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Welcome to this edition of the newsletter, it's a little late due in part to the lack of archaeology going on at present in the South East. But I have managed to secure some interesting articles, some are not directly related to archaeology, but none the less feel are relevant.

I am appealing to the members and any others who read this journal to let me have articles they may have, or are working on for inclusion in the next issue, deadline is last day of September, so no excuse, plenty of time.

A proposal has been made to not print the journal in such numbers, but to send it to members as a pdf file, what are your thoughts on this? Some copies would still be printed for those who do not have a computer, and would prefer a hard copy.

The cost of printing and posting cost some £200 per issue, at this time we need to save money, in the economic times of restraint.

Please let me have your views.

Bob Turner, a little chuffed!! Well done. (In his own words.)

I have heard recently that I have been granted Licentiate membership to the Society of Archaeological Illustrators and Surveyors.

Anyone can apply to join as an ordinary member provided they have prepared and have published work for an academic institution but I was asked to submit examples and provide two sponsors that would elevate my application to Licentiate level.

Dr Matt Pope and Robert Hutchinson (just about to become Dr) have supported me as I have recorded on their sites and produced illustrations so I was rather pleased to receive this honour.

I now have to submit a full portfolio and go before a board of fellows in due course which will mean that I can put MAA&S after my name and not just the LMAA&S as I now can. It's not an instant thing as I have to show a complete range of work and satisfy the board as to my competence and ability and technical know how on recording, section recording and illustration.

On behalf of the Society well done.

New web site address, this is where you can see all the work being undertaken by the field unit, the unit is growing at a good rate, and under the direction of the two field unit project managers, Pete Brannund and Ian Robertson, there are many exciting projects in the pipeline, the most and perhaps the biggest the society has ever undertaken is the Walberton Project, a 5 year project, which at the time going to print is largely reliant on a huge Heritage Lottery grant.

So watch this space. A full list of forth coming activities, digs and other work can be found at this address:

<http://www.worthingarch.co.uk>

I welcome comments on the journal; improvements, thoughts, are most welcome. The views expressed in articles are not necessarily those of the society, all rights are reserved.

Rodney Gunner.

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Interesting web sites:

<http://www.nationalarchives.gov.uk>

<https://www.greenmetropolis.com>

<http://www.digital-documents.co.uk>

<http://www.bognor-local-history.co.uk>

<http://www.archive.org>

Stop Press



Treasure Trove

From excavated site at Parham, was found this tiny apostle pilgrim brooch/badge or a religious cross and dates to 14th/15th century.

The metal is Silver Gilt and the casting mould would have been made from cuttle fish back bone.

In view of the fact that it's Silver and over 400 years old it has to be declared as Treasure Trove and has now been sent to the British Museum.

Deadline for articles for next issue is 30th September 2010, please supply in .pdf format if possible and photos as separate .jpegs.

Articles from members own research are most welcome.

Salt Industries in the Adur Valley

Adur Valley Research Group

At the time of Domesday there were some 285 salt pans in Sussex, these were on average worth 2s.6d. each.

In the Adur valley alone there were forty-two, besides the unspecified number that belonged to Coombes.

Salt was in great demand, it was needed for salting down meat to sustain the people during the winter months. We are now able to keep our cattle and other livestock going throughout the winter months, with modern farming methods and feeds.

But great difficulties faced our ancestors during the winter months, if there had been a bad summer and the grass did not grow because of drought, and then the poorest of the livestock would have to be put down. If the supply of food ran short then the cattle died.

So at the feast of St. Martin each year it was the business of the thrifty farmer to look over his cattle and put an end to the cows, oxen, and swine that he felt he could not give food to between that time and Lady Day.

This residue of stock was killed and put into the salting-pot, or salting-house, known by the name of "Lardarium", from which, I suspect our larder originated.

The people would have relied on this supply of salt meat for their winter fare.

The month of November was named by the Saxons the "blood month", the same idea prevailing in Holland made them call it the "Slagtmaand", or Slaughter month, owing to the speedy ending that it brought about to the superfluous live-stock of the farm.

Salt in consequence was of very great value and the industry of making it flourished along the Sussex coast.

It was mostly obtained by the evaporation of the sea water, and the simple method adopted at Appledram (not to be confused with Applesham in the more immediate neighbourhood) as late as the nineteenth century was to admit the salt water into a series of shallow pans or ponds, the largest being more than three acres in size.

These ponds or pans communicated with each other and were only 3 or 4 inches deep, and had clay bottoms.

The heat of the sun reduced the water in a few days to strong brine; this was then boiled in very large iron vessels. After it had been allowed to cool, the salt crystallized and the liquid that was left was drawn off.

The Victoria County History of Sussex mentions another method, whereby the seawater was allowed to flow over sandy soil or "sleech", and, having been exposed to the sun's rays, this top layer of sand and salt was afterwards dissolved in a pit, filtered through peat, and finally boiled.

The price of salt would vary according to how much the sun shone in a season.

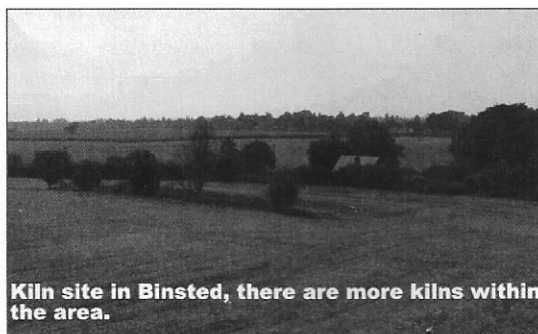
We read of a "Guldene salt kote" or a golden salt pan in the marshlands of Pevensy, and doubtless the land that bordered the Adur near Coombes was spoken of with equal respect.

The field name "the salts" is a familiar one and signifies land that flows over at times, and among such again near Pevensy, we hear of land called the "Queen Salts".

It is interesting to note that the river Adur at this time was still salt water as far north as Kneep Castle, the hunting-box of the Lords of Braose.

Binsted Tile Kiln

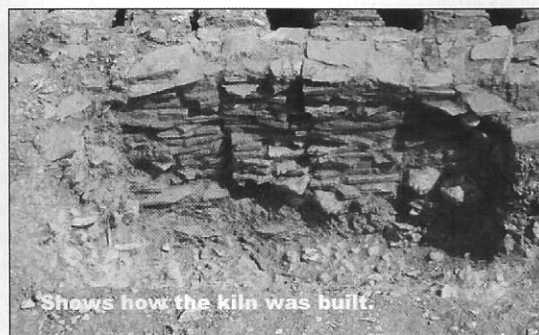
Gerald Hennings



In 2001, the Worthing Archaeological Society undertook excavation in 'Green Field' ¹, Church Farm, Binsted. A structure was identified. Excavations in 2005 revealed the lower portion of a tile kiln. Surface pottery and a pot, found within the kiln, was of Binsted manufacture indicating dates of operation from AD1250 to 1550 ²

This article will try to show why the kiln was built, why it continued to operate for so long and why it finally closed down. Amongst literature researched, little mention was ever made to this enterprise - possibly because contemporary scribes did not attach much importance to it. As a result, much of the following has to be conjecture, backed up by archaeology.

When a large building was constructed in the medieval period, material was sourced as close to the site as possible. In later manor houses, a brick kiln was often established virtually on site. E.g. Bishopstone ³. (bricks were, actually, not in general domestic use until late 15th century in Sussex. ⁴) In 1140, the church at Binsted was constructed ⁵. If it did have a tiled roof (a reasonable assumption), tiles are likely to have been fabricated close by. At Binsted, an outcrop of brick clay existed and had been exploited since Roman times ⁶. It seems plausible that tiles for the church would have been made locally in a "Clamp" type kiln - a non permanent structure.



With these primitive kilns, there would have been a lot of wasters, broken tile and probably some over-production. A dump was probably formed.

A barn is believed to have existed in Binsted ⁷ - a possible platform was noticed and remarked on by John Mills. A tithingman is also noted in Binsted in 1536. The barn would have required several thousand



tiles to roof it. With previous experience behind them, the tile makers may have decided to use a more up-to-date, "Parallel-flue", type kiln, which they might have built from the pile of tiles left over from the church roof job. This kiln type is a permanent structure. Another alternative is that, when Tortington Priory took over Binsted Church in 1291, they may have decided to re-roof it. The old tiles could have been stripped from the roof and used to build the kiln needed to make the new tiles for re-roofing. Alternatively, a dump of tiles might have resulted from the tithe barn job, where, again, a clamp kiln might have been used. Another requirement for roof tiles arose for building Binsted Manor House (which dates from 13C ⁸) - another incentive to build a tile kiln. It is assumed the date of construction of the parallel-flue kiln was around 1250, when this Roman - designed, barrel - vaulted type was re-introduced to Britain ⁹. Re-excavation of the kiln, which was reburied in 2005, and dating in 2007 may provide an answer. The below-ground walls of the kiln outer structure comprised mainly broken tile, although complete tiles had been used for the arches (fire bars). Calculation shows that the number of tiles (9,000) needed to build the barrel-arched parallel flue kiln roughly equalled the number that could have been stripped off the roof of a tithe barn (13,000) or church (7,000).

This kiln, too, might have produced a substantial pile of unwanted tiles, wasters and pieces. Also, the tilers found themselves with a permanent kiln. Did one of them say, "Why don't we go into the pottery business, making kitchenware pots?" So, around 1250 they constructed a kiln complex in a plot of land later known as "All the World" ¹¹, just to the North of the junction where Binsted Lane goes on North and the road to Walberton turns off West. This plot of land is bounded by the continuation of a footpath from, what was later called Old Scotland Lane. ¹² This pottery kiln site was excavated by Con Ainsworth in 1967, but never published, although references to the work can be found in several allied publications. ¹³

The tile kiln, on the other side of the road, in Green Field, would have continued in use, supplying the local area, but, also, to provide the supply of tiles needed for the pottery kiln operation. At Fig 1 is a sketch of what the tile kiln might have looked like. A photo of "our" excavated tile kiln is at Plate 1. The pottery

kiln, itself, was rebuilt several times and was, eventually, of the, later, more efficient, Double Flue - type. Alongside it, another tile kiln was built, of the same design as the one in "our" field. The output here seems to have been encaustic (decorated) floor tiles, roofing furniture (i.e. ridge tile and acrotiria) and plain floor tiles ¹⁴. The later pottery kiln would have been capable of producing glazed finishes - not possible with the Parallel-Flue kiln. The pottery kiln, as rebuilt, had sidewalls built from the much thicker, square floor tiles. (See Ainsworth photographs). These two kilns would have required a supply of tile to keep them operating. The Green Field kiln would have supplied them.

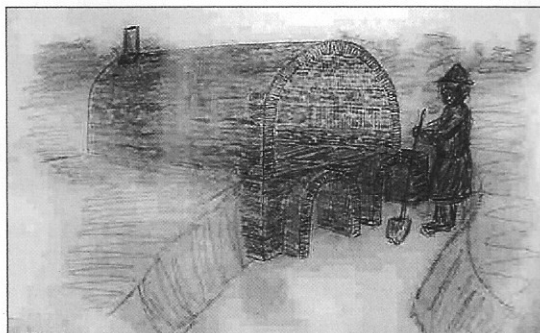


Fig 1 Sketch of Kiln

Let us examine the market for tiles at this time.

Several tithe barns were established in the area: e.g. Binsted itself, and Walberton. (The Tortington barn only dates from 17th Century.) Tortington Priory was founded in 1170 - only a few miles away and building there may well have been an incentive to construct a kiln. Parts of Binsted Manor House (now Church Farm) are also 13th Century. There were several other manor houses around: at Avisford (less than a mile away), Aldingbourne (4 miles) Barnham (2 miles), Bersted (6 miles), Bilsham (3 miles), Climping (4 miles), Eastergate (2 miles, but this had a Horsham stone roof in 1379, Westergate (3 miles), Woodgate (3 miles), Slindon (2 miles), Yapton (2 miles), Oving (6 miles). Churches were built at Bilsham and Walberton in 14th Century. ¹⁵. All these might have needed tiles. Most ordinary cottages would have had thatched roofs, but re-roofing with tile became popular from the early 14th Century ¹⁶. The number of private dwellings was not high - around eight cottages per village. Rural villages did not exhibit much population growth over the period we are looking at. (The Domesday Book records 6 cottars and 2 villains in Binsted, but in 1524 the population was still only 15 ¹⁷). In 13th Century, the population of Ford and Yapton was less than 30 in each.) So, provision of tiles for cottages would not have greatly influenced a desire to operate a permanent kiln.

Towns began to expand in the 12th century, but Chichester (8 miles away) was probably too far to make it worthwhile to cart heavy loads of tile along the very poor roads. In any case, Chichester had at least two tile kilns in the town ¹⁹. (The cathedral had roof repairs in 13th Century and a Bishop's Palace was built beginning in 1204). Arundel was nearer (2 miles): a Dominican Friary was built there in 1253, an Oratory in

1340 and a hospital (Maison Dieu) in 1395 ²⁰: These might have been suitable markets for tile. Boxgrove Priory, largely rebuilt in 13C, is close (2 miles), but did not appear to have had any dealings in Binsted. The same can be said of Halnaker.

It is suggested that the Green Field kiln was built for one specific job (the 13C Binsted Manor seems closest and most likely). Subsequently, it was used as a side line until another major job appeared.

A typical tithe barn was 90ft x 30ft ²¹. Fig 2 shows the way single peg, flat tiles, of the type being made at Binsted, were arranged on the roof. If we take a roof pitch of 45 degrees, with a tile overlap of a third, this would require 13,750 tiles.

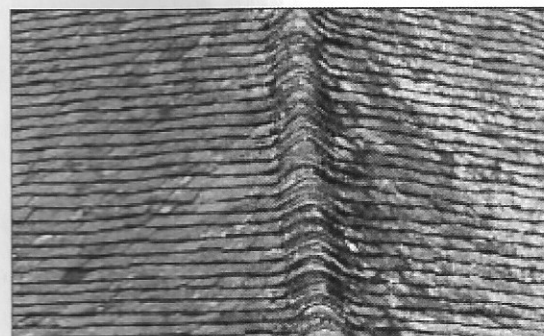


Fig 2 Arrangement of Roof Tiles

Let us assume that a manor house, priory/friary needed a similar quantity each and a church half as much. Domestic buildings produce a pretty insignificant quantity. So, we can arrive at bill for new tiles for new buildings of around 210,000 over a three hundred-year span. We might add 1% for repairs. The average market (approx. 750 tiles per year) is hardly enough to keep up any sort of continuous production.

However, if we look at the requirements for tile for the pottery kiln complex, the picture changes. We can estimate that the number of tiles/pieces (- most appear to have been fragments, rather than whole) required to build the loading access at one end of the barrel-vaulted tile kiln structure to be 926. At the end of each firing, the end wall would be demolished to extract the charge and put in the next, before rebuilding the end wall. Assume most tiles are re-usable, but 2½% are not. We arrive at a need for around 20 tiles for each firing. The semi-circular pottery kiln was smaller and we can estimate that the removable wall would lead to a bill of 15 tiles. The whole process would need a minimum turn round time of one week. Binsted pottery has been found at a wide spread of locations along the coast (but not far inland) from Portsmouth to Shoreham ²². However, this is hardly a big enough market for full time production. Production of pots was, probably a summer activity - say 4 months. This produces a bill of around 560 tiles in the year for both kilns on the West of the road. This is close to the number of tiles required for roofing projects. However, the latter would have seen some concentrated periods of activity, rather than a steady requirement.

We have to guess a bit about the number of tiles that could be produced by the Binsted tile kiln. A modern experiment by English Heritage at Cleeve Abbey ²³ showed that stacking encaustic tiles in a replica, early

kiln only produced a satisfactory result, if the tiles were stacked in an egg-box configuration, allowing the hot gases to circulate easily. Edward IV standardised roof tile size in 1477 at $10\frac{1}{2} \times 6\frac{1}{4} \times \frac{3}{8}$ inches. A possible stacking arrangement is shown, schematically, at Fig 3 and it can be worked out that that one firing could produce 1,000 tiles.

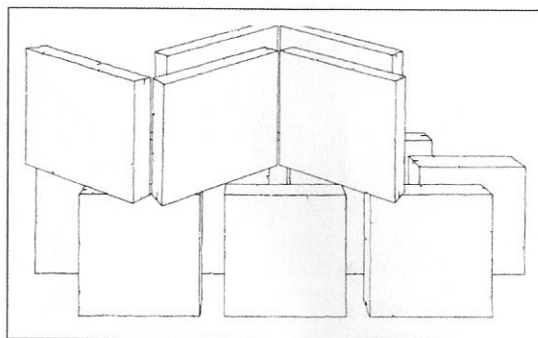


Fig 3 Possible Stacking of Tiles for Firing

However, in a modern method, the "green" tiles were dusted with a sand to stop them sticking together (and which, also, gave the tile colour), left to dry slowly for several weeks and put in the kiln, on-end vertically, in stacks of five (called "quartants"). The quadrants were arranged in a chequerboard pattern to assist hot gas circulation. The maximum was fifteen quartants high²⁴ to avoid distortion by the weight. Of course, this was a practical method in a hot, modern kiln, but was, probably, not a usable method in the medieval period. Batches were limited to 12,000 tiles in one firing at the modern kiln.

At the Binsted kiln, a single run would probably occupy a week: stacking, rebuilding the end (loading) wall, firing up, heating for two days and unloading after cooling down. This means that the tile kiln need only operate for two weeks in the summer, to meet the average market; but, a tithe barn project would require three and a half-month's work, a church two. Clay would have been dug out during the autumn and left to weather over winter. In the spring, it would, then, be broken up, ground and mixed with a temper (unless this formed part of the clay) and suitable quantities of water from the local stream. The tiles would have been formed in wooden, pattern boxes and left to dry in the air, before firing²⁵.

The calculations confirm the theory, remarked on by other authors, that pottery and tile making were sidelines to a normal occupation as agricultural labour, although Barton has suggested a full-time occupation producing pottery at Binsted. Records do not reveal whether the Binsted pottery was private enterprise or whether the landowners were in any way involved.

The Binsted tile kiln shows signs of many repairs to the structure. Sherds of pottery found at the level of the destroyed floor of the stoke hole may well be witness to repair of a heavily used area, rather than original construction. By the end of its life, the kiln was rapidly nearing collapse, with the fire bars heavily distorted and sagging over the arches. So, why did it finally shut down?

It would make exciting reading to find that the tilers were strung up from the nearest tree or killed in battle during the Wars of the Roses or even died in one of the

plague epidemics of 16th century, but any evidence is not forthcoming. More probably, the operators were not in a position to invest in new kilns when another pottery established itself at Graffham in *** and whose White Painted wares were more popular than plain Binsted ware²⁷ By 1450 Graffham White Painted ware had completely replaced Binsted tableware²⁸ and by the end of the century, metal cooking vessels were replacing ceramic²⁹ So, it would appear that it was competition that caused the Binsted enterprise to close down. However, the presence of a pottery kiln at "All the World" is still mentioned in 17th century³⁰, although the source does not reveal whether it was still operating.

There are references to Thetcher, John le Tigheler (ACM M530.Ams12171) and William atte Potte in 1332 paying taxes ("Pottersgavel") for operating a kiln³¹ in Binsted, but it has not been possible to verify these references. A Potte was recorded as living in Binsted in 15th century³² In 1601, a house was built at "All the World"³³ - which must have ceased to function as a pottery. One wonders where this remarkable name arose: did the owner say his house was "All the world to him"? Among known occupants is William Peeter(1643)³⁴. In 1589 to 92, there was a Joan Tyler living in Binsted.³⁵ In 1643, Joane Lasher conveyed the house "All the World" to M. Dowler (?)³⁶ she had inherited it from Joham Lasher. In 1600, a Thomas Tyler sold land in Bynsted³⁷, previously owned by Louis Tyler, but it does not seem to be the All the World property³⁸ At the same time, other land in Binsted was conveyanced by a William Ottley to Edmund Blofield & William Burte - again undefined.

The house was demolished by 1715³⁹ and the site reverted to a clay pit. Since then, the plot has been wooded, although OS 1876 ('96 revise) map⁴⁰ does show the outline of a possible clay pit remaining.

The superstructure of the Green Field tile kiln was pulled down and shovelled into the stoke pit to level it. The gaps between the 'bars' of the floor of the kiln were covered with chalk blocks to prevent cattle/sheep breaking their legs and the field became pasture. A pot was found in the entrance to the stoke hole in the 2005 excavations and has been, provisionally, dated to 1350 to 1420. This may be a clue as to the date of last firing, but could equally have been an already - old pot thrown in at close down. A proposed archaeo - magnetic dating will be eagerly studied in 2007.



From then on, the site seems to have been unnoticed until the pasture was ploughed in modern times. The ploughman became aware that he was dragging up quantities of tile and, fortunately, lifted the plough

over the area, thus allowing the sub structure to remain well preserved.

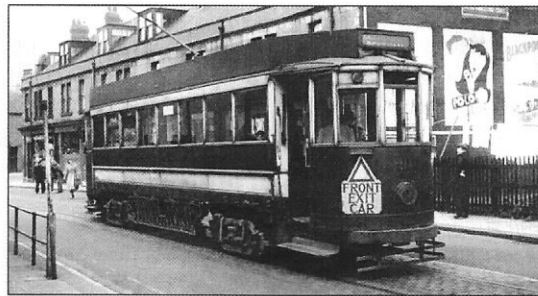
We have, thus, proposed how the tile kiln most likely came into being, resulting from a local roofing project. It continued to operate for three hundred years, not entirely on making tiles for periodic roofing jobs, but was put to use as an essential part of a pottery manufacturing complex, itself, possibly, a by-product of the original roofing project. Its operation could not have been full time, but was a sideline to local agricultural employment. Its eventual closure came about by failure of the pottery side to compete anymore in the local market. The existence of the tile kiln went un-remarked in the epigraphic record until archaeology brought it back into view.

References

- 1 This title appears on the 1838 Tithe map (WSRO: TD?W15 MF79 32/2). By this time, the field is recorded as pasture, with no reference to any structure. The Nordon map of 1606 refers to the area as "Long Meadow" (WSRO Add Mss Cat 16), but it does not show any detail i.e. cottages, etc.
- 2 WAS Report
- 3 Kiln at Bishopstone Manor
- 4 "Medieval Sussex Pottery" Barton KJ (1979)
- 5 Although it has been claimed that the church was built by monks from Tortington Priory, the priory was not founded until 1180 and it did not appropriate Binsted Church until 1291 (crsbi.ac.uk/ed/sx/binsted).
- 6 Ref to Roman kilns
- 7 Ref to Binsted tithe barn WSRO Par 22/30/1 and conversation with John Mills, W. Sussex county Archaeologist.
Ref to the Tithingman ACM M271 f(10)
- 8 Binsted Manor built *** WSRO***
- 9 "Pottery in England 3500BC - AD1730" Barton KJ (1975)
- 10 M Lyne Pottery Report. See also WSRO Greatham Ms
- 11 The name is recorded for the first time in ---- and appears in the 1838 Tithe map.
- 12 Scotland probably refers to the practice of making a payment to the local Lord in lieu of giving military service - known as "Scutage"; in this case, a woodland was yielded in payment. The road running to this wood, called "Scotland", became "Old Scotland Lane" in 1840 (WSRO SP1621 and TD/W15 No.48). It was, previously known as "Andrew's Lane" on the 1838 tithe map (see Note 1). From 1606 to 1727, it was "Arundel Highway" (WSRO Cap I/28/103(deed)), also referred to as "The King's Highway". in 13/14C (WSRO Cap I/15/3-4)
- 13 Barton
- 14 Ainsworth excavation. Unpublished notes, press cuttings and photographs in Worthing Museum archives.
- 15 Information taken from Victoria County History Vol 5.
- 16 Barton: "Medieval Sussex Pottery" (1979) Phillimore
King John made tiling compulsory in London in 1212 to reduce the fire hazard from thatch.
- 17 VCR
- 18 Date towns started to expand
- 19 chichester.govt.uk/enjoy/heritage_publications.cfm
Chichester Excavations Vol 3
- 20 Date Arundel Friary/hosp
- 21 The 13C tithe barn at Sullington is 118ft x 35ft and is regarded as large for its time.
- 22 "Potters, Kilns and Markets in Medieval Sussex" (1980) Streeton, Barton "Sussex Pottery".
- 23 eng-h-govt.uk/ArchRev/Rev97-98/histpSW.htm
- 24 Sussex Industrial History Report No. 1 (1970-1) Brick and Tile-making at Ashburnham, Sussex by Leslie & Harmer
- 25 <http://aghs.virtualalbum.co/bricktile> page 6
- 27 Ref
- 28 Binsted cooking pots were still being made in 1425. WSRO Add Mss 12179
- 29 "Pottery in England 3500BC -AD1730" Barton KJ (1975). Cooking pots were still being made at Binsted in 1425 (WSRO Add Mss 12170)
- 30 WSRO 1R 12 f13
- 31 Sussex Archaeological Collections Vol 118 (1980); "Potters, Kilns and Markets in Medieval England" by Streeton p108, quoting Hudson 1910, 256-; SRS x256
- 32 VCH Sx Part 1 p 256
- 33 Ref to AtW being built
- 34 WSRO Add Mss 7742
- 35 Diocese of Chichester Episcopal Records WSRO Ep/1/11/6
- 36 WSRO Add Mss Cat 11, 7742
- 37 WSRO Add Mss 33
- 38 Mention is made of "Lake" which was part of Marsh Farm- acquired by Tortington, not part of Binsted Manor/Church Farm
- 39 WSRO Add Mss 12171, 7742 and PRO C54/1700pt23. There is no building shown here on the 1838 Tithe Map Date of Demolition
- 40 1:25,000 Map LXII:4; See also PRO C54/1700 pt23 and WSRO Add Mss 7742

The Tram Strike of 1909

History of Transport



Dunston Tram

At the turn of the century the public transport system on the roads of West London was that of the London United Tramways Company. Their trams clattered from Hammersmith to Hounslow and Uxbridge, from Hanwell to Brentford and down to Hampton. The service was good and cheap and the Company employed 1,200 drivers and conductors who worked a 63-hour week for six shillings a day. Sometimes men were on duty for 10 hours without a meal break and continuous duties of 20 hours were not unknown. The Company employed "spots" whose job was to spy on employees and report breaches of regulations - like eating in the cab - and many suspensions and dismissals resulted from this system. The Amalgamated Union of Tram and Vehicle Workers was not recognised by the Company and agitators for recognition were discouraged or dismissed. There were plenty of jobless men waiting to take up any vacancy.

Despite the difficulties the union began recruiting and on Saturday, 3 April 1909 Jack Burns, full-time secretary of the West London branch, wrote to the Company chairman, Sir Clifton Robinson, asking for an interview to discuss the growing discontent amongst the employees. Sir Clifton refused to meet Mr. Burns, saying that he would only meet employees of the Company. Jack Burns wanted to discuss the men's demands which included union recognition, a six-day week, time and a quarter for rest day working, improvement in wages, re-instatement of men discharged because of their connection with the union and the putting of the tramcars into proper working order.

At the Fulwell Depot talk of an immediate strike began but the men approached Sir Clifton again, this time asking him to receive a deputation of twenty employees headed by Jack Burns and a Mr Watson, another union official. This was also refused; Sir Clifton was only willing to see the twenty employees. The drivers and conductors knew about the fate which had befallen previous employees who had led deputations.

After an angry meeting on Easter Saturday at the Fulwell Depot, which went on until 3 am, the men decided to strike immediately. Jack Burns believed the other depots at Hanwell and Chiswick would support the action and pickets were despatched to those depots. It is not clear why Fulwell was the centre of



Jack Burns at Hyde Park

the agitation but it could be because a former employee at Fulwell, who also lived nearby, had been sacked for his union activities. He may also have been the local union secretary.

The strike might have been successful if Jack Burns had addressed similar meetings at the Hanwell and Chiswick depots. The Company, however, had acted quickly to stop the strike spreading. The handfuls of pickets sent to Hanwell and Chiswick were not effective and as men reported for work they were required to sign a petition of loyalty to the Company. Two men at Chiswick who refused to sign were dismissed. At Hanwell the men were offered an extra day's pay to take over trams normally run by the Fulwell men. The Company took on extra workers and immediately dismissed all men who were taking part in the strike. Jack Burns went to Hanwell and Chiswick and persuaded a few men to join the strike but it was too late.

Nevertheless, on Sunday morning a large crowd of strikers and their wives and children gathered outside the Fulwell depot. Several local strike-breakers were booed but when three tramcars full of strike-breakers from Hanwell arrived the crowd became angry. As the vehicles began to be brought out of the depot some of the women broke through the police lines and ran at the trams, screaming threats at the drivers. It slowly dawned on the strikers that they were not going to win. In the evening trouble began as returning trams had their windows smashed by stones from catapults, and orange peel was hurled at the men from Hanwell who had taken the Company's bribe. The women supported the men throughout the struggle and joined in a march to Chiswick, taking their children with them.

On Easter Monday 2,000 people stood outside the depot jeering and hooting but eventually just standing in disgust as their colleagues ran the service for the Company. Sir Clifton Robinson gave triumphant interviews to the local press and blamed the union for misleading the men into a strike which resulted in their dismissal. There were, he pointed out, two men waiting for every job that became vacant. Worse was to come because the strike had not been considered by the union's executive council; it was therefore unofficial and strike pay was not available. Some dismissed employees tried to sue the union.

But that was not the end of the affair. For the next three weeks mass meetings were held, mainly in Hounslow, where the employees' grievances were aired. A march of dismissed Fulwell strikers to hand back their uniforms went through Hounslow and Brentford to Chiswick and brought much publicity. The union continued to recruit.

In May questions were asked in Parliament as a result of the strike and Winston Churchill, President of the Board of Trade, answered that there were no regulations concerning the number of hours that tram-drivers might work at a stretch. Nothing was done about the hours but further questioning resulted in a new regulation which obliged the police to be satisfied of a man's driving ability before he could drive a tram. Before that the Company could put anyone from the street into the driver's seat. Nothing was done, however, to help those men who were sacked - apart from meagre collections amongst the public and those still employed by the Company.

The strike failed partly because Jack Burns' oratory was only heard at Fulwell and the men would have been well advised to wait until the views of the other depots were known before they stopped work. The strike also foundered because the Company could take men straight from the unemployment lines and put them into the trams without any training. The courage and solidarity of Fulwell was in the end overwhelmed by

the pressure of poverty and unemployment which forced men to come forward to take the strikers' jobs.

The local press, particularly the Chiswick Times, attacked the union for spoiling the pleasure of the public over the Bank Holiday. The press also set up Sir Clifton Robinson as a local hero who had triumphed against overwhelming odds. The Union was displayed as a demon which had misled innocents to their destruction. The Chiswick Times managed to find a well-known local trade unionist who was reported as saying, "Personally, I do not believe in strikes. They are a thing of the past. The fact that during the last eight years there has been a decrease in the wages of the workers in the country as a whole proved conclusively that strikes are absolutely hopeless. Trades Unionism has lost its grip and if the workers of the country want to bring about better conditions for themselves, they must do it through the ballot-box".

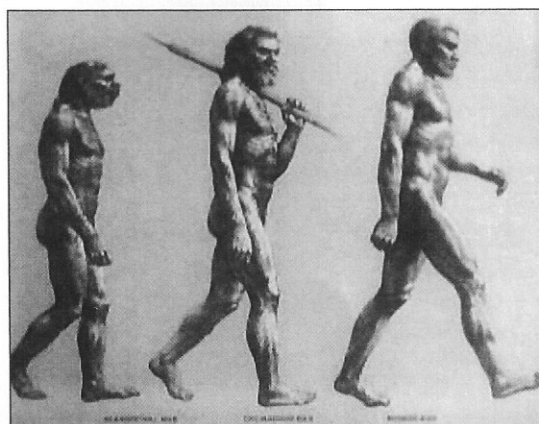
There was a depth of tragedy and despair in those remarks - some might call it realism - but it was the spirit of the Fulwell men rather than the practicality of the "well-known local trade unionist" that saw the Labour Movement through to its triumph in the end. The local events of 1909 might help to show us the right path to take at this end of the 20th century.

Neanderthal Genes

Paleogeneticist Svante Pääbo, and Richard E. Green of UC Santa Cruz.

Neanderthal genes survive in modern humans

The results of an international research project lasting over five years and involving some 56 scientists led by Svante Pääbo of the Max Planck Institute for Evolutionary Anthropology and Richard E. Green of UC Santa Cruz have just been published in the journal *Science*, and they suggest that many modern humans have some Neanderthal ancestry. While Edward M. Rubin, the director of the US Department of Energy's Joint Genome Institute, said the project was 'a terrific piece of work and a monumental endeavor', many experts are surprised at the results, which contradict previous evidence for little or no Neanderthal genetic inheritance.



Middle of picture
Neanderthal man



Bone samples

The researchers sequenced DNA from three bones from the Vindija cave site in Croatia that belonged to three female Neanderthals who died more than 40,000 years ago.

Recovering high quality genetic material for analysis was difficult because the DNA breaks down into short segments over time and becomes chemically altered, and remains also become contaminated by DNA from bacteria and fungi.

However, because the chemical changes were predictable, the team were able to write software to compensate. Some 4 billion units of Neanderthal DNA were analyzed, although this was only 60 percent of the Neanderthal genome. Nevertheless, Pääbo stated that this was 'a very good statistical sample of the entire genome.'

Using high-throughput technology to process many sequences simultaneously, the team then compared the draft Neanderthal sequence with samples from modern humans from France, Papua New Guinea, China, and southern and northern Africa. "The comparison of these two genetic sequences enables us to find out where our genome differs from that of our closest relative" Pääbo explained. While modern humans and chimpanzees share about 98 percent of their genes, modern humans and Neanderthals are 99.5 percent identical. Between one and four percent of modern Eurasian human genes seem to come from Neanderthals.

Green stated that the results seem to provide 'compelling' evidence of interbreeding. "It seemed like it was likely to be possible, but I am surprised by the amount. I really was not expecting it to be as high as four percent..." said John Hawks, associate professor of anthropology at the University of Wisconsin-Madison, "They're us. We're them".

The team identified over 70 gene changes unique to modern humans, associated with physiology, and the development of the brain, skin and bone. It is likely that behavioral differences also may have given an advantage to modern humans. Hawks stated that "any

traits [Neanderthals] had that might have been useful in later populations should still be here," but, "when we see their anatomies are gone, this isn't just chance. Those things that made the Neanderthals distinct to us as a population - those things didn't work. They're gone because they didn't work in the context of our population."

The results also offer support to the Out of Africa hypothesis, in which the ancestors of modern humans evolved in Africa some 200,000 years ago and populations migrated out between 50,000 and 60,000 years ago, although they contradict the most conservative model in which all archaic populations were simply replaced by modern humans. The greatest similarities between genomes were found between the European, Chinese and Papuan samples, which suggests that there was limited mating or gene flow between Neanderthals and the ancestors of modern Eurasians. While scientists previously thought Europe, where Neanderthal and modern human populations co-existed for 10,000 years the most likely venue for any interbreeding, this may have taken place in North Africa, the Levant, or the Arabian Peninsula, when a pioneering population of modern humans was leaving Africa.

However, Stanford archaeologist Richard G. Klein, noted for his work on the fossil record which suggests that modern humans replaced Neanderthals, has reservations about the results of the study. The Pääbo report "contradicts everything we know about the archaeological record. Their evidence is really wobbly and it bothers me a lot. But it's very important stuff if it's right - and I really do hope it's right."

Wartime History of Rewell Wood

V. Cooper, Walberton History Group

Rewell Wood is just north of Walberton

It was near the beginning of the war in 1940 that the New Zealand Forestry Corps (NZFC) arrived in Arundel. Unfortunately, no definitive written history seems to be available describing this particular activity, unlike the Canadian Forestry Corps who were mainly stationed in Scotland for which much information is available in print and on the Internet. Therefore, the undermentioned information has been gathered from locals who were in the Arundel district at the time and are still alive, living in the town today.

The NZFC were instructed to clear the Rewell wood of chestnut trees to be used in the war effort as pit props etc. Of course there were no modern equipment such as chain saws available, therefore, their main tools were two handed cross cut saws and hand axes. This was long hard work, the felled timber having been sawn to length and graded according to diameter and stacked in areas where it could be transported by lorry to Arundel Station for subsequent shipment by train around the country.

There were two principle carters responsible for this work. A driver called Acker Taylor and helper called

Dennis Challen (who didn't drive). They would do daily deliveries as and when a load was ready. Dennis was a huge man perfectly matched for the task as he was over 6ft 6 inches tall, well built and had size 13 boots. Acker was older and had learnt to drive well before any driving test or licence was required.

There was one occasion during their stay that a Government official came down in a "posh car", with the task of identifying and selecting hornbeam trees for felling to be used for special war use. (I understand this was the preferred wood to produce charcoal for gunpowder). Apparently, none were found in the vicinity.

The NZFC personnel were billeted in Warningcamp in the Georgian building, now the Youth Hostel, then a private Catholic prep. School, called St Wendolines pre war, but previously known as Sefton Place. In its previous life, this building was the home of a Mr Constable and John Constable, the painter visited him but apparently they were not related. Hence the prolific amount of his paintings depicting the local area (particularly Arundel castle) are known.

The work of felling the trees was completed well before the wars end. Obviously, the New Zealanders were glad to finish this tedious task and apparently celebrated by throwing their equipment (certainly the saws) into an old disused chalk pit within the woods. Here they remained, forgotten and overgrown with weeds. It was not until the mid 1960s when a certain thatcher moved into Walberton and was talking to Phil Challen (brother of Dennis Challen, recently died at 95 in 2009 (but lived in Arundel all his life). Phil was working for the Forestry Commission in Eartham Woods and lived in the house by its entrance. The topic of cross cut saws was discussed and Phil mentioned the

chalk pit incident to the thatcher. Keen on acquiring a traditional saw, they went to the pit and found the saws in a very poor state. However, two of the less corroded examples were selected. One was used for log cutting by the thatcher for his Jotel wood burning stove and the other was fixed in pride of place above his fireplace where it stood until recently before his house changed hands.

It is not known where the NZFC moved to after Rewell. It would be interesting to obtain further information on this. Has anyone any further information I wonder.

Symposium Notes

Victoria Melbourne Webb

Sussex Archaeological
Society Symposium Held
at the University of Sussex
March 2010

The Symposium was opened by John Manley, Chairman of the Sussex Archaeological Society, who commented that the event should be considered an archaeological Rite of Spring marking the end of the cold, dark Winter and re-enthusing us all to return to the fields, libraries and museums of Sussex.

The seven lectures had been placed in rough chronological order, starting with mesolithic/neolithic Falmer Stadium and Moulsecoomb Keep sites, followed by the Romano-British sites of Parham, Walburton and Barcombe. After lunch we spanned all ages looking at the historic environment of the Weald Forest, followed by medieval firebacks. A quick stop for tea and then we were introduced to the rural parish of Plumpton and ended the day with the surprisingly complex modern remains of the Tidemill just outside Newhaven.

Our first speaker was Matt Pope of Archaeology South-East who took us through a topographical survey of the London Road and Winterbourne valleys close to the University of Sussex campus, before concentrating on the excavations at the new Falmer Stadium site. Making good use of the on-line resource Google Earth, Matt uncovered the topography showing how the various sea-facing valleys in the Brighton area were the result of glacial weathering.

Turning to the Falmer site he showed us the remains of a 25m (approx) ring ditch with associated post holes that had been uncovered on the sandy deposits at the top of the valley. Flints associated with the feature placed it within the mesolithic and neolithic time frames. Drawing us back to the earlier topographical discussion, Matt reminded us that this particular valley through which the A27 currently runs, is not just one valley but in fact two valleys draining in different directions, and that the ring ditch was positioned just below the watershed of the south facing valley. A possible interpretation is that the feature indicated by the ring ditch (possibly a henge) acted, in part, as a territorial marker between the south valley and north valley tribes.

Our own Keith Bolton then took to the stage to detail our work at Parham and Walburton - those of you who attended the AGM earlier in March got the first draft of

this presentation. Certain Society Members who were in attendance had apparently started a sweepstake to see how many times Keith would say "ummm". I don't know who won, but the number was very low as Keith's natural enthusiasm for our work and his copious notes saw him at his most eloquent. (On a personal note I was rather disappointed that he did not mention the mutant dormice theory in relation to the remodelling of the villa, but maybe this was for the best!)

Next up was Rob Wallace of the University of Sussex. I must admit that his bath house at Barcombe rather puts ours to shame. Separated from the main villa it is 20m (approx) in length with a double apse, three distinct rooms, external burning and drains leading off to a ditch. Two things of interest to note were firstly, that it's size and location away from the villa may suggest a communal facility. Secondly that they have yet to find any specifically female items, eg. hair pins, which may imply that this facility was for men only. This contrasts to the smaller, earlier bath bouse attached to the villa which has produced items of female attire.

Rob then showed us his work with the Culver Archaeological Project and in particular the previously unknown Roman road running between Offham and Barcombe. Despite being heavily truncated by ploughing, large sections of the road's flint foundations (at least 2 or 3 courses) have been traced. Of particular interest was a very un-Roman like dogleg in the road. However, having experienced very wet conditions during the 2008 dig, this dogleg was shown to span a seasonal wet patch in the field. The inference is that the road's direction was changed in order to cross this wet patch at 90° rather than at an angle which would have resulted in more of the road slumping than has actually occurred.

Lots more information about Rob's work can be found at www.culverproject.com

After lunch it was the turn of Lyn Palmer and in an obvious break from tradition, John Manley promised us a quiz at the end of her presentation to stop us from falling asleep. As it turned out, the last thing any of us wanted to do was sleep during her talk.

Lyn works on the Weald Forest Ridge Landscape Partnership Scheme. The Scheme is a partnership of 18 organisations who have a vested interest in the Weald Forest Ridge and is aimed at "enabling people to learn about, enjoy and help preserve" the Ridge. The Weald Forest Ridge runs in an arc from the east of Horsham through the Ashdown Forest and around Crowborough, skirting just south of Tunbridge Wells with a thin sliver edging up to Tonbridge. 40% of this area is wooded (some 22% designated as ancient woodland) which means that, quite literally, much of the archaeology is hidden by the trees!

The focus of Lyn's presentation was the results of the recent LiDAR survey. LiDAR is a state of the art aerial surveying technique which bounces a signal from a plane to the earth. A reading is taken from the first point the signal hits and the last point it hits - the first being the top of the vegetation and the last being the ground. After a lot of number crunching and computer processing an aerial image is produced of the ground without any of the trees in the way (except for the evergreens which the signal can't penetrate).

Not to put too fine a point on it the images that were produced by the LiDAR survey were amazing. All sorts of humps and bumps, dips and ditches, circles and straight lines were revealed. Some of these features lined up with known features on OS maps, but a lot were being seen for the first time. Obviously it is possible to get a little over excited by what the photos show - a beautifully round feature which was thought to be a possible habitation platform, turned out to be a now disused Victorian cricket field. However, with the LiDAR picture in hand Lyn and her team can now go out into the woods and accurately pinpoint lost track ways, sawpits, charcoal platforms, iron working, quarrying, etc.

To see an example of a LiDAR picture and for more information about the Weald Forest Ridge go to www.highweald.org and in particular the Landscape Partnership Scheme.

Next was an equally fascinating talk by Jeremy Hodgkinson on Wealden iron firebacks. Not a topic normally covered in archaeological terms, but as Jeremy pointed out the old fashioned meaning of archaeology was the "study of material culture". Firebacks lend themselves to archaeological analysis because of the way they are made. The simplest form of fireback is a plain piece of iron which has been made by pouring molten metal onto a flat bed of sand. To create a decoration all you need do is make an impression in the sand. In its simplest form this is just a handprint or a twist of rope, but inevitably the decoration becomes more complex and wooden stamps are purpose made to impress

into the sand. As these wooden stamps would be unique to the person who carved them it is possible to see them being used on any number of firebacks in various configurations. If I heard Jeremy correctly during the 15th and 16th centuries there were as many forges in the Weald as there were in the rest of the country. This means that across the whole of our region (and often beyond) it is possible to find firebacks which have been

Jeremy took us through numerous examples from across our region where you could plainly see the

identical decorative motif, be it a heraldic dragon, lion, greyhound or a coat of arms, fleur de lis, border, alphabetical characters or inscription, etc., being used time and time again. Some firebacks bore the name of the maker, so that when you came across a fireback without a name, but with the distinctive stamped impression, you would know who made it.

Firebacks have just become a lot more interesting should you find yourself wandering around National Trust properties in future!

After a short break for tea we were introduced to David Milium who spoke on the characterisation of the landscape and in particular the parish of Plumpton. As I understood it "characterisation" is the in-depth, historical study of an area by bringing together details of the known archaeology, tithe maps, OS maps and other historic documents. By doing this David could show that in the early history of the area the archaeological record shows that various routes ran horizontally across the parish, however by the time of the first tithe maps, individual 20 acre farmsteads had been built along a route which ran vertically through the parish. Then as the parish becomes more populated or as industry develops other areas come to prominence, for example, near the railway, or are lost, like the completely forgotten second runway to the local airfield (clearly shown in an early 20th century aerial photograph but not recalled by the local community).

A major benefit of this type of work is that David is then able to go out into the parish and test the archival evidence against what is still visible. So, for example, a pond may in fact be all that remains of a much earlier quarry, or a Georgian fronted cottage hides the timber frame of its much earlier medieval hall.

Finally we heard from Luke Barber and his continuing work at Tidemills, the tidal mill sited near Newhaven in 1761 but which was much extended by William Catt between 1801 and 1840 to become the largest tidal mill in Sussex. However, Luke's presentation did not focus on this early stage but rather the extensive re-use of William Catt's coalyard during the early 20th century.

After the substantial coalyard became redundant it was purchased by Mr Dale a renowned trainer and veterinarian of thoroughbred horses. However, whilst some of the remaining concrete platforms showed signs of the stables, much had been obscured by the later occupants of the site, namely the military during WW2 who, following their departure, left very little standing.

What was made obvious by Luke's work was that, even though you think you know a site because there is a living memory of it and because there are extensive plans and aerial photographs, what is remembered, drawn or recorded is not necessarily what the archaeology shows. So, despite having the architectural drawings of Mr Dale's bungalow, the only two features that remain on the ground are a porch and large extension, neither of which feature on the drawings. Similarly, an aerial photograph which shows the later military buildings, fails to show two buildings which can be seen archaeologically and so were obviously built after the photo was taken.

This is a good reminder to all archaeologists (whether in the field or the archives) that what we uncover will inevitably be an incomplete picture and that in all likelihood more will have been lost than we can possibly hope to find!

With this the Symposium came to an end and John Manley was proven correct - I do now feel re-enthused to return to the field, especially if I can work with Luke Barker. His field unit are fuelled by copious amounts of cake and they have photographic evidence to prove it!

VJMW, 21/3/2010

The Sieges of Newark 1642-46



Newark Castle

Newark's location and strong royalist support

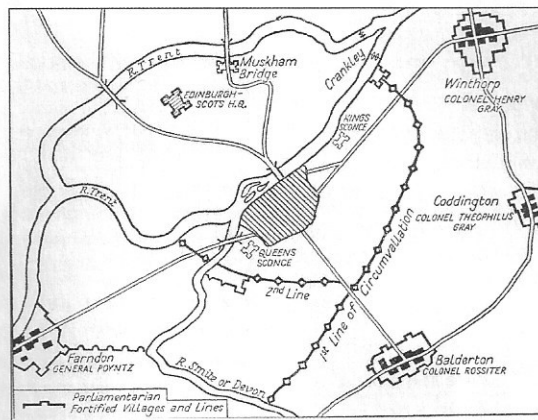
Newark on Trent in Nottinghamshire was strategically important in the English civil war between 1642 and 1646 due to its location, with a castle guarding the only crossing point over the river Trent before it reached the Humber estuary. It also lay astride the Great North Road which linked London with York and Newcastle, and the old Roman Fosse Way which crossed the country from east to west. It had strong Royalist connections before the war and in spite of Charles 1 increasingly unpopular fiscal policies the town and its citizens remained loyal to the King.

Charles raised his standard in Nottingham on the 22 August 1642 with his action taken as the starting date for the civil war. He had already visited Newark on two previous occasions to gain support for the Royalist cause, and it was inevitable that the town would play a crucial role in the civil war in the Midlands as a

communications centre between Charles' headquarters in Oxford and his support in the north of England. Its loyalty also meant it provided troops for the Royalist army in Nottinghamshire and served as both stronghold and rallying point for local Royalist sympathisers. By a twist of fate Newark also played a part in bringing the first civil war to a close when Charles surrendered to the Scottish army at nearby Kelham in 1646.

In spite of a large number of troops recruited from the town and surrounding countryside Newark became vulnerable to Parliamentary forces when the Royalist armies were deployed to support Charles' campaign in the West Midlands and later at the battle of Edgehill in 1642. The Parliamentarians used this power vacuum to extend their control, with sympathy for their cause growing in the surrounding counties of Derbyshire and Lincolnshire. This left Newark increasingly isolated and poorly defended. Small scale Parliamentary attacks

took place, but the defences held with the town, remaining loyal to the King and provided the opportunity to establish a garrison in the town after elements of the Royalist army returned from the Edgehill campaign.



Parliamentarian and Scottish army fortifications surrounding Newark, 1645-46 (Adapted from Wood, 1971)

February 1643: the first siege

With the establishment of the garrison and its military commander 4000 troops were stationed in the town. The commander immediately began strengthening the defences with construction of earthen ramparts and ditches surrounding the most vulnerable parts of the town. The first test of the new defences took place in February 1643 when 6000 Parliamentarians attacked the town, penetrating to the centre, but were beaten off by the defenders as the attackers failed to press home their advantage. This attack left the town's military commander aware that even better defences were needed as the Parliamentarians had been able to breach the ramparts and approach the town with ease. A new series of more substantial defences were constructed including two large sconces to the north and south of the town. The town had also grown beyond its medieval walls and those dwellings outside the fortifications were demolished to deny them to the enemy, but also to provide a clear field of fire for defenders. Further out into the Nottinghamshire countryside a series of Royalist manor houses were fortified to provide a defensive network to support Newark.

In 1643 Queen Henrietta Maria, who had travelled to Holland to purchase arms and ammunition by selling her jewels, and also to recruit soldiers for the Royalist cause, landed at Bridlington on the east coast, arriving at Newark on the 16th June on her way to Oxford to rendezvous with the King. She brought with her a 4500 strong army mainly recruited in the north. She departed for Oxford on the 3rd July, leaving behind 2000 troops to reinforce the town and the surrounding area for the King. In spite of the strengthened garrison the fortunes of war were changing in favour of Parliament with a series of successful attacks in the region to troops under the command of Oliver Cromwell.

February-March 1644: Prince Rupert lifts the second siege

By February 1644 Parliamentary forces had slowly encircled the town in preparation for a fresh attack. Between 5000 and 8000 troops surrounded the town, with the defenders reduced to 1200 as most of the garrison had been sent away to support neighbouring Royalist strongholds before the siege began. For three weeks the town suffered heavy bombardment with substantial destruction of buildings. Because of its importance to the Royalist cause the King was desperate to see it relieved and ordered Prince Rupert to defend the town. Prince Rupert arrived on the 21st March at the head of 5000 troops and in the ensuing attack routed the stronger Parliamentary force that had to negotiate for terms. The importance of this dramatic victory meant that the Royalists captured a significant amount of weapons including muskets, cannon and mortars. It also meant that the Parliamentarians were on the defensive in the region and lost control of a number of garrisons. For the next six months Newark was untroubled by opposing forces, although the defeat of the Royalist army at Marston Moor in July 1644 meant that the town again became exposed with no loyal army to support it, although the town was initially strengthened by an influx of survivors from the battle. This swelled the size of the garrison, and although it strengthened it militarily, it placed an enormous pressure on the citizens as witnessed in the increasing reports of death and disease rampant in the town. Again the town's defences were strengthened with the whole town said to resemble a fortress.

In 1644 the Parliamentarians were engaged in major battles in the West Country which enabled the reinforced garrison to sally forth attacking Parliamentary outposts in the region. It also provided them with the opportunity to continue to collect money from villages around Newark in order pay and feed troops and support the garrison. These were the cause of considerable fear on the part of villagers, with the account books of the village constables of Upton, five miles from Newark, graphically describing the impact of the civil war on its inhabitants, with both Royalist and Parliamentary troops continually raiding the village, extorting money, cattle and possessions, including the murder of one villager who resisted the demands of soldiers.

November 1645-May 1646: the final siege

Throughout the winter of 1644 and early 1645 the Parliamentary armies had increasing success culminating in their overwhelming victory at Naseby on the 14th June. With this decisive Parliamentary victory the King's army was killed or captured, including a considerable number of troops who had joined him from Newark. For a short period in the summer of 1645 Newark was left alone as the New Model Army was occupied elsewhere with the King visiting twice in August and October 1645. The lack of a Parliamentary presence provided the Royalists with the opportunity to harry some of the small Parliamentary garrisons in the county. This activity reached the notice of Parliament who decided that the Newark garrison needed to be finally destroyed. In November 1645 the Scottish Army of the Solemn League (who had allied themselves with

Parliament) with 9,000 troops arrived to the north and west of the town and built offensive fortifications, whilst to the south and east the English Northern Association Army with 7,000 troops used a series of small villages within two miles of the town as garrisons and constructed lines of circumvallation with curtain ramparts, trenches and small square earthwork camps every 230 metres to protect the besiegers. A second line of circumvallation was later constructed nearer the town with bastions and redoubts in an attempt to totally restrict royalist movement and provide firing positions which could be used to bombard the town. These lines of fortifications essentially cut the town off from the surrounding countryside with no movement possible. The blockade of the town coincided with a particularly severe winter which increased the plight of citizens and troops in a town that was unable to secure food or supplies.

During the six months between November and May preparations for the final assault on the town were complete. The English and Scottish armies had bombarded the town with shell and shot, softening it up prior to the final assault, with the destruction of domestic buildings, damage to the parish church and castle. The headquarters of the Parliamentary commanders then moved to within two miles of the town with 23 cannon positioned along the second line of circumvallation, all within firing range of the town. In addition the besiegers occupied land directly outside the town walls to deny access to grazing land for horses and cattle and to starve the town of food. The Trent and its tributary the Devon were dammed to stop the flow of water to the town's corn and gunpowder mills. During this final siege living conditions in the town deteriorated dramatically with troops and townspeople eating horsemeat to survive. Malnutrition increased with loss of access to food supplies and finally an outbreak of bubonic plague, thought to have been brought by Royalist soldiers seeking refuge. A contemporary account described Newark as 'a miserable stinking infected town'. The town was called on to surrender on the 28th March, but this was rejected by the military commander. The bombardment increased with more batteries under construction outside the town walls. The Parliamentary troops had now moved up to within carbine range of the town centre and prepared for the final assault.

The King's surrender

Then a dramatic twist in events took place unknown to both Royalist or Parliamentary armies, but which avoided the bloodshed that would have followed the final assault on the town. The Royalist cause was collapsing throughout the country and Charles felt it was no longer safe to remain in Oxford as the Parliamentarians consolidated their grip on the country. Charles realised that the only practical solution was to surrender to the Scots with the intention of driving a wedge between the Scots and the English. Charles' French agent, Montreuil,, negotiated with the Scots at Southwell, eight miles from Newark, and terms were agreed. Charles left Oxford on the 27th April in disguise and reached Southwell on the 5th May. He then gave himself up to the Scots at Kelham just outside Newark on the 6th May. His attempt to negotiate terms was refused with the Scots demanding the immediate

surrender of the Newark garrison. Charles was then taken prisoner and forced to write to the military commander of Newark ordering him to surrender.

The surrender of the town was agreed at the English army headquarters at Balderton at midnight on the 6th May. The Royalist defenders numbering up to 1800 were well treated at the surrender and allowed to leave the town unmolested. Noblemen, gentlemen and clergy were permitted to leave with their servants, horses and arms on condition that they returned to their homes and would remain unmolested so long as they did nothing against Parliament.

The final act though had further deadly consequences for the surrounding villages. The Parliamentary regiment occupied the town and orders were issued to the surrounding villages to provide labour to demolish the castle and the fortifications surrounding the town. The men that came into the town to reduce the defences were now exposed to the plague that was still raging. As a result the Parliamentarians rapidly evacuated the town and the enforced demolition work ceased and ensured the survival of the castle and fortifications that are still visible today. When the inhabitants returned to their villages they took with them the infection and by 1647 over 1000 citizens of the town and surrounding villages had succumbed to the plague. The war continued to exert its toll on the town and the surrounding countryside beyond the hostilities.

The impact of war on the population of Newark

Newark had a population of 2000 citizens at the outbreak of the civil war. Once the siege commenced the population doubled and at different times between 1642-46 over 4000 soldiers and Royalist supporters took shelter in the town. As the war took its toll on the surrounding countryside many Royalist families took refuge in the town for their own safety. Overcrowding and limited access to food meant that outbreaks of infections were common. In the five years 1642-46 835 people died of typhus or the plague. Typhus was the biggest killer occurring over the winter months and accounted for 30% of the deaths in burial registers. These figures are considered an underestimate as there are no records of burials of soldiers, except officers, nor any records of where the soldiers burial grounds are located. At the time of the final siege in 1645-46 a further 300 citizens died of the plague. It is estimated that over the period of the civil war between 25-30% of the population died from typhus or the plague.

What is there to see today on the ground today?

Newark contains some of the best remains of the civil war in the country, including, the west curtain wall of the castle, the Governor's House where Charles dismissed Prince Rupert for the loss of Bristol, the White Hart Inn which was the headquarters of the military commanders, Queen Henrietta Maria's house where she lodged during her stay on the way from the east coast to Oxford. Just beyond the town is the Queen's Sconce, regarded as one of the finest civil war fortifications in the country, further out at Hawton is a parliamentary redoubt and at Muskham Scottish fortifications. At Southwell is the Saracens Head Inn where Charles stayed before giving himself up to the Scottish Troops at nearby Kelham. The Gilstrap Centre

has a permanent exhibition of the civil war. Newark is also rich in civil war documentary evidence kept at the Newark and Sherwood Museum Resource Centre. A civil war trail and a series of booklets published by Nottinghamshire County Council are available from the Gilstrap Centre in Newark.

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Askwith Moor

Cairnfield, North Yorkshire

Cairns: OS Grid Reference - SE 170 507

BREAKING NEWS

Archaeology & History

Discovered on the afternoon of May 13, 2010, amidst another exploratory ramble in the good company of Sir Robert Nostrils Hopkinius and the Rt. Honorable Dave Hazell. We were out looking for the **Woman Stone** carving and a few others on Askwith Moor, and hoping we might be lucky and come across another carving or two in our meanderings. We did find a previously unrecorded cup-marked stone (I'll add that a bit later) — and a decent one at that! — but a new cairn-field was one helluva surprise. And in very good nick!



Cairn A, looking northwest



Cairn A, looking east

There are several cairns sitting just above the brow of the hill, looking into the western moors. Most of these are typical-looking single cairns, akin to those found on the moors above Ilkley, Bingley and Earby, being about 3 yards across and a couple of feet high amidst the peat and heather covering. But two of them here are notably different in structure and size (and please forgive my lengthy description of them here).

We found these tombs after noticing a large section of deep heather had been burnt back, and a large mass of

rocks were made visible as a result. Past ventures onto these moors when seeking for cup-and-ring carvings hadn't highlighted this cluster, so we thought it might be a good idea to check them out! As I approached them from the south from the **Woman Stone** carving (where we'd sat for a drink and some food, admiring the moors and being shouted at by a large gathering of geese who did not want us here), it became obvious, the closer I got, that something decidedly man-made was in evidence here.



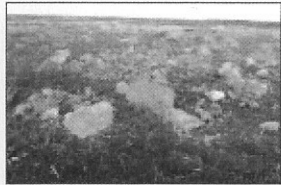
Cairn A, looking south

Walking roughly northwards out of the heather and onto the burnt ground, a cairn-like feature (hereafter known as "Cairn A") was right in front of me; though this seemed to have a ring of small stones — some earthfast, others placed there by people — surrounding the stone heap. And, as I walked around the edge of this large-ish cairn (about 9 yards in diameter and 2-3 feet tall), it was obvious that a couple of these outlying stones were stuck there by humans in bygone millenia. The most notable feature was the outlying northernmost upright: a small standing stone, coloured white and distinctly brighter than the common millstone grit rock from which this monument is primarily comprised. As I walked round it — adrenaline running and effing expletives emerging the more I saw — it became obvious that this outlying northern stone had long lines of thick quartz (or some crystalline vein) running across it, making it shine very brightly in the sunlight. Other brighter stones were around the edge of the cairn. It seemed obvious that this shining stone

was of some importance to the folks who stuck it here. And this was confirmed when I ambled into another prehistoric tomb about 50 yards north, at "Cairn B."



Cairn B, looking north



Cairn B, looking east

Cairn B was 11 yards in diameter, north-south, and 10 yards east-west. At its tallest height of only 2-3 feet, it was larger than cairn A. This reasonably well-preserved tomb had a very distinct outlying "wall" running around the edges of the stone heap, along the edge of the hillside and around onto the flat moorland. Here we found there were many more stones piled up in the centre of the tomb, but again, on its northern edge, was the tallest of the surrounding upright stones, white in colour (with perhaps a very worn cupmarking on top - but this is debatable...), erected here for some obviously important reason which remains, as yet, unknown to us. Although looking through the centre of the cairn and onto the white upright stone, aligning northwest on the distant skyline behind it, just peeping through a dip, seems to be the great rocky outcrop of Simon's Seat and its companion the Lord's Seat: very important ritual sites in pre-Christian days in this part of the world. Near the centre of this cairn was another distinctly coloured rock, as you can see in the photo, almost yellow! Intriguing...



The smaller "Cairn C"

Within a hundred yards or so scattered on the same moorland plain we found other tombs: Cairns C, D, E, F, G and H — but cairns A and B were distinctly the most impressive. An outlying single cairn, C, typical of those found on Ilkley Moor, Bingley Moor, Bleara Moor, etc, was just five yards southwest of Cairn A, with a possible single cup-marked stone laying on the ground by its side.

We know that human beings have been on these moors since mesolithic times from the excess of flints, blades and scrapers found here. Very near to these newly-discovered tombs, Mr Cowling (1946) told that:

"On the western slope of the highest part of Askwith Moor is a very interesting flaking site. For some time flints have been found in this area, but denudation revealed the working place about August, 1935. There were found some twenty finished tools of widely different varieties of flint. A large scraper of red flint is beautifully worked and has a fine glaze, as has a steep-edged side-blow scraper of brown flint. A small round scraper of dull grey flint has the appearance of newly-worked flint, and has been protected by being embedded in the peat... One blade of grey flint has been worked along both edges to form an oblong tool... The flint-worker on this site appears to have combed the neighbourhood to supplement the small supply of good flint."

All around here we found extensive remains of other prehistoric remains: hut circles, walling, cup-and-ring stones, more cairns, even a probable prehistoric trackway. We're gonna be spending a few nights sleeping up here in the coming weeks to see what more we can find.

Getting Here

From the large parking spot by the roadside along Askwith Moor Road, walk up (north) 250 yards until you reach the gate with the path leading onto Askwith Moor. Follow this along, past the triangulation pillar until you reach the Warden's Hut near the top of the ridge and overlooking the moors ahead. Naathen — look due south onto the moor and walk straight down the slope till the land levels out. If you're lucky and the heather aint fully grown, you'll see a cluster of stones about 500 yards away. That's where you're heading. If you end up reaching the Woman Stone carving, you've walked 100 yards past where you should be!



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Journal

All contributions to the newsletter are very welcome!
Please supply in pdf format if possible, and photos as separate .jpegs. to
Secretary, Rodney Gunner.

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