

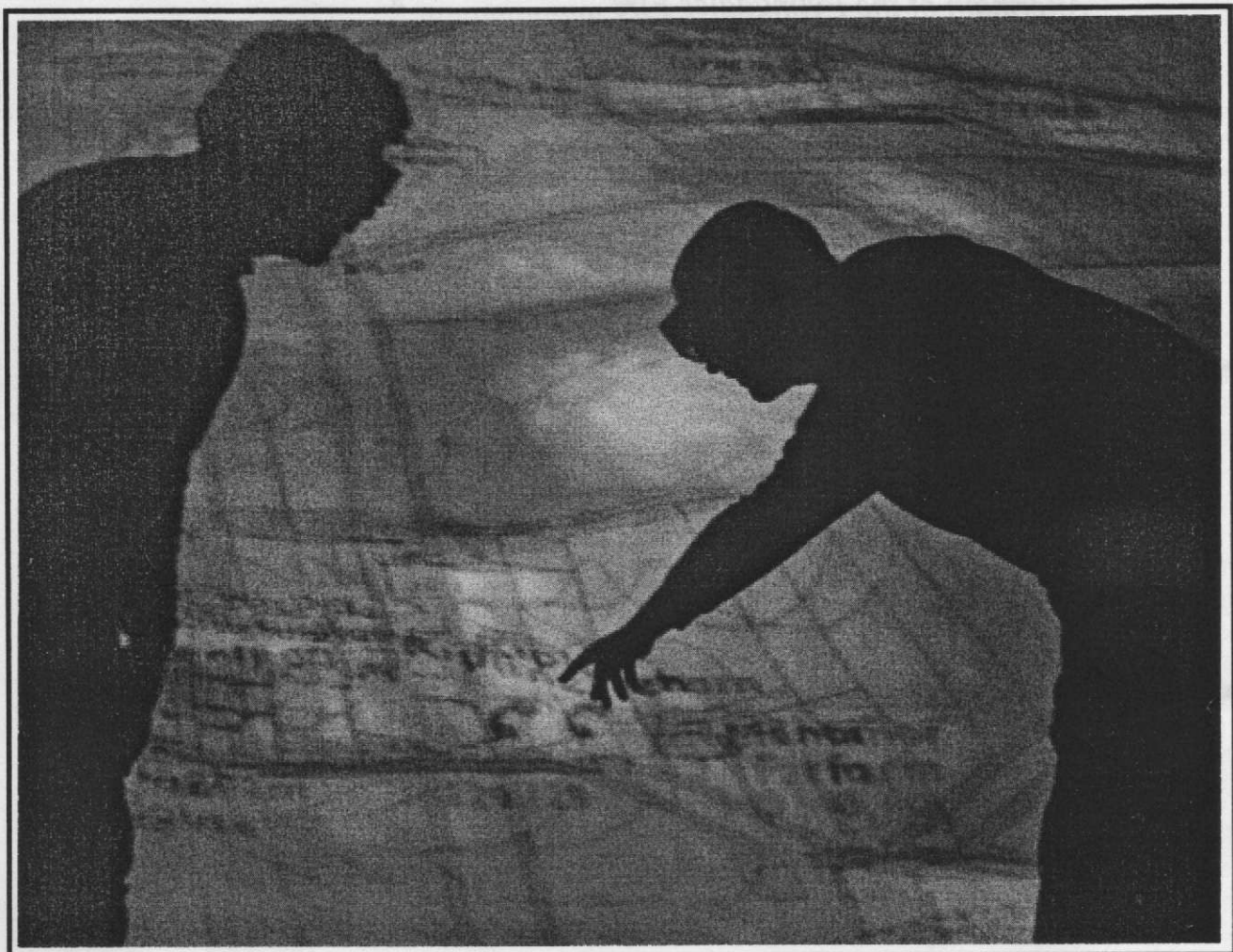
# ERAS News

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EAST RIDING ARCHAEOLOGICAL SOCIETY

No. 63 JANUARY 2006

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*Students wearing LCD shutter-glasses interacting with the immersive workwall at HIVE at Hull University  
Photograph: University of Hull*

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*Fylingdales Fire ♦ York Viking Festival ♦ HIVE at Hull University  
Local News ♦ ERAS Social ♦ Ted Wright's Book donation to ERAS ♦ Diary Dates*

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# *ERAS Local News ....*

## **ERAS PARTY, ST. MARY'S, BEVERLEY**

This year, we have hired the St. Mary's parish rooms in Hengate, Beverley for a buffet supper and quiz. The date is Saturday February 18th, 2006, so please fill in the enclosed form and return it as soon as possible, so we can notify the outside caterers of the numbers. It was decided to have a change of venue for the annual social event, as the Friary, atmospheric though it is, does not have disabled access, presents catering difficulties and is often very cold.

## **BEST WISHES TO TERRY MANBY**

ERAS sends best wishes to Terry after his recent illness. Terry did a lot of work towards organising the recent Mortimer Centenary Day and then was unable to attend due to a little matter of a heart attack. We hear he is now well on the mend and we wish him all the best for 2006.

## **TIME TO RENEW YOUR MEMBERSHIP**

Our trusty treasurer, Lesley Jackson is slightly alarmed that she hasn't received many membership renewals so far, this year. Please send off the form on page 11, with your cheque, or even better, arrange for a standing order, so you don't even have to think about it next time. Your free Volume 12 should be out this year and will include a large round-up of work in the region, but of course you will only get it if you have paid your membership fee.

## **GEOPHYSICS**

The resistivity meter has been used several times this year after being returned to the makers for an update to automatic logging. It is a lot quicker on 'automatic' but can still be used with manual logging, where ground conditions dictate that this is the best option. Two students in the final year of their part-time degree courses have borrowed the meter to survey land at Burton Agnes and at Saltburn. Three committee members attended the Council for Independent Archaeology's (CIA) conference at Cirencester this year to see how the resistivity meter's developer and producer Bob Randall of TR Systems was progressing with the development of a magnetometer. The prototype demonstrated was impressive, but the company felt it would be preferable to produce a machine that used the most technically advanced software, rather than one using the current standard. In order to produce such a device at a price affordable by relatively small groups, further work was required. ERAS has expressed a definite interest and we await further developments.

## **KEEPER OF ARCHAEOLOGY AT HERM**

Only a year ago, we were saying farewell to Craig Barclay and welcoming Bryan Sitch back to Hull as Keeper of Archaeology at Hull and East Riding Museum.

Now Bryan has also moved on, to a job in Manchester and ERAS sends all good wishes for the future to him and his wife Christine.

## **THE TED WRIGHT COLLECTION**

Don't forget that ERAS membership entitles you to a reader's ticket at the Brynmor Jones Library, on the Cottingham Road campus of Hull University. Ted Wright donated his collection of archaeological and historical books and journals to ERAS before he died and a list of these volumes now housed in the library is given on page 8. They are owned by ERAS, but administered by the Brynmor Jones Library and are distributed around the shelves, according to the cataloguing system. It is a wonderful library, so please take advantage of your rights to go in and read any of the library's huge collection of books on any subject.

## **FIELD STUDIES MEETINGS**

Apologies to those who turned up for field studies meetings recently and found nothing organised. We are considering how we can keep these meetings going over the winter months, when site work is not possible. We need a couple of organisers, without putting work on the shoulders of the same few people. The organisers could act as telephone contacts for enquiries about the meetings and could possibly be responsible for fetching pottery finds from Arram, for marking-up. They would not be expected to do presentations themselves, but only to make sure there is some work for people to do, or some items of interest to see. It seems a pity to lose all the enthusiasm that used to be there, so any volunteers ?!

## **ANGUS SMITH**

We are sorry to report the death on 1 December, 2005 of Angus Smith, who had been a member of ERAS for many years. Angus worked as a volunteer on several excavations including Redcliffe. He will mostly be remembered for his work at Weldon's Plantation, Winestead, where he continued fieldwork which had originally been started in 1985 by Dave Crowther of Hull and East Riding Museum, in conjunction with ERAS volunteers. Angus worked with his brother Ron and friend Ray Ketch on excavating and sampling the Winestead Iron Age site, until the physical difficulties of this hazardous lakeside environment became too much. However, he was able to continue his part-time studies at Hull University, gaining a BA in History and then an MA in Maritime Studies. Angus was a well known and popular figure in ERAS, regularly joining in visits and projects and attending lectures, until shortly before his death, at the age of 85. We offer our great sympathy to his widow, Dot and the rest of the family.

*Editor*

# *The Aftermath of the Fylingdales Fire*

*This article is based on a presentation given at the September, 2005 meeting of the North Yorkshire and Cleveland Coastal Forum, by Peter Barfoot, Head of Advisory Services, North York Moors National Park Authority. It describes the aftermath of the Fylingdales fire, the archaeology revealed in the resultant bare landscape and how staff have been attempting to deal with the environmental damage.*

In September 2003 a gorse fire of unknown origin, started on Fylingdales Moor. Heather on moorland and grouse shooting areas is often subjected to deliberate, controlled burning, partially to encourage new, high nutrient growth for winter feeding sheep. However, there had been little burning on that particular area for over forty years and the heather was well-grown, thick and dry. The fire, fanned by a south wind, leapt over the road and into the heather, resulting in an uncontrollably hot burn, which there was no hope of extinguishing. A decision was made to concentrate on containing the fire and protecting the peripheral properties. After two days and in the nick of time, the wind dropped and the fire was gradually able to be extinguished, leaving extensive damage to the moorland environment, but most properties, although stained by smoke and filled with ash, were largely undamaged.

The moor continued to smoulder for some time and four days later, the turf-built grouse butts were still red hot. There was considerable peat loss, but within a week, cotton grass had started to regrow in the wet areas. Great drifts of ash covered the moor, filling the roadside drainage ditches and was still blowing about a month later. The surface was burnt right down to the mineral soil and erosion of both the archaeology and the natural environment was a major danger. Britain has 75% of the world's heather moorland, so it was very important that this part of the Yorkshire Moors was not lost to grass. Long-term plans were made to repair the the environmental damage, starting with two phases of action.

There had been considerable loss of peat and initial work involved rewetting the surface of the remaining peat which had been almost 'bituminised' by the heat. It has been described as having the texture of a fibrous biscuit. Locally sourced 'nurse' grass, (to help stabilise the surface) and heather seed were sown and heather brash spread on the surface to retain the mois-

ture. If the surface was allowed to dry out again, the seedlings would not survive. Bales of heather were placed in gullies in an attempt to trap silt and prevent further erosion. Some areas at risk were temporarily fenced off. Phase two involved the planting of more 'nurse' grass over a wider area with selected areas of heather seeding and other planting. The grass is apparently growing well, but it is important that the balance is restored and that grassland does not take over. The results of the measures taken will be monitored and will be an interesting source of information for the future.

Alongside the environmental work, the archaeological damage was also considered. A number of previously unknown archaeological features had been revealed by the fire and a survey by English Heritage was commissioned.

In the same way as a light fall of snow can do, the layer of ash revealed several subtle variations in the topography, including a previously unknown lozenge shaped feature. At least one new ring cairn was revealed by the fire. The major cairn fields were already well mapped but many new cairns were revealed, some of which may be of Bronze Age date.

Several rectangular ditched platforms c4m x 3m, the function of which is still being debated, were revealed together with a number of previously unknown pre-historic house sites. Also revealed, and very difficult to see, were some previously unknown embanked field boundaries of unknown date.

A general spread of flint microliths and a small number of worked flints were noted, which may date to the Mesolithic or to the early Neolithic.

The number of pieces of rock art known in the area has increased by 50% since the survey. However, heat from the fire had damaged some of the pieces, a number of 'cup and ring' marked stones suffering from spalling of the surface.

Probably the most well publicised of the features revealed was a carved stone, which was part of another structure, and which possibly pre-dated it. The stone has been carefully recorded, and although many interpretations may be attempted, as with much rock art, its meaning, if any, is unknown.

# The Fylingdales Fire

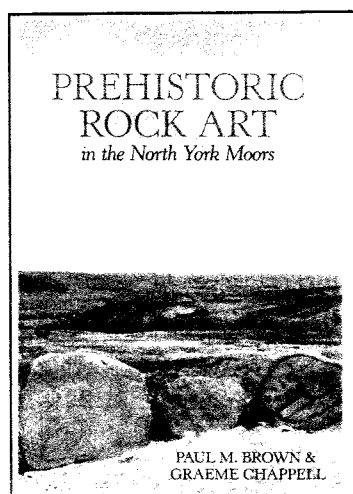
Features associated with the coastal alum working industry in the area were also revealed by the fire, including a series of leats to channel water into reservoirs. The North Yorkshire Moors now has the only recorded alum workings where the whole of the water management system is known and understood. There are also triple linear features - ruts resulting from horse tracks and cartwheels.

Other features of a relatively recent date, plotted by the survey, are the wartime slit trenches and practice shell holes. A detailed record of all the findings is lodged in the Sites and Monuments Record Office for the area.

A study of rock art on the North Yorkshire Moors (see below) by Paul Brown and Graeme Chappell, working with the co-operation of the National Parks Authority, has recently been published. There has been a lot of public interest in the findings revealed in the aftermath of the fire, but obviously the recording and rescue work has, so far, been on the basis of an emergency programme. There are moves afoot to look at the provision of some sort of associated display or exhibition, which would probably be housed in the Whitby and/or the Scarborough museum, but this would have to fit in with pre-arranged programmes and ongoing development plans.

Kate Dennett

*Thanks also to Graham Lee of North York Moors National Park Authority for additional information.*



Brown and Chappell's recently published book *Prehistoric Rock Art in the North York Moors*. Tempus, 2005

# York Viking Festival

16th-26th February, 2006

York Archaeological Trust is about to launch its very popular, annual Viking Festival - just the thing to brighten up those dull winter days! Advance notice of the events listed below has been given to the 'Friends of York Archaeological Trust' as places are limited, so if you are interested please book in good time. To get a full Viking Festival programme, (not out in time for this newsletter) or to book the events below, you can ring 01904 543403

or email [enquiries@vikingjorvik.com](mailto:enquiries@vikingjorvik.com)  
[www.vikingjorvik.com](http://www.vikingjorvik.com)

## Sunday 19th Feb: Uncovering Viking Yorkshire

Special coach tour into Yorkshire, starting from York city centre. 10am-5.30pm. £8.50/£7.50. Bring packed lunch and sturdy footwear.

Booking necessary.

## Tues 21 Feb: Visit Jorvik after hours.

British Museum coin expert Gareth Williams will be presenting some special finds from the Viking period. Light refreshments available. 7pm-9pm £10/ ££6  
Booking necessary.

## Wed 22 Feb: Bone and antler working

Some of the latest research in Viking crafts, trade and day-to-day activities. Steve Ashby of York University. 7.30pm, King's Manor, Exhibition Square, York. Limited access, by stairs only. £2/£1.50  
Booking necessary

## Thur 23 Feb: Svalbard: life in the Arctic

Illustrated talk on the wildlife and history of Svalbard and Spitsbergen with Alan Hall, who has worked as a tour guide for several summers in Svalbard. 7.30pm King's Manor, Exhibition Square, York. Limited access, by stairs only.  
Booking necessary

## Friday 24 February: Viking Dublin.

Festival keynote lecture, in conjunction with York Museums Trust, by Dr Pat Wallace, Director of the National Museum of Ireland. Dr Wallace has directed important excavations in Dublin, where an outstanding wealth and quantity of Viking age artefacts has been uncovered.

Tempest Anderson Hall, Museum Gardens, York. 7.30pm. £4/£3  
Booking necessary

# *HIVE at the University of Hull*

## *(Hull Immersive Visualization Environment)*

Students on the full and part-time archaeology courses at the University of Hull will be familiar with HIVE, as will those who were concerned with the production of the Valley of the First Ironmasters Website. HIVE has nothing to do with bees and nothing to do with underwater filming as its rather odd name might suggest.

HIVE'S function is to provide state-of-the-art visualisation, interaction and computing technology and related expertise for both the University departments and for industry. It has a 3D immersive visualisation auditorium complete with motion capture suite, a technology laboratory with graphic workstations and laser scanning technology, a research laboratory and a 72 CPU high performance computing cluster. Hive also has its own team of experts to support businesses and researchers interested in adopting and achieving maximum benefit from these technologies.

Immersive environments allow users to be immersed in a stereoscopic visualisation of a 3D scene or object. The user can interact with the environment in various ways, perhaps controlling objects using a wireless game pad or glove, or actually walking around and viewing the scene from different perspectives, just as if he/she is moving around exploring a scene in real life. The ability to view a virtual scene in 3D and comfortably interact with it, means users can learn from and analyse their environment. The motion capture suite allows users to interact and can be used to capture full body motion as well as allowing users to become head tracked while using the workwall.

The virtual scenes and objects can be created using various 3D modelling and animation software packages and then viewed using the visualisation technology. Hive has worked with various data sets from numerous existing software packages, but is also highly interested in researching and creating bespoke software solutions for users.

The display systems used for these immersive stereoscopic environments in HIVE range from a large workwall in the dedicated auditorium, accommodating 30 visitors or a more compact portable system. Other forms of display available in HIVE include head mounted systems and an Elumens VisionStation.

In one of the popular demonstrations given to visitors to HIVE'S auditorium, wearing special LCD shutter-glasses (and you can forget the wacky cardboard ones you had to wear to see 1950s 3D films) the viewer can explore the most intricate details of the inside of a monkey's skull, which appears to be resting, hugely enlarged, on the edge of seat in front.

Another demonstration model used is the St. Stephen's development in Hull. The technology has enabled a virtual, walk-through visualization of this major shopping development to be produced directly from the architect's model. It is peopled with figures and the viewer gets the sense of being in a real building, of being able to wander along the concourse, go up and down stairs and even, bizarrely, to fly through the suspended high level restaurant. This is invaluable in informing the public, discussing planning matters and selling retail space to potential investors in Hull.

The technology also has medical applications. It is being used for the visualisation of radiotherapy treatment for cancer. Internal anatomy, therapeutic radiation beams and dose patterns can all be visualised, enabling ground-breaking new ways of using the treatment to be developed. The technology really is cutting edge and has many engineering, medical and scientific applications. Other research projects involving HIVE include:

- ★ Underwater terrain visualisation
- ★ Simulation of bone diseases and therapies
- ★ Quantitative analysis and visualisation of the heart
- ★ Grid based visualisation
- ★ Visualisation and modelling of anatomical variation
- ★ Scientific visualisation of estuary and river flows
- ★ Improving face recognition

The possibilities for archaeology are immense. Visitors to the centre have already seen how satellite images and aerial photographs showing crop marks can be overlain onto Ordnance Survey maps and combined with archaeological data. Thus the viewer can 'fly' over the landscape, zoom up a valley and then home in on a particular spot and request details. These may be shown in the form of numbers, two dimensional images or graphs, or 3 dimensional images, wire grids or block diagrams, which appear to leap out of the landscape, like blocks of flats! Obviously all the data



# *HIVE at the University of Hull*

## *(Hull Immersive Visualization Environment)*

have to be input before the results can be seen, but this wonderful facility at the University of Hull could provide a tremendous boost for the city.

The Valley of the First Iron Masters archaeological website showed the potential of the equipment and expertise, to create and explore past landscapes. As this particular programme was a lottery funded project, it was, of course, subject to external time and cost limitations for data input. The project, a co-operation between University of Hull, University of Cambridge and ERAS was completed last year but updated information is still being put in, as and when it becomes available. In terms of the scope of a wider project, visualising a landscape over the whole of time, for example, rather than just one or two periods, the possibilities were only just touched upon, but are exciting to ponder.

In collaboration with HIVE, a new Hull based modelling and animation company, zabanda media, specialising in the areas of heritage and architecture, has been set up. Zabanda media is directed by Mark Faulkner, who worked with Peter Halkon on the Valley of the First Ironmasters website project. The company will also deliver training courses using the industry standard animation package 3D Studio Max and participants will be able to use Hive's graphic workstations and the 3D immersive workwall.

The laser scanning facility at the HIVE centre may be of particular interest to those working with data representing the built environment. The scanning technology allows large objects such as buildings to be scanned into the computer and then worked with alongside newly designed CAD datasets, thus giving the facility of combining existing real life buildings with new structures.

An impressive example shown to visitors involves the exterior of the Venn building (the main administrative block) at the University's Cottingham Road site, which has been laser scanned and reproduced as a highly detailed image made up of a 'cloud' of millions of surveyed points. In fact it is so detailed that the movement of birds on the roof of the building was also recorded, resulting in some confusion at first! The scanning took only fifteen minutes and the resultant image can be explored from any angle. Similarly the interior reception area has been scanned and wearing

the LCD shutter glasses the viewer can 'walk through' the building as though in a real space, with every detail recorded.

Hive was established at the University of Hull in 2002, from funding obtained through the Higher Education Funding Council for England's (HFCE) Strategic Research Investment Fund initiative.

If you are interested in finding out more about the possibilities, especially if you think there are more archaeological applications, the University of Hull would be pleased to hear from you.

For further information, please contact  
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*Many thanks to Emma Smith-Howe for providing information for the above article.*  
*Editor*

# *From the Bookshelf* *By Helen Fenwick*

As most members will be aware, Ted Wright, of Ferriby Boat fame, bequeathed his library to ERAS and this is why members now have access to the University Library. Not all Ted's books have been added to the collections, as only copies of heavily used ones or ones that were not already in the collection could be added. After a lot of work on the part of the Library and even longer of the author sorting out the catalogue, presented below is a list of Ted's books in the library with the catalogue codes in bold. As you look at the list you will see the variety of Ted's interests. Of course there is a large amount of texts on boats - many in foreign languages - there is even one in Korean! There is also a great deal of archaeology and local history of the E. Riding as well as of further afield. Ted's connections with South Africa can be seen in a few of the books. As well as those listed below, Ted subscribed to a number of journals and copies of these have been added to fill the gaps in the library collections.

Akerkund, H, 1974, Alnar Och Fot Berattau, **QC 84 A3**  
 Akerlund, 1963, Nydamskeppen, **VM 16 A3**  
 Andrews, W, 1892, Bygone Yorkshire, **DA 670 Y6 A5**  
 Annis, P.G.W. (ed.), 1978, Ingrid and other studies, **qVK 15 I5**  
 Arnold, B, 1992, Batellerie gallo-romaine sur le lac de Neuchatel vol 1, **qVM 16 A7**  
 Arnold, B, 1992, Batellerie gallo-romaine sur le lac de Neuchatel vol 2, **qVM 16 A7**  
 Aveling, H, 1960, Post Reformation Catholicism in East Yorkshire 1558-1790, **DA 670 Y6 E146(11)**  
 Bell, M., A. Caseldine & H. Neumann, 2000, Prehistoric intertidal archaeology in the Welsh Severn Estuary, **qDA 670 S29 B4**  
 Bickford, J.A.R & M.E Bickford, 1976, The private lunatic asylums of the East Riding, **DA 670 Y6 E146(32)**  
 Bradley, R, 1984, The social foundations of prehistoric Britain, **GN 805 B8**  
 Brewster, T.C.M, 1963, The excavation of Staple Howe, **DA 143 S7 B8**  
 Brigham, W.T, 1902, Ancient Hawaiian stone implements, **qDU 624 B8**  
 British Museum, 1976, Thracian treasures from Bulgaria, **N 5899 T5 B8**  
 Brooker, K, 1979, The Hull Strikes of 1911, **DA 670 Y6 E146(35)**  
 Buckland, P.C., 1979, Thorne Moors: A palaeoecological study of a Bronze Age site, **qQE 831 B9**  
 Burgess, C., 1980, The age of Stonehenge, **GN 776.22 G7 B9**  
 Burns, K.V., 1972, Plymouth's ships of war, **qVM 64 P48 B9**  
 Carr, F.G.G., 1951, Sailing barges, **VM 466 B3 C3**

Carver, M.O.H., 1993, Sutton Hoo Research Committee Bulletins 1983-1993, **qDA 155 S9**  
 Carver, MOH, 1992, The age of Sutton Hoo, **DA 155 A2**  
 Childe, V.G, 1940, Prehistoric communities of the British Isles, **DA 140 C5**  
 Christensen, A.E, 1966, Fra Vikingskip til motorsnekre, **VM 81 C5**  
 Chubb, H.J & C.L.D Duckworth, 1973, The Irrawaddy Flotilla Company, **qHE 689.7 Z9 I7**  
 Clark, J.G.D, 1954, Excavations at Star Carr, **qGN 774.22 G7 C5**  
 Cleland, H.F., 1929, Our prehistoric ancestors, **GN 738 C6**  
 Coles, B & J. Coles, 1986, Sweet Track to Glastonbury, **GN 806 S65 C6**  
 Coles, B & J. Coles, 1989, People of the wetlands, **CC 77 W48 C6**  
 Coles, B (ed.), 1992, The wetland revolution in prehistory, **qGN 786 W5**  
 Coles, J, B. Coles & M Dobson, 1990, Waterlogged wood, **qCC 79.5 W8 W3**  
 Coles, J., V. Fenwick & G. Hutchinson, 1993, A sprit of enquiry, **qGN 799 B62 S7**  
 Coles, J.M. & A.F. Harding, 1979, The Bronze Age in Europe, **GN 778.2 A1 C6**  
 Cooper, N.H (ed.), 1988, The Cirencester Area, **DA 690 C61 R8**  
 Corder, P, 1930, The defences of the Roman fort at Malton, **DA 690 M28 C7**  
 Cramp, R, 1989, Anglo-Saxon connections, **DA 152.2 C8**  
 Craven, M.T., 1972, A new and complete history of the Borough of Hedon, **DA 690 H4 C8**  
 Credland, A.G., 1982, Earles of Hull 1853-1932, **DA 690 H9 M97**  
 Crumlin-Pedersen, 1996, Archaeology and the sea, **CC 77 U5 C9**  
 Curwen, E.C, 1946, Plough and pasture, **S 419 C9**  
 Daniel, C St J. H, 1978, Sundials on walls, **qQB 215 D1**  
 Darroch, V, Barque Polly Woodside (Rona), **VM 395 P64 D2**  
 De Weerd, M.D, 1988, Scheped Voor Zwammerdam, **qVM 16 W3**  
 Dickens, A.G., 1954, The East Riding of Yorkshire with Hull and York, **DA 670 Y6 D5**  
 Dudley, H, 1949, Early days in North-west Lincolnshire, **DA 670 L7 D8**  
 Edwards, M, 1966, Scarborough 966-1966, **DA 690 S28 S2**  
 Eldson, S.M., 1989, Later Prehistoric pottery in England and Wales, **GN 805 E4**  
 Ellis, S (ed.), 1987, East Yorkshire Field Guide, **QE 73 Y6 E1**



- Evans, A.C., 1986, The Sutton Hoo Ship Burial, **DA 155 A2**
- Fagan, B.M., 1991, Ancient North America, **E 71 F1**
- Farr, G., 1975, The ship registers of the port of Hayle, **qHE 565 G7 F2**
- Fenwick, V., 1978, The Graveney Boat, **qVM 17 G7**
- Forbes, E.G., 1974, The birth of scientific navigation, **qVK 567 F6**
- Forster, G.L.F., 1973, The East Riding Justices of the Peace in the 17th century, **DA 670 Y6 E146(30)**
- Fowkes, E.H., 1963, Railway history and the local historian, **DA 670 Y6 E146(16)**
- Freeman, C.B., 1972, Mary Simpson of Boynton Vicarage, **JSYps F8**
- Gardiner, R., 1995, The age of the Galley, **qVM 16 A2**
- Gibson, A., 1986, Neolithic and Early Bronze Age pottery, **GN 805 G4**
- Gjessing, G., 1936, The Viking ship finds, **VM 17 V6**
- Glob, P.V., 1983, The mound people, **GN 778.22 D3 G5**
- Goddard, D., 1987, Working boats of the world, **VM 351 G5**
- Goldsmith-Carter, G., 1969, Sailing ships and sailing craft, **VM 15 G6**
- Goodwin, A.J.H., 1946, The loom of prehistory, **GN 865 S7 G6**
- Greenhill, B., 1971, Boats and boatmen of Pakistan, **VM 113 P16 G8**
- Greenhill, B., 1976, The archaeology of the boat, **VM 15 G8**
- Greenhill, B., 1980, The Ship 7: the life and death of the Merchant sailing ship 1815-1965, **VM 19 G8**
- Haddon, A.C. & J. Hornell, 1936, Canoes of Oceania Vol 1, **qGN 633 H1**
- Haddon, A.C. & J. Hornell, 1937, Canoes of Oceania Vol 2, **qGN 633 H1**
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- Hall, B.F., 1977, The Chinese maritime customs: an international service 1854-1950, **qHJ 7071 H1**
- Harris, A., 1977, The milk supply of East Yorkshire 1850-1950, **DA 670 Y6 E146(33)**
- Hasslof, O. H. Henningsen & A.E. Christensen, 1972, Ships and Shipyards Sailors and Fishermen, **GN 386 S5**
- Hawkes, C.F.C., 1940, The Prehistoric Foundations of Europe, **GN 575 H3**
- Herteig, A.E. (ed.), 1985, The Bryggen Papers Main series vol 1, **PD 2007 B9 B9**
- Hood, J. D., 1892, Waterspouts on the Yorkshire Wolds, **QC 957 H7**
- Hornell, J., 1950, Fishing in many waters, **SH 331 H8**
- Horridge, G.A., 1978, The design of planked boats of the moluccas, **qVM 351 H8**
- Horridge, G.A., 1979, The Konjo boat builders and the Bugis Prahus of South Sulawesi, **qVM 113 I4 H8**
- Horridge, G.A., 1979, The Lambo or prahhu Bot: a western ship in an eastern context, **qVM 351 H8**
- Hutchinson, G., 1994, Medieval ships and ship building, **VM 17 H9**
- Jenkins, N., 1980, The boat beneath the pyramid, **DT 62 S55 J5**
- Johnstone, P., 1980, The sea-craft of prehistory, **GN 799 B62 J7**
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- Jones, G., 1968, A history of the Vikings, **DL 65 J7**
- Keller, F., 1866, The lake dwellings of Switzerland and other parts of Europe, **GN 785 K2**
- Kitson Clark, M., 1935, A gazetteer of Roman remains in East Yorkshire, **DA 147 Y6 C5**
- Laming, A., 1959, Lascaux Paintings and engravings, **N 5310.5 F8 L2**
- Lee, J.E., 1850, Description of a roman building and other remains at Caerleon, **DA 745 C15 L4**
- Leitao, M., 1978, Boats of the Lisbon River, **qVM 311 F8 L5**
- Lipke, P., 1984, The Royal ship of Cheops, **qDT 62 S55 L7**
- Longworth, I.H. & I.A. Kinnes, 1980, Sutton Hoo excavations 1966, 1968-70, **qDA 155 L8**
- Manby, T.G. (ed.), 1988, Archaeology of Eastern Yorkshire, **qDA 670 Y6 A6**
- May, W.E., 1974, The boats of men at war, **qV 880 M4**
- McGrail, S., 1976, Medieval ships and harbours in Northern Europe, **qVM 17 I6**
- McGrail, S., 1977, Sources and techniques in boat archaeology, **qVM 15 S9**
- McGrail, S., 1978, Logboats of England and Wales Part 2, **qGN 799 B6 M1**
- McGrail, S., 1978, Logboats of England and Wales Part 1, **qGN 799 B6 M1**
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*Many thanks to Helen Fenwick for all her hard work on this project.*  
*Editor*

## *Dates for your Diary*

- Wed 18 Jan**    **ERAS Lecture.** Sonia O'Connor. In the Shadow of Ferrybridge Power Station: the Fryston chariot.
- Wed 1 Feb**    **ERAS Field Studies meeting**
- Mon 6 Feb**    Metal Detecting and British Battlefields. Seminar at Royal Armouries, Leeds.  
Sessions: English Heritage, Glenn Foard- Battlefields Trust, battlefield archaeologist Tony Pollard, Brian Pollard (Nat. Council for Metal Detecting) R. Bland & S. Worrell (Portable Antiquities Scheme)  
Details- 01508 558145. email BattlefieldTrust@aol.com
- Fri 10 Feb**    Early Medieval Northumbria- current work/future directions. 2 day conference, Newcastle University.  
Prof. M. Carver, Prof. J. Richards, Dr. J. Naylor, Prof. D. Whaley, Dr. D. Mason, Alex Woolf, Paul Gething, Dr. V. Thompson, H. Rawlin-Cushing, Mark Wood, Felicity Clark, Jenny Hall, Colm O'Brien, Dr. C. Loveluck, Dr. S. Ashley, Steve Ashby, Megan Gooch, Nicki Toop.  
Details- d.a.petts@durham.ac.uk or sam.turner@newcastle.ac.uk
- Sat 11 Feb**    CBA Annual Symposium. Tim Schadla-Hall, Yvonne Luke, Kurt Hunter-Mann, Trevor Pearson, Steve Moorhouse, Jemmi Chambers, Steven Sherlock, Simon Thompson, Peter Halkon, Stephen Burt. Tempest Anderson Hall, Yorkshire Museum, York. 11.00am. £5/£3
- Wed 15 Feb**    **ERAS Lecture.** Steve Allen. The Welham Bridge Logboat
- Thur 16 Feb**    Lecture by Ben Geary, of Birmingham University. Holocene Environments and Archaeology in Eastern England. 7.30pm, Cohen Building, Geography Dept, Hull University.
- Sat 18 Feb**    **ERAS social event at St Mary's parish rooms, Beverley**
- Fri 24 Feb**    Lecture on Viking Dublin at Tempest Anderson Hall, York. Dr Pat Wallace, Nat. Museum of Ireland. 7.30pm £4/£3. booking necessary. 01904 543403
- Wed 1 Mar**    Lunchtime lecture. Roman Remains by the Tadcaster Road. Jane McCornish. 12.30pm-1.00pm. St Saviours Church Hall, St Saviourgate, York. (York Archaeological Trust)
- Wed 1 Mar**    **ERAS Field Studies meeting**
- Sat 4 Mar**    Recovering Landscape as a Cultural Practice: a distant prospect? Workshop for practitioners, policy-makers & academics. A range of perspectives incl. cultural geography, archaeology, social theory. Emma Waterton, York University, King's Manor, York. email recoveringlandscape@gmail.com
- Wed 15 Mar**    **ERAS Lecture.** Chris Fenton-Thomas. Excavating a multi-period site at Melton East Yorkshire.
- Wed 5 Apr**    **ERAS Field Studies meeting**
- Wed 19 Apr**    **AGM at 7pm, followed by**  
**ERAS Lecture.** Prof. John Collis Old Celts, New Celts: recent controversies.  
After this lecture, everyone is invited for a drink in the west reading room opposite the lecture theatre.

ERAS lectures, unless otherwise stated, are held in Room S1, Wilberforce Building, Hull University, at 7.30pm. Members free, visitors £1. In the autumn and winter, Field Study meetings are at 7.30pm upstairs at the Friends Meeting House, Percy St, off Albion St, Hull, on the first Wednesday of each month. No commitment is necessary, just come and help to plan and carry out projects etc, but please ring Kate first, on 445232 to check what is on.