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Editorial

Welcome to the Winter 2006 edition of the Journal, the contents are very varied, covering many areas of archaeology and history, from trade tokens to sailing boats and the trades of the Dorset coastal areas.

This edition is bigger than before, and as you will see is printed on a better quality paper, in time it is hoped that there will be some colour pictures, so watch this space.

Members articles, I am awaiting articles from you the member, what have you been up to, are you evolved in an area of study, or have gained qualifications, been on a visit to a place of interest, then let me know and it can be included in the next issue.

Outings.

As many of you will know the coach outings had to be cancelled this year due to lack of interest in them, this is an end of a long tradition of summer outings for the Society, many of you can remember certain memorable trips, for me it must be last years cliff walk along the coastal path near Swanage, it rained and rained, and a little muddy, but you will not forget it.

Next year we plan to arrange visits to places of interest within our area, these will not be by coach, but by using our own cars, sharing of transport will be the aim, they will be mainly walking visits, on a Sunday afternoon, and also in the summer evenings.



(Total Station)

Slindon Village open day

The Society held a joint open day at Slindon Village hall with the Slindon History Group, and the National Trust, on a cold but bright day at the beginning of March.

It turned out to be one of the most successful open days we have been involved with, from the time the doors opened till they closed it was packed with local people, and others who had travelled, some a fair distance, to view the exhibits.

There were some remarkable photos on show, many from Robin Upton's collection, some dating back to the early days of photography, depicting scenes around the village and of local inhabitants from a bygone age.

The society displayed pictures of our work on the Slindon Estate, as well as a slide show, and visitors showed much interest in the work we have been undertaking on behalf of the National Trust.

It is planned to run another such day in about two years time.

Field Unit News Lottery Funding.

The society field unit has been successful in gaining Lottery funding to purchase a expensive piece of surveying equipment, known as a Total Station, the amount of the grant being £5000, the equipment will allow members of the Field unit to undertake a greater range of surveying projects.

Error.

In the last issue of the journal, the credit for the book review was given to Alan Stanley; it should have been given to John Green, my apologies for this error.

In the last issue of the Journal mention was made that the new Society website would be up and running very shortly; due to circumstances beyond our control this has been delayed, but it should be live within a short period of time.

Meanwhile do have a look at the Field Unit's own web site, this is in the form of a dairy, but contains a lot of information about the Society's field work, it can be found at, http://worthingpast.blogspot.com this also links you to other members sites.

An Archaeological Excavation at Manor Cottage, Southwick Street, Southwick, West Sussex 2005.



Introduction

The town of Southwick has seen very little in the way of archaeological investigation, with the obvious exception of the examination of the remains of a substantial Roman villa, first discovered in 1815. There have been occasional campaigns at the now-buried site, most notably between the wars, but most of Southwick's past lies undisturbed. Recent work in the vicinity of the villa has produced little new evidence, and the archaeological evaluation of the library site in April 2006 proved disappointing.

Manor Cottage is a building of medieval origin situated on the eastern side of Southwick Street to the south of the villa site, and now used as a museum by the Southwick (Sussex) Society. The element of the building closest to the road consists of a post-medieval extension to the main structure. Part of this addition was knocked down in the 1970s, and planning permission is to be sought for the rebuilding of the demolished element.

The Southwick (Sussex) Society contacted Archaeology South-East with a view to funding an excavation at the site prior to the rebuilding work. Following initial discussions, it was decided that the project would be an ideal opportunity for 'community' archaeology, so with the agreement of all the interested parties (including John Mills, Archaeological Officer, West Sussex County Council), it was decided that the excavation would be carried out by members of the Society under the supervision of the author. In addition, it was agreed that the Society would fund examination and analysis of all artefacts and the completion of a report on the project. *The Excavation*

The main excavation work was undertaken over the three days of the August Bank Holiday week-end (27th -29th August 2005) by an enthusiastic group of volunteers, in surprisingly fair weather. An area measuring c.5.4m by c.3.8m (situated between the existing building and Southwick Street) was manually stripped and investigated. This involved the removal of part of a brick, tile and concrete area, some of which had apparently been relaid after the 1970s demolition, as well as the systematic removal of flowerbeds and part of the lawned front garden, all completed with gusto by the assembled crowd. A 1m by 1m test-pit was also excavated to the north of the Cottage.

It soon became evident that there had been extensive truncation associated with the demolition of the building and subsequent landscaping. Part of the flint and chalk/clunch footings for the known elements of the demolished building were encountered just below the modern ground surface. Rather bizarrely one of the walls appeared to have been built without a foundation, possibly explaining why the building was considered in need of demolition in the 1970s. No buried floor surfaces had survived the thorough demolition, and much of the excavation involved the removal of disturbed garden soil to reveal the wall footings, and some post-medieval features. The manual excavation and extensive sieving of all of the deposits at the site resulted in the recovery of an interesting array of artefacts, which were washed and sorted on-site as part of the project, and then sent to specialists for analysis. The assemblages will eventually be returned to the Society for possible display in Manor Cottage.



The Finds

The oldest artefacts encountered at the site were three flint flakes probably dating from the Late Bronze Age, but the majority of artefacts were considerably later in date. An assemblage of over 200 sherds of pottery, containing both local and imported wares spanning the 13th to the 20th centuries was recovered, Ten percent of the assemblage was medieval in date, and included a sherd from an imported French jug. However, the vast majority of the pottery dated to the 19th century. A single fragment of late medieval roof tile was also found, but again most of the roofing material was 19th century in date. Other broadly datable post-medieval artefacts included clay pipe, glass, metalwork and children's toys. Undated artefacts included animal bone from cattle, sheep, pig and fowl and a substantial assemblage of oyster shells.

Arguably the most interesting find was amongst the assemblage of coins. The earliest was a copper alloy Spanish coin, a 2 *maravedis* of Charles II of Spain, who reigned 1665-1700. On the obverse is a crowned shield of Castile (i.e. a castle) and on the reverse is a crowned shield of Leon (i.e. a lion rampant left). Due to wear the mint name and date are illegible. This type of coin was issued *c*. 1680-1701 (i.e. continuing after the death of Charles in 1700). It has been clipped around the edge at some point, possibly to convert the piece into a token or weight.

The other coins consisted of a more domestic group consisting of a 1861 ½ penny of Victoria, a 1929 ½ penny of George V, a 1945 three pence of George VI and a 1976 one pence of Elizabeth II.

A fuller report has been lodged with West Sussex County Council, the West Sussex County Sites and Monuments Record, and with the Southwick (Sussex) Society, who plan to publish a version in the near future.

Conclusions

It is hoped that the small-scale excavation at Manor Cottage will act as a springboard to the wider archaeological investigation of Southwick in the future, and plans are well under way for further work in the summer of 2006. The project allowed a distinctly local, non-archaeological group to become directly and physically involved in archaeology, and the feedback from individuals and the Society as a whole has been unreservedly positive.

Post-Script

Another positive element of such community archaeology was highlighted when a local man produced a box containing an almost complete Romano-British greyware jar of 1st or 2nd century AD date discovered within a mile of the site. He donated it (and other items) to the Society for display in Manor Cottage, and provided an accurate findspot. Information on the find (and a hitherto unknown and potentially significant site) has been sent to the West Sussex County Council Sites and Monuments Record.

Acknowledgements

The work at Manor Cottage would not have been possible without the input of the small army of volunteers mobilised by the Southwick (Sussex) Society. Thanks are also due to Nigel Divers, the Hon. Secretary of the Society for instigating the project, to his wife Pam for her outstanding catering, and to John Mills, Archaeological Officer, West Sussex County Council for his continuing interest and support. Luke Barber, David Rudling and David Dunkin prepared the specialist reports on the finds.

SIMON STEVENS

Senior Archaeologist Archaeology South-East

FIELD UNIT UPDATE FOR AUTUMN 2006 JOURNAL

Summer 2006 has been a busy time for the Worthing Archaeological Society's Field Unit, with two major excavations being undertaken in July and September.

Gobblestubbs Excavation

The first excavation was in Rewell Wood, Arundel on the site of an enclosure adjacent to the scheduled earthworks in Gobblestubbs copse. The scheduled monument (West Sussex SMR No. 1307) by the Curwen's however, the published article did not any refer to the smaller enclosure. In 1973 the Gobblestubbs site was excavated by Worthing Archaeological Society under the joint leadership of Con Ainsworth and Dr H. B. Ratcliffe Densham.

Research undertaken recently by Sioned Vos at Worthing Museum has resulted in some of the finds from this excavation being rediscovered in the museums reserve collection (Accession Number X1983/450'). These finds will be included in the post-excavation work to be done on the recent excavation.

In July 2006 the Field Unit in conjunction with English Heritage undertook an excavation of the 'figure of eight' enclosure. The excavation involved digging three sections across banks and ditches, a trench outside of the enclosure and a number of smaller trenches inside the enclosure. Most of the pottery came from the lower layers of a single trench (trench 3).

A small quantity of worked flint flakes, blades and two Neolithic scrapers as well as burnt flint were found mostly in the top soil of the trenches.

The pottery, apart from three sherds of pre-historic pottery, is Late Iron Age/1st Century A.D. including a sherd of probably an imported white 'Gallo-Belgic' beaker. Most of the pottery is from jars and cooking pots including a small number of sherds of probably Rowlands Castle ware, but there are also rims and bases from finer dishes, bowls, lids and jars of black and other burnished wares.

A significant amount of daub was also recovered from the three main trenches and a small quantity of ironstone.

Walberton

Due to a change in the crop being grown on the Binsted tile kiln site, it was not possible to continue with the excavations here. Instead the landowner, Mr. Luke Wishart invited the Field Unit to investigate a site in Walberton, where Romano-British building material and pottery had been found, normally following ploughing.

Therefore, in late August, the Field Unit embarked on a two week excavation to see if there were any remaining structures or features associated with the finds. Initially the excavation consisted of digging a number of 1.0m x 1.0m test pits. Fortunately by day 3, two of these test pits had located features that warranted opening up larger trenches. Work then focussed on these features (both associated with wall foundations). At the end of the two weeks, through excavation and resistivity survey we had discovered a linear Roman-British villa consisting of five rooms and a corridor.

As expected from a Roman site, a large quantity of finds was recovered and there were some surprises, the most interesting being a rare sherd of mosaic 'millefiore' opaque green and yellow glass from a cast bowl or dish from the early 1st century. Other sherds were found from fine glass vessels and window glass.

Coins were also found covering the 1st through to 4th centuries, including one of Gallienus (late 3rd century) and two coins of Theodora of the Constantinian dynasty of the 4th century.

Some pieces of copper alloy jewellery were also discovered including an armlet or bangle, an early type of bow brooch and a ring fragment that may have had a glass intaglio. Other personal items include decorated copper alloy pins, a belt decoration and fragments of bone hairpins.

The finewares comprise a number of Samian sherds, including one from a 1st century dish. There is also a sherd of a Central Gaulish decorated figured black-slipped ware cup and 'Poppy-head' beakers and also Mortaria. The coarse wares are mostly jars, cooking pots and black burnished dishes including a Rowlands Castle 'beehive' storage jar.

Other finds include wild boar tusks and bones from cattle, sheep and a dog.

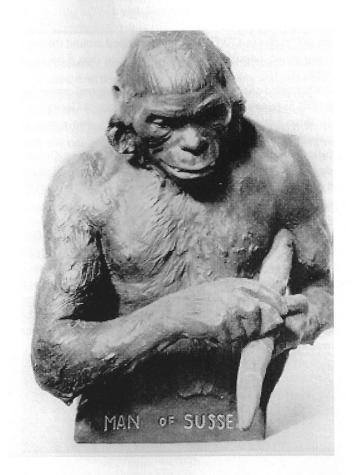
A large number of limestone tesserae were recovered, mostly white but a significant number are dark grey and also a few ceramic tile tesserae. Wall plaster was found some with evidence of red paint.

It would seem that the majority of the building material has been robbed from the site in the past and reused elsewhere, but there was still evidence of roofing tile and combed tile from a hypocaust or bathhouse.

KEITH BOLTON

Director of Field Unit

Piltdown Man!



For all the members that attended the lecture given by Professor Chris Stringer, they will know what an excellent lecture this was, I think I would be speaking for other members when I say, that it was the first time that I really understood this incredible hoax that duped so many academics of the time.

This hoax fooled many into thinking that supposed finding of remains of a primitive form of human being at a site in Piltdown East Sussex in 1912, were genuine, it fooled so many at the time, including our very own Society, our archive scrap books of the period carry extensive reports

about the discovery of Piltdown man, the society invited along the perpetrators of this hoax to lecture the society.. But from the very beginning of the discovery and wide spread coverage in the newspapers and academic journals of the period, many thought that it was most probably just that, an elaborate hoax. But they did not come forward and say so at the time, the reason being one suspects is that they did not in many cases want to take on their peers who had excepted this discovery as being truly remarkable.

Foot notes.

Piltdown man is one of the most famous frauds in the history of science. In 1912 Charles Dawson discovered the first of two skulls found in the Piltdown quarry in Sussex, England, skulls of an apparently primitive hominid, an ancestor of man. Piltdown man, or *Eoanthropus dawsoni* to use his scientific name, was a sensation. He was the expected "missing link" a mixture of human and ape with the noble brow of *Homo sapiens* and a primitive jaw. Best of all, he was British!

Charles Dawson was an amateur archaeologist, geologist, antiquarian, and was a collector of fossils for the British museum. He was the original person to seriously search for fossils in the Piltdown quarry. In 1912 he and Woodward discovered the first Piltdown skull. In 1915 he discovered the second skull. He died in 1916 shortly after the finds.

As the years went by and new finds of ancient hominids were made, Piltdown man became an anomaly that didn't fit in, a creature without a place in the human family tree. Finally, in 1953, the truth came out. Piltdown man was a hoax, the most ancient of people who never were.

Ref.

The Piltdown Forgery, J. S. Weiner, Oxford University Press, London, ,2003. is a republication of the 1955 edition.

The Piltdown Forgery is the classic account of one of the greatest hoaxes of our times, written by one of the experts who first revealed it to the public. Discovered in the early 1900s, the 'Piltdown Man' was believed to be a 'missing link' between humans and apes, but Joseph Weiner and his colleagues proved that the evidence had been faked. In this fiftieth anniversary edition, Professor Chris Stringer of the Natural History Museum in London provides an introduction to this famous

story, and an after word containing the latest detectivework. Ever-increasing technological powers may one day reveal who did what, and why, but until then this remains an engrossing tale of mixed motives, captivating trickery, and competing egos: a tale fit to rival the works of Sir Arthur Conan Doyle (himself a player in this saga) at his best.

RODNEY GUNNER

Chairman's Report Worthing Archaeological Society AGM March 2006

Ladies and Gentlemen, welcome to the 2006 AGM of the Worthing Archaeological Society. This report covers the general activity of the society in the past year.

Membership

Membership numbers (c170 annual subscription members, including students) have remained steady compared to downward trends elsewhere.

Winter Lectures

The 2005 season of lectures commenced with the Con Ainsworth Memorial Lecture given by Dr Justine Bayley (English Heritage) on Metal and Glass working in Roman Britain. Subsequent lectures were:

- · November: 'Piltdown and Sussex: an uneasy relationship' given by Mr. Anthony Brook.
- December: 'Behind the Scenes at Sussex Past' by Mrs.
 Helen Poole (Senior Museums Curator for SAS).
- January 2006: 'Substance and Seasonality in Mesolithic North West Europe' by Dr. Richard Carpenter (University of Sussex).
- February 2006: The John Pull Memorial Lecture was on 'Stonehenge' given by Mr. Mike Pitts, editor of British Archaeology.

Summer Outings

In 2005 there were three coach outings and a number of local guided walks. The coach outings were to:

- Danebury in May under the guidance of David Allen, curator of Andover Museum. The visit to the Hill Fort at Danebury was followed by a visit to Andover Museum.
- Worth Matravers in June to see the terraced field systems, the Norman chapel and the quarries containing post-medieval graffiti. The guide for this trip was Gordon Le Pard.
- · Winchelsea in July to visit the standing buildings and their cellars.

Each was memorable in its own right, the views from Danebury, the rain on the Dorset coast and the fascination of the cellars.

A series of guided walks was organised by Rodney Gunner to:

- · Sele Priory and the salt mounds;
- · Warminghurst Church;
- · West Grinstead and Baybridge canal.

Autumn Social

A very well attended Autumn Social held at the John Seldon, included a talk on 'Secrets of the Georgian Bedroom' given by Mr. Alan Green.

KEITH BOLTON

Members News

For my dissertation subject for next year I have been lucky enough to be able conduct a geophysical survey, to investigate a Romano-Celtic Temple, an Iron Age Shrine and associated remains at Ratham Mill, which is just north of Bosham, 5 miles west of Chichester, by kind permission of the owner Mr.George Heaver and because it is a Scheduled Monument, English Heritage.

Ian Allison very kindly agreed to help me (let's be honest here, without him it would have been a complete non-starter!) and along with Elizabeth and Tim Pullen and Pat Jones we were out in the field from 21st. - 25th. August.

Despite us being thin on the ground - as far as man power was concerned, we had fantastic results and identified the whereabouts of the Temple and Shrine. I would like to thank everyone concerned for their exceedingly hard work that week, especially Ian and I will keep you all posted as this is obviously an on going project.

SALLY MOUNTSTEPHEN MA STUDENT

Pat Jones MA Student

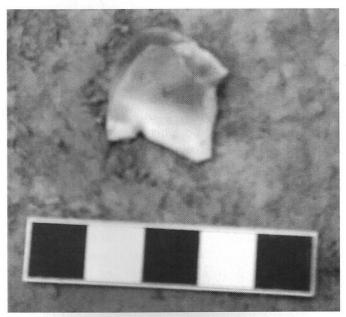
During 2006 I have been engaged in a project to investigate and identify raised beach deposits from the



Goodwood/Slindon Raised Beach in Valdoe, West Sussex. I supervised a deep excavation which was directed by Dr Matthew Pope as part of the Valdoe Assessment Survey. The team were mainly members of Worthing Archgaeological Society, plus some members of University of Sussex and Chichester Archaeological Society.

A Trench 6M square was excavated using a JCB, with a 4M square trench within it. At the base a 2M square

trench was begun by JCB but finished by hand due to the difficult angle required for the machine. At the top of the trench decalcified Solifluction gravel caused solution pipes which cut through Devensian dry valley deposits. Below this was Solifluction gravel which was formed during the Anglian Glaciation, which was above Brickearth from cooling intact. This covered the Palaeolithic landsurface which was only present for between 20 and 100 years, which is where artefacts may be expected to be found. These in fact became



evident when Peter Branlaund uncovered the first axe sharpeng flake from a Palaeolithic biface, touched for the first time in about half a million years. We found two more of these in close proximity. Then an unusual shaped flake was excavated. This was the Tranchet tip of a Palaeolithic Biface, proving that a Hominid had sharpened his axe here around 500 thouand years ago, before the Anglian glaciation.

Acknowledgements:

Doctor Matthew Pope for making it possible and for trusting me to supervise, Keith Bolton and Gill Turner, for help with logistics and day to day back up, Pete Skiltern and Andrew Maxted for surveying, Bob Turner for superb section drawings, assisted by Sally Mountstephen, Lisa Fisher for some excellent photography (not included here) and Geoff Smith of UCL for environmental work. All the diggers on a difficult but exciting excavation.

Bibliography

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PAT JONES MA STUDENT

Excavations at Church Farm Binsted

Background

In 1967, Con Ainsworth excavated a pottery kiln site West of Binsted Lane, Binsted. He suspected that there was another kiln to the East of the lane in the field belonging to Church Farm. Also in that field was an earth bank, marked on the OS maps as an "Earthwork". It was surmised that the earthwork formed part of a long bank and ditch extending north of the A27, of possible Iron Age or medieval date. Chichester District Archaeological Unit had examined this in 1993. The feature is

known as "the Rewell Hill Linear Earthwork" in the West Sussex Sites and Monuments Record.

Worthing Archaeological Society was invited to carry out fieldwork on the Church Farm site.

The society carried out a campaign during the summers of 1999 to 2003.

The Site

A map locating the site is at Fig 1



Reproduced from the 1995 Ordnance Survey Pathfinder Map Sheet 1305 scale 1:25 000 with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Licence Number AL52328A0001	Church Farm, Binsted Site Location (NB not to scale)
	Figure No. 1

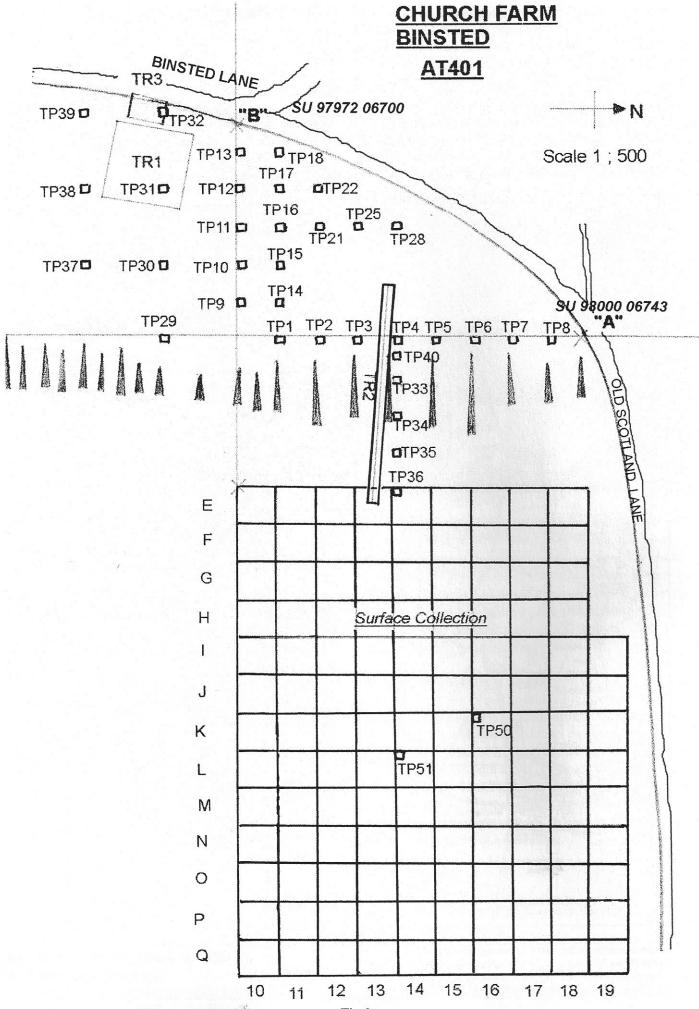


Fig 2.

Objectives

A draft Project Research Design Plan was drawn up by Chris Place (Independent Archaeologist) dated 1 Mar 1999.

The objectives may be summarised as follows:

To provide a training vehicle for the Worthing Archaeological Society members

To determine the date of the Earthwork

To locate the suspected pottery kiln

To identify any other archaeological features

Methodology

(Refer to the Site Plan at Fig 2)

1999

A series of 1m-square test pits (TPs1-40) were planned along and across the earthwork; but not all were opened. (TRs 19, 20, 23, 24, 26, 27).

Chris Place produced an Interim Report.

2000

A trench (TR1) was opened to explore an area around TP32, where Kathy CROWLEY had found what appeared to be a flint wall the previous season, but no trace of this feature was found.

A long test trench (TR2) was opened up across the earthwork. The task was eased by using a mechanical excavator, under supervision, for excavating the non-sensitive areas. A photograph of the trench is at Fig 3.

2001

Resistivity surveys were carried out, with assistance from Brighton & Hove Archaeological Society, but the results were inconclusive.

A surface collection (Field Walk) was made to determine the most likely location for the kiln, suspected of being in the field.

Two 1m-square test pits (TP50 & 51) were put in. What is interpreted as the kiln was found in TP50, but it was not excavated. A photograph of TP50 is at Fig 5. The other test pit (TP51) did not reveal any structures.

As "Kathy's Wall" had not been relocated in TR1, another trench TR3) was put in further west, closer into the hedge, (see next page).

2002

Another resistivity survey was done in the area of the suspected kiln. This confirmed the presence of a structure and a possible ditch to the West of it. However, the picture was obscured due to deep harrowing marks.

2003

A three dimensional map of the earthwork was produced.

2004

A coin found in 1999 was examined by Dr David Rudling and provisionally dated to the reign of Trajan (98 - 117AD).



Fig 3.

The pottery and CBM were passed to specialist Dr Malcolm Lyne in December 2004 for analysis. The results are covered in the paragraphs about the differing excavations.

Finds Processing was carried out, throughout, by members, mainly at the Slindon base, but, often, at home.

Test Pits (TPs1-40)

Most TPs were excavated only as far down as the natural, sterile ground surface of clay and gravel. Some were excavated to a greater depth to examine the possible construction layers of the earthwork or the geology of the site. The first 10 litres of all excavated topsoil was sieved.

All the upper, disturbed, ploughed, contexts were labelled by trench number as Context No 1.

Some pieces of metal (unidentifiable) were found. A coin was found in the undisturbed context of TP 28; this was undoubtedly a Roman sesterce, but was too worn to give a positive identification (probably Trajan – 98 – 117 AD).

TPs 33, 34 and 40 terminated in sand and gravel, interpreted as being a raised beach. Samples were given to Mark Roberts of the Boxgrove Project, who was investigating the raised beaches in the area. He confirmed the diagnosis.

Early examination of some of the ceramic suggested a pre-West Sussex Ware pottery in the area, dating from as early as AD1210. However, most of the early wares were appraised, at the time, as being of 14th century origin – when it is known that the Binsted kilns were operating. (See pottery analysis in 2005, below.)

Examination of the drawn sections and ceramic indicated that TPs 29 and 33 had found a ditch, while TP 34 may have located the bank of the earthwork.

The average depth of plough soil east of the earthwork was 27cms, while the undisturbed deposit, under it and above "natural", was 20cms thick. A similar set of figures applied East of the bank – although little excavation was done in this field.

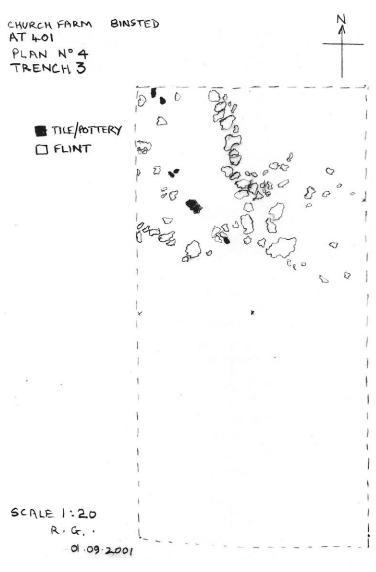


Fig 7.

"Kathv's Wall"

Trench (TR 1) failed to find any wall but it did reveal a number of postholes and a line of tile fragments, thought to be medieval in origin. The pottery suggested, initially, a date of AD 1400 \pm

25, but examination by Dr Malcolm Lyne dates the bulk of it to 1250 - 1450. ie. Contemporary with Con Ainsworth's kilns on the opposite side of the lane.

In 2001trench TR3 was put in slightly further west, and TP32 was found! (see plan at Fig. 2 and reduced trench plan on page 8). The excavation confirmed the location of the wall, which was now interpreted as the foundation of a possible timber structure, which may have been associated with the tile- making in the area. However, Malcolm Lyne identified 148 fragments belonging to a single Saxo-Norman cooking pot in the bottom context of TR3. Maps at West Sussex Records Office, going back as far as 1715 do not show a building in this area. (This might suggest a pre-18 century, demolished structure or, merely, a failure to record it.) It is, now, thought possible

that some, earlier, timber structure was being used as a store by the operators of the kiln in the medieval period. This building may have utilised some Saxo-Norman foundations. There were two concentrations of medieval pottery: in TR3 and near the site of the kiln in the field, with a drop off in density between.

The Earthwork

TPs1-8 & TP29 were sited parallel to the earthwork and may have been in the filled-in ditch associated with it. TPs33-36 were sited across the earthwork. TPs33-40 were excavated deeply enough to reveal any buried soil horizon.

A long trench (TR2), 18 x 3m, was machine excavated across the full width of the earthwork. This revealed that the bank was probably partially levelled (it is, now, only 34 m in height) and the ditch filled in. Lack of tile fragments in the ditch fill would suggest that the ditch was filled in prior to the operation of the nearby kilns. The ditch had been dug to an original depth of 2.5 m below current ground level. Both bank and ditch were 7m wide. However, it is possible that TR2 was not at right angles to the line of the earthwork and the widths may be overestimated.

No evidence was seen of the anticipated, buried soil surface under the bank. The excavation bottomed out with a layer of sand and gravel which was interpreted as a raised beach; round pebbles indicated the tidal zone below the sand. This information, together with soil samples, was passed to Dr Mark Roberts of the Boxgrove Project, who was investigating raised beaches in the area; he confirmed the interpretation. It seems probable that the constructors of the earthwork took advantage of the natural feature of the sandbank and followed the line of the raised beach. A Carbon 14 sample was taken from under the bank context, but has not been analysed. No other dating evidence was obtained from excavating the bank or ditch material, and, the age of the earthwork could not be obtained, other than

so, the age of the earthwork could not be obtained, other than that it pre-dated the kilns (13th century). It was not recommended that any further work should be done on the feature in the immediate future.



Fig 5.

Surface Collection

A grid of 5m squares was established, as shown on the Site Plan (Fig 2), with the object of locating the possible kiln.

Members then walked south/north across the area collecting any pottery, CBM(Ceramic Building Material) or other artifacts in each grid square, 1m either side of the N/S lines. It became obvious that the density of finds diminished in the more easterly (up slope) areas, so the whole of the field was not walked.

The ceramic from each square was weighed and counted. Afterwards, the tile fragments were discarded in the square they came from, and the pottery bagged and labelled for later analysis. Other artefacts were bagged separately.

The highest density of tile was found to be in Square K16 and the next highest in L14. These squares were selected to be tested and 1m-square test pits (TP50 and TP51) positioned in them. A plot of tile density on the surface showed a spread downhill to the south from where the kiln was eventually located.

Later analysis of the pottery showed it to be mostly medieval, from the nearby Binsted kilns, with some post – medieval and a small number of Saxo-Norman (very worn) sherds.

The Kiln

A 1x1m square test pit was opened at the South West corner in K16 (TP50) and another (TP51), similarly, placed in L14.

In TP 50, the excavated material, under the plough soil (some 14cms deep) was notable for the density of tile fragments – accounting for more than 65%.

At a depth of 34cms, some largish boulders of chalk were encountered. Below them, the top of a slightly curved wall, made of tile was found. The tile had become vitrified with heat. There were voids going down for at least 3/4m beside the wall.

(photograph at Fig. 5)

It was concluded that the excavation had found a portion of the tile kiln. Excavation was halted at that point. The test pit was back-filled. The excavated tile was collected for analysis.

Examination of the tile suggested that the kiln was operating at the same time as the pottery kilns discovered by Con Ainsworth.

The other test pit (TP 51) revealed a smaller density of tile fragments, four sherds of medieval Binsted pottery, but no structures.

The Tile

The tiles were very fragmented. No pieces were found which would indicate the dimensions, other than thickness. (Excavation in 2005 would suggest that these tile fragments had been used to construct the upper structure of the kiln and had been swept into the stoke hole area when the kiln was abandoned.)

The basic shape appeared to be a flat, rectangular tile with at slight curve (known as a "House) at one end and a small ridge at the other. Marks suggested that, before firing, they were laid on wooden boards to dry out. Some finger impressions were observed, but these appeared to be accidental in origin. Several exhibited a punched hole of 12 to 14mm in diameter,

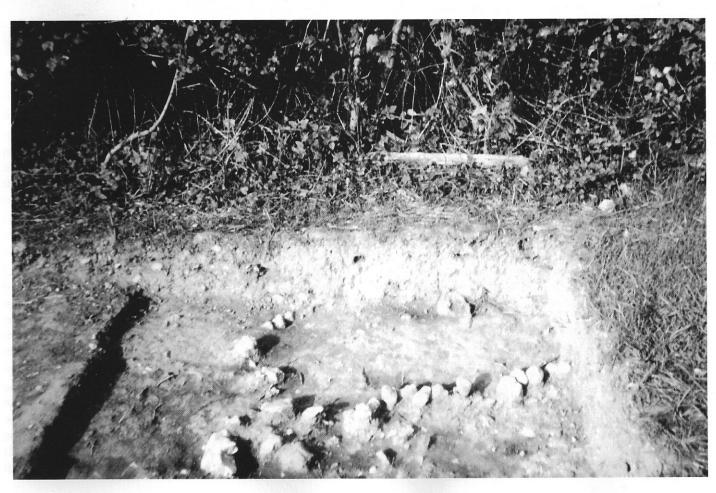


Fig 8.

intended for pegging to a roof. Not all the holes had been fully punched through. One side of the tile was often smoother than the opposite face.

There was considerable variation in thickness (to be expected of hand-made tiles) but there seemed to be three basic thicknesses:

10-13(14) mm referred to as Type	A
13-15mm	В
19-26mm	C

The firing appeared to be poorly controlled, judging by the variation in colour of the exterior and core and also the hardness: some tiles were scarcely more than terracotta, while others were extremely tough, especially the Type A. Type A showed signs of layering of the clay with some separation on firing.

Type A was often reddish in surface colour with traces of carbon (chaff?) inclusions and was grog tempered - some of which was fairly large in size. Where the core was also red, the tile was crumbly (underfired?), but tougher examples had a blue/grey core. Sometimes, though, the core was red and the exterior grey. This is taken to indicate poor control of the firing process.

Type B tended to be much greyer, as though there had been greater control over firing and this might mean that these tiles were of a slightly later production than the thinner ones.

Type C tiles often had traces of mortar on them and may, therefore, have been part of the kiln structure, rather than production. Possibly, these were floor tiles.

Dr. Malcolm Lyne opined that all the tiles were of normal Binsted fabrics dating to the period 1250 to 1450AD. In view of the lack of any even partially complete tiles to record sizes, it was decided that little could be gained by having them critically examined by an expert.

The Pottery

Dr Malcolm Lyne examined this in April 2005.

Pottery was, mainly, locally made, medieval (1250-1450) but there were a few pieces from Graffham and Orchard Street (Chichester).

A very small number (12) of Roman (AD 3/4C) sherds (including Rolands Castle and Alice Holt wares) occurred to the West of the earthwork on the downslope side of the field. Their abraded surfaces led to the conclusion that these were deposited in the process of field marling.

Similarly, the presence of a few Saxo-Norman sherds was probably due to the same process, with one exception. The presence of 148 sherds from one cooking pot might indicate some habitation in the Saxo-Norman period (1100 to 1200 AD) on the site of TR1 (near "Kathy's Wall"). Surface finds only were reported from the East end of the field-walking area, but finds in the plough-soil (Context 1) were, in the main (63%), from the early period. Those from deeper contexts were, preponderantly (63%), late and came from the earthwork or close to the West, downslope side, of it.

Coin

The solitary coin found in TP28 was dated to the reign of Trajan (AD 97-117) - a Ae sestertius of the Mint of Rome, but identification was not positive, due to its poor condition. The presence of such an early coin requires some caution; it may have been dropped here at some much later date, having been originally found elsewhere. Coins of this date originated from military establishments, usually, and, it is remotely possible, that its presence close to the earthwork might have some significance. It is more probable that it was introduced during field marling.

Metalwork

Two pieces of iron and a nail were found. X-ray photography did not clarify what the two objects might have been. There were, also, four pieces of copper alloy, which could not be identified, although one piece might have been part of a copper strap of recent date.

Interpretation of the Site

The earthwork is concluded to be a semi – natural feature (raised beach) which was utilised as a possible boundary at some time in the past. An Iron Age date has been suggested, but there is no evidence other than that it predates the establishment of the kilns. The presence of Saxo-Norman sherds, in the fill of the bank might indicate a post Roman date.

The medieval kiln is thought to be for the production of tiles only. The standards of production are assessed as poor.

Future Work

No further work on the earthwork is recommended. Because the base of the kiln is so well preserved, further excavation there is recommended.

Archive

The excavated material is, currently, located at the Society's store at Slindon, but will be held at Littlehampton Museum, along with the records of the excavation, under the Reference AT401. Copies of the more important records will be held by the Society.

Acknowledgements

The Society would like to thank Mr.Luke Wishart of Church Farm, Binsted for his active interest and co-operation in allowing us to work on his land. We, also thank John Mills for his support and encouragement at West Sussex County Council and W. Sussex CC Survey Dept for loan of a GIS equipment. We thank Dr David Rudling for cleaning and identifying the coin and Dr Malcolm Lyne for identification of the pottery.

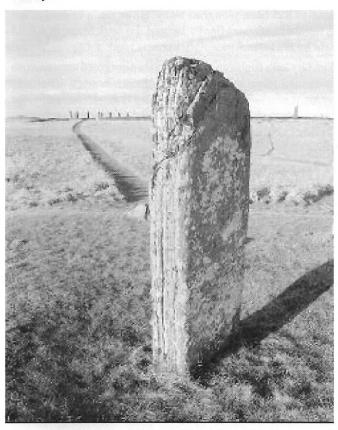
GERALD F HENNINGS

Solving the mysteries of the megaliths?

A review of Orkney's 2002 archaeological season

While the archaeological attention over recent years has been firmly on Tankerness and the underground chamber of Minehowe, the emphasis in 2002 shifted firmly back to the "Neolithic Heart of Orkney".

There, for the first time in almost 30 years, the area around two of Orkney's best-known ancient monuments - the Ring of Brodgar and Standing Stones of Stenness - came under close scrutiny.



The Comet Stone, an outlier to the Ring of Brodgar. Geophysics surveys this summer revealed the presence of a fourth "object" in the ground by this monolith

Not only was a large section of the Ness of Brodgar painstakingly surveyed, but the chance discovery of two stones by the Stenness loch could shed light on the construction of the stone circles, in particular how the megaliths were transported from their quarry site.

Nick Card of Orkney Archaeological Trust (OAT) came across the two prone stones while walking the eastern shore of the Stenness Loch.

Lying by the water, just to the north of the Wasbister disc barrow, the find could indicate that the megaliths took to the water for the final leg of their journey. Although Nick is only certain that one of the stones was destined to be a megalith, the discovery has intriguing parallels with a local tradition that other stones lie within the loch itself.

"It could be that these stones may once have been erected but were knocked or fell down in more recent history," suggested Nick, "but this seems unlikely. If they had been standing, they would surely have been recorded somewhere. It seems more probable that they were actually on the way somewhere. And if you were moving something that size it makes sense to use the water rather than drag them across the land."

That the Neolithic people of Scotland were capable seamen is a known fact. Not only did the earliest Orcadian settlers navigate the Pentland Firth but they maintained contact with the British main-land, something confirmed by certain artefacts found in the county and the obvious exchange of ideas evident throughout the period. Bearing this in mind, it is no great stretch of the imagination to suggest that the monument builders called on their boat-handling skills to transport the mega-liths needed for their ambitious construction.

Staying with the stone circles, work at Vestrafiold in Sandwick over the summer seems to have confirmed that megaliths were indeed quarried there - the location long held to be the source of the Stenness stones.

The project, led by Dr Colin Richards of Manchester University, hopes to reveal more about the people who hewed the great stones from the quarry and moved them more than seven miles to the Ness of Brodgar.

Previous investigations concentrated on the stone circles themselves, but Dr Richards' project could provide an intriguing glimpse behind the scenes of the construction of Orkney's grandest prehistoric relics.

The Vestrafiold work is ongoing and Dr Richards hopes to return in 2003.

The designation of the area surrounding Maeshowe, Brodgar, the Standing Stones and Skara Brae as a World Heritage Site in 1999 resulted in a number of projects to better understand the archaeology - visible and invisible - within the landscape. One of these was an extensive geo-physics survey of the Brodgar peninsula - the thin neck of land bordered by the Harray and Stenness lochs.

Funded by Historic Scotland, Orkney Islands Council (OIC), OAT and Orkney College, the 30-hectare survey took around five months to complete and revealed much about the landscape surrounding the stone circles. It not only clarified the extent of the known archaeological features but also revealed several new ones.

Of particular interest was Bighowe, the remains of a larger mound levelled in the early 20th century. Visible from the south as a low flat mound, Bighowe lies to the south-east of the Standing Stones, about half way between the stones and the Stenness Kirk. Early antiquarians labelled the structure a broch, something now confirmed by the detailed scan results.

Among the many other features revealed by the scans is the existence of a fourth "object" in the ground by the Comet Stone - the megalith that lies about 140 metres from the Ring of Brodgar - as well as a number of features within the Brodgar ring itself. It is hoped that another 30 hectares will be surveyed in 2003. Starting this season's archaeological digs was the Bookan chambered cairn, a little known structure to the northwest of the Ring of Brodgar. Originally excavated in 1861, the cairn is close to the Ring of Bookan - a ditch and bank "henge" monument of a type found across Britain.

Although the Bookan Cairn lies in what is arguably one of the richest archaeological landscapes in the county, very little was actually known about it. After the 19th century investigation it was assumed that because of the structure's unfamiliar design, it had to be a very early example of a chambered tomb. It was given a classification of its own and more or less forgotten about.



Summer 2002's first excavation - investigating the Bookan chambered cairn. The photograph shows the remains of the entrance passage and what is leftof the side chambers

But this year's two-week excavation revealed much about the cairn - in particular that the previous excavation had merely covered the earliest phase of its history.

Nick Card explained: "After the original tomb had fallen into disrepair, it was incorporated into a larger cairn around 16 metres in diameter and bounded by three concentric stone revetments.

"Various aspects of the tomb's layout, like the arrangement of the side compartments around a central chamber and the removable side-chamber 'doors', seem more akin to the Orkney's Maeshowe type of tombs rather than the stalled Orkney-Cromarty tombs like Unstan."

But despite its similarities to Maeshowe, Bookan's size and architectural aspects remain noticeably different to other chambered cairns found so far in Orkney.

In mid July, work at the Knowes of Trotty in Harray resumed with Nick Card joining Jane Downes of Orkney College to continue on from last year's surveying work.

Lying at the foot of the Ward of Red land, the Knowes of Trotty are the source of one of the most famous Orcadian archaeological discoveries so far - the four gold discs found in 1858 by local antiquarian George Petrie.

This year, although the archaeologists were interested in studying the anomalies revealed by last year's survey, the real goal was to identify ways to protect the site from the erosion damage threatening it.

"Seven small trenches were opened over a variety of (survey) anomalies to test some of the geophysics results and preliminary interpretations," said Jane Downes. "In each trench archaeological features relating to the site's function as a cemetery were encountered - ranging from an early Bronze Age building at the north end, to pyre sites, pits and a very truncated kerbed cairn."

The discovery of a building was unusual, as structures - particularly domestic ones - are not commonly found at cemetery sites. Investigations at the base of the main funeral mound also revealed that it had been built into a natural hillock, which had been sculpted and revetted to suit the builders.

Nick Card added: "Although the Knowes of Trotty is one of the most quoted Bronze Age cemetery sites in Britain, not much is actually known about it.

"Work over the last two seasons has shown that the area is

certainly a lot more extensive than was previously thought. It's now hoped that we are now going to get a lot of dating evidence that will help us understand how the cemetery developed. This season's work also allows us to put the findings from earlier investigations into context."

At the foot of Wideford Hill, just outside Kirkwall, an attempt to find a "lost" Neolithic village was a great success, with a team finally locating the ancient settlement in the shadow of the nearby chambered cairn.

Earlier searches, using reports by Orcadian antiquarian Robert Rendall, had revealed nothing, so it was assumed that any remains had been ploughed away. However, a re-evaluation of Rendall's account finally located the settlement, in a field right by the main Kirkwall-Stromness road.

With Dr Colin Richards at the helm, the site turned up numerous finds, including stone axes and Unstan pottery. The only evidence of a building, however, was a drain. Despite this, the finds seem to indicate that this could be a very early settlement - perhaps even earlier than the Knap of Howar on Papa Westray which dates from around 3,600BC.

Dr Richards hopes to return around Easter 2003.

A previous contender for Orkney's earliest village, at Stonehall in Firth, now looks like being somewhat later than first thought. Newly published radio-carbon dates from Dr Richard's previous excavations seem to indicate that Stonehall actually dates from around 3,300BC. Certainly not the very early settlement it was once thought. These new dates cause some problems when it comes to current ideas regarding the development of Neolithic settlements. It has generally been thought that each development stage of a village had its own distinct architectural style. Stonehall, therefore, was thought to be an early settlement because of the early style of architecture found there.



One of the Neolithic houses uncovered previously at Stonehall in Firth. The latest radiocarbon dates have revealed that the Stonehall Settlement is not as old as previously thought.

But these radiocarbon dates now indicate that the village was not actually showing a range of building styles that had developed slowly over a period of time. Instead, it appears that all these different styles could have been in use at the same time.

Finally on the subject of Neolithic villages, a book on one of

Colin Richard's best known excavations, the Barnhouse Settlement in Stenness, is to be published early next year. Those interested can expect to see the book in the shops by spring 2003.

Westray saw more excavations this year, with the continuation of work at the Knowe of Skea and Quoygrew, as well preliminary investigations of a "new" earth-house.

The second full season of excavation on the Knowe of Skea continued to reveal interesting, but puzzling finds. Originally thought to be a chambered cairn when it was first excavated in 2000, the latest discoveries have archaeologists turning again to this idea.

Last year's excavation revealed a well preserved Iron Age structure, which going by the finds, appeared date from 7th or 8th century AD. Despite the thickness of its walls - up to four metres in some places - the possibility that it was a broch was dismissed. Instead, it may be that the wall had been built up over time, with new layers added to try and stabilise to the previous wall.

The lack of domestic evidence has more or less ruled out the possibility that the structure was a dwelling. Although Iron Age artefacts were found within the structure, these were high quality, high status items, more reminiscent of grave goods.

The promontory is littered with burial cairns which undoubtedly have some connection to the quantity of human remains found in and around the mound. Samples taken this year date from the Iron Age, so it would appear that the Iron Age builders were re-using a much earlier structure. Construction technique and the quality of stonework also seem to confirm this.

Speaking during the excavation, Graeme Wilson said: "This is the tip of the iceberg. We can now see in the floor of the Iron Age building on top here, other structures, other stones poking through from below. So we're fairly sure there's something else under here. Plus, we haven't really had time yet to examine the whole of the mound and we know from last year and the year before that there is a whole load of more structures out there, a lot of different things happening.

"Until we get a better and wider look at this whole site, we won't really be able to understand how it has developed and how it fits into Westray as a whole and Orkney."

The Quoygrew excavations continued in July and August, once again led by Dr James Barrett. Funded by Historic Scotland, OIC, OAT and the University of York, this season's work focused on buildings first discovered in 1999.

An extension to the main building was revealed this year - a room that seemed to have been a bedroom before the addition of an external door saw it become a workshop or outbuilding. With four distinct phases of occupation, the main building was found to have an internal dimension of 10m by 4.8m, with entrances in the centre of both the eastern and western ends.

A "new" building was also discovered about one metre to the west of the main building. Built on top of the viking middens, its date and function are as yet uncertain.

Quoygrew produced hundreds of artefacts this year - mostly pottery, soapstone and whalebone. The discovery of 25 sherds of Scottish redware pottery helped date the buildings to the Late Middle Ages (1300-1500). The second building may have been re-roofed and reused in later centuries, as implied by 16th and 17th century coins recovered last year.

Excavation of the Quoygrew farm mound did not continue this season, but radiocarbon results have given it a date of 780-1 000AD. This confirms that settlement in this part of the site began in the Viking Age and that Quoygrew was occupied for approximately 1,000 years prior to its final abandonment in the 1930s.

Moving back into prehistory, an underground structure in Westray could provide some much needed clues as to the function of the monuments known locally as earth-houses.

Originally found around 20 years ago, the earth-house at Langskaill has remained largely untouched, giving archaeologists the opportunity to study the site first-hand.

Julie Gibson of OAT explained: "The structure doesn't seem to have been cleared out. One or two bones have been removed but they've been returned by the farmer.

"There are a number of earth-houses in Orkney but they're not in the least understood. We can't even really say for certain what time-period they are from, what they were for or what they were attached to, if anything. So the Langskaill earth-house, we are hoping, might give us an opportunity to clear up some of those questions."

Back at Minehowe for a third year, the archaeologists were concentrating on the supposed broch remains in Roundhowe to the south-west of the Tankerness underground chamber.

Despite having a road built through it, Roundhowe's banked enclosure survived and seemed to confirm the 19th century declarations that the mound was a broch. The 2002 excavation results, however, did not.

Funded by Historical Scotland, OIC, OAT, Orkney College and Sheffield University, four trenches were opened across the enclosure and bank - none of which showed any evidence of prehistoric structures.

The mound itself turned out to be a natural knoll, rising from an area of marshy ground.

From this, the small number of finds at the site, and the lack of settlement evidence, it became clear that whatever Roundhowe was, it was not the site of a broch.

But although there was no evidence of man-made structures, the knoll had been "altered" at some point. As well as the bank that formed an enclosure on top of the knoll, a large ditch (five metres wide by 1.5 metres deep) had been cut around the base. This would imply that the knoll had some significance or purpose, but as the excavation drew to a close in September, Roundhowe's relationship to Minehowe remained unclear. What has become apparent, however, is that Minehowe and Roundhowe and their apparently ritual landscape had more in common with ritual sites in Ireland, such as Tara, rather than its Scottish counterparts.

Also under the spotlight at Minehowe was the metalworking area outside the chamber's external ditch. More evidence of metal working - crucibles, slag, furnace linings, a kiln - was uncovered, all of which seemed to be associated with a large (six metres in diameter) oval stone structure, thought to date from the 4th century AD."We think this was either a domestic structure associated with the metalworking, or perhaps an area where they finished off their creations," said Nick Card, "If they were doing the 'heavy industry' work outside, with kilns all round, the large sandstone blocks here were probably used as anvils."



The oval metalworking building unearthed at Minehowe in Tankerness

Other finds included a whale-tooth sword pommel - found in one of the alcoves built into the wall of this structure - and several shards of Romano-British colour-coated ware. These, together with previous finds at Minehowe, confirm again the existence of trade-routes or contact between Orkney and mainland Scotland.

It was hoped to return to the metalworking area again in 2003. The discovery of a kist at Nether Unstan in Stenness resulted in an excavation in Stenness, but unfortunately no contents

were found within. Full results of this excavation are awaited. Looking ahead to 2003, the research plan for the World Heritage, described as a "real feather in Orkney College's cap", is due to be published in September.

Compiled by Jane Downes, the research plan will identify gaps in current knowledge and outlines potential areas for future research to help better understand the monuments and their surrounding landscape.

But although focusing on an area of prime historical importance, the research plan will not restrict itself to archaeology.

"We are not only looking at the Neolithic archaeology," explained Jane Downes, "but the whole history of the area as wells as aspects such as folklore. We are viewing it as a cultural landscape and recognising that people, from the Neolithic onwards, have encountered these monuments and have had some reverence for them."

With 2002 now drawn to a close, 2003 will see a new beginning for Orkney Archaeology Trust with a move to new premises in Kirkwall. The move, which will see all of Orkney archaeological services under one roof, is scheduled for around January 13.

The relocation of the Trust coincides with Orkney College's new post-graduate course in archaeology, which is due to start in February 2003. The course, which was delayed by external validation problems, came about after the need for housing the archaeology course was cited as one of the main reasons for a £1.3 million extension at the college.

Garum is Alive and Well and Living in Sweden!

There have been many archaeological finds in Britain of the large pottery vessels known as Amphorae. The most common use of these was to transport olive oil or the curious substance known as Garum or Fish Sauce. The use of this, smelling of rotten fish, was difficult to understand.

Airlines have discovered a rather unusual safety problem. The Independent for 3rd April chronicles concern over a rather special Swedish delicacy called "Surstromming" made from herring from the Baltic which are caught in the Spring. It is regulated by a medieval Royal Ordinance and the herring must be caught between April and May. It was once a basic ration of the Swedish army and is made by removing the gut and head and putting the fish in barrels in a light brine. The fish are then left to ferment for ten to twelve weeks. Originally it was taken from the barrel but now it is canned and left to ferment for a further year in the can.

The cans slowly expand top and bottom till they bulge like a football and look ready to explode. This is what worries the Airlines because the effect on opening is rather pungent! "A white milky brine fizzles out, bubbling like fermented cider and smelling like a blend of parmesan cheese and the bilge water of an ancient fishing vessel"* The fish is quite pleasant eaten with buttered crackers and mashed potato but the only problem is getting the smell out of the house. The Airlines do NOT

want to have to deal with the consequences of a can exploding in transit.

It is debated whether, like Garum, the fish are fermented or rotten, but the brine prevents putrifaction until the fermentation process sets in. The US Government has refused it an import permit because they say it is rotten.

Garum was made in a similar fashion. There are no precise ancient recipes but a Greek Manual from 900AD gives the following instructions:

"Any kind of small fish is put into a vessel and salted, shaken frequently and fermented in the sun. After it has reduced in the heat a large strong basket is placed into the vessel and the garum streams into the basket. The liquamen is strained through the basket when it is taken up. For immediate use it could be boiled or left to ferment in the sun." The liquid was used as a salty seasoning for fish and meat and different versions were popular throughout Asia. The French thought that the Vietnamese ate rotten fish, but by the 17th Century, the English discovered that salted anchovies would melt into a sauce and this was used just like Garum. Its popularity may have faded since Roman times, but it has never really gone away.

*From "Salt — A World History. Mark Kurlansky. Penguin Books"

ANNE INDUNI

Internet Archaeology

The growth in Internet archaeology is providing us with a wealth of information from all over the world. Some sites require you to be on broadband to get the best results, but try them all if you have dial up.

http://www.archaeologychannel.org

This site is really outstanding, to get the best from it you really need broadband, there are videos to watch and lots of Audio presentations of archaeological events from all over the world, it is an American site so be prepared for that.

http://blogger.com

Now this in very interesting, go to the site and type in the search box archaeology, and you will be very surprised what comes up, lots of very interesting sites from all over the world.

http://www.imagesonline.bl.uk/britishlibrary

This is a must, log on and have a look, some really fantastic images from by gone ages.

http://www.bbc.co.uk/history/war/wwtwo

A BBC site, well worth a visit, all you want to know about WW2 and more.

http://www.historicaldirectories.org

Historical Directories is a digital library of local and trade directories for England and Wales, from 1750 to 1919. It contains high quality reproductions of comparatively rare books, essential tools for research into local and genealogical history.

http://www.binsted-discoveries.blogspot.com

A research site about Binsted, this is a members site.

http://worthingpast.blogspot.com

Our own Field unit site, full of useful information about the Society's Field Unit. If you are a member of the field unit, you should log on to this site every week for updates. If not then log on to see what we are up to.

http://diggingup.blogspot.com

Another members site, a few thoughts.

http://www.sussexpast.co.uk

Sussex Archaeological Society site, well worth a visit.

http://lancsompastfinders.mysite.wanadoo-members.co.uk

Local history site.

http://www.findonvillage.com

Local history site, lots of information about Findon area.

In the next Journal more sites will be added, if any member has a site they would like to list here, then please let me know. Ed.

The Not-So-Secret Scroll - Priceless Relic or Floorcloth?

It is eight years since Andrew Sinclair first drew our attention to the interesting 'scroll' in the Masons' lodge at Kirkwall, as part of his campaign to prove that Earl Henry Sinclair went to America. 'The earliest Masonic document in existence in Scotland', he said, 'may well be the Kirkwall Teaching Scroll, which is held to date from the late fourteenth century, when Prince[sic] Henry St Clair became the Earl of Orkney.' He didn't say who 'held' the scroll to be so old. In his bibliography he revealed that 'The Lodge at Kirkwall still keeps a copy of the medieval original Teaching Scroll.'

Sinclair hadn't seen the scroll at that juncture, as his reference to a 'copy' makes clear. The Kirkwall scroll isn't a copy: it's an original. But an original of what date? It wasn't until 1997 that Sinclair viewed the artefact, along with fellow delegates to the 'Sinclair symposium'. Although his colleagues 'could not assess the evidence in front of their eyes' that the scroll was a medieval masterpiece, Sinclair had the 'knowledge or the vision of experience' to enable him to do so.

He became ecstatic. 'As I gazed up', he breathed, 'I sensed that I had chanced upon one of the great treasures of the Middle Ages, perhaps rivalled only by the 13th-century Mappa Mundi that hangs in Hereford Cathedral. It was a priceless relic that would demand the rewriting of medieval history.'

These proposals, set out and surpassed in his *The Secret Scroll* (Sinclair-Stevenson 2000), are bilge. Sinclair's methods led to faulty conclusions. As Masonic antiquaries have said since 1897, the Kirkwall scroll dates from the eighteenth century. It is most likely to have been designed and presented to the Kirkwall lodge as a floorcloth. And a little research enables us to identify its only begetter.

Sinclair's research was curiously incomplete. 'I was given a drawn copy of the Scroll,' he says, 'together with an interpretation of it by the late Brother Speth of the Quattuor [sic] Coronati Lodge of London.' He also received something else by another Brother Flett'. In text and bibliographyóhis books contain no footnote so Sinclair fails to give any sources for these documents. This is a pity, because Speth's and Flett's contributions, once located, are very important.

Sinclair goes on to cite quotations and opinions by Speth, which seem to confirm his own view that the scroll is medieval in date. For instance, he quotes Speth as saying that the right-hand margin of the scroll was 'the work of an artist who knew the Nile Delta and Sinai and the land of Canaan'. 'In the opinion of Brother Speth', according to Sinclair, 'the Kirkwall Scroll was the work of a skilled Knight Templar' whom he identified as the large mounted figure drawn beside the besieged Nile city. During his advance from Palestine the Templar 'evidently made notes or sketches as he went his way with the army, or probably made very accurate mental notes of the whole country and later drew short maps for future reference.' I was perplexed to read these alleged quotations by Speth, because they don't appear in my copy of his article.

George William Speth (1847-1901) was an erudite Freemason, a founder and secretary of the famous Quatuor Coronati Lodge and editor of its important journal, *Ars Quatuor Coronatorum*. In 1897 he commissioned an article about Kirkwall's lodge from another masonic enthusiast, Archdeacon Craven of Orkney. The article duly appeared in volume 10 of *AQC*, with a contribution by Speth himself about the scroll. Far from concluding that it

was the work of someone who had been to the Middle East, or who was a Templar, Speth speculated that it was a lodge floorcloth from 'the first half of the eighteenth century, or very little later'.

Speth died four years after writing his paper. I can't believe that he changed his mind about the scroll during that short period. Andrew Sinclair owes us an explanation for the disparity between his quotations from Speth, and Speth's 1897 text.

In the 1920s another erudite Freemason turned his attention to our scroll. Brother William Reginald Day, from the Sydney Research Lodge in New South Wales, wrote a long article about it, again in *Ars Quatuor Coronatorum* (vol. 38, 1925). Andrew Sinclair seems to be unaware of this important piece of work.

Day was an expert in Masonic iconography, and he looked closely at the structure and subject matter of the scroll, building on and amending Speth's conclusions. There is no space here to describe his findings in detail. On two occasions, however, he finds important clues to the cloth's date. On the face of the altar on panel 6, for instance, he finds 'the arms of the Grand Lodge of the Antients'. Since the 'Antients' came into existence in 1751, it would be a brave commentator who claimed that our scroll was 300 years older. Day discovered that the 'Antient' arms were first portrayed in a work of 1764: [c]onsequently', he says, it is reasonable to assume that the Scroll is of later date than that, especially as there are other traces of Antient influence'.

Thus in panel 8 Day found 'Antient' themes in some figures on top of globes. In *Freemasonry and the Concordant Orders*, he says, 'there is an illustration entitled the 'Dermott Arch' with exactly similar figures on the top of the two pillars, but no globes are depicted. [T]he name of Lord Blesington appears in the wording. This will give some idea of the antiquity of the design, as Lord Blesington's term as Grand Master lasted from 1756 to 1760.'

Day also spotted that in panel 7 of the scroll there are (in cipher) three verbatim quotations from the King James Bible (from Exodus chapter 3: 'I am that I am, I am hath sent me unto you', and Song of Solomon chapter 2: 'I am the Rose of Sharon and the Lilly of the Vally'). Sinclair must now explain how his medieval Templar anticipated King James's English translators of 1611. (Sinclair actually imagines that these well-known biblical texts are 'A Gnostic inscription concerning the Sophia, the ancient goddess of divine wisdom!)

I have only been able to give a taste of Day's scrupulous work. His paper is a tour de force. Like Speth, he had no doubt that the Kirkwall cloth was a modern production.

Why would there be a Masonic cloth in Kirkwall in the eighteenth century with influences from an 'Antient' source? We must now turn to the other work that Andrew Sinclair received during his research: James Flett's Kirkwall Kilwinning No. 38: the story from 1736 (1976). According to Flett a lodge minute of 27 December 1785 records that 'Bro. William Graeme, visiting brother from Lodge No. 128, Ancient Constitution of England, was, at his own desire admitted to become a member of this Lodge (My italics!) Lodge 128 wasn't in Yorkshire, as Sinclair thinks, or Bury in Lancashire, as others have suggested.

According to Lane's standard work on Masonic records (1894 edition) it was at an unknown location in the West End of London.

Who was William Graeme (more correctly Graham)? Paul Sutherland has written an entertaining account of Graham's career, in a dissertation which should be published as soon as possible. He was a son of Alexander Graham, the Stromness merchant who waged a famous legal battle with Kirkwall notables in the 1740s and 1750s. 'For a time', two of William's enemies wrote later, '[Graham] was *employed as a journeyman house-painter* in London. He returned to Orkney in poor circumstances, *but Mason-mad.*' (My italics)

A month after Graham's application to join the Kirkwall lodge he presented a floorcloth to his new brethren. There can be no doubt that this cloth is our scroll. Flett reports that when he joined the Kirkwall lodge, around 1900, 'there was at that time a very old Brother who occasionally visited Lodge meetings at the advanced age of over 90. On one occasion I asked him if he could tell me anything about the Scroll. He said he did not know very much about it except that it was used to be called the floorcloth, and that at his initiation it lay on the centre of the Lodge room floor when he was a young lad of 20.'

Unfortunately, Graham's relations with his brethren deteriorated, and in 1790 he and others formed a new lodge. They paraded through Kirkwall and laid the foundation stone of their new headquarters 'according to the ancient order of the craft'. Graeme was devoted to ancient ceremonies and rites, inside and outside the Masonic fold. In due course he founded an Anti-Burgher meeting-house in Kirkwall; on that occasion, after performing a great many antique tricks [he] kneeled down, made a long prayer, and dedicated this Church and then with his brethren paraded the streets of this place to the no small amusement of the public. (His enemies italics!)

In later, happier times, Graham became reconciled with his former brethren. When he died, sometime after 1812, he bequeathed to them his 'Book of the Ancient Constitution of Free and Accepted Masons', for use at his burial.

There is no document that states that William Graham painted the Kirkwall floorcloth. However, he must be the prime candidate to have done so. From Speth onwards the commentators agree that it is a crude piece of work. One can easily see', says Flett, "that the figures and emblems are very roughly painted, just such work as an amateur would have put off his hands'. We know that Graham was a journeyman painter. The scroll contains Antient symbols, and Graham hailed from an Antient lodge. Graham was 'Mason-mad', addicted to 'antique' rites. Most importantly, we know that he donated the scroll to the Kirkwall lodge, as a floorcloth for use in ceremonies.

Andrew Sinclair's alternative suggestion, that the scroll is far older, is less than convincing, especially when he cites George William Speth as a source for his view. His attempts to link it with the Sinclair family are laughable. He imagines that a structure portrayed on panel 4 of the scroll in the tabernacle in the wilderness, surrounded by the tents of the tribes (see Numbers chapter 2) is the Temple of Solomon, and that it has a close resemblance to the Sinclairs' Roslin Chapel.

Interestingly, Sinclair's illustration omits the tents. Most grotesque of all is his argument that the word 'sultcrinea' in panel 3 (the word is actually 'sulterinea') is an anagram of 'St Cler' (as in Sinclair), and 'vina' (as in Vinland, referring to Earl Henry Sinclair's alleged trip to America!)

He has no explanation how such a cloth could have ended up in William Graham's custody.

Finally, there is the question of radiocarbon dating. Sinclair acquired two dates for the scroll, from Oxford University's Accelerator Laboratory. The first result, he says, was 'disastrous', because the samples that he submitted were so spoiled by chemicals or use that the process declared them to be not more than fifty years old. He sent another piece, and this time the result pointed to 'the fifteenth century, most probably between 1400 and 1530'.

Sinclair's grasp of radiocarbon dating seems to be defective. Scientists check for chemical contamination before using the process. When Oxford investigated Sinclair's original sample they found no problem. Their result on that occasion was 85BP +/-35. (I am grateful to the laboratory for this information.) This doesn't mean 'not more than fifty years old', as Sinclair imagines. Such a result translates into a very wide range, and calibrates to the years 1680-1740 or 1800-1960. In other words, if the result is to be believed, William Graham (if he was the painter) could have used a piece of cloth made during the period up to 1740. Such a date would indeed be 'disastrous' for Sinclair's theory!

The second date that Sinclair acquired is 435BP +/-50, which calibrates to the years 1400-1530 or 1560-1640. This radically different result is of course still not incompatible with a late date for the *design* on the cloth. We have already seen that the *design* cannot be earlier than 1611, because of the quotations from the King James Bible on it. However, there is no reason to prefer this date to the other - and, given the incompatibility between them, it might be best to ignore both!

Radiocarbon analysis is useful in the *study* of art objects. It is dangerous to use it to try to *authenticate* them.

If I am confronted with a cloth in a Masonic lodge, stuffed with Masonic symbols, which we know was donated in 1786 by a Freemason entranced by Masonic lore, my inclination is to date it to the eighteenth century, the period when the symbols were devised, not to the fifteenth. When experts like Speth and Day reach the same conclusion, and radiocarbon dating doesn't rule out a late design, I am even more confident that Andrew Sinclair has got it all wrong.

I am grateful for valuable help to Patrick Ashmore, Phil Astley, Peter Claus, Jack Donaldson, Chris Dowle, Christopher Ramsey, John Shaw, Paul Sutherland, Willie Thomson and the Livingston Masonic Library of New York.

Brian Smith is the archivist for Shetland Islands Council and an honorary research fellow in the Department of History, University of Strathclyde.

BRIAN SMITH

John Pull and Blackpatch Flint Mines

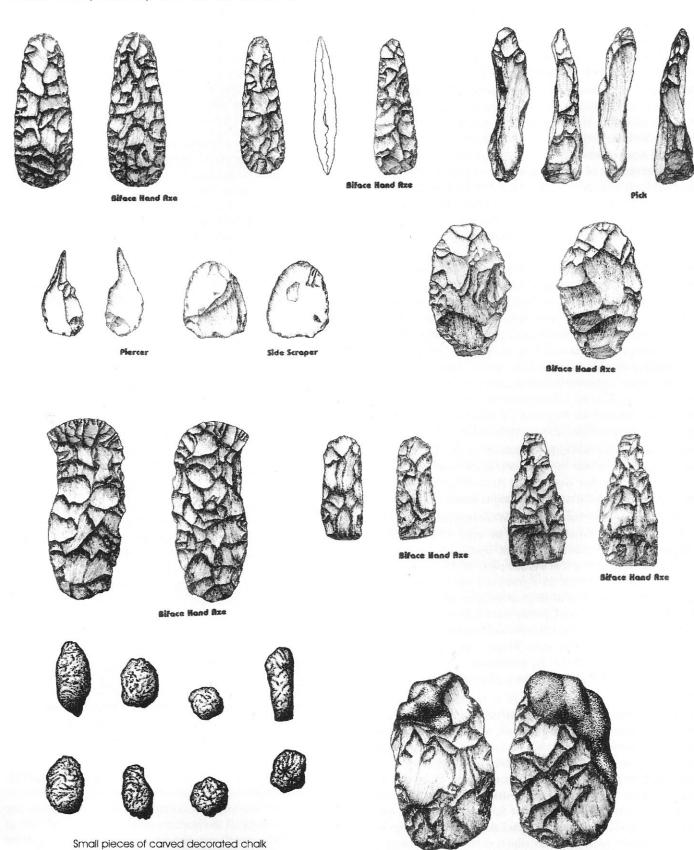
The advent of Time Team at Blackpatch on the Downs north of Worthing has awakened much interest in the work of John Pull and Worthing Archaeological Society in the investigation of early flint mines

Hidden in the vaults of Worthing Museum is box after box of the material taken from Blackpatch, Harrow Hill, Church Hill Findon, Cisbury and many other sites Pull worked on.

found in the flint mines classified as "Charms"

Being given access to these finds for the purpose of illustrations for the John Pull exhibition has been rather like opening a treasure trove not knowing what will be in the next box or the next one.

The flints are superb and the best 10 are shown. The Blackpatch site was mainly for flint removal and seemingly axe rough outs



although some other tools were in evidence, though not many compared with the quantity of axes in the collection.

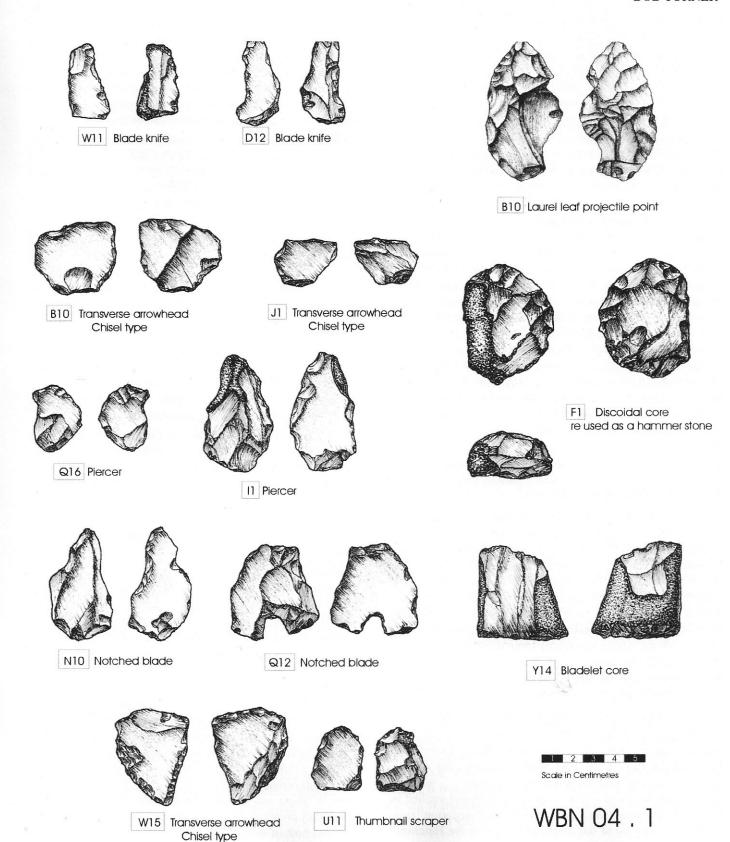
A small collection of carved chalk pieces were found and designated "Charms" by Pull although their use seems to remain a mystery. In examining them closely I cannot work out any use they could be put to being made of very friable chalk so perhaps we are looking at a bit of pre history pop art or just a time wasting doodle by one of our long lost ancestors.

Walberton Field Walk

Together with the Village History Group we walked a field just south of Walberton Church in 2004 and now the finds have been processed and the report completed.

Shown is a sample of the flints found on the day that according to our Finds Director Gill Turner represent a hunting camp rather than a Mesolithic settlement. In addition to these flints finds from virtually all eras since this time indicate continuous habitation from the Bronze age to the present day

BOB TURNER



St Aldhelm and the Chapel at Worth Matravers - Sea-mark, lighthouse or bell tower?

On the windswept southernmost headland at Renscombe in Worth Matravers, Dorset, stands the twelfth century chapel of St Aldhelm, a dedication first recorded in 1252. Sometime in the later seventh century Aldhelm composed a set of a hundred poetic riddles, one of which takes as its subject a farus editissima, a very tall lighthouse. While it is generally assumed that this, as with so much of his writing, is yet another derivative literary exercise, it seems quite possible that his vivid description of the high cliffs, surging salt-waves and the fire kindled in the tower was drawn from life evoking something known to his audience (Barker, 1988, 36-7). 'The late twelfth century chapel on the cliff at St Aldhelm's Head, is traditionally said to have had a light' notes Hutchinson (1994, 171). Aldhelm of Malmesbury, scholar and linguist, was first bishop of Sherborne, the diocese created on the division of the see of Winchester in AD 705. He died in 709.

Two questions are posed. What evidence is there for St Aldhelm's Chapel ever having served as a lighthouse and, if it once did, could the description of the *machina* we find described by Aldhelm relate to an actual structure once to be found on this Dorset headland?

This note is arranged in two parts. In the first, 'Sea mark, lighthouse or bell tower?' Gordon Le Pard reviews informed opinion of the nineteenth century and the evidence then assembled for the existence of a one-time medieval lighthouse at St Aldhelm's Head. In the second part, 'Aldhelm's Farus Editissima' Katherine Barker begins by reviewing what is known about the site in earlier centuries. Then she takes a closer look at the words of the Aldhelm's Latin original and attempts a brief review of what may be deduced from literary sources about coastal activity in the later seventh and early eighth centuries. She notes the very distinctive plan of the Chapel and its siting in relation to that presented by another Dorset 'sea mark' site. It may also be that we should re-consider the significance of another two twelfth-century churches on the Purbeck coast.

Gordon Le Pard

Sea mark, lighthouse or bell tower?

The earliest detailed description of the chapel is to be found in the first edition of Hutchins' *History and Antiquities of the County of Dorset* (1774) which, whilst describing the chapel in some detail, makes no mention of any tradition suggesting that it had been used as a lighthouse. Rather he makes the plausible suggestion that the building was 'a chantry wherein masses were said for the benefit of mariners that passed by this shore (*ibid*, 1774, 228). However by the time of the third edition (1861 - 70) the editors discuss in some detail the suggestion 'that a beacon may have been placed on this summit to warn mariners from approaching this dangerous coast' (page 679). The structure was by then in a ruinous condition.

No one can fail to see . . . that St Aldhelm's is not as other churches are' notes Moule (1893, 14, 75-9). For one thing it is a perfect square,' with a door on the west wall and a window at the northern end of the east wall. Internally, the roof is supported by a massive clustered central column . . . 'we have yet to learn that there is any other isolated chapel vaulted in this way' and then Moule gives a detailed description (*ibid*, 77-8). The drawing of the chapel published in the Hutchins'

first edition which shows the roof culminating in a simple apex may be compared with the building as drawn by Thomas Webster published in 1815 (Fig 1) which shows a short cylindrical ashlar pillar at the apex of the roof which now supports a cross [RCHM vol 2 SE pt 2, 412]. Engelfield (1816, quoted by Austen 1858) noted that 'the roof was so ruined and overgrown with grass that it could not be traced with certainty . . . part of the groin had fallen in'.

The Chapel was restored early in the nineteenth century by Mr Morton Pitt, owner of Renscombe Farm, and then more thoroughly by Lord Eldon mid-century. It must be admitted that he did an excellent job, the only additions were massive buttresses which were necessary to support the walls. He rebuilt the fallen sections of the walls and completely repaired the roof. It was whilst the workmen were carrying out this part of the restoration that they made their discovery.

'Parts of the groins, however, having fallen in, its proprietor, Lord Eldon, had directed it to be repaired; and the workmen who were employed discovered on the top of the building, a cylindrical foundation of three feet in diameter which had no doubt been the base of some erection (Engelfield, quoted in Austen, 1858; see above).

The 'cylindrical foundation' is clearly shown in the excellent section drawing by Webster (Fig 2). It is a continuation of the massive central column and clearly continued above the roof. The discovery of this column 'occasioned many conjectures as to the purpose it was intended to serve' (Hutchins 1861-70, 680). The first detailed suggestions were made by J H Austen (1858) in a paper he read to the Purbeck Society. He does not seem to have been fixed in his ideas, at one point he notes that 'the square pillar in the centre seems to have been originally designed to support some weighty superstructure of which the cylindrical base on the top is a part, and might have been a beacon, or some species of light-house' (Austen, 1858).

However a few paragraphs later he dismisses the idea that it carried a light. 'The bell-rock on which a light-house is now erected, near the Firth of Forth, is said to owe its name to a bell formerly fixed upon it by the monks of Aberbrothock, or Arbroath, and thus alluded to by Southey;

When the Rock was hid by the surge's swell, The Mariners heard the warning Bell; And then they knew the perilous Rock And blest the Abbot of Aberbrothock.

These lines suggest what in reality might have been the use of the superstructure mentioned by Sir H Engelfield as having been discovered here, and which appeared to require considerable support, *viz.* that it was a tower adapted to the suspension of a heavy bell which the priest continued to toll during the dark weather. Had it contained a light, there must have been a stair case leading to it, which does not appear to have existed (Austen, 1858).

He adds a note from his friend, Mr T Bond, who points out that 'if [this] conjecture respecting the used of the cylindrical base, which is said to have once existed on the summit is correct, there must have been an opening through its vaulting to admit a rope or chain of the bell, and traces of this opening might still perhaps be discovered' (Austen, *ibid*). Twenty years later W Shipp and J W Hodson considered both these ideas when they prepared the third edition of Hutchins' *History* and rejected both of them.

One supposition is that it was placed here to support a campanile, but there is no appearance in the vaulting beneath of there ever having been any aperture for the passage of a rope or chain by which a bell would have been rung. It has also been thought that a beacon may have been placed on this summit to warn mariners from approaching this dangerous coast, but there is no warrant for this conjecture, and on the many accounts a beacon would have been most inconveniently placed in this situation. It would have been inaccessible except by climbing over the roof (Hutchins 1861-70, 679-690). However they made a third suggestion. 'It seems probable that this erection was . . . the base of a cross.'

Despite their scepticism as to the lighthouse theory, this was resurrected by H J Moule in 1893 (see above) who had his own explanation as to how a light could have been maintained. He briefly describes the central column which he notes 'is believed to have risen above the roof, of whatever kind it may have been . . . and that this shaft carried either a bell or a fire cresset or both, as a warning to mariners.' 'It has been objected' he continues, that 'there is no sign of stairs to give access to the beacon. This seems no valid difficulty. A wooden stepladder alongside (say) the north wall, and at the eve turning at right angles up the roof, would be a very simple piece of work; and if abandoned to decay, would leave no mark.' He also noted a slight bank round the chapel. 'At the south side there are signs of foundations. Here may be the site of a priest's cell, supposed to have adjoined the Chapel' (Moule, 1893, 78-9).

After this, the idea that the chapel had been a medieval lighthouse gained general credence. It is described as such in popular accounts of the area, and is listed as a possible medieval lighthouse in Hague and Christie's classic work *Lighthouses their architecture*, *history and archaeology* (1975). Almost the only exception to this general agreement is to be found in the description by the Royal Commission on Historical Monuments.

'At the apex of the roof is a short cylindrical ashlar pier, now supporting a cross erected in 1873 [note the cross was erected earlier, perhaps as part of the original restoration, it is shown on a drawing in Austen's 1858 paper] but perhaps originally carried up more prominently as a seamark for shipping; the suggestion that it provided a base for a fire-beacon seems untenable (RCHM, 1970, 411-2).

It must be admitted that the case for St Aldhelm's Chapel ever having born a light is very weak. The difficulties identified by the earlier writers are still valid, whilst the solution proposed by Moule is hard to accept. If there were evidence of substantial re-building then the idea of a separate, external, wooden ladder might be reasonable. As it is, the central stone column, the feature which could have born a light, is certainly part of the original design.

Therefore the likelihood is that the central column continued above the roof, to provide a substantial sea mark. Indeed, there are parallels, but not in Britain. 'Britain does not seem to have adopted the eleventh century Norwegian practice of erecting stone crosses as sailing marks.' The tallest of them may have been up to 15 metres high' (Hutchinson, 1994, 170). So perhaps St Aldhelm's Chapel was built to incorporate a massive cross to identify and warn mariners of this dangerous headland.

KATHERINE BARKER

Aldhelm's Farus Editissima

The chapel dedication

The dedication of a medieval chapel to an early West Saxon saint is unusual and is in itself a subject that invites enquiry. The Roman Church favoured dedications to New Testament saints, a practice promoted in Britain by Augustine at the end of the sixth century, re-stated by Theodore, Archbishop of Canterbury in the second half of the seventh; he held office between 668-690.

As Hutchins notes the chapel 'takes its name from it dedication to St Aldhelm, first bishop of Sherborne'. 'It is styled in the Valor of 1291 the chapel of St Aldhelm and rated at 20s, but no institutions to it are to be found in the Sarum registers, not does it appear to have been endowed with any lands . . . so it was probably only a chantry wherein masses were said for the benefit of those mariners who passed by this shore.' Hutchins, 1774, 228). Moule (1893, 79) notes that the priest of St Aldhelm's Chapel was in the pay of the Crown and received the same stipend as the priest serving the St Mary chapel in Corfe Castle. At the Dissolution the Manor of Renscombe with the advowson of the chapel was granted to Thomas Arundel 'to be held in of the king in chief, by knight's service' The manor changed hands a number of times and was granted out by Charles I only to be sequestered by Parliament in 1642. St Aldhelm's Chapel appears as 'Renscombe Chapel' on a map of 1737 (DRO D 1/Fry/11/12). The Manor of Renscombe is listed in the Cerne Abbey foundation charter of 987 (Sawyer No 1217) and was held by the Abbey until the Dissolution. A number of boundary surveys survive for this area in the Shaftesbury Cartulary, but none specifically for Renscombe (Hinton 1994, 11-20).

John Leland, writing about 1540, notes that 'from the est south est point of the haven of Waymouth caullid S. Aldelmes Point, beying a litle foreland, is a litle bay scant of a 2. miles, by the which I rode . . . "The very utter part of Sainct Aldelmus Point is 5. miles from Sandwich' [Swanage] (Toulmin-Smith, I, 253 and 255). Leland locates the headland in terms of its distance from the next port. The Dorset coastal map of 1539 shows the clifftop chapel as a small rectangular structure with a red roof,2 and gives its location in terms of miles from Portland. There are a number of beacon cressets shown along the coast, and a number of buildings with towers - but none is shown for Sainct Aldomes chaple (Beaton 2001, 10). By contrast Ralph Tresswell's Survey of the Isle of Purbeck of 1586 (Beaton, ibid 13) shows the chapel with a tall slim tower topped by a cross and with a very small structure to the east side. There is no door at the base of the tower - which would open onto the cliff top. Given that the mapmaker has distinguished between other church towers -Tyneham, for example, has a steeple - suggests the use here of local knowledge, although other of Tresswell's buildings are clearly not accurately depicted.

In the 1620s Coker (Survey, 47-8) notes that 'on a little Poynt or Promontarie, stands St Aldene's Chappell, finelie vaulted and built onlie of Stone, not soe much unlike that of Abotsbury, which, if I mistake not, took Name from the Dedication to St Adeline the first bishop of Sherborne in this Shire; but now it serves for a Sea Marke, belonging to the family of Welles in Hampshire.' Coker describes the structure as a sea mark. Following the Dissolution of the Monasteries (and the sale of the Renscombe Estate), it is relevant to note that that Elizabeth I had made the altering or dismantling of prominent sea marks a criminal offence (Bathhurst, 1999, 7).

Aldhelm and the farus editissima

We read here the ten-line Latin text of one of Aldhelm's set of one hundred *enigmata*, riddles or 'mysteries' followed by three English translations, only one of which, that by W B Wildman, attempts a poetic format. Aldhelm's subject (which the reader or listener is supposed to guess) is a very tall lighthouse. *Editus*, 'high, 'elevated' is in the superlative case, thus 'highest, 'most elevated.'

XC11...FARUS EDITISSIMA

Rupibus in celsis, qua tundunt caerula cautes Et salis undantes turgescunt aequore fluctus, Machina me summis construxit molibus amplam, Navigeros calles ut pandam classibus index. Non maris aequoreos lustrabam remige campos Nec ratibus pontum sulcabam tramite flexo Et tamen immensis errantes fluctibus actos Arcibus ex celsis signans ad litora duco Flammiger imponens torres in turribus altis, Ignea brumales dum condunt sidera nimbi.

Ehwald 1919, 140

XCII Lofty Lighthouse

'On lofty cliffs, where the sea pounds the rocks and surging salt-waves swell the flood, construction-work raised me aloft with mighty structure so that, (acting) as a guide, I might point out the shipping-lanes to (passing) ships. I do not ply with oar the bounding main [line 5] nor cleave the sea in a bending course with keels; and yet, giving signals from my lofty height, I lead wandering ships, driven by mighty waves, safely to shore: the fireman kindles firebrands in my lofty towers as wintry clouds conceal the twinkling stars.'

Lapidge and Rosier, 1985, 91. 92 Tall Lighthouse

'On high crags, where the blue seas pound the reefs, And briny billows swell the heaving flood,

Mechanic art has built me, great and high,

For ships a guiding finger to reveal

The open channel. Yet I never roam

The level sea in ships of many oars,

That cut a curving furrow through the deep; But, pointing from my pinnacle, I lead

Those wanderers buffeted by mountain-waves Safely to shore, lifting a fiery brand,

For high upon my tower a torch I set,

When wintry clouds conceal the flaming stars.'

Pitman 1925/1970, 55.

92 ['The answer is a lighthouse']

'High on the cliffs that front the thunderous seas, While the salt surf goes whistling down the breeze, Upreared was I, solid in mighty mass,

To show the sea-ways to the ships that pass. I never stirred with oars the watery plain,

I never ploughed with sinuous share the main, And yet by signal from my lofty scaur

I guide the wave-tossed wanderers to the shore; While murky clouds blot out the stars of night, Flaming afar I stand a tower of light.'

Wildman, 1905, 86-7.

The most recent translation is by Lapidge and Rosier (1985) which may be compared with that published by Pitman in 1925. Aldhelm's Latin is notoriously difficult. As he commented himself, no one born of a *gens germanica* had 'toiled so

mightily in a pursuit of this sort before [my] humble self(Lapidge and Herren, 1979, 45). Well-educated and hugely well-read with a brilliant command of language, his Latin scholarship was widely admired and his work copied and circulated throughout continental Europe at least until the eleventh century. 'Aldhelm's collection of riddles forms part of his vast *Epistola ad Arcircium*, [Letter to Arcircius] and the *Enigmata* were inserted in that work ostensibly to demonstrate the properties of hexametrical verse expounded in the treatise on [poetic] metre;' Arcircius is to be identified with scholar-king Aldfrith of Northumbria (ruled 685-705). 'Aldhelm implies that he had composed the *Enigmata* on an earlier occasion, with the purpose of exercising "the first beginnings of his intelligence."' In his *Enigmata* his 'genius is [already] fully apparent' (Lapidge and Rosier, 1985, 61).

Aldhelm explains he is using an ancient literary form and quotes the work of Symphosius as his model. Aldhelm's selection of topics is an interesting one embracing many which relate to the natural world. Born about 640 and becoming Bishop of Sherborne in the year of Aldfrith's death, Aldhelm was writing for the world of the seventh century. Through 'word play' he explores the hidden and subtle relationships between objects in the visible world; eternal truths – but not overtly Christian. And because this is Aldhelm the natural philosopher we find the *Enigmata* of continuing interest today. They remain 'accessible.'

What of Aldhelm and the *farus?* The word derives from the Greek, *Pharos*, the island at the mouth of the Nile, site of the lighthouse at Alexandria, one of the wonders of the ancient world. 'Aldhelm's knowledge of lighthouses' note Lapidge and Rosier (*ibid*, 254, note 82) seems to have derived primarily from Isidore [of Seville] although it is possible that in the late seventh century some fabric of the Roman lighthouses at Dover remained visible.' There are however, a number of riddles where Aldhelm has clearly used his own powers of observation (Lapidge and Rosier, ibid, 254, note 83) and it is the contention here that the *farus editissima* should be included among them.

Le Pard points out that it is highly likely the solid structures of the Roman lighthouses remained major sea marks at Dover into the seventh century – indeed, well beyond. And which is where William of Malmesbury sets the miracle of Aldhelm calming the storm (see below).

Aldhelm's words have to fit the rules of Latin 'versification.' That given, we find a very evocative description. The farus is sited up high on rupibus, literally on broken or shattered things, where the caerula, the dark-blue sea buffets the cautes sharp, pointed rocks. This tall structure is described as a machina a 'device' or 'artifice' something made for a specific purpose - often for the military. (A machina was also the word used for a platform for the sale of slaves). This machina was deliberately construxit, as we would expect, summis, on a prominent place, and on a large scale. Molibus is from moles a 'vast structure', a word which can refer to a mole or dam or machine of war. The description is emphasised by amplam giving us today's 'ample' - money was not spared on this exercise. The purpose of this machina was to act as index 'pointer' to something naviger, literally 'ship-bearing.' To keep classis, ships, on the right calles, 'track'; literally footway o path made by cattle, at best, a race-track. The classi-Britannica, the Britannic fleet, is first mentioned in the Flavian period (Mann in Jones and Barry (eds) 1989, 2). The machine does not actually go to sea itself ... it does not row a boat, no sulcat, 'furrow' through the sea; the sulcus is a long narrow trench of the track of a fast-moving [sailing] vessel, which curves, flexo. But by `signifying'- giving signals - it gives wandering ships right of passage; actus refers to movement, to the right of driving cattle – a nice metaphor comparing sea lanes with established drove routes on land. And then it leads them to shore.

How did this *machina* work? It sent out signals from on high, *ex celsis*, from an *arx*, a box, enclosure, a cell – the word here is in the plural. The job was that of the *flammiger*, literally the 'flame bearer' who set the fire *in turribus altis*, 'in the lofty towers.'

There follows a line which may provide us with a clue as to the orientation of this *machina* – this tall structure. Aldhelm is interested in the cosmos. Translated by 'while wintry clouds conceal the twinkling stars' we find that in the last line *brumales* is that pertaining to the winter solstice, the shortest day, and *sidera* pertains to the constellations or stars. And they are linked by the verb *condo*, *condere*, 'to put together, to set up or found [a town] to put in place or establish'. Was this *farus* positioned with reference to the north?

Aldhelm and the coast

We hear - indirectly - from Aldhelm and from his contemporaries of luxury cross-channel trade. The subject of one of Aldhelm's riddles is piper, [black] pepper, which describes itself as seasoning 'the delicacies if the kitchen: the feasts of kings and extravagant dishes and likewise sauces and stews' (Lapidge and Rosier, ibid, 78). In a dedication written for a church built by Abbess Bucge, Aldhelm describes the church glowing in the light shining through the glass windows on gold and silver and jewelled fittings, and the beautiful smell of Sabaean frankincense emitted by an embossed hanging thurible (Lapidge and Rosier ibid, 49). Bishop Wilfred (died 709; Eddius, XVII, 35) adorned the altars in his church at Hexham with purpura et serico purple and silk. We have literary references here that hint of foreign worlds; of the Byzantine east Mediterranean, of Arabia, and of the silk route across central Asia.

Byzantine silver spoons and dishes were recovered from the Sutton Hoo ship burial of similar date (Carver 1998, 106, and Stevenson in Carver, 1992, 179-180).

Bede (*Lives*, Chs 4, 5 and 6) tells us how Benedict Biscop, abbot of Monkwearmouth-Jarrow (died 689) imported master masons and glaziers from Gaul, and returning from a fourth visit to Rome brought back 'a great mass of books of every sort, an abundant supply of relics' . . . and also the chief cantor of Rome to teach his monks the liturgy (*ibid*, 6, 192).

These high-born Roman churchmen were builders. Wilfred at Ripon 'built from the foundations . . . a church of dressed stone, supported by various columns and side aisles (Eddius, XVII, 37) and at Hexham there were 'crypts of wonderfully dressed stone, and the manifold building above ground supported by various columns . . . surrounded by various winding passages with spiral stairs leading up and down . . . nor have we heard of any other house on this side of the Alps built on such a scale.' (Eddius XXII, 47).

If continental rivers were the motorways of the early medieval world, anyone coming to Britain had to face a sea crossing. In 666 after a lengthy stay in Merovingian Gaul, Wilfred, his companions and what was clearly a very valuable cargo, were blown off course and 'hurled onto the land of the South Saxons'

declaring that they treated as their own possessions all that the sea cast onto the land' (Eddius XIII, 27-9). A number were killed in the resulting affray. It seems that at least in some places 'Right of Wreck' goes back rather further than we might think. Wilfred went on to set up a coastal bishopric for the South Saxons at Selsey (*ibid* XLI, 81-5), the King gave his own estate to be the episcopal see and added another 87 hides. Wilfred was shipwrecked. But Aldhelm could do better; he could calm storms. William of Malmesbury writing in the 1120s relates a number of Aldhelm miracles, and one of them is set on the coast (Preest 2002, Ch 224). Aldhelm was in Dover 'since he heard that some ships had put in there. The harbour being narrow, is always busy, as in most coastal towns." Strolling 'along the harbour front' Aldhelm spotted a store of books in a cargo recently arrived. He made an offer for a complete Old and New Testament bound together - and was refused. The boat set sail 'and it was not long before the vengeance of the Lord sharply punished the insult done to the Saint.' A violent storm rose and the boat tried desperately to

get back into port. Aldhelm 'stretched out his hand . . . and

stilled the storm somewhat. Then he soon he got into a boat

himself and . . . through the skill of the oarsmen he reached

those in peril, everything changed for the good.' They all made

it safely back into harbour - and Aldhelm got his Bible for

rather less than the asking price (Preest, ibid, 256-7). Such

skill in calming storms - and in lifeboat service - surely

commended themselves to those serving the chapel on the

- onto a Sussex beach. They were attacked by 'a huge army of

pagans intending to seize the ship and its contents 'proudly

Aldhelm and the royal manor of Purbeck

Renscombe Headland.

The miraculous powers of Aldhelm came to the notice of Osmund, the Norman bishop who supervised the removal of the bishopric from Sherborne to Sarum. He sought a relic from Malmesbury and was presented with the saint's left arm bone (ibid, Ch 269). Two of his archdeacons were healed. Osmund's successor and chancellor to Henry I was Roger of Caen who had the greater part of the Anglo-Saxon cathedral church at Sherborne demolished and the Benedictine Abbey buildings remodelled along Norman lines (Gibb 1981, 50). Norman builders were also active in Purbeck. Recent work on the parish church of St Nicholas at Studland identified an interesting decoration on the corbels of a motif of a circle enclosing a diamond shape with slightly curved sides with a cross set between the four points. 'Our list of examples' note the authors (Lundgren and Thurlby, 1999, 13; Fig 13) 'provides a date range from 1107 to the 1130s and in the cases of . . . the patronage of King Henry I. Add to this the use of the motif by Roger, Bishop of Sarum, who moved in the highest royal circles. And we begin to see that Studland was created for a very ambitious patron . . . a starting date for Studland before 1125 is unlikely while parallels with other buildings indicate that the church would have been completed by 1140.' Further, the authors draw attention to the unusual rib vault of the central tower and chancel, and the location of the altar. It has often been assumed to be the site of an earlier Saxon building [RCHM vol 2 SE pt 2, 277-8] but Lundgren and Thurlby (ibid 1999, 6-8) found no obvious trace.

Also dedicated to St Nicholas is the parish church of Worth Matravers, another significant Norman structure with a tower. 'The reported occurrence of stoned-lined cist graves at both Worth and Studland churches may even suggest some 4.6m

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continuity in the use of earlier cemetery sites (Hinton, 1994, 19). Both churches share the same dedication. Fourth century Bishop of Myra, Nicholas is remembered as patron saint of children, but is also protector of merchants and sailors. 'One day [three] mariners from the Aegean called on him to save them from the stormy sea, and St Nicholas appeared and calmed the sea and with a lighted taper in his hand, steered the ship into harbour' (Bond, 1914, 173). No one seems to have drawn attention to these distinctive Purbeck churches and their possible relationship with the coastline. Everitt (1986, 191) notes that almost all Nicholas dedications in Kent are associated with daughter-churches attached to the mother church of a villa regia or royal manor. In a discussion of the distribution of church dedications, he cites the case of St Nicholas-at-Wade attached to the mother house at Reculver on the north Kent

It has been convincingly argued by Hinton (ibid, 11) that the Isle of Purbeck represents the villa regia of Corfe, a status which frames its later tenurial history. Corfe's ecclesiastical parochia was itself possibly a sub-division of an earlier parochia belonging to Wareham, Corfe's port on the River Frome at the head of Poole Harbour (Hinton, 1987, 50-54). Campbell (1986, 140) notes the importance in early England for units of government to be based not so much on towns but on groups of 'multiple estates,' a major church constructed at a centre of royal authority.

William of Malmesbury records that in order to arrange the necessaria for his journey to Rome, Aldhelm 'went to the estates under his control in the county of Dorset. And while he was waiting for a favourable wind, he built a church there, in which he himself might commend his journey and return to God . . . the still-surviving walls of this building lacks a roof . . . except that something protects the altar and protects the holy stone from defecating birds.' `The place is two miles from the sea', iuxta Werham...ubi Corf castellum pelago prominet (Preest, 2003, 217). Much ink has been spilled on the location of this church, but it is clear it was built in the vicinity of Wareham on royal/episcopal land and had no landed endowment of its own. From William's words this was at least one church in Purbeck which had not (at least so far) been re-built by the Normans.

Aldhelm was bishop for only four/five years at the end of what is taken to be a long life. It is tempting to suggest that the estates under his control were those to which he held title as member of the royal West Saxon house. An earlier pre-West Saxon, British Christian presence at Wareham was found during the 1840 restoration of Lady St Mary (RCHM vol 2, SE, pt 2, 310-12). There are indications in other areas of early Sherborne history that British Christian landowners were deprived of their inheritance by the incoming Roman church (Barker, 1980, 229-231). Eddius (XVII, 37) actually tells us how Bishop Wilfred, 'in the presence of kings' read out a list of lands they had presented to the Church and also 'a list of consecrated places in the various parts which the British clergy had deserted when fleeing from the hostile swords . . . of the warriors of our own nation.' It has been suggested that the Roman church re-introduced to this island its knowledge of written law. Title to land was henceforward to be defined by exempla Romanorum - but written in English (Bede HE II, Ch 5; Chaney, 1970, 175).

The early significance of Purbeck stone extraction and quarrying has often been noted. Not only of economic significance, there are port, trading and defence considerations. The Manor of Renscombe shared with the Manor of Kingston in Corfe, the small harbour at schort mannes or seortmannes pol, latterly Chapman's Pool (Hinton, 1994, 13). A personal name perhaps, or cypman, merchant or trader, in whose honesty the founder-abbot of Cerne, Aelfric, had so little trust (Homilies II, 239). Rising sea levels will have changed the geography of the pol of the seventh century.

St Aldhelm's Chapel dates from the second half of the twelfth century [RCHM vol 2 SE pt 2, 411]; its very distinctive structure has already been noted. In course of writing this note. Dr. Karin Mew drew the author's attention the Roman temple site at Jordan Hill above Weymouth. 'The first time I visited Jordan Hill' she writes, 'I was so struck by the similarities with St Aldhelm's Chapel at Worth, not only the coastal promontory location but by the ground plan of the excavated temple'. The central cella of the temple is 25 feet square [7m 50] (RCHM vol 2 SE pt 3 pp 616-7; Drew, 1931 265-276 and 1932, 15-21) as compared with the ground plan of the chapel at Worth which is 251/2 feet square (RCHM SE vol 2 pt 2 pp 411-412). She continues; 'the site overlooks Bowleaze Cove where an Anglo-Saxon gold mount with a blue glass inset was found by a metal detectorist in 1990 which is viewed in association with the Minster Lovell and Alfred Jewels' (Webster and Blackmore, 1991, pp 281-2). As noted above the Renscombe Chapel is adjacent to Chapman's Pool. Near the Jordan Temple site is the Roman villa at Preston excavated the year later (Drew, 1932, 21-34) first discovered in 1844. As Mew notes (pers comm) the name Preston itself may not be without interest here. Preston, preost tun 'priest farm', is listed as a Salisbury prebend in 1291 [Mills 1977, pt 1, 230-1].

It may be of significance that by 1086 the greater part of the Dorset coast was held either by Crown or by Church - or by their agents. These were the two institutions which (at least in theory) were capable of managing coast and sea marks and having the resources to do so.5 In 998 in response to the Viking threat, the re-founded Benedictine Abbey of Sherborne was made responsible made for the maintenance of rogi, 'beacons' on its extensive estates (Barker 2005, forthcoming). This will permit us to suggest that the Abbot of Cerne, at least from 987, had responsibility for St Aldhelm's Head. Early warning beacons need continuous manning in times of danger, the flammiger must be at the ready, and this will surely include look-out positions on the coast. A coastal beacon can serve a dual purpose. Le Pard notes here that one would expect however, that a navigation beacon be lit all the time – or when ships might be expected to see it - but a warning beacon could not be one and the same unless there was an idea of changing its purpose in times of war. A coast look-out could certainly serve two purposes, and it would certainly have been possible for a warning beacon to have been placed beside the chapel of St Aldhelm's Head; indeed it might have been seen as an ideal site.

The Dorset coast and Sea marks5

Lapidge and Rosier (ibid 254, note 82) suggest that some fabric of the two Roman lighthouses at Dover may have remained visible into the seventh century and which, if William's account is to be trusted, Aldhelm will have seen (see above). The surviving edifice is externally octagonal in plan with each side



long and an internal chamber 4.20m square. A solid masonry structure, it tapered and it is suggested it reached a height of about 24m (Johnson, 1989, 150-2).

Cross-channel traffic did not cease with the Romans. Imperial control broke down and with its collapse, we may take it, harbours were not properly maintained and sea marks no longer dependable. The location in which these structures find themselves today provides us with a post-Roman-to-medieval Dover harbour 'management' sequence to ponder. They stand up high on either side of the one-time Roman harbour, the *farus* on the east side is immediately adjacent to the parish church of St Mary within the precinct of the Norman Castle. The *farus* on the west side stood above the Roman fort and was almost completely obliterated – superseded - in defence works hurriedly constructed on the Western Heights in response to threatened invasion by Napoleon.

We may have surviving in the St Aldhelm's Chapel literature some evidence of changes wrought to the structure – to its perceived significance - in response to the needs of the time. By the time of the third edition of John Hutchins (1861-70, see above) it may be that it was wars with the French that prompted the beacon theory, although by then, as Le Pard notes (see above) the roof had been partly dismantled and rebuilt, revealing the central column. The first edition of Hutchins (1774) the illustration shows a simple apex to the roof; in 1815, the year of Waterloo, it is shown with a circular ashlar column (Fig 2) - easily explained as a beacon platform. Le Pard further notes that at this time some lighthouses were still lit by open fires in their roofs and this may have been the ultimate source of the idea. As regards bells, Southey's poem (see above) was very popular and found its way into many Victorian anthologies. The tale of Robert Stevenson's building of the Bell Rock Lighthouse was often re-told as an example of the heroic engineers so popular in the nineteenth century.

In 1539 just before the Dissolution (as we saw above) the chapel is shown as a small square structure with a red roof, by 1586, wars with the Spanish seem to have transformed Tresswell's chapel into a tall slim cliff-top tower. How it was

during the Wars of the Roses, the Hundred Years War, the wars of Stephen and Matilda, we may only speculate.

Through William of Malmesbury, we know that Norman churchmen were well acquainted with Aldhelm's maritime capabilities. As noted above Osmund, first bishop of Sarum, sought an Aldhelm relic for the new cathedral. Sherborne was demolished and rebuilt under the aegis of his successor, Roger of Caen who is implicated in the (re)building of St Nicholas in Studland. It is suggested here that he also had rebuilt the seamark structure on the Renscombe headland, a prestigious – and practical - venture for a people for whom cross-Channel trafficking was part of life. And Aldhelm was dedicatee. There are more than hints here of Benedictine-based Norman episcopal 'coast management.' And the Norman builders need not necessarily have changed the plan of the building. We find a square church recorded by Bede. King Edwin's baptism took place in York in 627, 'and in this city he established the see of his teacher and bishop Paulinus . . . at Paulinus' suggestion, he gave orders to build on the same site [of his baptism] a larger more noble basilica of stone, which was to enclose the little oratory he had built before. The foundations were laid, and the walls of the square church began to rise around this little oratory . . . `(Bede, HE, II Ch 14, 131).

The seventh-century cemetery excavated at Ulwell near Swanage has added a new dimension to the Purbeck story. Initially thought to be of Roman date, excavation of a rather larger area changed the picture. As Cox (1988, 37-48) notes; 'Ulwell cemetery... indicates the survival of Romano-Brititish traditions in an area where former Roman economic influence and possibly imperial control... had been strong. The area was the amongst the first in England to come within the sphere of peripheral trade with Rome... via Gaul... and the influence of this early contact and the development of large-scale quarrying and manufacturing in Purbeck from the first to at least the fourth century may have enabled the survival into the seventh century of cultural affinities closer to the vestiges of the Roman world than with the Anglo-Saxon settlement of southern England.'

It is argued here that continental Romanitas was re-introduced into England by the Roman church of the later seventh century in the setting up of a formal territorially-based episcopal administration by Archbishop Theodore, originally from Tarsus in Asia Minor (Lapidge (ed), 1995). It is clear from Theodore's Penitential that a third part of the pecunia taken from a conquered king was to be given to the Church. The church had, in short, the right to tax (Campbell, ibid, 50). It may be we have underestimated the impact of this movement on the rulers of the West Saxon world of the second half of the seventh century and with it the renewed demands made on the resources of the Isle of Purbeck. And that this coastline was among the first - after Kent - to come within the sphere of the Christian world of Merovingian Gaul.

This will not solve the question as to whether our putative seventh-century structure on St Aldhelm's Head was editissima and carried a light. But we are left to ponder the orientation of the Norman building. Standing on the cliff top, four hundred feet above the beach below, the chapel is oriented such that its corners (not the flat sides) are set north-south, brumalis, presenting a 'diamond' shape across the four-square cross of the points of the compass. And the whole is encircled by low banks which have the appearance of a badly-eroded barrow

In the days before radio and satellite communication,6 the church could not only be on site to offer prayers for seaman and comfort in disaster, but undertake in the darkness the maintenance of The Light.

'St James . . . first bishop of Jerusalem, when the splendour of the Gospel was dawning and the radiance of eternal light was growing red, said 'Pray for one another . . . Siquidem oppido frequens oratio quasi arx editissima . . . orantem pro nobis beatudinem vestram Since, indeed, frequent prayer is thought to be exactly like a lofty citadel and an unassailable fortress alma trinitas, una

deitatis substantia et trina personarum subsistentia, . . . Trinity - the one substance of the deity and the three-fold substance of its persons monarchium gubernans ab alto caeli culmine iugitur tueri dignetur... controlling the monarchy of the entire universe from the lofty summit of heaven - deign to watch continually over you . . . as you pray for me.'

(Aldhelm, from last lines of De Virginitate, Ehwald, 1919, 322-3; Lapidge and Herren, 1979, 132).

NOTES

- 1 The occurrence of stapol in coastal place-names may be something for further investigation here; stapol, 'a post, a pillar (of wood, stone etc) (Smith 1956, pt II, 146). We find Whitstable on the north Kent coast and Barnstaple in north Devon, and Stapleton on a spur of land overlooking the navigable River Parrett in Somerset. It is not known how many coastal church towers (if any) may once have been equipped to carry a light.
- 2 Bathurst (1999, xvi-xvii), notes that the English service, founded in 1514 as 'the Most Glorious and Undivided Trinity of St Clement in the Parish of Deptford Stroud in the County of Kent (later foreshortened to Trinity House) developed in piecemeal fashion. For a period of 300 years or so, most of its lights were built and maintained by individuals who had been granted charters . . . the lights' construction was erratic and their maintenance wayward. Pepys, who was master of Trinity

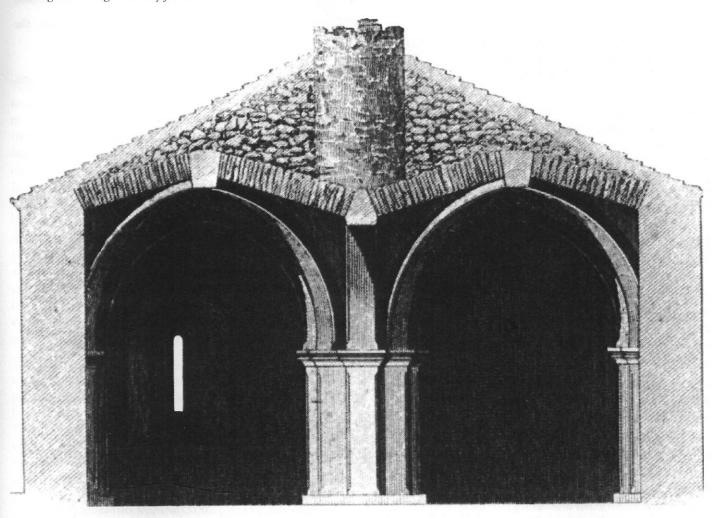
House from 1676 to 1689, found private charters disgraceful. . . "the evil of having lights raised for the profit of private men, not for the good of public seamen, their widows and orphans." In theory, the private owners could build, light and staff the towers in any way they chose in return for a small annual rent.'

- 3 Moule (ibid 78) adds an interesting footnote regarding the roof-covering of the Chapel. 'The late Mr Bond strongly doubted the truth of the idea that the original roof was wholly of stone, the tile stones laid on a rubble pyramid built on the vaulting.' Le Pard notes here that the picture on the coastal map is of a rectangular, gable-ended building. One suggestion made about this map is that it was drawn from the sea, the mapmaker travelling along the Dorset coast in a boat. If this is the case he may well have seen the chapel from a distance. If so he may well have interpreted the outline of the chapel as the gable-end of a more 'traditionally' shaped building. Le Pard writes 'this struck me last year when I was at Worth Matravers looking across to St Aldhelm's Head, the silhouette of the chapel looked exactly like the gable-end of a building."
- 4 Another dedication to St Nicholas in Dorset at Abbotsbbury where there is another chapel built as a sea mark. Le Pard notes that Abbotsbury was originally a royal estate, granted by Cnut to a thegn, Orc; an estate afterwards granted to the church (Sawyer No 961 and No 1064).
- 5 Under this heading it might be worth considering the number of ecclesiastical buildings which served as a Dorset sea marks in addition to other functions, but which lie beyond the scope of this paper. Le Pard cites the church of Wyke Regis church which was undoubtedly positioned where it would act as a sea mark to ships rounding Portland Bill. Other Dorset churches he suspects were also positioned to serve as sea marks include Christchurch Priory, Wareham, Poole, Swanage, Preston and Bridport (including the Chantry, a curious building with strong ecclesiastical connections).
- 6 St Aldhelm's Head was re-equipped during the Second World War - works which included the construction of a [second] small building of square plan. As John Beavis has recently noted (2004, 34-5) there is at St Aldhelm's Head 'the remains of a building which housed low-level (Chain Home Low) radar; a contemporary photo shows the transmitter aerial on the roof of a brick-lined structure'. 'On the cliff-edge to the south-west of the main site is the floor of a small square building . . . survival of activity by the Telecommunications Research Establishment (TRE).' 'The sculpture beside the path just to the east of the National Coastwatch Lookout commemorates this work.' The path westwards passes four concrete plinths, probably the base of a Second World War communications mast.' Sixty years on not much remains.

KATHERINE BARKER & GORDON LE PARD

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Runes

The Runic alphabet also called futhark was a writing system of uncertain origin used by Germanic peoples of northern Europe, Britain, Scandinavia and Iceland from about the 3rd century to the 16th or 17th century A.D. Runic writing appeared rather late in the history of writing and is clearly derived from one of the alphabets of the Mediterranean area. Because of its angular letter forms, however, and because early runic inscriptions were written from left to right like the earliest alphabets, runic writing seems to belong to a more ancient system. Scholars have attempted to derive it from the Greek or Latin alphabets, either capitals or cursive forms, at any period from the 6th century BC to the 5th century AD. A likely theory is that the runic alphabet was developed by the Goths, a Germanic people, from the Etruscan alphabet of northern Italy and was perhaps also influenced by the Latin alphabet in the 1 st and 2nd century BC.

The origin of the name rune or runic is probably related to the fact that the ancient German tribes, like all primitive peoples, attributed magic powers to the mysterious symbols scratched on armour, jewels, tombstones and so forth. This is given credence by two related Germanic forms that mean "mystery, secret, secrecy": the Old Germanic root ru-and the Gothic runa. The most interesting runic inscriptions are those that were cut for magical purposes and those that appeal to deities. It is still however in doubt whether runes were originally employed mainly for magical purposes as the name suggests or as a usual means of communication.

The earliest extant runic inscriptions, numbering over 50,come from Denmark and Schleswig and date from the 3m to the 6th century AD. About 60 inscriptions from Norway date from the 5th to the 8th century, slightly later than the continental ones. There are also about 50 Anglo Saxon runic inscriptions extant, including the Frank's casket (about AD 650-700 AD); the right side of the casket is in the Museo Nationale in Florence and the rest is in the British Museum. The largest number of inscriptions come from Sweden, about 2,500 and most of these date from the 11th and 12th century. There is no certain evidence of wide literary use of runes in early times, but some scholars hold that the runic writing was widely employed for all kinds of secular documents, such as legal provisions, contracts genealogies and poems. The known manuscripts are however relatively late. The gradual displacement of the runes coincided with the increasing influence of the Roman Catholic Church. The runic scripts lingered on for a long time after the introduction of Christianity however. Indeed the use of runes for charms and memorial inscriptions lasted into the 16th and even the 17th century.

There are at least three main varieties of runic script; Early or Common, Germanic (used in Northern Europe before about 800AD) Anglo-Saxon or Anglian ,used in Britain from the 5th or 6th century and Nordic or Scandinavian used

from the 8th to the 12th or 13th century AD in Scandinavia and Iceland.

The early Germanic script had 24 letters, divided into three groups called aettir. The sounds of the first 6 letters were f,u,t,h,a,r,k.giving the alphabet it's name futhark. The Anglo-Saxon script added letters to the futhark to represent sounds of Old English that did not occur in the languages that had used the Early Germanic script. Anglo Saxon had 28 letters and after about 900AD it had 33. There were also some slight differences in letter shape. The Scandinavian languages were even richer in sounds than Old English but instead of adding letters to represent new sounds, the users of the Nordic script compounded the letter values, using the same letter to stand for more than one sound ego one letter for k and g and one for a, ae and 0 This led to a smaller futhark of only 16 letters.

0ghams.

Ogham writing also spelled ogam or ogum dates from the 4th century AD and was used for writing the Irish and Pictish languages on mainly stone monuments. The ogham alphabet was restricted to the Celtic population of the British Isles. There are over 375 known inscriptions; 316 of them have been discovered in Ireland, chiefly in the southern counties; only 55 from the northern counties; 40 have been discovered in Wales; 2 in Devon and one from Cornwall. One inscription was discovered at Silchester. About 10 come from the Isle of Man and a few from Scotland. The Welsh inscriptions are usually bi-lingual, Latin- Celtic. With one exception the Irish inscriptions are in ogham alone. Most peculiar is the runic-oghamic inscription from the Isle of Man (the runes being a kind of secret writing and the oghams being a kind of cryptic script.) The distribution of the ogham inscriptions, combined with their language and grammatical forms, point to South Wales or southern Ireland as their place of origin and to the 4th century AD as their date of origin.

The ogham character was used for writing messages and letters (generally on wooden staves but there is no material evidence of this) but sometimes it was also written on shields or other hard material and was employed for carving on tombstones. The oghams formed a cryptic script and there were several varieties such as wheel ,bird, tree, hill, church colour and other oghams.

The main ogham alphabet consisted of 20 letters represented by straight or diagonal strokes, varying in number from one to five and drawn or cut below, above or right through horizontal lines; or else drawn cut to the left, right or directly through vertical lines. The ogham alphabet was divided into 4 groups, each containing 5 letters. Oghams were employed in the Middle Ages; the 14 century Book Of Ballymote reproduces the earliest keys for translation. In many cases the ogham inscriptions run upward.

Several ogham inscriptions known as the Pictish oghams

were found in Western Scotland, on the small island of Gigha off the western coast, in Argyll, in northeastern Scotland and on the northern isles such as the Shetlands. They either belong to the same type as the Welsh and Irish oghams or are written in another ogham variety.

SHIRLEY SMITH

Early British Tokens

TOKEN; Coins with no official sanction, issued by traders to overcome shortages of official coinage. Governments at times approved such issues, though invariably they forbade as soon as state monies became available.

Early British tokens have become a fascinating and increasingly interesting area of numismatics as they provide a far greater insight into the socio-economic and political climate of the times when they were issued than the state or Regal coinage often does.

Tokens were issued at times when the state was unable, or unwilling to issue sufficient small change for the populations needs. Regal coinage was issued sporadically and grudgingly from 1672 to 1775, when it stopped altogether by George III. This happened for several reasons including the problem of counterfeits and debased (i.e. coinage not worth its weight in metal) and, allegedly, the fact that George thought that copper was not a metal worthy of bearing his image. To make matters worse, increasing urbanisation and industrialisation meant that the population was concentrating around the major cities, the economic powerhouses. Industrial workers had little to barter with and this lead to an increasing demand for low value coinage, i.e. 'coppers'.

Tokens were issued in four distinct times, answering the desperate need for small change among the working classes.

Seventeenth century tokens were issued between 1648 and 1672. They were mainly farthings and show the name of the merchant ot town issuing them. They are often crudely made from poor dies.

Evasion tokens were in use from about 1771, being common between 1795 and 1798. Counterfeiting was, of course, strictly illegal, but an alternative was the evasion token which imitated Regal coinage, but was light weight and had nonsense legends. Common examples include GEORGE RULES, BRUTUS SEXTUS or CLAUDIUS ROMANUS (the latter two being legends from Roman coins) on the obverse (front or portrait side of the coin), and BONNI FACE, BRITISH TARS or BRITIANS ISLES on the reverse. This evaded the counterfeit laws, and since most people were illiterate, they circulated freely.

Conder tokens began to appear at the end of the 18th century. The Parys Mountain Company in Anglesey mined

copper and had access to coining presses. Little Regal coinage made its way to this industrial outpost and local trade was stymied. The Company made a decision. Beginning in 1787 they produced Penny and Halfpenny tokens, of correct weight, good design and a milled and inscribed edge with a promissory note. They were very successful; the workers accepted them and they were loved by merchants. Other manufacturers climbed on the band wagon, employing skilled engravers to design their own pieces. Improvements in technology meant that elaborate designs could be minted on flans of fixed weight and quality. By 1795 thousands of different tokens, mostly halfpennies could be found across the British Isles. The designs often represent local stories, record the type of equipment driving the Industrial Revolution, or advertise the wares. There is nothing new under the sun and the advent of tokens these tokens was welcomed not just by workers and merchants, but by collectors as well. The craze expanded among the middle and upper classes and reached the stage were some token issues were made just for collectors!

For a twelve year period between 1787 and 1797 almost the only 'coins' in general circulation were Conder (named after James Conder, an eighteenth century cataloguer of tokens, who also issued his own advertising his drapery business in Ipswich) tokens. Taken as a group, they form a history of the period. Through them we can see how they lived and thought, their commerce, politics, advertising and architecture is beautifully recorded.

Nineteenth century Tokens. Regal issues of coppers recommenced in 1797 with the issue of the George III cartwheel series. However, rising copper prices meant that production ceased in 1807. Predictably, penny and halfpenny tokens again appear, again being well produced and with a huge variety of designs. It was at this time that imitation guineas and half guineas began to circulate. Made of brass, these were primarily intended as gaming counters, and like poker chips today, often carried advertising or political messages.

With the accession to the throne of George IV, the state reintroduced a full range of coinage, though it was only in 1960 that bronze replaced copper as the metal of choice. Tokens continued to be produced by co-operative and friendly societies and for gaming right up to the present day.

The early British Tokens are once again avidly collected. Pieces in mint condition or rare can fetch hundreds of pounds in today's collectors market. There are clubs dedicated to their study, especially in America. So next time you are clearing out the attic, looking through an elderly relatives belongings, or trowelling, kept an eye out. You may uncover a nice little nest egg, but more importantly you might find part of the archaeological record of the countries rich heritage.

Digging for Joy - a student of archaeology describes his boyhood passion for the subject

PROFESSOR BARRY CUNLIFFE

Barry Cunliffe tells how, aged nine, his first encounter with Roman remains in a Somerset field determined his ambition to become an archaeologist.

It all began one hot summer day fifty years ago on my uncle's farm in Somerset. Normally these short summer holidays, away from the awful monotony of bomb-scarred Portsmouth, were a delight. In those days, innocent of Big Brothers like the Health and Safety Executive, a nine-year-old could be put to good use at harvest time in charge of the horse pulling the cart through the field as the men loaded the stooks of corn, or even, as a great reward, being allowed to drive the tractor back to the farm pulling a rickety cart of full milk churns. But on this particular day there was a lull in activity and I was bored. What could I do? 'Why not', my uncle suggested, 'go into the field beyond the orchard where the Roman villa is buried and see what you can find?'. It sounded promising and after hours of kicking over mole hills I came back, pockets full of tesserae and bits of Roman tile, firmly convinced that I was going to be an archaeologist.

The Pitney villa, as it was known, had been found and partially uncovered in 1827 by a local antiquarian, Samuel Hassel, who had published a booklet, The Pitney Pavement, mostly devoted to describing the fine figured mosaic pavement he had unearthed. Someone had told my uncle about the book and given him a sketch of the villa plan. When the holidays were over my first call was Portsmouth City Reference Library. I already knew well its somewhat limited joys, but not surprisingly it didn't yeild Hassel's book. However, the staff were willing to order it through interlibrary loan. Three weeks later an astonished librarian reluctantly handed the excessively rare pamphlet of 1831 ('Fifty copies printed. None for sale') to a nineyear-old. Required to sit in her full view with the precious document, every evening, for the week that the book was on loan, I copied it out word for word. (Thirty-five years later I finally found a copy in an antiquarian book catalogue.)

Around two years afterwards, it must have been about 1951 or 1952, again on holiday on the farm, I heard that archaeologists were digging at the nearby Roman villa at Low Ham where some years earlier they had uncovered the famous mosaic depicting scenes from the Aeneid, now in Taunton Museum. I walked the few miles to Low Ham, to the fenced-off area in the middle of the field and stood there open-mouthed watching the digging in progress until eventually the director, H.L.S. Dewar, a retired tea planter and local amateur archaeologist, invited me in to have a closer look. It was the first of many acts of kindness he was to show

me. His advice, when hearing that I wanted to be an archaeologist, was good advice indeed: 'Remember that an archaeologist must have a thick skin,' he said, 'a very thick skin.'

Although the passion to become an archaeologist was now deeply rooted, like so many of my contemporaries, I came from a home with no tradition of sending children into any form of higher education. Archaeology was the idle pastime of the leisured rich. My school, a state grammar in the north of Portsmouth, was wonderfully encouraging. At that time one or two boys had managed to get into universities and it was thought that this might be something worth my While to aim for and, since I particularly enjoyed biology and chemistry, it seemed that my course was set. Archaeology was acceptable as a somewhat eccentric hobby but it was not a serious career prospect.

The chance to really become involved came in 1954 when a history teacher decided to nm a small excavation for the Portsmouth Museum Society at a Roman rural settlement near Chalton, on the Downs north of Portsmouth. Local enthusiasm for Saturday digging soon waned so, to provide sinew for the work, boys from the school were invited to join in. Three of us responded. Desultory is probably the kindest word for the excavation but it was real hands-on archaeology and more to the point it provided a direct entry into the network of local archaeology where enthusiasm and willingness mattered more than age or experience. Chalton was also the beginning of a lifelong friendship 'with John Budden, the farmer who owned the land. Together, over the years, we have nosed happily through every corner of that downland landscape worrying out its evolution from the period of the Mesolithic hunter-gatherers to the modern day, publishing a succession of papers on the results.

The amateur network was very active but soon the pattern settled down. On Saturday mornings I would catch a train to Winchester there to help in whatever rescue excavation the museum director, Frank Cottrill, was running. If the ground was too frozen or the rain too heavy there was always pottery to be washed in the museum store room. Frank was a brilliant teacher and rescue work in the centre of Winchester offered ample scope for learning the complexities of deeply stratified urban sites. I was even paid — a train fare and 1/6d per hour! Lunchtimes were put to good use spending the anticipated largess on second-hand books in Gilberts. On Sundays a train to Rowlands Castle took me into the Downs to join another local group, led by John Boyden, who was beginning to explore and plan the well-preserved Iron Age and Roman field systems and to carry out a number of small excavations.

These weekends were exhausting but immensely exhilarating. For a fifteen-year-old they provided total immersion. There was no better way to learn archaeological stratigraphy and landscape evolution, while getting to grips with the subtleties of group dynamics and the powerful forces of self-motivation.

The summer of 1955 offered a new opportunity. The Worthing Archaeological Society was running a threeweek summer excavation at Muntham Court — the site of a large Iron Age settlement they had partially uncovered the previous year - and required volunteers. Although I didn't realise it at the time I was to be present at the end of an era. Sussex had a long and distinguished tradition of high quality archaeological activity going back to the 1920S when the Curwens, two local doctors, father and son, organised annual research excavations on the Sussex Downs. In the 1930S they were joined by two young men, George Holleyman and Philip Burstow, a school teacher at Brighton College, and it was they who, in 1955, were directing the excavation at Muntham Court.

Fascinating though the daily excavation was, it was the evenings that I most remember — a mixed age group from fifteen to fifty sitting around the campsite talking about almost everything. A whole new world was suddenly opened up and I was made to feel a palt of it. Here, on a battered old radio, some of us listened nightly to the Proms — the first classical music I had ever consciously heard. Often George and Philip would talk about things found during the day. Iron Age pottery would be brought out and compared with material from other Sussex sites described in articles published in maroon-covered volumes of the Sussex Archaeological Society.

Before I left I asked George, who also ran an antiquarian bookshop in Brighton, if he could find me second-hand copies of some of the volumes containing the most important Iron Age reports. I left him ten shillings and he promised to send relevant volumes to that value. A week or so later two enormous parcels of books arrived, the postage alone costing more than ten shillings. It was an act of kindness that has endeared Sussex archaeology and Iron Age pottery to me ever since.

That year at Muntham Court was the last in the unbroken amateur tradition of Sussex archaeology. George Holleyman retired from the field altogether but Philip Burstow was later to join me as a volunteer each season during the excavation at Fishbourne from 1961 to 1967, recording his experiences in his scurrilous diary. When in 1955 I was allowed to choose a book as a school prize the obvious choice was E.C. Curwen's

The Archaeology of Sussex. Many years later, after Philip's death, George Holleyman gave me Philip's own old dog-eared copy — the volume we had pored over those evenings at Muntham twenty years before.

Muntham was a start but now I was spending every spare moment digging in Winchester and with John Boyden on various Iron Age sites in West Sussex. It was on one of these sites, Hammer Wood, an Iron Age hillfort in the Weald, that I first came into contact with the world of professional archaeology. A group of students from the Institute of Archaeology in London had come for a field trip led by Sheppard Frere and Molly Cotton (who had been one of Sir Mortimer Wheeler's assistants in the 1930S and 40s). At the end of the visit I was led before Frere to be given career advice. He was characteristically to the point: 'These amateur digs are all very well but you need experience on a real excavation — you should volunteer for my excavation at Verulamium: here's the address: I did, and of course he was right.

Verulamium was a very large rescue excavation, carried out in advance of road building, exploring a great swath through the centre of the Roman city. Frere had abandoned the traditional grid system of excavation, which his predecessor Sir Mortimer Wheeler had pioneered, and was now stripping huge areas layer by layer establishing the principles of the methods now almost universally practised. It was an exciting time and Verulamium provided a hothouse where would-be young archaeologists were brought, hardened and, if they survived, transplanted. My trysplantation, overseen by Sheppard Frere in 1961, was to direct the excavation at Fishbourne.

But now it was decision time. University was a real option. A decent batch of science A-Levels meant that a place at Cambridge to read Natural Sciences was attainable. But was that what I really wanted? There were weeks of indecision and then by chance I saw in a magazine the advice that Sir Mortimer Wheeler had given to someone who was thinking of becoming an archaeologist: 'Don't do it ... unless you can't conceive of life without being one.' It was excellent advice and on the first day of the autumn term of 1959 I found myself — a newly admitted student of Archaeology and Anthropology — entering the room of my tutor Glyn Daniel at St John's College, Cambridge.

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Student Thanks

A few weeks ago I was looking at the programme of lectures organised for this winter, and noticed that Keith was due to address us at the Annual General Meeting in March. His chosen topic is Field Unit Digs 2002-2006. Sitting there, my mind wandered back over those years and I suddenly realised two things. The first was that it was at Slindon in 2002 that I first dug with the Field Unit, and, more importantly, I first brought students from Boundstone Community College to dig with the society. The second was that I couldn't actually remember thanking the Society for the opportunities it has been able to give those students. Archaeology was first taught at Boundstone in 1999, the students enjoyed studying it, but classwork can never really bring a subject to life. At first it was taught in the Sixth Form, but the last two years it has formed a central plank of the school's gifted and talented programme. In June 2006, Year 10 students (Forth Formers to us members of the older generations) sat their first 'A' level units. The results were spectacular, students achieving A grade results



two years ahead of schedule. In 2002, the Field Unit welcomed our students, in each subsequent year that welcome has been extended. It is impossible to measure how much that welcome has added to their education. Every member of the Field Unit has accepted their presence, giving of their time and experience freely. At the same time, I am sure that the presence of the students has enhanced our digs. It certainly lowered the average age of the diggers! Possibly as a direct result of their experiences, two students have gone on to study Archaeology at University and will soon be joining the ranks of the professionals. If memory serves me right, a total of 24 students have been involved in Society activities (museum days, Young Archaeologist Days as well as excavations) over the last 5 years. This summer was



the best yet, 10 students and I ex-student working on site, 4 of them for a week. What we've established is a very positive relationship between the school and the Society, and long may it continue. I know that the Head of the school, Mr Evea, would want to join me in thanking everyone in the Society for allowing our students to 'get their hands dirty', and for making a very positive contribution to their education. It would be easy to give special thanks to particular people, but that would obscure all those precious one to one moments that make such a difference to the human experience, so I will satisfy myself by saying that those thanks are due to all members of Society who have come into contact with the students. For many of us, Archaeology is a passion, but if the study of the past is to have a future then it up to us to encourage future generations to treasure our cultural past. Worthing Archaeological Society has

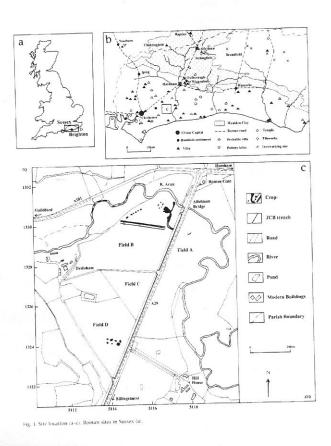
certainly begun to establish a reputation for doing just

From a personal point of view it has provided me with some very special memories; The look of delight on Lauren's face when she found a coin at Walberton. The look of envy on everybody else's face when she found a second! Ayesha's technique for emptying a barrow on a spoil heap at Rewell Wood, few of us saw it but none will forget it. The day when the resistivity equipment was christened 'Roger', don't ask, I couldn't explain in print! Katie (15 years of age) insisting she'd got the northern wall of the villa at Walberton and me being very sceptical. The 'I told you so' look she gave me when it was confirmed two days later!

PETER BRANNLUND

Where is the cemetery at Alfoldean?

The site at Alfoldean consists primarily of a large Romano-British mansio and staging-post complex within a rectangular enclosure (clearly visible as a crop-mark and as an earthwork), straddling Stane Street, a major artery from Noviomagus (Chichester) to Londinium (London), and associated strip-settlement, situated about 6km west of Horsham within the parish of Slinfold in West Sussex (centred on NGR 511730 133050), occupying two fields situated either side of the modern A29 directly south of, and neatly snuggled into a large meander of the River Arun. The surrounding land slopes down to the flood plain of the river from all directions, with the highest area of the site approximately 31 metres aOD, with underlying geology of alluvial silt overlying Arun 3rd and 4th gravel terraces, which in turn overlies clay and sandstone (BGS 1972).



Alfoldean location. Plan taken from SAC Vol 138 (2000), p76. Michael Lule et al..

The *mansio* and enclosure is considered to be of national importance and has been designated a Scheduled Ancient Monument (S.A.M. WS222).



Aerial Photograph of site taken by RAF 1946.

The site was first discovered in 1775, and further investigated briefly between 1809-10 during road restoration. Sporadic digging was then carried out during the 1840s by a Mr Briggs, but nothing was recorded at that time. A short report was prepared for SAC in 1859 by Martin (SAC Vol XI, 144) and in 1912 a tesselated pavement was discovered during ploughing (Belloc, 1913, 250), which was lifted and reset into the lawn of Hill House, nearby; It was not until 1922-23 (SAC vol 64, 81-104, 1923, and Vol 65 112-157, 1924) and 1934-5 (SAC vol 76, 183-192) that systematic excavations were carried out on the site by S Winbolt; and then not again until October 2005 by Wessex Archaeology (Report 59473.01 Apr 2006); with intermittent work being carried out in the 1980s and 1990s by Michael Luke and others (SAC 138, 75-101, 2000).

Winbolt was the first to postulate that accompanying the *mansio*, was the possibility of a strip settlement, and this was confirmed by the use of fieldwalking techniques, earthwork surveys, and aerial photograph analysis during the 1980s by Michael Luke and Judie English, in the 1990s by Elizabeth Elliott, and from 1999 onwards by myself. The conclusions being drawn that the mansio was part of a much larger settlement which was not included within the S.A.M.

Michael Luke records the site as a chain of deliberately planted settlements along Stane Street, extending from the enclosure and covering an area of some 9 hectares. During 1986, Michael Luke recorded the section of a large JCB trench dug along the roadside verge through

the middle of the site, and during 1998 a watching brief was undertaken by John Mills of WSCC during the construction of a lay-by along the A29, both of whom identified features associated with Romano-British occupation. The fields are regularly ploughed, and dense pottery scatters are still evident, extending several hundred metres south of the enclosure.

In 2005 a geophysical survey was conducted by GSB Prospection Ltd (Report 2005/70), in the two fields and this was successful in not only pinpointing the general footprint of the mansio building but also in identifying an extensive complex of other archaeological features. Field systems, trackways, settlement and workshop type activity has been mapped over an area in excess of 3 hectares outside the enclosure, but due to time constraints, it was not possible to determine the limits. However, what has become evident is that an extensive settlement extends southwards for at least 300 metres south of the enclosure, within which are several doubleditched anomalies presumably indicating trackways running both N-S and E-W, connecting paddocks, small fields and presumably areas of houses/workshops. There is also the possibility of a large number of pits of uncertain function, excavation of which to determine the nature of the activity is yet to be undertaken. The concentration of these pits is much greater closer to the road than in the east though it is possible that the settlement or related agriculture extends right down to the river in this direction.

Geophysical analysis of the western field produced results of a different character to the anomalies inside the enclosure in the eastern field, possibly as a result of fewer disturbances to the archaeology, but nevertheless still suggesting the presence of dense occupation. Unfortunately, for the remainder of the site southwards, outside the enclosure, far fewer anomalies of archaeological interest, in particular, linear ditch anomalies, were revealed, although large pits close to the western flanks of Stane Street were present indicating unenclosed workshops or small-scale industrial activity along the road, taking advantage of the trade that the mansio attracted. The conclusion reached, was that the focus of the settlement appeared to lie on the eastern side of the Roman road. I have to say however, based solely on the geophysics and the work of Wessex archaeology, this is of course true, but when combined with the evidence from the JCB trench and fieldwalking it clearly is not.

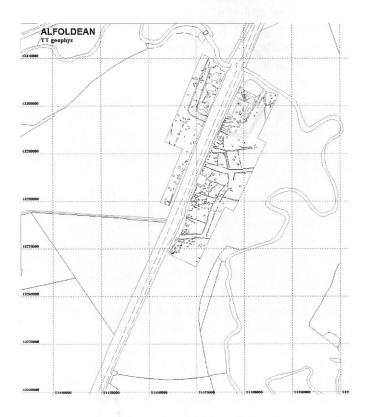
The conclusions also drawn from the 2005 excavations were summed up by Wessex Archaeology in the statement "the focus of activity on the site was from the later 1st century into the 3rd century AD, with sporadic later activity, broadly confirming the results of previous fieldwork on the site." Although basically true, it has to be remembered that most of the investigations were

undertaken in the vicinity of the mansio enclosure and their dating evidence is therefore applicable to this area and not necessarily the rest of the roadside settlement.

What we know, therefore, is that we have a large roadside settlement, upwards of about 8 ha (approx 20 acres), occupied continuously for about 250 years+, (from the 1st century to mid 3rd century AD), and possibly longer.

Whilst attending the 2005 excavations, I was in conversation with Judie English upon this very subject, when she suddenly asked, "Where did they plant the dead ones?" An entirely reasonable question, and one that has occupied my mind ever since.

It is often said that Roman life expectancy at birth was between 22 to 25 years (Tim G. Parkin, Demography and Roman Society 1992), but that if you got through the dangerous infant and toddler years you could expect to live into your fifties, so the settlement may well have had a dense population of at least 15 successive generations. So, what size would the cemetery be, and where was it located?



Plan of site with geophysics results superimposed. Courtesy Michael Luke 2006.

In determining the location of the Cemetery one has to first consider the legal, social, and spiritual aspects for such a site. It has to be remembered that during the first two centuries AD, cremation was the preferred method of burial, the population being pagan, and it was not until well into the second century that inhumation became increasingly popular, commencing during the reign of the Emperor Hadrian (AD 117-138). It is not known whether this change came about because of spiritual factors or for other reasons, but nevertheless, both types of burial continued side by side for a further 200 years when, in the early 3rd century, cremation ceased. After the elevation of Constantine to the purple (AD 307-337), he permitted, encouraged and personally converted to Christianity, and in AD 311 he issued the Edict of Serdica which essentially converted the entire Roman Empire from a pagan to a Christian one. Following the rise of Christianity, inhumation became the norm because the belief that resurrection was impossible after cremation.

Whether burial be performed by either method, we can immediately deduce where the cemetery is *not*, and that is within the settlement precincts themselves. The *Lex Duodecim Tabularum* or more simply the Law of the 12 Tables, the ancient legislation that stood at the foundation of Roman law and which formed the centrepiece of the constitution of the Roman Rebublic (and later the Empire), and the core of *mos maiorum*, strictly proscribed against such a thing. Table X, law 1, clearly stated *hominem mortuum in urbe ne sepelito neve urito*, which translated, stated categorically, "No dead man may be cremated nor buried in the city." (Cicero, De legibus 2, 23) The body of the deceased therefore had to be conveyed, in procession, to a burial place outside the city where it would be cremated.

Jock Macdonald, in "Pagan Religious and Burial Practices in Roman Britain" observed that there were 3 main traditions of religious experience to be found in Britain during the Roman occupation - The Celtic, the Roman, and the Oriental. All religions, especially the Pagan ones, were capable of assimilating beliefs, rites and practices from each other, and these 3 beliefs probably intermingled and modified each other over the course of years in the ordinary way. Of the three traditions, clearly the Roman occupies the pivotal position, both as the official tradition of the conquering legions and as the intermediary between the other two, There was a range of views for example, concerning the existence of an afterlife. Such feelings changed with time, but whatever thoughts there were, one thing remained central to the Roman way of life was respect for the ancestor, and particularly the body of the deceased. The soul, they thought, could find rest only when the body had been duly laid in the grave. Thus arose an elaborate funeral ceremony, funus. The law even decreed as to how this ceremony had to be conducted, what colour certain mourners had to wear, and even instructions down to how many flautists had to be present!! Once at the cemetery site, the body was cremated at a bustum - it is unlikely, considering the size of Alfoldean, that the settlement would have possessed an *ustrinum* or crematorium. The ashes were then gathered together by the next of kin and placed into an urn made of wood, terracotta, or glass, and then buried – although the ashes of the poor were placed directly into the soil and covered with terracotta tiles or the upper portion of an amphora.

The dead, it was thought, were not entirely cut off from the living, and thus had to be regularly appeared and honoured as though they were still living. Particularly among the Celts – and let us remember that the local native population were just that, Romanised Celts, members of the Regnii tribe - there was a generally accepted view of an afterlife. Many felt that the dead, living in their tombs, could influence the fortunes of the living in vague, undefined ways. Therefore, just to be safe, gifts and offerings were made to the deceased. Naturally then, the cemetery would become an important part of the landscape, and such places could become huge, with mausoleoms, tombs, etc, such as those along the Appian Way, or the so called "street of tombs" outside Pompeii. There were other burial places near the cities, of course, less conspicuous and less expensive, and on the farms, country estates, and minor settlements like Alfoldean, provision was made for persons of humbler station. Whatever size or status the cemetery be, however, the principle always remained the same in that it would be a sacred area where descendants would regularly visit their ancestors pour libations upon the graves and hold celebrations in honour of the deceased.

To find the cemetery therefore, we have to look outside the settlement. The usual practice was to place the cemetery along the main road to make a "statement" and would as such be a prominent part of the landscape. But where can we say can be called outside the settlement?

What we first have to decide is where that demarkation line would have been drawn at Alfoldean. Wessex Archaeology, on the 2005 excavation, presumed that the earthworks of the mansio enclosure was that line, and therefore naturally accepted Miles Russell's "circularity" just outside the enclosure, to be possibly a mausoleum. However, upon further excavation the feature was reinterpreted as a roundhouse with hearth, - dated to the 3rd century by the discovery of a broken but almost complete New Forest indented beaker. However, in the light of a further discovery, their first thoughts that the enclosure was the demarkation line appeared to be correct, in that the almost intact but crushed 3rd century beaker was found to be accompanied by a large shard of glass, identified as the base of a large square bottle from the Rhineland - possibly Cologne, 2nd century AD which vessels were known to have been used as cinerary urns to take a cremation.

Now, this is just the point. A bottle dated to the 2nd century is from a time by which the settlement would have been well established. Therefore, in my opinion the demarkation line must have been further afield, as by this time at least 7 generations must have lived and died on the site since the mansio complex was built. The fact that a single cremation has been found within the settlement itself would not have been at all unusual. Although burials had to take place outside the town, there were exceptions in the case of young children (aged less than 40 days) who were often buried near their homes. This may well have been one such burial.

So back to the main thrust of my argument. Where was the cemetery?

For the moment, I rule out a siting towards the East of the settlement. I admit that the width of the trackways revealed by geophysics in the Eastern field, and which conjoin and appear to head in an easterly direction, may well be of sufficient size to sustain such funeral processions, and that the cemetery may be across a bridge over the Arun and lie in the fields beyond. However, I tend towards the view that the terrain would detract from the "statement" effect necessary for the spiritual life of the community, and would be sufficiently far away from Stane Street as not to be noticed by travellers along it.

The same view I would hold for a western siting of the cemetery, - again the desired impact would be greatly diminished the further away from the main road it lay. However, cemeteries usually lay on a road for just such a reason and we may well once have had such a road on an E-W alignment.

A triple ditch linear anomaly identified as a cropmark by Michael Luke in 1981, might conceivably be interpreted as just such a road with roadside ditch, and therefore wide enough for funeral processions. This cropmark showed up as three parallel linear lines, apparently aligned west to east commencing just south-west of the enclosure. In 1982, Michael Luke believed that this was a Roman Road, quoting Mr Hampton, photographer for the Royal Commission on Ancient Monuments, being in agreement. By explanation, Michael Luke observed that the third ditch would have been necessary to obtain material to raise the road above the flood plain (E Walddlove A Roman Road in the Vale of Clwyd 1979, 22-23). If the line of the anomaly were to be extended on the OS map of Roman Britain, it would be found to pass by Chiddingfold Roman Villa and then by the Alice Holt Potteries before joining a known road to Neatham on the Chichester-Silchester road. Another thought, Michael Luke postulated, was that it may perhaps be a local road to Kiln Copse in nearby Roman Woods (TQ 110 300) where a Roman building may have existed. Such a road would probably have started north of the river to

avoid the need for a separate bridge (SAC Newsletter 37, Aug 1982. 285).

However, both of these interpretations have since been discounted by Michael Luke. In his 1986 Report, he reevaluated the anomaly observing that "The width between the south ditch and the middle ditch (ignoring the dark green area) would be adequate for a road, but if the dark green area is genuine (as it appears to be) would only be 2 m. wide which is only wide enough for a path. The situation where 3 ditches are associated with a road..." see reference to Waddlelove above. "...needed an extra ditch to extract more material for an extra large agger where it passed through marshland. At Alfoldean this situation is not comparable since the ditches are in an area which is well above flooding. Assuming this feature to be a road it might be expected to have some kind of metalling between the southern and middle which might show as a light cropmark but there was no sign of this..." He now believes that assuming the 3 ditches are of the same date, they are more likely to represent a boundary of some kind. A triple ditch is unlikely to be needed to keep in animals, but be either defensive or of status value. If it were to serve as a boundary it would seem to be unnecessary since it is quite close to the river, which if it was like today, would have served as a good boundary.



Triple ditch linear cropmark. Photo 1981 by Mike Luke.

If therefore, there were no E-W road, then there would be no facility for the funeral procession etc, and therefore likely to be unsuitable for a cemetery site. This then, leaves either to the north or to the south along Stane Street itself.

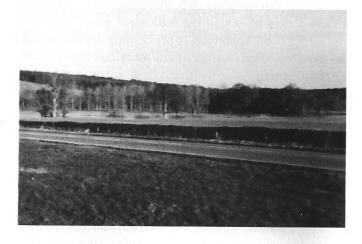
Immediately north of the *mansio*, Stane Street crosses a bridge to traverse the flood-plain and water meadows, and then follows the rising terrain to enter dense woodland now known as Plattershall Copse (locally, Roman

Woods). The present A29 ends abruptly at a roundabout on the Horsham-Guildford road (A281) called Roman Gate Roundabout, but the line of the original Stane Street may still be followed through the woods and can be traced as a series of aggars and ditches, the entire stretch of which is considered to be of national importance and has been designated a Scheduled Ancient Monument (S.A.M. WS223).



Surviving aggar of Stane Street in Roman Woods, Rowhook. Photo July 2000 Alex Vincent, Roman Roads of Sussex, Middleton Press. ISBN 1901706486.

Let us first examine the possibility that the cemetery lies somewhere in the flood-plain, between the Arun bridge and the rising ground. It is unlikely for two possible reasons. Firstly, as this area has always been liable to regular flooding there is no reason to suppose this did not also regularly occur in Roman times. Indeed, the water table would undoubtedly have been higher than today so the risk of flooding could well have been higher. This regular occurrence would have had an impact on hygiene, as there would be the risk of putrefaction residues contaminating the river, and therefore a danger to the settlement itself which must have relied heavily upon the River Arun for its water supply.



River Arun in flood. Winter 1985. photo Michael Luke.

A second consideration, whether inhumation or cremation, would once again be the spiritual factor in that if the ancestors were to be respected as though they were still living, their "houses" would not be built in a location that the living would naturally avoid themselves. No one would want to risk being regularly flooded out, so why should the ancestors be any different? No, if the cemetery were to be situated to the north, it would be on higher ground. The hillside overlooking the floodplain, southwards facing, would be an ideal location - somewhere one would naturally wish to live, and certainally a "statement" to passersby. However, this would work only if the hillside were open country, which today it is not, being a mixture of open fields and dense mixed deciduous woodland. What the nature of the vegetation would have been in Roman times would be the subject of speculation, but I suspect there would have been rather more woodland than today, and would therefore obcure the visual effect.

This then leaves the south of the settlement. I believe that the limits of the settlement, yet to be proven, lie somewhere between the southernmost end of field A, and the rising ground on the top of which sits Hill House. If this proves to be the case, then the cemetery must be south of this line somewhere, situated overlooking the road.

One clue, probably circumstantial but not to be ignored, is a fieldname Pot Field, associated with the 1843 Tithe map. (The field lies centred on NGR 5115 1320). Could this possibly refer to an urn-field, or just merely refer to a field belonging to a Mr Pott? Intriguing nevertheless and worthy of further investigation. The Jury is still out, but I am working on the case.

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Journal

All contributions to the newsletter are very welcome

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