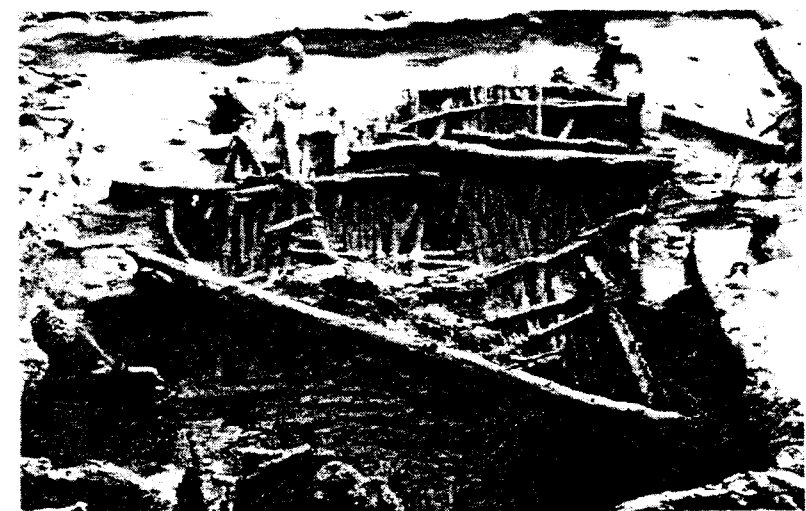


ERAS News

EAST RIDING ARCHAEOLOGICAL SOCIETY

No 45 AUGUST 1997



Lecture programme

Easington

Bainton

Melton trackway

Denmark

*Thornborough and
Middleham*

CBA Forum

Iron Age conference

Beverley Westwood

Boxgrove lecture

*Experimental Iron
Working lecture*

*Transactions of the
East Riding Antiquarian
Society*

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Cover photographs

top: general view of the foreshore looking west towards
the excavations

bottom: area 1, east-west aligned trackway
photographs from the Centre for Wetlands Archaeology

Editorial When you look at your new membership card, enclosed with this newsletter, you will notice a major difference to our 1997/98 lecture programme: it will be held at the University of Hull. The decision to change the venue was not taken lightly, as the committee realise that it will inconvenience some members, but it had become inevitable. For some time now the society has been suffering rapidly increasing costs in hiring our usual venue. Members who attended the AGM will have heard the Treasurer report that, for 1996/97, the Society's expenditure exceeded its income; this is obviously not a situation which can be allowed to continue, as Mr Micawber would doubtless have agreed ("Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery."). Various alternatives were explored by the committee, but the only suitable place found was the University of Hull, on Cottingham Road. Room 28 in the east wing of the Wilberforce building (a concrete block in the middle of the campus, previously known as Social Sciences) has been booked. Some members may know the site from having attended evening classes, but a map will be included with this mailing (ignore the instructions on the first page about reporting to Reception to be assigned a parking space – that only applies during office hours).

On the positive side, there is adequate free parking and those members who have been reluctant to visit the Old Town at night should feel safer as there are always people around while evening classes are running. The closest car parks for the Wilberforce building are those to the north of the building, most

easily approached from the Inglemire Lane entrance (but you will probably have to leave from the main entrance on Cottingham road as the Inglemire gate is locked later in the evening). The car parks are not labelled on the campus plan, but are shown in light grey.

As a society I think we are very lucky in the first class speakers our various Programme Secretaries have arranged for us (and some speakers have even returned the compliment, appreciating an interested and lively audience!). Peter Halkon has again arranged a splendidly varied programme and has written brief notes about the different lecturers (see below).

There are a couple of separate sheets in this mailing which I will briefly mention. The annual dinner (plus quiz) will be held at the White Hart, Alfred Gelder Street, Hull on October 8. The booking form should be returned to Penny Douglas no later than September 30. A second sheet invites you to respond if you might be interested in the suggestion of an ERAS trip to Denmark in 1998. There is yet another form at the end of this newsletter if you wish to order any copies of the Transactions of the East Riding Antiquarian Society. (You may copy the form if you prefer not to cut it out) Brief summaries of the contents of the various volumes, together with prices will also be found at the end of this newsletter.

Finally, providing there is no sudden monsoon or tidal wave in the next few days, the ERAS excavation at Easington begins on Friday August 29. Opportunities to excavate are rare these days, so do come along if you are interested (site details pages 4 and 5).

ERAS LECTURE PROGRAMME 1997/8

Please note the new venue in the Wilberforce Building University of Hull

17th September Reports meeting – a chance to catch up with recent archaeological activities from various people working in the region. This will include Rodney Mackey reviewing work on the Easington barrow, reports on the work of Humber Archaeological Partnership, the Bainton Project and the 1997 season's excavation at Hayton.

15th October Sonia O'Connor Keeping the past together. Archaeological conservation and investigation
Sonia is Honorary visiting Fellow in the Department of Archaeological Sciences, University of Bradford. An accomplished speaker, she has been responsible for conserving some of the most exciting archaeological finds from the region, including the Coppergate Anglo-Saxon helmet and Medieval wax writing tablets from York.

19th November Roy Friendship-Taylor A peep into the past at the home of Tiberius Claudius Severus. Excavations at the Late Iron Age settlement and Roman Villa at Piddington, Northants
The Upper Nene Archaeological Society under the direction of Roy and Liz Friendship-Taylor have been digging this site since 1979, with the aid of a great many volunteers. This exemplary project has been able to chart the rise and fall of a settlement from its origins as an Iron Age farmstead with round houses to a large villa with a bath-house. Anglo-Saxon burials have also been found there.

17th December *Damian Goodburn* **Reconstructing the Dover Boat**

In 1991 a major road construction resulted in the discovery of a Bronze Age boat, with many similarities with the sewn plank boats from North Ferriby on the Humber foreshore. A nationally acclaimed expert in ancient timber technology, Damian Goodburn, who works at the Museum of London, has been involved in an exciting project to replicate this vessel.

21st January *Vivien Swan* **People and pots: ethnic minorities in the Roman army of Britain from Hadrian to Severus**

Vivien Swan is one of the leading experts on the pottery of Roman Britain. Formerly based at the Royal Commission in York, she is the author of "Pottery in Roman Britain" and "The Pottery Kilns of Roman Britain". Her recent research has attempted to put new meaning to pottery sherds, suggesting that North African and Gallic troops serving in the Roman army in Britain brought some of their culinary habits with them.

18th February *Brian Ayers* **The origins and early development of Norwich**

Brian Ayers was an original member of the Humberside Archaeology Unit, and directed excavations in Hull's Old Town. Now Principal Field Archaeologist for the Norfolk Archaeology Unit he has done much to shed light on the development of one of England's foremost Medieval towns.

18th March *Barry Cunliff* **The Iron Age Communities of Danebury and its region**

Professor Cunliffe of the Institute of Archaeology, University of Oxford, is one of the foremost archaeologists working in Britain today. His excavations at Fishbourne Roman Palace and Roman Bath made him a national figure and he has appeared on TV programmes such as Chronicle and presented archaeology programmes for BBC Radio. An internationally acclaimed expert, he is the author of the standard works on Iron Age Britain. The long term project centred on the Hampshire hillfort of Danebury, which he directed, is one of the major contributions to British archaeology.

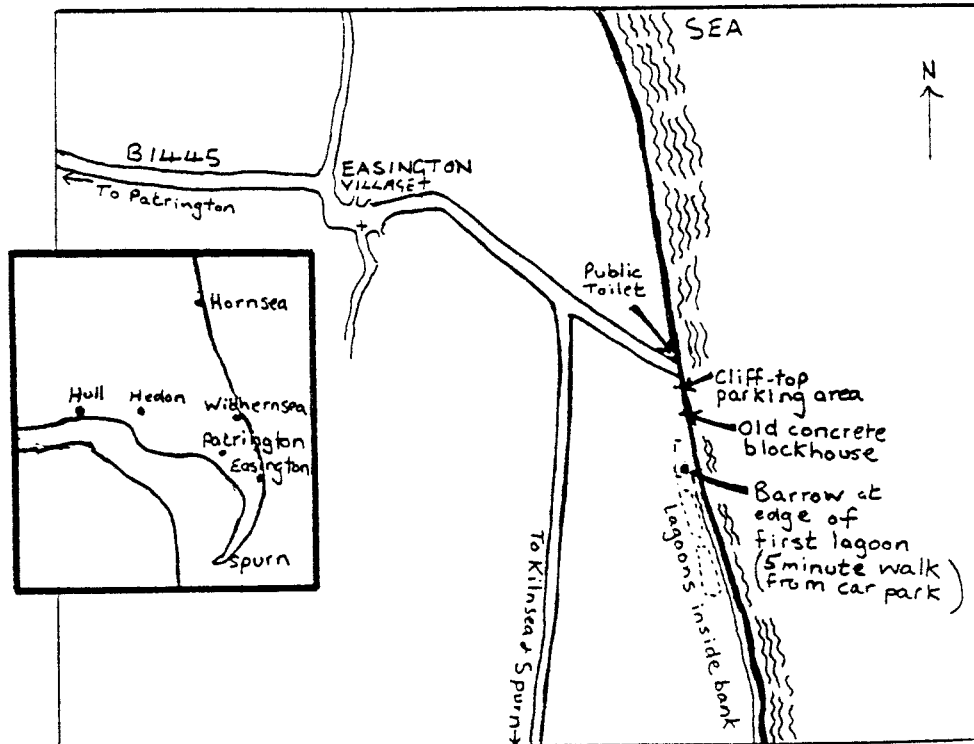
15th April **AGM The Humber Wetlands.**

Based in the Department of Geography, University of Hull, and sponsored by English Heritage, the Humber Wetlands Project is managed by Robert Van De Noort. After intensive programmes of field walking and palaeoenvironmental work the team have already published important volumes on the wetland archaeology of Holderness and the Humberhead Levels. They are beginning an exploration of the Vale of York. This lecture will provide a review of their work in our region.

EASINGTON BRONZE AGE BARROW EXCAVATION

- ◆**DATES** Friday 29 Aug and continuing every day except Mondays for 4 – 6 weeks
- ◆**TIMES** 10am – 5.30pm (or just as much time as you can spare)
- ◆**PLACE** Map reference TA4087/1808
From Hull take the A1033 past Hedon to Patrington, then the B1445 from Patrington to Easington. Go through the village and, immediately after, bear left to the clifftop next to the caravan park. Leave vehicles in the clifftop parking area and walk south past an old concrete blockhouse (5 mins only)
- ◆**BRING** Kneeling mat, trowel, packed lunch (and old clothes!)
- ◆**VOLUNTEERS** are very welcome. All volunteers must be paid-up members of ERAS (because of insurance cover) and nobody under 15 years of age without checking first (contact numbers below)
- ◆**SAFETY** Please ensure that you have had an anti-tetanus jab within the last ten years

For more information phone:
Rod Mackey 01482 866816 or
Kate Dennett 01482 445232



THE BAINTON PROJECT

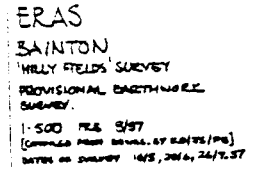
As part of the continuing Bainton project, members have carried out site survey work to the west of the village, in an area known as "Hilly Fields". The objective has been to provide first hand experience of field surveying (including how to deal with inquisitive livestock!) and to record and hopefully identify the various features. Methods used to date have involved setting up a principal baseline and then establishing right angled offsets using a cross head, several models of which have been demonstrated at Field Studies meetings.

In addition, members have continued with map documentary research, with a view to confirming the location and ownership of the buildings that once stood on the survey site, plus any other information relevant to them. These buildings include the former manor house to West Bainton.

Future aspects to be addressed during the next few months include road and trackway tracing, prehistoric features (particularly barrows) and a survey of village buildings.

Peter Bartle





It was, not surprisingly, Ted Wright, that discoverer and excavator of the Ferriby Boats, who noticed what appeared to be two wooden structures emerging from the intertidal mud at Melton. Increasingly worried by the results of erosion, mainly caused by the Humber navigation channel moving nearer to the north bank, he approached David Crowther at Hull Museum in the summer of 1984 – which is how members of ERAS came to be working in 'glorious' mud (also familiarly termed 'gloop', 'slop' and other less printable alternatives) in the autumn of 1984. The work, taking place at weekends, involved recording and excavating

Though the complete extent of the wood could not be determined, the structure was interpreted as a platform or part of a trackway, either connected with

river craft or allowing improved access over marshy ground.

ERAS members have kept a somewhat intermittent watch over the foreshore area in an attempt to monitor the erosion of remaining wood. Conditions are difficult because the wood can only be seen clearly when weather and tidal conditions combine to clear the area of some of its sloppy mantle.

Now to the recent activity, which has resulted in Melton featuring in at least four newspapers and television's Look North and Calendar. As you all know, the Humber Wetlands Group, funded by English Heritage and headed by Robert Van de Noort, have been conducting an extensive and intensive survey of the present and former areas of the Humber basin. So far, they've published reports on Holderness and the Humberhead Levels and are currently working in the Vale of York region. In July this year, following a field visit to the Melton foreshore, they decided to excavate two eroding structures. The excavation was carried out between 15 July and 1 August by William Fletcher, Henry Chapman and an MSc student. As I hope you can see from the cover photograph, the results were impressive. Structure 1 (shown in close-up) is the western end of an east-west aligned trackway which seems to extend for approximately 20m, while Structure 2 (only a few metres away, at a slightly higher level)) is the southwestern end of a southwest-northeast aligned trackway.

The condition of the wood seemed better than that excavated in 1984 (as far as I remember) and the structures, taken as a whole, more complete and less damaged. They are much more obviously linear than the 1984 structure. If the dates turn out to be very similar, perhaps the arrangement of wood excavated in 1984 could be an extra hurdle or platform put down in a particularly wet patch of a marshy area that already had sufficient traffic to warrant two lengths of trackway. Structure 2 in the recent excavations had a layer of roundwood placed loosely on top, perhaps as the route became wetter as a result of heavy traffic or rising water. The preliminary conclusion of the Wetlands team is that both structures have been short trackways across tidal creeks, linking areas of saltmarsh.

The trackways had been held in place on either side with parallel lines of sharpened stakes driven vertically into the ground (visible on the cover photograph). Four of these long stakes have been removed for species identification, study of the axe marks and preservation. The axe marks are remarkably fine and sharp and the long stakes are in good condition: even the original bending over of one of the stake tips as it was driven into the ground has

been retained. Two radiocarbon dates will be obtained from each site and samples are also being subjected to palaeo-environmental investigations and analyses. Those of us interested in this muddy but archaeologically fruitful area await the results with interest. Returning to my comment at the beginning about the difficulty in imagining a day on the foreshore at Melton, c1000 BC, I may not be much closer to that leap of perception, but the estuarine region could well have been a useful and productive environment. It lay beside an important waterway, if it had a saltmarsh vegetation it would have been suitable for grazing and for wild fowling, and we now know that access across it was sufficiently important to make worthwhile the careful construction of substantial hurdles and trackways.

I would like to acknowledge the use of the wetlands website <http://www.hull.ac.uk/wetlands/melton.htm> and permission to reproduce photographs from that website.

Finally, if anyone has any photographs of the 1984 excavation, would they please let me know,

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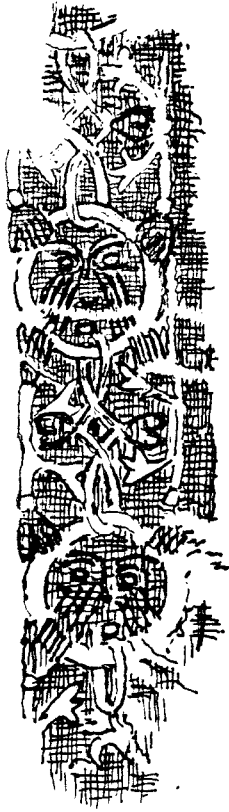
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ADVERTISEMENT

York Minster Library has a data-base of 250,000 entries on Yorkshire men and women before 1550. The data base can also be searched for items, such as place names. The library has other material on computer, such as executors' accounts.

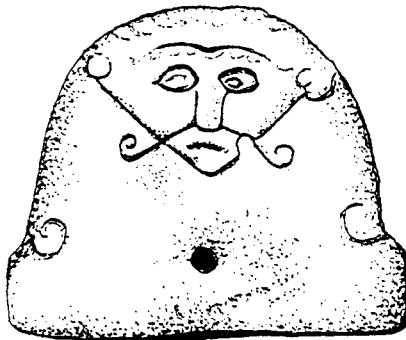
A search for up to 3 surnames with their various spellings, costs £12.50, and cheques should be made out to -The Dean and Chapter of York. There is no charge for an unsuccessful search. Enquiries to - Biographical Data Bank, Minster Library, Dean's Park, York YO1 2JD
Send no money initially.

DIGGING INTO DENMARK



Tom Wray, an ERAS committee member, has visited Denmark several times as part of his job, and was there again in March this year with his wife Pauline. While there, they found time to visit several monuments, pre-historic burial grounds and museums in the Jutland peninsula, that part of Denmark linked to the rest of Europe by the border with Germany.

Tom has also compiled a visitor's guide to Denmark which will be available to ERAS members. This lists many more monuments, sites and museums of archaeological interest. The guide will be useful for independent travellers to Denmark as well as to groups. Full of historic treasures from 2000 year old 'bog people' to Viking ruins, Denmark is an excellent place to explore.



soapstone bellows shield from Snapton (Viking) height 20cm

THE PREMIER attraction in northern Jutland is Lindholm Høje in Nørresundby, just over the Limfjord from the city of Aalborg. It is the site of Denmark's largest late Iron Age and Viking Age burial ground. In contrast to most other burial sites, the positions of most of the graves at Lindholm Høje are visible. This is partly because they were originally marked out by stones and partly because they have been protected by a thick layer of shifting sand since the Viking Age.

The site, which contains about 700 graves, was in use from sometime in the 6th century until the middle of the Viking Age. Most of the graves are cremation graves surrounded by triangular, oval or ship-like stone settings. The grave goods consist of personal items for everyday use as well status-giving imported objects. The graves represent the last resting place of the inhabitants of a nearby village, of which traces have also been found. The ground plans of enclosed farmsteads are marked out at the site.

South of the burial ground, a unique cultivated field from the Viking Age has been excavated and preserved. The soil had just been ploughed into a number of long parallel strips when the field was engulfed in a thick layer of shifting sand.

The first archaeological investigation of Lindholm Høje was made in 1889 by Kristian Bahnson from Denmark's National Museum. This was after a colleague visited the hill of shifting sand the previous year and declared that the stone settings were 'probably not without interest.'

Nothing more was done about the site for several years. Then, in 1896 the eager amateur archaeologist and dancing teacher Augusta Zangenberg probed the area with a steel rod and excavated three of the stone settings she found. The artefacts were sent to the National Museum together with drawings of the graves. In an accompanying letter she wrote:

'Everything indicates that the whole area is filled up with Iron Age graves and as several of these may provide good information I find it my duty to inform you of my findings. I will be pleased to hand everything over to the National Museum — except for the beads which I would like to keep for myself...'

In the 1880s there was no law protecting antiquities against destruction, and Augusta Zangenberg was not the only one who found Lindholm Høje interesting. Others undertook excavations and much information about the outskirts of the graveyard has been lost. At this time, the hills belonged to a person who wanted to sell to the highest bidder. But the antiquities were saved when a planter by the name of A.F. Lassen purchased the area. He donated it to the municipality and made it a condition that the area was to be open to the public and that any prospective investigation had to take place under the auspices of the National Museum.

Large scale excavation of Lindholm Høje did not, however, take place until 1952. During the German occupation of Denmark in World War II, the Germans dug trenches and set up gun emplacements across the hills. In the walls of the trenches prehistoric graves could be seen. The National Museum's excavation lasted six years and took place under difficult circumstances. The archaeologists had to cope with both snowstorms and sandstorms.

Close to Lindholm Høje burial ground there is an excellent museum. Opened in 1992, it was presented to Aalborg municipality by the cement works Aalborg Portland to celebrate its 100th anniversary. The large and attractive museum interior contains a fine exhibition of artefacts uncovered at the site, together with reconstructions and models. The exhibition covers the history of Lindholm Høje and its excavation, as well as neighbouring sites from the Iron Age and Viking period. There are displays on grave sites, the village, weapons, Viking Age ships, the king and country, coinage, the Limfjord, trade and traffic, domestic animals, fields, wells, the blacksmith, carpentry, the bronze-smith and the amber worker, bone carving and comb-making, food and cooking, beads, hygiene and more.

An English chronicle tells how English women appreciated the Nordic men because they combed their hair every day, washed every Saturday and changed clothes often. The information is partly confirmed by the many finds of late Iron Age and Viking combs.

Fyrkat is a circular Viking Age fortress just west of the town of Hobro, about 50 km south of Aalborg. The fortress is situated on a small headland jutting out into a broad river valley and, during our visit this March, was covered in snow. The construction of the fortress follows a strict geometric ground plan consisting of a circular rampart with four gateways connected by two straight roads which divide the area inside the rampart into four equal quarters. Each quarter contains a block consisting of four identical long houses enclosing a courtyard.

The fortress was built around the same time as Trelleborg, a similar construction on Sealand, i.e. 980 AD. An associated burial site shows that Fyrkat was inhabited by men, women and children. Only one of the four buildings in each block appears to have been used for dwelling purposes. Archaeological evidence suggests that the other buildings functioned as smithies, stores, stables and workshops for gold and silversmiths. Outside the fort perimeter, a full-scale replica of one of the Fyrkat houses has been built.

The history of Denmark goes back much earlier than the Viking Age of course, and prehistory is alive in the Danish landscape. Dolmens and barrows, remains of the first dwellings and other archaeological finds tell us of the life of those early days.

We visited **Lundhøj**, which dates from around 3000 BC and is said to be one of the best preserved passage graves in Denmark. Lundhøj lies in the middle of a farmer's field near the village of Hurup, near the west coast of northern Jutland. There was no one around when we arrived, but the office was open so we went inside. We paid the Dkr 5 entrance fee for the self-guided tour, took the key to unlock the gate at the entrance to the grave, and a couple of candles to light our way inside.

Lundhøj burial mound is about 30 metres in circumference and five metres high and surrounds the passage grave (or megalith tomb). The chamber itself was discovered in 1837, when an excavation was made from the top down into the mound, but no more than the chamber itself and the adjoining small room were cleared out on that occasion. It was not until 1890 that the passage was opened completely, and at that time the south-western end, where the stones had been removed previously in order to obtain access to the chamber, was closed again.

All that is known about what the tomb contained is that the remains of unburned human bones, a fine battle axe of stone and some earthenware sherds were found in the small room. In the side of the mound itself, above the cover stones of the passage, a clay vessel was found in 1890 containing cremated human bones and certain small bronze objects dating from the Late Bronze Age.

This type of passage grave is said to be of a shape and structure peculiar to Scandinavia. It dates from the middle of the Late Stone Age in the third Millennium BC.

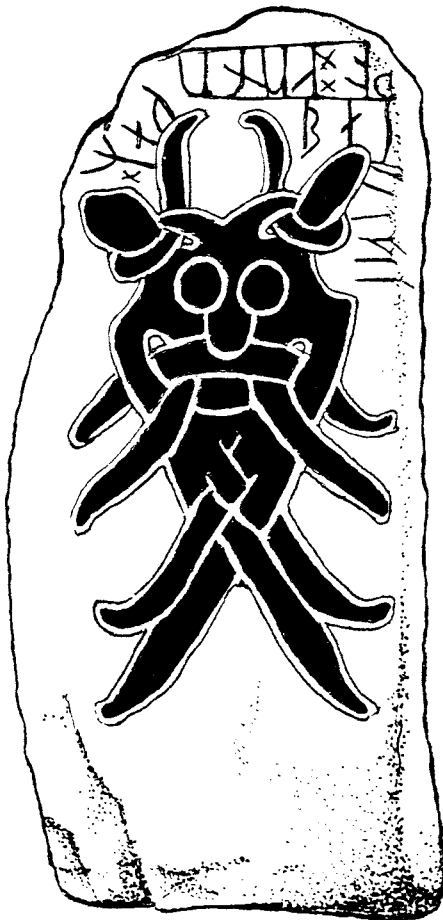
At **Ydby Hede**, a few miles south of Lundhøj, we visited what is claimed to be the largest group of Bronze Age tumuli in Denmark. In this prehistoric 'churchyard' there are about 50 mounds. The site itself lies on the edge of Skibsted Fjord, where there are lots of trails and spots suitable for picnics. At this and many of the other sites mentioned in this report, there are information boards, most of which contain a paragraph or two in English.

'The grave mounds in Ydby were built during the late Stone Age and the early Bronze Age, about 4400-3000 years ago,' explains one of the information boards at this site. 'From the beginning, the barrows only covered

one grave. In connection with later burials the barrows were often enlarged several times. Special chemical conditions in the barrows have preserved the Bronze Age peoples' clothes until today.'

We also visited a well-preserved unopened passage grave at **Blakshøj**, near Frederikshavn. 'These stone age graves were built by the first Danish peasants around 3200 BC,' explains the information board at this site. 'They were built as graves for the leading members of the early farming society. The dead persons were buried with a few personal belongings and some pots and food and drink. Each grave was used for several burials. Possibly they were family graves used by the same family generation after generation. Passage graves are found all over western Europe as far as southern Spain.'

Dolmens like **Stenstuen** (near Frederikshavn) and **Rampen** (west of Sæby), which we also visited, are Denmark's oldest stone built burial places. 'The barrows consist of one or more stone built burial chambers surrounded by a mound and a row of large stones. Only the members of the most distinguished families were buried in dolmens.'



The Århus stone: runic stone 1000AD

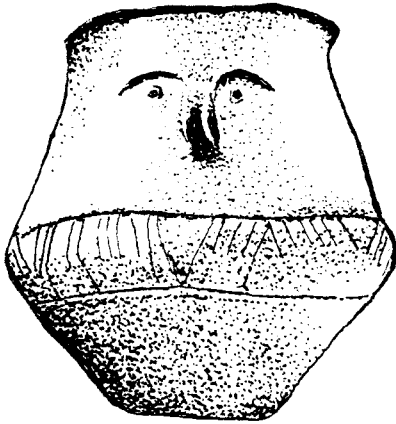
On the centre of Jutland's east coast, the city of Århus has been an important trade centre and seaport since Viking times. Today it is Denmark's second largest city. Set in a wooded area just south of the city centre is **Moesgård Prehistoric Museum**. It should not be missed. It is packed with an impressive collection of artefacts from the Stone Age to the Viking Age, including a roomful of rune stones. The most extraordinary exhibit is the Iron Age Grauballe man, found preserved in a nearby bog in 1952. The dehydrated, leathery body is amazingly intact, right down to its red hair and fingernails. Examinations showed him to be a 30-45 year-old man who was killed by a deep slash across the throat, before being deposited naked in an old, water-filled peat cutting in a bog at Grauballe near Silkeborg. The Grauballe Man is thought to have been sacrificed to ensure fertility and good crops, or to achieve good fortune in some dangerous situation.

In the museum there are models, descriptions and finds from several different grave types, including megalithic graves. The burial monuments were a prominent feature throughout the Funnel Beaker Culture (3400-2800 BC). The large long barrows from the early part of the period were impressive constructions, with extensive surrounding wooden palisades and wood-built chambers. Later, the prevailing building material became stone, and in the dolmens and passage graves the ring-walls as well as the chambers were constructed of huge stones.

Above all it is the dolmens which are the characteristic feature of the landscape, with their free-standing chambers and rows of often extremely large perimeter stones. The passage graves look less impressive from the outside, with considerably smaller ring-stones, and with chambers hidden by the mound. If, however, you clamber through the long passage into the spacious chamber, where most people can stand upright, the passage graves prove to be technically impressive building structures.

Because of their permanence and easy accessibility, the chambers of dolmens and passage graves have been regularly employed as burial places from the time they were built and far into the Iron Age. Often the contents from earlier burials have been cleared out to make space for new interments.

The majority of the Bronze Age finds in Moesgård Museum come from graves, nearly all of them from barrows. Originally there have been an estimated 80,000 barrows from the Bronze Age, slightly under a quarter of which still remain, having survived the increasingly intensive cultivation of the land.



Bronze Age face urn, Moesgård

The gold horns in the Moesgård exhibition are not the originals, nor are they casts of the originals, but they were produced on the basis of drawings and descriptions worked out immediately after the horns were discovered. Both horns were found in a field near Møgeltonder, the long one in 1639, and the short one in 1734; but in 1802 they were stolen from the Royal Art Chamber by a goldsmith, who immediately melted them down into jewellery of various kinds. The horns were manufactured in Denmark around 400 AD.

Also on display at Moesgård is a huge timber foundation structure excavated from Danevirke, the rampart on Denmark's southern frontier at the bottom of the Jutland peninsula. The earliest part of this great earthwork was built in 737 AD as a fortification against enemies from the south, and there is a good deal of evidence that already at that time Denmark was united into one kingdom. In excavations in 1971 a number of large 'caissons' were discovered, built of heavy oak beams, and serving as the foundation for the rampart in a water-logged area of meadowland.

The Moesgård collection also includes a large number of artefacts from archaeological excavations in Viking Age Århus. The display is accompanied by a narrative describing everyday life and production of craftsmen in the fortified commercial town.

A trail dubbed the 'prehistoric trackway' leads from behind the museum through fields and beech woods down to a beach. The trail, marked by red dotted stones, passes reconstructions of Iron Age buildings and graves, and of cult sites from the Stone Age and the Bronze Age.

Half-timbered houses, cobblestone streets and ancient churches are thick on the ground in Denmark, but a

few places are singularly unique. **Ribe**, the oldest town in Denmark, has an exquisite historic centre encircling a 12th-century cathedral. Dating back to about 700 AD, the town is situated a few miles south-east of the port of Esbjerg in southern Jutland, and was an important medieval trading centre. The old town is a tightly clustered place, easy to explore. Tourists are thick on the ground in season, however, so be warned.

Situated in the town centre, with a view across the river to the cathedral, the recently-built Ribe Viking Museum stands at the heart of the spot where the first town in Scandinavia was founded. Archaeological surveys have shown that a large market once existed at this point on the river. The artefacts are displayed in the museum and show that Ribe was an important trade hub between western Europe and the rest of Scandinavia during the early Viking period. The market was divided up into many plots where different craftsmen made large quantities of pearls, combs, bronze jewellery and a wide range of other goods.

The museum also tells the story of how Ribe grew and expanded during the Viking period and was fortified with large ramparts in several stages. The Christian missionary Ansgar is known to have built a wooden church in Ribe in the 850s, but its precise location has not yet been ascertained.

Tom Wray

The first drawing in this article is of the design on an embroidered textile from Mammon grave, Jutland (Viking). All drawings from this article are by Kate Dennett

Of Course !

Don't forget that there are a number of archaeology or history related evening courses at the University of Hull, starting at the end of September/beginning of October.

The archaeology of Roman Yorkshire, Peter Halkon, County Primary School.

An Introduction to the History and Uses of Ancient Woodland in the East Riding of Yorkshire, Ronni Hewer, Hull University campus.

Archaeology: The Prehistory of Eastern Yorkshire, Terry Manby, South Cave School.

Archaeology Underwater, J Buglass, York.

This list is by no means complete. Further details are available from the Centre for Continuing Education, Salmon Grove, Tel: Hull 01482 465936.

CBA FORUM

The annual symposium of the Council for British Archaeology, Yorkshire, was held this year on Saturday, 22nd February. This annual event is always a good opportunity to catch up on the work being done by all the different groups involved in Yorkshire archaeology. The following is just a selection of topics covered during the day

Pink Elephants over Wheeldale

G Lee

This item must get the prize for the most original title - even if I'm still not sure where the pink elephants come in - perhaps they'll be seen flying overhead on

the day that archaeology gets the funding that it needs and deserves. Pachyderms aside, this report described some of the archaeological work undertaken within the North York Moors National Park during 1996. At the 12th century Mulgrave Castle, archaeological recording accompanied the first phase of consolidation of the keep. Most of the early architecture had been swept away by rebuilding between the 14th and 16th century. Towers had been added to give the appearance of a hunting lodge in the early 19th century planned landscape which affected the structure of the castle in various ways.

A three year conservation project at the 14th century Danby Castle was completed, as was a limited amount of consolidation of the south kilns at the Rosedale ironstone mines.

A survey was commissioned of a section of the Casten Dyke, a late Bronze Age and early Iron Age earthwork near Sutton Bank. At the nearby Carlton Bank, a project concerning more recent archaeology is continuing. Of industrial archaeological interest are an alum quarry dating from the late 17th to 18th century, 19th century jet workings and 19th century sandstone quarries. There is obviously a wealth of archaeological sites in the National Park, which runs its own SMR.

One piece of archaeology on the North York Moors that most people know is the Wheeldale stretch of Roman road, in the news last year because of vandalism involving dislodging and smashing kerb stones. Management work to clear two cross-drains in 1996 provided an opportunity to record sections through the road. These sections showed the small sandstone slabs on the surface and the kerb stones on either side, but fail to show any foundations beneath the sandstone slabs, contrary to earlier records. There have even been some doubts that the road is indeed Roman. The speaker still believes that it is Roman, but probably late in the period.

The Pontefract and District Archaeology Society have been regularly reporting their excavation

activities at the CBA Yorkshire symposium as long as I have been attending. This year they are celebrating forty years as a society which began in 1957 as a result of the excavation of St John's Priory. They dug at Drax in the 1960s, and also at the Dominican Friary - in fact, they dug all over in the 60s! (helped by their foresight in enrolling a member with a JCB). It has not all been excavation, as illustrated by their winning the Pitt Rivers Award for recording the buildings of Swales Yard. Members also assisted at the West Yorkshire Archaeology Unit's excavations, and they continue as an active society, recent excavations involving a henge monument. They seem to run an ambitious programme of excursions, as destinations have included Egypt and China.

Gone Swimming: the wet and dry archaeology of York MAP Archaeological Consultancy Ltd

The wet part was actually within the River Foss. A watching brief was being maintained during the construction of a coffer-dam. Anglo-Scandinavian timbers were first found but could not be excavated. One area became available for excavation in May and revealed a multiphase series of wattle-lined channels and a sluice gate. After the channels were removed a clay bank with timber revetments was exposed. Finds from the Roman period to modern day were recovered. At the time of reporting, the excavation was still continuing.

A drier trench was located in part within the carriageway outside the MAFF building on Peasholme Green. The excavators expected to encounter a medieval frontage but the excavation led straight to a series of Roman dumps: kiln furniture, huge quantities of tile and more than 15,000 sherds of Roman pottery. The excavation could only go down 1.5 metres (though a further 1.5m was augered) and no kiln was found. This assemblage of ceramic material should increase our knowledge in this field.

Wood Hall Moated Manor Project

This training excavation, which began in 1988, aims to completely excavate the moated site of Wood Hall in advance of its destruction. It is sited near the village of Womersley, on the shoreline of the post-glacial Lake Humber. Finds date from the Mesolithic to post-Conquest period, though no record of Bronze Age or Anglo Saxon activity has been found yet. A number of pre-moat features were found, including a causeway track flanked by deep ditches, a linear ditch with a rich organic fill, rubbish pits and a number of small timber buildings dating to about 1150.

In 1183 a change in ownership led to changes at the site: buildings were demolished and the moat was constructed. Putting a moat around one's property is

doubtless the next best thing to owning a castle.

Four phases of timber bridge were discovered. Unfortunately it has proved impossible to date the earliest oak timbers by dendrochronology. It is thought that this early (de Newmarch) period was busy and productive - a cattle ranch involved in the production of meat, hides, butter and cheese

The de Newmarch period came to an end in 1403, when the last male was killed at the battle of Shrewsbury when his daughter was young and there are indications of a short period of neglect. Elizabeth married John Neville of Altofts (who died in 1482) and the archaeological record seems to tally, showing a massive clearance of the ground. The old drawbridge was demolished down to its foundations and a new bridge constructed. What may be thought of as a leisure phase was begun and reconstruction continued into a third phase with the Gascoigne family. An impressive gatehouse tower was built of ashlar blocks and again a new bridge was constructed, this time in two phases. This version survived until the late 17th or early 18th century.

This Gascoigne period suggests an increasingly leisured existence, with hawking and hunting, archery and bowling. There were herb gardens and flower beds and peacocks on the lawn. Three fine venetian glasses were found in the moat.

All this was found by excavation, but by the end of 1994 the Manor House itself had still not been found, so in 1995 work began in the apple orchard. A guardrobe, a kitchen area and window glass were found. The various finds suggest that the hall was demolished in the early part of the 16th century.

The Wood Hall project is due to finish in 1998. There is an interpretation centre on the site for visitors.

The Vale of Pickering Project *Dominic Powesland*

With only seven minutes remaining at the end of the symposium Dominic gave a lightening overview of this landscape project which has been going for twenty years. There have been forty acres of excavation - which made it the only site where you needed binoculars. The project has earned a reputation for the application of technology, with the attempt being made to combine the various methods. Multi-spectral data have added greatly to the interpretation of the site. It has been an operation involving rescue archaeology, research and education. Dominic acknowledged the debt owed to the late Tony Brewster.

Early work on the site involved the excavation of an

Anglo-Saxon cemetery, which gave an insight into the relationship between the prehistoric and the early Anglo-Saxon, because the prehistoric features would have been visible to the early Anglo-Saxon settlers. A large body of textile evidence has survived as well as the 'usual' A/S brooches. A spring provided a focus for the settlement, which included some eighty posthole buildings, as well as grubenhouse (cavity floor buildings). An important discovery was that the settlement was divided into areas of different function, depending on the underlying geology. The grubenhouse were contemporary with the posthole buildings and the speaker believes that grubenhouse are still poorly understood; what is certain is that they contain an enormous amount of evidence, on this site containing about a metre of bones.

The aim was to excavate all the Anglo-Saxon evidence and try to obtain an understanding of the earlier evidence. The methodology involved the three-dimensional recording of all finds, because it was just not possible to evaluate all the evidence within the time available. This technique has ensured that all the information is available for later study. Dominic Powesland explained that though excavation is very exciting, the analysis is very important: it is this stage which is taking place now.

It has been possible to identify posthole structures by high-resolution magnetometry and distinguish between the various sorts of posthole buildings. It must have been a tremendous initiative to establish such a large site in the early A/S period, though the settlement later contracted. The researchers have learnt about the homogeneity of Anglo-Saxon building designs. There are about ten classes of structure and, ultimately, this is evidence for the degree of sophistication throughout the county in the Anglo-Saxon period.

Why is the Vale of Pickering so important? From the earlier evidence it appears that the whole of this area of the valley was reshaped in the 4th and 5th centuries. An enormous amount of effort must have been involved in cutting and depositing deposits to establish a series of terraces. The building remains are rather obscure but are being interpreted as a series of Roman shrines. A large well was found (but there was no time to excavate it). It would appear that the early Anglo-Saxon settlement was established on the edge of a ritual space of Roman period and the ritual function continued because there was no structural activity in this area during the Anglo-Saxon. There must have been something which restricted access to the ritual space.

There were other contributions to this symposium but I hope they will be covered at the ERAS Reports Meeting on September 17.

IRON AGE BRITAIN - University of Oxford Department of Adult Education and Institute of Archaeology

7th -9th February 1997

(Peter Halkon)

In February 1997, I was fortunate enough to be able to attend the above conference, which was both immensely enjoyable and most informative. Accommodation and meals at Rewley House in the heart of Oxford's dreaming spires, was first rate, and very reasonable in cost. The aim of the weekend was to present a review of the archaeology of Iron Age Britain and to do this, some of the best scholars working in the field were invited to contribute. Organisation, largely by Gary Locke was excellent, speakers ran to time and managed the difficult balancing act of appealing to both 'professional' archaeologists, academics, Continuing Education students and those attending through general interest.

In two articles I will try to present a resume of the main points of each contribution. Should any of the contributors read this I apologise for any mistakes, omissions or misunderstandings.

Professor Barry Cunliffe began by explaining the need to view Britain in a different way, as a peninsula in Europe - a point emphasised by his redrawing of the map. He presented a new model for Iron Age Britain dividing it into different systems of interaction which varied as the Iron Age went on. In the early Iron Age he identified Western Atlantic and Central European zones, operating in Europe. Within these zones were the trade routes of the Danube/Rhine/Seine systems with distinctions between innovating and consuming societies.

West Central Europe was ideally situated on the Rhine to Mediterranean network and became a core area. It was in this zone that the Hallstatt Chieftains gained prestige, illustrated by rich graves such as those at Vix (Burgundy) and Hochdorf, where burials were accompanied by four-wheeled carts and rich grave goods. Britain and Ireland were on the periphery of this system c. 700-600BC. Warrior chiefs seem to have been an important element in the peripheral zone, represented by Gundlingen type swords and characteristic shapes. Between 600 - 500 BC new types of artefacts came in to circulation, such as daggers, which British craftsmen took over and modified. This system collapses some time after 500BC

The core zone then moved north to the areas of the Marne and Moselle rivers and Bohemia. The type site

for this zone was La Tene. Burials of the rich and powerful were now accompanied by two wheeled vehicles, such as those of the Arras culture of East Yorkshire. The traditional explanation for distribution of similar types of burials was invasion. Professor Cunliffe regarded this view as an oversimplification. Similarities between areas were perhaps best explained by the existence of a North Sea zone in which gifts, ideas and concepts were exchanged. The fruit of all this was the La Tene art style seen in such objects as the Wandsworth shield boss, Witham shield boss and Torrs pony cap. Eastern Britain was part of the North Sea zone and continental influence and invasion was no longer necessary to explain cultural similarities.

To the west was the Atlantic Zone, with obvious place-name and geographical links, such as Cape Finisterre and Land's End. This area included Gallicia, Armorica, SW Britain, Wales, and Southern Ireland. This zone, with Brittany central to its development, was mineral rich. Artefacts which link Atlantic Europe included pots resembling stamped bronze vessels. A vessel from Cerrig-y-Drudion, for example, has close affinities with objects from Western France.

Sites were also similar with rounds, cliff castles and promontory forts in Cornwall and Brittany and Fougous (underground passages) in Armorica, Cornwall, S. Wales and S.W. Ireland. Sea transport was of great importance in this zone. The northern limit of this system was Scotland - a "land beyond which there is nothing".

Between the North Sea and Atlantic Zones was the Centre South Zone - the zone of the hillforts, though not necessarily the most important zone - Wessex is no longer to be seen as the centre of the world. This system is abnormal, the normal being the Eastern zone. Wessex hillforts demonstrate Marcher mentality as the area forms an interface between two systems. The regular conflict which the hillforts suggest made it a likely place for the procurment of slaves. Diodorus Siculus records that a slave = 1 amphora of wine. Very large numbers of Dressel 1 amphorae, dating to around 150BC have been found at Hengistbury Head which was a major place for receiving other imports such as raw purple glass. Professor Cunliffe asked whether hillforts were connected with this trade.

In the Eastern Zone there was constant contact between Gallo-Belgica and Eastern Britain. The Thames Estuary was very important. In Europe, Julius Caesar's wars against the Gauls had a profound impact and helped to create a new political geography in which Lugdunum (Lyon) becomes important. New roads to the channel were built.

Between 50 BC - 43AD Europe became Roman, with the exception of Britain. During this period the southeast corner of Britain was important, as exemplified by the Aylesford Swarling culture and its rich burials, such as one from Baldock which included fire-dogs, amphorae and other imports. Major centres, or Oppida, grew up e.g. Camulodunum (Colchester) and Silchester. The social and economic systems of this area were very sophisticated.

Conclusion:

Modern Geopolitics is conditioned by the reality of geography. Atlantic countries are still joined by links - to counter balance this was the so-called 'Hot Banana' of industrial power running between Birmingham and Milan. Perhaps the development of Iron Age Europe should be seen in a similar light.

Gary Locke - The Ridge way

Gary Locke described work carried out in a research area concentrated on White Horse Hill, looking particularly at Late Bronze Age, Iron Age and Romano-British periods. The work is carried out as a research/training excavation and summer school. Work in the area has previously been done by Martin Atkins last century and Bodlian Library and British Museum. Richard Bradley conducted work at Ram's Hill and the Oxford Archaeology Unit have also done research in the area.

One of the main aims of the current project is to examine change and continuity and the longevity of use of White Horse Hill from the Early Bronze Age to its use as the site of a Victorian Fair, held in Uffington Castle. The White Horse itself was regularly scoured until 1857. The Horse was closely associated with mythology. Similarly, nearby Dragon Hill was where St George was supposed to have slain the dragon.

The Horse has now been dated by Optically Stimulated Luminescence dating of the hill wash which occurs in layers between earlier versions of horses. Three dates have been obtained which centre on 1000BC \pm 350. This pushes out the theory that the horse celebrated Alfred's victory against the Danes at Ashdown. Neither was it contemporary with late Iron Age coins depicting horses, the horses on the coins having some apparent similarity in style as the Uffington White horse.

In 1994/5 excavation on a shoulder of land outside the hill fort yielded a pre-hill fort enclosure and linear earthworks as well as a ploughed-out round barrow and a Romano-British burial. Snails suggested open grassland environment in the later Bronze Age.

Geophysical survey was carried out which showed surprisingly little activity in the interior of Uffington Castle. It contained less than 100 pits compared to Danebury, which had over 4,000. There were a few post holes but no obvious round houses. A gully and a pit lined with clay was found, possibly associated with water storage.

The sequence of ramparts was standard, with a first phase box rampart dating from 5th or 6th BC modified in the 3rd century BC into a dump rampart. In the first phase two sarsen stones were placed on the bank.

A huge amount of Romano-British material dating from the late 3rd-4th AD was found and entrances were broken through the rampart at this time. This was possibly the site of Roman Fair. Coin losses suggest people passing through to a possible temple on a spur of land outside.

At Segsbury hillfort, which had a view over Vale of the White Horse, English Heritage carried out a geophysical survey in which round houses and pits were found as well as an inner ditch.

There are new ideas concerning round houses. A large proportion of Iron Age huts have their doors to the East, the direction of the rising sun. Oswald suggests strong preference for living in the E or SE part of the house. Was this part of a belief system as well as practical? Certain houses had west facing doorways. Were these for evil spirits? Parts of humans were found around these houses such as the skull of a 6-8 year old child: also the torso of an adult. As at Danebury special deposits were placed in pits e.g. a dog of whippet type. Other pits were not easy to explain in terms of storage as they were backfilled with no artefacts.

The associated field systems were examined by Rhodes in the 1950s and have now being re-mapped by RCHME. These date from the late Bronze Age to the Iron Age.

George Lambrick The Thames Valley

This scarp and vale countryside with a flood plain has provided an unusual insight into a sequence of hydrological change. In the early period it was wooded, and later there was a much higher water level with seasonal flooding. Arable land use was expanded which led to erosion of sediments. Petra Day and Adam Parker have recovered a complete environmental sequence from the Pleistocene to the Middle Ages. In about 2500BC a massive clearance took place with increase in grasses and ferns. By 200 BC there was further removal of trees and shrubs. There was more grass and cereal with a change in the pollen

record indicating a change from bracken and rough grazing to a much lower level for bracken and fern. This suggests an intensification of farming at end of the Iron Age.

In the Cotswolds there were defended enclosures and also differences in settlement pattern, suggesting different social relationships. At Tower Hill a hoard of metal artefacts was found in the doorway of a round house. Wessex Archaeology had been working on a Thames island at Wallingford and found a pattern of posts. In excavation of the Eton boating lake a high status Late Bronze Age site has been found and further evidence for land division along the river.

At Yarnton on the edge of gravel terraces on the flood plain, a whole sequence of Early Bronze Age houses and other features were excavated, including D-shaped round buildings with superimposed plans. The sequence extends to the RB period. Settlement continued on the edge of the gravel terrace. In the Early Iron Age there is evidence for arable non-intensive agriculture and burials, which is very unusual for Southern Britain. These have been radiocarbon dated to 300-225 BC.

In the Stanton Harcourt area there are open and enclosed settlements. Further aerial photography plotting shows more settlements, consisting of linear spreads of pits with polygonal penannular gullies. Eight hundred pits have been totally excavated. Phasing is difficult and it is not known which were in use at the same time. The settlement showed functional variation. Some blocks had settlement and different crafts. Loom weights and metal working were found in isolated areas. There was considerable variety as early houses were of post ring type. There were also four post structures which are generally rare on the gravels. These may be as early as Late Bronze Age. Numerous special deposits were found including dog and baby burials.

In the lower lying areas the habitat has been reconstructed from insects and plant remains. There were enclosures in pastoral surroundings and grazing land was very important. In the Middle Iron Age, settlement short lived as the area was subject to flooding. There was seasonal use of the flood plain associated with coherent groups of settlements with grazing over earlier prehistoric monuments.

On the Cotswolds during excavation at Rollright, ditches and pits were found. At Birdlip (famous for a burial with a mirror) enclosures were also excavated. At Preston near Cirencester there was a polygonal enclosure and Roman road near a woodland environment.

Defensive sites were also found on the gravels. Coin distribution suggested that these were associated with Catuvellaunian expansion. At Dyke hills in the middle of Abingdon, a massive moat had been found. This could be a new Late Pre-Roman Iron Age oppidum lying underneath the present day town. Clustering of defences suggests that there was an area of conflict and a break in continuity in the Late Iron Age caused by Roman Invasion.

John Dent -

Iron Age East Yorkshire

Dr Dent, who has recently completed a Phd Thesis on Iron Age East Yorkshire, surveyed a major area of investigation in the Great Slack. Burials play an important part in our understanding of Iron Age East Yorkshire. Now around 1000 burials in the Arras tradition have been excavated. In the early period, graves were placed directly on the surface under a mound, and therefore do not survive if ploughed. Twelve of the East Yorkshire examples had cart burials which had basic features in common. The yoke was placed on the west of the body, corpses were placed in a crouched or flexed position with a N-S alignment being most common. Continental influence was shown in the square barrow and some brooches and other metalwork.

A third type of burial was the very crouched inhumation which suggests secondary status in the community. A fourth type, which is slightly later, includes the extended E-W ones, which were buried with weapons and only one brooch.

The sequence of burials was worked out by brooch types and intercutting barrows. Cowlam is the earliest, though both Burton Fleming and Wetwang cemeteries had barrows with no graves and earlier settlement. The latest have involuted brooches. By the Second century BC homogenous barrows with deep graves were the norm.

The most spectacular burials were those found at Wetwang in 1984: three cart burials with rich grave goods, probably dating to the 3rd-4th century BC. There were no brooches but magnificent decoration of artefacts, such as an iron pin decorated with gold. Coral imported from the Mediterranean was also used. It is interesting to note that the richest burials were at Arras and Great Slack rather than Rudston.

At Kirkburn in 1987 Ian Stead excavated a cart burial which included a mail coat. An adjacent burial contained a superb sword. In the Garton Station cemetery, burial may have been associated with the River Hull, which flowed over the cemetery in flood. In one grave with a sword and 14 spearheads, water bubbles out of the ground.

On the western escarpment there were square enclosures with causeways. At Garton Station, a square trench was backfilled and replaced by a ditched enclosure, which may be a possible sanctuary. The same site had been focus of ritual for a long time as there was a Neolithic long enclosure and an Anglo-Saxon cemetery there. Nearby Elmswell was also a focus for religious activity at its springs.

By the second century BC the landscape was laid out and the framework filled up. Dyke system associated with late Bronze Age hill forts, e.g. Paddock Hill, divided the landscape. It is likely that some dykes continued into the Roman period.

There are around 4,000 rectangular enclosures within the area of study, and droveway settlements such as Bell Slack and Blealands Nook. Many are similar to Hodson's Little Woodbury culture with iron ring headed pins and triangular loom weights. Chalk figurines are associated with later activity.

In Wetwang/Garton 80 houses have now been excavated, and only two of these are enclosed. Dr Dent called for archaeologists to be less coy about these settlements - "no shilly-shallying- let's call it a village". Infilling from the valley sides had been caused by soil erosion. Mixed farming was carried out with grazing and outfield cultivation.

In the lowland area, important work has been carried out by Peter Halkon around Holme-on-Spalding Moor, especially around Walling Fen. The evidence for iron working here is of particular significance and related to two log boats at Hasholme and South Carr Farm.

Sites have been excavated at North Cave and Brantingham. In some places there was a drainage problem - hence the density of square ditched enclosures. At North Cave steps were found going into a waterhole consisting of an old wooden ox-collar.

In the later period there was increasing contact with the south. Dragonby type vessels have been found at Bursea, Brantingham and Risby.

Rudston, the core area for the PhD thesis, remained very important with continuity of ritual significance. The ridge above Rudston and Gypsy Race were very significant landscape features.

East Yorkshire was a zoned landscape in the Iron Age. A model can be constructed with an arable core associated with grazing and cemeteries. The Wolds area had been partitioned by Dyke systems.

Peter Halkon

ERAS LECTURE SUMMARIES

Experimental Iron Working: putting the iron back into the Iron Age

19 March 1997

Peter Crew

There was a strong local link with the speaker because two of the prominent prehistoric iron producing areas in the country are the Foulness valley (where Peter Halkon has based his research) and North Wales (where the speaker has worked).

Peter Crew started with a slide of an Ordnance Survey map of North Wales which showed various copper mining sites used in the Bronze Age, for example the Great Orme, also iron working sites and late Iron Age metal finds. He then quoted Barry Cunliffe as saying that most of the evidence which is shown on maps like this is anecdotal. However, the speaker went on to talk about two sites at which the evidence is far from anecdotal. The first site was the Bryn y Castell hill fort, 700 meters in diameter, where the archaeological evidence has survived because the area has never been ploughed, an important factor in an area of such shallow stratigraphy, 4 -5 cm between the surface and solid rock. At the site, evidence was found for roundhouses, furnaces, smithing hearths and concentrations of slag. Geophysical surveying assisted the identification of areas of slag.

Over seven years the site was totally excavated, recovering two tonnes of slag. There was little evidence for metal working or pottery but stone hammers were found with particles of smashed slag adhering to their surfaces. Only two small iron objects were found, one of them referred to as a 'backscratcher'. However, they did find a group of fragments of seamless glass armlets, some of which were similar to ones found at Rudston and Wetwang. Peter Crew suggested that there is an association of these objects with iron working sites: they are expensive exotic trinkets reflecting the wealth of the iron workers.

The second site described was Crawcwellt. As this site was visible as low walls, some forming enclosures, some without any orientation, it was originally classed as a Bronze Age field monument, but has proved to be an undefended Iron Age site. At area A on acid moorland, excavation yielded evidence for four successive timbered buildings. As there were about is difficult to interpret, but in the centre of the roundhouse sequence was a series of iron working features, indicating that the iron working was definitely carried out inside the buildings. This observation runs counter to the generally held belief that it was an open air process; in fact the need to control temperature and draughts by the exclusion of wind and rain make the indoor option a more logical choice. Using a thermoremanent technique of archaeomagnetic dating, the iron furnaces dated to

the last 200 years BC.

The internal temperature of the furnace reaches about 1200°C, which causes the clay to become vitrified and very fragile so only the bottom tends to survive. This has resulted in some books describing as a 'bowl furnace' what is actually the surviving base of a shaft furnace. The furnace wall was at least 15cm thick, enabling the heat to be retained. A slide showed the blowing hole through which, not surprisingly, air was blown. Three furnaces were excavated within a 3m diameter pit. Apart from information about iron working, furnaces are a useful source of dating material (by archaeomagnetism) on sites like this where there is no datable pottery and the alternative of ¹⁴C dating is expensive and imprecise for the Iron Age.

Other areas of the Crawcwellt site were B, around a large oak tree, and C, where there were two stone-founded huts and slag dumps. One building had a six stake hole entrance and was considered domestic in function, whereas the final building was at first thought to be a Bronze Age cairn but proved to be a hut with a furnace in the middle and a stone anvil. The building was only three metres in diameter so perhaps the furnace belongs to an earlier building. Visible were a vitrified centre surrounded by unburnt clay and evidence for stakes which were part of a supporting wattle structure.

Crawcwellt is a four hectare settlement of which only 2% has been excavated, so remote sensing with a fluxgate radiometer was tried in an attempt to locate the iron. Unfortunately, the local geology includes magnetic rocks which produce anomalies. High resolution geophysics were used to produce a greater density of measurements. These were then processed in a manner to compress the middle readings and emphasise the high and low. In a slag dump there is a lot of cancelling out of randomly aligned pieces, but the method enabled the hearths to be distinguished from the background geology. There is potential for future technical development in this area.

Magnetic susceptibility surveying was also used. This technique, which uses pulsed magnetic fields, works well on thin spreads of slag. By correlating the results on the data plots with actual quantities found in those areas which have been excavated, it becomes possible to estimate the slag in the unexcavated areas and hence the total amount of slag in the whole site.

	Quantities of slag
Moore's Farm, East Yorks	5200 kg
Crawcwellt	3700 kg
Maiden Castle	250 kg
Kes Tor	2 kg

What does the 3.7 tonnes from Crawcwellt mean in

terms of iron production and charcoal use? A programme of experimental work was embarked upon; at the time of the lecture some eighty experiments had been completed. It became apparent that iron smelting is, and was, a highly specialised operation. This was not something that a few farmers did in their spare time. These professionals may have wielded considerable economic and political power.

Much of the information in standard textbooks is based on 19th century sources of iron ore, but in the Iron Age bog iron (basically a very thick iron pan which can form above beds of clay) would have been the principal raw material. Large surviving deposits of this can be found in East Yorkshire.

During the experimental work seven types of furnace have been used to try to raise the contents to temperatures of 1200 - 1500°C. Neither bowl type furnaces nor those with a thin wall are successful, despite these being described in many of the standard texts. During the process alternate layers of ore and charcoal are fed into the furnace over a period of 8-10 hours. From this a 'bloom' is produced which is not pure iron but an iron-rich material. One wonders how people first realised that this could be a useful substance - but only after two days further work. The bloom is quite spongy in texture and has a relative density of about 5 compared with a density for iron of 7.5.

During the subsequent refining process of the bloom into a billet much weight may be lost but it is then suitable for forging. By drawing the billet out into a long thin bar it could be shown that the iron did not contain voids and pieces of slag. Some 1500 of these 'currency bars' or 'trading bars' have been found, including 100 in one hoard - a packhorse load. Sometimes, one end of the bar was reduced in thickness and bent around to produce a socket, further demonstrating the quality of the product. (Typical bars, weighing about 1kg, were passed around for members to see. A comparison could be made with a piece of commercial wrought iron treated in the same way; it had cracked and was clearly inferior).

Measuring the amounts of fuel used and time involved in each of the processes has shown that iron production was a time-consuming, resource-hungry activity, far more so than previously assumed.

	process weight of charcoal	man days
smithing	25 kg	6
bloom smithing	8 kg	2
billet smithing	7 kg	2
bar smithing	10	2.5
total	50 kg	12.5

As a result of this rather revolutionary work the interpretation given to some iron objects has been reviewed. A two pint tankard with a nice design on the

bottom was originally thought to have been left by a chieftain fleeing from the Romans, but Peter Crew believes it simply indicates the wealth of the local iron workers. An attractive fire dog found in a peat bog in a ritual context was previously thought to be an import but is now considered to be the product of local iron workers of great skill and wealth. It may have required 3.5 man years to produce. The tyres on a chariot buried at Garton Slack would have taken 200 man days and 8 tonnes of charcoal in the production of the raw materials.

Following the experimental work estimates have been made of the amount of bar iron produced, based on the amounts of slag measured. For Bryn y Castell the figures are:

production cycles	180 (x 3 = 540)
raw ore	1800 kg
wood equivalent	90 tonnes
bar iron produced	90 kg (= 7 man years)

What does this mean in British terms? If the iron requirement in southern England is based on the loss of a small knife per site per year, then that requirement would amount to one tonne of iron per year; that alone would account for the iron production of three of the largest sites in the country. The implication of these calculations is that there must have been hundreds of sites the size of Bryn y Castell, Crawcwellt and Moore's Farm to account for all the iron artefacts which have survived. So where are they? New sites have recently been found in Somerset, Devon and East Yorkshire, totalling nineteen pre-Roman sites. It is possible that much useful evidence has just not been recognised. When the slag is collected by flotation and magnets more than a third of it by weight is less than a centimetre in size, and of that, more than a third is less than a millimetre.

No currency bars have been found from the Forest of Dean and only very few from Wales, East Yorkshire or the Weald of Kent. The theory is that the iron was transported to hillforts to be made into bars. There is some evidence from Danebury that currency bars were being chopped up. Several sorts of trade iron of different compositions were found at Danebury, indicating a degree of sophistication to the trade. One form of trade iron that has only recently been recognised as such is the hooked billet. These are now being found more regularly so perhaps it is a case of knowing what one is looking for.

In his final comment the speaker suggested that the tradition of chariot burials arose in East Yorkshire because of the wealth of the area in the Iron Age as a result of the iron industry. There is perhaps potential for showing the link with the iron producing sites, but only some iron is distinctive enough to identify or

classify it by composition. In any case, you rapidly get away from the original because, as a valuable commodity, iron was recycled. This is why it is thought better to concentrate on the trade iron.

This lecture describing such innovative research work stimulated a number of questions from an appreciative audience.
Pete Walker & Ed..

Boxgrove - the first European and the vole clock

Jan 15 1997

Simon Parfitt

This palaeolithic site has been made famous by the discovery of a human tibia which represents the earliest hominid from the British Isles and one of the earliest from Europe. In true archaeological tradition this important find was made after the official excavation had come to an end. In the winter of 1993 a local amateur volunteer carried on working after the main digging season, on a 1.5m trench at the end of a sequence of 5m square trenches. The human tibia was found in the last trench and was virtually the last bone to be found. Flattened and fractured, it was removed in a block of sediment.

Simon Parfitt (our speaker, and Assistant Director of the Boxgrove Project) was called in and as he began to dismantle, clean and reconstruct the fragments he became more and more excited. Most of the shaft of the tibia could be reconstructed but the bone is not complete: only parts of the articulation at either end survive. The most striking feature of the tibia is its size, as demonstrated when the speaker showed the audience a cast of the bone. As well as considerable length, the shaft has very pronounced muscle-scar ridges. A CT (Computerised Tomography) scan at University Hospital indicated that this was the tibia of a robust individual, a very active type. His (or her) height is estimated at 5' 11"-6'. Other hominids from the same time period (late *Homo erectus*, pre-Neanderthal) all seem to be massively built. A cross-section taken of the tibia shows the cortical bone in the middle to be far thicker than in a modern man of a similar size. The bone is also somewhat flattened from side-to-side rather than circular in cross-section, probably because the bone is built to cope with bio-mechanical stress.

Small pieces of the tibia have been sectioned to estimate the age at death, thought to be 40-plus. In addition, it is hoped that chemical analysis will yield information about diet. From the evidence of massive size, lack of pathology and age at death, this hominid must have been successful in his environment.

Early hominid remains like this are very important because although there is evidence for the origin of

man in Africa, so much dating evidence is missing - the date of man's moving out of Africa and of his arrival in Europe. At a site in Andalucia in southern Spain archaeologists are claiming a date of 1.8 million years, which would date the fossils as old as those of the Oldava Gorge. However, the claim that the fossils at Orce are hominid in origin is controversial: some archaeologists argue that they are equine. The site has yielded tools but it has proved difficult to fit them into the geological context. A site in northern Spain is perhaps more securely dated within a sealed context. A date of 800,000 before present has been obtained and there is some archaeomagnetic dating.

What most people agree is that by 500,000 years ago southern and western Europe were occupied. At that time there was a land bridge between Britain and Europe across which migration could take place, with the population perhaps spreading by way of coastal routes and up river valleys. The landscape was totally different then, temperature being the major controlling factor. The Boxgrove interglacial predates the Anglian Glacial which was a very cold phase during which the ice sheet moved far south in Britain, slicing through the land bridge between Britain and Europe and forming the Channel.

A number of sites have been discovered which are thought to be contemporary with Boxgrove but they have produced a range of different tools: High Lodge has produced scrapers, Warren Hill beautiful ovate hand axes and Kents Cavern very crude hand axes, while Boxgrove itself has well-made hand axes. Thus it is not possible to use tool typology to date sites of this period.

Geology

The Boxgrove site is in a quarry (in fact two quarries, side by side) on the southern dip slope of the South Downs, near Chichester in West Sussex. South of this is the western coastal plain stretching to Selsey Bill. Boxgrove was a coastal area in the interglacial: the speaker showed a slide depicting a schematic view of the bedrock geology - a series of steps formed by sealevel changes. Over the last half a million years geological conditions have contributed to the preservation of a landscape of between 500,000 and about 120,000 years ago.

The quarrying activity involved extracting flint-rich gravels and chalky gravel. Sand was also quarried from lower down and between the sand and gravel lay a horizon rich in handaxes and flints flakes. The excavation has been a rescue operation, working quickly, but digging a series of test pits has enabled the geological sequence to be worked out; this is extremely important on this site because

archaeological finds are present throughout and the geology is vital to their dating.

The earliest part of the sequence was formed by a rising sea level cutting into the chalk platform, leaving a 100m cliff and depositing the Slindon sands. In the beach gravels which built up at the base of the cliff many hand axes have been found. It is thought that people were attracted by the high quality flint revealed by frequent cliff falls.

As the sea retreated large lagoons were formed behind shingle bars or sand banks. The lagoonal muds which were deposited are very important because the archaeological material found within them has been deposited *in situ*. Above this, representing the later Ice Age, lie the 15 metres of gravel which have protected the site.

This geological sequence was illustrated by the speaker with slides of a huge trench cut with the aid of the quarry company. The complicated geology, which includes cliff collapses, has influenced the method of excavation: it is necessary to identify the horizon and follow it while excavating.

Archaeology

The fan shape of a particular scatter of flint flakes from the lagoon deposits has been interpreted as the result of someone sitting on the ground and making a hand axe. Experiments have shown that this pattern of debitage does result if this activity is copied; indeed, most of the flakes from this Boxgrove scatter have now been reconstructed to deduce the process that produced them: firstly, flakes were knapped from an axe rough-out to make an ovate hand axe, but the tip broke off when it was nearly finished so the flint worker reshaped the flawed tool into a smaller hand axe. The reconstruction of this individual event which took place so many years ago is quite remarkable - the freezing of a moment in time.

The Boxgrove site has also produced the oldest antler soft-hammer in Britain, a length of shed antler with a pitted surface. Under the microscope can be seen tiny pieces of flint which have become inbedded during use of the hammer to knap flint. The antler hammer had been used so much that it has been worn down at an angle.

Many hand axes have been found at Boxgrove. One of the most remarkable slides which we saw during the lecture showed an excavation surface littered with axes, looking for all the world like the results of some axe-making dayschool! There is, however, at least one example of an axe plus pieces of flint from the tip suggesting that the implement has been resharpened, so that some tools may have been carried around and curated, not just used and discarded.

But what were the axes used for? It is thought that they were used almost entirely for butchering large carcasses. A lot of the hand axes show scratches and polishes produced by bone or skin. In one area of the site a series of knapping episodes was uncovered. It appears that at this site a group of hunters killed a horse and then made the tools with which to butcher it.

Animal bones

Animal bones have made a major contribution to dating the site and have also provided information about the environment. At the start of the excavation, no animal bones were being found, but as quarrying – and excavation – moved nearer to the cliff line this changed. In 1985 the excavators started to collect animal bones, making particular efforts to retrieve small mammal bones by washing and fine sieving.

The major dating question at Boxgrove was whether the site was occupied before or after the last great glaciation, the Anglian (478,000-424,000 years ago, also called stage 12 in the modern oxygen isotope dating sequence of ocean bed cores). Sites such as Hoxne in Suffolk are clearly on top of the glacial till and are therefore post-Anglian, and at first it was thought that Boxgrove was of a similar date because the hand axes are well-made, elegant and do not look more primitive than the Hoxne axes. But, as mentioned earlier in this summary, axe typology is not a suitable base for dating at Boxgrove. Since the geological sequence is much more complicated at Boxgrove than at, for example, Hoxne, it also has not proved suitable for providing a reliable chronology, so another basis has been sought.

The dating method used at Boxgrove is based on mammal evolution and extinctions. Across northern Europe changes in animal species have been correlated with changes in climate and some species have become date markers on archaeological sites. Thus the discovery at Boxgrove of a group of species characteristic of the warm stage before the last glaciation (such as two extinct shrews, an extinct cave bear and an extinct rhinoceros) puts Boxgrove in the pre-Anglian interglacial between 524,000 and 478,000 years ago.

Of particular importance in dating at Boxgrove is the water vole. Evolution within small species tends to occur comparatively quickly; in this particular species it was resulting in a change from rooted teeth (which wear down during the life of the animal) to continuously growing teeth (which may allow the shrew to live longer, hence the evolutionary advantage). The small evolutionary changes involved allow small dating divisions – the 'vole clock' of the lecture's title. This gives a minimum date

for the Boxgrove site of 478,000 years ago.

In 1995 and 1996 two summer seasons were funded by English Heritage to look at the geological deposits in the area of the tibia where the different horizons are all mixed up and only the chalk gravels can be recognised. Ostracod and freshwater species have been found so these are not marine or lagoon sediments. Below the tibia findspot 14 very fine hand axes were found. The hominid trench was enlarged to find as much evidence as possible and by the end of 1995 some 250 hand axes had been discovered, mostly at the bottom of the sequence. This area was 100m south of the chalk cliff where it seems that a stream ran from a fault line in the cliff. It is likely that the fresh water was a focal point, attracting animals coming to drink and feed and also attracting predators, including hominids.

No more of the owner of the hominid tibia was found but, at the very end of the 1995 season, two teeth were found from a hominid jaw, the central lower incisors. These teeth have large roots, which are primitive features; unfortunately incisors do not have the sort of distinctive morphology which would be helpful in distinguishing different forms of primitive hominid. However, quite a lot of information has been gleaned from these teeth: scratch marks on the teeth suggest that the owner was in the habit of using his teeth to hold meat while he cut off pieces with a flint implement, sometimes scratching his teeth in the process. The owner also had severe gum recession which may have caused the teeth to drop out (surely not together?) – or perhaps they were lost in a fight. Further analysis will include a CT scan. Microwear analysis may give information about diet. The find that is really needed is a skull, or parts of skulls, but the quarry area is now filled in because the quarry is no longer active – no threat: no opportunity.

This was a fascinating lecture on an important site by an accomplished speaker (though not Mark Roberts as advertised on the membership card.) I'd like to thank Simon Parfitt for the full Boxgrove Bibliography which he sent me. There is also a website at <http://www.ucl.ac.uk/boxgrove/home.htm>

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 Roberts, M B (1994) How old is 'Boxgrove Man'? Reply to Bowen and Sykes *Nature* 371:751
 Roberts, M B (1996) 'Man the Hunter' returns at Boxgrove *British Archaeology* 18 8-9
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 'Boxgrove' in *Current Archaeology* (ed A & W Selkirk) 53 324-333

A WALK AROUND BEVERLEY WESTWOOD

On the 16th of March this year Rodney Mackey took a party of interested members on an afternoon walk around Beverley Westwood, having previously talked about the history of the area at a Field Study Meeting. I had realised that there were archaeological features on the Westwood, but I hadn't anticipated just how many. It is difficult to describe something that is so dependent upon what you see in front of you, but Rodney has provided a map, tracing the route that we took and marking many of the features. Angela Gowland has helped me with the following brief notes.

.....

Medieval ridge-and-furrow was visible at the start on the flat area before Union Pit. Also visible was the road up towards the Hurn. Rod suggested that this area had been ploughed as a result of not being part of the original Westwood. The Union Pit was where the Freeman of Beverley were allowed to quarry for building stone, road stone, marl etc. A lot of houses in the wet part of Beverley were built on a raft of clay and stones. On the edge of the pit more recent archaeology was visible - a mortar spigot from World War II, shiny steel set in concrete. Also near the pit was a small barrow.

We then crossed the Newbald Road and walked up towards the Grandstand. Part of this was ploughed up in wartime, one of only two areas of the Westwood to have been disturbed by ploughing. Towards the Grandstand there is a two-celled enclosure, not visible on the ground but discernable on aerial photographs.

After this point we turned towards Burton Bushes, passing some enclosures, probably Iron Age. Looking back from the stile allowing access we could see the hollow-way, the medieval road which ran from the Newbald Road to Bishop Burton.

Inside the wood there is a large rectangular bank and ditch lost in the undergrowth, but visible where it is crossed by a path. It is probably Romano-British - indicating open area at the time and showing that Burton Bushes is not the primeval forest that some people claim.

Leaving Burton Bushes the party headed down the valley to a large hollow known as Cobbler's Well or Cordwainer's Pit, where members of the Cobbler's Guild were allowed to extract chalk.

Following the hollow-way up the hill towards the Newbald Road we could see the zig-zag lines of a

World War I army trench.

At the head of the Newbald valley is a large dewpond which was still in use until new T.T. regulations for cattle stopped them being watered at ponds, so the clay bottom of the dewpond was punctured. There are a number in the area which can be seen full of water in aerial photographs of the 1940s.

Running more or less parallel to the present Newbald Road are the remains of the old medieval road with the old hedge line.

On the other side of the road a long Iron Age boundary ditch runs into the valley bottom then appears again, heading uphill, turns a corner and heads in the direction of the Black Mill area. (It continues past there but is difficult to see). Down in the valley is an Iron Age settlement site. We followed parallel ditches down towards the edge of woodland and then we turned up towards the Black Mill crossing the newly cleared training gallop. Two Iron Age square barrows were visible near the mill, and a round Bronze Age barrow. An hollow of uncertain age, quarried at one end, has been scheduled.

Turning away from the mill, towards the Grandstand, we could see a group of five or six square barrows. Adjacent is one large Iron Age barrow and two round Iron Age barrows. It was from one of these that Greenwell excavated a chariot burial in 1875 which is now in the British Museum.

The previously mentioned long Iron Age boundary ditch could be seen to be blocked for about 23 yards where the 18th century race track crossed it.

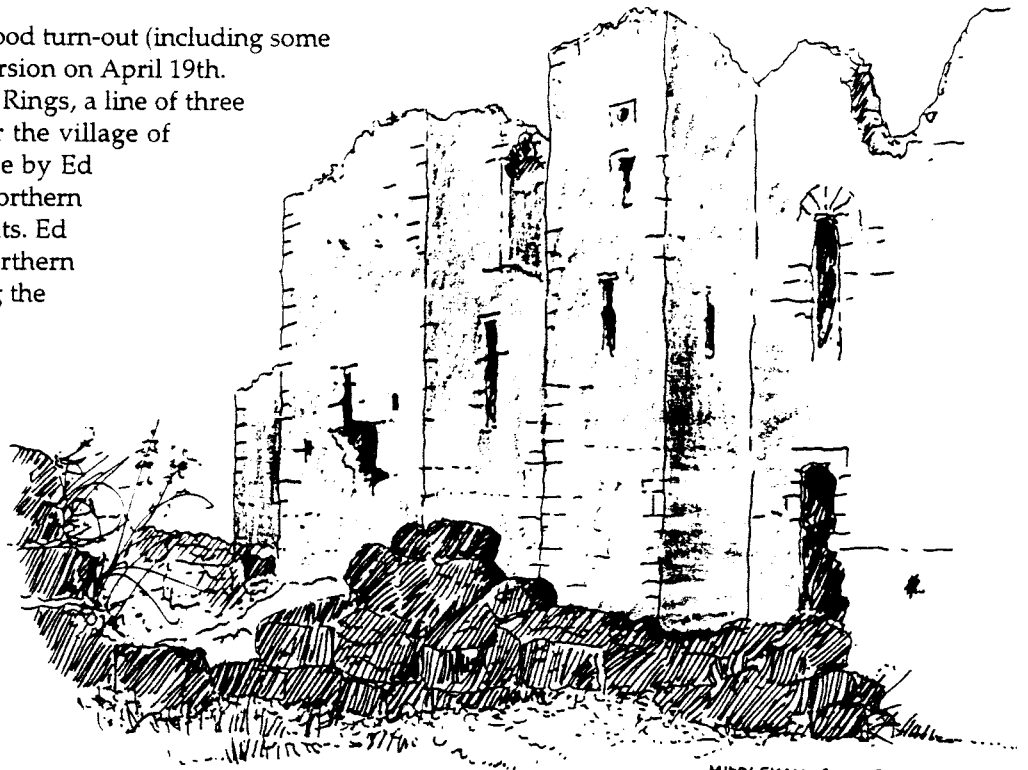
White Mill stood not far east of Black Mill. It was pulled down in 1855 after being damaged in a gale. The site of the mill's well could be seen, and a road leading to the mill.

Our guided tour finished at the site of Fishwick's Mill in Butt Close. It was built in 1761 by John Maud as a post mill on a mound. After its 99 year lease ran out in 1860, the townspeople thought that ownership should be given to the town. After something of a riot, the Freeman burnt it down. The mill mound is now levelled and the stones which were laid to mark the boundary are becoming buried in the grass.

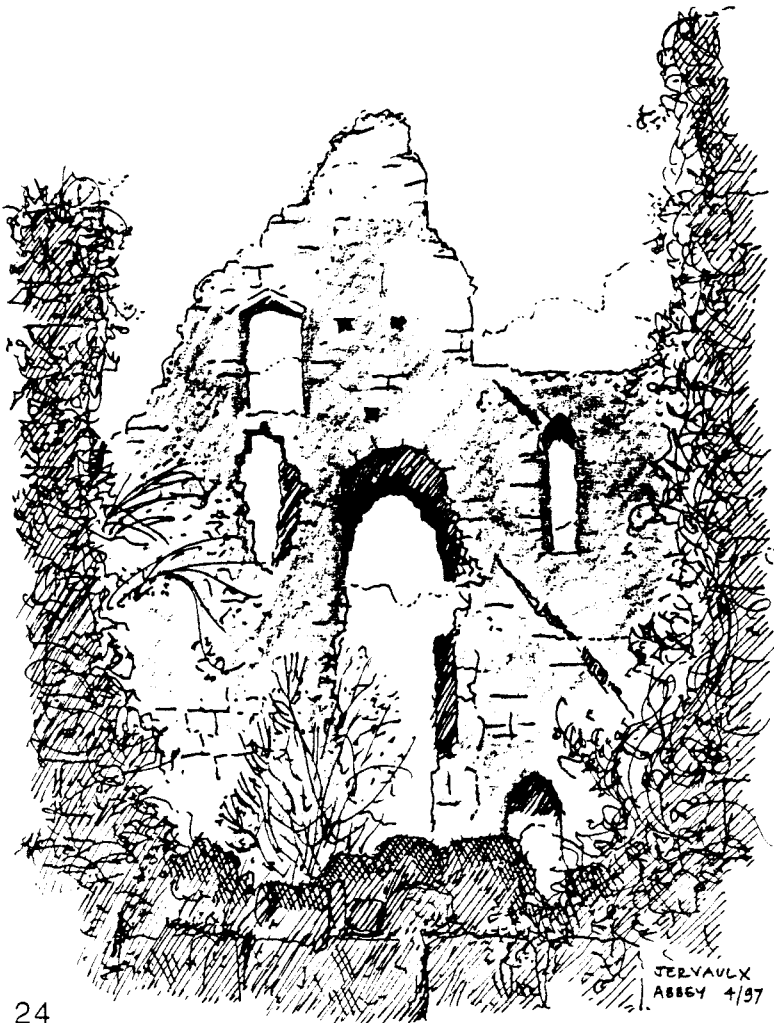
Ed: I may well have missed some items from this tour - you will have to spot them for me when you repeat the route, with the aid of Rodney's map! Even if we did not remember everything we saw, we all enjoyed the little excursion and would like to thank Rodney Mackey for opening our eyes to archaeology so near at hand

ERAS TRIP TO THORNBOROUGH HENGES, MIDDLEHAM CASTLE AND JERVAULX ABBEY

It was encouraging to see such a good turn-out (including some new members) for the ERAS excursion on April 19th. Our first stop was Thornborough Rings, a line of three Neolithic henge monuments near the village of West Tanfield. We were met there by Ed Dennison, who led us round the northern and central of the three monuments. Ed has carried out a survey of the northern monument and had brought along the detailed plans to show us. This proved particularly helpful as the northern henge is densely covered with trees and other vegetation (an additional diversion for the more botanically knowledgeable among the party).



MIDDLEHAM CASTLE
4/97 PRB.



JERVAULX
ABBEY 4/97 PRB

The Thornborough complex is currently under study as part of the Vale of Mowbray Neolithic Landscape Research Project. The area contains no less than six henges and two cursuses. At Thornborough, the middle of the three equally spaced henges covers a cursus, which indicates its origins in the Early Neolithic. A double line of U-shaped pits originally held the posts of a timber avenue. An oval enclosure near the eastern end of the enclosure resembles the long mortuary enclosures of the gravel terraces of the south of England. What is beginning to emerge is that this ritual complex held its importance over a long period.

After leaving Thornborough, the coach took us on to Middleham Castle, where numerous hostelrys and tea shops provided not only lunch but a welcome refuge from the cold wind. At Middleham Castle everyone spread out to explore the castle where Richard III spent many years as a young man.

Since Aldborough Roman Town Museum is open only for a few hours a day it proved impossible to fit it into the itinerary; Jervaulx Abbey, however, a Cistercian Abbey in private hands, is not far from Middleham. This most romantic of ruins provided a tranquil end to the excursion and a chance to see how the stone walls and arches are being consolidated while conserving their cloak of vegetation.

Transactions of the East Riding Antiquarian Society 1893 - 1948

As mentioned in the last newsletter, a number of volumes of the transactions of the above society, a precursor of ERAS, have been given to ERAS for sale to members. The condition of the books is variable. Some are in good condition and have uncut pages. Many have been damaged by damp or simply have pages yellowed by age. A few were damaged when the museum was bombed in the war. There are about 40 hardback volumes (red).

The books can be ordered at the prices listed, on a first come, first served basis and the best copies will be distributed first. A full index compiled by Dr Stephen Harrison can be viewed at meetings or by 'phoning Susan Gibson or Kate Dennett.

To give you a brief idea of the contents, Joe Santaniello has produced the following review.

TERAS 1 Meaux Abbey article is informative whilst ER Field Names should interest landscape archaeologists.

TERAS 2 Two colour plates of tiles from Meaux Abbey, a description of Huggate Dikes while, for Civil War enthusiasts, there is a transcript of the 1650 Parliamentary Survey of the Benefices of the ER (excluding Holderness, see TERAS 4 below).

TERAS 3 One for 'castles buffs' with a description and two plans of the blockhouses and 'castle' in Hull plus an extremely erroneous description of Moot Hill, Driffield.

TERAS 4 For Beverley folk, there are two gems, a charter 1752 of the Brotherhood of Tanners and the accounts etc of the building of North Bar. The Parliamentary Survey from TERAS 2 is completed with Holderness.

TERAS 5 Documents from the Record Office should appeal to Beverley residents and is a useful addition to Beverley Town Documents (Selden Society).

TERAS 6 Landscape archaeologists might find ER Field Names of interest while the 15th century Fabric Roll for Beverley Minster is enlightening (see TERAS 7 below).

TERAS 9 Tom Sheppard's article describes the Roos boat. Compare Stevenson's eight man restoration with the full-frontal in Changing Faces, Humberside Heritage Pub 9.

TERAS 10 Cole's drawings of the ER Church Fonts are useful aids to church archaeology. Bonuses are the articles and notes of the St Quintin family and Harpham church, the Roman villa, Langton and more on the Roos boat (see TERAS 9 below).

TERAS 11 A catalogue of paintings etc at Castle Howard and Naworth Castle, Cumberland dominate

this volume.

TERAS 12 Stovin's Manuscript pt I describes Hatfield Chase in the 17th century (for part II see TERAS 13 pt II above).

TERAS 13 pt I This issue is confined to a catalogue of portraits at Kirkham Abbey (House) and 2 Carlton Terrace, London.

TERAS 13 pt II Collier's description, illustrations and plate of the Roman Remains at Harpham will appeal to excavation fans, whilst the 2nd part of Stovin's manuscript (see TERAS 12 below) should interest Goole area members.

TERAS 14 The Burlington Vault, Londesborough Church, a lay subsidy roll for Beverley and plates of Roman, Anglo-Saxon and Viking artefacts are the main attractions.

TERAS 15 Poll Tax Roll (14th century) is essential reading for ER medievalists. The 'desertion' of Rowley Village will appeal to lovers of romantic history.

TERAS 16 If you like pictures of Anglo-Saxon vases, Tom Sheppard's article and plates is the one for you.

TERAS 17 This includes one of Mortimer's the Stature of Early Man in East Yorkshire, a description of the Brigg boat and illustrations of ER Tradesmen's Tokens, Arms of Hull and excavations of a manor house at Scarborough.

TERAS 18 A mixed bag with a good description of the Priory of Haltemprice, a posthumous piece by Mortimer about the Danes' Graves excavations and medieval documents at Burton Agnes (see TERAS 19 below).

TERAS 19 More documents at Burton Agnes (see TERAS 18 above) and Tom Sheppard's outline of maps and charts of the ER. There are two interesting items on East Riding Levies of the 14th century and the Trade Guilds of Beverley.

TERAS 20 Two informative accounts by Tom Sheppard are of particular note, the Arms of Hull and excavations of a manor house at Scarborough.

TERAS 21 An ER muster roll of 1625, a list of ER archdeacons from 1130 - 1898 and medieval documents from Scampson, cater to a variety of interests.

TERAS 22 Once more from the inexhaustible Tom Sheppard, once faintly disguised as TS, almost writes the whole volume with pieces of Danes' Dyke and Whaling Relics. The scholarly Rev Collier unearths more medieval documents, this time from Everingham.

TERAS 23 Tom Sheppard offers plenty of good quality illustrations of various prehistoric axes and stone 'weapons'.

TERAS 24 A glorious hotchpotch of items, mostly illustrated, include a Saxon gold ring, prehistoric finds, Roman remains and a photo of a decorated tram with a very stiff and formal driver who is definitely not going to lose his dignity.

TERAS 25 The first 137 pages are devoted to John Nicholson's Place Names of the East Riding of Yorkshire, a creditable fore-runner to A H Smith's

Place Names.

TERAS 26 Another one for the Middle Ages with detailed studies of Wyke on Hull and Meaux Abbey. Additional is an outline of early means of ER transport.

TERAS 27 pt I Roman articles of note: Tom Sheppard on Roman Kilns and Pottery near Holme-on-Spalding Moor and Philip Corder on Roman Pottery at Throlam plus Architectural Gems of ER, Yorks tokens and 14th century tiles.

TERAS 27 pt III, 28 pts I & II These yearly reports on the excavations at Brough by Corder & Romans are of seminal importance in the study of East Yorkshire.

DIARY OF EVENTS

Fri 29 Aug Easington dig starts
Easington TA 4087 / 1808

Wed 3 Sept ERAS Field Study Meeting
Unit 3 Chapel Lane Staithe, Hull

2-4 Sept Archaeological Sciences 97 conference
University of Durham, South Road
Durham DH1 3LE
Tel: 0191 374 3625 (Registration fee £36)

Sat 13 Sept Local History Bookfair 10am 4.30pm
Lairgate, Beverley

7 - 9 Sept British Association for the
Advancement of Science includes
Anthropology & Archaeology sessions
Univ of Leeds
Info from: BAAS, 23 Savile Row,
London W1X 2NB Tel: 0171 973 3076
<http://www.britassoc.org.uk>

Wed 17 Sept ERAS Reports Meeting 7.30pm
Wilberforce Building Univ of Hull
Cottingham Road Hull

Wed 1 Oct Field Study Meeting 7.30pm
Unit 3, Chapel Lane Staithe, Hull

Sat 4 Oct Yorkshire Wolds Heritage Trust with
Yorks. Gardens Trust, coach tour:
Beyond the Garden - the Designed
Landscape (1) Sledmere and the Wolds
£5 booking essential: 01759 303148

Wed 8 Oct ERAS Annual Dinner 7.15pm for 7.30pm
White Hart, Alfred Gelder St, Hull
£10.50 book by 30 Sept

 Wed 15 Oct ERAS lecture: Keeping the past
together. Archaeological conservation
and investigation *Sonia O'Conner*
7.30pm Wilberforce Building, Univ of
Hull, Cottingham Road

Sat 18 Oct Society for Church Archaeology
Annual Conference £16 or £23 incl lunch
St William's College, York, fee to:
Davina Turner, RCHME, Shelley Hse
Acomb Rd, York YO2 4HB

Sat 25 Oct Joint Day Meeting: YAS Prehistory
Research Section & CBA Yorkshire
10.30am-4.30pm Univ Coll of Ripon &
York St John, Lord Mayor's Walk, York
£18 members, £21 non-members
T G Manby, 43 Meadow Drive
Market Weighton, York TO4 3QG

Wed 19 Nov ERAS lecture: A peep into the past at
the home of Tiberius Claudius
Severus Roy Friendship- Taylor
7.30pm Wilberforce Building, Univ of
Hull, Cottingham Road, Hull

Sat 22 Nov British Academy & Prehistoric Soc
Day Symposium: Grahame Clark and
World Prehistory fee £25 (I think) incl
lunch and reception
Rosemary Lambeth, The British
Academy, 20-21 Cornwall Terrace,
London NW1 4QP Tel: 01904 671417

Wed 17 Dec ERAS lecture 7.30pm *Damian Goodburn*
Reconstructing the Dover Boat
Wilberforce Building Univ of Hull

Feb 1998 CBA Yorkshire Annual Symposium
Tempest Anderson Hall
Yorkshire Museum, York

Ed: if you'd like clarification of any of these events,
please phone me and I'll try to help, if I can.

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XXVIII (I)	1935	5	5.00
XXVIII (II) *	1935-36	7	7.50 or 2.00

* Only one decent copy others are burnt

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If your order is received before **Sept 10th**, the books will be ready for you to collect at the first lecture meeting on Sept 17th at the new venue at Hull University. Orders received later can be collected at the following lecture.

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