ERAS News

September 2010

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Comments or contributions are always welcome. Please send to the editor, Kate Dennett, 455 Chanterlands Ave. Hull. HU5 4AY

Or email <u>katedennett@katedennett.karoo.co.uk</u>

ERAS LOCAL NEWS ...

AGM New Committee

We welcome former committee member Nick Wilson as our new chairman, elected at the AGM in April. New to the committee this year is Katherine Roe. Many thanks to Wil and Fiona for continuing to accommodate committee meetings at Arram.

New Volume

The impressive new Volume 12 of East Riding Archaeologist is currently being distributed. Our thanks go to editor Dave Evans for his extensive work in putting together this volume. If you are a paid-up member and haven't received your free copy through the post or delivered to your house by one of the committee, please collect it from a lecture meeting. The book retails for £25. Many thanks to Ed Dennison for organizing the posting of the volumes to people who live out of the county, also for dealing with standing orders from libraries etc. On a very few copies, the text on pages 3-6 has been printed upside down. If you have been given one of these, please notify us and we will change it for a good copy. Dave Evans declares that he has Volume 13 well on the way, so if you have anything to contribute, now is the time to declare it.

Capturing the East Riding, Photography Competition

Groups can take part in this East Yorkshire photography competition. There are no categories and the images can be very individual or personal to the photographer. There are two stages of judging, the first being the responsibility of each participating group, the second stage involving all the winners of the first round and leading to an exhibition in Beverley Art Gallery and a smaller touring exhibition. Pictures can be digital or on film and must be taken in the East Riding, between 1st October 2010 and 30th September 2011. Further details will be in the next newsletter (providing your committee agrees to host a first stage round). Meanwhile keep your eyes open and camera ready to capture that special image. This imaginative venture resulted from a consultation process between the E. Riding Council and several arts/cultural organizations and individuals concerned in the shaping of the council's Cultural Strategy. Professional photographers not eligible.

Resistivity Survey at Wilberforce College

Rod Mackey and other members carried out a survey on an Iron Age/RB site excavated by John Bartlett and ERAS in the 1960s, in an attempt to tie in the original findings to the OS grid, but the meter did not read deeply enough, showing up only the very modern features (see overleaf).

Local History Book Fair – change of venue

The popular book fair will be held this year on Saturday 23rd October at the Treasure House, Beverley. It should be

a little warmer and more convenient than last year's venue in the Minster and the café, serving good coffee, might encourage more volunteers to help on the ERAS stall.

New Council for British Archaeology Website

CBA has launched a new website, to help people keep in touch with archaeology and to help groups keep in touch with each other. The site was developed by CBA membership secretary Paul Brayford, an ERAS member and a former chairman. Check it out at www.cba-yorkshire.org.uk

CBA visit to Hartlepool's Maritime Experience

CBA Yorkshire is running a day visit to this superb recreation of an 18th century seaport, meeting at Hartlepool on Sat 9th October, 10.30am. This is an opportunity to explore the quayside, with period buildings, shops and displays, together with a tour of HMS Trincomalee, the oldest British warship still afloat and a talk and tour of Paddle Steam Ship Wingfield Castle. £16/£14/£13. Booking date - Sept 4th, but probably still worth enquiring. Contact L. Mallinson, 45 Frank Lane, Thornhill, Dewsbury. Email chair@cba-yorkshire.org.uk

Rural Heritage Sector Appointment

David Bull attended an ERAS committee meeting, to explain his role, funded by 'LEADER' in the E. Riding. He aims to increase awareness and provide support for rural heritage, by working with community groups. A small grants scheme is planned to help groups with equipment, training and technical report writing, but not staffing. Qualifying projects must be community based, sustainable and preferably carry match funding. David can be contacted at David.Bull@eastriding.gov.uk

ERAS Publicity Stands

Membership has been decreasing over the last two years, so we are making an effort to publicize ERAS, especially to younger people. Richard Coates, Graham Myers and Colin Parr manned a stall at Pearson Park's, anniversary celebrations in Hull recently. They were in a large tent, (next to the donkey rides!) so naturally were at their busiest when it rained, but they reported a lot of interest in the handling collection and gave out lots of membership forms. Kate Dennett, helped by Richard Coates, Enid Waudby and others also organized a stall with a handling collection of artefacts at Beverley Frairy during the Town Trail opening celebrations, which again resulted in lots of interest. Let's hope we get a few new members. NB. Of 198 addresses on our membership list, 20 are out of Yorkshire, a further 20 being in N, S, or W. Yorkshire.

Dominic Powlesland Lecture at Weaverthorpe

Check the events page for details.

Editor

ERAS Open day at S.A.M.

Southburn Archaeological Museum (SAM) would like to welcome ERAS members, friends and family to visit the museum on Saturday 2 October between 10:30 and 15:30 for an open day.

The collection and offerings at SAM have continued to develop since the formal opening in July 2008 and some recent additional special exhibits include;

- The replica Iron Age Chariot built for the BBC 'Meet the Ancestors' Programme on loan from the British Museum.
- Bronze bowl excavated and loaned to SAM by Mick Carr.
- Replica Viking Loom constructed by Brian and Maxine Birkett.

In addition, there is the SAM collection of artefacts dating from the Neolithic to the twentieth century. In addition to finds from Southburn, there are finds from other JSR farms in the locality and loaned items from the Arram and Burshill excavations.

We have a 'hands on' room suitable for all age groups where you can experience history and archaeology by drawing, making pots from air-hardening clay, using optical and digital microscopes, making mosaics, doing sand tray excavations, playing the Viking hnefetafl, board game, card and loom weaving and more. This gives you the chance to handle and examine in detail ancient pottery, coins, bones etc.

You will find the museum on the JSR Southburn farm (YO25 9ED for sat nav). Turn west off the A164 Beverley to Driffield road just north of Hutton Cranswick or south off the A614 following the JSR sign near Kirkburn.

The entrance to the farm is by the main JSR offices and the Museum entrance and car park will be signed from here.

The SAM brochure including a map can be downloaded from our website www.samatsouthburn.com

Bill Coultard

Are you practical and inventive or do you know someone who is?

Several successful surveys have been carried out using our resistivity meter, over the last few years. However, the machine type, widely used by archaeological groups, both commercial and voluntary, reads down to a depth of only 0.5m. On some sites, especially on clay soils, ditch fills, for example, do not show up at this depth, as the moisture-retaining levels are lower down. For this reason, our meter was largely unsuccessful on sites at Arram, Beverley Westwood and most recently at Wilberforce College grounds.

If we are able to buy a multiplexer, a small electronic addition, which would make our machine much more versatile, in particular, enabling it to read and image the ground at three different depths (½m, 1m & 1½m) simultaneously, it would be a big improvement. The current prototype developed by Bob Randall of TR Systems Ltd. is made of steel and wood (see below), and is too heavy. A lighter version is needed, with a capability of being easily dismantled or folded. We are looking for someone who could design and make a prototype 4-pin frame for the resistivity meter. Please contact our Vice-Chair, Rod Mackey on 01482 866816 or e-mail: rodmackey@rodmackey.karoo.co.uk if you think you can help.



ERAS VISIT TO DERBYSHIRE SITES, JULY 2010

Brenda Doyle



After a long period of hot weather the forecast for Saturday 10th July was variable so, as seasoned archaeologists, we set off prepared with everything from sun-cream to cardigans and cagoules. The first stop, in Derbyshire, after the coach manoeuvred along winding and increasingly narrow lanes, was Arbor Low and Gib Hill Barrow. The driver seemed reluctant to take the coach up the farm track, but summoned up his courage and drove up the bumpy track to the yard where we disembarked. We headed off across the fields to what has to be said was, on first sight, an unprepossessing group of stones. Closer inspection showed it was a fascinating small henge, enclosing a circle whose stones appear to have been deliberately flattened. Although compact, this henge monument, with internal stone circle, belongs to a relatively rare group of 13 monuments stretching in distribution from Scotland to Cornwall, with Avebury and Stonehenge in between.

Arbor Low is made up of a Class II Henge with one entrance and a single internal ditch, an internal stone circle of material taken from a local outcrop rather than stone from the ditch, a central 'cove' and a round barrow cut into the SW section of the bank. From this barrow came the only dating material in the form of a cremation and two food vessels of a style used in the early Bronze Age, between 2200 and 1850BC.

The 'cove' (a term coined by William Stukeley when describing an example at Avebury) in the centre of the monument is speculated to be a reflection of earlier megalithic tomb chambers and is thought to be the first structure on the site. Close by, but possibly not contemporary to it, an extended adult skeleton burial and a rock-cut pit containing soil and a human ulna was found in the early 20th century. Dating from similar pits found less than ten miles from Arbor Low has been put at 2350 –



Above: The henge ditch and bank, taken from the entrance. Above left: Lesley Jackson and Zhi Parish inspecting the fallen stones of the circle.

1950BC. Other finds from the henge ditch are sparse but range from flint scrapers to an antler pick.

A short distance away, Gib Hill, a second round barrow, had also produced a food vessel burial which was possibly secondary to an earlier oval barrow and these appear to be linked to the henge by an earth bank and avenue. All in all this was an interesting site which, due to its compact size, may lack the impressive majesty of Stonehenge but was (as decided by myself, Graham M and Fiona) a 'local henge for local people'! It is clearly central to a landscape dotted with round barrows and must have had some major significance that we can only speculate on, some 5000 years after it was constructed.

We then moved on to Haddon Hall, a delightful example of a fortified manor house, nestling in the valley of the River Wye on a limestone bluff, just two miles from the town of Bakewell. First mention of a house occurs in a settlement document of the late 12th century, originally following the plan of a Norman fort with a curtain wall enclosing a tower, chapel and courtyard with, presumably, other wooden structures. Small sections of the 12ft high wall can still be seen and the structure was probably built as a deterrent rather than a fortification. Extension work, emphasizing the wealth and status of the owners, was started in the late 14th century with the construction of a kitchen suite and the great hall which now forms the entrance to the house from the lower courtyard.

Work continued in the 15th century with a period of major refurbishment and alterations to the chapel, including the building of the octagonal bell tower and fresco seccoes

plaster decoration on the walls. During the Reformation these frescoes were plastered over and whitewashed but were uncovered and carefully restored in the early 20th century. Fragments of paintings included impressive floral displays, three kings that would have illustrated a Medieval morality of earthly vanity, images of three skeletons, a mysterious Medieval lady and a portrayal of St Christopher, that would originally have covered the walls and been brightly painted as an aid to worship and to the understanding of the Christian message for the congregation. They were an intriguing insight into the appearance of this Medieval place of worship. There is also some fine stained glass of the period although much has been lost or stolen and the windows today contain a rearrangement of the original glass.

The rooms of the hall contain a fine mixture of panelling and plasterwork, incorporating the boar's head of the Vernon family and the peacock of the Manners family, interspersed with rose and thistle motifs. Work continued into the Elizabethan period and culminated in the construction of a long gallery overlooking the lovely gardens and with fine views of the surrounding countryside. The windows in the long gallery were modified in the late 16th century and the diamond shaped panes are fascinatingly set at different angles to maximise and make the best of the natural light and lend the exterior view of the gallery an unusual and fluid appearance. This work was part of the last phase of building as, in the early 18th century, Sir John Manners was created first Duke of Rutland and the family moved to Belvoir Castle, leaving Haddon Hall uninhabited for over 200 years until the ninth Duke and Duchess of Rutland began the extensive restoration which continues today.



Throughout the Hall there are many fascinating nooks and crannies, wonderful pieces of furniture and tapestries which span the centuries and were collected by the ancestors of the family which now inhabits this delightful house as a family home. However, in spite of all the impressive contents and architecture that makes up the hall, one of my main memories is the discussion, sparked by our very pleasant and knowledgeable tour guide, about

the origins of the word 'threshold'. Was it there to contain the reeds or threshes that covered the floor or does it relate to the entrance-way of a building being used to thresh wheat using the natural through draught?

We then drove to Bakewell town and dispersed in search of Bakewell puddings, ice-cream, cigarettes (*yes Graham M, I will name and shame!*) and, the main purpose of the stop, the Parish Church. It contains the largest collection of fragments of Anglo-Scandinavian, free-standing, sculpture on any one site and these tell the story of the formation of what we know as England, from an amalgamation of Anglo-Saxon and Viking tribes. Many of the fragments were found in the foundations of the church tower and north-west alcove during rebuilding in the 1840's and the external cross shafts come from track-ways near the town.

The engraved designs could come from 800AD onwards but Viking settlement in the east Pennines dates to the early 10th century so it is more likely that the crosses can be dated to this period. The images are a combination of pagan and Christian messages with Woden on his horse appearing at the top with Ratatosk, a squirrel who communicated with the gods, below them eating what are possibly the fruits of the vine - the fruit of Christ. I had problems recognising this figure as a squirrel but will bow to the consensus and interpretation of those far more learned than me! A bow and arrow are aimed at Ratatosk, a Christian image relating to the words of God. With pagan panels on the east face and Christian panels depicting Christ crucified and St Peter it would seem that the pagans were being asked to recognise Christ as their chief god instead of Woden. On the smaller cross shaft there are more abstract forms of the fruit of the vine and these show absorption of the Irish sculptural form of Celtic interlace. There are also symbols representing the Trinity in a three-cornered interlace and a panel containing a guilloche – a twisted loop in a figure of eight thought to represent the coming together of many tribes.

The shafts are suffering from acid rain deterioration and there are plans for a better exhibition with more information but many authorities have to be consulted so it may be many years before this happens. The stones are an unusual find in the environs of an otherwise ordinary parish church in a small Derbyshire town. They were an interesting conclusion to a day trip of sites and artefacts which spanned the centuries and just touched upon the wealth of history that this part of the country has to offer. It is a shame the trip was not better attended, as those members who did come along had a great day out.

(Much Arbor Low information for this article was taken from hand-outs produced by G. Myers largely based on publications by Aubrey Burl. – Editor)

Commercial Archaeology and Grey Literature

Keith Foster of the Council for Independent Archaeology (CIA) regularly sends useful emails reproducing articles from Chris Catlin writing for Salon, the electronic newsletter of the Society of Antiquaries. This item discussing an article in the journal Nature earlier this year caught my eye, so I asked Keith if we could reproduce it (with acknowledgement to Chris Catlin, Salon and Nature) Editor

Nature magazine turned its attention recently to an assessment of what has been achieved by the 'explosion in commercial archaeology' of the last twenty years, and the resulting 'flood of information'. The article concludes that the legacy of commercial archaeology is a huge amount of 'unpublished literature', and that archaeologists are struggling to 'figure out how to find and use this'. The report quotes our Fellow Richard Bradley saying that his research into so-called 'grey literature' (unpublished or low print-run reports that are difficult to access through libraries and archives) transformed his understanding of the Bronze Age and made him aware that 'what I was teaching would be out of date without looking at the grey literature'. For example, he found dozens of reports showing that settlements in England had remained strong during the Bronze Age and had not suffered a population crash, as academics had long thought.

The problem, argues the report, is not just that the evidence is buried in the offices of archaeological units or local planning officials; academics also struggle to keep up with the avalanche of new data. Our Fellow Barry Cunliffe is quoted as saying 'there is such a vast body of untapped stuff out there; this means there is a hold-up in academic development'. Professor Cunliffe is especially concerned about units that say 'I'm sorry, my client is not prepared to make such and such a report public'. 'It ought to be made mandatory that all these reports should be made available', he says.

Echoing Barry's view, Oxford colleague Gary Lock, Fellow, wrote in *British Archaeology* in 2008 that he was unable to access reports on several developer-funded projects that had been carried out in the part of Oxfordshire that he was studying and that 'archaeological information is being treated as a commodity to which developers control access'.

Fellow, Kenneth Aitchison, head of projects and professional development at the Institute for

Archaeologists, disagrees. Grey literature 'does what it is supposed to do and is essentially accessible', he says, arguing that the issue is not one of access, but rather of awareness, attitude and understanding: 'the major archaeological contractors are run as charitable trusts with educational aims. They forge links with universities and are working to get their grey literature online. More material is published on the internet than ever before, and the situation has improved massively in the past few years'. *

All agree that grey literature contains important information and must be used. Our Fellow Michael Fulford, who has been piloting a study of the grey literature about Roman Britain, says 'We've almost found another "another Roman Britain", and one that we would never have seen without developer-funded archaeology'. Commercial excavations have produced a massive increase in the number and type of sites now known, especially low-status rural settlements where indigenous communities co-existed with Roman invaders, keeping their vernacular architecture, but furnishing their homes with Roman manufactured goods.

In a twist to the tale, he says he advises PhD students who want to keep their hand in with fieldwork, that they might be better off working in commercial archaeology because it often involves large projects that are properly funded. 'We have to adapt to an archaeological record that is massively expanded and, at its best, of far better quality than has been achieved by academics, who are often very part-time fieldworkers', he concludes.

Students researching for dissertations do indeed find difficulty in accessing some information, even though the local Historic Environment Record Office staff are most helpful. Sometimes work that is ongoing, such as major quarry excavations might take several years to complete, thus understandably, even though an interim report might or might not be issued, the synthesis and conclusions cannot be written up until the whole site is finished. Thus research and conclusions are always lagging behind what one knows is available, but unquotable evidence.

* An interesting point, here is that in with your ERAS newsletter you have a good quality booklet, produced by commercial firm On-Site Archaeology (for public consumption) on the results of the extensive work on the Junction on the A63 at Melton.

Editor.

VISIONS OF ROMAN GERMANY

A VISIT TO THE NEW MUSEUMS OF KALKRIESE AND XANTEN

By Ian Rowlandson



In 2009 I visited two sites which show how modern heritage attraction design is developing in Germany. German museums are often quite different from British establishments; they are often very formal with panels bearing large sections of text and artefacts. It is expected that the visitor is looking to learn a considerable amount of factual knowledge during the visit but few alternative media methods are used to convey it. This contrasts with the modern trend in British museums for interactive displays to make visits fun and accessible to visitors of a variety of ages. The two museums I visited on this trip provide a good blend of experiences for a variety of audiences coupled with impressive architecture and a variety of learning experiences and interpretative simulations.

Kalkriese

The Kalkriese Museum is located to the east of the modern town of Bramsche in Lower Saxony. The site was found in 1987 by J.A.S Clunn, a former British Army officer based locally, when he uncovered a hoard of coins with his metal detector. Subsequent investigations have found what is believed to be the site of the slaughter of a Roman army that was campaigning to the west of the River Rhine during the time of the Emperor Augustus. Kalkriese is believed to be the location of the final stand of the Roman general Varus against the rebel German leader Arminius and his tribal army in AD 9. This theory is supported by the large quantity of coins and metalwork found on the site which date to this period. Historians recall that the army of Varus, traversing the densely wooded terrain, was repeatedly ambushed by the Germanic army, scattering the Romans in disarray. The excavations, which were underway when we visited, have produced evidence of a temporary rampart, built for defence, by the remnants of the Roman army making their last stand.

The project is undertaken by a small team funded by the regional authorities who have already published reports on the majority of the findings. The site is located on natural sand deposits and the team sifts each layer on the site with a broad bladed tool, a bit like a snow shovel. When finds are located these are carefully cleaned and lifted with trowels and small tools. The director gave us a tour of the site and explained the methodology in use and the problems they face in excavating a battle site with acidic soil conditions. Interestingly, he noted that they found very little pottery, as a Roman army on the march predominantly used metal vessels. There is a range of finds from the excavation on display at the museum including a fine cavalry helmet, armour fittings, keys, brooches, bowls and spoons. The finds so far have also included the remains of a mule laden with baggage and fragments of a human skull with cut wounds, probably from one of the Roman soldiers killed on the site.

The rebel leader Arminius is also an important figure in German culture and national identity in a similar way that King Arthur is to the British. The account of Arminius features in the Roman historian Tacitus's Annales and it has been claimed that various northern European folk tales were inspired by this battle. Arminius became restyled with a Germanic name as Hermann (roughly translated as man of the army) by Martin Luther. In the 19th century with the rise of nationalism in Europe, Hermann was seized upon by German nationalists as an undefeated German liberator. A massive statue of Hermann known as the Hermannsdenkmal, was erected in the Teutoburg forest and was completed following the unification of Germany and the victory over the French in the Franco-Prussian War of 1870-1. Hermann was also subsequently appropriated as a symbol of German Nationalism by the Nazi regime. As such, Arminius is a contentious figure in German literature and culture, far more so than King Arthur is to Britain. The museum displays at Kalkriese successfully highlight the importance of Arminius in German culture, art and history. The excavation of this battlefield and the associated museum is therefore highly significant for students of Roman history and German identity.

The main museum display is housed in a new building, a rusting watch tower deliberately faced with panels of sheet iron. The design of the building was influenced by the archaeological finds of ferrous metal work and is a

striking, if slightly unusual, example of modern museum architecture as it looks like it needs to be sanded down and given a good coat of paint! (*photo below*)The new building also provides a viewing platform which lets the visitor look out across the site of the battle field. The displays have been put together in a very stylishly designed space with a variety of artefacts on display to illustrate various themes about the conflict and lives of the participants in the battle.



Interesting methods used include the projection of a video of Arminus arguing with Varus onto two manikin heads giving the appearance of the actors being present in the room. Presenting a fictitious argument between the two speakers (in German) it gives a flavour of why Arminus, formerly a commander in the Roman army, raised a rebellion against Varus. Another display using ball bearings on a map of the landscape to propose how the Roman army might have scattered is also an interesting

idea, and good fun to play with. There were also audio description sections and further projections of ghostly actors dressed as Roman soldiers describing the events of the battle. Other display cases focused on the study of Roman coins and displays of the metalwork showing reconstructions of how it was used. The gallery layout was quite sparse and uncluttered with lots of space for visitors to move about the displays. The only criticism of the gallery was that it could have displayed a broader range of the military weapons and armour fittings for those who are especially interested in Roman small finds, but the experience for the non-specialist was enjoyable, stylish and informative.

Also open during the visit was a temporary exhibition called CONFLICT which outlined the activities of the German tribes after the Varus disaster. A fantastic range of weaponry, jewellery and household items was presented in the same style as the main exhibition. The display included lighting and projections alongside the traditional text panels and the display cases were presented in a similar style to those in the main display. This gallery with its temporary exhibitions provides a reason for return visits. The facilities at the site are good, with a café and a shop having an excellent array of gifts and books for the visitor.

Xanten

Xanten, in the Nord Rhine Westphalia region, is Germany's biggest archaeological open air museum. The site is based around the Roman town of *Colonia Ulpia Traiana*. The earliest Roman occupation in the area was an early Roman camp, *Castra Vetera I* which was established around 15BC, 3km away from the later site. It was used as a campaigning base until it was destroyed during the Batavian revolt of AD69. The fort was the main base for the fleet which patrolled the river system. It was re established (*Casta Vetra II*) and became the base camp for *Legio VI Vitrix*. In AD122 the camp was occupied by *Legio XXX Ulpia Victrix* when *VI Vitrix* was reassigned to Britain. The fortress was occupied until the late 3rd century AD.

The civil settlement at the site was given the rights of a *colonia* in AD100/105 by Trajan, taking the name *Colonia Ulpia Traiana*. The city became the second largest in the province of Germania Inferior after the settlement at modern day Cologne. The settlement at Xanten covered a total area of 73 ha and was surrounded by a circuit of city walls 3.4km in length made of an earth bank faced with tufa blocks and having defensive towers. In the 2nd century AD, the city's civic buildings were developed and included a basilica, a temple to the Capitoline triad of Jupiter, Juno and Minerva, public baths and an amphitheatre. The *colonia* was sacked by Germanic



Reconstruction of a gatehouse at the Xanten Archaeological Park

tribes in AD275, the Franks subsequently settling on the site of the modern town of Xanten.

The modern archaeological park preserves a large proportion of the 73ha Roman town and is a huge visitor attraction. As the modern town lies to the south west of the site over one of the Roman cemeteries, the park consists of open areas with scattered interpretive simulations of Roman buildings including the city walls and towers and parkland. Notable amongst these are partial reconstructions of a temple and the amphitheatre simulating the original Roman structures.

The new museum housing the collections is built on the site of the Basilica Baths and the building attempts to mimic, in glass and steel, the shape of the original building. At 25m tall the building is an imposing structure and gives a feeling of the scale of the Roman civic buildings originally on the site. The displays include an area of the excavated archaeological remains preserved within the building.

This museum is a fantastic experience and provides the visitor with both the opportunity to see a huge range of finds and a variety of different multi media and interactive displays. There is a wide range of metalwork including a good display of armour and weapons. There are also well-presented collections of inscriptions and ceramics. There are plenty of interactive digital displays and games to get 'hands on' with, including a full set of Roman legionary kit which can be worn (photo right!) and handled and a Roman saddle which can be sat on. The displays are presented along a sloping walkway towards the main gallery at the top of the building with views out to the surrounding park land through the glass walls.

Other buildings located around the site include an area of excavation preserved under cover and a display of replica carts and chariots. A particularly fun element of the site is a functioning 'Roman' hotel and restaurant serving Roman food. It would be a good idea if more British sites would

consider this as an option to make their sites more attractive to visitors. There was also a number of staff demonstrating Roman crafts such as arrow making and leather working and a new Roman style building with a portico was under construction to house these activities. The leather working demonstration was led by the cobbler from the local town who also made Roman sandals which could be bought from the gift shop. Further excavations were underway at the site but unfortunately we visited on the rest day so none of the dig team where in action.

One of the problems with the reconstruction in the Xanten Archaeological Park is that the reconstructed areas amount to only a fraction of the buildings which were present during the Roman period. This gives a slightly false feeling that there was a large area of open space within the walls of the Roman town. This is remedied by the paths being laid out along the lines of the Roman street plan with display boards to suggest which Roman buildings occupied the areas which are now covered in grass. There is an ongoing programme of building on the site and it is hoped that further buildings will be constructed around the site to house more attractions. There is also a large Roman themed playground for those with children who are suffering from museum overload and fancy a run around. Many visitors also used the open spaces around the site for a game of Frisbee or a kick-around with a football.



Conclusion

Both museums have stylish and useful websites available in German and English. Museum displays and museum guides were available in English. Tours in a variety of other languages were also available on request. An enjoyable time was had at both sites and a day could be happily spent around each attraction. I would recommend both sites.

The mixture of archaeological site simulation, preserved archaeological remains and museum displays at Xanten allows the general visitor a variety of heritage experiences. The site provides a varied day out perhaps offering a better and more fun opportunity to learn about a Roman town than the presentation of a traditional museum display or archaeological site. Although Xanten is clearly less formal than the presentation of a number of Roman sites in Britain it is perhaps a way to encourage a greater range and number of visitors to interact with their heritage even though it might appear a bit too much like a theme park for some purists. These attractions, especially Xanten, also display the remains, artefacts and enough information to satisfy those with a more specialist interest. Could a similar approach to the park at Xanten be considered for the Romano-British town at Wroxeter?

These attractions have been the subject of substantial investments by the regional authorities. Both sites have ongoing research excavations which provide a growing volume of evidence, extensively published in both popular and academic form. The sites offer the visitor the chance to view a large range of archaeological finds in a well presented easily accessible manner and offer a variety of interactive displays that are fun for all ages!



The new glass and steel museum building at Xanten mimicking the shape of the Basilica baths found on the site.

Further reading

Xanten

Xanten- <u>www.apx.de-</u> official website English and German

See also

Colonia Ulpia Traiana- Xanten, Römisch-Germanisches Zentralmuseum website http://www2.rgzm.de/Transformation/Deutschland/Staedte NiedergemanienBilder/Xanten/Xanten_engl.htm

Academic publication of the site is available in the *Xantener Berichte* series

Kalkriese

Official website in Englishhttp://www.kalkriesevarusschlacht.de/index.php?menuid=1&getlang=en

Academic publication of the site is available in the *Varukurier* series along with a number of other journal articles and monographs. A good illustrated summary in English is available from the shop-

Harnecker, J., 2004, *Arminius, Varus and the Battlefield at Kalkriese*, Rasch, Bramsche

Reconstructions/Interpretive simulations

For more information and discussion of the use of reconstructions and interpretive simulations in Britain and Germany see-

Rowehl, J. 2003, Constructing Quality Interpretation: The Use of Interpretative Simulations, Arkell European Fellowship Report for the National Trust http://www.nationaltrust.org.uk/main/w-learning-arkell05.pdf

UMHA AOIS SYMPOSIUM, 2010

KATE DENNETT

As this issue of ERAS News seems, quite accidentally, to have turned into a holiday jaunts issue, I thought I might as well fill up the last two available pages with my own venture for this year. I attended the nine day Umha Aois (Irish for Bronze Age and pronounced *Oova Ish*) Bronze Casting Symposium in Doolin, County Clare, on the west coast of Ireland. It is a real hands-on event and has been held annually for several years. The aim of the project is to understand more fully, how Bronze Age metal working was carried out, by attempting to reproduce items for which there is artefactual evidence, using, as far as possible, methods for which there is archaeological evidence. There is also a certain experimental aspect, looking at methods which could have been used and which might not necessarily leave any evidence.

Most of those attending were either sculptors, metals specialists or archaeologists, although the project started out originally as an artist/sculptor based event but has gradually become more biased towards the archaeology. The focus of this year's event was on trying to reproduce some of the magnificent blowing horns dating to the Bronze Age and found in various areas of Ireland. Many examples of horns, either side-blowing or end-blowing, are displayed in the National Museum in Dublin, together with other ritual objects, including crotals, the ovoid, seamless, hollow, bronze objects, known only from the Dowris hoard and thought possibly to be associated with a bull cult.

It is thought the horns were made using the lost wax process, but the work involved in making such a wax model, together with its sprue assembly was extremely complex. In its simplest form, the sprue assembly comprises a pouring cup and tubes for the molten bronze, together with risers to allow the hot gasses to escape. Many people will perhaps have experience of using the lost wax method of casting, so I won't describe the full process here. However, I will say that applying all the tubework to a large, hollow, delicate wax object such as a horn requires a lot of skill in assembling it securely, with minimal handling of the whole relatively soft, but heavy wax object. Hollow objects such as socketed items or horns are also more complex because they must have a core, which needs to be held in place by pins or chaplets, as once the wax has been melted out, the core will be loose inside the mould. (Needless to say, as a beginner I did not tackle a horn, but managed to produce a reasonably successful socketed spearhead, a flanged axe and a couple of smaller items).

The wax models were dipped in two layers of clay slip, before being built up gradually with layers of clay mixed with horse dung and some grog, until a good thick mould was achieved. The wax was then melted out (and collected for re-use) in two stages. Firstly, over a fire, it was melted from the pouring cup, thus giving an escape route for the wax deeper inside, and preventing sideways expansion which might cause the mould to explode. Further heating of the moulds, placed upside down in a furnace, melted out all the remaining wax. The clay moulds were then fired hard in the furnace. The resultant hollow, fired clay and dung moulds were light and crumbly on the outside and withstood the heat shock of being filled with molten bronze, whilst the inner layers of fine clay slip maintained the fine detail of the original wax model.

The smelting and casting was done either in simple pit furnaces inside a wood and canvas yurt or in the open air, in small above-ground, hand-built furnaces which we made from clay and horse dung. Using lumpwood charcoal, in either of these furnace types, it took surprisingly little time, with the aid of the wood and leather bellows, to achieve a pouring temperature of 1050 – 1070°, which was thought to be suitable for the type of mould being used. During this project, most of the bronze was smelted from 90% copper and 10% tin, although when casting a Medieval style bronze hand bell, 20% tin was used, to achieve a better ring tone and it did indeed give a beautiful sound.

About six attempts were made to cast a horn, but only one was really successful and there is more work to be done on refining the method. It seems that casting with the mould supported in the ground in an almost upright position and with a single pouring cup, thus giving better pressure to the flow of molten bronze, might be better than placing the mould horizontally and having multiple pouring cups. However, there are so many variables that this cannot be stated with certainty. The successful casting was of a sideblowing horn, which had the typical decoration of small conical spikes around the open end, and a small loop close to the closed end. It is thought that the original horns were probably made specifically for individual persons, as the gap at the narrow end was nearly always about a hand width, allowing for comfortable holding when being blown. The successfully cast horn made a very good sound and was relatively easy to blow, using closed, vibrating lips. The bullocks in the next field were intensely interested whenever the horn was blown!















Left, from top: above-ground furnace made from clay and horse dung, used with large bellows.

Wax models of a flanged axe and a socketed axe, with partially completed sprue assembly.

Various wax models and their sprue assemblies drying after their first coat of clay slip, ie the first stage of mould making. Melting out the wax from a completed horn mould and an axe mould

Right, from top: smelting bronze in a pit furnace, to pour into a bell mould. A horn mould also lies in the foreground.

Pouring a horizontal horn mould, made with three pouring cups. An unsuccessful horn where the bronze has not poured into the wide end of the clay mould. The clay core can be seen in the unused part of the mould.

Front cover: Holger Lönze with his successfully cast horn

2010-11 Meetings of the Hull and East Riding Branch of The Historical Association.

Sat. 25th September - Guided visit to 'Catholic York'

Thurs. 21st **October** - Pepys off the Page. What the Diary doesn't tell us. Dr Charles Prior (University of Hull).

Thurs. 18th November - Suffragettes on Stage. Pageants, Plays and how the Vote was Won. Dr Katherine Cockin (University of Hull).

Thurs. 20th January - 'He had not known there were such people in Hull'. Trains, Strikers & 'Mobs' 1911. Dr. D. Reid (University of Hull).

Thurs. 17th **February** - 'The Ship of State'. Dr Roger Brock (Dept. of Classics, University of Leeds).

Thurs. 24th March - 'Suez-cide': Anthony Eden and the Suez Crisis. Prof. Simon C. Smith (University of Hull). Meeting includes AGM.

All meetings of the Historical Association are held at 7.30pm at the Danish Church of St Nikolas, Osbourne Street, Hull, unless otherwise stated. Visitors are welcome to all lectures but a donation of £2 is asked from visitors. For membership enquiries, please contact Sylvia Usher on 01482 448065

OTHER EVENTS OF INTEREST

17 September

Illustrated Lecture by Prof. Dominic Powlesland. Reflections of the Archaeology of the Great Wold Valley. 7.30pm St Andrew's Church, Weaverthorpe. £6/£2.50, including refreshments. Tickets from Pete or Jill Wilson, 01944 738282. Tickets on the door, if places available.

15-17 September

The End of Tradition? Conference on Aspects of Commons and Cultural Severance in the Landscape. Sheffield Hallam University. info@hallamec.plus.com

17-19 September

Society for Church Archaeology. Annual conference – Documenting Destruction in Yorkshire: The Dispersal of Monastic Artefacts.

The Bar Convent, York. Speakers - Prof. Richard Morris, Pam Graves, Lesley Johansen, Kevin Booth and Andrew Davidson. Also includes tours to Holy Trinity Priory and St Mary's Abbey, York, The Yorkshire Museum, Byland

and Rievaulx Abbeys and English Heritage's store of monastic material in Helmsley. Details – www.britarch.ac.uk/socchurcharchaeol

Sat 2 October

CBA Publishing Workshop for Local Heritage Groups. Bar Convent, 17 Blossom St. York. £10. Event sold out, but so much in demand that similar event to be organised later. ERAS is to fund 2 members on this course.

Sat 9 October

CBA Visit to Hartlepool Maritime Experience. Details from Louise Mallinson, tel 01924 465380

Sun 10 October

CBA North. Visit and guided walk by Chris Burgess to Blyth Battery. 11am. Book by 7th October by email Chris.Burgess@northumberland.gov.uk

Sat 23 October

Local History Bookfair. 10am – 4pm The new venue this year is the Treasure House, Beverley.

Sat 13 November

YAS Roman Section. Dayschool at Temple Hall, York St. John University, Lord Mayor's Walk, York. 9.30am -5pm. The End of the Roman North: Roman to Anglo-Saxon in Northern England, followed by special Keynote lecture on the Trapain Law Hoard. £20. Cheques payable to Roman Antiquities Section, YAS. Send FAO Ms J Heron, RAS/YAS Claremont, 23 Clarendon Rd. Leeds LS2 9NZ Please enclose SAE.

Sat 27 November

Day school. Archaeology in West Yorkshire, run by West Yorkshire Archaeology Advisory Service, at the Royal Armouries in Leeds. £12 not including lunch. Café and restaurant on site. The morning will be devoted to a round-up of work in the region. Afternoon session on what archaeology can tell us about food and eating in the past.

Register online at www.archaeology.wyjs.org.uk
Or by phone to Becky Harlow 0113 3441681
Or email bharlow@wyjs.org.uk

Anytime in York

The Yorkshire Museum, Museum Gardens, York reopened on August 1st after a £2m refurbishment in which walls have been removed to open up the interior space. Sounds like it might be worth a visit, especially if combined with a visit to the refurbished Jorvik Centre. Anybody who hasn't visited Jorvik since it originally opened, will see a huge difference with a quicker flow through of visitors and a great many new reconstructed scenes and models.