

School of Archaeology &
Ancient History

The Bulletin:

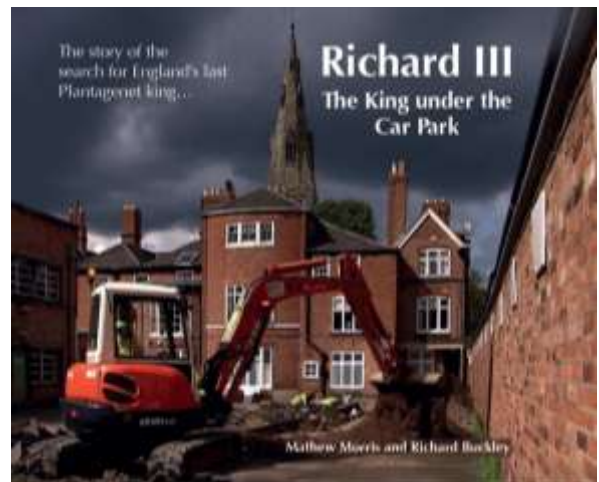
News from the School

Richard III and Greyfriars—the 2013 Update

Another year, another excavation, another thunderstorm heralding the discovery of an intriguing burial... – yes, it must be the return to Greyfriars! At the end of July, ULAS (University of Leicester Archaeological Services) wrapped up a second successful excavation back in THE car park, this time examining a much larger area of the site (approx. 17m by 25m) around last year's Trenches 1 and 3 (where Richard III was found). In 2012, the discovery of Richard III's remains understandably stole the show. But it must not be forgotten that we also uncovered the previously unexcavated remains of a Franciscan friary, parts of its eastern range including the chapter house, and the chancel of its church, including the choir where Richard was buried. However, the nature of last year's excavation was limited in scope, so this year was a great opportunity to go back and learn more. This year, we explored more of the chancel and now have a better idea of the church's layout and how Richard III's grave fits inside the choir (he lay up against the southern choir stall at the very western end). We have found some in-situ tiled floor; and a new building was traced south of the church, built with large buttressed walls - perhaps the remains of an earlier chapel or else another building connected with the friary.

Three more burials have been exhumed, one from the presbytery, one from the eastern end of the choir and one half under the choir and presbytery, and so presumably from an earlier phase of the church. The latter two were both in wooden coffins but that in the presbytery, more or less central within the space, set probably fairly close to the high altar, is the first fully intact medieval stone coffin to be discovered in Leicester during a modern excavation. The outer coffin is carved from limestone and is 2.12 meters long. Removal of the lid required a full nine people (see image below)! Inside was an inner lead coffin, intact except for a hole at one end of the casket. As yet, the person inside has not been examined in detail but it is likely a female, perhaps a wealthy benefactor of the church. Some small fragments of woven cord and sheet were found inside the coffin, perhaps from a shroud, and some of her hair still survived. No writing was visible on the coffin lid but it does bear a crude cross soldered into the metal. News on the body will be made available once the careful scientific studies have been completed.

Finally, most recently, in November, ULAS launched *Richard III: The King Under the Car Park*, by Mathew Morris and Richard Buckley—the first popular book by the lead archaeologists who excavated the Greyfriars site. Make sure you read this fascinating account—available at a mere £8.95 from the University (and any other quality) bookshop!



STOP PRESS: SCHOOL AND ULAS WIN QUEEN'S ANNIVERSARY PRIZE 2013

As this *Bulletin* goes to press, it has just been announced (21st November) that the School and our professional unit, the University of Leicester Archaeological Services (ULAS), have been awarded a **Queen's Anniversary Prize for Higher and Further Education**. These awards mark achievement of world class excellence in UK universities and colleges. This follows on the headline-grabbing discovery of the remains of Richard III beneath a Leicester car park in September last year, but the award recognises our long record of commercial archaeology and public engagement as well as our exceptional research and teaching. Leicester is one of only a handful of archaeology departments in the UK that still maintains a professional archaeological unit alongside the academic staff. Under the direction of Richard Buckley and Patrick Clay, the unit has been part of the School since 1995, when we took over the rump of the County Council archaeological service. The award is thus recognition of nearly 20 years of ULAS work nurtured and supported by a sequence of Heads of School, notably Professors Graeme Barker, Marilyn Palmer, Colin Haselgrove and Lin Foxhall.

The synergy of the professional/academic partnership has been a key to our success over the years, with ULAS staff contributing to teaching and fieldwork training of students and academic staff working as advisors on ULAS projects with a significant research element. The Richard III investigation highlights the relationship perfectly, with Richard Buckley and his ULAS staff leading the excavation, but a number of academics playing key roles, whether in the excavation or subsequent examination of Richard's skeletal remains, genetic research, etc. as well as coordinating aspects of the wider public presentation of the discovery. This has not been an isolated example and the nomination for the prize presented a wider range of projects where the School has made a major impact in public engagement with ar-

chaeological discoveries, such as the Hallaton Iron Age hoards and the current training excavation at Burrough Hill.

Richard Buckley comments: "We are justifiably proud of our strong working relationship with the School of Archaeology and Ancient History. Not only do we all gain from the two-way flow of knowledge and skills between the academic department and the professional unit, but also from the opportunities this partnership presents to work together on significant research projects such as the field schools at Leicester Abbey and Burrough Hill and high profile projects such as Hallaton and Greyfriars. Working together in this way means that the whole School - professionals, students and academic staff alike - can all share in our collective successes."

From a student perspective one of the great features about the presence of ULAS within the School is the opportunity for enhanced professional training in archaeology and quite a number of current ULAS staff have in fact been our students at one time or another. We strongly believe that the practical skills learned by our students in taking part in team-oriented fieldwork are vital for their future employability across a wide range of fields.

The Queen's Anniversary Prizes are awarded by the Royal Anniversary Trust, an independent charity set up in the 1990s and concerned with the advancement of education for public benefit, with around 20 awards in each two-year cycle. The Prize will be presented by the Queen at Buckingham Palace in late February to a small group of ULAS and School staff, past and present students and our VC and Chancellor. We shall also be represented at a Guildhall dinner in London in honour of all this year's recipients. This is the third time that a University of Leicester department has been awarded a Queen's Anniversary Prize, following Physics (1994) and Genetics (2002). We are the fourth archaeology department to be so honoured nationally, joining Birmingham (1996), Reading (2009) and York (2011).

David Mattingly, Acting Head of School

OTHER SCHOOL AND ULAS NEWS

It is 10 years since the School moved in to its current building and we continue to transform and enhance the space, most prominent being the creation of the new seminar room space off the main foyer, and, upstairs, of a new research laboratory for study of human and animal bones.

Staff news for 2013 includes a number of comings and goings. After long and much appreciated service with our dedicated administrative team, Kathy Ashley has retired and Pauline Lawrence and Dipti Radia have moved on, with James Buckley a first, temporary addition. Among academic staff, Huw Barton was promoted to Senior Lecturer, Constantina Katsari has left the School and Mary Harlow, appointed last year, has quickly settled, as has Teaching Fellow Niall McKeown. New post-doctoral researchers include Adrian Chadwick on the AHRC-funded Coin Hoards project, Shane McCorristone on the Wellcome Criminal Bodies, and Julia Farley as a Leverhulme Early Career Fellow. Departing post-doctoral researchers include Franca Cole (Trans-Sahara project - gone to a lectureship in archaeological conservation at UCL-Doha), Andrea Roppa and Melissa Vettors (both Tracing Networks).

Recent staff distinctions include: Richard Thomas, elected as Chair of the Association for Environmental Archaeology; Sarah Scott, the first person in the School to be awarded a University Teaching Fellowship; Oliver Harris now a Fellow of the HEA; Pim Allison, awarded a Harold White Fellowship at ANU, Australia; Andy Merrills will be Visiting Researcher on the Ancient North African & Phoenician Diaspora Project, Department of Classics, University of Sydney; Lin Foxhall, who is on AQA's panel of experts revising the syllabus for A level archaeology; Neil Christie appointed to the Faculty of the British School at Rome; and David Mattingly, elected as a Member of the Academia Europaea. David also delivered the prestigious Jerome Lectures at the American Academy in Rome and at the University of Michigan.

Meanwhile, in terms of ULAS project work, in addition to the excitement of the Burrough Hill and Greyfriars discoveries, there has been a big increase in commercial work this year, a highlight being the extensive 3rd- and 4th-century Roman settlement at Pineham, Northampton, where a well-preserved smoke house and wells, one including fragments of an Early Christian lead baptismal font, were located. Ongoing excavation at Kirby Muxloe has revealed an Iron Age settlement characterised by a linear arrangement of over 20 roundhouses, and featuring two iron cauldrons from a ring ditch which may indicate feasting activities. Elsewhere Iron Age settlements have been examined at Brackley, Broughton Astley and Lutterworth while medieval buildings were revealed during a watching brief through the centre of Coventry and an excavation at Wellingborough. Much more is anticipated for 2014!

Chickens and humans:

Leicester archaeologists get involved in fowl research

Leicester University's School of Archaeology & Ancient History, together with five project partners (Bournemouth, Durham, Nottingham, York and Roehampton) have been awarded £1.94 million from the AHRC under the Science and Culture scheme for a research project entitled: *Cultural and Scientific Perceptions of Human-Chicken Interactions*.

The chicken is native to Southeast Asia but over the last 8,000 years it has been transported by people around the world—no other livestock species is so widely established: today there are over 20 billion worldwide. The chicken's eastward spread from Asia to the Americas has been the subject of many studies; however, its diffusion to the West has received much less attention. There have been a few small scale surveys documenting the spread of chickens across Europe, but there has been no comprehensive review about the rapidity of the spread and its cultural and environmental impacts. No ancient (and little modern) DNA work has been published for European chickens, nor have there been any isotopic studies focussed specifically upon their diets or whether they were bred locally or traded. Given the social and cultural significance of this species (whether as a provider of meat, eggs or feathers, its widespread use in cockfighting or its association with ritual, magic and medicine), a detailed analysis of the natural and cultural history of chickens in Europe is long overdue and this has genuine potential to provide cultural data of the highest quality and relevance for a range of disciplines and audiences.

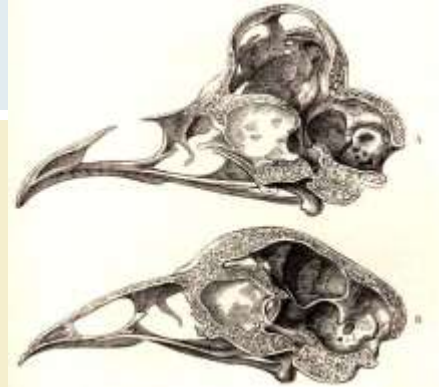
To realise this potential and elucidate the circumstances and meaning of the westward spread of the chicken from the late prehistoric period to modern times a trans-disciplinary team - composed of experts in European archaeology, anthropology, genetics, zooarchaeology, and other branches of archaeological science - will integrate the evidence from their specialist studies.

The Leicester team will comprise Dr Richard Thomas (Co-Investigator), Dr Brooklynn "Tyr" Fothergill (Postdoc Researcher), and a PhD student (generously funded by this University's College of Arts, Humanities and Law) and will focus on osteometrics and pathology to investigate the changing size and shape of chickens, explore the archaeological identifiability of breeds, and document disease and injury, through space and time.

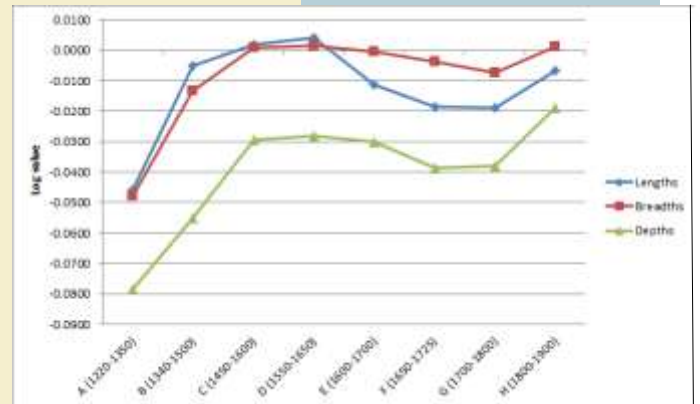
Large cohorts of fast maturing, intensively reared broilers epitomise contemporary industrial poultry farming. These commercial meat birds were bred in the first half of the 20th century to satisfy a rapidly increasing demand for chicken meat at a low cost. Today, traditional approaches to livestock breeding are being supplemented by the selection of birds with known genetic constitution, to enhance productivity or to improve disease resistance, for example. The selection of favourable characteristics in chickens is not a new phenomenon, however: the Roman agricultural commentator Columella extolled the virtues of five-toed chickens and decried creeper fowl, indicating that selection for particular characters may have been occurring from at least Roman times. While the latter points to the long history of chicken breeding, it is a history that is very poorly understood. Narratives that focus upon poultry concentrate primarily upon developments which occurred in the 18th and 19th centuries as knowledge of heredity improved and the 'scientific' approach encouraged the keeping records of productivity (e.g. egg laying, maturation rate, body size, breeding success and bloodlines), increasing their visibility to the historian. A disconnection thus exists between contemporary breeds and their antecedents: the former kept by small-holders and documented in texts; the latter primarily revealed through studies of the skeletal remains of the animals.

While the 'improvement' of chickens may have satisfied productivity requirements, it is possible that there were unintended health consequences for the birds: as modern poultry farmers can readily attest with lameness problems in fast-growing broilers. The connection between livestock breeding and disease susceptibility has not been explored in the past, yet it has potentially very significant implications for the future sustainability of poultry husbandry.

Both of these strands will be addressed by studying chicken bones from across Europe and from the Iron Age to the present day, and all the findings will be integrated with those of our project partners.



Above: Image from Charles Darwin's *'On the Origins of Species by Natural Selection'* showing a normal chicken compared with the skull of a crested fowl (the latter appear in the Roman period, are more common by late medieval times)



Above: Graph showing size change in chickens from London 1220-1900, showing that chicken bones get bigger in the 14th century and in the 19th century. An indication of new 'breeds'?

Below: Image showing the size differences in chicken humeri (an upper wing bone) in finds from an early modern site excavated in Chester



From Children to Dress in the Ancient World— new Senior Lecturer, Dr Mary Harlow, introduces herself:

I am by (Leicester University) training an ancient historian who works with texts, images and material culture. I have even been known to do field work but only in hot and interesting places – Dr Taylor is a witness to my awesome mini bus driving down tiny Italian lanes and my linguistic ability in managing to buy ready-mix concrete, wheelbarrows and screwdrivers from Italian ironmongers. My research interests are primarily dress and age and ageing in Roman society. The study of the life course – from birth to death – and how society responds to and expects different types of behaviour from different age groups is a way of reading Roman social relations. It is an approach that includes methodologies from sociology, anthropology, gender and gerontology – and produces some interesting ways of looking at Roman society as can be seen in Harlow and R. Laurence (2002) *Growing Up and Growing Old at Rome* and *A Cultural History of Childhood and the Family* (2010). I have published several articles on dress and full info on these can be found on my staff web pages.

Previously I have worked for the universities of St Andrews, the Open University and Birmingham (1995-2013) and am very happy to be returning to Leicester. From March 2011 to July this year I had the privilege of spending two years working as a Guest Professor at the Centre for Textile Research (CTR) at the University of Copenhagen.

Ostensibly this was to find the time to research and write a book on Roman Dress for CUP, a project I thought I had pretty well wrapped up until I went to CTR. There I discovered that there was a huge learning curve to climb in terms of textile archaeology and innovative thinking about the way textiles and clothing have shaped the world since pre-history (the image below shows me trying to understand how a loom works). So, the book is still a work in progress, but my enthusiasm and skills in textile archaeology and textile production are growing and I hope to sneak a course on dress into the curriculum at Leicester in the near future.



Julia Farley tells us about her

Iron Age and Roman gold and silver

After a year working at the British Museum, I am now back in Leicester, working on a 3-year Leverhulme Early Career Fellowship on gold and silver in Iron Age and Roman Britain. I can illustrate the kind of themes I will be exploring in my project using an Iron Age object from Lincolnshire: the Market Rasen gold brooch. This brooch resembles Mediterranean types known also from Gaul and southern England, with four examples from the Winchester hoard. Wearing these objects manifested a particular form of social status in the Roman world. When found in the northern provinces, these Mediterranean objects are often interpreted as diplomatic gifts. There are even classical texts which discuss the giving of gold brooches as part of sets of regal paraphernalia to provincial client rulers, and the Winchester hoard finds have been interpreted in this light. The Market Rasen brooch, however, was not a gift from Rome. The curved projection from the bow speaks of connections to a British brooch type, the birdlip, and the finely tooled designs on the foot and catchplate are distinctively British. Rather than a simple gift, this object may well represent a local reinterpretation of an exotic symbol of power, crafted in an imported material, but in a local style.

I am interested in the way that gold and silver objects like this brooch can show us how not just things, but also ideas, knowledge, materials, and values circulated and became transformed as the Roman Empire expanded. Precious metals played a crucial role in mediating the interaction of Iron Age and Roman concepts of power, wealth, and display, and the mutual creation of new colonial identities, practices, and value systems.

Top left: *The Market Rasen Iron Age gold brooch. Inset: Detail of engraving on foot and catchplate. (Images copyright Trustees of the British Museum)*





Left: A Nilotic scene from the Casa del Medico, Pompeii, depicting pygmies hunting out wild beasts

On being a Nile-ist. *The Confessions of Dr Andy Merrills*

For the last few years I've been involved in a ridiculously ambitious research project relating to how the Romans understood the world around them – basically how their 'geography' worked. We have some vague idea that the Romans had maps, but none of these has survived, they don't seem to have been taken very seriously, and we have little sense of what they actually looked like. A handful of formal 'geographical' texts have survived –

works like the great *Geographika* of the Greek writer Strabo – but these were hardly high-status texts, and very few people seem to have read them. The Romans didn't have geography lessons at school, and the world that they knew was rapidly changing as the empire expanded. So what did they really know about it, and how did they express this knowledge?

What I wanted to do was to think about the different ways in which geographical knowledge could be articulated by examining contrasting representations of a single feature – the River Nile – in a variety of different media. I'm focusing on the period from around c.60 BCE–c.80 CE, and on texts and images that originated from Italy, but this still involves a colossal amount of material. After all, this was the time in which Egypt was brought into Augustus' new empire, and the newly captive Nile appears in some of the greatest literary works of the time, including the poetry of Virgil, Ovid, Propertius and Lucan. It also features prominently in the scientific writing of Lucretius and Seneca and the great encyclopaedia of the Elder Pliny. The Nile was a point of contemplation for moral and natural philosophers, and hinted at revelations about the mysterious origins of the world. The unknown sources of the Nile drew Roman explorers to the distant south, and whet the grandiose appetites of megalomaniac emperors. And scenes of violent (and often erotic) activities on the banks of the river were fabulously popular on the domestic interiors of Rome and Pompeii (see image above). At once a symbol of oriental 'otherness', and the creation of the universe, a token of imperial power and a fashionable theme for interior decorators, the Nile had a huge number of different associations in the later Republic and the earlier empire. My plan has been to discuss all of them! In so doing, I want to think about who 'owned' geographical knowledge at this time, how writers (and painters) made their accounts trustworthy, and how contrasting media allowed different groups to express their own involvement in the great project of empire.

The project has been going on for a while, and has changed dramatically since I first started working on it, long before I came to Leicester. All being well, though, the book should be finished in early 2014, and I'll plan to write something for next year's report confirming its publication!

This summer the School of Archaeology & Ancient History and the Centre for Historical Archaeology launched our first-ever North American archaeological fieldschool! Between 24th June and 2nd August, 12 of our Leicester campus-based students, 3 of our distance learning students, and 8 students enrolled in Anthropology departments across America (including the University of Florida, Brown University, Randolph-Mason College, University of Pittsburg, Eastern Michigan State University, and Northern Arizona University) came together to learn archaeological method and theory in Connecticut. They took part in a collaborative research project organised between Dr Craig Cipolla and the Mohegan Tribe. This means that students learned about contemporary Mohegan peoples and practices, including the Tribe's interest in archaeology, while conducting research on past Mohegan peoples. This year's students sampled a wide variety of archaeology, digging a 17th-century English-Pequot battlefield site, Connecticut's

The Mohegan Fieldschool 2013

The second 2013 field team



fifth-discovered PaleoIndian site, and a variety of sites at Cochegan Rock dating from the 18th century to the present. In addition to the archaeology, students attended a nice mix of guest lectures from local archaeologists and Native American scholars and officials. Despite the heat, humidity, and Connecticut's many insects, all students duly survived!

About the Site

The Cochegan Site provides an interesting context to study interactions between English colonists and Mohegans from the 17th century onwards. Currently a 37-hectare property owned by the Mohegan Tribe, the Cochegan Site, contains both a ceremonial stone landscape, used by the Mohegans since the 17th century,



The first 2013 field team

and an English/Anglo-American farmstead—owned and occupied by several generations of the Baker family throughout the 18th and 19th centuries. During the 17th century, the Mohegan sachem Uncas held tribal meetings on top of Cochegan Rock, a 16-meter-tall glacial erratic sitting at the heart of the site. In the

early 18th century, Uncas's son Oweneco sold much of the Cochegan property to an English settler named Joshua Baker. Baker subsequently set up a farmstead directly adjacent to Cochegan Rock that he and his family occupied continually up through the late 19th century. The Bakers were not alone, however: oral and archival records suggest that a Mohegan shepherd named Caleb Cochegan—the property's namesake—lived in or near a natural shelter 'underneath' Cochegan Rock during the 18th century. Since it was commonplace for Native men to work on English farmsteads then, Caleb Cochegan and other Mohegan men probably provided labour for the Baker farm. The 2013 field students performed a shovel test pit survey and excavated a number of archaeological features, including the mysterious structure pictured below.



Burrough Hill - The 2013 Season. *Directors John Thomas (ULAS) & Jeremy Taylor (SAAH) report*

The fourth season of excavation at Burrough Hill took place in June & July 2013, with two large areas (Trenches 8 & 9) being the focus of work this year. Both trenches contained significant new archaeological information relating to Iron Age activity, but evidence was also discovered for earlier and later human activity on the site, stretching the story of Burrough Hill further than we had previously been able to.

Trench 8 was located in the SW corner of the hillfort to target geophysical anomalies and test the idea that a conspicuous gap in the ramparts there may have been an Iron Age entrance (it leads quite nicely downslope to where the natural springs are found). The geophysics for this area suggested a roundhouse with adjacent enclosure (recalling the arrangement in last year's Trench 7), and we hoped to get comparable information.

But what we had thought was an Iron Age enclosure turned out to be part of a group of features of probable Early Bronze Age date. The focus appears to have been a large C-shaped ditch of c.10m diameter and an opening to the north. Within the opening a squared shallow feature contained flint scrapers, an arrowhead and knapping debris. To the rear of the C-shaped ditch a small pit contained fragments of at least three Beaker pots. Similar fragments of this pottery were found in the ditch and the possible structural remains hinting at broadly contemporary activity.

Iron Age activity was focussed on a complete roundhouse which, unusually, had remains of the buildings wall slot surviving, as well as the eaves-drip drainage gully. Several small pits, post holes and burnt areas survived within the building. The entrance had been sealed at some point by two short gullies, both rich in finds, contrasting with the main roundhouse features that were relatively finds free. Various pits were located to the rear of the roundhouse: two large pits held predominantly animal bone assemblages, while another, affectionately nicknamed the 'house clearance' pit, contained domestic deposits including pottery, bone, hearth waste, loom weights and a virtually complete, but smashed rotary quern. A final pit contained layers of 'fuel-ash' slag generated from hearth waste, organic layers and, at the bottom, a significant collection of decorative metal fittings from a chariot, deliberately buried with what may be other horse-related equipment.

As for the possible 'entrance', questions remain, but our work did reveal a well-constructed drystone wall running across the gap. This quality of stonework was previously seen in the main hillfort entrance so finding it here too may be significant. This wall may have defined or blocked an (as yet unseen) entrance in this corner of the hillfort. Intriguingly, a small undated structure (rather SFB-like!) had been constructed in the rubble tumble of the rampart.

Trench 9 was both large and complex. Located in the NE corner of the hillfort it aimed to investigate geophys anomalies of several roundhouses. It soon became clear that it contained much more than predicted, with multiple overlapping curving gullies that probably represent a sequence of roundhouses. In terms of our understanding of how the hillfort was organised this trench counters the apparently 'single use' model shown by the roundhouse in Trench 8 for example. One complete circle (top right in the photo below) likely is a full roundhouse but others were less well preserved. Associated pits produced assemblages of pottery, animal bone, loom weights and querns, including one that had been deliberately mis-shapen before deposition, in a similar way to the smashed quern in Trench 8.

Below: the complicated Trench 9 with multiple round-houses, boundary ditches and Roman walls



Some of these roundhouse remains may have been used until quite late in the Iron Age occupation of the hillfort as several features contained transitional 'combed ware' pottery.

A long-lived linear boundary (running up the right hand side of the photo) also spanned the Iron Age-Roman transition indicating continuity of use here. One big surprise in Trench 9 was a series of wall fragments which appear to date to the later Roman period. These did not show on the geophysics but apparently relate to some sort of structure of the 3rd-4th century. The walls were badly damaged by medieval ploughing so it is difficult to determine exactly what these walls once belonged to but they do provide a focus of activity for the spread of late Roman pottery that has been recovered from the northern part of the hillfort during earlier excavations.

2013 was another good year for engaging with the public, promoting the site via local television and radio interviews. We hosted seven school visits (approx. 300 children) one of which was filmed for BBC East Midlands Today for an edition of 'Inside Out', due to air in February 2014, four local society visits, a Summer School and a day of digging for the Leicestershire YACs. Our Open Day attracted over 500 visitors and a day also ran at Melton Museum which had over 100 visitors to see finds, meet re-enactors and listen to talks about our excavations.

Digging up Romans with Operation Nightingale



Image above: Undergraduates excavating the hypocaust room; in the background, a soldier checks the spoil heap for metal artefacts.

Image below: The Operation Nightingale Whitewalls Brake excavation team of spring 2013, comprising serving soldiers and veterans of the Regular and Territorial Army, almost all dealing with physical and/or psychological injuries, plus civilian archaeologists and students from the School (plus me, 2nd from right).



Simon James reports on the latest work as part of this award-winning initiative: In freezing conditions, from 23 March-6 April 2013, six School students joined me to form part of a team of soldiers, veterans and civilian archaeologists to excavate a major Roman building at Whitewall Brake in South Wales. This Scheduled monument lies inside the Army's Caerwent Training Area, overlooking the walls of the Roman city of *Venta Silurum*. For the last couple of years, School staff and students have been helping investigate the site to assist Cadw and the MOD (Ministry of Defence)

better understand and manage the remains. What we found was intriguing; but how we found it was at least as important.

The scheduled area is scattered with imported white building stones giving it its modern name. Our work has revealed massive masonry walls over a span of 50m, and a hypocaust room once boasting a polychrome mosaic. Pottery and coins suggest 3rd- and 4th-century usage. Despite both geophysics and excavation, the site remains stubbornly enigmatic. Was it a residence? A shrine complex like nearby Lydney? But why so few portable finds? These ques-

tions require more fieldwork—in itself also an objective of the project.

This dig is part of the award-winning 'Operation Nightingale', conceived by Army medical sergeant and archaeology graduate Diarmaid Walshe. Run by the Defence Archaeology Group, 'Op Nightingale' aims to help injured soldiers—mostly veterans of Iraq and Afghanistan—recover through engaging them in archaeological field research. It works: I have seen how this can help soldiers who have lost their fitness, vocation, and self-confidence to continue rebuilding their physical and psychological health, and to find a renewed sense of purpose through a novel activity involving field skills in which soldiers already have a head start. Op Nightingale also involves them working closely with civilians, here with site director Philip Abramson (the archaeologist with the MOD's Defence Infrastructure Organisation), and our team of undergraduates, who were there on formal training placements as part of their degrees. Military/civilian collaboration is key to the process, helping soldiers reflect on future career options, including university; several are now indeed taking degrees at Leicester. The soldiers also had a lot to teach students too, notably looking after themselves in arctic field conditions! Despite the cold a brilliant atmosphere of hard work, profound discussions of very difficult experiences, but—most obvious—sheer fun was generated at Whitewall Brake, between the soldiers and civvies on the project, offering everyone an intensely memorable experience, from spending 24 hours living on Army ration packs to extended bonding sessions over beer and Internet at the coach and Horses in Caerwent village.

Many Op Nightingale soldiers want to come back for more—as do many of the students who have now worked there.

During the coming year we aim to offer more training placements, and opportunities to work with Operation Nightingale at Caerwent, so watch this space!

Defence Archaeology Group:
<http://www.daguk.org/>

There's more to Bosworth than Richard III!

In the late 1990s, five parishes in Leicestershire were the focus of a comprehensive metal-detector survey, which revealed the location of the Battle of Bosworth. One particular field, however, had another story to tell. A small area produced hundreds of Roman finds, including over 200 brooches and almost 700 coins. Geophysical survey showed that the finds clustered around a circular feature about 12m wide. All the evidence pointed to a Roman temple.

This summer, a small team led by Nick Ray and Julia Farley carried out the first excavations at the site. If TV producers insist on not working with animals or children, perhaps archaeologists should avoid working on arable land. The dig had been postponed the previous summer owing to the wet weather, and it looked like this year there might once again be no gap between the crops. Unwilling to be defeated, we bought the wheat.

On day three, it looked like we might be left with some very expensive bread flour and few results. Where was the mysterious circular feature? A stroke of genius from Nick and some mighty mattocking by Tim Higgins from ULAS quickly had the trench extended a metre to the north, revealing the footings of a stone wall (see picture, with a triumphant Julia Nikolaus and Nick Ray). A coin of Constantine at the bottom of the construction trench neatly dated this to the latter half of the 4th century. We had found (a bit of) our temple! The dig also revealed Roman postholes in the area of the temple and dating evidence for a nearby trackway and field boundaries.

Special thanks to the excavation team, and all the Leicester University and County Council staff who helped make the project happen.



"XRF analysis back in Leicester has demonstrated that the wheel object is essentially pure lead..."

Circles within circles

Mark Gillings reports: In August a team from Leicester headed down to Somerset to lead a community-based fieldwork project at the site of **Porlock Circle**, a presumed late Neolithic-early Bronze Age standing stone circle one of only two known on the uplands of Exmoor. Central to the project was a detailed record of the circle for English Heritage and the Exmoor National Park Authority. This comprised production of a plan and scaled elevation drawings of the surviving stones as well as targeted excavation of one part of the circle that had shown signs of recent disturbance. In practice a modest 6 x 4m trench (see photograph below) was centred upon two visible standing stones of the circle perimeter,



revealing not only three previously unrecorded prehistoric stone holes (all now missing their original stones) but that the two standing stones visible today are both fakes, having been hastily erected (using modern spades) sometime since the last formal survey of the site in 1990.

There was only one find from the excavation that fell within the interior of the circle. This is a circular lead 'wheel' some 6.5cm in diameter that had been deposited on the surface of the subsoil. Intact (until we managed to put a spade through the middle of it during de-turfing), this find is very curious. A quick XRF analysis back in Leicester has demonstrated that it is essentially pure lead (99.7%); and having discussed with fellow staff and their contacts, the most likely interpretation is that it is a late Iron Age / early Roman model votive wheel of a type most often found in France. VERY intriguing...

So, we are still waiting for that cache of polished stone axes! Don't you just love archaeology?



NEW BOOKS FROM THE SCHOOL

This new *Society for Medieval Archaeology* monograph details the results of the **Wallingford Burh to Borough Research Project, 2008-10**, a major archaeological project, funded by the Arts and Humanities Research Council, based on and around the historic town of Wallingford in south Oxfordshire, England. Founded in the late Saxon period under King Alfred the Great as a key defensive and administrative focus next to the Thames, the settlement also contained a substantial royal castle established shortly after the Norman Conquest (Wallingford was in fact where Duke William crossed the Thames in 1066 to march on and take London). Excellent conditions of archaeological survival mean that Wallingford is an important case study for exploring urbanism in England between the early and late Middle Ages.

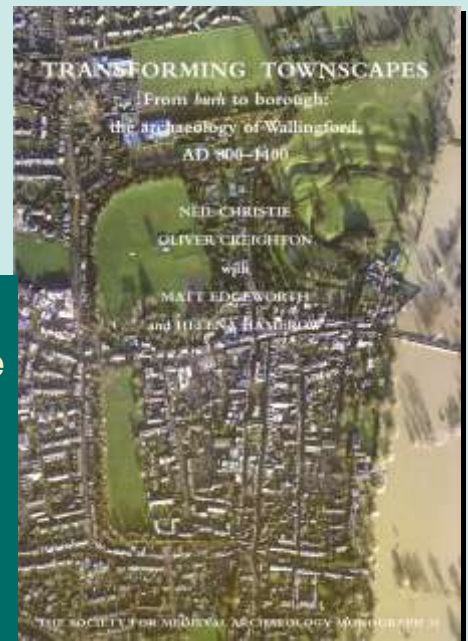
This volume details both the project fieldwork (comprising excavations, test-pitting and extensive geophysical and other surveys), and data from developer-led interventions and other previously unpublished excavations in the town's historic core. It highlights in particular the strong community-led approach of the project, with a highly successful blend of aca-

demics, professional archaeologists and locals helping to bring much more of the town's heritage to light. The study traces the pre-town archaeology of Wallingford – from late Iron Age landscape to early Saxon cemetery – and then analyses the town's physical and social evolution from Saxon *burh* to chartered borough, and assesses its defences, castle, churches, housing, markets, material culture, coinage, communications and hinterland.

Core questions running through the volume relate to the roles of the river Thames and of royal power in shaping Wallingford's fortunes and identity and in explaining the town's severe and early decline.

Transforming Townscapes. From Burh to Borough: The Archaeology of Wallingford, AD 800-1400.

By Neil Christie and
Oliver Creighton, with
Matt Edgeworth and Helena Hamerow



Becoming Brothertown

*Native American Ethnogenesis and
Endurance in the Modern World*

CRAIG N. CIPOLLA



Craig Cipolla outlines the scope of his new book:

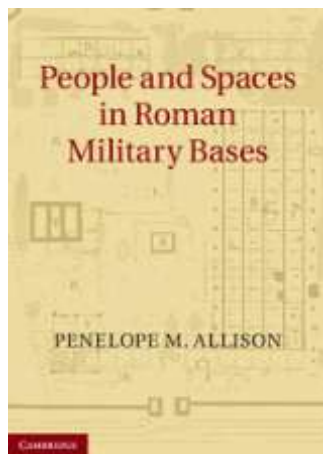
Becoming Brothertown. Native American Ethnogenesis and Endurance in the Modern World explores the emergence of the Brothertown Indians, a 'new' community of Native peoples formed in direct response to colonialism and guided by the vision of Samson Occom, a Mohegan Indian and ordained Presbyterian minister. Breaking away from their home settlements of coastal New England during the late eighteenth century, members of various tribes

migrated to Oneida Country in central New York State in hopes of escaping East Coast land politics and the corrupting influences of colonial culture.

In the nineteenth century, the new community relocated once again, this time to present-day Wisconsin, where the Brothertown Indian Nation remains centred today.

This book carefully combines historical archaeology, grave-stones studies, and discourse analysis to tell the story of the Brothertown Indians.

MORE NEW BOOKS FROM THE SCHOOL

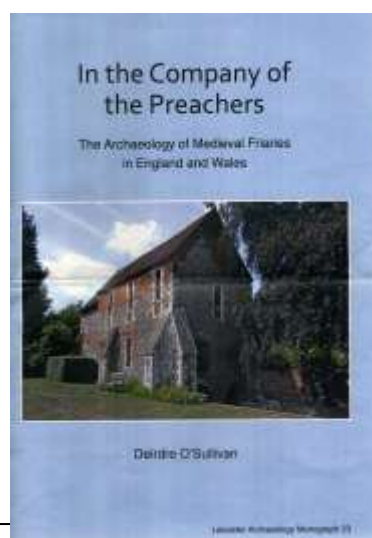


People and Spaces in Roman Military Bases, authored by *Penelope Allison*, builds on her earlier work at urban sites, particularly Pompeii, and uses artefact distribution and spatial analyses to develop fresh perspectives on the community who lived within the fortification walls of early Roman imperial military bases—the various industrial, commercial, domestic and leisure activities in which non-combatant and combat personnel were

involved, and the socio-spatial organisation of these activities and these establishments. In this it explores the lives of families and other support personnel who are widely assumed to have inhabited civilian settlements outside the walls. The publication is further accompanied by an online resources which demonstrates these artefact distribution patterns. (For access, please visit: ads.ahds.ac.uk/catalogue/archive/milspace_leic_2008/)

In the Company of the Preachers. The Archaeology of Medieval Friaries in England and Wales (Leicester Archaeology Monograph No.23). By *Deirdre O'Sullivan*.

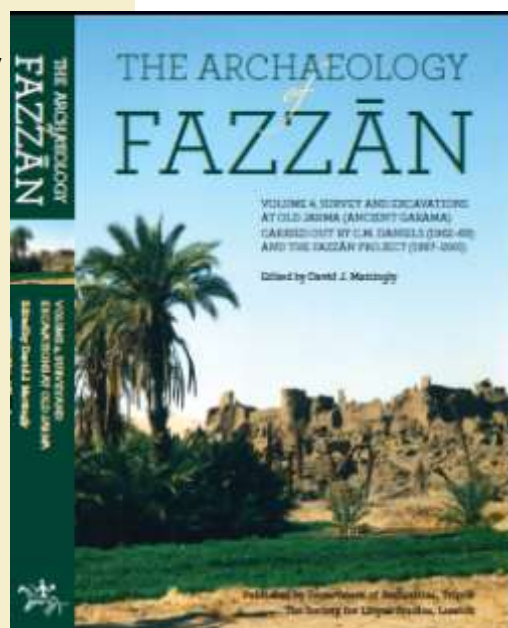
The first synthesis of the archaeological and historical evidence relating to *all* the medieval houses of the mendicant friars in England and Wales, this volume helps to understand individual biographies of place, and demonstrates the variety of communities, the range of settings and circumstances, and differences of scale of these convents. Drawing on an array of written, buried and upstanding data, this book offers a new, and systematic approach to the study of a neglected field. It gathers together data on all sites, not a handful of case studies, and so provides sizeable foundations for a more critical understanding of the development of mendicant sites, and their impact on medieval townscapes and their post-Reformation legacy.



THE ARCHAEOLOGY OF FAZZAN VOLUME 4

Survey and Excavations at Old Jarma (Ancient Garama) carried out by C.M. Daniels (1962–69) and the Fazzān Project (1997–2001). Edited by David Mattingly. Published by the Society for Libyan Studies and the Department of Antiquities, Tripoli, with financial assistance from BP Exploration Ltd

This is the final volume of the *Archaeology of Fazzan* series and it contains reports and analysis on excavations carried out between 1997–2001 by an Anglo-Libyan team led by David Mattingly at the oasis town of Old Jarma. The work incorporates unpublished data from earlier investigations at the site, notably by Charles Daniels (1965, 1969) and Mohammed Ayoub (1962–67). The publication is lavishly illustrated by site plans and numerous colour photographs, particularly of the rich artefact assemblages recovered. The key element of the story of Fazzan is the existence of an early Libyan civilisation, the Garamantes, who were responsible for a series of notable firsts in Libyan history (first Libyan writing, first towns in the interior of Libya, first oasis agriculture, introduction of the camel, the horse and wheeled transport to the Sahara, development of advanced irrigation technology). This was a singularly important moment in Libya's cultural history, with resonances also in Sub-Saharan Africa, since for the first time it is possible to see in detail the effect of early Trans-Saharan links.



The Society for Historical Archaeology comes to Leicester

Prof Sarah Tarlow reflects on a BIG international gathering in January 2013:

Really, it was all former School lecturer Audrey Horning's fault. Back in 2009 Audrey was invited to make a pitch to the Society for Historical Archaeology's (SHA) conference committee. Despite all our attempts to sabotage her, Audrey made such a good sell that the SHA decided to break with tradition for only the second time in its history and bring the conference to Europe in 2013 – specifically, to Leicester.

Preparing to host a large number of mostly North American archaeologists turned out to be a huge job. The list of what was required was huge: not only a first class academic programme, but also a student reception, a members' reception, an opening event, a series of round table lunches and workshops, a world-beating plenary lecture, a book room, two exhibitions and an open, public event to involve the whole local community. And everything was to be signed, staffed, catered, trouble-shot and social media-ized to be down with the kids.

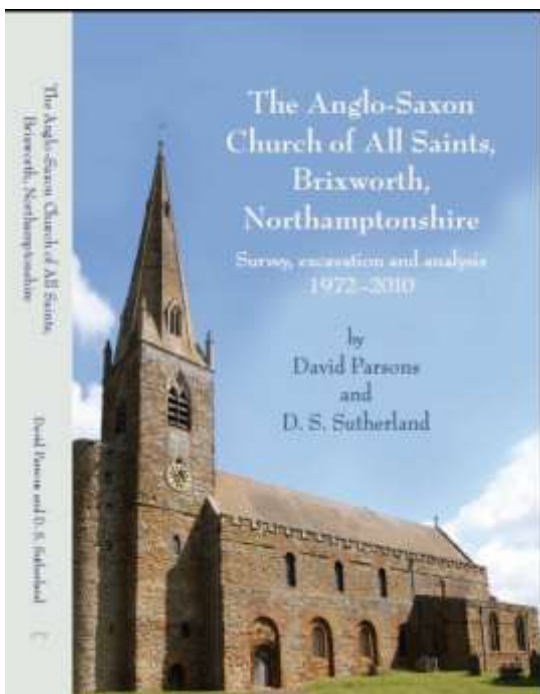
Luckily we had secret weapons: brilliant colleagues and tireless post-grad students, together with the best efforts of the university catering and conference services. The conference took place in January 2013, with around 800 delegates and, despite a few hairy moments, it was a triumph. The public event was the biggest and best the SHA had ever seen; the photograph shows how busy it all was in the O2 Academy. The conference, though small by SHA standards, was enjoyed by everyone we spoke to (though I sup-



pose they couldn't really say anything else). The Guildhall reception was enchanting and magical, and the extra pub quiz, laid on by Emma Dwyer and Sarah Newstead at The Marquis, was a huge hit.

By the end of the conference Sarah N had lost her voice, and Audrey, Alasdair, Ruth and I had acquired that glassy look that comes from no sleep and trying to remember far too many people's names and last minute audio-visual requirements. But it was brilliant to see so many of our own students, past and present, helping out as student volunteers, giving fantastic papers and cruising the book room. It made us really proud of our colleagues and students that Leicester could demonstrate to a big international society what kind of show we can put on, even without a special conference hotel or a local tradition of holding conferences of this sort of scale.

Good luck to the team at Quebec City who are organising this year's event. But rather you than me!



Brixworth Church Publication

Dr David Parsons, Honorary Fellow and former head of the Adult Education Dept at Leicester, writes of the arrival of a landmark publication:

Students of the School in the late 1970s and 80s will remember being taken by Land Rover to Brixworth in Northamptonshire after the end of exams (what were they...?), where their fieldwork task was to mount the scaffolding around All Saints' church with drawing boards to record the stonework of this hugely important Anglo-Saxon church at 1:10 scale – the largest archaeological 'section' drawing any of them had ever been asked to attempt. Simultaneously each stone was allocated a geological ID, and the final record of the data is a series of colour-coded diagrams at the back of this publication. In the meantime post-survey research has been immensely time-consuming and it has taken computer science quite a while to develop techniques that have made possible a full analysis of the data.

But now, 37 years after the first pilot survey season, here is the final publication (published by Oxbow Books). Result? – Period I c.800; Period II by AD 900. So don't believe what the textbooks say.



This past May I walked the Camino de Santiago de Compostella, a pilgrimage route to Santiago in northern Spain, first established in the 10th century and now a popular trek for both the religious and secular. While one can start at any destination, my own experience began on the French Way, in the small town of St-Jean-de-Pied-de-Port nestled in the Pyrenees near the Spanish border. Here, I received my pilgrim credentials, including a passport and a shell (the symbol of the Camino), important tools which acted as identification for *hospitaliers*, owners of the pilgrim hostels (called *albergues*) in which I sheltered throughout my journey. Otherwise, all I had in my possession were my lovely pink poles, a 10kg rucksack, a cap, and, crucially, comfy hiking boots!

The trek took me to some amazing places and through some outstanding landscapes. Some memories stand out: arriving at Roncevalles on Day 1 after a vast hike to the summit; walking my first 30km day; needing water while walking the Mesete only to find the nearest fountain to be dry; arriving in the majestic cities of Burgos, Leòn, and Astorga; enjoying a *'spaghetтата'* made by three lovely Sardinian pilgrims; waking up at 5:30am to watch the moon set and the sun rise at the Cruz de Ferro; my first glimpse of the Cathedral of Santiago; and watching priests swing the Botafumeiro (do check it out on YouTube!).

"the Camino is a slightly strange bubble where it is acceptable to show your feet to strangers and talk about how your blisters burst along the way ..."

Above all else, I remember meeting and walking with other pilgrims, although at times, the sheer volume of people - 300 left St-Jean-de-Pied-de-Port on the 1st of May - made the trek seem like a race. Worries arose about whether a bed would be available at the next location or if you would have to keep walking! Indeed, in Burgos, I managed to get the very last bed in the municipal albergue (which has 200 beds!). Yet despite those worries, the pilgrims I met always were friendly, fun to chat with, and incredibly helpful. I would often walk as part of a group since the walking goes much faster and is more enjoyable when you have someone to chat with! Discussions often focused on the question of *why* we were trekking - some had religious motivations

(in one case, an Italian was trying to find his faith again), others for the adventure, and some for deeply personal reasons. Whatever the reason, there was a sense of camaraderie and a respect for each other.

The people I walked with were always changing (thus remembering names was no easy task). Sometimes fellow pilgrims would stop earlier, keep walk-

ing, or even grab a taxi due to injury. Indeed, one interesting conversation revolved around 'Camino Rules' and how everyone had their own personal set to follow. My own was rather simple: walk the entire way with my rucksack. At the same time, sometimes snobbery would emerge - some pilgrims would frown upon others who would send their bags ahead; others would chastise those who reserved beds at private albergues. Indeed, with the worry of beds on everyone's minds, this latter issue unsurprisingly often came up. Despite the potential for 'heated discussions', many of the pilgrims I walked with were lots of fun - I remember a few heads turning on one occasion when my group began to sing a revised version of 'Frère Jacques' with verses about finding the next location in both German and English! Looking back, I can only describe the Camino as a slightly strange bubble where it is acceptable to show your feet to strangers and talk about how your blisters burst along the way (thankfully this never happened to me - my main ailment over the trek was a small case trench foot)!

I started the trek wondering whether I would experience similar sensations to pilgrims of the past. Yet the first thing that comes to mind now in fact are the conversations and the people I met, and not the glorious churches I visited. Perhaps that has more to do with my own personal inclinations towards Christianity? Would a pilgrim of the 10th century have had similar thoughts? Overall, I walked around 800km (~500 miles) over 34 days, over two major mountain chains, across the flatlands of the Spanish Meseta, through the majestic woodlands of Galicia, and arrived in Santiago on the 3rd of June. Most describe their journey as 'once in a life-time' - and for me, when I arrived in Santiago, actually all I could think was when could I do it again!

Along the 'Way': a pilgrim experience

*PhD student Chantal
Bielmann recounts
her Spanish trek*



The astute amongst you will have noticed that over the summer the bone lab has become the bone labs - following the development of the osteology research lab (Room 113), made possible by a generous grant from the University of Leicester Equipment and Research Infrastructure Fund. The Lab offers a state-of-the-art facility for human osteological research within the School and houses our teaching and research collection of 60 Roman skeletons and over 100 post-medieval skeletons.

We also welcome some new faces in the bone lab(s). Kerry Lawless has joined us on a six-month internship as research and teaching technician. Part of her portfolio will be to catalogue the School's teaching and research collection of human skeletal remains, which we will be making accessible on our website. We also welcome Dr. Carme Rissech. Carme is a human osteologist from the University of Barcelona. Over the next 12 months she will be collaborating with Jo and Richard, on ageing human skeletal remains and applying geometric morphometrics to the study of animal 'breed' identification. We also welcome back Lluís Lloveras-Roca (also from the University of Barcelona), who is just embarking on the second year of a two-year post-doctoral research post exploring small mammal exploitation in Upper Palaeolithic Iberia. In Janu-



Exciting times in the SAAH bone labs (x 2!)

ary, Brooklynne "Tyr" Fothergill will be re-joining the lab when she embarks on a three year fellowship on the chicken project (of which more on page xx) and she will be accompanied by a college-funded PhD student (yet to be appointed), who will be joining Rebecca Gordon (AHRC funded), Meghann Mahoney, and Eric Tourigny (SSHRC funded) as resident zooarchaeologists, and Rebecca Kibble, Tom Ohlson, and Clay Swindell as part-time students.

In other news, Richard Thomas has been appointed as Chair of the Association of Environmental Archaeology and members of the lab have had many publication successes, including the skeletal analysis of

Richard III, livestock size change in later medieval and early modern England, and the problems of assessing the effects of digestion on rabbit bones!

To keep up to date with life and research in the lab, follow us on facebook: <http://www.facebook.com/>

Roman political machinations in cartoon guise!

MA (just completed) student *Liz Janovsky* shows her artistic grasp of the past

"My childhood was spent watching *Il était une fois... l'homme*, later reading Asterix and Kate Beaton's history comics. Studying history, I discovered that a lot of the past was pretty weird. I've never not been drawing and cartoons proved to be the perfect instrument for sharing all those strange facts. Suetonius's Twelve Caesars is one of my favourites, especially for bizarre tidbits, that may or may not be true. I hope to eventually turn all of his lives into comics."

Lastly, a link to my website: <http://foxesandtea.wordpress.com/>



Look out at your garden, and those of your neighbours. What do they look like and how are they used? There will be lots of individual differences. The garden can be: a designed relaxation space for family and friends, a wildlife haven (by design or neglect!), a traditional cottage fruit and vegetable plot, a children's play area, etc. Think what information these differences reveal about the owner, his/her priorities, interests and lifestyle. It's a very individualized picture, but go back a few hundred years and the differences are far fewer, primarily between landscaped park-like gardens which served as status display areas for the wealthy and intensively managed food-producing plots for the vast majority. Thinking back as far as the ancient world, we know a great deal about the archaeologically-recovered gardens of the Roman world, especially of Pompeii (see image right for the reconstructed garden at the *House of the Vetii*). In many ways they are similar to our own: privately owned, attached to houses and acting as an extension to them, as an area of hospitality, relaxation and display.

So, it's very easy to assume that all gardens in the ancient world worked like this, but this is certainly not the case, as far as the gardens of archaic and classical Greece are concerned, particularly those of Athens - the only city for which we have enough information to draw conclusions. Greek gardens seem to have worked in an entirely different way. If you had walked around ancient Athens, you would have struggled to find a *personal* garden attached to a house; instead, the vast majority of gardens were *public and sacred*, and nearly all of them were sited in a suburban zone ringing the city.

My PhD research is focused firstly on finding practical in-



formation about these gardens - necessarily from scratch, as the topic has not been fully researched. The investigations of ancient writers and most modern archaeologists have concentrated on the urban and the built environment, muddy gardens being far less impressive. Therefore, a notable initial task in my studies was to compile databases of primary source references from literature and epigraphy. The references are fleeting and frequently obscure; and a training in grammatical Attic Greek is not a great help when facing a semi-literate provincial inscription! Painted pottery scenes and archaeological site reports have also been collected. My second and current task is to investigate and write up what these sources tell us about the different types of gardens and how they may be categorized.

The third and most interesting phase will be to stand back from this material and ask what it tells us about Greek society, its priorities and attitudes. Obviously, I am drawing conclusions as I go along and it was clear from the beginning of my research that the earliest references we have relate more to gardens that were conceived by the mind than those that were worked by the hand. This is wonderful, as it gives information about what gardens were thought to be, how they were regarded, for whom were they appropriate and what qualities were associated with them. A case study of the *Garden of the Hesperides* (illustrated on the left, from a vase by the Meidias Painter) provides an introductory chapter exploring these ideas. Ultimately, I hope that I will have gathered enough information to illuminate a neglected but essential part of the Greek landscape.

The Gardens of Ancient Greece

Doctoral researcher Margaret Hilditch tells us of her search for the ordered greenery of antiquity



The Quispisisa Obsidian Source Project

The Research programme was directed by Dr Nico Tripcevich of the Archaeological Research Facility, University of California at Berkeley and Dr Dan Contreras of Kiel University, Germany.

The research was generously supported by: National Geographic Committee of Research and Development; The Brunner Earth Sciences Laboratory, Stanford University; The Archaeological Research Facility, University of California at Berkeley; The Stahl Fund

REFERENCES:

N. Tripcevich and D. Contreras, 2011: Quarrying Evidence at the Quispisisa Obsidian Source, Ayacucho, Peru in *Latin American Antiquity* 22(1) 121–136; N. Tripcevich and K. Vaughn (eds.) 2013: *Mining and Quarrying in the Ancient Andes* (Springer: New York).

There was only one way to carry all our equipment to the Survey Area!



High Altitude Obsidian Procurement in the Central Peruvian Andes

Former Leicester MA student, **Tom Kimber**, now of the Terra Rosa Cultural Resource Management, Fremantle, Western Australia,

reports: Obsidian, the natural glass prized in volcanic regions across the world for its remarkable flaking characteristics, gained attention from Andean Archaeologists in the 1970s. Initial work focussed on the geochemical categorisation of obsidian artefacts into a series of types, each derived from a distinct geological source. The most widely distributed of these types, named Quispisisa after the *Quechua* term for 'shattered glassy stone' has been identified in archaeological contexts stretching from the Tiwanaku heartland to the south to as far north as the Chota Province in northern Peru and temporally from the terminal Pleistocene through to the late Middle Horizon. Understanding the shifting patterns of obsidian procurement from the source of Quispisisa type obsidian provides important information on inter-regional and long-distance pre-Hispanic interaction. However, it was only in July 2012 that the first systematic and intensive archaeological expedition set out into the thin air of the Andean Plateau, 4000 m above sea level to document the source of Quispisisa-type obsidian. The project focussed on two areas: the quarry area itself, a complex of nearly 100 open-cut excavations with associated structures and late stage reduction scatters, and the settlement site of Marcamarca, a middle horizon complex of circular structures, and mortuary features, where obsidian literally paves the streets. Cultural obsidian litters the landscape and the central question for the team was how to sample and document such a large corpus. For example, excavation unit 1 at the Marcamarca complex (as yet unpublished) yielded almost 1 m of pure deposited obsidian flakes and bifacially-retouched artefacts (see image top right). The dataset can be used to address archaeological questions related to the socio-political context of obsidian extraction at the Quispisisa source, how regional consumption patterns evolved, plus methodological questions about archaeological approaches to lithic quarries, engaging with theoretical approaches to scale and inter-regional comparisons with other obsidian sources both in the Andes, and further afield. Aspects of the research were presented at the SAA conference in Honolulu, April 2013, and publications are forthcoming.



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Bulletin editor:
Dr Neil Christie



And finally.... PHOTO CAPTION COMPETITION TIME!

The editor looks forward to some intriguing, suitable, irreverent, irrelevant or inconsequential captions to explain and enlighten this image. Entries by email, please, with full credit card details and a yuletide lyric or three....

