

Conference and AGM

We look forward to seeing as many of our members as possible at this year's annual conference held jointly with Kent Archaeological Society in Canterbury on **Saturday 12 November** on the theme of 'Agriculture, Industry and Trade in the Roman South-East'. Chaired by Paul Booth, the day will feature a full programme of speakers who will be providing updated research and insights on new discoveries in all three counties carried out since David Bird's 2017 publication on the topic.



Council for
British Archaeology
South East

The background of the conference poster is a photograph of several dark, irregular fragments of Roman pottery or stone, some with lighter, possibly calcified or mineralized areas.

**Agriculture, Industry and Trade in
the Roman South East**

Saturday 12 November 2022 (10:00-17:00)

**Grimond Lecture Theatre 1, University of Kent at
Canterbury CT2 7NX**

Speakers include James Gerrard, Anne Sassin, Philip Smithers, Louise Rayner, Martyn Allen, Damian Goodburn & Lindsay Banfield

Tickets £15 KAS & CBA-SE members / £20 non-members
/ student bursaries available

Programme & booking via Eventbrite at kentarchaeology.org.uk

Tickets are priced at £15 for members, with student bursaries also available. Please visit our website for the booking link and further details.

Programme

9.30–10.00 Registration

10.00–10.10 Chair: Paul Booth, Welcome and introduction

10.10–10.50 James Gerrard (Newcastle University), ‘Living by the Medway Marsh: Roman and early medieval activity at Grange Farm, Gillingham Kent’

10.50–11.30 Anne Sassin (Kent Downs AONB), ‘Gods and grains: new insights into ritual and agricultural activity at Lullingstone Roman Villa, Kent’

11.30–11.50 Tea & coffee break

11.50–12.30 Philip Smither (West Berkshire Heritage), ‘Re-investigating trade at Richborough’

12.30–13.10 Louise Rayner (Archaeology South-East), ‘New findings, old archives: recent research on Roman pottery’

13.10–14.20 Lunch

14.20–15.00 Lindsay Banfield (York Archaeology), ‘Making flour the German Way: imported lava querns and millstones in Roman Britain and Sussex’

15.00–15.40 Damian Goodburn (Museum of London Archaeology), ‘Evidence for Roman woodworking and woodlands in the SE of England’

15.40–16.00 Break

16.00–16.40 Martyn Allen (Oxford Archaeology), ‘Striking while it’s hot: new evidence for Roman iron production on the Bexhill–Hastings Link Road, East Sussex’

16.40–16.50 Closing remarks

This year’s AGM will be held online via Zoom on **Thursday 8 December** at 20.00, following a free special lecture by Dr Sophia Adams on ‘Battle of the Bronze Age Hoards: Havering versus Boughton Malherbe’ at 19.00. The lecture is open to all, but [registration](#) is required in advance. Members are invited to then stay online for the AGM. Please visit our website for more details and for the registration link.

Photograph of the hoard as received by the Portable Antiquities Scheme (PAS CC BY)



Surrey

Surrey Archaeological Society

The Surrey Historic Environment Research Framework (SHERF) conference is to be held on **Saturday 26 November** via Zoom on the theme ‘Defensive Structures: Symbols of Power?’ Booking is available online from surreyarchaeology.org.uk. Other upcoming Society events include our Roman Studies Group’s full programme of online talks for the winter/spring, now listed on the website as with those for the Surrey Industrial History Group. The Medieval Studies Forum is also running an important workshop and training day on church graffiti in Cobham on **Tuesday 15 November**, followed by an online lecture on Merton Priory (and the group’s annual AGM) on **Thursday 17 November**. Please visit the website for all details for these and other events.

During the summer heatwave, the annual dig at Abinger continued and has revealed another probable Iron Age building. The director, Emma Corke, will be speaking about this at the Annual Symposium ‘in person’ event on **Saturday 18 March 2023** in the Ashted Hall. Other talks are confirmed from Foundations Archaeology on prehistoric Spelthorne and from AOC on Mesolithic and Neolithic pits from Mercers Farm. There will also be some final words on researching Old Woking and a presentation about the publication on dendrochronological studies of Surrey medieval buildings.

The Society’s outreach work has continued with a number of heritage outreach sessions covering a wide range of audiences. This includes a special artefact handling session which was arranged for Seekers at Woodlarks, a local charity working with visually impaired adults at Woodlarks campsite in Tilford, environmental processing and LiDAR sessions for the Chertsey Young Archaeologists’ Club, and both KS2 and KS3/4 school sessions, including a Raising Aspirations talk to students at Oxted School. Further outreach work will continue over the winter, including projects derived from the Surrey LiDAR Portal.



Surrey County Council Historic Environment Planning team

The Covid-19 Pandemic was strange times for all of us, but as part of a wider local authority organisation, work for Surrey's Historic Environment Planning Team continued as usual, albeit in altered circumstances with the majority of the team working from home. During that period Surrey County Council sold off the headquarters building of County Hall in Kingston Upon Thames and relocated to a number of different (some new) sites across the county. In addition a new policy of ‘Agile Working’ was instituted,

involving reduced office space and a more fluid and flexible working environment. Needless to say this hasn't been without some challenges and the implications of this have had wide-ranging service impacts.

The team, including the county Historic Environment Record, is now based at Quadrant Court in Woking. The limitations on office space mean that visits to the HER are difficult at present and for the time being at least better access to material can be provided digitally rather than in person. The team remains in place however and is structurally located within the council's Planning Department as before. A number of projects are underway resulting from the changes, not the least of which is an aim to significantly increase the digital holdings of both the HER and the wider team, to make our service provision more fully mobile in line with the current council policies. With over 50 years of material this will be no easy or rapid task, but we're both keen and hopeful to see this carried out as quickly as we can. Another project recently completed has been the compilation of new or updated Local Lists for six of Surrey's District and Borough planning authorities. Local listing ensures that heritage assets of lesser than national importance, but nonetheless noteworthy status, are recognised within the planning process for the value they contribute to the area, and unlike nationally-designated sites can include a wide array of features that local people consider to be important. With Mole Valley, Woking, Elmbridge, Epsom & Ewell, Surrey Heath and Tandridge taking part in the DCMS (as was, now DLUHC) funded project, Surrey will now have an up-to-date Local List in all the Boroughs, with the remaining five authorities having completed theirs recently also. Another project the team has recently followed through has been the creation of a contingency programme to allow for the professional recovery of archaeological discoveries made by members of the public, meaning that should significant finds be made outside of the context of paid or previously-arranged work, measures are now in place to ensure they can be retrieved in a controlled and measured way to maximise the collection of any associated information.

Normal 'Business as Usual' services continue. As staff are still based largely away from the offices, access to paper records is less immediate than it was previously, so we'd ask that some patience be exercised with regards to enquiries that might require these, particularly about historic archaeological projects in the County and their reports. However, as always, staff here are keen to assist with any enquires made. Contact details for team and further details about the various services the team offers can be found at <https://www.surreycc.gov.uk/land-planning-and-development/heritage-and-planning>.

Rose Hooker

*(with contributions by Anne
Sassin and Tony Howe)*

Sussex

As winter beckons, the various archaeological organisations in Sussex have been gearing up for both a return to live (in-person) or on-line lectures, live day schools and post-excavation finds processing, and a significant decrease in fieldwork compared with that undertaken in the spring and summer months.

Sussex Archaeological Society

Thus, at the Sussex Archaeological Society (SAS) a programme of on-line archaeology evening lectures is due to start at the beginning of November. Whilst viewing such lectures is free for SAS members, non-members are also welcome but are asked to pay £5 for each lecture. In August a live meeting of the Sussex Archaeology Forum was held in Lewes, this being the first such meeting for nearly three years, the previous programme (three such meetings a year) having been cancelled due to Covid issues. The recent meeting was important as it resulted in local society representatives, archaeological planners and others to meet again, report on work in hand, and to network generally. Readers are reminded that the next deadline for applications to SAS for the 'Sally Christian Archaeology Bequest Fund' for funding for practical training course and conference fees, etc, is **17 February 2023** for awards in March (see www.sussexpast.co.uk for further details).

Senior staff changes at SAS have continued, with recently appointed CEO Andrew Edwards leaving in September. Taking Andrew's place, but as 'Executive Director', is former Head of Historic Properties at SAS, Leanne O'Boyle. Another vacancy has also been filled, with Izzy Roberts taking on the role as Membership Secretary. At the SAS AGM in October, the Chair of Council, Amanda Jones, was re-elected as a trustee, whilst Dr Paul Basu, John Orna-Ornstein and Sarah Watson were elected as new trustees to replace long-serving trustees Lys Drewett, Jan Oldham and Peter Vos, who all stood down from Council having completed the maximum stint allowed of three terms of three years. In July most of the annual subscription rates for belonging to SAS were raised, that for individual members rising from £40 to £47.

Sussex School of Archaeology and History

The Sussex School of Archaeology and History (SSA&H) also had a staff change, with Annalie Seaman resigning from the post as School Manager to pursue other interests. Whilst the School is currently undergoing a period of re-organisation, a new and imminent development will be the holding of the School's first Sussex History Symposium on **Saturday 26 November** at King's Church, Lewes. The basic format of this event will be similar to that of the long established and popular annual Sussex Archaeology Symposia, with speakers presenting the results of recent research and fieldwork within the two counties of East and West Sussex. The date of next year's Sussex Archaeology Symposium has now been fixed for **Saturday 25 March 2023** at Kings

Church, Lewes, whilst a Sussex Archaeology and History conference on ‘The Sussex Landscape Transformed’ is planned for **Saturday 14 October 2023** at the same venue.

Elsewhere:

Hastings

A Scheduled Monument Section 42 licence was obtained by HAARG (the Hastings Area Archaeological Research Group) to undertake geophysical surveys of Hastings Castle, Ladies Parlour and the surrounding parkland. The work was undertaken in the spring of 2022 before the castle was opened to visitors.

Within the castle, the resistivity surveys located the keep, which had been thought to have been lost to cliff erosion. However, its position matches an illustration in a book written by famous hoaxer Charles Dawson printed in 1909. Other features identified included the ‘footprint’ of a Victorian shelter, a possible in-situ floor associated with the church narthex (porch/antechamber), the line of a previously unknown wall and possible graves.



Resistivity survey in progress within Hastings Castle

On the open parkland outside of the castle a number of features were identified. Reflecting a medieval and agricultural past, ‘ridge and furrow’ plough marks are evident on the magnetometer results, along with some ditches, an enclosure and a possible building. 20th century features include the positions of anti-aircraft guns from World War II, and these have been matched with photographic evidence.

Sedlescombe

HAARG has been undertaking archaeological work at Footland Farm, Sedlescombe at a Romano-British iron production site over a number of years, as have a number of other societies in the past. SAS published reports during the 19th and 20th centuries, Ivan Margary visited the site, Battle and District Historical Society undertook fieldwork, as did local school children under the guidance of their school teacher in the 1980s. The Wealden Iron Research Group have also undertaken investigations.

HAARG undertook a massive magnetometer survey in 2013. The survey started at the footpath opposite Sedlescombe Church, continued down through Footland Farm and up to Cripps Corner following the line of a Roman road as it passes through a number of enclosures and the main iron production site.



Magnetometer survey area including Footland Farm overlain onto a Google Earth image



Photograph from the 2019 excavation at Sedlescombe showing the remains of the Roman road as it enters the largest enclosure

The magnetometer survey has enabled ‘targeted’ excavations. Six trenches were dug in 2019 and a further two this year. Trench 7 (see photograph) revealed a ditch which had been recut, and then later a pit had been dug into the infilled ditch. Two postholes were identified. Pottery, iron residue slag and furnace wall material were recovered. From the base of the ditch a number of very large sherds of East Sussex ware pottery were recovered. This trench was not completely excavated due to adverse weather.

Trench 8 revealed several layers of iron slag and burnt clay from furnace walls. At the base of the trench was a slightly curved gully or ditch with a posthole. We can speculate and refer to this feature as the drip gully of a roundhouse. Pottery, combed Romano-British ceramic building material and a tiny glass bead were recovered. The pottery will be sent for a professional report this autumn. HAARG hopes to return to Footland Farm in the future to undertake further excavations.



Photograph of Trench 7 (October 2022), showing a partially excavated trench with a recut ditch running SE to NW. Later the ditch was cut during the digging of a pit. Two postholes can also be seen in the photograph.

Willingdon

The 2022 excavations at Butts Brow, Willingdon launched the Big Dig project, part of Changing Chalk – a partnership of organisations led by the National Trust (NT) and supported by the National Lottery Heritage Fund and People’s Postcode Lottery working together for the future of the South Downs. The excavation took place during the last two weeks of July with the ambitious aim of finding out more about the Neolithic enclosure around the hill-top at Butts Brow. Volunteers worked with the archaeologists

on site to open two trenches to investigate the ditch and bank. This work recovered worked flints, a single piece of prehistoric pottery and, in a third trench designed to investigate a potential barrow, a collection of early 20th century glass! Over 2000 visitors discovered more about one of the area's prehistoric mysteries. Further analysis of the finds is ongoing.

Brighton

The Brighton and Hove Archaeological Society (BHAS) have had a very busy season in the field during 2022. The team returned to the Late Iron Age site at Rocky Clump, Stanmer in April and continued digging there until mid-October. The aim of the excavation was to seek the location of a roundhouse thought to be located close to, and associated with, a large ditched enclosure. Previous excavation work had shown that the enclosure contained a granary and grain storage pit, but no evidence for human accommodation. It was postulated that any dwelling would be sited close to the enclosure in order to aid the inhabitants to protect their food supply. Geophysical survey work had revealed a large circular area of low soil resistivity, and this evidence was considered to indicate the possible location of a possible roundhouse. The excavations in 2022 revealed numerous postholes, possibly associated with a structure, but the area of soil with low resistance proved to be a very large pit. This pit, which was not bottomed, is over 2 metres in depth. A 'floor' or layer of large flints was revealed at a depth of 1.5 metres, and finds from this deposit include decorated pottery, animal bone and oyster shells. Adjacent to the large pit is a possible dew pond. Although this feature yielded very few finds, it did contain a silver denarius coin of Antoninus Pius (AD 138-161). Another large pit to the west is yielding numerous struck flint flakes and several pieces of possible Middle Bronze Age pottery.





The excavations have been well supported throughout the season, with an international group of diggers. BHAS had people from America, India, Mexico and Norway participating, with other volunteers from all over Sussex, and even from Hampshire and Hertfordshire! The Chailey Young Archaeologists Club (YAC) visited in August, and the Brighton YACs in September. Both groups of YACs enjoyed digging with BHAS and were reluctant to leave the site. Post-excavation work will begin in November.

BHAS also excavated a test-pit at a dew pond elsewhere at Stanmer. The test-pit confirmed that the pond was constructed as detailed in Dr Peter Brandon's book, *The South Downs*. In addition, the BHAS outreach team attended events as part of the Stanmer Park Restoration Project.

Other BHAS outreach events included led walks around Hollingbury Camp (a Late Bronze Age/Early Iron Age hillfort) and the Neolithic causewayed enclosure at Whitehawk Hill. A full programme of both local history and archaeology lectures, walks and day schools have been planned for the 2022/2023 winter period.

Chichester District

Work by the Chichester and District Archaeology Society (CDAS) was undertaken at three locations:

Petworth House

The National Trust (NT) celebrated 75 years at Petworth House and gardens in June. In celebration the NT organised a day of heritage events, including inviting CDAS to open a trial trench across a long-lost path, a proposed one created by Capability Brown in 1752. Visitors to the celebrations witnessed a path of brick edging with an iron and sandstone surface between.

A NT video of the excavation was released (youtu.be/bNAHBfKPyXs).



St Huberts church, Idsworth

In September, CDAS opened trial trenches close to St Huberts church, Idsworth along the Sussex/Hampshire border. Previous geophysical survey work had indicated a ditched enclosure close to the Saxon/Norman church.

Dating evidence recovered from the enclosure ditch dates to the Late Iron Age and early Roman periods.



Uppark

In October, the NT asked CDAS to investigate another 'lost path'. This one, at Uppark, the NT is in the process of reinstating. A trial trench revealed a portion of the old path, chalk block edges with a gravel surface in-between.

David Rudling

*(with thanks to BHAS, CDAS, HAARG,
and NT)*

Kent

Kent Archaeological Society

At the much-delayed AGM on 17 September, members of the Kent Archaeological Society (KAS) voted to accept proposed constitutional changes. The Board of Trustees was reduced to a maximum of twelve members, and the President of the Society has been replaced by a chair of the Trustees. The officers of the Society are no longer Trustees but form a management group to deliver in practically the Society's public benefit, in terms of education, public outreach and supporting research. As part of these reforms, the Society has appointed an Outreach Officer, Peter Joyce. Peter is known to many through his work in the Kent history field and is currently studying for a doctorate at Christchurch College in Canterbury.

The Society is planning online and in-person events and activities for the winter and next year, starting with the television presenter and well-known historian Michael Wood coming to speak at Maidstone Museum on **Thursday 1 December**. March will see the recommencement of the Fieldwork Forums and a conference on Early Medieval Monasticism. Currently an exhibition is being planned in collaboration with Maidstone Museum. This will highlight discoveries and fieldwork old and new and it is hoped that the Aylesford gold 'torcs', last seen in public at the 'Beyond the Horizon' exhibition in 2013 (in Dover and Boulogne) will at last be extricated from the bank vault which is their usual home.

Most excitingly (as this is the Hon Curator who is writing this) the Society has recently purchased a large assemblage of material from the Ozengell Early Medieval cemetery near Ramsgate, Thanet. These items, which had remained in the possession of the land-owner, derive from nearly 200 graves excavated under the supervision of Dave Perkins between 1977 and 1981 and were due to be auctioned at the end of October. The Society was fortunate to be able to negotiate a pre-sale purchase through the auction house, Roseberys, to ensure that this collection remains intact, in Kent and available for further study and interpretation.

Church Field, Otford

The 2022 season at Church Field Roman villa, Otford has confirmed the high class of workmanship put into the hypocaust of what is now considered to be a 'guest house', complete with small garden and stable. The main building range, while presenting what looks like a symmetrical corridor frontage, is showing evidence of being two separate complexes joined together at the main entrance. We have uncovered the partially reused foundations of an earlier building, and possible evidence of a wooden floor in one of the smaller rooms. But the dominant feature for this year has been an unexpected ditch, which appears to run from springs to the north, under part of the villa building and into what may be a pond at the southern end. Pottery is pushing the dating of the villa



complex back. We are fairly certain that it was demolished around the late 340s, but there is now indication that there may have been occupation of the site in the mid 2nd century. This earlier phase will continue to be explored next year.

The Lossenham Project, Newenden

This community project is at Lossenham Farm in Newenden, Kent, which many of HAARG's field team have been participating in. During 2021 and 2022 the ruins of Lossenham Priory have been undergoing excavation under the direction of Isle Heritage CIC. The location of the priory site had been lost, but following geophysical surveys the footprint of the priory has been established. Excavations are ongoing. The farm also boasts a medieval earthwork (Castle Toll) which may also be the location of a late Anglo-Saxon enclosure. Scheduled Monument consent has been gained to allow investigation of this next year. To be involved, visit lossenham.org.uk.

Boxley Abbey, near Maidstone

Since 2020 HAARG has worked in partnership with the Society for the Protection of Ancient Buildings (SPAB) and Maidstone Area Archaeological Group (MAAG) to undertake geophysical surveys of the abbey and surrounding grounds. The surveys were undertaken in 2020 and 2021. A large number of anomalies were identified. In July 2022 trial excavations were undertaken under the direction of ecclesiastical archaeologist Graham Keeble. A large circular feature seen on the geophysics was found to be a horse training circle/ring, probably related to the stables identified on early maps of the site as well as an area of high resistivity on the geophysical survey. A well-constructed stone

drain was identified possibly relating to the abbey buildings, however it was associated with a building of poorer construction, suggesting re-use.

Subject to funding and licences, further excavations are being planned for 2023.

One of the trenches at Boxley Abbey showing the medieval drain and later building foundations. Note the building in the background, originally thought to be a 'hospitium'; however further research suggests it was an enormous 'brewhouse'.



Maidstone Area Archaeological Group

During 2022 the members of Maidstone Area Archaeological Group (MAAG) have been dividing their time between two sites. We have been continuing to explore the late Iron Age/Romano-British site at East Farleigh, where a parcel of land to the south of the 2nd/3rd century buildings seems to represent a focus for funerary activity. A late Iron Age enclosure ditch is cut by a palisade of early Roman era date. Either side of this time-line there is also a hint of earlier barrows and post-Roman activity in the form of a 5th century 'corn-dryer' and single 6th century polychrome glass bead. We believe our other site at East Malling is a continuation of the Romano-British site discovered close by in the 1950s. So far, we have uncovered an almost square building sitting astride a boundary wall and a timber building nestled into the outer south-eastern corner. A significant feature is a metallised walkway leading from the western side of the building, flanked by a stone wall on either side. Survey data suggests this runs for at least 70m. MAAG intend to continue work at both sites throughout the winter, weather permitting.



Working on Building 2 at East Malling (left) and Building 1, seen from the north (right)



Walls and causeway heading west at East Malling

Lullingstone Castle

A community dig took place at Lullingstone Castle, near Eynsford, in May and October, funded by the NLHF and led by the Darent Valley Landscape Partnership Scheme. This involved a very dedicated group of local volunteers, families and both the Bexley and North Downs YACs. The dig was initially instigated to investigate geophysical anomalies from a resistivity survey of the Castle grounds undertaken in 2011 by West Kent Archaeological Society, with a focus on the lawn immediately north of the house, where there were suggestions of a Tudor ‘sunken garden’. Further survey, desk-based assessment and test pitting made clear early on the suggested line of the garden moat, linked to an inner gatehouse of reputed Tudor date, which was filled in during the second half of the 18th century under Sir John Dixon Dyke’s relandscaping scheme. Overlying this was a large circular path which extended across the area of the modern lawn, likely late Victorian, thus not associated with the garden’s early phases.

A total of nine small trenches were placed across various features during the two stages of the dig, including the moat and various garden paths. Although the oldest standing fabric at the site is the outer gatehouse, constructed in 1497 and thought to be the oldest brick-built gatehouses in the country, it is assumed an earlier medieval manor house would have preceded the present building. Trenches 2, 3 and 7, all of which lie near the house and within what would have been a walled garden before the moat was filled in, contained deposits comprised entirely of medieval (mainly 13th century) pottery in their lowest levels. Trench 6, a 12m long section across the moat, could not be bottomed due to safety reasons, though it provided a useful insight into the construction of the moat walls and the process of its 18th-century demolition and in-fill, including the importation of nearby chalk as a primary in-fill before the walls were then pushed in.



A section across Lullingstone Castle’s garden moat, looking south towards the house and the interior of the demolished south moat wall; the 20th century circular garden path is in the forefront

Folkestone Villa

During September, 2022, the remains of a Roman mosaic floor reburied some 65 years ago were re-exposed at the Roman villa site on Folkestone's East Cliff. Much of the villa had been excavated and laid out as a tourist attraction during the 1920s but the cost of upkeep led to these remains being reburied by Folkestone Council in 1957.

For the original Roman owners of the villa there were fine views across the English Channel from their grand mansion, but the clay cliffs upon which the villa stands are not stable and continuing coastal erosion means that this important site is now in danger of slowly falling into the sea. Several rooms of a bath-suite have already been lost since they were first excavated.

Beginning in 2010, Canterbury Archaeological Trust has been leading teams of local volunteers and university students in excavations aimed at recording the most vulnerable remains before they are lost. Underneath the Roman villa extensive traces of earlier buildings set within ditched enclosures of late Iron Age date have been recorded – the villa had clearly been placed on a site occupied by native Britons long before the Roman invasion. With imported pottery and coins, the pre-Roman remains are, in many ways, probably of even more importance than the Roman villa complex.

Towards the end of the 1st century AD, a villa was established on the existing settlement site and this was rebuilt and enlarged during the 2nd century. The later villa complex had more than fifty rooms and included two bath-suites. The re-excavated mosaic belongs to the villa's grand central dining room (triclinium). When it was first exposed in 1924 around two-thirds of the mosaic survived and a cover-building was erected over it to protect it from the weather. Unfortunately, this building was destroyed during the Second World War and local accounts suggested that by 1957, when the mosaic was reburied, it was in a rather sorry state.

The aim of the excavation in 2022 was to determine just how much of the mosaic now survives. The excavations showed that although much had been lost since its original excavation, sizeable areas still remain. It would seem that there had been some subsequent restoration of what was originally exposed during the 1920s excavations and these recent repairs helped stabilise what remained of the Roman design. The mosaic has



now been reburied pending discussions on whether it should be lifted and moved to a museum for permanent preservation and display.

Elizabeth Blanning

*(with contributions by Lynn Cornwell, Kevin Froming,
Anne Sassin, Stephen Clifton and Keith Parfitt)*



Bishopstone Anglo-Saxon cemetery: publication

A working party has been established with the objective of bringing the Anglo-Saxon cemetery at Rookery Hill, Bishopstone, East Sussex to publication within the next three years. The cemetery and traces of associated settlement were excavated in 1967-8 under very challenging conditions during a housing development at the Harbour View Estate, Bishopstone. The excavation was directed by David Thomson. Only one object has ever been published, by Vera Evison: a Quoit Brooch style buckle in *Antiquaries Journal* in 1968. The cemetery is believed to date to the 5th and 6th centuries. Much credit goes to the late Eric Holden who recorded some of the graves and provided the only photos we have of numbered graves, as well as the only general view excavation photo (*below*).

Excavations on adjacent farmland of associated Anglo-Saxon settlement and earlier activity of Neolithic, later Bronze Age, Iron Age and Romano-British date (including late 4th century AD) were published by Martin Bell in *Sussex Archaeological Collections* 115 (1977). A monograph was published by Dr Gabor Thomas in 2010, *The later Anglo-Saxon settlement at Bishopstone*, which concerns a successor site in the valley below Rookery Hill. This combination of a Saxon cemetery and associated settlement, the presence of very late Romano-British activity on the same site and an extensively excavated possible successor later Saxon site in the valley below, make this complex exceptional and the cemetery a high priority for publication.

There is a catalogue of the cemetery finds by Dr N Stoodley and other significant progress on the cemetery finds has been arranged by David Worsell, of which conservation of the finds by Jacqui Watson at Fishbourne has been especially important. There has also been an assessment of the human bones and some isotope and ancient DNA studies. Together these contributions lay good foundations for the post-excavation programme. The undersigned are currently carrying out an assessment of the cemetery post-excavation which will lead to the formulation of a strategy by the end of 2022. We hope this programme will include new geophysical survey and a community engagement element. The working party would be most grateful to hear from anybody who was involved in the original excavation, or has information about relatives who were, especially if there are any photographs of the excavation. We would also like to contact Mr David Thomson's wife Mrs Sharon Thomson, or any relative who may have any material relating to the excavation. If you have any information please contact m.g.bell@reading.ac.uk.



Bishopstone excavation of Grave 57 and 60 (Photo Eric Holden)

Martin Bell, David Worsell, Sue Harrington, Scott Chaussee, Mike Allen

WIRG's furnace at HMS Cranborne

On the 10-12 June 2022 the Wealden Iron Research Group (WIRG) participated in the Historical Metallurgy Society's conference and demonstrations 'Accidental and Experimental Archaeometallurgy 2022'. Teams gathered at The Ancient Technology Centre, Cranborne, Dorset to participate in demonstrations and accompanying conference.

WIRG decided that they would perform a smelt as authentic as possible to archaeological evidence by taking advantage of additional team members and event participants to conduct the smelt using board bellows connected to a blow hole through the furnace wall, rather than an inserted tuyere, as tuyeres are seldom found on the Weald. A furnace was constructed of similar dimensions to that presently used by WIRG at their Pippingford site on Ashdown Forest, East Sussex, which in turn is based on some excavated Romano-British furnaces on the Weald.



The furnace under construction at Cranborne (left) and Ethan and Jack pumping the bellows, a five hour long task with help from passer-byes (right)

Because of the short time available to build and dry a furnace, conduct a smelt and demolish the structure to return the site to its original condition, WIRG decided to part pre-fabricate a furnace at Pippingford. Local Wealden clay, which contains around 88% silica, was used with added grog in the form of previously demolished furnace wall, to reduce shrinkage. Hay, chopped to around 50mm, was incorporated to provide fibre reinforcement.

A wooden mould shaped in the form of a truncated triangle was constructed which was filled with clay and then compressed under a car jack acting against an overhanging tree stump. The blocks were air dried within an open front shelter over a period of a few months. Each block provided a wall thickness of 150mm and weighed around 9kg. The dimensions of the blocks were such that, eight blocks, 'cemented' together, would produce a circular hearth of 270mm diameter. Allowing for one absent block per course to create a slagging arch, 14 blocks were required to lay two courses. In the event, 20 clay blocks were made to provide spares should any be damaged in transit.

At Cranborne, the clay blocks were wetted by brief immersion in water prior to being ‘battered’ with sieved Pippingford clay, wetted to a plastic state. The blocks were positioned around a sheet steel former, each joint being tamped to ensure gas tightness. Since all 20 blocks had survived transit, 60% of a third course of pre-cast blocks could be laid to a height of about 330mm.

The shaft above the blocks was built to a height of 1000mm using clay provided at Cranborne. This was a ball clay sourced from Devon which arrived as compressed dried sheets about 10mm thick. No analysis was available but the main constituent of a ball clay is kaolinite $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$ and so has a significant alumina content. To dilute this constituent and render the clay more mouldable, about 60% by volume of sharp sand was added when mixing the clay. The mix was kept as dry as possible to reduce drying time and the risk of slumping, and chopped hay added to the mix to provide some reinforcement.



(Left) compressing the pre-fabricated clay blocks in a mould using a car jack, and (right) consolidating one of two parts of the bloom

The shaft was built against the former, around which cling film had been wrapped and soft paraffin wax smeared to prevent adhesion of the clay as it was packed against the former. To further guard against adhesion, as each layer of clay was completed, the former was rotated one-quarter of a turn (opposite to the wrapping direction of the cling film) by inserting a toggle bar. The former was slightly negatively tapered from 270mm diameter at the base to 300mm at the top to aid removing it vertically when the build was complete. To further mitigate slumping during the build, eight bamboo rods were inserted vertically mid thickness between the pre-cast blocks and secured near the top into notches cut into a thick cardboard ring. The wall thickness of the shaft tapered from 150mm above the pre-cast blocks to 100mm at the top. The walls were constructed of ‘sausages’ of the clay mix kneaded by hand and incorporated against the former by impacting with the fist.

A slagging arch was created by leaving out two vertically aligned pre-cast blocks in the lower two courses, the gap being bridged by a pair of 10mm thick wrought iron flat bars as a lintel to support the clay of the shaft above this.

A 25mm diameter blowing hole, inclined down 23°, was made above the slagging arch. Measured on the outer wall, this was 360mm above the base, thus providing an exit in the inner wall calculated as 296mm above the furnace base.

The build commenced on the Friday afternoon and was completed by 12.30 on the Saturday. The former was lifted out without problem revealing a good smooth and consistent inner surface to the shaft. Lighted embers were charged to the furnace to commence drying and an air inlet block, which had been incorporated into the clay of the sealed slagging arch, removed.

The smelt

A Wealden Siderite ore collected from a stream bed at Stepney Ford Bridge, Kent was selected. This was a relatively rich ore by Wealden standards assaying at 36% Fe and 4.5% Si content. The average analysis by wet methods is indicated in Table 1.

Fe ₂ O ₃	SiO ₂ & insolubles	Al ₂ O ₃	CaO	MgO	Water	Volatiles	Not determined	Total	Total Fe	Total Si
51.38	9.53	6.06	2.14	0.0	0.86	29.00	1.03	100	35.96	4.50

Table 1 Analysis of raw Stepney Ford Bridge siderite ore (wt %)

We find that it requires at least four times the amount of iron to silicon ($\text{Fe/Si} > 4$) to create a bloom as much of the iron is lost to the silica as slag. We call this the ‘bloom potential’ and, for this ore, the value is $36/4.5 = 8$. This is only an indication as it does not take into account any Si absorbed from the furnace lining, or the role of other element fluxing with Si in preference to Fe eg Ca & Mn.

The ‘Accidental’ element of the event came to the fore when it was discovered that the Wealden ore brought to Cranborne for smelting had not been fully calcined, necessitating in-situ calcining during the smelt.

Since roasting is a violent reaction with particles exploding as the volatiles are released, the uncalcined ore was broken to 10-15mm size to minimise internal pressure build up. Our normal procedure of topping up the furnace with charcoal to the very top and sprinkling ore onto this over a period of time as the charge level burns down (typically over 10 minutes or so) proved unsuitable at Cranborne as exploding ore was shooting out of the furnace. Hence we lowered the charge level to around 100mm below the top of the furnace and added ore prior to the charcoal so that the latter contained the violence of the reaction within the furnace. We also reduced the quantities of ore and charcoal added at each charge from our usual 1kg each to 518g. Interestingly, despite calcining being an endothermic reaction, no drop in furnace temperature was observed, as measured by thermocouples.

On smelt day, the intensity of the wood fire in the furnace was increased by blowing air with an electric blower. Once the temperature near the top of the furnace exceeded 700°C, the electric blower was disconnected and a pair of board bellows connected. These were pumped continuously for the next 4³/₄ hours by the two younger members of the team and any spectator who came within reach!

A total of 14kg each of ore and charcoal were charged at a ratio 1:1 for a period of 165 minutes. An additional 2kg of charcoal was then added in batches to feed the burn down period, air still being delivered via the bellows. The burn-down period lasted 120 minutes.

Attempts to tap slag from the furnace by penetrating the clay at the base of the slagging arch failed to produce a slag run. Indeed, a hollow was detected within the furnace above the base.

Following a two-hour burn down the slagging arch was broken open. Several masses of hot material were pulled out and hammered using a wooden mallet on a wooden anvil (tree stump). The first few pieces immediately disintegrated indicating them to be wholly slag. A heavy mass was then extracted which proved malleable under the mallet but eventually broke in two. Consolidation continued on both pieces with periodic returns to the remaining embers in the furnace to reheat but was stopped when sufficient re-heat could no longer be achieved in the part dismantled furnace. Once cooled below the Curie temperature, the material responded to a magnet.

Subsequent to the event, the bloom was sampled metallographically showed it to be steel of composition ranging from 0.67 to 0.8%C. This high degree of carburisation is in contrast to what is generally achieved at Pippingford where, for example, a recent smelt of almost the same duration produced a bloom averaging just 0.13%C.

The lack of tap slag is attributed to the slag within the bloom consisting largely of Pyroxene (63.2%) of nominal composition FeSiO_3 which has a flow temperature of 1490°C, much higher than the lower flowing point fayalite $\text{Fe}_2(\text{SiO}_4)$ which runs at around 1256°C. Such fayalite slags are more commonly experienced at Pippingford. In addition, the high alumina content of the ball clay contributed to the formation of Plagioclase ($\text{CaAl}_2\text{Si}_2\text{O}_8$) as the second highest constituent (22.18%), constituents not normally associated with Pippingford slags.

The extensive carburisation of the iron bloom at Cranborne had evidently taken place. The viscous nature of the slag trapped in the bloom, consisting of 63% pyroxene, is suggested to have caused the burden to drop more slowly through the peak carburization temperature, thereby absorbing carbon to produce a high carbon iron. Pyroxene forms at a lower temperature than fayalite. Hand pumping of the bellows over such a long period no doubt contributed to the lower average temperature of the smelt.

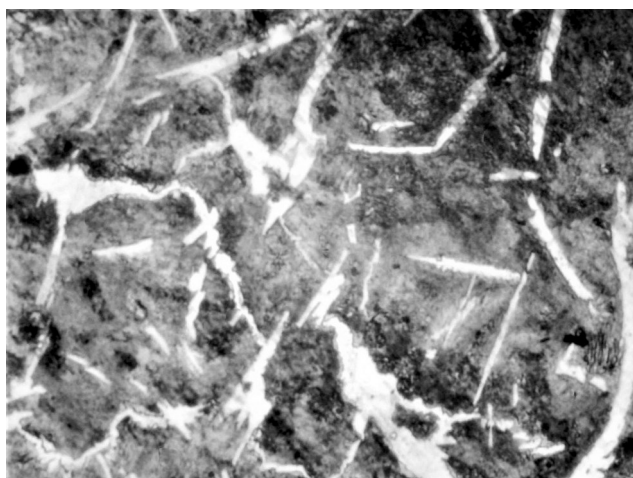
Smelts at Pippingford normally take place on the first Saturday of the month April to October, although will be suspended if there is a fire risk from dry weather conditions. We have been kindly gifted an electric reciprocating blower by renowned, now retired, smelter Peter Crew which we will use to simulate the pulsating action and greater air pressure achievable when using bellows.

Contact secretary@wealdeniron.org.uk if you would like to participate.

Tim Smith (Hon Sec Wealden Iron Research Group)



Iron content of bloom revealed on cutting

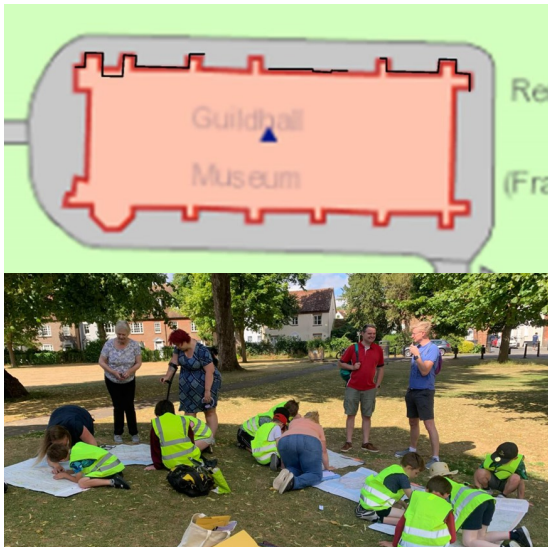


Micrograph of bloom iron showing 15% acicular ferrite in a matrix of fine pearlite x100 Nital 2% etch

Chichester Young Archaeologists Club

After a lot of planning I was thrilled to confirm the launch of Chichester YAC in June 2022. Before our first session we had 15 members signed up and welcomed them into Priory Park in Chichester on 9 July 2022. We started with two leaders, Steve and myself and one volunteer Emma. We now are just about to have confirmation of our third volunteer and have a membership of 21, with lots more interest where we are waiting on application forms.

Our first session in Priory Park, Chichester, was on maps. After a brief introduction from Steve Cleverley we got down on the ground to look at Ordnance Survey maps to see what features the YACs could find and see what they can tell us about the landscape. After they got to grips with the maps we went and looked at the priory building. We showed them how to set a base line and how to plot the building by taking measurements from the line. The results were amazing and so accurate that you wouldn't have believed it was their very first attempt.



Our second session saw us at St Huberts at Old Idsworth where CDAS had just carried out a dig. They'd set aside some areas so that the YACs could get involved in their very first excavation. There was lots of enthusiasm, especially when the finds started popping up. The site is varied and remains varied from Iron Age to Victorian. We told the YACs to give themselves a round of applause for their efforts. Lots of good technique in those so young.



Our October session saw us at a Farm near Graffham to explore the landscape and geology of the area, and how this served a regional pottery industry known as ‘Graffham wares’. At the Farm, numerous pottery sherds/pieces had been found close to the manor house in the bed and sides of a winter-bourne stream. We looked at the pottery pieces so far collected and walked around the land to see the different geological sources used to create these Graffham Wares. Samples of sand and clay were collected and these are currently being processed in the YACs’ homes so that we can endeavour to make clay pots at our next session.



To see the excitement in the faces when they arrive and the enthusiasm with which they throw themselves into everything is brilliant and we certainly have archaeologists of the future.

We currently aren’t at capacity and are looking for new members and potentially more volunteers. If you want to know more drop us an email at chichestervac@gmail.com.

Sam Joy (club leader)

Surrey Historic Environment Research Framework

On **Saturday 26 November**, the Surrey Archaeological Society will host its annual Surrey Historic Environment Research Framework (SHERF) conference, this year on the theme of ‘Defensive structures: symbols of power?’ This will be an online conference, held via Zoom, with a full day’s programme (abridged version below) and excellent range of speakers:

10.00 Chair, Emma Corke (Chair, Research Committee)

10.10 Paul Ferris (Independent Researcher): “‘The last line’ – an archaeological evaluation of the 1940 anti-invasion defences between Guildford and Dorking’

10.50 Peter Mills and Michael Hutchinson (Mills Whipp Research): ‘London’s Civil War Defences Reviewed – Symbols of Power and Control’

11.40 William Wyeth (English Heritage): ‘Door and Peace – examples of new thinking on English castles’

13.35 Stuart Brookes (University College London): ‘Hiding and finding in Viking Age Wessex’

14.15 Kryisia Truscoe (Forestry England): ‘Defence or display? The role of linear earthworks in the landscapes of Late Iron Age territorial oppida’

15.05 Barney Harris (University College London): ‘Linear modelling: interrogating defence and power in the context of linear earthworks in the landscape’

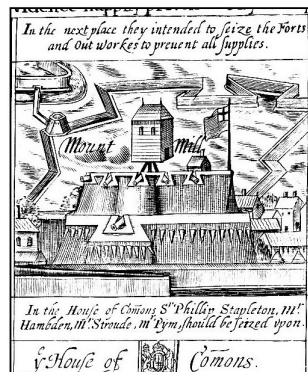
15.45 Questions and close

There is a booking fee of £5 which may be paid online with PayPal through the event page (<https://www.surreyarchaeology.org.uk/>).

Disposal of the dead in Roman SE England conference

The Surrey Roman Studies Group will hold its bi-annual conference at Ashted Peace Memorial Hall on **Sunday 21 May 2023** (please note a change from the original date). The conference aims not only to discuss evidence uncovered for death in the Roman period in the South-East and how it differs from continental practices, but also to explore what might account for the millions of dead not seen in the archaeological record. Whilst the speakers and timetable have yet to be confirmed, the line-up will include John Pearce of King’s College London, who will give the keynote talk on ‘The general character of the funerary world’. Booking information will be available later in the year.

For this and other events in Surrey, please follow the SyAS e-newsletters. To be placed on the mailing list (non-members welcome), email info@surreyarchaeology.org.uk.



University of Sussex autumn online lecture series

Wednesday 16 November (19.30) Caroline Mackenzie: ‘Culture and society at Lullingstone Roman Villa’, the Sally Christian Archaeology Lecture 2022

Wednesday 18 January 2023 (19.30) Jaime Kaminski (Sussex Archaeological Society): ‘Understanding the “Near Lewes” Bronze Age hoard’

Wednesday 15 February (19.30) David Staveley: ‘With a Mag[netometer] on Roman Farne Street’

Wednesday 15 March (19.30) Anne Bone: ‘Secrets of the High Woods – South Downs Heritage Revealed’

Wednesday 19 April (19.30) Martin Bell (University of Reading): ‘The Sussex landscape in the Mesolithic and Neolithic’, the Holleyman Archaeology Lecture 2023

All are welcome. Although the lectures are free, donations are appreciated. For booking links and further details about the lectures, please [visit www.usas.org.uk](http://www.usas.org.uk).

Sussex School of Archaeology and History symposiums

Following the popularity and importance over many years of the annual Archaeology Symposium, the Sussex School of Archaeology and History are running a day programme of lectures on Sussex History on **Saturday 26 November** at Kings Church Hall, Lewes (10.00-17.00). Event fee (to include tea and coffee but not lunch): £30, or £20 for students.

On **Saturday 25 March 2023** at Kings Church Hall, Lewes (10.00-17.00), the Sussex Archaeology Symposium will take place. Confirmed speakers and topics will include:

Jaime Kaminski: ‘The Near Lewes Hoard of Bronze Age Metalwork’

David Millum and/or Rob Wallace: ‘Bridge Farm Excavations 2018-22: a puzzling plethora of pits, postholes and pottery’

David Staveley: ‘Geophysical Survey at Chichester’

Rebecca Henry-Stumpe: ‘A comparison of the early animal-based food remains of Fishbourne Roman Palace to the later villas of Hampshire and Sussex’

Richard Best: ‘Roman Sussex in the Post-Roman world: a preliminary examination of reuse and recycling in Early Medieval Sussex’

Jane Clark: ‘Recent Sussex Portable Antiquities Scheme Finds’

For further information about both events and to book tickets, please see www.sussexarchaeology.org or email info@sussexarchaeology.co.uk.

Council for British Archaeology South-East

CBA-SE is a branch (Charity No 1047378) of the Council for British Archaeology which aims to advance the public's knowledge of archaeology and history in their local area and to share information across counties.

Committee members 2021/22

Chair: Anne Sassin; Vice-Chair: Steve Cleverly; Grants: John Funnell; Treasurer: Steve Cleverly; Secretary: Elizabeth Blanning; Membership Secretary: Shiela Broomfield; Newsletter Editor: Anne Sassin; Webmaster: Phil Stanley; Social Media Officer: Andy Ward; E-letter: Rose Hooker; Other trustees: David Rudling, Judie English, Lynn Cornwell, Lucie Bolton, Ed Dickinson and Alex Egginton



Enquiries and Membership: Shiela Broomfield, 8 Woodview Crescent, Hildenborough, Tonbridge, Kent TN11 9HD, tel: 01732 838698, s.b.broomfield@outlook.com

Contributions for the Newsletter and E-letter

If you have news that you think might be of interest to people in the South Eastern region, please contact the editor (asassinallen@gmail.com). Articles and notes on all aspects of fieldwork and research on the history and archaeology of the region are very welcome. Contributors are encouraged to discuss their ideas with the editor beforehand, including on the proper format of submitted material (please do supply digital copy when possible) and possible deadline extensions. The newsletter is issued twice a year, with the next one intended for early Spring 2023.

Events, including lectures, workshops, conferences and fieldwork opportunities, should be sent to Rose Hooker (rosemary.hooker@blueyonder.co.uk), our e-letter editor. The e-letter is emailed to all of our members and partnership organisations, and is circulated six times a year.

Follow us on social media

To keep up-to-date with news, also follow us on Facebook  [@CBASouthEast](https://www.facebook.com/CBASouthEast) and Twitter  [@CBASouthEast](https://twitter.com/CBASouthEast).

<http://www.cbасouth-east.org>