  
GDPR act. For a copy of our Data protection policy please contact the Membership secretary  
[membership@caguk.net](mailto:membership@caguk.net)