



CAMBRIDGE ARCHAEOLOGY FIELD GROUP

Newsletter Number 161

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www.cafg.net

President	Dr Paul Spoerry	Vice-President	Dr Sue Oosthuizen
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SPECIAL GENERAL MEETING

At the Special General Meeting held on Wednesday, 6th October 2010, a minute's silence was held in memory of Dr John Alexander, the first president of the Group, who died on the 17 August 2010. The Chairman advised the Group that it was five years to the day that Mrs Val Whittaker, in whose name the Group offers an annual memorial prize, had died.

The primary purpose of the meeting was to agree on the person to be invited to become the Group's new President, and it was unanimously agreed to invite Dr Paul Spoerry, the Group's current Vice-President, to become the President. It was then unanimously agreed that Dr Susan Oosthuizen be invited to become Vice-President. *Both have accepted.*

The Chairman outlined the committee's feeling that a suitable memorial to Dr John Alexander would be an annual lecture in his name, possibly focusing on areas in which he had a particular interest. If given at the Annual General Meeting, it could be by the new President or by someone who knew or worked with Dr Alexander. The meeting agreed to a special event, possibly a memorial lecture. It was suggested that enquiries be made of any other groups who might be considering holding a memorial event or might join with this Group.

Dr Alexander's family had invited donations to the Pakistan Flood Relief Fund, but it was suggested that Group members might be prepared to donate to a fund to enable a memorial event to be on a larger scale than normal lectures. A collection could even be held on the day to provide funds for future events. Members were invited to put forward their views to the Secretary.

A JOHN ALEXANDER MEMORIAL FUND ?

Would you be prepared to contribute to a fund to enable a memorial event, or annual events to be held in his name? Do you have other ideas? Please let us know.

BAR HILL PROCESSING EVENINGS

Processing continues at the Oxford Archaeology East HQ at 15 Trafalgar Way, Bar Hill on Wednesdays when there is no lecture. We meet from about 7.15 pm. We are currently washing finds from fieldwalking.

Please note that there will be no meetings on the 22nd or 29th December.

For those who have not yet found us: approach Bar Hill; at the roundabout where Tesco is on the left, go straight on; take the first right (Trafalgar Way) and Unit 15 is on the corner of the second left turn, with parking in front. Be careful of the large lorries in this area. A plan can be provided.

LECTURES

The lecture programme continues at 7.30 pm on the first Wednesday in the month, in the seminar room at the McDonald Institute for Archaeological Research, Downing Street, Cambridge. Parking is available on site from Tennis Court Road.

1 December	Dr Paul Spoerry, our new President on <i>Langley Abbey and Medieval Broadland</i>
5 January	Mike Coles on a review of the Group's work during the year
2 February	tbc
2 March	tbc
6 April	AGM

SOCIAL EVENING

A social evening will be held at Bar Hill on Wednesday, 15th December. All welcome. Please bring a contribution of food or drink.

We are also aiming to arrange a Group dinner in the New Year.

SUBSCRIPTIONS

If you have not already paid your subscription for this year (from April), at £8 for individual membership and £11 family membership please send them to the treasurer, address above. You should be aware that you are only covered by the Group's insurance if you are a paid-up member.

FIELDWORK

We are feldwalking in Comberton, along the road between Comberton and Toft. Meet in the layby on the north side of the B1046, just west of Comberton at 10 am. Wear stout shoes or boots and clothing for all eventualities. We usually continue until around 12.30 p.m.

After a long stint finding virtually nothing, we have now found a small concentration of Roman pottery. There are photographs on the website.

WIMPOLE EXCAVATIONS

The 2010 excavations resulted from a new telephone line laid between Wimpole Hall and the buildings of Home Farm in 2009. In digging the trench across the meadow next to the eastern barn of the farm, some brick structures were uncovered; not in a place where they were expected.

Subsequent examination of old maps suggested the bricks might be the walls of the house shown on a map of 1828 drawn by Robert Withers as part of a planning scheme for the whole estate and based on a survey of 1815, and also shown on the plans drawn up by Sir John Soane in 1795, when he was designing the new farm buildings. On Soane's plan the site is labelled 'Mr Ratfords house'. It is quite likely the house had been demolished by 1828. Builders' plans are not always accurate representations of structures so we were asked to attempt to establish the nature of the building, what it was used for and when it went out of use.

The excavated brick walls and finds suggest Mr Ratford's house was built in the middle of the 17th century. The earliest map of Wimpole is dated 1638 and this shows a house in the same position,

but the houses on the map are not accurate drawings of the buildings and their position may well not be accurate. It is quite possible that this earlier house lies beneath the brick walls uncovered in the excavation.

Documentary research has, so far, failed to find any further reference to Mr Ratford. But in the will of John Ratford, carpenter of Wimpole 1795, he leaves his round mahogany card table to his daughter Sarah. Perhaps he was also a farmer who lived in this house.

Five trenches were excavated. Preliminary geophysics by RheeSearch had shown a large disturbed area but helpfully the very dry weather in June and July caused clear parch marks to appear, outlining the walls of the structure. The trenches were placed to investigate these marks.

Narrow red brick walls were uncovered, in places no more than 10cm below the surface. In the south west corner was a large mass of brickwork in at least two phases, perhaps part of a large gable end to the building. The general lack of demolition brick rubble elsewhere suggests the house was timber framed. A small quantity of stone roof tile and red fired tiles was found, not sufficient for a building of this size; perhaps it was, at least in part, thatched. The house was built one room deep (5.2m) and at least four rooms long: the parch marks suggested that it in fact extends into the next meadow (23m overall length).

The building seems to have been extended to the west, outside the excavated area, as we found both part of what may be a gable end and brickwork extending west beyond the trench and, separately, a western extension of a yellow brick floor and light walls; these bricks were very different to the main structure and suggest a late 18th century out-house.

In three trenches underlying the 17th century features was a layer containing only 14-15th century pottery. With two possible beam slots cut into the natural clay these might represent the house shown on the 1638 map, presumably demolished and replaced in the mid 17th century.

Photographs can be seen on the website, where there is also more detail, and on Facebook.

TRACING PREHISTORIC ANCESTRY WITH DNA

On the 2nd June 2010, Dr Peter Forster outlined the work that has been going on since the 1990s to trace the movements of ancient homo sapiens through the use of modern DNA. For this purpose, rather than tracing the Y chromosome of the male line, researchers have used Mitochondrial DNA, which is passed through the female line, as it produces thousands of copies. Changes occur by mutations, calculated at about 1.5 mutations each 20,000 years. The original DNA may not exist and mathematics is used to follow the line back.

The earliest MtDNA type (or female ancestor), known as L0, was from south or east Africa. An expansion, group L1, was found all over Africa 200,000 – 80,000 years ago, when there is archaeological evidence for modern humans. 80 – 60,000 years ago groups L2 and 3 swamped Africa, leaving only the Western Pygmies in central Africa and the southern bushmen with a high percentage of group L1 MtDNA. The L3 group left Africa 60 – 50,000 years ago and the mutated groups N and M are found just outside the continent. Everyone outside Africa descends from groups N or M, Europeans only from N. A route from Africa across the mouth of the Nile is unlikely as there would be problems with the Neanderthals; a more likely route was across the mouth of the Red Sea, which at 60,000 years ago was some 5 km across, with 1 mile less water to cross than now and 100m lower because of the Ice Age. The water level dropped from 130,000 years ago and rose again after 60,000 years ago.

Between 60 and 30,000 years ago, groups M and N spread to Australia and East Asia and started to move north as well. 60,000 years ago the Malay peninsula was one and Australia was connected

to Papua New Guinea, though Wallace's line between them was always water. Groups M, N and R did not mutate on the way to Australia, which suggests a fast migration. Australia and New Guinea had the same founder as the rest of Asia and each other, although their DNA profiles are different except for a minor part of the population. At Lake Mungo in Australia, human remains show that brow ridges reappeared there after 40,000 years ago, even though they receded in Africa 160,000 years ago. There is no evidence for a connection with homo erectus.

At 30 – 20,000 years ago the world was still in an Ice Age, but was more stable and groups M, N, and R and their descendants took over Europe and Asia, including Siberia. Groups from northern Siberia went on to America and Neanderthals became extinct.

The glacial maximum was at 20,000 years ago, when much of Africa was uninhabitable. Alaska was habitable but cut off. The population was forced south, for example into Iberia, where survivors developed into H and V groups. During the warm period of 15 – 12,000 years ago, the H and V groups swamped north and west Europe and groups in southern Asia moved back north and east, wiping out any trace of previously settled groups. The settlement of other outlying areas followed.

It has now been possible to extract ancient DNA from a 7,500 year old Neolithic farming community in central Europe: 24 of the 57 skeletons yielded reproducible DNA. MtDNA N1a was found in 25% of the ancient sample but in only 2% of modern Europeans. It does not seem possible for this loss to have occurred naturally. A Mesolithic DNA study found one MtDNA type in over 85% of samples, probably the earliest type restricted to Europe. 30-35% of our DNA appears to come from hunter-gatherers, none from farmers, so something must have happened between the first farmers and the Bronze Age, when the take-over seems complete. 1-4% of our DNA is shared with the Neanderthals.

Ice Age movements shaped the gene pool, but restricted human expansion because of their instability rather than the cold as such.

The website www.rootsforreal.com has maps of this migration.

THE PALAEOLITHIC RECORD OF THE TRENT VALLEY

On the 6th October Tom White talked about the lower and middle Palaeolithic record of the Trent Valley, the results of a project, funded by English Heritage, in which he had been involved.

The River Trent flows from Burton on Trent, through the Midlands and currently north to the Humber Estuary, although through most of the Pleistocene it had a more easterly flow to The Wash. The aim of the project was to reconstruct the evolution of the landscape of the valley during the years around 750,000 – 35,000 years ago, a period with 5 major climate cycles, when colonization of Britain would only have been possible during interglacials. The Trent valley is the northernmost British region with significant evidence for occupation of Neanderthals and homo heidelbergensis.

The Project team monitored 50 quarries for evidence of river terraces and artefacts. Rivers deposit fluvial sediments as they flow, mainly gravel and sand, and the remains of these are known as terraces. The sequence is that the oldest terraces are highest, as rivers deepen their valleys progressively, and terraces can be mapped by comparison of the sediment components. Their chronology can now be determined by reference to the Marine Oxygen Isotope Record. Of course, many deposits were obliterated by later glaciers.

The artefacts found, both by the project team and earlier collectors, were mostly of flint though with some quartzite, including flake tools and hand axes. They were generally heavily abraded, often broken. Yet the gravels are 75% quartzite and up to 20% chert, with flint being rare – sometimes just 1%. Could there be a collector bias or could it just be that flint is easier to see? Also quartzite is easily abraded, tested by experiments.

Environmental remains included the skull of a woolly rhino, the tooth of a type of elephant found in warm temperatures, remains of reindeer and red deer; and the mollusc species *corbicula fluminalis*, only found here at certain times. Plant remains were also found, including pollen and seeds.

These remains can give relative dating, through knowledge of species surviving only in certain conditions, but various forms of scientific dating have also been used. Amino Acid Racemization Dating can be used to provide age estimates for mollusc shells. Optically Stimulated Luminescence Dating can give the date of the last exposure of mineral grains to daylight.

As the Trent had flowed to The Wash, the project was extended to the fen rivers. These are very different to the Trent, with little uplift and consequently little differentiation of periods. Terrace levels 2/3 (among the more recent) are much more extensive in the fen river valleys and there is fantastic local flint.

The details of this project appear in the Proceedings of the Geologists' Association, but Tom has provided English Heritage summaries and a copy is in the Group library.

NEW WEBSITE

Peter Cornelissen, one of our members, is kindly developing a new website for us, with a new web address of: www.cafg.net At present this will redirect to the existing website, but the new one should be up and running in the Spring, so you should become accustomed to the new address.

You will also find on the website links to our pages on Facebook and the CBA's Community Archaeology Forum.

CAMBRIDGE ANTIQUARIAN SOCIETY

CAS lecture meetings are on Mondays at 6.00 pm at the Law Faculty, West Road, Cambridge, which members of the Group are welcome to attend. The programme continues with:

- 6 December Dr John Baker on *Place-names and the Anglo-Saxon landscape of the Cambridge region*
- 10 January Christopher Evans on *Time and the River: Environmental Change, Monumentality and Prehistoric Land-use at Needingworth Quarry, Over*
- 7 February Dr Jennifer Wallace on *Archaeological Poetics*

The Spring conference will be held on Saturday, 19th March 2011 on the subject of *From Camulodunum to Durobrivae, aspect of Roman Life in the Eastern Region*

CBA MID ANGLIA

CBA Mid Anglia region is holding its AGM at 2 pm on **4 December** in Tilty Church, Essex, to which all are invited. The agenda includes a motion that the Mid Anglia and East Anglia groups should merge. Website: www.britarch.ac.uk/cbama/

After the AGM Rachel Clarke of Oxford Archaeology East will lead a guided walk of and an illustrated talk on the ruined Cistercian Abbey next to the church. Meet in the car park next to the church at 2.30pm. Maps can be provided, but Tilty is about 4km south of Thaxted.

CONFERENCES/COURSES

The following day conferences are organised by the McDonald Institute for Archaeological Research and will be held in the Law Faculty. The cost for each is £39 (lunch is not included)

26 February *Place-names and landscape: recent research.* Closing date 16 February
21 May *Designing with water: new work in garden history.* Closing date 11 May

Courses at Madingley Hall:

17-19 December *A journey back: a walk through human evolution*
18-20 February *Forensic facial reconstruction*
3 April *Pastures, greens and commons*
10 April *Moot and hundred meeting places*
16/17 April and 14/15 May *Introduction to archaeological field survey*
20-22 May *Religion and beliefs in the archaeological landscape*

Cambridge University Institute of Continuing Education evening classes from January include:
Prehistoric and Roman sites, monuments and landscapes. Wednesdays at 7.15pm
Victorian and Edwardian designed landscapes. Mondays at 7.15pm
Conservation and Interpretation of designed landscapes. Thursdays at 7.15pm
Classical peoples. Mondays at 7.15pm
The city of Cambridge: archaeology and development. Tuesdays at 7.15pm
Conflict archaeology. Thursdays at 11 am, Duxford Imperial War Museum

NEWS

Butchered cow and goat bones have been found in Ethiopia dating from 3.4m years ago, bearing the distinctive marks made by stone tools. Maybe *Australopithecus afarensis* (Lucy) at 3.2m years old was the first tool user, rather than *Homo habilis* (2.3m years ago) [World Archaeology]

A circular structure found at Star Carr in North Yorkshire has been dated to around 8500 BC, some five centuries earlier than pit houses recently excavated elsewhere, making it the oldest known in Britain. In addition, a substantial Mesolithic platform of split timbers extended at least 20m along the lake shore. [British Archaeology/Current Archaeology]

The Festival of British Archaeology in 2011 will take place from 16 to 31 July.

LIBRARY ADDITIONS

“Archaeology: Theories, Methods and Practice” by Colin Renfrew and Paul Bahn. 4th edition 2004.
Thames & Hudson

British Archaeology November/December 2010

CBA Conservation update October 2010

CBA Newsletter, August 2010

“A History of Britain 3000BC-AD1603. At the Edge of the World?” by Simon Schama. 2000. BBC
Proceedings of the Cambridge Antiquarian Society Vol XCIX for 2010

“The Staffordshire Hoard” by Kevin Leahy and Roger Bland. 2009. British Museum Press

“The Trent Valley: Archaeology and Landscape of the Ice Age”. 2010. Trent Valley Palaeolithic
Project.

“Understanding the Archaeology of Landscapes: a guide to good recording practice”. 2007. English
Heritage

“The Vale of York Hoard” by Gareth Williams and Barry Ager. 2010. British Museum Press

We have the following copies of **Current Archaeology**, available for members to take and keep:
133 – 191; 193 – 199; 201 – 206; 210; 212 – 214; 216 & 217; 219 – 222; 224 – 239; 241 – 246

Susan May, Secretary