



# NEWSLETTER

2019, ISSUE 5

November 2019

## Chairman's Notes

First I must mention again the publication by KuTAS of the excavations at Tolworth Court Farm in 2000 & 2002, on which a number of EEHAS members helped out. Copies are available, price £5, from Steve Nelson at society meetings. This entreats us to finish the report on the Bourne Hall excavations of 1962/65. Also work is in hand to progress the report on the Hatch Furlong excavation of more recent years. Apropos of this, I noticed in the current British Archaeology magazine, in an article on Michael Faraday, a photograph of the Roman lead glazed jar from the ritual shafts in Ewell found in 1847. Faraday demonstrated that it had lead glaze, and this was probably the first instance of scientific analysis of an archaeological object. There are now a few examples of this rare Roman type in Ewell and publication of them would be useful.

(Continued under Membership Matters).

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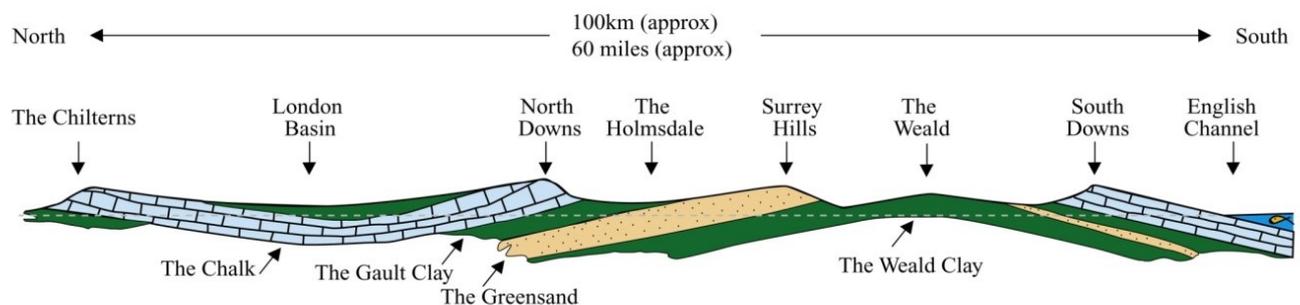
### Lecture Diary

December 4th	Christmas Party
Note that there is no January meeting.	
February 5th	Social history set in east London spanning 100 years of immense social change 1862 – 1962 : Joyce Hampton.
March 4th	AGM and talk by our president Jon Cotton.
Meetings are held on the first Wednesday of each month at St. Mary's Church Hall, London Road, Ewell KT17 2BB.	
Doors open 7.45 for 8pm start. Members free, visitors £4, includes refreshments.	

## September Meeting – ‘Why on Earth is Ewell where it is? The answer lies in geology, naturally.’ – Professor Richard Selley

Steve Nelson

Professor Richard Selley returned to talk to us on the local geology of the Borough and the bearing this had on past societies. He began by outlining the background to the topography of south east England and its implications for the development of prehistoric societies. In particular, the route ways of movement were governed by the geology and especially, in southern England, the chalk belts. If you look at Stonehenge and its related monuments they seem to act as a hub for ancient trackway routes, for our area out along the North and South-Downs. In the Roman period the road system was imposed but to a great extent still respected the chalk down-lands, with just a few roads extending into the Weald.



North South geological cross section

A generalised north-south geological cross-section across London and to the south illustrates the eroded anticline of the chalk formation exposing the underlying Greensands and Weald clay. Epsom and Ewell sits on the dip slope of the North Downs on the edge of the London Basin. The chalk is porous and permeable and the London Clay is impermeable. This is of course a generalisation and geology is not always straightforward. Within the London clay there are units of gravel/sand deposits that can trap water. The recent Crossrail project had problems with this during the tunnelling. However, in our area the junction of the chalk and the clay, where there are intervening bands of sands, Thanet and Reading Beds produce springs of water. This spring line phenomenon is the key to the series of narrow north south parishes that extend across mid Surrey from Croydon to Clandon and of which Ewell is one. When their boundaries were formed, whether late Saxon or earlier, each parish had a variety of soil type; chalk down-land grazing, arable sandy soils and forested clays (often referred to as the waste in medieval documents).

Richard stressed the importance of water supply at all times and the relative levels of the water table were crucial to human occupation. The water table is the point at which water finds its relative depth. As Richard emphasised this is related to the geological strata and their different properties. He referred to the rates of extraction of water in recent times in the London area. Until the early 19th century it was relatively low but saw a huge increase from the middle of the century reaching a peak in the mid 20th century with the consequent

ground water level dramatically reduced. However, since the mid 1960s extraction has actually decreased and the water level is increasing - a good thing you would think but there is a downside in that the current ground water is often contaminated. The water companies have had to resort to extensive and expensive cleaning and filtering.

Richard also reflected on the formation of the famous Epsom Salts. Its complex chemical makeup derives from the geological deposits on the clay of Epsom Common, conditions that equally apply to similar areas to the east and west. So, why did Epsom become so famous for this and not elsewhere? Does the answer lie with marketing and/or Epsom's proximity to London and the fashionable elite?

As Richard demonstrated, early settlements and their development were to a great extent determined or at least influenced by the geological background. Epsom and Ewell is part of this, although modern infrastructure has tended to mask the old topography. Richard also stressed that while the basics of geology are relatively simple local conditions, particularly with surface drift geology, can complicate the picture.

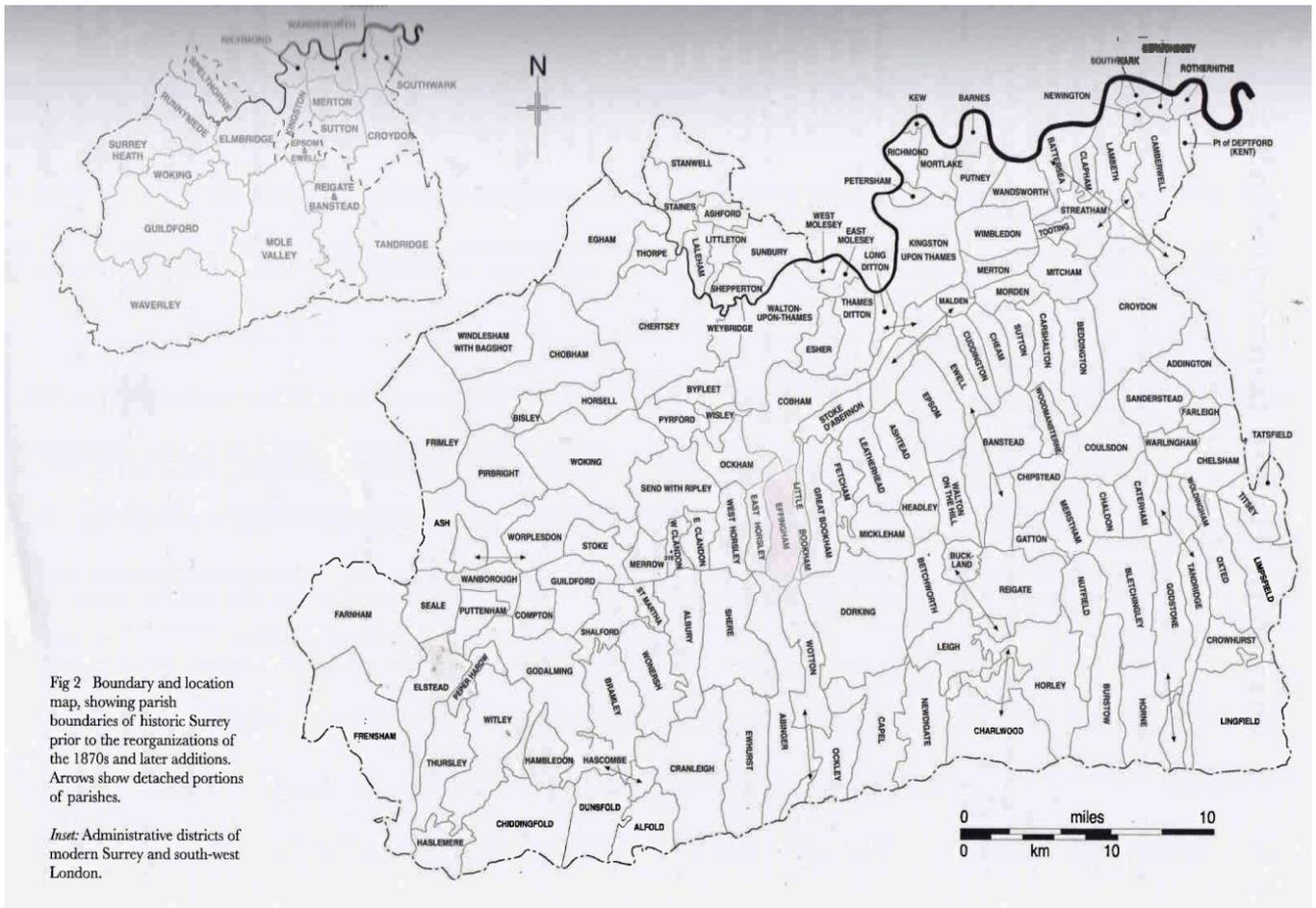
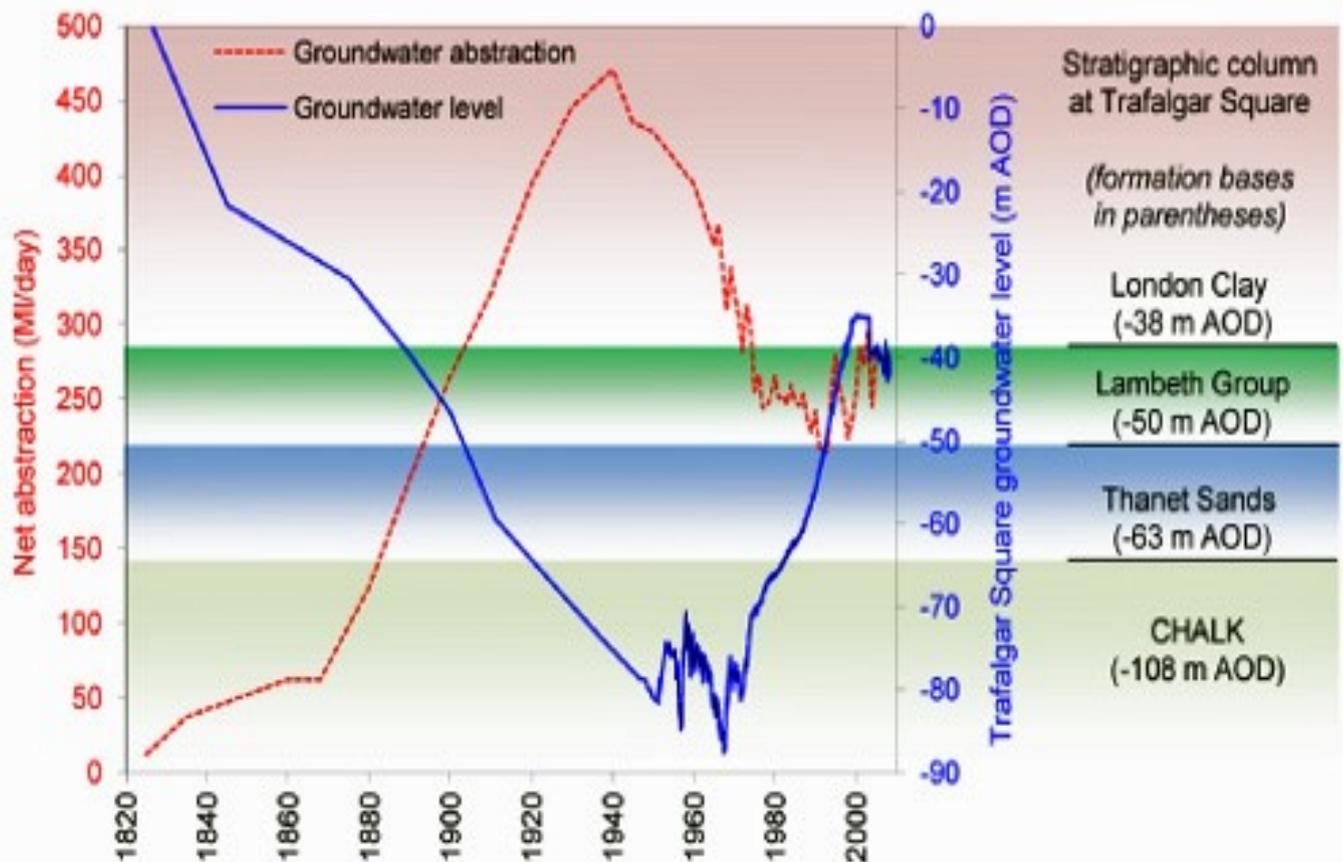


Fig 2 Boundary and location map, showing parish boundaries of historic Surrey prior to the reorganizations of the 1870s and later additions. Arrows show detached portions of parishes.

*Inset:* Administrative districts of modern Surrey and south-west London.

### Surrey parishes SyAS



) Groundwater abstraction from the study area vs. groundwater level in the centre of the London Basin  
Groundwater level illustrated by the record from Trafalgar Square observation borehole (TQ28/119)

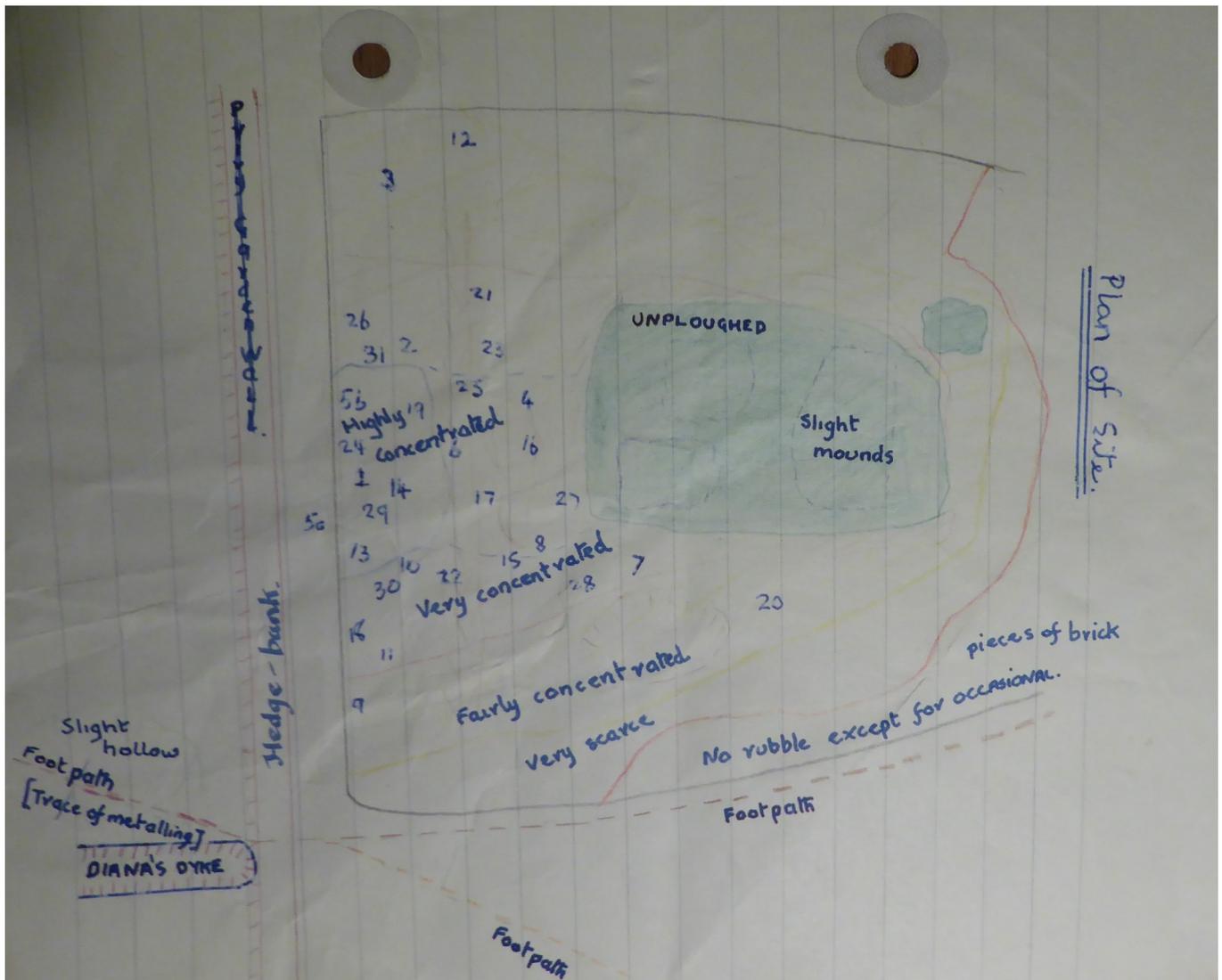
Ground water extraction

### Nonsuch Park Test Pitting - Jeff Cousins

Following on from the test pitting in the grounds of Bourne Hall in May, several pits were dug in Nonsuch Park during the Heritage Open Days on 21-22 September 2019. This was carried out in conjunction with the Surrey Archaeological Society as part of their National Lottery Heritage Fund funded Pitting Programme. Tudor re-enactors were also on hand on the Sunday.

This wasn't merely a PR exercise to get the public involved in digging holes, but was an attempt to answer a real question - what evidence, if any, remained of the stable block of Nonsuch Palace? The 1731 survey map of the "Little Park" (basically, what is now Nonsuch Park) named the field to the east of what is now the "dog-free" field at the Ewell corner of Nonsuch Park as "Old Stables Ground". This is on a little hillock and would have been a good spot for an eye-catcher viewed from the palace. This field had been ploughed during the winter of 1959-60, and field walked by David Cousins in the few years afterwards. Flints (with mortar), brick chips, roof tile fragments, Reigate stone fragments and floor tiles were found. Bourne Hall Museum and EEHAS had copies of his report (though not his sketch map of where the finds had been found), and the finds had been handed over to Bourne Hall

Museum. David had retired to Poole, but co-incidentally I was in touch with him through sharing our family history research (we both had Cousins ancestors from the same part of London). He kindly sent me a copy of his sketch map.



In 2018 a magnetometry survey had been conducted of the field (plus part of the adjacent dog-free field; not shown) - see the next page. The bright band across the top is thought to be a modern drain. The yellow squares show the test pits and the blue circles metal detecting find spots (apologies to those reading in black & white, the online version will be in colour!).

The following is not a formal write-up of the dig by any means, but just notes from my viewpoint of having been one of the volunteer diggers.

Much of Nonsuch Park had previously been searched by metal detectorists, and some of their finds were on display. They included coins (from Stephen, Edward III, Elizabeth I, William III, George III and Victoria), Tudor buckles, Tudor keys, musket balls, a ring, a thimble, a WW2 Home Guard "blank" bullet and compass, and a Tudor falconry bell - I was amazed that this looked much the same as the modern day falconry bell that I have on my dog.



The turf had already been removed from nine 1 metre squares, aligned N-S on the compass, on the Friday. In the event, pits were dug at seven of these spots. These test pits were not sited in random locations, but in spots where the magnetometry had indicated that there might be something of interest. I was assigned “TP7” (Test Pit 7). This was located on the lower of the WSW-ENE dark lines shown by the magnetometry (above). My volunteers were Mike, all the way from Colorado (he was visiting relatives in the area, he hadn’t come all that way just to see us!), and Ramash from Worcester Park; many thanks go to them for their hard work. First we laid down tarpaulins for dumping the spoil on. We dug down 10cm at a time, each layer being known as a “spit”, and the spoil from each spit having its own pile on the tarpaulin. These spoil heaps were then sieved to pick out the larger objects.

The top two spits contained loose grey soil, probably what had been ploughed, with fragments of roof tile in it. The third spit and top half of the fourth spit were hard and full of largish (many longer than 10 cm) pieces of flint. The lower half of the fourth spit, and the

unfinished fifth spit, had soil in their northern halves and flint in their southern halves. Possibly the dark line on the magnetometry was a ditch that had been filled in with flint, then a courtyard had been spread out above it?? When the stables had been rebuilt by Elizabeth I in 1599, 573 cart loads of flint were brought to Nonsuch - all that flint had to have gone somewhere.

Most of the other pits had less flint, but a lot of broken roof tile, and some stone. Supposedly there had been a large stables for 32 horses and a small stable for 6 horses (plus a barn either side, a room for the saddles, and the palace bakehouse). I made an amateur comparison with a Roman cavalry barracks for 27 horses. That was 50m by 8m. Times 38/27 for 38 horses, times 1.15 for a roof sloping at 30°, times 2.62 to allow for overlap (from a modern website on tiling), gives 1700 square metres of tile - whatever the correct academic figure is, that's an awful lot of roof tile.

I was the most impressed by a pit showing a wall in situ, turning a corner - see right.

Afterwards we put the soil and flint (unless interesting, such as worked or fire-cracked) from the spoil heaps back into the pits in the reverse order to that in which it had been extracted, then put the turf back on top.

I spent Sunday afternoon in the finds tent (actually a gazebo). The finds from each spit were sorted by type: mostly roof tile, but also CBM (Ceramic Building Material - a posh name for broken bits of old brick), flint, stone, chalk, occasionally a bit of clay pipe or mediaeval glass turned black with age; then weighed. The number of peg holes visible in the roof tiles was also counted.

My wife visited the dig whilst walking the above-mentioned dog over Nonsuch Park, and now each time we walk the dog there it goes to sniff "my" pit. A very enjoyable weekend it was.



## October Meeting - Victorian portrait photography as a social history study - Stephen Furniss

Steve Nelson

At the October meeting we heard about the development of early photography by Stephen Furniss, himself a descendent of the old established Epsom business, Furniss's in the High Street. Although the development of photography is essentially a Victorian phenomenon, the principles involved have earlier origins. The *camera obscura* had been used from medieval times to project an image to assist in drawing but this of course was not a "fixed" image. It is thought that in England Thomas Wedgwood in the late C18 experimented with chemical processes to capture images, unsuccessfully as they apparently did not last. Others, principally in France and Germany, also experimented with chemical processes. As with many inventions there was no single "discovery" as such but a gradual experimentation leading from one process to another gradually perfecting the technique.

In 1814 Joseph Niepce in France achieved the first semi-permanent photographic image although it is thought this required an exposure time of some 5 hours and later faded. In 1832 Louis Daguerre, who had collaborated with Niepce, produced the first photograph that needed less exposure time and was "fixed". He patented this in 1837 as a Daguerreotype. These images were captured on small silver plated copper sheets sealed behind glass – they appear either negative or positive depending on your angle of view and became extremely popular in the 1840s and 50s. The invention was patented in France and also in England and Wales, but not apparently Scotland, which allowed Richard Beard to acquire the rights, and after moving to London in the early 1830s he collaborated with others and opened the first professional photographic studio at the Polytechnic in Regent Street in 1839. Meanwhile, Henry Fox Talbot, of Lacock, had developed a different process for printing onto high quality paper and this was introduced to the public as a Calotype in 1841. His famous image through a window at Lacock Abbey (1835) is thought to be the oldest photographic negative and is often reproduced.



Gentleman with head support - see the base of the stand behind the chair legs

In 1841 Antoine Claudet had opened a studio on the roof of a building at St Martins in the Field, London. Roof level studios were preferred as they gave the most amount of light necessary for successful images.



Baby with mother hiding behind the chair holding the baby

Although Victorian photographs were not instant, there is something of a myth that they needed an inordinately long exposure time. However, they still took a minute or so in the mid C19 and sitters were required to pose carefully. To assist in this, studios provided a clamp system to hold the head still. Evidence of this can often be seen on a stand behind the subject. There was a particular problem with young children and there are photos showing the mother firmly holding the baby in place!

By the 1850s the price for portraits was becoming cheaper, reasonable images were being offered at 1/- a time and becoming within the range of the ordinary public. At this time there was a huge demand for what were known as Cartes de Visite as they resembled contemporary visiting cards in size. These were produced in England in 1857 and introduced the sale of stock photographs of famous celebrities and especially the Royal Family. These were extremely commercially successful, usually with the studio's name and address on the back, and began a collecting cartomania craze.

Another craze from the 1850s was for stereoscopic double image photographic cards which when viewed under a lens gave a 3D effect. I recall some years ago and ex-colleague of mine, Geoff Parnell, collaborated with the American journal

Stereo World in tracking down such images of the Tower of London and other Royal Palaces. By comparing them with documented changes in the architecture he was able to demonstrate that some, particularly those by the firm Dages and Harman, of the Tower of London are among the earliest of this genre.

A development of the Calotype was the tin type or Ferrottype process patented in the US by Hamilton Smith and in this country by James Cutting. The plates were cheap to make and use as they needed no drying time and were thus versatile for outdoors views. They were popular in the 1870s and 80s. Finally by the late 1880s George Eastman, in the US, developed roll film and founded the Eastman Kodak company, thus bringing us virtually up to date.

Stephen Furniss showed a number of slides illustrating his outline of the development of early photography and brought a great number of examples from his extensive collection. He was also able to advise on the dates of family photographs that members had brought

along.

A simple time line:

Daguerreotypes 1840s and 1850s

Calotypes or Ambrotypes 1850s and 1860s

Tin, Ferrotypes 1870s and 1880s

**Editor's Note:** The latest (Oct 2019) English Heritage Members' Magazine has an article entitled 'Picture Perfect' covering early photography.

## **Forthcoming Events**

### **Kingston upon Thames Archaeological Society: Excavations at St. Peter's Church, Petersham**

Thursday 14th November 2019, at 7:30pm for 8pm, Surbiton Library Halls, Ewell Road, Surbiton. A wealthy post-mediaeval community by the Thames. A talk by Dr Helen Chittock, AOL Archaeology Group.

### **Leatherhead & District Local History Society: Fashion and Folly**

Friday 15th November 2019, at 7:30pm for 8pm, Letherhead Institute, 67 High Street, Leatherhead. A talk by Jane Lewis of the Surrey History Centre.

### **Surrey Archaeological Society: AGM and SHERF19**

Saturday 16th November 2019 at 10am - 4pm, Ashted Peace Memorial Hall, Woodfield Lane, Ashted, KT21 2BE. The annual Surrey Historic Environment Research Framework conference will be based on Scientific Analyses this year. It is followed by the AGM.

### **Surbiton and District Historical Society: The Arbiter of Taste - Lord Burlington & Chiswick House in the 18thC**

Tuesday 19th November 2019 at 1.45pm for 2pm, Surbiton Library Annex. A talk by Keith Hathaway. £2 for visitors.

### **Esher District Local Historical Society: The Suffragettes (and Suffragists) in the First World War**

Saturday 23rd November 2019, time not given but normally at 2;30 pm, Holy Trinity Church Hall, Church Road, Claygate, KT10 0JP. A talk by Kathy Atherton. £3 for visitors.

### **Surbiton and District Historical Society: Christmas Event**

Tuesday 3rd December 2019 at 7.30pm for 7.45pm, Surbiton Library Annex. There will be a charge for visitors.

### **Surrey Archaeological Society: Roman Studies Group: The excavations at Colemore**

Tuesday 3rd December 2019 at 7.30pm, Letherhead Institute, 67 High Street, Leatherhead. A talk by David Quick, Chairman of Liss Archaeology.

**Leatherhead & District Local History Society: Christmas Miscellany**

Friday 6th December 2019, at 7:30pm, Letherhead Institute, 67 High Street, Leatherhead. Talks on Commander Alexander 'Alastair' Guthrie Denniston of Ashted, a wartime code-breaker, by John Rowley; Test Pitting at Rowhurst, by Nigel Bond; and "Walking in Leatherhead", by Bill Whitman.

**Carshalton And District History & Archaeology Society: TBA**

Saturday 7th December 2019 at 3.00pm, Milton Hall (the Darby & Joan Club), Cooper Crescent, Carshalton, SM5 2LG.

**Kingston upon Thames Archaeological Society: AGM and Christmas Celebration**

Thursday 12th December 2019, at 7:30pm for 8pm, Surbiton Library Halls, Ewell Road, Surbiton.

**Carshalton And District History & Archaeology Society: TBA**

Saturday 4th January 2020 at 3.00pm, Milton Hall (the Darby & Joan Club), Cooper Crescent, Carshalton, SM5 2LG.

**Surrey Archaeological Society: Roman Studies Group: Gallic sanctuaries**

Tuesday 7th January 2020 at 7.15pm, Letherhead Institute, 67 High Street, Leatherhead. A talk by James Bromwich.

**Leatherhead & District Local History Society: TBA**

Friday 17th January 2020, at 7:30pm for 8pm, Letherhead Institute, 67 High Street, Leatherhead.

**Surbiton and District Historical Society: Merchants, Military Men and Migrants**

Tuesday 21st January 2020 at 1.45pm for 2pm, Surbiton Library Annex. A talk by Dr Judie English. £2 for visitors.

**Carshalton And District History & Archaeology Society: TBA**

Saturday 1st February 2020 at 3.00pm, Milton Hall (the Darby & Joan Club), Cooper Crescent, Carshalton, SM5 2LG.

**Surbiton and District Historical Society: King Richard III and Surrey: a Drama in 4 Acts**

Tuesday 4th February 2020 at 7.30pm for 7.45pm, Surbiton Library Annex. A talk by Mike Page. £2 for visitors.

**Surrey Archaeological Society: Roman Studies Group: Excavations at Cocks Farm Abinger 2019**

Tuesday 4th February 2020 at 7.30pm, Letherhead Institute, 67 High Street, Leatherhead. A talk by the excavations' Director, Emma Corke.

## MEMBERSHIP MATTERS

### Chairman's Notes (continued):

I note the recent interest in the press about the new visitor centre at Sutton Hoo opened by the NT this year, 80 years after its first excavation. Along with the obligatory gift shop and café, the site now includes a new exhibition with superb replicas of the more famous Saxon objects, with displays illustrating their manufacturing techniques. Also opened for the first time is Mrs Pretty's house now renamed Tranmer House. I was particularly impressed by the view through the window, from her Dining Room, of the burial mounds. It is well worth a visit.



View through the window of Tranmer House

### **EEHAS Christmas Party 2019**

We are having our traditional Christmas celebration on Wednesday 4th December at 7.45 for 8.00 pm in St Mary's Church Hall. Tickets priced at £3 will be available at the November meeting and also by post from Doreen Tilbury at 31 West Hill Avenue, Epsom, KT19 8LE. There will be food and drink (including a glass of mulled wine or a soft drink), plus a raffle.

The event is reliant on members bringing a plate of food to share, and it would be helpful if you could tell Doreen what you intend to bring when you buy your ticket; this will hopefully prevent a spread consisting of lots of the same thing.

If you have a quiz or other festive activity you would like to share please let us know.

### **Little at LIDL**

**Jeff Cousins**

Some of you may have notice the new headquarters building for LIDL being built near Tolworth station. The trial trenching found:

No cultural or environmental remains, or archaeological activity.

A natural fissure was observed. Those who know the Tolworth Court Farm fields will know that the ground is heavy clay, and in summer cracks more than 2 inches wide can run for more than 1/4 mile. Our own baby San Andreas fault.

### **2020 Subscriptions**

Members are reminded that subscriptions for 2020 become due on 1st January. Subscriptions can be paid at the monthly meetings, or by post to the Treasurer, Jane Pedler, or the Membership Secretary, Doreen Tilbury. Subs are £15 for ordinary membership, £22 for family membership, £6 for student, or £22 for corporate and school memberships. A slip is provided below:

### **2020 Subscriptions**

I (we) wish to renew membership for 2020 Amount enclosed.....

Name and address.....

.....

.....

E-mail address.....

*Epsom & Ewell History & Archaeology Society*  
*Founded 1960 Registered Charity No. 259221*

**Useful contact details**

**President:** Jon Cotton MA, FSA

**Chairman:** Steve Nelson

**Secretary:** Nikki Cowlard, 1 Norman Avenue, Epsom KT17 3AB (01372) 745432

e-mail [info@epsomewellhistory.org.uk](mailto:info@epsomewellhistory.org.uk)

**Treasurer:** Jane Pedler

**Archaeology Officer:** Frank Pemberton

**Conservation Officer:** Nikki Cowlard (see details above)

**Membership Secretary:** Doreen Tilbury

**Newsletter Editor:** Jeff Cousins

**Programme Secretary:** Vacant

If you are interested in this post please contact the Secretary.

**Please send copy for the next newsletter to the Newsletter Editor by 12 January 2020.**

**Visit our website**

**[www.epsomewellhistory.org.uk](http://www.epsomewellhistory.org.uk)**

**Gift Aid**

Just a further reminder that if you pay tax EEHAS, as a charity, can claim Gift Aid on your subscription or donations, at no cost to yourself. In order for us to do this you need to sign a Gift Aid Declaration form which is available at meetings and can also be found on the Society website on the Membership page.

You can see a colour copy of this newsletter on the Society website from mid November

**[www.epsomewellhistory.org.uk](http://www.epsomewellhistory.org.uk)**