

12,000 Years of Archaeology at Bradgate Park

Dr Richard Thomas reports on a promising first season of the new undergraduate field school

The first season of our excavations at Bradgate Park focussed on three areas: a moated site (thought to be the location of the medieval park-keeper's lodge), a large stone outbuilding to the south



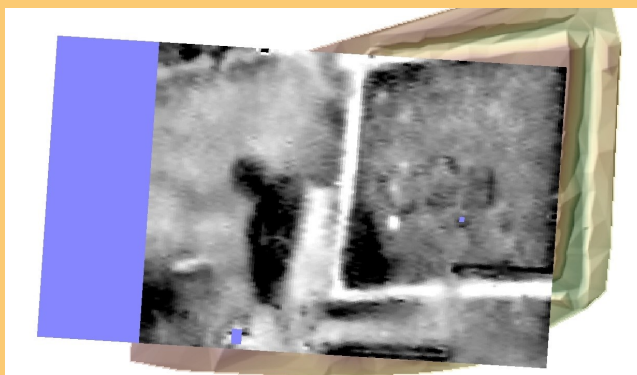
Finding green-glazed pottery

of the Bradgate House of unknown date and purpose (but which appears on a 1746 plan of the estate), and a building located within the courtyard of the House, but which sits on a completely different alignment. The excavations did not disappoint. We recovered everything from stone tools dated to the end of the last Ice Age, to a 1950s toy gun! Some of things we discovered confirmed what we suspected, but there were many surprises too. Our medieval moated site yielded a large building with stone foundations, a wooden frame and walls, and a slate roof, that looks to have been built and occupied in the 13th and 14th centuries. What surprised is how much the building had been extended over its lifetime. The question now is whether this is something grander than a park-keeper's lodge?

Excavations of the moated site also produced Roman pottery, adding to the slight but growing evidence for a Roman presence in the Park. Our excavations of the outbuilding produced another wonderfully preserved structure with a long history. The building appears to date to the late 17th or 18th century and may have



Exposing the flagstone floor in Trench 5



Resistivity survey of the moat: results

served as a cart-house, but it was built on an external stone courtyard, terraced into the hill slope, that may have been laid down when Bradgate House was first built.

"We recovered everything from stone tools dated to the end of the last Ice Age, to a 1950s toy gun"

Inside the courtyard of Bradgate House we found our most tantalising and potentially history-changing discovery: the building that doesn't line up with the rest of the House was demolished and backfilled in the late 15th or early 16th century. Could this be earlier than Bradgate House itself (which was completed around 1520)? If so, it would change our understanding of the House completely, because all traditional histories state that the House was built on a new site. Clearly, only further excavation will provide the answers!

This summer was the first of five seasons of excavation and we have been overwhelmed by the support and interest of members of the public, and the open day on Saturday 27th June was a huge success. Next year will be revisiting these areas to try and find answers to the questions that remain.

We—and our future students—cannot wait...

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Welcome to *The Bulletin* Issue 37

It gives me enormous pleasure to write my first Bulletin entry as Acting Head of School. It has been over a year since our last Bulletin, so there have been many changes to tell you about. Firstly, I want to take this opportunity to express my sincerest thanks to Dr Chloe Duckworth and Dr Neil Christie for overseeing Bulletin production for the forthcoming year. We have had a tremendously busy summer. Highlights have included the first season of our new School/ULAS training excavation at Bradgate Park (p.1), a new field project in Akrotiri, Cyprus, in which archaeologists are working alongside injured servicemen (p.3), a major public event connected with the re-interment of Richard III (p.6-7) and a host of new and continuing research projects. Our former Head of School, Professor Lin Foxhall has left the School to take up the position of Head of School of Histories, Languages and Culture, at the University of Liverpool. Lin made a major contribution to the School in research, teaching and management, and we wish her every success in her new role.

I am sure you will want to join in my congratulations to Professor David Mattingly who has been appointed as Head of School (2015-2019); I have taken the reins for the current academic year whilst David is away on research leave. Dr Craig Cipolla (Lecturer in Historical Archaeology) has also departed to take up the position of Associate Curator of North American archaeology at the Royal Ontario Museum, whilst our technician Tony Gouldwell and our archaeobotanist, Professor Marijke van der Veen, have both retired (Marijke is now Professor Emeritus). Finally, we bid adieu to three post-doctoral scholars: Dr Corisande Fenwick, Dr Victoria Leitch and Dr Shane McCorristine. Whilst it is always sad to say farewell to colleagues, it has also presented the opportunity to bring new staff to the School and it gives me great pleasure to welcome the following new colleagues: Dr Lindsay Lloyd-Smith (Teaching Fellow in Distance Learning), Dr Emma Battell Lowman (Research Associate on the Harnessing the Power of the Criminal Corpse Project), Dr Rachel Crellin (Leverhulme Trust Fellow), Dr Danielle de Carle (Technician – Organic), Dr Chloe Duckworth (British Academy Post-Doctoral Fellow), Leanne Harrington (Archivist), Dr Jack Lennon (Lecturer in Ancient History), Victoria Lucas (Technician – inorganic), Dr Adam Rogers (Teaching Fellow in Iron Age and Roman Archaeology), and Dr Alice Samson (Lecturer in Historical Archaeology). We will also shortly be advertising a new lectureship in Ancient History (Greek/Hellenistic) – exciting times indeed!

Dr Richard Thomas, Acting Head of School

ULAS News

It has been a busy year for ULAS, with some interesting archaeological findings and a lot of public outreach. In April, co-director Richard Buckley toured the USA at the invitation of the American Institute of Archaeology, giving lectures on the discovery of Richard III in six different venues. Sounds like quite a jolly, until you realise that this involves seven flights, three train rides, three bus journeys, five taxi rides and multiple car journeys, leaving just a day and a bit free! Still, the tour was well organised by the wonderful Laurel Sparks from the AIA, and went pretty much without a hitch, starting with an audience of 400 at the Minneapolis Institute of Arts and ending with a lecture in the Scarsdale public library (with Valparaiso University, Missouri History Museum, University of Missouri, Loyola University, and a little jazz music in between).

The ULAS News blog and Facebook page are doing well, with a strong, regular following. ULAS involvement in the Bradgate Park fieldschool also contributed to the success of the first season, with some promising findings and a lot of excitement about what will be revealed by future work (reported on p.1). We have also reached the final season of work at Burrough Hill, which is reported separately on pages 8 and 9.

Within Leicester, highlights include ongoing work at the site on the corner of Oxford Street and Newarke Street, where we returned to excavate a further area within the walled town's southern suburbs. The site was located between that of the previous excavation in 2013, which revealed a number of unusual Roman burials with possible pagan traits, and the location of Christian burials to the east. Although heavily disturbed by Victorian constructions, the site has shed light on the organisation of the area in the Roman period, and has helped explain the differences in burial characteristics, with a substantial ditch acting as a possible boundary between the formal cemetery and the 'backyard' burials excavated in 2013. Also on Oxford Street, two former industrial properties (no. 53 and 55) were excavated. The area in the northern part of the site yielded a well-preserved Roman well containing over thirty coins of the 4th century AD, items of personal adornment, disarticulated and incomplete human remains (probably due to the unceremonious deposition of nearby burial soils as backfill), and iron nails and hobnails.

We uncovered possible medieval fishponds in the grounds of The Vicarage, St. Mary's Road, Hinckley. At Enderby, Soar Valley Way, we excavated an Iron Age pit alignment and Roman enclosure together with two large waterlogged Iron Age features interpreted as waterholes which yielded a flat, oval wooden 'shield-shaped' object (670 mm x 370 mm) with red ochre pigment on the surface: the object was lifted in a block of soil and consolidated using Plaster of Paris in the lab, with marks in the soil revealing a basketry 'boss' and twisted cord or wire impressions.

(cont. p.3)

Digging at RAF Akrotiri

Professor Simon James reports

During September a small School team conducted a two-week dig on late Roman and early Byzantine harbour buildings at Dreamer's Bay, on the southernmost tip of Cyprus. This was a rescue exercise to investigate and record structures being eroded by the sea. It was also a pilot for a planned larger School project on the Akrotiri peninsula. I was very lucky to have a crack team of ULAS archaeologists, Steve Baker, Andy Hyam and Andy McLeish led by Vicki Score, with PhD Anna Walas handling finds and heading up outreach activities.



The team, including locally resident Southampton archaeology student Kate Wilmot

Akrotiri is a former island, now attached to Cyprus by two massive curving beaches. These frame a salt lake famed for its flamingos. We dug to the lapping of the waves, although the roar of fast jets, tankers, cargo planes and various helicopters also punctuated our days. Akrotiri is the site of an RAF airbase, and we were digging inside the secure perimeter. It was plane spotters' heaven with U2 spy planes and Tornado bombers thundering off to patrol over Syria just 60 miles away.

The archaeology was very satisfying, masonry wall foundations exposed by the waves which we cleaned and selectively excavated, starting to make sense of the layout of the ancient port. While Vicki and the team cracked on with the immediate task of the excavation, I spent much of my time in meetings with officials in the UK civil administration and military officers, and in reconnoitring future prospec-



Amphorae from the port, and Ferreol

tive fieldwork targets.

This is going to be a collaboration with multiple partners. On the academic side, we Leicester landlubbers need to work with underwater specialists. Two joined us from Southampton, Lucy Blue and geomorphologist Ferréol Salomon. We hope that in future seasons they will work on the submerged archaeology of the harbour. We also established contacts with the University of Cyprus, not least to help us with Cypriot ceramics.

Other partners made our project feasible on a very small budget. As we were doing rescue work urgently required by the Ministry of Defence, MOD arranged us excellent accommodation and meals in the officer's mess at nearby Episkopi Army base. The RAF flew our kit out, and RAF Akrotiri lent us a tent, tables, chairs and tools. Equally vital was the help of the Western Sovereign Base Area Archaeological Society, whose president, Frank Garrod, arranged three vehicles for us at very cheap prices.

All this, has laid the ground work for future digs at Akrotiri. From 2016 onwards these will involve another major partner: **Operation Nightingale**, which helps injured Service personnel and veterans recover through engaging them in archaeology.

We had a wonderful time in 'Aki' and 'Epi', receiving a very warm welcome from the many officials, Army and RAF personnel, teachers and other civilians we met. All looks good for future seasons. Now we just have to secure the funding!



Steve excavating a wall at Dreamer's Bay



Dig dinner!

ULAS News (cont. from p.2)

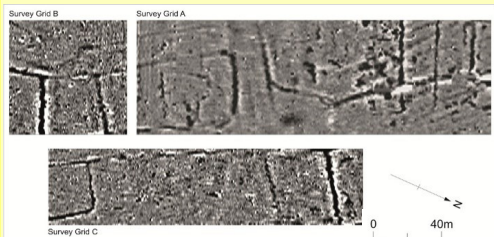
And finally, March was inevitably a very busy month for ULAS staff, kicking off with the University's 'King Richard III Day' on Saturday 21st, followed on Sunday 22nd by the departure of Richard III's coffin and three services marking his reburial in Leicester Cathedral during the week. In addition, ULAS staff helped out at the Jewry Wall event 'Medieval Leicester and King Richard III' on Sunday 22nd with a whole range of activities for the public from dressing for battle to medieval food tasting, bringing a record 1900 visitors to the museum in a single day. All told, reburial week put Leicester centre stage around the world. Here are a few numbers to quantify the success: 11 million (viewers of Channel 4's three live programmes); 2,071 (UK news stories mentioning UoL and RIII in March); 35,000 (visitors to Leicester for the procession); 10,000 (visitors to Bosworth Battlefield Centre); 8,000 (visitors to RIII Visitor Centre); 4,000 (visitors to Jewry Wall Museum in one week). For more on RIII outreach, see pages 6 and 7.



Putting coin hoards into context

Dr Adrian Chadwick and Dr Adam Rogers on geophysical survey and a British Museum exhibit

The AHRC-funded **Coin Hoards Project**, run jointly with British Museum, is going from strength to strength. We are investigating the social, political and landscape contexts of coin hoards in Iron Age and Roman Britain. A major focus has been analysis of the landscape context in which hoards were placed, traditionally not seen as a central concern in coin hoard studies. This work has brought new revelations about individual coin hoard sites as well as helping to elucidate broader patterns in the types of places that were chosen for hoard deposition. To investigate the immediate localities of hoards, geophysical survey has been undertaken at key sites, including that of the massive third century Frome hoard in Somerset, which is well-known to the School. The hoard was placed in the vicinity of a stream and where a number of springs rise up. Our geophysical work produced traces of settlement in the adjacent field with a potential path leading to the hoard site. At North Dalton in Yorkshire, several enclosures were identified near the hoard spot (below).



Geophysical survey at North Dalton, Yorkshire

the British Museum, Eleanor is completing the monumental task of creating an online database, accessible through the PAS website, of all the hoards in our dataset, which will be available for future research projects. She is also preparing an exhibition at the British Museum, drawing on the project, on the theme of hoarding in Britain. This is due to open in December 2015 and will be well worth a visit!

The team includes Dr Roger Bland, Dr Sam Moorhead and Dr Eleanor Ghey at the British Museum; with Professors Colin Haselgrove and David Mattingly, and Dr Jeremy Taylor, Dr Adrian Chadwick and Dr Adam Rogers at Leicester. There are also now two exciting PhDs linked with the project on metalwork deposition being investigated by Rachel Wilkinson and Rachael Sycamore.



Malmesbury Hoard (AD 286-317)
© British Museum

We are also investigating the social context of the hoards, including their implications for understanding the events of the third century and the impact on Britain of the so-called 'third century crisis'. Other social contexts have also been important including the Iron Age to Roman transition and developments during the early Roman period. In

In Caesar's Footsteps

Dr Andrew Fitzpatrick and Professor Colin Haselgrove

If you walk along the promenade at Walmer in east Kent you will come across a large plaque. On it there is a bust of a triumphant Julius Caesar wearing a laurel wreath. His portrait is encircled by the inscription 'The First Roman Invasion of Britain led by Julius Caesar landed near here in LV BC.'

Actually, we don't know where Julius Caesar landed in either of his two invasions of Britain in 55 and 54 BC. And we don't know very much about what effect those invasions had on the peoples of Iron Age Britain. In fact we know surprisingly little about the archaeology of the opening chapter of British history. When it was made, the Walmer plaque represented as good a guess as any as to where Caesar's fleet landed. The lack of evidence for the invasions has often been interpreted as indicating that they were little more than a publicity stunt by a master spin doctor and that Caesar's campaigns had few long-term consequences for Britain. New archaeological discoveries are beginning to challenge those assumptions. Several defended sites, burials, and hoards in south-east England can be plausibly associated with the events of 55-54 BC. And if direct evidence for the invasions can be identified, can we begin to study their

consequences?

The 'In Caesar's Footsteps' project set out to meet that challenge. Funded by the Leverhulme Trust, we are systematically assessing finds old and new, and undertaking new surveys of potential Roman military bases and hillforts that might have been attacked by Caesar. Initial results using non-invasive techniques – ranging from Lidar data to earthwork survey – have been promising and are now being followed up by more detailed analyses.



The day it didn't rain. 17 Sept. 2015. Members of five community groups with Kent community archaeologists at Ebbsfleet.

The fieldwork is being undertaken in conjunction with ULAS colleagues and we are involving community groups. The September surveys of a suspected Roman base at Ebbsfleet on the Isle of Thanet were done with the help of members of local archaeology societies and metal-detecting clubs from across Kent coordinated by Kent County Council. Surveys at other sites will take place through the coming year and an excavation at Ebbsfleet is planned for 2016, guided by the 2015 surveys. We are also working with academics in France, Germany and the Netherlands.

Caesar's invasions of Britain were just one part of his seven year-long Battle for Gaul. In it the peoples of north-western Europe were confronted for the first time by the violent expansion of an empire. The story of Caesar's invasions of Britain must be understood in the context of those dramatic events.

At the cutting edge

Our new Leverhulme postdoctoral fellow, Dr Rachel Crellyn, introduces herself and her work on Bronze Age axes



My name is Rachel and I have an obsession with prehistoric bronze metalwork, and most specifically axes!

I started a three year Leverhulme Post-Doc with the School of Archaeology and Ancient History in January. Before this I completed my PhD at Newcastle University and worked as a Research Assistant for the Centre for Manx Studies (an offshoot of the University of Liverpool on the wonderful Isle of

Man). My Leverhulme research is focused on understanding the impact of bronze as a new material at the beginning of the Bronze Age in Britain and Ireland. Dr Oliver Harris is my mentor and as you might guess, this means I too enjoy archaeological theory a lot more than is normal.

"I will be using replica axes for a range of different tasks including woodworking, butchery, assaulting other bronze axes and digging..."

One of the most exciting aspects of my post-doc research focuses on developing metal wear-analysis. The generous Leverhulme Trust have funded 12 replica Early Bronze Age flat axes which I will be using for a range of different tasks including woodworking, butchery, assaulting other bronze axes and digging around in the earth. Some of these experiments will be carried out in a controlled lab set-up in the Engineering Department and others will be completed in more 'real' field conditions. The axes are then being analysed using traditional qualitative methods alongside cutting edge (haha!) quantitative surface analysis with the amazing 3D infinite focus microscope in the Geology Depart-

ment. The aim of all this larking around with axes is to develop a reference collection of microscopic wear marks left by different activities on the surfaces of the axes this will then be used as the basis for a study of a large sample of prehistoric British and Irish axes to better understand how they might have been used in prehistory. The database from the project will be made freely available online for other researchers to enjoy use.

When I am not busy smashing and chopping stuff up with axes or reading theory I am also involved in 'Bronze Age Combat: an experimental approach'.* The project combines field experiments with replica swords, shields, spears and axes with analysis of prehistoric metalwork in museum collections. Yeah... we got funding to play with swords and shields (!) but with the serious goal of addressing the nature of combat and violence in the Bronze Age.



Image from the Bronze Age Combat Project

In order to make my obsession with bronze seem a little less odd I am trying to spread the love. The department has recently purchased 8 replica axes which are available for teaching, demonstrations and outreach work! We are also currently looking after many of the replicas from the combat project which were a big hit at the Bradgate Park Excavation Open Day.

*<https://sites.google.com/site/bronzeagecombat/home>

BreaKing ... glaSs?

Dr Chloe Duckworth on starting her British Academy postdoctoral fellowship

Over the past few weeks, the keener eyes in the School may have noticed a string of scarily-packaged chemicals arriving in the post. Well, it's time to confess: they're mine, and far from any suspicious activity of the Walter White kind, they will be used in order to recreate glasses with the exact chemistry of those of the first millennium AD Mediterranean. Glass chemistry is horribly complex, but also incredibly useful: it tells us about the changing technology of glass-making, which is thousands of years old, and also offers valuable clues to where glasses found at a particular site were originally made, feeding into our understanding of trade and economy.

The elephant in the works (to mix my metaphors) has always been recycling. From at least the Roman period on, people have recognised that glasses lend themselves to recycling, playing merry havoc with our understanding of how their chemistry relates to the social factors of production and economy. Which is where I come in, with my chemicals. I'll be testing the effects of recycling on glasses made to ancient compositions, in order to look for chemical traces of this activity, and apply this knowledge to our existing dataset. I'll use the results to chart—and attempt to quantify—recycling on a large scale. Where and when was glass recycling most common? Was it primarily a response to scarcity, or something else? How controlled was it? ...

Watch this space.



Richard III Re-Interment Inspires...

Outreach officer Deborah Miles-Williams reports

Since the discovery in 2012 our department's normal archaeology outreach programme has successfully expanded to include delivering a wide range of Richard III activities both on campus/off campus to schools and the wider community, but never so much as we faced in the run up to and during the re-interment week in March 2015!

Throughout February and March we delivered the '**Richard in the Classroom Project**'. This programme was designed and organised by me in collaboration with Jim Butler, Public Engagement Manager for College of Arts, Humanities and Law, and Dr Cas Kramer, GENIE project, University of Leicester. With support from a wide range of student volunteers from both SAAH and Genetics, assemblies discussing the discovery, research and forthcoming re-interment of Richard III were delivered to **7,162 local primary & secondary school children** in Leicester and the county.

At the beginning of the re-interment week a **Richard III Open Day** was held on campus to celebrate and share with the public the cross-collaborative research that had taken place at the university through engaging hands on activities and talks for all age groups.

Within the department I organised and co-ordinated a wide range of activities for people to participate in. These included three wooden dig boxes outside the building, with play sand, plastic trowels and un-stratified material - pottery, metal, animal bones for the



younger visitors to 'excavate', sieves for seeds and finds trays to place their discoveries into and look at with hand held magnifying glasses.

Inside the reception area we had representatives from the Portable Antiquities Scheme demonstrating how to use the PAS database for Bosworth Battlefield finds, members of the Leicester Young Archaeologists Club, Midway Model Shop selling medieval Playmobil figures (pocket money disappeared quickly!), and a map regression activity in the seminar room. (cont. p.7)

Corinthian pots and banana genetics: Distance learning lab week, 14th-18th Sept.

Stephen von Dodelsen, Level 3 DL Archaeology reports

For me, distance learning ('DL') is the only option. I work full-time, and although it can sometimes be demanding to do a degree on top of that, DL allows me to study something I find truly interesting. What I love about it is that we are people of all ages, and from all over the world (this week involved participants from Greece, Belgium and the U.S., to name but a few). It also helps to spread the word about archaeology! As I am older than the average campus-based student, I have a wide range of friends, and I communicate some of the fresh ideas I pick up in my course with them. In these times of funding cuts and heritage at stake, I believe that is really important.

I have found the lab week to be an enriching, positive and thought-provoking experience. We had the opportunity to engage with experts in a wide range of activities, examining Bronze Age axes under the microscope with Dr Rachel Crellin, Corinthian pots using micro-XRF with Dr Ian Whitbread, and recording standing buildings with Deirdre O'Sullivan. With Dr Turi King, we separated strands of banana DNA and mapped the genomes of a family through three generations. We also benefitted from talks by current PhD students in the School of Archaeology and Ancient History, and had the opportunity to chat at length with our dissertation supervisors. All in all I'm feeling very positive about the whole thing – now I just have to see how my dissertation goes!



Donning lab coats and learning about DNA with Turi King

(cont. from p.6)

Meanwhile, in the Bone and Ceramics Labs further activities included medieval pottery from Leicester and Leicestershire for handling/discussion/display alongside material from the Greyfriars excavation with Nick Cooper and Debbie Sawday from ULAS and student volunteers. Thin sections from pottery under a microscope were displayed, linked to a TV screen and were also available for handling and discussion about the provenance and technology with Dr Ian Whitbread. Human skeletons were laid out for the discussion of the evidence for gender, age, diseases, and trauma relating to Richard III with student volunteers Katrien Janin and Anna Moosbauer. Medieval Tile maker Karen Slade demonstrated how and why tiles were made and visitors were able to 'make



and Deirdre O'Sullivan was there to discuss the Richard III MOOCs.

Talks were given by the Richard III team, Richard Buckley, Mat Morris, Dr Turi King, Dr Jo Appleby, Professor Kevin Schurer and others throughout the day on campus. And Professor Lin Foxhall launched her book, *Bones of a King*.



Many thanks to the twenty SAAH student volunteers and seven staff members involved in delivering activities within the department, Queens Hall and the Medieval Tent outside the Fielding Johnson building during the event. The wide range of activities that we delivered to the public that day resulted in a record **1,286 visitors in one day!**

During re-interment day itself in the city we had a Richard III stand in St. Martins Square, near to the cathedral. A rather cold day, wet and windy day we still had **250** visitors. Thanks to staff/student volunteers involved. At the end of the re-interment week I took another team of student volunteers to help deliver Time Detectives at Wygoston House, Leicester (In collaboration with Leicester City Council as part of the Richard III Events for Re-interment Week), with **650** visitors over the two days. Thanks to all our student volunteers.

and take' their own tile designs.

Over in the Queens Hall SAAH student volunteers organised and helped visitors to play medieval board games. And in the marquee Dr Richard Thomas gave engaging talks on butchery techniques used in the medieval period whilst a couple of Rangers from Bradgate Park proceeded to actually demonstrate butchery on a carcass – a bit gruesome but the visitors loved every minute! Andy Hyam from ULAS was also present with his re-enactor knight's armour

Between the school assemblies, open day, Richard III stand and Time Detectives – and in less than 8 weeks we engaged as a department with a total of 9,348 members of the public



...And continues to engage schools' interest!

Year 5 pupils and their teachers from Rushey Mead Primary were inspired by a Richard III Archaeology & Genetics session delivered on campus earlier in the spring by Debbie Miles-Williams, (Archaeology Outreach Officer, School of Archaeology & Ancient History) and Dr Cas Kramer (GENIE Outreach and Public Engagement Coordinator). **So inspired, in fact, that when they returned to school, they created a Richard III skeleton of their own!**



Debbie Miles-Williams said, 'Teachers, Gillian Abbott and Jo Badge wrote to say how much both the pupils and teachers enjoyed their visit to the university, and that it was a fabulous experience. The pupils are now working on researching, designing and producing the paper Mache skeleton using History, Design & Technology, Art, Maths and ICT skills.'

The pupils then wrote persuasive letters to Debbie asking her to give a home to the skeleton that they had created. When their teacher Jo Badge delivered this fabulous resource to the department

Richard Buckley kindly agreed to have his photo taken with the children's work and a copy was sent back to the school for everyone to see.

What's more, Leicester Museum Service is now hoping that the children's work can be showcased at a future family day at Jewry Wall museum!

Prehistory for all

The final season of excavations in the summer of 2014 at **Burrough Hill** coincided with the introduction of all things prehistoric to the National Curriculum for primary schools. Hillforts are named as a good example for projects so needless to say, we had a fantastic response from local schools this year. All told we took over 700 school-children around Burrough Hill this year, showing them the excavations and involving them in a range of activities revolving around life and death in the Iron Age. Throughout the entire project we estimate to have introduced Burrough Hill to around 2000 young people, all of whom took something from their experience (whether it was from the archaeology, being in the beautiful countryside or being in close contact with the livestock and their by-products!).

Many thanks to Debbie Frearson, Anna Moosbauer, Bethan Boulter, Andrew Mayfield & James Earley for their fantastic help in managing the school visits this year, alongside Andy, Sophie & John.

On top of this we had another very well attended Open Day (over 550 visitors) who were given guided tours of the excavations, learnt about local history and archaeology groups, the School and ULAS and were given a taste of the Iron Age by some wonderful re-enactors.



Extension to Trench 3

ULAS Report: Burrough Hill

John Thomas, Jeremy Taylor, Andy Hyam and Sophie Adams

And so the final season was upon us ... It hardly seems five years since we began the Burrough Hill Project but here we are, all backfilled and starting a massive archive in the face – gulp!

This year's aim was to tie up a few niggling things we had gathered over the years and have another look at the external settlement we examined in 2011.

We located Trench 10 in the centre of the hillfort to examine a large amorphous blob revealed by the geophysical survey. Lo and behold, once machined we found ... a large amorphous blob! Sophie and her team excavated a variety of slots into the feature,

which appears to have been a clay quarry.

Pottery recovered from the backfill suggests a Late Iron Age – Early Roman date. A large Iron Age pit in the trench corner hinted at more exciting activity beyond the excavation area, and produced a fairly decent assem-

blage of domestic material including pottery, a cattle skull and the upper part of a beehive rotary quern.

Trench 11 revisited last year's excavation in the south-west corner to try and pin down the elusive 'backdoor' of the hillfort – was it really there or had the ramparts been slighted at a later date? More Iron Age pits were revealed including a very deep cylindrical example and a broad, shallow feature containing a large domestic assemblage and what appears to be a bronze finger ring. The western terminal of our Early Bronze Age 'hengiform' feature was also excavated and another sherd of Beaker pottery found.

Closer examination of the ramparts revealed evidence to support the idea that the gap in the SW corner was indeed an original entrance (access to a water source via the natural springs on the western side of the hillfort being one reason for this). Excavation of the rampart contents showed a clear terminal to the western arm of the defences as it reached the gap, and hints of a framework of larger ironstone boulders supporting the whole construction, as we had previously seen in the main entrance. The gap was blocked at some point during the Iron Age by a well-built drystone wall – this year's work revealed a shallow foundation cut into the earlier deposits. Layers overlying the wall, and collapsed rubble from it, contained Iron Age domestic remains suggesting that the blocking wall had started to collapse before occupation of the hillfort ceased. (cont. p.9)



Trench 10 with large IA pit in bottom corner

Burrough Hill (cont. from p.8)

Finally Andy opened two trenches outside the hillfort to gain further information on the external settlement. Trench 12 was located over a large enclosure/roundhouse that appeared to be cut through on its western side by the hillfort quarry ditch. The relationship between the two features was not established but it is possible that the large quarry ditch acted as a western edge for the enclosure/roundhouse, which was also Iron Age in date. A small square annex to the southern side was also found, with evidence for stake holes in the base. Evidence for Roman activity was also found: a spread of stone & cobbles incorporating several re-used saddle querns was apparently part of what had once been a larger surface. It had been badly damaged by ploughing but adds to increasing evidence for a late Roman farmstead located in and around the northern part of the hillfort.

Finally, we re-visited Trench 3 from 2011, to complete the picture of buildings and enclosures. The rear of one roundhouse was revealed, as well as a smaller, circular roundhouse/enclosure, within which was a pit cluster. It is possible that the pits were deliberately contained within the circular ditch, as we have seen on other areas of the hillfort. Pottery from these features indicated a very late Iron Age – Early Roman date for their backfilling, with several sherds of transitional combed ware. A nice little glass bead was also found in one of the pits.

It has been a real privilege to work at Burrough Hill and everyone involved has done a fantastic job in recovering the evidence that will enable a detailed account of the hillfort's history to be told. Hopefully in the future, Burrough will be viewed in a similar way to some of the more well publicised hillforts. A huge thanks to everyone from ULAS who was involved in the excavation and who showed their support along the way.



Aerial view of Trench 11, showing rampart terminal, entrance blocking wall, W. end of 'hengiform' feature, all supervised closely by the local (bovine) population

Adventures in the Collections: My Time as an 'Inside Archaeologist'

Teaching fellow Dr Sarah Newstead talks collections cats, 16th century peppercorns and bugs!

When I started my archaeology career, I was fully trained in field methods in probably the best place imaginable, a site located in the very tropical, very exotic Kingdom of Tonga. A few weeks into my first season there, I realized that while we were all slogging away in the 50 degree heat and centipede-laden dirt, our lab manager was drinking cups of tea, analysing all the neat stuff we'd found and listening to the radio on the porch of our field house. I wanted in! Over the following winter I put my mind to learning all the post-excavation and analysis techniques needed in the lab and by the next season I was the one running the lab, drinking cups of tea and listening to the radio on the porch. My next project was analysing the artefacts from Christopher Columbus' first landing site in Jamaica (yes, there was some gold) and from then on, I've always worked in the lab or in collections. My MA and PhD were both collections-based and I've run field labs for a number of large projects.



A friend in the collections.
Almada, Portugal

But isn't collections-based research and lab work boring? It is not!

This is a career path that will grant you backstage access to the wonders of museums and regional storage facilities. I once had to move an entire flogging frame in Plymouth to get at boxes, a stark reminder of the harsh lives led by the sailors I study. I've seen a box of 16th century peppercorns from a wreck site housed in a gigantic military facility in Lisbon. They let me touch them! I've made friends with collections cats whose job is to keep the mice at bay. I've seen angels, dinosaurs, devils and more taxidermied (sometimes extinct) fauna than I could count in my work, all unrelated to my own research, but all things you happen upon while working in collections. I reckon my gold exposure is c.85% higher than the average field archaeologist: curators always want to show you their shiny stuff. I've seen the very best examples of material culture from the time periods I study.

And the best part of being an 'inside archaeologist'? The field is literally endless. Archaeologists excavate way more than can be analysed immediately and curators are often happy when a researcher arrives to study the archaeological material in their collections. Researching museum and governmental collections aids these agencies in securing funding and helps to preserve precious archaeological resources for future generations. Plus, if you learn those post-excavation



Unexpected dino presence.
Redondo, Portugal

skills, you could also work on newly excavated collections in the field. It's all of the field fun and adventure without the weather and bug-related drawbacks!

(Re)Dating Danebury

Professor Colin Haselgrove's Leverhulme-funded (Re)Dating Danebury project with Professors Chris Gosden (Oxford) and Gordon Cook (SUERC) is moving into its third and final year. The aim is to construct a new absolute chronology of Iron Age sites around Danebury hillfort using radiocarbon dating and Bayesian modelling. The results will be used to reassess the typological sequences, models of settlement dynamics and social interpretations produced by Barry Cunliffe's original Danebury research.

Derek Hamilton and Cynthia Poole (Oxford Archaeology) have been busy collecting samples of articulated human and animal bone, charcoal and carbonised grain from deposits in pits and other features, and food residues on pottery from Danebury and eight other sites in the environs. Over 265 ^{14}C dates have been reported from the SUERC Radiocarbon Laboratory and fed into Bayesian models for each site, with some exciting results. At one site, all the ^{14}C dates lie within the period that it was thought to be uninhabited! The previous dates had been based solely on pottery typo-chronology. Other settlement dates are moving earlier or later in time; some occupations are lengthening and others are shortening.

Alongside the dating programme, Dr Kerry Sayle (SUERC) has worked with us on a stable isotope pilot project on inhumations from the Sudern Farm cemetery. How could we turn down free analytical work? The samples were processed for ^{14}C . The results indicate mobility within at least part of the population, along with movement of some animals over large distances.

This year will see Lisa Brown (Oxford Archaeology) re-examining the pottery at the dated sites and the project monograph will be written up for delivery in 2016. If you would like to learn more about radiocarbon dating in British Iron Age studies, download the 'The impact of Bayesian chronologies on the British Iron Age' by Hamilton, Haselgrove and Gosden in *World Archaeology*.

(tandfonline.com/doi/full/10.1080/00438243.2015.1053976)



Danebury archives, housed in an old stable block, Chilcomb House

Big Data on the Roman Table

AHRC Research Network



Professor Pim Allison on a successful first workshop

The first workshop for the research network 'Big Data on the Roman Table' took place at the College Court Conference Centre, University of Leicester (26th-27th September 2015), organised by Professor Pim Allison and Dr Martin Pitts (University of Exeter)

This AHRC-funded research network aims to develop approaches to Roman artefactual evidence for eating and drinking whereby this wealth of data can be investigated more effectively and be truly instrumental in understandings of social practice across diverse social, cultural and gender groups in the Roman world. The network is exploring and developing approaches to big data that can bring manifold possibilities for mapping diverse cultural

practices of Roman food consumption, in ways that have thus far – because of data quality and because of the limitations of current analytical and visualisation techniques, and of scholarly vision – only been attempted on small or disparately connected datasets.

The research network has brought together an international group of researchers, professionals and stakeholders and this first workshop was attended by some forty delegates who included academic, government and commercial archaeologists from Canada, USA, Italy, Germany, France, Spain, the Netherlands, Ireland and the UK, as well as computer scientists and mathematicians. These delegates critically reviewed and challenged current approaches to how we describe and categorise eating and drinking vessels from across the Roman world, with papers presented on Roman tablewares from Scotland to Asia Minor. This workshop also initiated fruitful dialogue with the scholars in other fields with appropriate technical expertise to assist in develop new approaches to artefact classification and collation, to the quantitative and spatial analyses of the large datasets, and to the presentation of such analyses.



(cont. p.11)

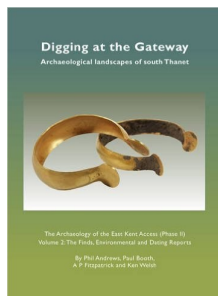
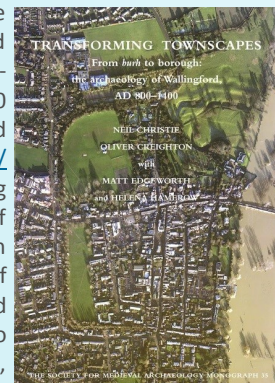
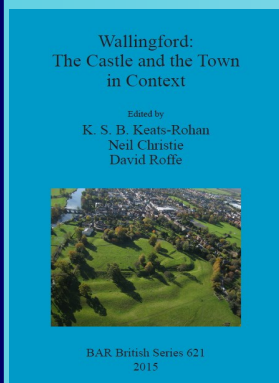
WALLINGFORD – PROJECT PUBLICATIONS

Between 2008 and 2011 a major archaeological project overseen by **Dr Neil Christie** (with main co-director Professor Oliver Creighton, Exeter University) and funded by the Arts and Humanities Research Council, explored the historic town of Wallingford in south Oxfordshire. Founded in the late Saxon period as a key defensive and administrative focus next to the Thames, the settlement gained a substantial royal castle established shortly after the Norman Conquest. 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. Not one, but two major volumes have come out since the conclusion of the Wallingford Burh to Borough Research Project: the first, *Transforming Townscapes*, a Society for Medieval Archaeology monograph (2013), details in full the results of our project fieldwork (comprising excavations – 10 major trenches – test-pitting and extensive geophysical and other surveys), and data from developer-led interventions and other (some large) previously unpublished excavations (see also <http://www2.le.ac.uk/departments/archaeology/research/projects/wallingford>). The volume highlights in particular the strong

community-led approach of the project, with a highly successful blend of academics, professional archaeologists and locals helping to bring much more of Wallingford's heritage to light. It 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.

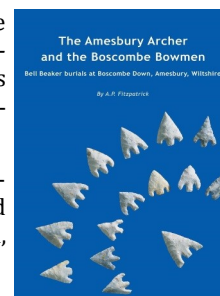
Now, a new volume, *Wallingford: The Castle and the Towns in Context*, has just been published (2015), by Archaeopress as British Archaeological Report 621. Edited by Katharine Keats-Rohan, Neil Christie and David Roffe, the volume features summaries of the archaeological work, but the core emphasis is very much the castle complex, and previously little-exploited documentary sources, enabling a rich image to be painted of this complex, which hosted many a royal figure, played a key role in the Anarchy of the mid-12th century and was again very prominent in resistance in the mid-17th-century Civil War.

Both volumes put Wallingford firmly on the map of early to late medieval England, with now one of the best studied urban centres in the UK. And it's a lovely place still to visit – although don't expect to see majestic castle walls, since the Civil war saw massive slighting of the site; however, the castle earthworks are impressive and give some impression of this once substantial royal stronghold.



At 1150 pages and weighing in at 5 kilos, Andrew Fitzpatrick is making a bid for the biggest publication, as a co-author of *Digging at the Gateway. Archaeological Landscapes of South Thanet*. Written with Phil Andrews, Paul Booth and Ken Welsh, this two volume heavyweight reports on the largest excavation in Britain in 2009-10. (Oxford Wessex Archaeology Monograph 18, 2015).

The first hardback print run of Andrew Fitzpatrick's 2011 monograph on the Amesbury Archer sold out within the year. When the bigger paperback print run also sold out, the work was re-published this year as an e-book. As Andrew commented, 'that's probably quite unusual for an excavation report.'



Big Data on the Roman Table (cont. from p.10)

The 'takeaway' from the first workshop is that we will be exploring and developing appropriate digital 'menus' so that we can navigate through this smorgasbord of datasets and ideas.



Delegates relax post-workshop at College Court

We will be choosing the ingredients (particular appropriate tableware datasets) and the recipes (the analytical approaches) to help us to carry out quantitative and spatial analyses of these large datasets of predominantly Roman pottery and to present these analyses in a more easily digestible fashion. We can then start to develop greater understandings of dining practices throughout this world, and what these tell us about cultural practices and social interaction across the Roman world.



'Upcycled' tiramisu, served in a jam jar, provided much food for thought at the workshop dinner!

Lost Nubian Landscapes Revisited

Dr David Edwards on the Archaeological Survey of Sudanese Nubia (1963-69)



Abu Simbel

The Archaeological Survey of Sudanese Nubia (ASSN) 1963-1969 was one of most intensive archaeological salvage programmes of the 20th century, exploring c.130km of the Nile valley at the southern end of the Aswan High Dam reservoir. The original fieldwork was carried out by the Sudan Antiquities Service, supported by UNESCO (better known for the Abu Simbel rescue, as shown on the left). One of our primary aims is to secure the publication, in varied forms, of the

project's huge archives, now in Leicester (though most of the artefacts are in Khartoum). There are also considerable opportunities to build on the original records, drawing on major advances in our understandings of the archaeology of NE Africa and Nubia since the 1960s, and the excellent records of a project of unusual coherence and vision.

This archive represents a unique record as well as an opportunity to investigate now-lost landscapes (below right). The remarkable archaeological dataset (now essentially 'complete', after flooding of almost all the land along the Nile) offers varied possibilities for exploration, at different scales and in many different periods. This region, which has been colo-

nised (in several senses), abandoned and resettled, fought over and fought through, offers remarkably complex history. At times part of the borderlands of kingdoms and empires (of Kush, Pharaonic Egypt, Meroe, Ottoman Egypt), it also created its own distinctive 'Nubian' cultural forms, still with us today.

"This region has been colonised, abandoned and resettled, fought over and fought through."

A current pilot programme is nearing completion, focussed on publication of one element of the archive relating to 'Pharaonic' sites, to be completed in 2016. Concurrently, research is also underway on a small group of post-medieval (Ottoman) sites. Several graduate and undergraduate students have already assisted with managing the massive paper and photo archive, as well as a successful BA Dissertation.

If you would like to know more about the project, please do contact Dr David Edwards.



Second cataract of the Nile, 1959

About The Bulletin

The Bulletin is edited by Dr Chloe Duckworth (cd227@le.ac.uk) and Dr Neil Christie (njc10@le.ac.uk), and is contributed to by **staff and students** of the School of Archaeology and Ancient History and ULAS, so please get in touch if you have a contribution. We look forward to hearing from you!

*Archaeology and Ancient History
University of Leicester
University Road
Leicester LE1 7RH*



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Caption competition

Send your suggested captions to cd227@le.ac.uk

