



KENT UNDERGROUND RESEARCH GROUP

Newsletter Issue Number 135 December 2021



HOLE IN BEXLEY HEATH

ROBERT HALL NOVEMBER 2021

A request came through the KURGSEC system (backed up via a phone call to Hugh Farrer) to look at a hole that had emerged in a back garden in Lion Road, Bexley Heath.

Photographs and video were received by email indicating that a small hole had arisen in a back garden lawn, some distance from the house and which entered into a larger brick structure. As it was a garden used by young children, there was a safety aspect and the hole was covered with a concrete slab, although there was a natural concern about the possibility of the hole getting larger with time.

This report firstly covers some basic desk research of the area to check for possible clues from that source. It then covers the results of a visit to the site on 6 November 2021.

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Editors Note:

A very big thanks to everyone who has contributed to KURG newsletters this year.

We had a very enjoyable AGM at the Margate Caves last month, and for those of you who were unable to make the day, there is a short summary included in this newsletter.

Keep an eye out in 2022 for our updated website...

Articles, announcements or suggestions for the newsletter can be e-mailed to me at:

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Member: NAMHO and BCRA

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Desk research: maps of Bexley Heath near Lion Road

British Geological Survey maps (not included here) show no wells or deep bore holes nearby. Most data is confidential, but there are some shallow boreholes relating to work on sewers that are in the public domain and these show sands and gravels to perhaps a 5 metre depth (the nearby boreholes do not go deeper).

The evidence from these maps is that in the 1860's/1870's the area of interest was open farmland. Building in the area started not long after. There is no real evidence of any brickyard, quarry or well shown on these maps that might lead to an expectation of underground features.

Aerial photographs and later maps give little evidence for the possible existence of air-raid shelters (either WW1 or WW2), although this cannot be discounted.



Early post war (WW2) aerial view

Results of visit

The hole in the lawn was only around 15 cm across, but was then about 80 cm deep to the top of a debris cone in a brick structure.



Hole at the surface; the tape measure is set at 1 metre length for scale

The brick structure appeared to be circular and of about 1.5 metre diameter. The diameter was tapering down towards the surface, giving a domed roof shape, albeit truncated.



Inside of brick structure looking downwards; view of curved brick walls and the ceramic pipe

The visible debris cone was mostly soil, but included bits of turf and some broken brick. It seems that the domed top of the structure had been damaged at some point in the past and a fair amount of the turf of the lawn (rather more than the 15 cm hole) was no longer supported by bricks.

The debris cone was not steep, but it was possible to see rather more than a metre below ground around its edge to the bricks. The brickwork did not appear to be of high quality and had not been smoothed and rendered. Around 1 metre down on the west side (towards the house) was a ceramic pipe of relatively large diameter (say, 10-15 cm, although its location did not permit measurement).

There was no evidence of metal pipework or similar that would indicate the presence of a pump or similar to indicate a cistern or even a pumped well.

The available evidence points to this being a cess pit/septic tank. It was probably associated with the house before a connection to a public sewer became possible. However, there is the possibility that it was associated with temporary housing: we occasionally see such structures built in wartime to provide sewerage facilities for temporary housing constructed to alleviate local shortages caused by bomb damage.

Although it was not possible to measure the depth of the original structure, it is likely to be of the order of 3 metres.

The form of the visible structure and the lack of any evidence from the maps make it very unlikely to be a deep construction such as a well or a dene hole (an old chalk mine).

next to my neighbour I came across a small hole running between the houses... after some investigating it appears to be a well?? It must be very old as the two houses are over 100 years and I assume was part of whatever was there before the houses were built. I have a video of the well and was wondering if you could help in any way to ascertain what this was for or what it is."

Some pre-visit desk analysis is given below. This is followed by the results of the visit, together with further information that has since been identified.

Map data

The location is understood to be in the back gardens of houses on the A2 London Road/West Street area in Sittingbourne. OS maps from 1866/7 revealed nothing of interest in this location (e.g. well/shaft). However, the whole area a little to the west is called "Chalkwell" and there are lime kilns in quarries immediately to the south and a brick field a short distance to the south-west. These are all highly indicative of the likelihood of deneholes or chalkwells in the area (effectively small underground quarries for chalk, accessed from the surface by means of a shaft).

The oldest readily available 25 inch map shows a "P", meaning a "pump" at a location that seems consistent with the message at the centre of this extract. It is not clear what "Sm" means in this context, but it may mean "smithy" and refer to the property at the rear. There are other pumps in the gardens of other nearby houses. It is therefore also readily possible that there could be a well at the location, formerly surmounted by a pump.

The BGS map viewer shows the bedrock to be chalk, but with a very localised band of surface clay/gravel or sand on top. No well is shown, although there are quite a number of boreholes to the north – mostly seemingly associated with water extraction for paper-making industries. The data sheet for the borehole is not very legible, but does indicate the likelihood of reasonably shallow wells for water extraction in the general area.

HOLE IN SITTINGBOURNE

ROBERT HALL

NOVEMBER 2021

This query came in by email to KURGSEC in October 2021 as follows: "I was explaining to them that over the weekend while digging in my garden

Visit

The site was visited on 6 November by Robert Hall and Emma Scheck.

The structure was circular with an internal diameter of about 1 metre. We did not plumb the structure, but it is around 3 metres deep, with a shallow depth of water and a small amount of detritus at the bottom. The material used to build it was brick, but with an interior that appeared to have been smoothed and rendered. The top of the structure had a brick dome top. There were the remains of what appeared to be brick runs from the location of current rainwater downpipes to the structure, although they no longer discharge water into the structure.

Photographs taken of inside the structure show that there is a pipe still extant on the northern side that rises from the foot of the structure along one wall. Nearby, is a paving slab with a roughly cut half circle slot that would seem likely to have been a slab at the foot of a hand pump.

The location of the structure is under the boundary fence between the two houses. This tallies with the location of the pump shown on the 1897 map.

Based on this, it would seem that the structure is a fresh water cistern fed from rainwater collected from the roof of the houses. It is interesting to note that it lies on the boundary of what is now (and in the 1897 map) two separate houses, rather lending credence to the idea that what is now a pair of semi-detached houses were once under common ownership. There is a possibility that the cistern is a modified well: it is not unknown for wells to be “topped up” by rainwater collection in some cases or alternatively a cistern might be put in the place of a previous well. It would take a more detailed investigation of the bottom of the structure to determine if this is the case here, but this seems unlikely to be realistically feasible given its location.

The following photograph of the site was taken looking South, with the domed brick top of the

structure on the right. One brick run from a downpipe runs towards the bottom left of the picture, the other is less obvious, but appears to run under the fence line towards the wall at the top of the picture. The slab with the slot that may have once been by a hand pump is top left of the picture (but has recently been moved). The various wooden boards are merely placed for convenience of access.



The next photograph provides a closer view of the cistern and the two brick runs. The tape measure is set at 1 metre in length for scale.



The slab may once have been associated with a pump at the top of the cistern.



The interior of the cistern has a smoothed interior, and from the view of the cistern interior looking down, the pipe is visible at the top of the picture.



Two cast iron drainage channels have been found in the garden near the cistern, each labelled as "R Gardiner Sittingbourne". The garden also contains a fair quantity of slag.

From a search of newspapers, there are numerous mentions of an "R Gardiner" as an engineer/proprietor of the "East Kent Iron Works" in Sittingbourne. These appear from the 1870s onwards with an address given as "High St, Sittingbourne". On maps of that date the High St is part of the old A2 some hundreds of metres east of

London Road, although it has not proved easy to identify the exact location of the relevant building.



As an example of the articles concerned, this appeared on 3 July 1875 in the Whitstable Times and Herne Bay Herald:

"ACCIDENT – On Tuesday a lad named Thomas Pretty, in the employ of Mr. R. Gardiner, engineer, High-street, Sittingbourne, met with a rather serious accident. One of the men was requested to throw a strap off a wheel which was driving a portion of the machinery but the lad took it upon himself to do so, and, foolishly, without stopping the engine. The result was that one of his arms became entangled in the strap, and his wrist was severely lacerated. He is likely to be "laid by" several weeks through the injury."

A useful summary of the East Kent Iron Works is given in a small article in the East Kent Gazette on 11 January 1930. In summary; Robert Gardiner died in 1907 and the East Kent Iron Works business seems to have been passed down to his son in law, a Mr Harry Green, by which time the

business had relocated closer to the location in question. The East Kent Iron Works seems to have carried on in business into the 1980s in some form.

Taking this together, it seems most likely that the "R Gardiner" cast iron drainage channel was actually cast in the foundry near the house in the late 1800s or very early 1900s. It is possible that the foundry might have used old patterns to make castings after the death of Robert Gardiner in 1907, but that likelihood would decline with time.

It also seems likely that the slag found in the garden comes from the same source – although exactly how this occurred is not clear. It may also be noted that the 1897 map does seem to indicate a smaller smithy by the house and that could also have been the source.

Conclusions:

We believe that the structure is a fresh water cistern, originally fed by rainwater from the roof of the house that was used to feed a hand pump, as shown on the 1897 map. Importantly, it does not have the usual characteristics that we would expect for a denehole that might have had possible structural consequences for nearby buildings.

We believe that it is an old structure – certainly before the surveying of the 1897 map and is probably contemporaneous with the building of the house itself, although it is a possibility that the cistern is associated with an earlier well. The “R. Gardiner, Sittingbourne” castings were made by the East Kent Iron Works, and are hence very local items. No doubt more information could be found from further local research.

Abbey by SPAB this summer, which includes contributions from all sorts of historians, archaeologists, specialist builders and surveyors – Ed.

Particulars for the Boxley Abbey Estate produced in advance of it being auctioned in the late 19th Century contain a tantalising description of extensive tunnelling: "*In the Abbey Wall, on the north side of this [Kitchen] Garden, are Two Entrances to Underground Passages, which are said to lead to Boxley Church on the east, and to Allington Castle on the south west.*"

The estate agent somehow omits to mention here that these entrances were probably actually constructed to allow gongfermors to "muck out" the drainage channel under the reredorter – or communal monastic latrine – of the Cistercian monastery. If, however, the writer was correct in his assertions about the extent of the tunnels, then the current august owner of Allington Castle might be startled to learn that his home was at the wrong end of an implied 2.6 km mediaeval pipeline of ecclesiastical excrement from Boxley Abbey and Boxley Church.

KURG is somewhat sceptical of such stories and so went to Boxley equipped merely to investigate the few tens of metres of passage that could be directly inspected by the Mk 1 human eyeball, augmented by an assortment of endoscopes, wide angle video cameras and radio sondes (nicknamed "Lady" for the occasion) secured on drain rods.

Comparative research was also undertaken at other monasteries and priories: their custodians aghast at our avoidance of the monumental masonry of the abbeys and claustral buildings in preference for the muddy ditches and culverts that formed the remains of the latrines and the associated drainage channels. The usual Cistercian arrangement was for monks to have access at first floor level directly from their “dorter”, or dormitory, into the reredorter to apply their rears to what might be delicately referred to as “drop zones” depositing into the drainage channel

KURG AND THE CISTERCIANS

ROBERT HALL NOVEMBER 2021

The following is based on a submission from KURG to the KAS for publication in an article covering another archaeological investigation at Boxley

perhaps 3 or 4 metres below. The upper level of the reredorters typically seem to be spacious and capable of multiple occupancy with little privacy – perhaps to diminish the risk of dirty habits. Little seems to be known about the function of the ground floor of the reredorters, nor the use of latrines by day or by lay brothers, although in some cases it does seem that corrodians and other more exalted occupants of the monastery had their own latrines also feeding into the same drainage system.

In the case of Boxley, the paper by Tester in *Archaeologia Cantiana* LXXXVIII described the remains of the reredorter with much focus on the stonework forming a sluice gate. This forms a rare survival for a reredorter in such a complete form.

Tester also proposed that the drainage channel ran from east to west before turning abruptly south and into a pond. In a pleasing demonstration of inertia, the modern septic tank arrangements seem to have a nearby parallel southern run into the same pond. We concur, based on calcified deposits on stonework, that the most likely direction of flow in the drainage channel was from east to west. However, whereas Tester proposes that the sluice gate was upstream of the “drop zones” with a relatively small reredorter at the end of the east range of buildings, we believe that the visible sluice gate is downstream of the “drop zones” and that the reredorter was a substantial building running east at right angles to the dormitory, similar to that at Cleeve.

The north side of the Boxley Abbey complex is provided with ample water from springs rising on the nearby North Downs. The south side is not so blessed. In winter, surface water run-off might have been an adequate supply to flush the drainage channel when needed, but summer flows are more limited. Rainwater run-off from roofs of buildings might have been used, or an engineered channel to direct water from the north to the south side of the complex, but this has yet to be identified.

KURG AGM ANGIE HARWOOD

OCTOBER 2021

The KURG AGM 2021 was held on Sunday 24th October at the Margate Caves. Draft minutes have been circulated to the membership.

The 2020 AGM minutes were formally agreed and adopted, Trustees, Field Officers and other roles confirmed, and the finances reported in good order (KURG subscriptions will remain the same, but the contribution for BCA insurance will increase slightly for 2022).

KURG activities in the last year have included excavations for the Northfleet Restoration Trust, supporting the Maidstone Girls Grammar School to relocate underground entrances and turn their bunker into an education space for schools in the area; excavations of a family vault in Bishopsbourne to assist burial plans; assisting the Society for the Protection of Ancient Buildings (SBAP) with further investigations of the culverts and reredorter at Boxley Abbey; and various site visits to investigate newly opened underground features such as the denehole in Broadditch Farm and Shottendane hole, providing advice to the public based on the findings.

A highlight of the proceedings was the appointment of Stuart Fraser as KURG Webmaster (see next article - and of course a big thankyou to Dave for all his hard work in keeping things going for the last decade), and Che Tsang’s offer of support for Newsletter distribution (note, paper copies of the newsletter will no longer be available for new members).

The event was well attended, and the venue superb. Plenty of hot drinks and biscuits were provided throughout the meeting, followed by a complementary tour of the underground caves with our unofficial superguide, Rod.

Photographs are courtesy of Pete Burton.



KURG WEBSITE

STUART FRASER

NOVEMBER 2021

After many years of good service and having started to look a bit dated we have a new look to the official kurg.org.uk website, but don't worry for anyone missing the old site/content there is an archive of it linked from the home page. I took over as the 'official' KURG webmaster recently after Dave's 10 years as the un-official one - thanks Dave!

[HOME](#) [ABOUT US](#) [CONTACT](#) [LINKS](#) [SEARCH](#)

WELCOME TO THE HOME
OF
KENT UNDERGROUND RESEARCH GROUP

Recent Projects

Crossness Pumping Station,
Kent
School Bunker Rediscovered
Hammeret 'WW2 Bunker'
Bathouse, Chislehurst, Kent
Cliftonville Hole, Kent

This new site isn't finished yet, if you can't find something then you can view an archive of the [old site](#)

The new site is based on modern CMS software that allows us to provide more features and make it easier to keep it updated and add projects or

articles with little technical IT skills needed, contributors can add content now almost as easily as creating a word document, so if you would like to do some write ups or add images do get in touch. We also now have an online contact form that has already attracted a few enquires. I have also added a few more tools and features behind the scenes including moving us to a new hosting service and updated how email is managed.

As part of all that we now also (re) own the KURG business/links/Organisation in Google so we can track where interest is coming from and help make sure people searching for help in the Kent area get in touch with us.

If you have any (constructive!) feedback or notice any errors then do please drop me a line, though I can't promise an instant response.

Stuart can be contacted at:

webmaster@kurg.org.uk

SECRO PRACTICE RESCUE EMMA SCHECK NOVEMBER 2021

The recent SECRO practice rescue at the Emmer Green chalk mine in the grounds of a scout hut near Reading had been planned for many months. It was a joint practice with the Midlands and also the Gloucester cave rescue teams, although it is debatable how much more practise they needed following their involvement in the very large OFD rescue the other weekend!

The scout hut is very well equipped, not just with a handy chalk mine, but also with camping space, car park, large indoor halls, loos and a kitchen. Indeed, everything one could possibly want for a practice!

Anyway, for those with tents the event started on Saturday night with a hearty hot meal provided by the scout leaders, plus a talk, and a great deal of chatting and catching up.

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Sunday morning dawned bright and sunny, and the practice proper got underway. The scenario was that two or possibly three people had descended a shaft into an un-surveyed mine, and were now very overdue.

The participants were divided into teams: one to survey the area, one for communications using CaveLink, one team at the shaft-top, another on the main gate for access monitoring, a couple of search teams, a stretcher team, plus, of course the surface control team.

Unbeknownst to us, two other teams were also set up – one was to be a pair of rather pushy press journalists trying to get onto site and get 'an angle', and the other to be a distraught and 'ready to risk anything' father of one of the casualties who was intent on descending the shaft with nothing but a piece of string and a mobile phone!

I was in search team one, and we found the casualty 'Boris' (the one with the distraught father), who had a broken leg. The other search team found 'Priti' who had a hurt arm and hypothermia. There was no third casualty as 'Dominic' had gone for an appointment with an optician instead of exploring that day!

So we practiced casualty care, packaging for the stretcher, carrying and also passing along the stretcher, and all the elements that go into caring - both medically and emotionally – for a hurt person, and getting them out of a 60ft shaft. Although, we did swap 'Boris' who was suddenly miraculously cured, for a bag of rocks for the stretcher haul up the shaft.

The whole day was useful, fun, helpful, informative, and it was also really good to have a new generation of SECRO faces in the surface control team, plus working with the Midlands and the Gloucester teams.

I know there were lots of other learnings to be had with those in the other search and surface teams, so all in all, I can thoroughly recommend these

rescue practices, they are most enjoyable, and you just never know when we might be called for real.



Photograph courtesy of Graham Christian



Boris is found but Priti is still missing – photograph courtesy of Alan McBride



Search team waiting to descend with Shaft team – photograph courtesy of Graham Christian



Rigging for stretcher hauling – photograph courtesy of Graham Christian



Ready for the haul up the shaft – photograph courtesy of Alan McBride



Stretcher and 'barrow boy' going up the shaft – photograph courtesy of Alan McBride



ONCE UPON A TIME...

Odds and ends from the past from Rod LeGear (and guest star Terry Reeve this month)

NOTES FROM JOHN CAIGER ROD LEGEAR OCTOBER 2021

John E.L. Caiger was a diligent amateur archaeologist with a great interest in underground sites, particularly deneholes and chalkwells. He sadly died in 1975 but his widow, Nesta, continued his interest and research and was KURG Chairman for 20 years.

John published his surveys and reports in the Kent Archaeological Society's annual journal *Archaeologia Cantiana* but many smaller sites and those whose surveys were still to be drawn up remained unpublished.

Some years before her own death in 2017 Nesta gave me John's notebooks on deneholes etc. and her own scrapbooks of underground related information. These contain notes and surveys that were not published at the time and many newspaper cuttings of subsidences etc.

From a newspaper article early 1960s:

EASTRY CAVES OPEN FOR WHITSUN Artist is Preparing Pictures

"Although not ready for Easter holiday-makers as had been hoped, Eastry's famous labyrinth of caves and galleries will be open for tourism at Whitsun.

A series of period paintings, illustrating the history of Eastry and the caves is being prepared by the

well-known artist, Mr Nicholas Cameron. These will be on display to visitors.

During excavations of the galleries a number of 'historical' pictures have been found done in Edwardian times. "They are awful pictures and are being removed", Mr G.J. Gardner, who is the new proprietor of the caves, told a reporter this week. One of them shows a naked crusader nine feet tall. Mr Gardner, who acquired Eastry Caves last December, is also the proprietor of the famous caves at Chislehurst.

Work of restoration at Eastry is in the hands of British Museum expert, Mr Charles Quarrell. There is still a lot of work to be done underground, though preparations of a new entrance are well underway. Access to the caves originally was made through a well in the grounds of a cottage called 'Beckett's' in Gore Lane. Subsequently a doorway with steps was installed. Under the present arrangement a completely new entrance is being constructed from the adjoining property.

Visitors at Whitsun will be able to make a conducted tour lasting twenty-five minutes."

A contemporary guide book states that the caves were open every afternoon from 3pm to 7pm including Sundays during the summer season. The tours were escorted by a 'competent' guide and the charge was 1s 6d for adults and 6d for children.

From the notes of J E L Caiger in 1955:

A SUBSIDENCE AT MACE FARM, CUDHAM, KENT

"This denehole or possible chalkwell was accidentally rediscovered by Mr Day of Pearson's Lime Pits, Otford, whilst employed in chalking a field at the above named farm on May 6th. The weight of his tractor and chalk load causing the shaft filling to sink some 3ft or more as he passed over the filled up shaft.

The site was visited on May 8th, but the filling was firmly wedged and an entry into the shaft could not be gained. Local inhabitants informed me it had been open some 50 years ago to a depth of 30ft and had then been filled up. It was found possible to attempt to dislodge the contents by the use of explosives (gelignite). Two charges of 22ozs and 28ozs were tried but proved unsuccessful, the plug still firmly intact, but lowered only a few feet by the explosion effect.

Other nearby and similar filled up shafts were seen; it would seem that the practice of sinking shafts was at one time in vogue in the Cudham district."

The first photograph shows a young John Caiger on the left and Mr Day on the right. The second photograph is the 28 ounces charge of gelignite exploding.





The white specks on the ground in the photos are the small chalk modules from the Otford quarry spread on the land by Mr Day. A few hundred years earlier chalk from the deneholes would have been spread in exactly the same way but using horses and carts.

And some reminiscings from Terry Reeve..

MY FIRST DENEHOLES

TERRY REEVE

November 2021



I will never forget my first visit to a denehole , or the circumstances that led to it , but can't recall exactly how old I was at the time. I think I was probably about eleven or twelve. It was the large quarry, which is now the Bluewater shopping centre, that first attracted me to the area around Darent

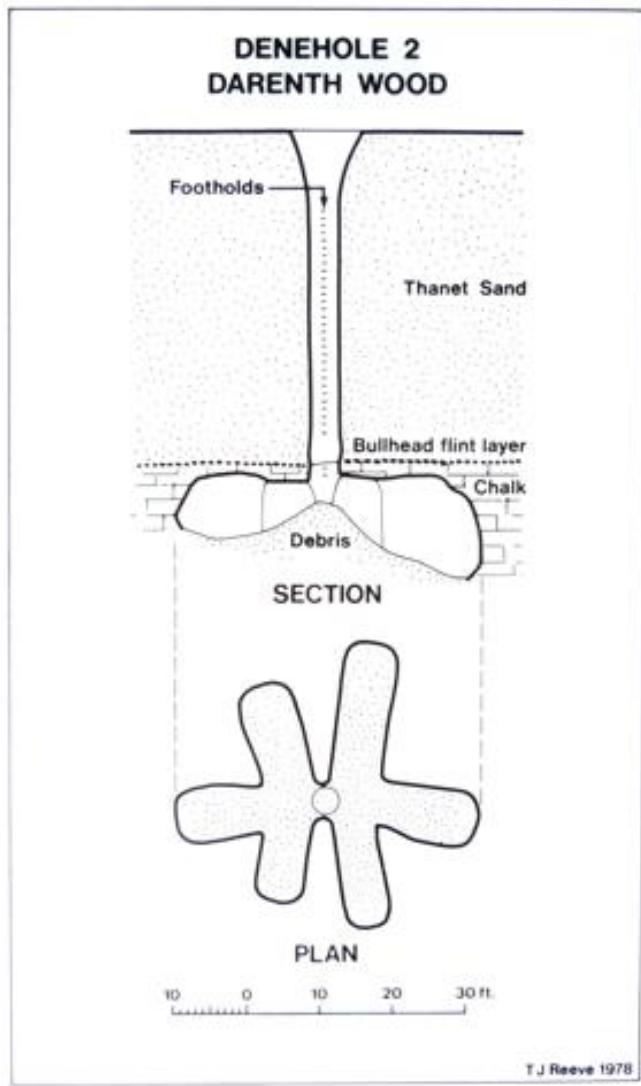
Woods near Dartford as it was a good place to collect fossils. Some of the best specimens in my collection came from this pit. Although this pit was still being worked at the time, it was possible to climb down to a wide high level ledge that was inaccessible to the quarrymen working below and even if you were seen they could only shout at you.

Opposite this quarry, in the lane through Darent Woods, my friends and I would dare one another to walk through the large gypsy camp. This usually resulted in being accosted by the gypsy kids with a challenge to a fight but on one occasion they were a lot more friendly and asked if we would like to see the denehole. I had no idea what a denehole was at that time and out curiosity took them up on the offer. After fighting our way through undergrowth we emerged at a small clearing in the wood where we were shown two deep holes comprising a narrow vertical shaft and a second hole, obviously formed by a collapse, which provided easy access to all the denehole chambers from a small entrance at the bottom of a steep slope.



This turned out to be the shallower of the two open Darent Wood deneholes, where John and Nester Cagier had carried out archaeological excavations, both in the debris cone of the denehole and the ditch of a nearby earthwork , obtaining evidence of

a 13th century date. The finds included medieval pottery and a large collection of animal bones including a polecat and dogs of the whippet variety.



This denehole is unusual in that, although it has the typical double trefoil plan, there is also a small additional side chamber branching off near the end of one of the lateral chambers, which can be reached from the second collapse entrance without the need of ropes or ladders. The roof of this chamber is at a higher level than the rest of the mine and is probably a remnant of a second adjoining denehole in which the area around the shaft has collapsed. It may be possible to enter more chambers in this area by digging.

Another small excavation, carried out during some investigations by South London Field Studies

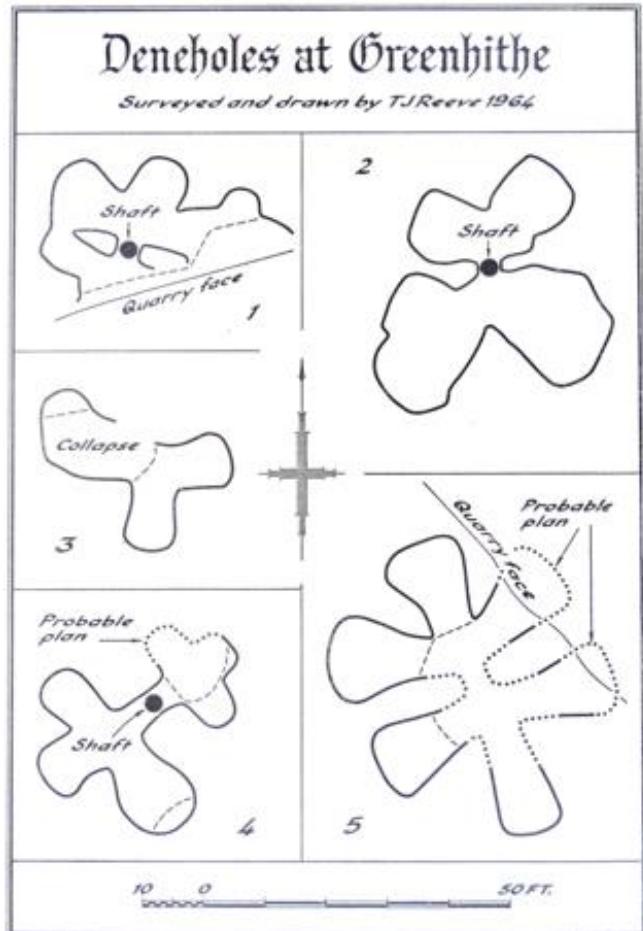
Society, also produced a large collection of bones suggesting that the shaft had remained open in a woodland setting for a considerable length of time. The bones were examined by John Carrick at Dartford Museum who compiled the following fauna list: badger, rabbit, fox, dog, mole, stoat, common shrew, field vole, water vole, field mouse, frog, toad and several species of bird. There were also some human remains including vertebrae, ribs, scapular, sternum, radius, tarsals and metatarsals. The remainder of the skeleton must still be there.

My main childhood interests included geology, caves, palaeontology, prehistoric archaeology, astronomy and natural history, which were not the sort of subjects that I learnt much about at school. In this respect, I was fortunate that Dartford had a very good library, which - unlike my present recently refurbished local library in Battle - actually had a decent collection of books in it. The so-called improvements at Battle involved the removal of a complete set of Sussex Archaeological Collections, which had previously been available for lending, and the disposal of half the local history section, but at least they have retained their extremely tatty and obviously well-read copy of Kent and East Sussex Underground.

There were several books which helped to inspire my interest in caves and mines. My favourite was *Ten Years Under the Earth* by Norbert Casteret, especially the chapter describing the discovery of prehistoric clay sculptures of animals beyond the sumps in Montespan Cave in France. Another was *Exploring Caves*, by Reverend C. H. D. Cullingford, of which there happened to be a copy in my school library. This little book is illustrated with pen and ink sketches and includes a chapter about deneholes and mines in the South East. One of the most prized books in my own collection is an original copy of '*Ightham : the story of a Kentish village and its surroundings.*' by F J Bennet. This might sound an unlikely title to have anything to do with speleology but contains a wealth of information concerning the Paleolithic rock shelters at Oldbury Hill and the small Ragstone caves

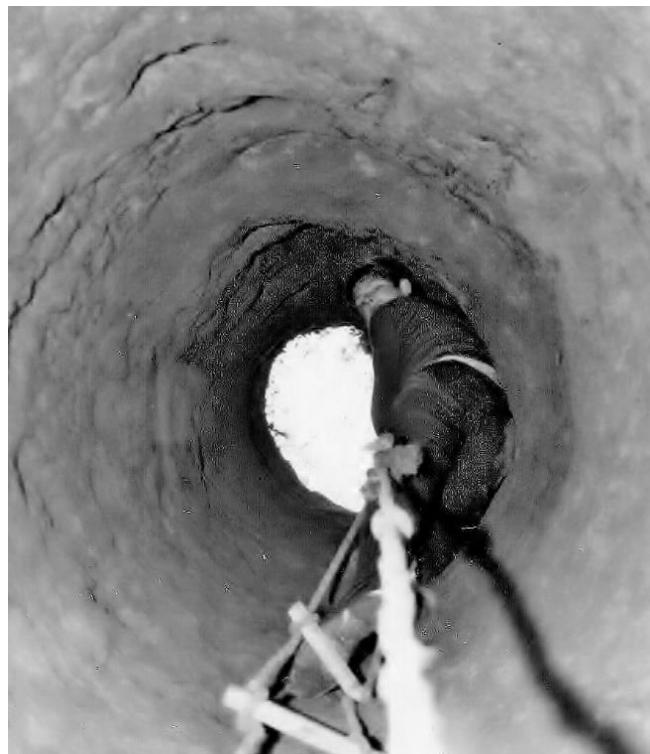
known as the Ightham Fissures which at the time of their discovery in the years preceding 1894, provided the most comprehensive list of Pleistocene fossil fauna found anywhere in the British Isles. Originally published in 1907, this has recently been reprinted.

My search for more deneholes to explore began with a visit to Dartford reference library which provided a wealth of information on the subject including an article in the Transactions of Dartford Antiquarian Society describing the exploration of a denehole at Mounts Wood, Greenhithe, in 1918. This included an excellent survey by Brian Peak which gives the actual measurements and angles that were taken to produce the plan and is a good example of the standard to aim for when surveying deneholes.



The location of Mounts Wood was obtained from a large scale OS map in the library but when I arrived

in at the site in 1961, the woodland had been bulldozed in preparation for chalk quarrying. The Thanet Sand, which overlies the chalk in thicknesses of up to 50 feet, was being stripped off using an enormous excavator and passed on a conveyer belt around the edge of the pit to be tipped into disused parts. As luck would have it, I had arrived in the nick of time. A small circular area of turf and bushes remained untouched and this contained the denehole shaft and its surrounding fence, which was now only a few yards from the edge of the quarry. This is Denehole No.2 on my survey plans.



For my first solo decent of this denehole I relied on a single rope making use the footholds in the shaft sides as the original miners would have done in the past. This was easy enough going down but the climb out was a bit of a struggle where the footholds near the base of the shaft were almost completely eroded away. On a second visit with some school friends, we overcame this problem with a crudely constructed rope ladder in which the rungs were attached to the ropes using bent over nails. One of my friends still struggled with the ascent and we ended up having to physically haul

him out while he desperately clung to the ladder. This denehole was unusual in that, although it had the typical narrow shaft with footholds, there were only four chambers. These were arranged in two pairs on either side of a short narrow passage under the shaft where the footholds continue down to floor level.

As the quarrying progressed, three more deneholes came to light where the weight of heavy machinery caused collapses in the exposed chalk surface. Although there was little or no security at the quarries in those days, I still took the precaution of choosing a very foggy day to do my surveys so as to avoid attracting the attention of the quarrymen. Actually, I needn't have worried because on subsequent visits the quarry manager and workmen were very friendly and amenable to anyone showing interest in the deneholes or geology of the site. They even provided a wooden ladder for access to one of holes.

Denehole No.5 was situated very close to the edge of the quarry and the ends of two of the chambers had already been quarried away. Although the roofs of three of its chambers had collapsed its outline was still clearly discernible as a typical double trefoil type. Denehole No.4 was another example of the six chambered type in which the chambers on one side of the shaft were particularly well preserved and could be entered by ladder through a small hole in the roof. The base of the shaft, measuring three feet in diameter, could also be seen in horizontal cross section in the exposed chalk surface. This was blocked with compacted sand, forming a very steep sided cone in the chambers below. In No.3 only two chambers remained intact, along with a large collapsed area where the original plan could not be determined with certainty.

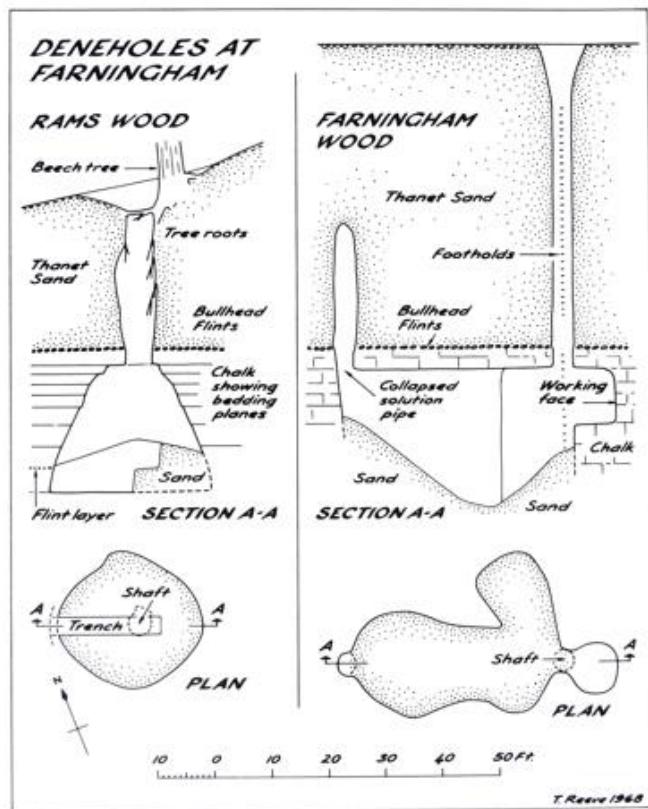
Another visit to the quarry in 1964 was arranged by Harry Pearman, following my reply to a local newspaper article requesting information about deneholes for inclusion in the Chelsea Speleological Society publication - Deneholes,

Records Vol. 4. The participants on this occasion were, myself, Harry and his wife Heather, Fred Topliffe and Bob Fish. Nothing had changed since my previous visit and after a quick look at the previously surveyed deneholes we turned our attention to another interesting looking opening on the western side of the quarry. This denehole, (No. 1) was entered by hanging a caving ladder over the edge of the quarry face using the base of the conveyer belt as a belay. Most of the chambers on one side of the shaft had been quarried away but from what remained it appeared to be an extended double trefoil type in which the groups of chambers on either side of the shaft had been linked together leaving two chalk pillars to support the roof. There was also an additional shallow alcove in the side of one of the lateral chambers. Previously, deneholes of this type had only been recorded in the Baldwyns Park area of Bexley. On the same day we also descended both of the nearby Darenth Wood deneholes.

The most recent denehole (No. 6) to be exposed by the quarrying was recorded by Alan Glyne - Ridgers, who visited the pit while he was working on the excavation of the nearby Springhead Roman settlement. Only the ends of two of its chambers remained exposed in the quarry face, both of which were almost completely choked with sand. This was not far from the site of another well-known denehole known as 'Clabbernappers Hole' which was described in the Gentleman's Magazine 1803 as 'a wonderful cavern, divided into detached cells and compartments, excavated from a hill facing south at the bottom of which you enter it'. A search of the woodland, hereabouts, revealed a large depression which might be the site of this denehole.

Another particularly interesting denehole, which I first visited during my schooldays, was the only surviving example of the single chambered type known as 'bee-hive or bell pits'. This was one of two deneholes in woods near Farningham which were examined in the early Sixties by members of the Lewisham Natural History Society. As well as

recording the bats and insects that inhabited the holes, they also carried out an archaeological excavation.



The bell pit was located near the western edge of Rams Wood and consisted of a 25 ft deep shaft, cut through Thanet sand, leading to a dome shaped chamber in the chalk some 25 ft in diameter and 22 ft high. The entrance was situated in a hollow at base of an enormous beech tree, the

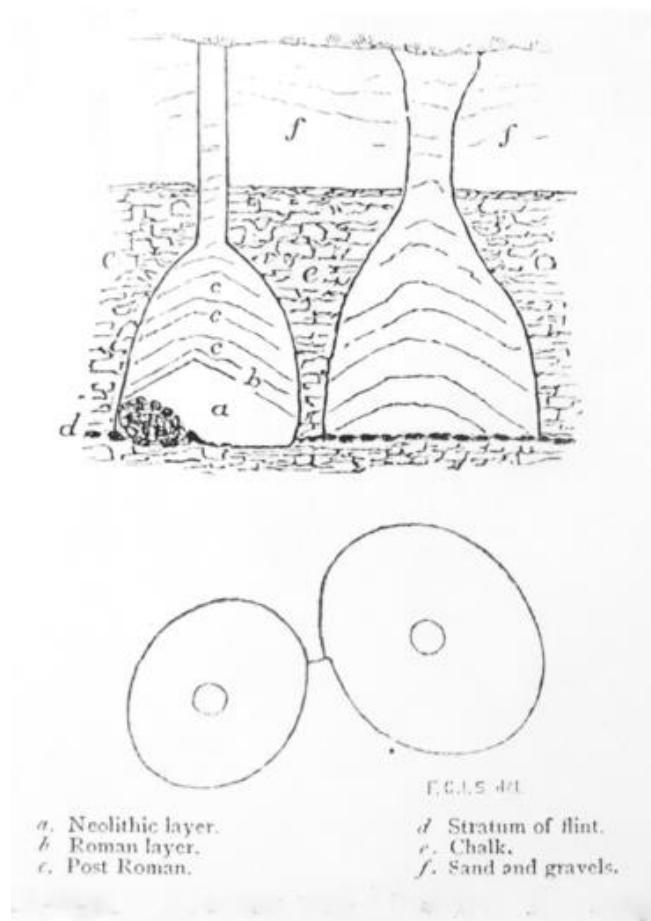
roots of which had eroded the shaft sides obliterating any trace of footholds. Assuming that the shaft originally had footholds some form of ladder must have been used during excavation of the chamber, perhaps not unlike that constructed from tree trunks and branches by members of Lewisham natural history society during their explorations. Alternatively, a rope ladder might have been used or perhaps they simply hauled one another in and out with the same rope that was used for extraction of the chalk.

The archaeological investigation involved excavating a trench down to floor level, which extended from one wall to the centre of the chamber directly beneath the shaft. But apart from two pig skeletons of recent date nothing of interest was found. Beneath the top layer of dark soil and woodland debris there was only compacted sand with no evidence of any stratification. The probable explanation, is that the shaft was immediately backfilled when the mining ceased using the sand originally extracted during its excavation. Some form of obstruction such as a tree stump was probably wedged in the base of the shaft prior to filling to prevent the sand dropping into the chamber below. The shaft may then have reopened at later time following heavy rain or disturbance of the infill by the tree roots.

Two very similar bell pits discovered in a chalk pit at Crayford, were described by F.C.J. Spurrel in the Archaeological Journal vol. XXXVII under the title 'Account of Neolithic flint mines at Crayford, Kent'. But unlike the Rams Wood denehole, the infill in these pits exhibited clear evidence of stratification suggesting that the filling had accumulated gradually over a long period of time and everything seemed to be in the correct chronological order.

The following description appeared in several early publications including the Victoria History of Kent and a local newspaper article: 'One of these pits measured from the surface to the chalk about 18 feet thence to the floor 17 feet 6 inches. From the floor rose an obtuse cone of sandy clay, very hard,

6 feet high, washed in very slowly and evenly by the rain. In the cone were found several flakes, worked scrapers and a core but no pottery; above this lay coarser soil, several sorts of pottery, some made with shells, some with chalk ornamented by finger nail; higher up still Roman pottery, a fine Samian plate, and bones and rubbish to the surface'.



The original article - of which I found a copy in a library in Canterbury - provides a more detailed description of the Roman layer. As well as the Samian plate (which is in Dartford Museum) this consisted of a mass of pottery representing at least 150 vessels, mixed with bones and fragments of iron, forming a layer about a foot in thickness. The bones comprised pig, ox, horse, sheep or goat, small deer, dog and some bird bones including goose. There were also large numbers of shells of

banded snails and oysters, all of which is typical of the sort of rubbish that would be expected if the pit had been used as a midden during the Roman period.

There is also a description of: 'another mine further west which was worked on a different principle; the centre was open down to fifteen feet, then smaller caves around beyond the central area ten feet lower, reaching the layer of flint; flaking in this cave went much further, and a fire was lighted within. Perhaps it was used as a dwelling place'. Unfortunately there is no illustration of this mine but the description does seem more typical of Neolithic flint mining.

Another interesting observation from the Crayford site is that 'these caves present no marks which indicate the means by which they were dug, and there is but one conclusion that the blocks were prised out, perhaps with wood or horn'.

This is where the Rams Wood hole definitely differs from the Crayford bell pits - the many pick marks in its chamber were clearly made with a metal implement and are similar to those seen in the more typical double trefoil deneholes. Despite its striking resemblance to the Crayford pits - which in my opinion clearly provide evidence of a very early date - I think the Rams Wood hole is probably nothing more than a rare deviation from the more typical medieval denehole plans.

The other Farningham denehole was the deepest in Kent measuring 85 feet to the lowest point. Its underground plan is particularly interesting as it shows a denehole still in an intermediate stage of excavation. Only two very large and deep chambers were completed along with a small high level working face on the other side of the shaft forming the start of what would have become another set of chambers had the mining continued. Lewisham natural history society abandoned their exploration of this denehole when discarded insecticide cans were found at the bottom. When I first saw it in 1961 it was blocked part way down

with tree trunks and branches following coppicing of the woodland but it did open up again a few years later, by which time smell of insecticide had gone away, and was descended on several occasions by South London Field Studies Society and Chelsea Speleological Society. These visits provided the opportunity to make a quick survey and take some photographs.

Although I frequently accompanied Chelsea Speleological Society members in their activities in South East England, I did not join until I was well into my twenties. Around that time I also became a member of Unit 2 Cave Research and Exploration, which is now known as Wealdon Cave and Mine Society. As a teenager, it was the South London Field Studies Society that provided my introduction to the world of natural caves with trips to Porth yr Ogof, White Lady Cave and Town Drain in Wales, Pixies Cave at Chudleigh in Devon and some coastal chalk caves at Beer - also in Devon. This society was formed in association with an adult education natural history evening class at the Kirkdale branch of Forest Hill and Sydenham Evening Institute. They also produced an annual journal to which those members attending the classes and numerous field trips were invited to submit articles.

Both the Darent Wood deneholes are still open and now fitted with grills for protection of the bats. The deeper of the two, (Denehole No.2) situated on the eastern edge of the wood, is probably the best surviving example of the typical double trefoil type in Kent. All the Mounts Wood deneholes have now been lost to the quarrying and the Rams Wood shaft was filled in during construction of the M25.

The Farningham Wood denehole was still open when I showed it to Jim Bradshaw in 1976 but I don't know anything about the present situation. There is also another denehole in Farningham Wood, which is located in the area owned by the Boy Scout Association and covered by concrete slab. Unfortunately there is also a pipe leading into

it where I was told they empty the contents of their Elsan toilet.



USEFUL WEBSITES

The following links or sites have been sent in by readers and provide an insightful picture of the underground scene - Ed!

This link to the Margate Shell Grotto comes from across the pond, and provides some nice photographs and description of the discovery and mystery which surrounds the origins of this unique underground feature:

<https://www.mentalfloss.com/article/651673/england-mysterious-underground-shell-grotto>

I enjoyed this quirky article about the start point of the London Underground; although no longer served by Tube trains, and not really much subterranean information in the article, it does provide some interesting tube trivia about the 'zero point'!

<https://www.mylondon.news/lifestyle/travel/i-went-london-underground-starts-22036583>

Pete Burton has sent an interesting link with details of the opening of an exciting cave replica in Marseille in June 2022:

<https://www.completefrance.com/travel/activities/grotte-cosquer-replica-opens-june-2022-marseille-8484610>

The real Grotte Cosquer lies 37 metres below sea level in the Mediterranean and is home to 500 works of prehistoric cave art. More historical details can be found at:

https://en.m.wikipedia.org/wiki/Cosquer_Cave

UPCOMING EVENTS

and reminders...



Subterranea Britannica

SUBBRIT WEBINARS

Since the last newsletter, SubBrit has broadcast additional "In The Dark" webcasts which can be accessed by visiting <https://www.subbrit.org.uk>.

On 9th December, Part 4 of the 'Underground London' series presented by Nick Catford will be available for on-line viewing at 6.30 pm. Pre-registration is required by visiting:

<https://www.bigmarker.com/subbrit/in-the-dark-underground-london-part-4>

Included in this webinar is a miscellany of sites, from the disused tube stations and closed sections of the London underground railway system, many of which were given a new lease of life, to the secret central government and military bunkers - operations rooms and control centres - which protected London against the German bombers during the Second World War.

Nick will also look at London's Cold War bunkers, never used in anger; and similarly the more modest Royal Observer Corps posts. There are air raid shelters, large and small, public and private; mines and underground quarries, some going back to the 17th century, and tunnels of all sorts: pipe tunnels, horse tunnels, tram tunnels, service tunnels, and the tunnel under the Thames Barrier. Last but not least, and not for the fainthearted, is a collection of photographs showing the capital's creepy Victorian cemetery catacombs.

It should be a good presentation as Nick was granted unprecedented access to many of the sites in order to compile the collection of images shown in the Webinar. And don't worry if you've missed parts 1-3 as these are still available to view on demand through the website.



NAMHO CONFERENCE 2022

17th – 20th June 2022

Next year's NAMHO conference is to take place from 17-20 June 2022 at Grosmont in the North York Moors and among the Cleveland ironstone and jet workings. Further details will be available in due course when visiting www.namho.org.

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