

ERAS news

No 36

September 1991

After something of a lull during the summer, a number of archaeological events are now lining up for your attention. Since some of them are threatening to arrive before this newsletter, I shall describe them without further ado. The first is the annual conference of the Fortress Study Group which is being held in Hull on 6-9 September and for which 15 places are available for ERAS members. More information is given on pages 3-4. The next event is a coach trip arranged for ERAS members to West Heslerton on 14 September - an opportunity not to be missed as this is probably the last season of excavation at West Heslerton. The coach leaves from outside Y.E.B. on Ferensway at 9.30am and will return via Wharram Percy to Hull for 5pm. The cost will be £5-£6; further details and booking from Andrew Foxon, Hull Museums, 83 Alfred Gelder Street, Hull HU1 1EP, Tel: 0482 593902 during office hours or 0482 48523 evenings.

The first ERAS lecture of the 1991/1992 season will as usual be the Reports Meeting, on 18 September. Because the dates and speakers for a couple of the later lectures have only recently been confirmed the 1991/1992 card has not yet been printed, but the first few lectures are listed in the events diary at the end of this newsletter. Andrew Foxon has put together a very varied and interesting programme, and, as last year, all lectures will start at 7.30pm in the Old Grammar School. Coffee will be available beforehand.

EAST RIDING ARCHAEOLOGICAL SOCIETY

The Kingdom of Osaris

Bryan Sitch has organised a visit to the new Egyptology gallery at the Bagshaw Museum, Batley, on Saturday 26 October. The trip will also include visits to other sites in the afternoon. Details can be found on pages 5-6.

Seeing beneath the Soil

ERAS / University of Hull Dayschool

The dayschools organised in conjunction with Hull University have proved very popular. The topic of the dayschool on 16 November is the methods employed in detecting archaeological sites without excavation, which is very much in keeping with an increasing appreciation of the value of non-destructive archaeology. The programme and booking form are included with this newsletter.

The Field Study Group continues to meet on the first Wednesday of the month. These informal meetings are held in Castle Warehouse, courtesy of Hull Museums, and have widened in popularity and interest over the past year, due largely to the efforts of Andrew Foxon and Bryan Sitch, who have enabled members to see and handle material from the museum's collections. Different meetings have featured, for example, neolithic flint tools, Iron Age and Roman pottery, Iron Age coins and Bronze Age metalwork. The meetings also enable members to hear about any available fieldwork and other archaeological events.

I apologise if this newsletter arrives too late to inform you about some event you would have liked to attend. I'm afraid the publication dates of the newsletter do not always fit the availability of such information. I can only urge you to make the most of the opportunities available.

I'd also like to take this opportunity to congratulate Andrew Foxon on receiving his doctorate from Glasgow

University.

Finally, the list of revised prices for ERAS publications, promised but omitted from the last newsletter, should be found with this newsletter.

FORTHCOMING EVENTS

FORTRESS STUDY GROUP CONFERENCE 1991

Hull University 6-9 September

The Fortress Study Group is holding its annual conference - on the theme of post-artillery fortifications of Humberside - in Hull on 6-9 September. Based at Cleminson Hall at the University, the delegates will visit local sites with surviving military architecture during the day on Saturday and Sunday and will attend illustrated talks in the evening.

Through the kindness of the organiser, David Clarke, 15 places are available for members of ERAS. The provisional programme is as follows:

Friday 6 September

09.00	Depart Cleminson Hall
09.30-11.00	Paull Point Battery
11.30-12.30	Sunk Island Battery and Stone Creek Anti-Aircraft Battery
13.30-15.30	Spurn Point - packed lunch
15.45-16.45	Kilnsea Battery
17.45	Drive through Hull Citadel site
18.15	Arrive Cleminson Hall

Illustrated talks

20.00	Martin Foreman: The Defence of Hull
21.15	A.D. Saunders: English Fortifications

during the Civil Wars

Sunday 8 September

09.00 Depart Cleminson Hall
09.15 Arrive Tower Street, Garrison Side
09.30-10.00 Visit to Old Grammar School
10.10-10.45 Visit Beverley Gate

The FSG will then travel to Newark, which will then host the rest of the conference.

There will be a charge of £5 per day to cover the cost of the coach and the hand-out packs. Remember, there are only 15 places for ERAS members and they will be allocated on a first-come, first-served basis. If you would like to go on the visits and attend the talks, please let me know as soon as possible so that I can make the necessary arrangements with David Clarke.

This is a golden opportunity for ERAS members to enjoy a guided tour of important local sites with military architecture, some of which are in private ownership and may only be visited by special appointment. Members should be aware, however, that the sites on Saturday's itinerary are not regarded as "visitor-friendly" and some clambering through nettles and brambles might be necessary, so sensible footwear is the order of the day. Pith helmet and machete optional!

Contact me as soon as possible on 593902 extension 3948 if you would like to go on the trips and/or attend the lectures. Book early to avoid disappointment!

Bryan Stich
Hon. Sec.

THE KINGDOM OF OSIRIS-LIFE AND DEATH IN ANCIENT EGYPT

Visit to the Bagshaw Museum at Batley, near Leeds

Osiris, ruler of the ancient Egyptian underworld, presides over a new gallery at the Bagshaw Museum at Batley, near Leeds. Visitors are invited to make a personal journey of discovery to the land of mummies, myth and magic.

The people of ancient Egypt loved life and hoped to continue their civilised existence beyond the grave. To this end they equipped their tombs with the trappings of life on earth and decorated the walls with colourful scenes depicting their many activities, pleasures and pastimes.

The new gallery, which re-creates the atmosphere of a tomb, provides the setting for a wealth of objects which have been excavated in Egypt, including a funerary boat from Beni Hassan lent by Hull City Museums. A coffin lid and mummy mask are amongst the items which have been especially conserved for exhibition. Together with pottery, tools, jewellery and sculpture, they provide an insight into life and death in Ancient Egypt.

ERAS is organising a visit to the Bagshaw Museum on Saturday 26 October. The itinerary for the visit is as follows:

09.00 Coach leaves Y.E.B. Showroom on Ferensway, Hull. Pick-up points on outskirts and Goole.
10.30 Arrive Batley
10.30-10.45 Coffee
10.45-12.00 The Kingdom of Osiris. Visits to the exhibition will be in small groups
12.00-1300 Lunch
pm - Visit to Tolson Museum Archaeology

Galleries, Castlehill; Aldmondbury Iron
Age hillfort and Birstall Manorial Court.
16.00 Leave for Hull
17.30 Arrive Ferensway, Hull.

The cost of the trip will be £10. Please contact Bryan Sitch at Hull Museums, 83 Alfred Gelder Street, Hull, HU1 1EP, Tel: (0482) 593902 ext 3948, as soon as possible if you would like to go. Bookings received before 1 October will receive a £3 discount.

Bryan Sitch, Hon. Sec.
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EGYPTOLOGY LECTURE

To accompany Leeds City Museum's Egyptology exhibition and Y.T.V.'s programme "The Body Snatchers", Dr Rosalie David, leader of the Manchester Mummy Team and Dr E. Tapp, Consultant Histopathologist at the Royal Preston Hospital, will be giving a Celebrity Lecture entitled "Natsef-Amun = The Keeper of the Bulls" at Leeds City Art Gallery at 7.30pm on Wednesday 6 November 1991. The lecture will describe the discoveries made during the recent examination of the 3000 - year - old mummy of Natsef-Amun, the priest, scribe and keeper of the Bulls at the Great Temple of Karnak.

Tickets, price £2.00 each are available now from Leeds City Museum, Calverley Street, Leeds LS1 3AA. Tickets for this lecture are likely to be heavily subscribed and ERAS members should write off as soon as possible to avoid disappointment.

Since this lecture is being held on the first Wednesday in November, the Field Studies Group meeting will be postponed to Wednesday 13 November to allow members to go to Leeds if they wish.

Bryan Sitch, Hon. Sec.

NEWS FROM THE MUSEUM

Mosaics to stay

One of the best collections of Roman mosaics in Britain is on show in the Hull and East Riding Museum and the finest in quality is the Horkstow mosaic, found in the 18th century a few miles south of South Ferriby.

The mosaic is on loan to Hull Museums and Art Galleries and we are delighted that its owner, Mr Warwick Hele, has agreed to extend the loan until 2003.

A Celtic World - the Iron Age in East Yorkshire

As a complement to the "Celtic World" exhibition in the Hull and East Riding Museum, Bryan Sitch (Assistant Keeper of Archaeology) has written a booklet telling the rich story of Iron Age Yorkshire. Published for Hull Museums and Art Galleries by Hutton Press, it should be available in late October.

Place your orders now!
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.....AND FROM THE UNIT

EXCAVATIONS

The main excavation work of the Humberside Archaeology Unit recently has been on the south bank.

Kirmington Airport Illuminations

The proposed southern extension to the main runway at Humberside Airport, Kirmington, required additional landing lights to be erected on the scheduled area

north of the runway and east of Kirmington village. Here aerial photography has revealed the substantial cropmarks of a probable 1st century Roman fort together with settlement enclosures, trackways and ditches. Systematic fieldwalking by the Unit over the past three years has produced substantial evidence for occupation from the Iron Age to the 4th/5th centuries AD.

The erection of the new runway lights led to the Unit carrying out a watching brief of 63 small trenches during June and July 1991. Various ditches and pits were recorded as well as two phases of a metalled trackway. Substantial amounts of pottery dating from the Iron Age to the 4th-5th centuries AD were recovered. One of the most interesting Romano-British pieces was a fragment of a triple vase on a base-ring, the type of vessel which is associated with the worship of triads of deities. Similar vases are known from other Romano-British sites: there is a complete example from Chester (Gods of Roman Britain, Miranda Green, Shire Archaeology 34: p57 1983). Large quantities of ironwork were also recovered as well as a late-Roman brooch.

Barnetby Wold Farm

Also due to the construction of the runway extension at Kirmington was the Unit's excavation to the south of the airport at the scheduled site at Barnetby Wold Farm. Isolated pits and features yielded some unique decorated Bronze Age and/or Iron Age pottery. Flint scrapers, cores and an arrowhead were also recovered.

Flixborough Middle Saxon Site

In conjunction with Scunthorpe Museum the Humberside Unit has also been involved over the last two years in the excavations at Flixborough. This important monastic and aristocratic Middle Saxon settlement was

unknown until 1988, when Kevin Leahy of Scunthorpe Museum discovered Saxon burials in a sand quarry. Further investigation revealed the post holes and wall trenches of a group of 14 timber buildings. The finds from the site are impressive in number, state of preservation and quality of craftsmanship. Some of the finds will appear in the British Museum exhibition, The Making of England: Anglo-Saxon Art and Culture AD 600-900, which opens in November.

On the north bank two watching briefs have been undertaken at a site on the east bank of the river Hull. The work revealed a complex system of boundary and irrigation ditches, which were cut by a series of pits and associated features. Artefacts recovered from these features indicated Romano-British occupation from the 2nd century AD to the 4th century AD. It is likely that the settlement was a small farm. Further evidence was recovered for occupation during the 12th century AD and this continued until the early part of the 20th century when the site was used for pasture.

A pottery dump in the rear garden of a house in Leven revealed a wide range of pottery dating from the 13th-18th/19th centuries, thus adding to the one Leven sherd recorded in Loughlin and Miller's Archaeological Sites in Humberside!

Further information on these sites and others will be given by members of the Humberside Archaeology Unit at the Reports Meeting on 18 September. The Flixborough site is the subject of the Society's January lecture by Kevin Leahy.

PUBLICATIONS

The Lurk Lane excavations are now published and available from the Archaeology Unit price £35.00 + £3.00 p&p. Cheques should be made payable to Humberside Council.

The next Unit volume to be published concerns Eastgate, Beverley. Publication will be at the end of October or shortly after. This volume should be of interest to those many members of ERAS who took part in this excavation.

The Unit has also just published a popular booklet entitled "North Holderness - Man and the Landscape" which is for sale at £1.50 + p&p. The booklet gathers together information on the archaeology and historic landscape of the parishes around Hornsea from Barmston in the north to Witherwick in the south. Sites featured include the bronze age settlement at Barmston and the shrunken medieval village at Siggleshorne, in the excavation of which a number of ERAS members were involved. There are many illustrations of finds such as those from the Anglo-Saxon cemetery at Hornsea, and imaginative reconstructions of past landscapes in the North Holderness area.

ROMANO-BRITISH FINDS: AN APPEAL

Humberside Archaeology Unit is currently preparing a new revised set of educational panels about Humberside in the Roman period and would like to hear from any ERAS members who have unprovenanced pottery, brooches, coins etc which could be used in handling sessions in conjunction with the panels. The sets of panels are very popular and in considerable demand from schools in the region. Please ring Alison Williams at Humberside Archaeology Unit (0482) 868770 if you can help.

(Most of the above news from the Humberside Unit was written by Alison Williams.)

ACROSS THE WATER

The archaeological set-up in Lincolnshire has come in for adverse criticism from time to time. There is a perceived image of in-fighting and chaos. Those of us involved in the management, preservation and presentation of Lincolnshire's rich and varied heritage feel that the image is a hangover from a time in the past, and that we are doing pioneer work in several areas.

South Lincolnshire has seen, over the past five years, the establishment and growth of the "Community Archaeology" scheme, which is now up and running in North and South Kesteven, and Boston, an area which once regarded archaeology as something to be machined out at once. At least two other districts are known to be interested in having community archaeologists in the near future.

In all three areas the community archaeologists provide a planning consultancy service to the planning departments, monitoring applications and commenting on the archaeological implications of any developments. They have also been involved in formulating archaeological policy in local and district plans. This local, low-level approach has been proven to work efficiently. Both archaeologists and local government officers know who to talk to, how their own departments work, and are aware of the pitfalls and problems. The archaeologists also quickly gain an in-depth working knowledge of their areas. They are also responsible for the maintenance of the Heritage Lincolnshire SMR, and for supplying information to the County SMR at Lincoln.

The interpretative side of the project is less easy to define; it falls into three main areas: interpretation, education and publicity, whereby residents and visitors should be made aware of the

county's rich archaeological heritage, and heritage-based tourism to Lincolnshire should be encouraged. This can of course be done in many ways, from producing leaflets and display panels to the North Kesteven "Bumps and Hollows Days", which encourage artistic interpretation of sites. The community archaeologists have also been involved in the construction of a round-house for a local school, pottery workshops and museum exhibitions. They also give talks to all areas of the public, from schools to retired groups. In addition to this they are responsible for publicising archaeology and archaeological events in their districts and for organising site visits and tours.

The project seems to be working smoothly and it is hoped that other districts will take the opportunity to establish a community archaeologist, as the reaction from almost everyone, both in the county and outside, has been extremely positive. One schools advisor from Oldham even said "So how do I get a community archaeologist for my area?".

Martin Brown AIFIA
Boston Community Archaeologist

A POSSIBLE CHARIOT BURIAL AT HORNSEA, NORTH HUMBERSIDE

The purpose of this note is to place on record further references to the discovery of an Iron Age chariot or cart burial at Hornsea by William Morfitt of Atwick. The collecting activities of the Morfitt family have already been discussed in previous articles (see Sitch 1988; 1991) and need not be discussed again here.

Suffice it to say that during 30 years beachcombing along the Holderness coast the Morfitts made many important discoveries. Unfortunately they rarely

published reports, although they did keep 'log-books' or journals, in which they recorded their finds and observations over many years (Armstrong, quoted in Sheppard, 1923, 176). One such record concerns the excavation of a 'Saxon' chariot burial and was published by Dr Ian Stead in his The La Tène Cultures of Eastern Yorkshire (1965, 93):

"1904. The Old Gashouse North End Promenard. While digging at Hornsea in the Gravil Red (a hill) near the Old Gas house on Jan'y 4th, 1904 I unearthed spearheads of Iron and one spearhead with an Iron haft and blade of bronze, also what appeared to be thin wheels of some light vehicle and bits for horse trappings very much corroded. Evident of Saxon period."

The reference to iron tyres is obviously more suggestive of the Iron Age than the Anglo-Saxon period but allowance must be made for William Morfitt's limited knowledge of archaeology; though a successful businessman, he had had only a rudimentary education and had only taken a serious interest in archaeology when he moved to Atwick at the age of sixty. When Stead was writing no cart or chariot burials containing weapons had been found and little weight was attached to William Morfitt's note (Stead, 1965, 93-4; 1979, 24).

Discoveries in recent years, however, have removed some of the grounds on which Stead's scepticism was based. Cart or chariot burials accompanied by weapons have been found at Wetwang Slack (Dent, 1985) and an iron mail tunic was discovered in the Kirkburn burial (Anon, 1988). Unfortunately William Morfitt's finds are no longer available for inspection and the account cannot be verified.

There is another line of enquiry which does, nevertheless, cast fresh light on this obscure

discovery. William Morfitt corresponded with many prominent archaeologists between the early 1900s and his death in 1923. Two letters from Canon William Greenwell (1820-1918), the famous Durham antiquary and ecclesiastic refer to the Hornsea chariot burial:

"I have never heard of your finding the remains of a chariot... From what you say these appear to have been the tires (sic) of the wheels, bits of the horses and spearheads."

(HCAO DDX7/40 : 30.12.1907)

and:

"...when you have time I shall be glad to have as full an account of what you observed and what you found in the chariot burial for such it seems to have been."

(HCAO DDX7/40 : 9.12.1908)

Greenwell did not keep old correspondence and with the exception of these two letters, no other reference seems to have survived. The published note and Greenwell's letters to William Morfitt are meagre archaeological fare indeed, but they are more helpful than might appear at first glance. Firstly Greenwell had excavated a chariot burial at Beverley in 1875 and had recorded, if not seen, another discovered near Market Weighton in 1877 (Greenwell 1906). As an authority on the prehistoric archaeology of the region, he would surely have recognised a chariot burial if one had been described to him. Secondly, the location of the 1904 discovery may be inferred from the three references to landmarks in William Morfitt's note. The gasworks, the gravel pit and the Promenade Gardens may be traced on contemporary and later Ordnance Survey maps. Figure 1 combines elements of the Ordnance Survey maps of Hornsea of 1892 and 1910. (Sheet CXCVII 3 and 4). The possible chariot burial might have been located in the area of National Grid

Reference TA 207484, near the site of the old Granville Court Hotel.

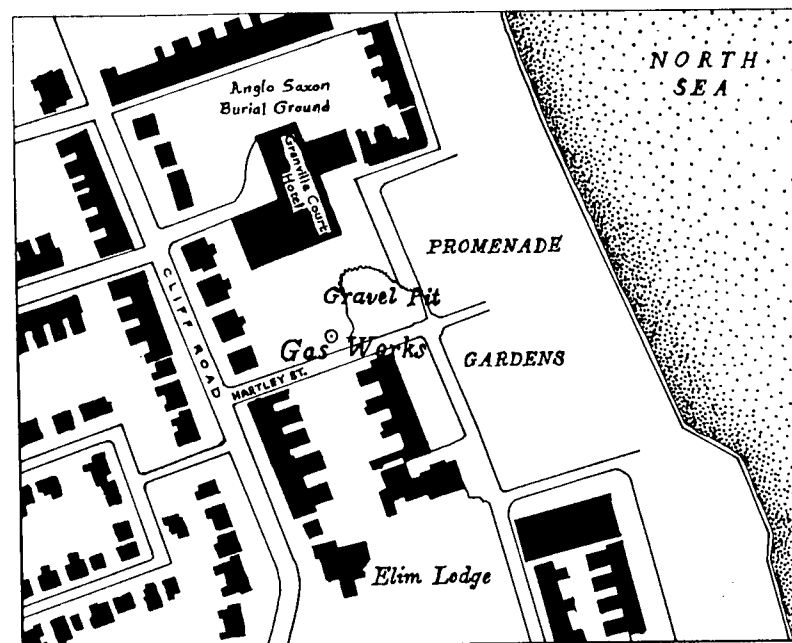


Fig 1: Map combining details of the Ordnance Survey Maps of 1892 and 1910 (sheet CXCVII 3 and 4), showing places mentioned in the text.

Of course the Greenwell-Morfitt correspondence does not remove all uncertainty about the Hornsea chariot burial of 1904, but it does suggest that it deserves more consideration than it had received hitherto. Certainly, as Stead anticipated, it would be unwise to dismiss it entirely. The references also show that the Morfitt paper archive, for all its shortcomings, may yield important information about archaeological discoveries along the Holderness coast. A re-evaluation of the Morfitt family's work is now

being undertaken by the writer and any information Society members can supply would be gratefully received.

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Abbreviations

HCAO - Humberside County Archive Office, to which special thanks are due for permission to quote from original documents held in the Morfitt Collection.

It is hoped that a more complete account of the Hornsea chariot burial will appear in a forthcoming

East Yorkshire Local History Society Bulletin.

Bryan J.Sitch
Assistant Keeper of Archaeology
Hull City Museums & Art Galleries

ERAS WESSEX WEEKEND 20-22 April 1990 (cont)

The Sunday morning and early afternoon of this weekend visit were spent in the Avebury area, again with Peter Chowne as our guide. The henge monument at Avebury (SU:103699) is so large that the eastern part of the village lies within it. Although two roads pass through the circle it still remains today an impressive site, enhanced on our visit by a morning mist which the special-effects department had laid on for us.

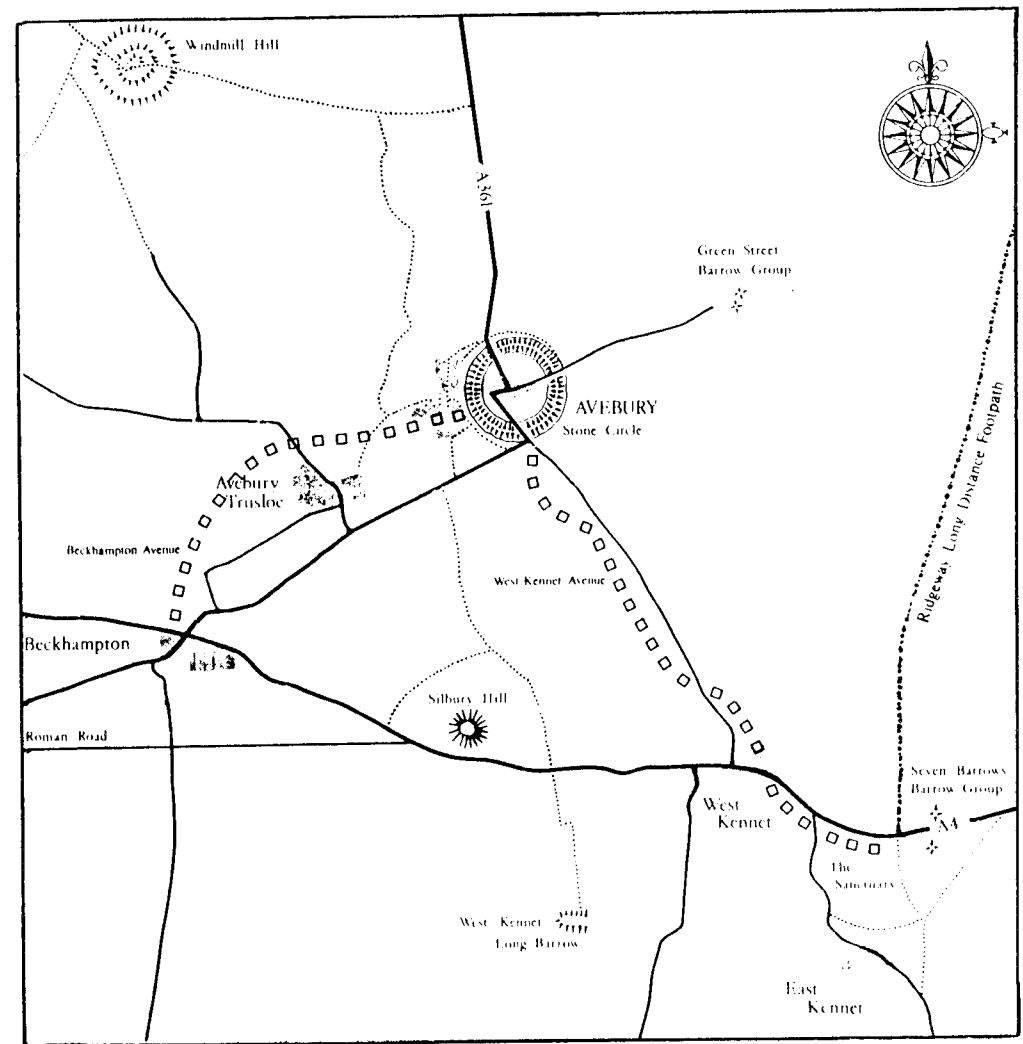
This circle-henge was partly excavated by St. George Gray before the First World War and by Alexander Keiller between 1934 and 1939. More work is likely at Avebury within the next 5-10 years. As a World Heritage Site Avebury should benefit from special protection; however, Britain is not a member of UNESCO and the site has recently been under threat from more than one proposed development.

Inside the henge stand the remains of two stone circles, erected towards the end of the Neolithic, c.2900 BC. The stones used were sarsons, great slabs or boulders of siliceous sandstone which can be found on the Marlborough Downs. The southern circle, 102.4m in diameter, was composed of 30 stones with a tall pillar (the Obelisk) near its centre. A rectangle of smaller sarsons known as the Z-stones stood around the Obelisk. The northern ring consisted of concentric circles, 97.5 and 51.8m across, with probably 27 and 12 stones on their circumferences. At the centre stood

three massive sarson stones forming a three-sided structure known as The Cove. Two of these great stones stand today but many of the Avebury circle stones were buried in the 14th century or broken up and used for building materials in the 18th century. As a medieval barber tried to bury one of the stones it fell and crushed him. Some fallen or buried stones were re-erected during the excavations.

Not content with these circles of sarson stones, a vast ditch with an outer bank was constructed around them, probably a couple of hundred years later, enclosing an area almost a quarter of a mile across. About 6.7m inside the edge of the ditch was set a huge circle, the largest in the British Isles, of at least 98 stones, the largest at the four entrance gaps. Excavations showed that the ditch varies in width and depth at the bottom but averages 9.1m deep and 4m wide. The width at the top is 21.3m. A massive organised effort must have been involved in the construction of the ditch. There is, I recall, a photograph of some of Keiller's workmen standing in the excavated ditch, which effectively illustrates the scale of the earthworks. From the southern entrance an avenue of pairs of stones, partly restored by Keiller, led up Overton Hill to a small stone circle, the Sanctuary, destroyed in the 18th century but probably some sort of mortuary structure. From the western entrance more stones, the Beckhampton Avenue, once extended at least a mile westwards to where now only two stones, Adam and Eve, remain.

Human bone, antler picks, flints and late-neolithic pottery have been recovered from the ditch. We were able to see some of these finds in Avebury Museum, behind the church in the village. Surprisingly little Grooved Ware was found, perhaps indicating that Avebury is earlier than other henge monuments. Parts of the interior of the monument were ploughed in medieval times and the centre has yet to be excavated.



Diagrammatic map of the Avebury area

After visiting the museum our party travelled the short distance to West Kennet Long Barrow (SU:04677, where a steep climb was rewarded by entrance to the largest stone-chambered tomb in southern England. The tomb was damaged in the 17th century - or perhaps "raided" would be a better term: a certain Dr Troope

of Marlborough came to the tomb and "stored myself of many bushells (of human bones) of which I made a noble medicine that relieved many of my distressed neighbours". It is to be hoped that their relief was great. Fortunately he did not find all the burials, nor did John Thurnam when he excavated in 1859, finding the burials of five male adults and a child, together with pieces of neolithic Peterborough Ware and beaker pottery. It was left to Stuart Piggott and Richard Atkinson to complete the work in 1955-6 when they found four intact burial chambers that Thurnam (and, presumably, the good Dr Troope!) had missed.

The barrow was found to have been built in the first half or the middle of the third millenium BC. It has a core of sarson stones and a façade of massive sarson boulders. The internal structure consists of five burial chambers opening off an axial passage fronted by a semi-circular forecourt behind the façade. The gaps between the wall stones are filled with dry-stone walling and the roof of each side-chamber is roughly corbelled and then completed with a large capstone. The structure is covered with chalk quarried from two flanking ditches to form a trapezoid mound a little over 100m long. Though now covered with grass the monument with its white chalk covering, sited on a ridge, would originally have been visible from some distance.

The excavations have shown that at least 46 individuals were buried in the tomb (plus Dr Troop's portion, of course) over a considerable period of time. The pottery types relate the West Kennet tomb in time to the earlier phases of use of the causewayed camp on Windmill Hill, two and a half miles to the northwest. The use of the tomb spanned at least five hundred years and possibly a thousand. The distribution of sherds and other objects suggests that they may have accumulated as offerings over a period of time in some other structure and were

eventually collected and deposited at one time in the burial chambers together with chalk rubble, earth and stones, filling the tomb. The tomb was then sealed with the massive blocking stones, perhaps around 1600BC.

Between Avebury and West Kennet lies Silbury Hill, (SU:100685) the largest man-made ancient mound in Europe and an overwhelming sight from the road that now runs past it (the A4). Its purpose is intriguing; it has always been considered to be a burial mound but if so it is one which is remarkably successful in keeping hidden any burial, frustrating all and many attempts to uncover its secrets, starting with a vertical shaft from the summit in 1776. It may be that any deposits were destroyed by that first excavation by the Duke of Northumberland; it may be that a burial lies off-centre; or it may be that it was erected for an entirely different purpose. What excavation has shown is that construction took place in several phases, at around 2,500 BC.

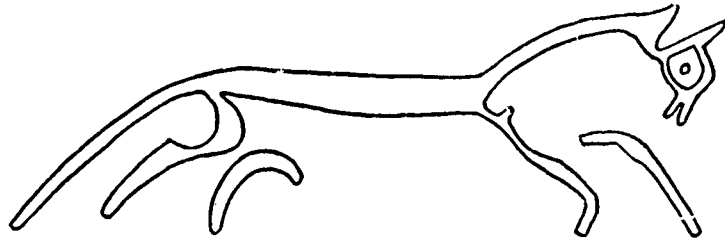
Phase 1: A circular area of about 19.8m diameter was enclosed by a low fence supported by widely spaced stakes. Within this was built a clay mound 4.9m in diameter and 0.9m high, covered by turves and soil. This in turn was covered by four concentric conical layers of gravel, chalk and subsoil to give a primary mound some 34m in diameter and 5.2m high.

Phase 2: Before any weathering of the original mound could take place it was enlarged to a diameter of 73.1m with chalk quarried from a surrounding ditch.

Phase 3: Before the ditch was completed the size of the mound was again increased, using chalk from the much larger ditch visible today. The additional chalk was carefully added in a series of truncated cones piled up upon one another, each divided into cells by chalk blocks to give stability to the mound. This

produced the shape of a stepped cone.

Phase 4: Lastly, all but the uppermost step of the cone were filled in with chalk from a westwards extension of the ditch. The final mound has a height of 39.6m, a diameter of 158.5m and contains about 257,000 cubic metres of chalk.



The very last monument visited by our party was the Uffington white horse (SU:302866) which is cut into the very edge of the northern escarpment of the Berkshire Downs. This is the oldest of the chalk-cut horses; it is generally thought to be of Iron Age date and was a memorable, if necessarily fleeting, sight before our return to Hull.

I think all members of that party would wish to thank Dr Peter Chowne of the Trust for Wessex Archaeology for his expert, patient and efficient guidance around the many sites visited over the weekend.

Jan 23: OLD BONES: ARCHAEOLOGICAL AND PATHOLOGICAL INTERPRETATION - Francis Thornton

Bone is a living tissue but one which survives well in soil if conditions are not too acid and thus is frequently a component of excavated material. Francis Thornton pointed out that it was not just human bone which was important; the study of excavated animal bone should not be omitted because it can provide not only information about the different species prevalent in different periods, but also about ancient husbandry practices, hunting and herding, butchery techniques and diet.

Excavated human bone provides information from which may be estimated age at death and sex. Some diseases and injuries can be indentified by their effects on bone, as can some customs and habits.

Sex is determined principally by an examination of the skull and pelvis. Since there is often considerable overlap in the range of dimensions and general shape found in the two sexes, it is preferable to have a large series of complete skeletons of any ethnic group, but in general male and female are distinguished by a number of characteristics; for example, the male skull is generally larger and heavier, the supraorbital ridges (brows) are more prominent, the muscular ridges are larger, the mastoid processes more developed and the teeth are often larger. In the female pelvis, adapted for childbirth, the sciatic notch is shallower than in the male and the pre-auricular sulcus (groove) is more constantly present than in the male.

In a young adult or adolescent, age can be estimated from tooth eruption and the degree of epiphyseal fusion. These cartilagenous areas, or epiphyses, are

present, for example, at both ends of every long bone of the limbs. Ossification begins separately from the main bone, but between ages 12 and 20 the epiphyses fuse with the main bone. Fusion takes place at different ages in different parts of the body. The most accurate feature for ageing children is the teeth. The age of an adult is estimated from molar wear, "lipping" of vertebrae, the wear and tear of the large joints, changes in the pubic symphysis, and the morphology and microscopy of the long bones.

A number of diseases may manifest themselves in bone, ranging from the obvious (dental disease, osteomyelitis) to blood disorders such as sickle cell anaemia. Sometimes there may be evidence of injuries, either sufficiently gross to be the cause of death, or damage such as fractures which have healed, perhaps resulting in overlapping of the bone and reduction in length. Some fractures appear to have been treated; for example, there is evidence for splints having been used in ancient Egypt. In some cases the cause of the injury remains - the speaker showed a slide of a skeleton from an Anglo-Saxon cemetery at Eccles with an arrowhead embedded in the spine.

A peculiar type of damage is that caused to the skull by trephining or trepanning. This operation usually consisted of the scraping of an annular groove in the skull by an instrument and the eventual removal of a roundel of cranial bone.

Many diseases do not, of course, involve changes in the skeleton, but those which do are of great value in assessing the health of previous populations. Inflammation of the bone (osteitis) may result in considerable thickening as a new irregular layer is formed. Sometimes it may be possible to identify a specific disease, such as tuberculosis or leprosy, as the cause of the bone deformity, whereas other cases may be diagnosed simply as periostitis (inflammation

of the outer cortex) or osteomyelitis (inflammation of the inner, cancellous, tissue) which may be the result of infection following a compound fracture. Both types of osteitis have been frequent from the Neolithic onwards.

Tuberculous osteitis may begin to develop in the end of a long-bone, or in one of the short bones such as the vertebrae. When the spine is involved a hump-backed condition may result and sometimes two or more vertebrae may fuse together. This vertebral deformity is the most reliable diagnostic feature of tuberculosis.

It is thought that leprosy was brought to Britain during the Roman invasions, and leper-houses were established in Saxon times. The disease can be slow to develop, but characteristically involves destruction of the extremities and remodelling of the bone. In the skull there may be loss of bone from the areas of the hard palate, nose and upper incisors.

Other types of diseases expressed in bone include bone tumours, diseases of the jaws and teeth, arthritis, skeletal deformities such as congenital dysplasia of the hip, growth disorders caused by hormonal imbalance, dietary deficiencies (eg rickets), blood disorders such as sickle cell anaemia and congenital abnormalities like achondroplasia (dwarfism) and hydrocephaly. Renal and gall bladder stones are often recovered from excavations.

Information on the historical treatment of bone disease and trauma can be obtained from early manuscripts, paintings and sculpture. The bronze doors of the cathedral at Verona show an early example of surgery taking place.

As techniques of studying bone become more sophisticated it should be possible to gain increasing

amounts of information from bony remains. Future studies may involve trace element analysis to indicate diet and the analysis of surface scoring on teeth. DNA and RNA analysis and blood typing may be used to study the relationships among and between populations.

The speaker had brought along some actual bone samples, including skulls, so the lecture concluded with some 'hands-on' experience.

OBITUARY Norman Trickey

Members of the Society will be saddened to hear of the death of Norman Trickey in July. He was a founder member of the Field Study Group, formed by Peter Armstrong in 1980, attending many of the early meetings, amongst the most memorable a visit to Nunburnholme. I was privileged to be a course tutor at South Cave evening classes which Norman also attended and colleagues and fellow class members will, I'm sure, agree with me about the great contribution Norman gave, questioning accepted views of the past and stimulating lively discussion. A great polymath, he was able to apply his wide reading and deep knowledge in approaching historical problems from new perspectives. He always argued the probability of the presence of a Saxon monastery on or near the Humber and it was fitting that a week before he died, news of the Flixborough discoveries hit the headlines.

Peter Halkon

DIARY OF EVENTS

Time and Venue

6-9 September

Fortress Study Group
Annual Conference

Hull University
Cleminson Hall
Thwaite Street
Cottingham

(further details on page 3)

and local sites

Saturday 14 September

9.30am

ERAS visit to West Heslerton
excavations

coach departs from
YEB Ferensway

Wednesday 18 September

7.30pm

ERAS Reports Meeting

Old Grammar School
South Church Side
Hull

Thursday 26 September

7.30pm

Hull Numismatic Soc. lecture:
Red Cross Insignia
(Edward Winkler)

Hull Central Library
Albion Street
Hull

Wednesday 3 October

7.30pm

ERAS Field Study Group

* Castle Warehouse
Chapel Lane Staith
High St, Hull

Wednesday 17 October	7.30pm
Hull Numismatic Society Auction	Hull Central Library Albion Street

Wednesday 23 October	7.30pm
ERAS lecture: The Spanish Armada: some new evidence from the wrecks (Dr Colin Martin)	Old Grammar School South Church Side Hull

Saturday 26 October	9.00am departure
ERAS visit to Batley Museum exhibition: The Kingdom of Osaris - Life and Death in Ancient Egypt	YEB Ferensway and other pick-up points

Saturday 2 November	9.45am-5pm
University of Leeds Dept. of Adult Continuing Education Dayschool: Centres of Power - The Archaeology of Fortified Sites in Yorkshire	Leeds Univ. Continuing Education Building Springfield Mount off Clarendon Road Leeds 2
£10 fee to:	Marilyn Moreland Dept. of Adult Continuing Education The University Leeds LS2 9JT

Wednesday 6 November 7.30pm

Lecture: Natséf-Amun = The Keeper of the Bulls (Dr Rosalie David and Dr E. Tapp)	Leeds City Art Gallery tickets (£2) from: Leeds City Museum Calverley Street Leeds LS1 3AA
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Wednesday 13 November	7.30pm
ERAS Field Study Group	Castle Warehouse Chapel Lane Staith High St, Hull

Thursday 14 November	7.30pm
Hull Numismatic Society Annual General Meeting	Hull Central Library Albion Street

Saturday 16 November	10am-4.35pm
ERAS and University of Hull Dayschool: Seeing beneath the Soil	S2 Wilberforce Building University of Hull

Wednesday 20 November 7.30pm	
ERAS lecture: The Auvergne survey: the earliest Iron Age towns (Professor John Collis)	Old Grammar School South Church Side Hull

Wednesday 4 December 7.30pm

ERAS Field Study Group	Castle Warehouse Chapel Lane Staith High St, Hull
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Saturday 7 December	10.15am-5.00pm
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University of Leeds Dept. of Adult Continuing Education Dayschool: Archaeology in West Yorkshire	Leeds Univ. Continuing Education Building Springfield Mount off Clarendon Road Leeds 2 £7.00 fee to: address as 2 November
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Wednesday 18 December 7.30pm

ERAS lecture: In the steps of Sir Mortimer Wheeler...excavations at Maiden Castle, Dorset (Niall Sharples)	Old Grammar School South Church Side Hull
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Wednesday 8 January	7.30pm
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Field Study Group	Castle Warehouse Chapel Lane Staith High Street, Hull
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Wednesday 22 January	7.30pm
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ERAS lecture: Excavations at Flixborough (Kevin Leahy)	Old Grammar School South Church Side Hull
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Saturday 25 January

2pm

Tony Brewster memorial lecture: Archaeological air photography in Yorkshire(Derrick Riley)	Old Grammar School South Church Side Hull
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* It is possible that one of the Field Study Group meetings, perhaps the October meeting, may take the form of a visit to "The Barbarians" exhibition at Scunthorpe museum, but definite arrangements have not yet been made. Please contact Bryan Sitch for further information.