



Registered Charity No: 272098

ISSN 0585-9980

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Bulletin 430

December 2011



**THE MOLESEY BRONZE AGE SHIELD
RE-DISCOVERED**

BRONZE AGE SHIELD RE-DISCOVERED *Paul Gossage and Steven Baker*

A three thousand year old bronze shield, first found in 1864 on the bed of the River Thames near Hampton Court, has just been rediscovered.

It had last been known of in the ownership of a local resident, James Milner of Palace Road, Molesey, who had kept it safely until at the very least 1868, but more likely until 1882, and during those years he proudly displayed it at prestigious national locations. After it left Molesey, however, it became untraceable and was to all intents and purposes lost, despite efforts by various organizations and specialists to find it.

Seven years ago the authors resolved to track it down. At that stage, the little they knew about it was from the 'Book of Molesey' (by the late Rowland Baker who was Steven's father) in which there is an illustration and some text saying that the shield was found



The reverse of the Molesey Shield.

in the river at Molesey. Intrigued as to its whereabouts they made enquiries with the authorities which showed only two known documentary references to it. The first was a feature article in a prestigious antiquarian magazine of the era, and the second was when it was displayed at the London premises of the Society of Antiquaries in 1867.

Our fresh search included researching the entire family tree of the Milners who lived in Molesey until 1910, obtaining wills of the Milners, internet links across the world with relatives of the Milners, searching old newspaper records and contacting owners of obscure private collections of antiquarians who had connections with the shield.

Two years ago the British Museum put us in contact with Bronze Age archaeologist Marion Uckelmann, who had just finished a doctorate on all the European Bronze Age shields and was aware of its existence and equally intrigued as to its whereabouts.

Steven then unearthed a previously unknown record of the shield being displayed at the Leeds National Exhibition of Works of Art in 1868. This led to the discovery by researcher Janice Phelps of documentary proof that the shield returned home to Molesey, but the search came to another standstill for a year.

Then we asked Surrey Archaeological Society to do an in-depth search of its archives and their librarian, Hannah Jeffery, combed through all their records and pieced together three clues in an obscure document. Hannah realized that she had discovered a similar sounding shield which had been found near to where the missing shield had been located (described in the earliest documentary record as "between Hampton and Walton"), and this had gone to the Dorset private collection of Pitt Rivers, the famous archaeologist. Hannah passed this vital information to us, who passed it on to Marion, who immediately said it all "clicked". She realized that the missing shield is in the Hunt Museum in Ireland, and had been bought from the Pitt Rivers Dorset collection around 1970 with two other items that had provenances linking them to separate places in north-east Ireland. Because the shield had been



The Molesey Shield in the Hunt Museum.

bought with these two other items, it had been assumed it came from the same area, and had mistakenly been labelled the 'Antrim Shield'.

So at last, the mystery was unravelled and the shield has been found.

The shield is 64 cm in diameter, and its centre features a domed boss, to allow space for the warrior's hand, around which are eleven circular rings of ornate punched dimples. It is a superb example of Bronze Age craftsmanship and was created from a single block of bronze, forged at c600° C and then beaten ever thinner. It has been estimated that 'heating and beating' would have had to be repeated at least 200 times in order to create the shield. It would have been physically demanding, but it was also painstaking and delicate craftsmanship. Such expertise was amongst the heights of the technology of the day.



Detail of the central boss.

Archaeologists believe that the shield probably served a variety of purposes during its lifetime. Firstly, as a precious, beautiful and charismatic artefact in its own right, that would have been carried as a symbol of power, prestige and status by a leader of the community. It is also likely that it would have been used on ceremonial occasions, but as well as all this, its robust design means that it was intended for battle. Indeed it has some

damage which may have been inflicted in combat. The experts, however, believe that the final purpose of the shield was fulfilled when it was deliberately and ceremonially laid to rest in the river as a votive offering, never to be seen again.

Photographs by M. Uckelmann; courtesy of the Hunt Museum, Limerick

EXCAVATION AT COCKS FARM 2011

David Bird

The Society's Roman Studies Group has carried out another two-week excavation as part of the current programme of work at Abinger coordinated by Nikki Cowlard (for last year, including the results of magnetometer survey, see *Bulletin* 422). Although the weather proved challenging, with constant changes between wet and dry making interpretation of features more difficult on the sandy soil, all aims were more than achieved, with important results. It is probable that almost all the evidence is for Roman-period activity. Evidence for pre- and post-Roman occupation continues to be very limited, but, as would be expected on the Surrey Greensand, the excavation produced some worked flint, including core fragments and a very nice scraper. Three trenches were opened, one being an extension and continuation of last year's kiln trench. The Society's new camera and tripod again proved their worth.



Lower 'corridor' wall and junction with cross wall in trench 7 (photo Margaret Broomfield).

Trench 7, supervised by Emma Corke, was set through a gap in the hedgerow in order to provide a link between the features known to exist in the lower orchard area with those higher up in the best preserved part of the villa. The trench was much plagued by tree roots which could not be removed for safety reasons, but it was possible to locate the foundations of the southern wall of a room that was part of the range uncovered in 1995 and show that it had a tessellated floor, as well as a parallel wall 3m to the south. This wall was expected to be defining a corridor, but it proved to have a cross wall joining it to the higher wall and it may be that there was originally a double row of rooms. The trench cut across the line of Trench 1 (2009) and made clear that a stone 'platform' recorded

there was in fact rubble from the lower wall. It also provided information about the nature of the hedgerow, and made it easier to understand the way the site was terraced. Traces of a possible lower wall more or less on the line of the hedgerow and a continuation of the line of mostly *opus signinum* rubble found in 2009 are still open to interpretation.

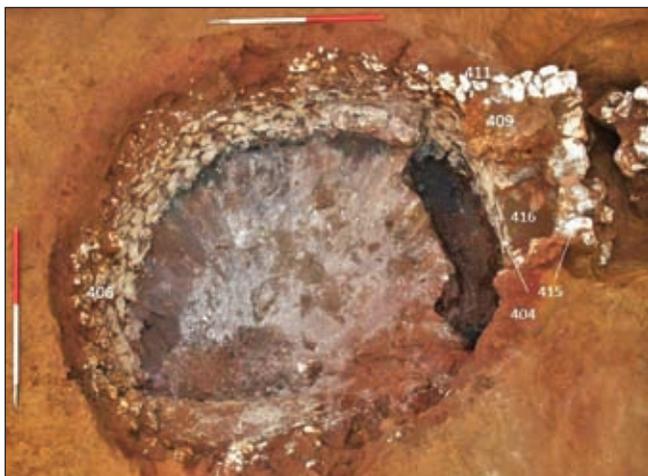
Trench 6 was supervised by Gillian Lachelin. It was placed in the centre of the field east of the villa to sample an area which had many anomalies showing on the magnetometer



Views of the upper and lower faces of the Lodsworth upper quern stone from trench 6 (photo Margaret Broomfield and Alan Hall).

surveys. The trench was over 30m in length and revealed a variety of features, but it was clear that these only survived where they had been cut into the subsoil. In places plough marks could be seen cutting the top of the natural. It was not possible to make sense of some shallow amorphous areas of darker soil, but one of these produced a large amount of Roman pottery and is presumably related to occupation. Three main features were found, all of which could be recognised on the magnetometer survey. One was a roughly v-shaped gully running at an angle to the main field system. It contained a considerable amount of Roman pottery (over 3kg) and two possible quern fragments. In the topsoil near this gully the upper stone of an Iron Age or early Roman Lodsworth quern was found, complete but very worn on one side. Further down the slope a small ditch was sampled (probably only its lower levels survived) that is likely to be part of the field system located by magnetometry; it produced a few sherds of Roman pottery. Between this ditch and the gully a wide spread of darker soil proved to be a shallow feature associated with a break in the slope that probably marked an east-west boundary visible on earlier maps. Finds of recent material were made here but the feature was found to overlie a deep probably circular pit (only half seen on one side of the trench) which is likely to be dated to the Roman period. The lower black fill with some charcoal was associated with a few Roman sherds. Taken altogether, the finds from Trench 6 imply an occupation and/or activity area which deserves further investigation, although it is unfortunately likely that it will be difficult to find much evidence for structures.

Finally, last year's Trench 4 was reopened and extended, and again supervised by Nikki Cowlard (whose work continued well into the week after the dig with assistance particularly from Emma Corke and Alix Smith). The whole area of the lime kiln was exposed, together with its servicing area. It was not fully excavated because of health and safety considerations, which also made it difficult to obtain a complete continuous section (although one was achieved, albeit in two parts), but enough was achieved to make it possible to understand its construction. Outside the kiln it was found that the natural subsoil sloped down towards the adjacent holloway much more rapidly than the current ground surface; the servicing area was thus markedly downslope from the kiln. This area or 'stokehole' was roughly bag-shaped in plan, about 2m wide, 2.9m long and 0.6-0.7m deep. It was carefully checked to make sure



Overhead view of kiln showing vent area to right. The kiln had been partially backfilled as a safety measure at this stage of the excavation (photo Margaret Broomfield).

that there was no evidence for a stokehole as deep as the floor of the kiln. Beyond its end, which was marked by a rough stone and chalk wall, the natural dipped more rapidly, possibly into a ditch but perhaps implying that an earlier version of the holloway was much closer to the kiln in the Roman period. There are some grounds for thinking that this holloway was the eastern boundary of the villa

estate and that it will have been the route used to bring chalk to the limekiln from the Downs to the north.

The kiln itself was a roughly circular feature 2.8m across, 2.8m long and about 2m deep from the top of the natural. The steep-sided pit had been lined with chalk lumps (down to 1.4m below natural) apparently intended to act as a rough wall, outside which the natural sand had been burnt red all the way round. Below the chalk wall was a layer of ironstone which had turned to powder presumably as a result of the heat. It was probably not a natural layer but a deliberately placed part of the structure, as it was at the same depth and of the same thickness all round – except in front of the ‘vent’ at the front (see below), where it was not present.

Where the chalk ‘walls’ could be examined in more detail it appeared that some clay had been used to hold the blocks in place at the front of the kiln, where they had been roughly dressed to a flat face in the area around and below a feature which came to be referred to as the ‘vent’. This was set at the surviving top of the kiln on the downslope side at the end of the ‘stokehole’, within side walls made of shaped chalk blocks set in and faced with clay together with some clay lumps. These walls turned outwards from the wall of the kiln and met a cross wall of chalk blocks to form a roughly box-shaped feature with a fired clay base sloping into the kiln. The ‘arch’ of the ‘vent’ itself was formed of pre-shaped clay blocks probably originally placed leather-hard in a corbelled arrangement and covered with a thin layer of clay as a facing. The top of the vent was not present and had presumably been removed by



View of the ‘vent’ from inside the kiln, showing remnants of clay block ‘arch’ on left, central chalk setting with sloping clay facing below, and shaped chalk blocks in kiln side below vent (photo Nikki Cowlard).

ploughing, and chalk blocks in the 'stokehole' fill beyond the back wall of the box-like feature were probably tumble from its back and side walls. The tumble overlay a layer of red sand and charcoal in the fill of the 'stokehole'. Was the 'box' perhaps the setting for a bellows?

It is likely that when the kiln went out of use, the whole feature was backfilled with more or less clean sandy soil, most likely the material originally dug out to make the pit. It would have been a serious hazard for man and beast otherwise. When this sandy fill was removed the lower part of the kiln was found to be full of fired chalk, sometimes forming very large lumps, except for one large area at a low level below the 'vent' area where only the sandy soil was present. There was no charcoal at all at the higher levels except at the base of the 'vent', but near the bottom of the kiln it was present in large quantities, even surviving as substantial pieces of wood.

Research continues to explain the working of the kiln. The elaborate 'vent' and the careful treatment of the kiln walls below it, coupled with the area of the lower fill clear of chalk and the way that within the kiln charcoal was only found at the lowest levels all seem to imply a system designed to deliver air to the base of the kiln. It may be that a rough wooden structure was built to keep a passage open from the vent down to the fuel placed at the lowest level of the kiln until the chalk charge had formed itself into an arch that maintained the passage even when the wood had burnt away. Some such explanation seems to be required in the absence of a low-level 'stokehole'.

It was clear that a Roman date was most likely for the kiln. This rested on three points: Shirley Corke has found nothing in the documentary records to indicate the presence of a kiln in this spot, which makes it probable that it must be at least as early as medieval; there are a few late medieval or early post-medieval sherds from the ploughsoil in the trench, but none were found in the fill of the kiln or associated with its working area; and by contrast three Roman greyware sherds were found associated with the working surface on the slope below the kiln (these must be at least a metre below the current ground surface and are the only Roman sherds found in the entire trench) and two large pieces of Roman tile were also associated with the area around the 'box' behind the kiln 'vent'. We have now received confirmation of a Roman date from radiocarbon dating of the charcoal in the base of the kiln, which gives between AD 70 and 134 at 68% confidence and 55 – 216 at 95%. The kiln is therefore likely to be associated with an early phase of villa construction at the site. It may be noted that Susan Pringle's report on earlier finds of painted wall plaster includes the comment that 'the relatively high quality of some of the finishes for a rural setting implies that the Cocks Farm villa was exceptionally prosperous in the early Roman period, particularly the later 1st and 2nd centuries'.

As usual, the excavation owed a great deal to a large number of people, and many thanks are due to them all. The team's backbone was provided by experienced members of the Roman Studies Group (who also provided many useful thoughts about the site as the excavation progressed), but it was also pleasing to welcome increasing numbers of newcomers. Nikki Cowlard set up the excavation with Emma Corke who arranged the necessary permissions and provided on-site facilities. Margaret Broomfield kindly coordinated recording and coped with the overhead camera in the absence of Alan Hall through ill health; the latter's enthusiastic presence on site was much missed. Bill Meads again provided metal detector expertise and other assistance. Finds were managed by Isabel Ellis and members of AARG. David and Audrey Graham provided key surveying expertise. This note was much improved by comments from the Steering Group, in particular those of Emma and Nikki as a result of their extra work on the kiln.

COUNCIL NEWS

A THANK YOU FROM SUE JANAWAY

I'd like to thank everyone for the wonderful card and presents you recently gave me as a parting gift from the Society. A special thank-you to everyone who signed the card – the largest card I have ever had!

The book on the life and paintings of my favourite artist John Craxton was a complete surprise. As many of you know, John and I love Crete and go there most years. John Craxton shared our love for the island and first moved there in the 1960s. He particularly liked to draw Cretan goats, which John and I meet on every walk in Crete.

The vouchers I will spend on a print or painting for our house. We have recently repainted our hall (a rare event in the Janaway household) and I have just the place to hang a picture – something bright and cheerful to remind me of my happy times at Castle Arch.

Thank you again.

CHRISTMAS AND NEW YEAR CLOSURES

The Office and Library at Castle Arch will be closed from Christmas Eve and will open again on Tuesday 3rd January 2012. Emma, Hannah and Mandy would like to wish all members a very merry Christmas and a peaceful New Year.

NEW MEMBERS

Emma Coburn

I would like to welcome the following new members who have joined the Society. I have included principal interests, where they have been given on the membership application form. If you have any questions, queries or comments, please do not hesitate to get in contact with me on 01483 532454 or info@surreyarchaeology.org.uk

Name	Town	Principal Archaeological and Local History Interests
Miss C Devereux	Great Bookham	Anthropology
Mrs A Gray	Normandy	History and Archaeology
Miss F Harrison	Upper Farringdon	
Jane Le Cluse	Billingshurst	Local History: Brockham, Betchworth, Buckland and Dorking
Mr A Simon	Wimbledon	SW London, General
Mr I Symes	East Horsley	All

OBITUARIES

ANN NOYES 1923-2011

The death of Ann Noyes has left a large gap in the Society as well as in her family and in Shere. In Shere church on 10 November eight members, from three generations, provided details of a many faceted life. She was an accomplished writer, her first published book a collection of the letters exchanged between the couple who would become her parents, under the title *Engaged in War*.

At Wimbledon High School she learned the Latin later to be useful when she turned her mind to local history. Hopes of going on to University were dashed by the War (and her more recent achievements indicate how far up the academic ladder she could have progressed). Her school was evacuated to Bath, and after a short experience working as a Land Girl, she started to train as a Nurse, from which

profession she failed to escape, moving up to become a Staff Nurse and later Ward Sister. Sympathy for the bottom end of society emerges strongly in much later historical work.

After marrying Tom in 1952 she became a Community Nurse in East London, particularly involved with people who had exceptional difficulties. They had four children. Time spent some in Africa provided the name "Twiga" given to their house in Gomshall. It is the Swahili word for a giraffe; it was also given to the imprint she used for her first two local history books. When she had the time she worked for a degree at the Open University, and later, in 1991-1992, for a Diploma in English Local History at what was to become Portsmouth University. It was after the move to Gomshall that she turned to local history.

The first work she produced, **Shere Poverty** (from Parish Workhouse to Union Workhouse; 1996) was based on the research she undertook for the Portsmouth Diploma. It gave her the opportunity to explore, and use, all the surviving eighteenth to twenty century resources for Surrey history, including the large number available for the extensive parish of Shere. Her careful thoroughness is demonstrated by the long list of acknowledgements at the beginning of the fifty page illustrated book, as well as the list of sources and index at the end.

Before the next booklet, **A Tannery in Gomshall**) came out (1997, reprinted 2003) she had joined the Shere and Gomshall Local History Society and it appeared under their aegis. It was undertaken in time to use the experiences of the last people who had worked in an enterprise existing on that site since at least 1568. Her attitude to what she was doing is clear in her acknowledgement to the former manager of the Tannery thanking him "for his help and guidance to one who started on this exercise with great ignorance of a large and very complex subject". She was steadily improving her paleographical skills and knowledge of Surrey sources, and produced the Poll Tax of 1380 for Shere and Gomshall in **Surrey History VI** (2001).

Here was someone who had skills and judgment invaluable to the Surrey Archaeological Society, especially to their new project of up-to-date village studies. The first book was entitled **Shere, a Surrey Village in Maps** (2001), and included areas now no longer part of Shere parish. The team thus included members from Gomshall and Peaslake and Ewhurst. In spite of this unusually wide coverage it did show the way to those that have followed, with a profuse use of maps and plans, clear explanation of what is covered (even if briefly), an index, list of sources and acknowledgments. It is in a sense almost Ann's book, dependent on "her commitment and steadfast leadership of the team in seeing the project through." The Forward mentions "the redoubtable and enthusiastic leadership of Ann Noyes". She also contributed to other volumes in this series: **Peaslake, a story of a Surrey Village** (2003) and **Gomshall, Peaslake and Ewhurst** (2010).

Throughout her life she continued learning, increasing her knowledge, adding new skills and looking out for new sources. She had wide sympathies and many friends, and will be much missed, perhaps nowhere more than in the Archaeological Society.

Shirley Corke

NANCY HAWKINS

Nancy Grace Mary Hawkins (née Cox), who died in October aged 89, was one of the co-founders (indeed among the principal guiding lights in the 1960s and 1970s) of the Mayford History Society, now renamed as the Woking History Society. She had already joined the Surrey Archaeological Society in 1966 and by 1971 was local secretary, a post she held for seventeen years. She soon organised an archaeology group in the Mayford History Society and under her direction it undertook the

excavations of the Romano-British farmstead sites at Woking Park Farm and Black Close, Mayford (published respectively in *Collections* 75 and 76), and a frustrating search for Zouch's monument in Woking Park. She co-led the evaluation fieldwork at the Late Upper Palaeolithic site at Parley Brook/Brockhill in Horsell in 1975 and 1977 (which Will Mills is now reviewing and will hopefully publish in the *Collections* or elsewhere as part of his formal evaluation of all the nationally important lithics recovered from the site in the 1920s). Nancy played an important part in the excavations at Sutton Park, where the team that she had built up formed the core of the excavation team (see the opening paragraphs and acknowledgements of David Bird's report in the most recent edition of the *Collections*). Her work in the Woking area led to her being a member of the Society's Excavations Committee from 1973-76.

Within the Mayford History Society she was Hon Secretary from its foundation until 1975, Chairman from 1979 until 1981 and then Vice-President until her death. She was a frequent contributor to that society's newsletter and, being an accomplished pianist, gave at the 2003 AGM probably the first performance in 140 years of the 'Royal Dramatic College Quadrille' written for the annual fair held at Crystal Palace of Woking's ill-fated home for retired actors.

From October 1975 to December 1978 she edited the Society's *Bulletin*, and thus served also on the Publications Committee. After a career at the Sorbo Factory she retired in the early 1980s and married a work colleague, Charles Hawkins, to whom she had been PA, on St George's Day 1981. Unfortunately he contracted multiple sclerosis early in their married life and Nan's outside activities were curtailed as she nursed him until his death on 31 January 2000. She was, however, able to assist the Society from home, being appointed Lectures and Information Officer by the then Visits and Symposia Committee, a post she held from 1990 to 1998, during which time she built up a considerable, but, regrettably little consulted, list of expert speakers and specialists from among the members of the Society.

More recently Nancy has been a stalwart member of the VSG group working on Old Woking; she passed her research notes about Old Woking to the team working on the village, and these will, on completion of the work, be deposited in the Surrey History Centre, along with the papers and photographs of the Parley Brook/Brockhill site and other matters which have been placed there by her nephew, Chris Smith (SHC ref 8889), and will link up with the formal archive in Guildford Museum. Chris has also deposited another collection of her slides of excavations, mostly from the Woking area, to the Society (ref: NL/HAWKINS). Chris is the son of Nan's sister Margaret, another founder member of the Mayford History Society, twice its Hon Secretary, and active in many other ways in its work. Now 91 she still lives in Mayford and we send our sympathy to her, Chris and her two step-children and nine step-grandchildren. The abiding memory of Nan is of a true and gentle lady, who nevertheless was the first professionally minded person to put Woking and its archaeology on the map of Surrey.

Richard Christophers

SURREY INDUSTRIAL HISTORY GROUP

THE RESEARCH FRAMEWORK CONFERENCE 2011 *Glenys Crocker*

The conference was held at the Letherhead Institute on 15th October, with a programme arranged by the Surrey Industrial History Group to cover a longer time span than the period of industrialisation.

The first lecture was given by Wayne Cocroft of English Heritage on the **National Heritage Protection Plan**, which aims to bring together work by EH and other

partners and is to run from 2011 to 2015. He explained the structure of the plan, which can now be seen on the EH website. 'Measure 4', about assessing character and significance, was of particular relevance. It contains 17 'activities'. These include subjects such as field systems, battlefields and Pleistocene and Early Holocene archaeology as well as several concerned with industry and with 20th century heritage. Wayne selected 'Twentieth Century Military Heritage', which has been the subject of much of his own recent work, for example on the archaeology of the Cold War. In particular he discussed the disposal site of the underground stone quarries at Corsham in Wiltshire, which were reused by the Royal Naval Stores Depot. He also discussed the Hoo peninsula on the Medway, which has been proposed as a site for a new London airport. This has the kind of remains - of salt and gravel working, cement works, explosives works, an ordnance depot, plant for power generation and radio communications - that pose problems for industrial archaeology because of their massive scale.

David Bird followed with a talk on Aspects of the **Roman tile kiln industry**. This used new technology and its early products were for high-status buildings. It expanded quickly and tile stamps range from the Imperial and Classis Britannica stamps to those of towns and ordinary civilian tileries. These show a significant level of literacy among craftsmen. More research is needed on modes of production, for example in the matter of scale in relation to demand. One can distinguish between a heavy sector for very large deliveries in cities and a lighter one for smaller and more varied markets. The processes of manufacture - digging, weathering and preparing clay, moulding the tiles, drying and firing them - were illustrated with photographs taken at the local Swallow's Tile Works in Cranleigh shortly before it closed in 2008, as well as examples from Romania and China. Matters to consider include fuel supplies, the location of tileries, for example in relation to transport and land ownership, the design of kilns, and which way up tegulae were made.

Jan Spencer, newsletter editor and webmaster of SIHG, is making a study of **animal-powered engines** worked by rotary movement. He showed a power graph of the various animals known to have been used, with horses and camels at the top, through oxen, mules and buffalo in the middle to donkeys, and listed a wide range of applications with many illustrations, including corn milling (Pompeii), knife grinding, driving a pug mill (Compton pottery), hauling ships, working cranes in cathedrals, operating a pile driver in the construction of Westminster Bridge and turning spits for cooking - there was a special breed of Turnspit dog, which has now died out. Several illustrations were presented as moving images. These included an experimental reconstruction of a Roman bucket chain for raising water at the Cranborne Ancient Technology Centre in Dorset, complete with sound, and an animated diagram of how a recently inspected horse wheel at Cobham Park might have worked with planetary gear. Jan showed a map of known sites in Surrey and nearby counties. He thinks there are many more examples to be discovered and indeed there were some suggestions at the meeting, including St Philomena's at Carshalton. This project looks likely to run for some time.

The presentation on the **Glass Industry of the Weald** was in two parts, the first by Colin Clark, who welcomed the inclusion of Wealden Glass in the National Heritage Protection Plan, as outlined by Wayne Cocroft in the first talk. He outlined the history of the industry and noted previous work on the subject by the Rev. T S Cooper, S E Winbolt (1933), G H Kenyon (1967) and the excavations by Eric Wood in the 1960s at Blunden's Wood and Knightons. Both of these were medieval sites and no excavations have been carried out for the later period (1570-1615) when French technology had been introduced. The stages of glass making were outlined. The fuel used was wood, not charcoal. The inclusion of cullet, broken glass waste brought back by distribution merchants, was an early example of recycling. There is no proof

that coloured glass was made in the Weald and those fragments that are known are thought probably to be cullet.

Tom Munnery's contribution on SCAU's Wealden Glass Project was delivered in the event by his colleague Wayne Weller, who was thanked for standing in at short notice. The aim of the project is to define the scale and extent of the industry, confirm accurately the locations of sites, of which nearly 50 are known, and assess their condition. Application for funding has been made to English Heritage.

The next talk was on **Archaeological Evidence for Extractive Industries** by Paul Sowan, who, following on from the previous speaker, first commented on the absence of an early glass industry in east Surrey. The large deposits of sand there were not exploited for a hundred years after the glass industry in south-west Surrey ended. There is hardly any documentary record of the extensive and varied sand workings under Reigate. Regarding archaeological evidence, one has to consider whether a hole in the ground was made primarily for the hole or for its contents, or for both. It can be difficult to distinguish between man-made and natural features. It is useful to have mapping of industrial and transport sites that pre-dates the works. The British Geological Survey is now mapping made ground. It is a challenge to obtain the O.S. water-and-contours-only maps that were available in the 1930s and try to locate features. There were questions about the kind of chalk used for lime-burning. The major limeworks at Dorking and Betchworth made greystone lime from the Lower Chalk, which contains clay. It sets under water and is therefore known as hydraulic lime. There are no flint mines in Surrey and only two chalk quarries for building stone, as distinct from chalkpits for lime, at Guildford and West Humble.

Gordon Knowles gave the final talk on **Surrey's Aviation Buildings**. He showed many historic photographs, for few associated structures survive, compared with those of the contemporary motoring scene. The whole industry started and finished within the 20th century. It began in the first decade with A.V.Roe's efforts to become airborne at Brooklands in 1907 and, successfully, in 1908, the year when the first sustained heavier-than-air flight in Great Britain was made by Samuel Cody at Farnborough. The industry ended in Surrey with the closure of the BAE factory at Dunsfold in the year 2000. In between, Brooklands became a centre of club flying and flying schools, and of aircraft manufacture by Vickers and others. Manufacturing was also developed at Kingston by Sopwith, followed by Hawker, which also took over the wartime airfield at Dunsfold. Surrey also had several early airports, of which Croydon was the world's first international terminal. Croydon's control tower survives and its memory is preserved by the Croydon Airport Society. The Brooklands Society covers both the aviation and motoring heritage. Some structures survive at Brooklands, including the first flight ticket office (1911) and Blue Bird restaurant, the stratospheric chamber and the office of Barnes Wallis, who designed the Wellington bomber. Manufacturing sites have been redeveloped but there is scope for recording work at Dunsfold. The history of aviation in Surrey is a large subject and fortunately a detailed summary was given by Sir Peter Masefield in a lecture to the Surrey Local History Symposium in 1985. This was published by Phillimore for the Surrey Local History Council in 1993, entitled 'Surrey Aeronautics and Aviation, 1785-1985'.

The Society is grateful to Surrey County Council Heritage Conservation Team for its support of the research framework conferences. The theme for autumn 2012 will be Local History.

PREHISTORIC GROUP

MANGLES COLLECTION

Rose Hooker & Jen Newell

The lithics section of the Prehistoric Group has recently reassessed the Mangles Collection held by Guildford Museum. This collection has now been itemised on a spreadsheet held by the group and used by the museum in the formation of a database. There are over 100 implements, a third of which are unprovenanced, and the rest of the collection is largely from sites in Surrey, Sussex and Hampshire, with a number of scrapers, axe fragments, blades and hammerstones; mostly attributable to the broad dating range of the Neolithic. Amongst the collection from Sussex are a number of implements from Cissbury including a probable Early Neolithic handaxe which looks like a Palaeolithic ficron, and induced much discussion.

The collection was deposited at Guildford Museum by Miss Mangles in 1931, but there was no other information available. However some research has shown that the collector was Henry Albert Mangles (1833-1908), a scion of a prominent Guildford family. His lithics collection was well known to the Surrey Archaeological Society in the nineteenth century as they are mentioned by Lasham in the *Collections* of 1892. Henry Mangles was also a member of the Geological Society to which he had been elected in 1890 and his obituary in their Quarterly Journal in 1909 notes that 'he was very much attached to geology and a keen collector of flint-implements'. He had acted as Director on two of their excursions to Farnham when he exhibited a series of implements from the Farnham Gravels. The obituary also recorded that he was well know to horticulturalists and had received many awards from the Royal Horticultural Society.



The Cissbury 'handaxe'.

In fact, he had inherited a plant collection from his brother James (1832-1884) who lived in Valewood, Haslemere and had been one of the earliest rhododendron collectors and hybridisers, and Henry continued this work. In 1873, a house had been built on open heathland for Henry at Littleworth Cross, Seale, and much of the plant

collection survives. Gertrude Jekyll lived nearby at Munstead (from where an axe fragment in the collection was collected) and knew the family. Visiting Littleworth Cross in May 1889 she was introduced to Edwin Lutyens, who was designing a cottage and garden buildings for Henry, and their famous collaboration began. Henry lived in Seale with his sister Clara who stayed there after his death until her own in 1931.

Many of the Mangles family are equally noteworthy. James (1762-1838) and John (1760-1837) Mangles owned three ships which traded with the East Indies and Australia in the late eighteenth and early nineteenth centuries. This led to a close relationship with the East India Company and the Bengal Civil Service who employed many of the sons and grandsons of these men. The family also had a close interest in the Swan River Colony of Western Australia, and Mangles Bay in Western Australia is named after them as is the Western Australia floral emblem (*Anigozanthus manglesii* or the Red and Green Kangaroo Paw). Elizabeth Mangles, a daughter of James Mangles, married Sir James Stirling the Governor of Western Australia who named his residence after the Mangles family home (Woodbridge House). In 1829, James Mangles had retired and bought the Wanborough estate from Lord Onslow and in 1832 he became MP for Guildford until his death in 1837. His son Ross Donnelly (1801-1877) also represented Guildford from 1841-58. The connection with India continued, and Ross Lewis (1833-1905) the son of Ross Donnelly is one of only five civilians to be awarded the VC; in his case, for heroism during the Indian Mutiny of 1857. John Mangles had a son James (1786-1867) FRS, who travelled extensively in the Middle East and to Australia and commissioned collections of seeds and plants to be sent to England. All in all, a most remarkable family.

This work would not have been possible without the contributions of our current members: Roger Ellaby, Judie English, Robin Tanner, Chris Taylor, Ken Waters and Keith Winsor. Although space is limited we welcome enquiries from anyone who might wish to participate as the opportunity arises.

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- Lasham F 1892 Palaeolithic Man in West Surrey *SyAC* **11**, 25-29
Lasham F 1892 Neolithic and Bronze Age Man in West Surrey *SyAC* **11**, 243-51
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ROMAN STUDIES GROUP

THE DEVELOPMENT OF INDUSTRY IN SOUTHERN ROMAN BRITAIN
Day Conference 2012
Saturday 12th May 2012
9.30am-5.30pm
Chertsey Hall, Chertsey

The Roman Studies Group's major biennial Conference in 2012 will focus on 'The Development of Industry in Southern Roman Britain'. Themes will be the development of the Wealden Iron Industry, Metal Working, Glass Making, the Leather Industry and the Pottery and Tile Industries. Speakers will include Justine Bayley, Ian Betts, Jeremy Hodgkinson, Jackie Keily and Margaret Broomfield, Louise Rayner and John Shepherd.

Cost: £15 to include coffee/teas. A two-course hot lunch available on the day for approx. £8

Further Information: Full details, booking arrangements and travel directions will be available under "Events" on the Society's website early in January. There will be a further announcement in the Bulletin and Roman Studies Group members will be emailed.

SURREY LOCAL HISTORY COMMITTEE

SURREY'S SPORTING LIFE Annual Symposium

The Local History Committee's Annual Symposium took place at Shalford Village Hall on Saturday 22nd October. In keeping with the run up to the Olympics, the theme this year was Surrey's Sporting Life. Lesley Ronaldson, a Real Tennis professional from Hampton Court kicked off the day's programme with a talk on **Tudor Sports and Pastimes**. She was followed by Jim Faulkner from the Surrey County Playing Fields Association who told us about **Surrey Playing Fields from King George V to Queen Elizabeth II**. We then saw a compilation of archive film, narrated by Phil Cooper from the Surrey History Centre. Phil returned to the stage after lunch to give a talk about **The 1948 Olympic Torch Run through Surrey** and he was followed by Matthew Alexander who gave an entertaining talk on **Shrovetide Football in Surrey**. The afternoon was concluded by Mike Fanya with a talk on **The Early History of Cricket in Surrey**.

Local History Societies attending put on some very interesting displays and the Gravett Award for the best display was awarded to Egham by Runnymede Historical Society.

Photographs of Sally Jenkinson, of the Surrey History Centre presenting the certificate for the Gravett Award to Jill Williams will be sent separately.

RESEARCHING SURREY'S INFRASTRUCTURE Deposited plans of roads, railways and canals of Surrey 1789 to 1982 *Saturday 28th January 2012, 2pm* *Surrey History Centre*

A meeting organised by the Surrey Local History Committee.

Plans of proposed roads, railways, canals and public utilities, such as gas, electricity and water, which required access to private land and which involved the historic county of Surrey were deposited at the Surrey Quarter Sessions. Not all of these proposals came to fruition. The plans were originally designed to be presented to Parliament to bring in a bill to authorise the construction, in order to give the earliest opportunity for people to object to the proposed route. Another copy will be found in the Parliamentary Archives (previously the House of Lords Record Office).

These plans are often very useful maps showing details of the land they cross. The plan is usually accompanied by a reference book giving the ownership of each plot of land. Surrey History Centre holds plans deposited at the Quarter Sessions from 1789 to 1888 and also later plans submitted to Surrey County Council since then. The early plans are often the earliest detailed record available before the tithe map.

The main limitation is that for roads, railways and canals the plans only covers a narrow strip alongside the proposed route. However if there are several adjacent routes they may overlap.

The linear nature of these plans makes them hard to catalogue topographically.

There is a handlist available in the search room of plans listing which parishes each crosses.

Gerry Moss



Plan of a reservoir fed by Vauxhall Creek for the South London Waterworks at Kennington dated 15 Jul 1805 (QS6/8/20/1 by permission of Surrey History Centre).

MISCELLANY

REIGATE PRIORY'S STOWAWAYS

Giles Graham-Brown

As many of the original documents for the history of Reigate Priory are lost, we feel a great deal of gratitude to the historians who have recorded details which otherwise we would never know. One such is Thomas Cox, for it was he who was the first to tell us the following: Ralph Hosier and William Sebern were benefactors who later took the habit while Adam was prior in 1298; Edmund Stretham was its prior in 1534; and the tennis court and glasshouse were destroyed by fire in 1575.

However, although most of the above has been absorbed by subsequent Reigate historians Edmund Stretham has been omitted – and with good reason, because it's absolutely certain that John Lynden was prior from 1530 until its dissolution in 1536. So Stretham must have been the prior of another religious house. And a quick search on the internet reveals that an Edmund Stretam was prior of the Crutched Friars, London.

Mystery solved, but curiosity piqued; so one goes to the established authorities – VCH *London*, Dugdale's *Monasticon*, and Stow's *Survey of London* – to read further about the Crutched Friars of Hart Street, London. All three say that Ralph Hosier and William Sabernes were benefactors who later took the habit around 1298 when Adam was prior. Dugdale refers to Stow about the glasshouse; and Stow is worth quoting as, writing in the 1590s, he was recording events which were fresh in his memory: "In place of this church is now a carpenters' yard, a tennis court, and such like. The friars' hall was made a glass-house, or house wherein was made glass of divers sorts to

drink in; which house in the year 1575, on the 4th of September, burst into a terrible fire, where being practiced all possible means to quench, notwithstanding as the same house in a small time before had consumed a great quantity of wood by making of glasses, now itself having within it about forty thousand billets of wood, was all consumed to the stone walls, which nevertheless greatly hindered the fire from spreading any further.”

So one has to conclude that Cox muddled some of his research material on Reigate Priory with that of the Crutched Friars, London. In his defense both houses were called Holy Cross, and he didn't get *everything* wrong. However, historians of Reigate Priory must jettison Hosier, Sebem and Prior Adam from the 13th century section of their work, and the tennis court, glasshouse and fire from the 16th century section.

REFERENCES

Cox, Thomas, *Magna Britannia Antiqua & Nova: Staffordshire - Warwickshire*, pp.448f.
 Dugdale, William, *Monasticon* Vol VI, pt 3, p.1586
 Stow, John A *Survey of London* (London, 1893), pp.166f.
 VCH *London*: Vol I, pp.514-16 (via british-history.ac.uk).

THE SEAL OF STONE FROM – COBHAM!

David Williams

A large, well-preserved and impressive medieval seal matrix was found in Cobham in August and was brought to me by one of my regular metal detectorists. The seal, which measures 74mm x 45mm, shows Mary seated on a throne and holding aloft a flower. On her lap is the Christ child who holds a book. The inscription reads:

+S'ECCE SCE MARIE ET SCI W(V)LFADI MARTIRIS DE STANIS



The Seal of Stone.

This can be read as The Seal of the Church of Saint Mary and Saint Wulfad the Martyr of Stanis. Initial enquiries looked at the possibility that this originated from a church in nearby Staines. However, Saint Wulfad is not a local saint and Googling soon showed that he is closely connected with the town of Stone in Staffordshire. This is in fact the seal of Stone's Augustinian Priory. The Augustinian Priory at Stone was founded in the 12th century, possibly around 1138-47, and was set up as a daughter-house of Kenilworth Priory in Warwickshire. It was a small community, with 8 canons and two novices in 1521. The house was dissolved in Spring 1537. However, the Priory Church continued to be used as the Parish Church until it was demolished and replaced by the current church of St. Michael & St.Wulfad in 1758.

As far as can be ascertained there is no known connection between Cobham and Stone. Although the medieval Earls of Stafford had lands in Surrey Cobham is not amongst them, so the seal's arrival in Surrey is likely to remain a mystery.

There is much interest in the Stone area and reports have appeared on BBC Radios Stoke and Surrey. At the time of writing negotiations are taking place between the finder and landowner and interested parties in Stone with the eventual intention of displaying the seal locally.

The PAS database reference for the seal is SUR-B74173

SURREY EXCAVATION SITE CODES

The Research Committee would like to encourage a unified approach to the matter of excavation site codes in Surrey. As it has not proved possible to establish an overarching authority to issue codes as happens in some areas, the Committee has decided that at least a facility can be provided whereby those willing to take part can register their own codes and check to see if a proposed code would duplicate one already in use. A page has been created on the Surrey Archaeological Society website where anyone, directing an excavation in the county, can input their chosen site code. Codes may also be registered retrospectively but it is not currently proposed to pursue all old codes.

In order to register a site code contact Emma Coburn at info@surreyarchaeology.org.uk and to check those already registered look at the Research page on www.surreyarchaeology.org.uk

It is hoped that anyone, including professional teams, carrying out fieldwork in Surrey will use this facility which will enable all excavation codes to be accessible to researchers.

BOURNE HALL MUSEUM CLUB

A club for children 8 plus who love history

Events in 2012

14th January	The Witchfinder General
11th February	Noble Knights and the Battle of Agincourt
3-4th March	Herald of Spring
10th March	Ancient Greeks
4th April	An Audience with King Henry VIII
11th April	An Audience with Queen Victoria
12th May	Florence Nightingale
9th June	The History of Toys
14th July	Roman road builders
2nd-20th July	Community Big Dig at Hatch Furlong

Further information from David Brooks, Museum Assistant, tel. 0208 394 1734; email brooks@epsom-ewell.gov.uk or www.epsom-ewell.gov.uk

LECTURE MEETINGS

4th January

“30 years in the Metropolitan Police” by Bob Ferris to Epsom & Ewell History & Archaeology Society at St Mary’s Church Hall, London Road, Ewell at 7.30 for 8 pm.

7th January

“What the butler saw; Victorian life below stairs” by Alison Gowans to Carshalton & District History & Archaeology Society in Milton Hall, Cooper Crescent, off Nightingale Road, Carshalton at 3 pm. Visitors welcome £2.

9th January

“More about Flexford” by David Calow to Guildford Archaeology and Local History Group in The Meeting Room, United Reformed Church (side entrance), Portsmouth Road, Guildford at 7.30 pm. Visitors welcome £3.

10th January

“Results of the Archaeological Thames Link Project” by Jo Taylor to Southwark and

Lambeth Archaeological Society at The Housing Co-op Hall, 106 The Cut, almost opposite the Old Vic Theatre at 7 for 7.30 pm. Visitors welcome £1. Enquiries 020 8764 8314.

10th January

“The Surrey Constabulary” by Robert Bartlett to Westcott Local History Group in the Westcott Reading Room at 7.45 for 8 pm. Visitors welcome £1.

14th January

“Ottershaw Park Estate” by John Athersuch to Walton and Weybridge Local History Society in Weybridge Library Lecture Hall at 3 pm.

16th January

“The Brentford 1802 election and its Richmond connections” by Christopher May to Richmond Local History Society at the Duke Street Church, Richmond at 7.30 for 8 pm. Visitors welcome £1. Further information from Elizabeth Velluet tel. 020 8891 3825 or www.richmondhistory.org.uk

16th January

“The Lost Countryside: images of rural life” by Chris Shepheard to Surrey Industrial Group in Lecture Theatre F, University of Surrey, Guildford, 7.30-9.50 pm. Part of 36th Series of Industrial Archaeology Lectures. Single lectures £5, payable on the night. Enquiries to Programme Co-ordinator Bob Bryson, Tel: 01483 577809,

18th January

“The Campaign in German East Africa 1914-1918” by Tim Tawney to the Surrey Branch of the Western Front Association in the Day Centre, Lushington Drive, Cobham, KT11 2LY (behind Waitrose) at 7.45 p.m. Visitors welcome by £3 donation.

20th January

“Gatton Park; bringing the 18th century back to life” by Glynn Sherrat to Leatherhead & District Local History Society in the Abraham Dixon Hall, Letherhead Institute (top of High Street) at 7.30 for 8 pm. All welcome £1.

21st January

“Merton’s Railways” by David Luff to Merton Historical Society at Christ Church Hall, Colliers Wood at 2.30 pm. Visitors welcome £2

27th January

“The Mayors of Guildford” by Terence Patrick assisted by Matthew Alexander to Send & Ripley History Society in the Ripley Village Hall at 8 pm.

28th January

“Balchins of Bramley” by Jill Bryant to Bramley History Society in Holy Trinity Church at 2.30 pm. Admission £1 members and £2 non-members.

24th January

“The Role of the Surrey Archaeological Society” by David Calow to Surrey Industrial Group in Lecture Theatre F, University of Surrey, Guildford, 7.30-9.50 pm. Part of 36th Series of Industrial Archaeology Lectures. Single lectures £5, payable on the night. Enquiries to Programme Co-ordinator Bob Bryson, Tel: 01483 577809, meetings@sihg.org.uk

26th January

“Canaletto along the Thames” by Nick Pollard to Egham-by-Runnymede Historical Society in the Main Hall of the Literary Institute, High Street, Egham at 8 pm. Visitors welcome £2.

4th February

“City customs and traditions” by Pete Smith to Carshalton & District History & Archaeology Society in Milton Hall, Cooper Crescent, off Nightingale Road, Carshalton at 3 pm. Visitors welcome £2.

6th February

“London bridges and their builders” by Michael Day to Woking History Society at Mayford Village Hall, Saunders Lane, Mayford at 7.45 for 8 pm. Visitors welcome £2.

7th February

"The History of the London Underground" by Tony Earle to Surrey Industrial Group in Lecture Theatre F, University of Surrey, Guildford, 7.30-9.50 pm. Part of 36th Series of Industrial Archaeology Lectures. Single lectures £5, payable on the night. Enquiries to Programme Co-ordinator Bob Bryson, Tel: 01483 577809, meetings@sihg.org.uk

8th February

"Domestic history from Norman times to the present day" by Lucy Worsley, presenter of the BBC series "If Walls Could Talk", to the Domestic Buildings Research Group at East Horsley Village Hall, Kingston Avenue, East Horsley at 6.45 for 7.15 pm. SyAS members and up to two friends per member are welcome, £6 per head (includes refreshments). Pre-booking essential, cheque payable to 'DBRG' to Carol Coyne, 64 Dudley Road, Walton-on-Thames KT12 2JX, with SAE (enquiries Tel: 01932-226374).

10th February

"The city of Akhenaten (and how it was uncovered)" by Chris Naunton to Richmond Archaeological Society in the Vestry Rooms, Paradise Road, Richmond at 8 pm. Visitors welcome by donation.

13th February

"The Houses of Richmond Park" by Max Lankester to Richmond Local History Society at the Duke Street Church, Richmond at 7.30 for 8 pm. Visitors welcome £1. Further information from Elizabeth Velluet Tel: 020 8891 3825 or www.richmondhistory.org.uk

14th February

"The Surrey hills" by Jane Garrett to Shere, Gomshall and Peaslake Local History Society in Shere Village Hall at 8 pm.

15th February

"The Platoon" by Andy Robertshaw to the Surrey Branch of the Western Front Association in the Day Centre, Lushington Drive, Cobham, KT11 2LY (behind Waitrose) at 7.45pm. Visitors welcome by £3 donation

DATES FOR *BULLETIN* CONTRIBUTIONS 2012

There will be six issues of the *Bulletin* next year. To assist contributors relevant dates are as follows:

431	Copy date	6th January	Approximate delivery	6th February
432		2nd March		2nd April
433		4th May		4th June
434		6th July		6th August
435		21st September		22nd October
436		16th November		17th December

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Next Issue: Copy required by 6th January for the February issue.

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