Editorial

Welcome to the 44th lucerna. Sadly this edition begins with an appreciation of the life and work of Glenys Lloyd-Morgan. Although I never met her, like many in the group I came across her reports in the course of my work, and was particularly struck by the fact that while examining the proceedings of the International Congress on Ancient Bronzes that Glenys was the only British contributor on figurines in any of the volumes.

In addition we have an extended report on the Autumn 2012 RFG conference at Vindolanda. Many thanks to all the participants who submitted articles on their presentations. Further dates for your diaries are the spring meeting at the British Museum (p.8) and the autumn meeting in the Cotswolds (p.33).

This issue also contains details of an Iron Age helmet recently found in Kent and further thoughts on the Silchester eagle.

There is also a notice announcing a new finds group focusing on Bronze Age and Iron Age artefacts (p.10). Something which I am sure many members will be interested in.

Emma Durham

Notes for contributors

Contributions are always welcome – particularly on new finds – so please send them to us, and share them with the rest of the Roman Finds Group!

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GLENYS LLOYD-MORGAN: AN APPRECIATION
Hilary Cool

Glenys in c.1980 taken by Dan Robinson

Glenys Lloyd-Morgan, who died in September 2012, was an excellent scholar, a generous and kind friend and a truly original person. For many years in the early days of this group she was also a hard-working committee member. Sadly for many younger members she will only be known as the author of reports they cite, for in 1998 she developed Alzheimer’s at the tragically early age of 53. It seemed only fitting that there should be a memorial to her in the Newsletter she often contributed to as author, reviewer and crossword puzzle setter.

In the following pages you will find memories of her from Stephen Briggs (originally published in the Guardian on December 6th), Pam Irving a contemporary at Birmingham, and Margaret Ward who worked with her in Chester. Martin Henig combines recollections with a short note about a gem associated with Venus, a deity Glenys had a particular fondness for. Finally there is her bibliography compiled by Nina Crummy with the help of Gill Dunn.

Now when we find mirror fragments amongst the assemblages we are working on, it is always to Glenys’s works we turn first. She was, and remains, the foremost authority on Roman mirrors in the Western empire. For many years though, we just parcelled them up and sent them off to her, and a full report would coming winging its way back. It was not just mirrors though: she was an excellent general small find specialist, a numismatist, and the first choice for figurines and little oddities. Her knowledge of the obscurer reaches of the literature was legendary. She would always be able to come up with appropriate parallel for your difficult piece, often in some Yugoslavian festschrift known only to the author and Glenys. She could be, rightly to my mind, harsh on shoddy scholarship. I recall that it was following one of her reviews on a book purporting to be an authoritative guide to Roman small finds, that the RFG committee decided the time had probably come to put the normal legal disclaimer in the Newsletter that the views of the authors were not necessarily those of the RFG!

Everyone who ever came across her will have favourite memories. Her kindness is often a feature of these. There is a generation of research students who found a visit to work on material at the Grosvenor Museum at Chester a bright spot in what could be a lonely and soul destroying sojourn working in the basements of endless museums. She would make sure you got the best out of the collection, provide you with information you hadn’t known you needed, and then take you to her home to stay, thus eking out your slender means. Glenys wasn’t rich in material possessions, but for us in the Roman finds community she was rich in, and generous with, everything else. I recall in about 1977 when Gill Chitty and I wanted to go to a conference in Oxford Glenys sprang into action ‘borrowing’ her sister’s flat so we’d have a place to stay. When she knew I was putting together this memorial, Judith Plouviez recalled her as ‘a kind and helpful person - not only did she tell me about my mirror fragments from Pakenham, but she also told me where to buy a pair of plastic-nosed callipers to measure how thick they were – an invaluable purchase for avoiding damage to fragile objects’. Nick Cooper remembered the wonderful report she did for the Leicester Unit on the Pan clasp knife handle from the Shires excavations in 1988/9. He said ‘she thanked us for the opportunity to study it – when the thanks really needed to go in the other direction. One of those connoisseurs you don’t get too many of these days’.

For me it has been a source of great sadness that we lost her to the darkness 15 years ago. Such is the nature of archaeological publication that her reports written in happier days have continued to emerge as the years have gone by. It has been bitter sweet to open a new book and see one. Her publications are her memorial, but in what follows you will discover aspects of Glenys the true eccentric and party animal. Such people should be remembered and celebrated. The next time you use one of her reports, think of her and then later, raise a glass to her memory and give thanks for her life and works.
Glenys – the life
Stephen Briggs

My friend Glenys Lloyd-Morgan, who has died aged 67 after suffering from Alzheimer’s disease, devoted her career to the appreciation and understanding of Roman archaeology.

She was born in Halifax and brought up in Caernarfonshire; her father was a merchant sea captain and her mother was an entomologist and teacher. Glenys graduated from the archaeology department at Birmingham University in 1970 and acquired fine skills in excavation. Former contemporaries recall how she practiced it at Droitwich, Worcestershire.

Under Richard Tomlinson’s supervision, she did a PhD at Birmingham on Roman mirrors, which she studied, along with any potential Celtic-related predecessor artefacts in museums throughout Britain and Ireland. Venturing into the world of Roman Europe, she spent a very happy period at the Museum Kam in Nijmegen, the Netherlands, in 1973-74. At the British School at Rome, she met Sir Anthony Blunt, who vividly recalled Glenys’s enthusiasms for Etruscan mirrors and how she had enlivened the school’s New Year’s Eve party by dancing on the table.

In March 1975, Glenys joined the Grosvenor Museum, Chester. There, she catalogued collections and did convincing re-enactments as a Roman lady. Though hoped-for promotion never materialised, she soldiered on until marrying and moving to Rochdale in 1989. She became a finds consultant specialising in Roman artefacts. In 1998, she returned home to north Wales where it was recognised that she had developed Alzheimer’s. She was taken into a home soon afterwards and the rest of her life was spent in full-time care.

I first met Glenys at the Young Archaeologists’ Conference in Durham early in 1968, where she sang and danced, as was often her habit. Her dress could be unconventional and her eastern dances disarming to those more used to her authoritative archaeological presentations.

Made a fellow of the Society of Antiquaries in March 1979, she published in mainland Europe, Britain and Ireland. Glenys was a warm-hearted and helpful collaborator who made lasting friendships, retained her youthful sense of fun, loved children and assumed the role of aunt without encouragement. Her scholarly works will endure.

She is survived by her sister, Ceridwen, her brother, Dewi, and three nephews.

Glenys – the young archaeologist
Pam Irving

I first met Glenys when, as a brand new Birmingham Undergraduate in 1969, I volunteered to help make the tea and coffee which were an essential part of the Arch Soc monthly meetings at which guest speakers were invited. A fellow undergraduate volunteer and I were solemnly invested in the care of the tea urn, which was apparently both temperamental and irreplaceable, by Glenys, whose exact function Chair, Secretary or Treasurer that year I forget. The custody of the tea urn, and subsequent further involvement in Arch Soc provided privileges which I was unaware of at this stage. It provided legitimate access to the postgrads study room, where the urn was kept, as well as being a good place to cadge a cup of tea or coffee and a chat from the legitimate occupants, but which was otherwise forbidden ground to undergrads.

In this way I became better acquainted with Glenys. We had in common that we were both ‘mature’ students with a previous record of employment. Glenys had for a while before she went to Birmingham worked as a lab technician at Revlon (or it may have been Rimmel, definitely a cosmetics company) and had lived for a while in a bedsit in London before she began her archaeological education. She did originally aspire to do her research on Etruscan bronzes and set off to explore the terrain, only to find that someone else was well embarked on research in this area. The resultant re-think is definitely Roman mirrors gain.

We kept in touch in the vague way that graduates with the potential need for a bed for the night do, while Glenys was working in Nimegen. I was in London and I did put Glenys up on odd occasions when she was back in the UK and wanted to use London libraries or the BM. We were competitors in a Civil Service competition when Research Assistant posts at the then Inspectorate of Ancient Monuments and Historic Buildings were being recruited (in 1974?). Incredibly she was turned down, and I was one of the four or five appointees. I was at least able as a result to put some fee paid work in her way, including the unfortunately still unpublished report on the copper alloy finds from the late Ernest Greenfield’s excavations at Thistleton, Rutland.
I was invited as a guest when she was capped at the Society of Antiquaries; and when she moved to Chester stayed with her, or at least visited when I had monitoring meetings at the Chester Archaeological Unit. I have a delightful craft pottery candle holder in the shape of a small medieval castle which was a wedding present from her, which demonstrates her thoughtful choice of gift. She knew I collected craft pottery, and was then involved with the excavations at Hen Domen. Incredibly she invariably sent me a card on my wedding anniversary, (how many people do that for friends); and as I was not especially good at keeping in touch with her, especially after she married, I only knew that something was wrong when no anniversary card from her arrived.

She was ecstatically happy with her late marriage which did change her life very much for the better, and it is sad to think that the essential and vibrant person who so enriched the lives of those who knew her was so sadly lost to view at such an early age. It is to be hoped that the past 15 years of her life were spent in contentment and complete lack of awareness of what she and we had lost.

Glenys at Chester
Margaret Ward

Glenys in an ivory tower in the Grosvenor Museum might be the stuff of legend, but her hospitality was not limited to her professional life. In 1975 I had arrived straight from university in a job with the Grosvenor Museum Excavations’ team in Chester. Significantly (and memorably, on the Museum’s magnificent staircase), it was Glenys who was first to pop up and invite me home for tea. I was a little in awe of her and the occasion, being as she was my senior in years, status, and erudition. When I eventually found her flat, it was buried within a rambling, if not crumbling, house whose landlord caused her Damocles-like consternation by leaving the word ‘demolition’ to hang over her head. Vivid still is the memory of her unexpected informality – and her flamboyant approach to home-baking, that first cake being fluorescently green-iced, or, rather, green-draped. I had never met a cake so florid – nor a cake-maker so effervescent.

In those heady days before the introduction of a minimum wage, I was existing in a 10-foot caravan on a farm. Its isolation, cold and condensation were more palpable as summer turned into late November. Glenys’s homely welcome, despite her Spartan circumstances, proved far warmer. And, despite appearances, she turned out to be the antithesis of an academic stereotype, being a ‘party animal’ on quite another level: her uninhibited dancing at parties opened the eyes of many a young digger. Rapidly dispelled was any illusion of Glenys as a straightforward, or indeed straight-laced, blue-stocking. Her standing amongst the volunteers was further enhanced when she brought to a party her brother, Dewi, who was en route to Aberdeen, or rather to his oil-rig in the North Sea. Oil-rigging at that time being seen as adventurous, if not swashbuckling, it did her reputation for ‘coolness’ no harm. She is remembered across the world – and not solely in her academic guise.

Glenys was a frequent visitor to the even more derelict house on the City Wall at Abbey Green, our base for three years of excavating the fortress defences and centurions’ quarters. Glenys would often seek refuge with us for tea-breaks and to inspect the latest enamelled brooch or the latest miniature votive offering – and a great favourite, a small bronze tortoise. A few of these Abbey Green finds were quickly recorded and illustrated with her advice 30 years ago (McPeake et al. 1980, 23-5), but only the brief ‘interim’ note saw publication and I am told that the little bronze tortoise disintegrated years ago.

After those excavations ended, we met up weekly in the less convivial atmosphere of Museum staff meetings, but when in 1979 she was elected F.S.A. and also to the Committee of the Roman Society, her excitement could not be constrained – and my knowledge of gossip in the academic world suddenly increased. For all of us whom she did not exasperate, she wove much into the rich tapestry of life. At her funeral, an Horatian ode (Book I, 11) was said to give fitting advice for the present and future:

\[
\text{dum loquimur, fugerit invida aetas: carpe diem, quam minimum credula postero.}
\]

‘While we speak, cruel time will have fled. Take hold of the day, trusting as little as possible in tomorrow.’

Hearing of this memento mori stirred in me the stream of consciousness, flowing on from those years when we had discussed Roman finds, Latin and (like Alma-Tadema’s rather more elegant ladies) classical poetry. Appropriate to the Glenys that I knew, was Horace’s memento vivere (Odes I, 37):

\[
\text{nunc est bibendum, nunc pede libero pulsanda tellus}
\]
She would have liked us, too, to think, ‘Now’s the time for a party, now’s the time to beat a footloose dance upon the earth.’ As a character and as a scholar, to borrow again from that ode, non humilis mulier - ‘no lowly woman’ was she, but ‘larger than life’ and surely death. I thought of her life-experience, the beaming enthusiasm and the ensuing darkness, and how many memories her passing has revived. I thought of the disintegrated bronze tortoise and of Glenys’s work enduring in print and, no doubt, in archives nation-wide, and I thought that she might be willing to concur with Horace (Odes, III.30), ‘I have created a monument more enduring than bronze…’

*Exegi monumentum aere perennius regalique situ pyramidum altius, quod non imber edax, non Aquilo inpotens possit diruere aut innumerabilis annorum series et fugae temporum. Non omnis moriar………..*

I have created a monument more enduring than bronze
and higher than a pyramid’s royal site,
which neither the biting rain nor the impotently raging North wind
can erode, nor even the innumerable succession of years and the flight of the times.
I shall not altogether die………..


**Glenys and Venus**
Fr. Martin Henig

I have delightful memories of Glenys, who was consistently vivacious, helpful and learned. I recall a memorable visit with her in Chester while I was compiling ‘Some notes on Gems and Finger Rings in the Grosvenor Museum’, published in the *Journal of the Chester Archaeological Society* (vol.60,1977, pp.43-8). She managed to locate in the museum stores an impression of a long lost cornelian intaglio from Chester depicting Venus holding a hand-mirror (no.2 in my list). This combined two of her interests, mirrors of course, upon which she spoke and published so often, and Venus who was the subject of a dazzling ‘performance’ culminating in a version of the ‘dance of the seven veils’ at a conference held in 1984 in the sober lecture room of Oxford’s Centre for Continuing Education. Whenever I read the brilliant paper she published in *Pagan Gods and Shrines of the Roman Empire* edited by Anthony King and myself two years later, entitled ‘Roman Venus: public worship and private rites’ I think of that occasion.

I have been concerned from time to time over the past 40 years with images of Venus, in sculpture from Wroxeter and Dover, in mosaic at Bignor and Kingscote, and the occasional intaglio, usually of Venus Victrix, the darling of the Roman army, but the most touching reference to the goddess I have encountered is a tiny cameo brought to my attention by Stephen Sherlock and pictured above. It is in the form of a scallop shell and was re-used in an Anglo-Saxon gold and garnet pendant, excavated from a burial in north-east Yorkshire. This exquisite object was chosen for the front cover of the report (Sherlock 2012). As with the jet scallop shell of 3rd/4th-century date from a burial to the east of *Londinium* (Murdoch 1991, 31-2), or the shells liberally depicted on lead coffins like one from Spitalfields (now in the Museum of London) as well as in funerary sculpture, the shell refers directly to the goddess born from the spume of the sea. The scallop-shell additionally would have alluded to the sea-realm of Neptune over which the souls of the dead must pass to the Blessed Isles and thus it acquired a connection with rebirth and the afterlife long before it became the badge of St James at Compostela in perhaps the 9th century. Yet for the Anglo-Saxon Christian who treasured this little Roman object, continued to promise security.

Dear Glenys, rest in peace, the power of that divine love.
Glenys Lloyd-Morgan: A bibliography
Compiled by Nina Crummy

The bibliography is divided into four sections:
Mirrors, Book chapters, Coins, figurines and other finds, and Reviews. The section on Mirrors contains the bulk of her work on these objects, but there may be other mirror fragments in the general small finds reports listed in the final section.

Mirrors
1973
1975-6
The Typology and Chronology of Roman Mirrors in Italy and the North-western Provinces, with special reference to the collections in the Netherlands, PhD thesis, University of Birmingham.
‘Mirrors in Roman Britain’, in J. Munby & M. Henig (eds), Roman Life and Art in Britain, BAR Brit Ser 41, 231-52.
‘Roman mirrors in Britain’ Current Archaeology 58, 5.11, 329-31.
‘Mirrors in Roman Chester’, J Chester Archaeological Soc 60, 49-55.
‘Two Roman mirrors from Corbridge’, Britannia 8, 335-8. 1978
1979
1980
Description of the Collections in the Rijksmuseum G.M. Kam at Nijmegen 9: the mirrors (Nijmegen).
1983
‘Reflections upon an ancient mirror’, Museum Archaeologist 9 (Feb.), 6-10.
‘A lead mirror-frame of the Roman period from Caerwent’, Archaeologia Cambrensis 135, 201-3. 1987
The Concept of the Goddess

neglected goddesses’, in S. Billington and M. Green (eds), ‘Nemesis and Bellona: a preliminary study of two
1996
Celtic World

Appearance, life and leisure’, in M. Gr

1995
Monog. 9 (Oxford), 143

Empire

‘Caryatids and other supporters’, in M. Henig (ed.),
1990
Henig & A. King (eds), ‘Roman Venus: public worship and private rites’, in M. 
1986
Book chapters

History

Historical Society 1970

excavations by the Bi

2012
97.

Wanborough,

Fitzpatrick,

‘Mirrors’, in A.S. Anderson, J.S.
2001
97.

Wiltshire

‘The mirrors’, in H.E.M. Cool
1998
(Oxford), 1010.

(London), 29-33.

1995


2000

2001

2012

Book chapters

1986

1990
‘Caryatids and other supporters’, in M. Henig (ed.), Architecture and Architectural Sculpture in the Roman Empire, Oxford University Comm for Archaeology Monog. 9 (Oxford), 143-51.

1995

1996

Coins, figurines and other finds

1974

1976

1977

1978


with others, ‘Stray finds’, Cheshire Archaeological Bull 6, 75-83.

1980

1980/81
with others, ‘Stray finds’, Cheshire Archaeological Bull 7, 57-90.

1981


1982
with others, ‘Stray finds’, Cheshire Archaeological Bull 8, 70-91.

1983
‘Some further Roman coins from Clwyd (in the Grosvenor Museum, Chester)’, Bull Board Celtic Studies 30, 422-30.


1984

1984/85
‘A Roman cinerary urn in St James Church, Audlem’, Cheshire Archaeological Bull 10, 32-4.


1986

1992


1993


2000

2001

2012


1987


1988


1989

‘Some further coins from the Maesmor/Bryneddydd hoard of 1863’, Bull Board Celtic Studies 36, 227-9.

1990


1991


1992


1993

‘Mirror’, (not a mirror, but probably part of a patera handle) in A. Woodward & P. Leach, The Uley Shrines, EH Archaeological Rep 17 (London), 174.

1994

‘Coin and other small find reports’, in S.W. Ward, Excavations at Chester. Saxon Occupation within the Fortress: sites excavated 1971-1981 (Chester), 27, 53, 66-7, 92-3, 97-9, 101, 104 (pp. 66-7 with J. Graham-Campbell)


with M. Green & D. Williams, ‘A bronze Janiform object from Betchworth, Surrey’, Britannia 25, 239.

1994/95


1995


‘Roman non-ferrous metalwork’, in B. Heywood & D. Phillips, Excavations at York Minster, 1: from Roman


1996


1997


1998


1999

with S.C. Palmer, ‘Copper-alloy objects (Roman)’, Trans Birmingham Warwickshire Soc 103, 134-42.

2000


2001

'A Roman bronze from Cronton, Merseyside', *J Merseyside Archaeological Soc* 10, 52.

2001


2003


2004


2005


2006


2012


**Reviews**

1978


1983


1988


1989


**POMPEII AND HERCULANEUM: RFG spring meeting and exhibition book**

Members will have received notification of the conference at the British Museum on April 19th. See the website for a copy of the details (http://www.romanfinds.org.uk/meetings). The details have also gone out to other societies, so don't delay in sending your application.

For those who are not able to come to the conference but would like a paperback copy of the exhibition book, *Life and death in Pompeii and Herculaneum* by Paul Roberts, you can pre-order the book at an incredibly reduced rate of £15 (usual price £25). If you would like to order a copy of the book, please send your details and a cheque for £17.50 (£15 + £2.50 postage and packing) to Jenny Hall, 26 Park Hill Road, Wallington, Surrey SM6 0SB. Copies cannot be sent out until after the conference in April.
An Iron Age helmet from Kent
Ellen Swift, University of Kent

An unusual recent discovery was made in Kent – an Iron Age helmet containing a cremation burial. The find also included a brooch (perhaps to pin a bag containing the cremated bone), and is thought to date to the 1st century BC. The discovery was made by a metal-detectorist on farmland near Canterbury in September 2012 and reported to the Portable Antiquities Scheme. It was registered as Treasure as it included two prehistoric metal objects found together. Canterbury Archaeological Trust carried out an excavation of the find spot which meant that many valuable contextual details could be recorded.

The helmet is made of bronze and is c.15cm in diameter, with a projecting neck-guard. A spike that would originally have projected from the top of the helmet had become detached from it and was found separately. Iron Age helmets are very rare finds, although another example containing a cremation burial has been found in Belgium (Steve Willis pers. comm).

The helmet was scanned by Lloyd Bosworth at the Department of Classical & Archaeological Studies, University of Kent, using a portable 3-D laser scanner which created a detailed image of the object. The image can be rotated on screen so that the helmet can be viewed from any angle, and usefully amplifies traces of manufacturing techniques and surface decorative detail hidden by colour variation. (A copy of the helmet could also theoretically be ‘printed’ as a solid object from the 3D data, though currently this technology is very expensive).

The helmet is currently at the British Museum where it is undergoing further study and conservation. Canterbury Museum hopes to buy the find so that it can be displayed locally.

© Canterbury Archaeological Trust
The European Iron Age Artefacts Symposium and Prehistoric Finds Group

On 6th and 7th October 2012 the first European Iron Age Artefacts Symposium (EIAAS) was held at the University of Leicester. The conference was well attended by specialists in the field, postgraduate students and museum professionals from a number of British and European institutions. A wide variety of papers were presented, ranging from studies of specific artefacts types, to analyses of site assemblages, curation and display. The range and quality of these papers demonstrated just how much the study of Iron Age artefacts (and artefacts more generally) is thriving and developing at the moment.

Given the success of the conference it was hoped that some volunteers would come forward to organise a follow up next year, but so far no offers have been received. As an alternative the idea of setting up a Prehistoric Finds Group focusing on Bronze Age and Iron Age artefacts was discussed and the organisers of the conference are currently looking into this possibility. We intend to start on a small and relatively informal level, organising an initial meeting where we can gauge interest and find out what would be wanted from such a group. We are currently trying to organise a date in February for this initial meeting, which will take place at the British Museum, but no dates have yet been finalised. If you are interested in attending or would just like to register your interest in the group more generally please contact Anna Booth at alb43@le.ac.uk for updates.

RFG DATASHEETS

We are always looking for datasheet contributions, so if you would like to share your expertise and knowledge please get in touch with Gill Dunn. It could be on a particular find type, an industry or present ongoing research, which will be a valuable resource to students, people just starting off in their finds career and curators alike.

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VINDOLANDA: RFG Autumn Meeting
(October 5th-6th, 2012)
Stephen Greep

The Vindolanda Trust hosted our autumn meeting at the Hedley Centre, Vindolanda. This was an excellent and new venue, with a room for presentations and further space for finds display and book sales. Plenty of parking was an added help! For anyone looking for a venue on the Wall for a meeting this would be ideal.

The meeting proved very popular – so popular in fact that there was a waiting list. Apologies to any Roman Finds Group members who didn’t manage to get a place – it’s highly recommended you book early for future meetings! Without exception the papers were excellent – reviews follow this introductory note. The end of meeting tour around the site was also well attended – very few people departed early, hopefully another sign of a successful meeting. The Vindolanda Trust not only provided the rooms, a number of speakers, free entry to the Roman Army Museum and Friday lunch, but also a handsome wine and canapé reception on the Friday evening where we had the run of the museum to ourselves. On the Friday evening almost all the delegates and speakers attended an excellent meal at our meeting hotel, the Gilsland Spa.

Thanks to all those who helped with the organisation. I hope the following summaries of papers serves as a reminder to those who were able to be present and give a good flavour of the event to anyone who wasn’t able to attend!

Day 1 (notes by Angela Wardle)
After a welcome and introduction by Stephen Greep, Barbara Birley introduced us to some of the more interesting and unusual artefacts as well as fine examples of the more common everyday finds from the site. Recent excavations have concentrated on the granaries, north-west quadrant and vicus. The former area produced fragments of a remarkable bronze ‘calendar’ inscribed SEPTEMBER and there is increasing evidence of post-Roman activity with, for example, a large penannular brooch and a strap end. Other highlights included a copper-alloy griffin figurine and an inscribed lead mirror frame. Within the intramural barracks block was a concealed infant burial, without grave goods, a late Antonine coin hoard and evidence for metal working including silver and copper ingots. The wealth of finds from Vindolanda, particularly the number of inscriptions, continues to astonish and we were fortunate to see many new finds in the museum display.
Andrew Birley gave a stimulating talk on the significance of a temple dedicated to Jupiter Dolichenus. The discovery of the intramural temple, constructed on the northern rampart of the 3rd-century fort at Vindolanda, came as a complete surprise to the excavators. Although formal religious space was set aside inside the fort, in the form of the chapel of the standards within the principia, the discovery of a full blown temple inside the walls of a fort was unexpected. Continuing excavation of the area surrounding the temple has shown that this structure was not set in perfect isolation. The discovery of surrounding structures and the deposition of associated finds offer further insights into the role that this building played within the social structure of the Vindolanda military community in the 3rd century and there is increasing evidence at Vindolanda and elsewhere in the Roman world for religious space inside forts in the later Roman period.

Jenny Price discussed the remarkable series of painted glass cups from Vindolanda. The colourless cylindrical cup, the dominant form of drinking vessel in from the late 2nd to the middle of the 3rd century AD, was especially common in forts and vicus. Most were functional, everyday items, but a few were decorated, with coloured trails, incised or scratched letters and motifs or painted designs, the paint fired onto the surface. Depictions of beasts such as bulls, leopards and lions were in the repertoire, and many of these cups have been found in Denmark, Zealand and on the Rhine. In Britain the distribution is concentrated on the northern military sites. Fragments of a cup from Vindolanda show fighting gladiators, with eight figures remaining from an original 12, while three other cups show fish and one has distinctive rows of double dots. All these motifs can be paralleled on smaller fragments from other northern sites including Piercebridge, Catterick and Binchester. It is probable that the cups represent special examples of a common form, made in the north-west provinces specifically for the military market and it is possible that they were decorated away from the main place of production.

Richard Brickstock gave an introduction to the very large collection of coins from Vindolanda, which now total over 3000. The original group of 800 studied by Casey in the 1980s showed an imbalance in the excavations, with a distinction between the fort and vicus. Much of the collection represented small change and the degree of wear has been examined to estimate how long the coins were in circulation. By contrast unworn die-linked sestertii dated AD 103-111 are presumably from a consignment of fresh coins from Rome. Twenty-one denarii found in 2011 in the centurion’s apartment dating around AD 180-200 appear to represent a savings hoard. Comparison with other Wall sites shows a Flavian peak consistent with a foundation date of AD 85, with no Antonine gap, but a possible decline in the 120s-130s. Coins from the early years of excavation showed a bias to the earlier periods, but this is now being redressed by more recent excavations. Examination of the distribution highlights a concentration outside the granary, perhaps representing a market outside the fort, with an unexpected concentration of small change within the fort itself.

David Breeze discussed a series of enamelled vessels from Hadrian’s Wall. Three vessels, the Rudge cup, the Amiens patera and the Ilam pan (formerly Staffordshire Moorland) bear the names of Hadrian’s Wall forts. Two appear to show a depiction of the Wall and a fourth pan found at Bath has the same motif. This lecture considered the names of the forts, the dates of the pans and their possible uses as well as the likely place of their production. It is very likely that they were used as dedications, perhaps sold as souvenirs. The inscribed pans, together with other enamelled vessels are discussed in his very attractive new book – The First Souvenirs. Enamelled Vessels from Hadrian’s Wall – details of which can be found in the Books section below.

Patricia Birley outlined the somewhat complex background to the development of the excellent new displays at Vindolanda, stressing the point that good museum interpretation is a direct consequence of finds research and has the power to communicate the value and understanding of collections to a diverse range of audiences. Whatever the chosen exhibition techniques, the Vindolanda Trust believes that good interpretative design benefits from a high level of involvement by curatorial and research personnel in the design process and that this is the key to a successful exhibition. Essentially the Vindolanda displays put the objects first and finds and other specialists were involved in the whole concept from the start.

Day 2 (notes by Michael Marshall)

Alex Croom began the second day by talking about the large assemblage of horse gear and associated material from South Shields, interpreting it in light of other aspects of the site sequence such the structural evidence for cavalry barracks and other evidence for the sites garrison. There were major spatial concentrations of horse gear around the cavalry
barracks indicating that finds distributions do reflect activity zones to some extent. The *vicus* also produced a relatively large assemblage though there are few pieces from the actual streets which horses would have traversed. The overall chronological trends were interesting with a high concentration in the Antonine levels and quite a few unstratified finds datable to the 3rd century but little evidence from the 4th century with the exception of some important late spurs.

She also explored the range of material which could be interpreted together in this functional category, e.g. terrets and other cart fittings, as well as other finds such as strap slides, large button and loop fasteners and certain classes of studs which might be associated with harness. Fasteners /connectors formed the biggest single group but other classes such as spurs, bits and terrets were also represented. The assemblage includes some other important pieces such as several stud groups which come from leather straps and a group of *trompetenmuster* fittings including pieces which may have been used for attaching streamers.

Rob Collins explored the evidence for continuity and change between Late Roman garrisons and post-Roman war bands in the frontier zone. There is a large and growing body of evidence for continued occupation in forts on Hadrian's Wall into the 5th century AD and beyond. Despite the evidence of continuity the character of occupation seems to change as seem, for example, in repurposing of the *principia* at York and Vindolanda. Differences in the components and composition of 5th-century ‘Roman’ finds assemblages not only allow us to identify sites of this date but also probably reflect changing patterns in artefact supply, use and disposal. The war band model supposes soldiers remained in the area but officers became chiefs while forts and their units became associated with specific territories. The difference between a soldier who is trained and paid by a state and a warrior who serves a patron is fundamental to this distinction and can perhaps be approached through evidence for locally differentiated supply as opposed to that linked to a broader geopolitical entity. Important trends which may illustrate these processes include the decline in access to imported pottery and other finds and reliance on more localised industries. New types of find such as zoomorphic penannular brooches were adopted and in the post-Roman period new types of site and perhaps political organisation developed. Defended centres such as the wall forts and native hillforts (which might have belonged to similar milieu) contrast with the villa estates and high status rural settlements found in the area further to the south-east.

Fraser Hunter’s talk concerned patterns in the production and consumption of native styles of material culture on the frontier. Interaction with Rome may have provided the inspiration for the development of new distinctive regional styles particular the ‘massive’ metalwork tradition found in northern Britain beyond the Forth and central British styles found in the Humber – Forth region. Products include personal ornaments, weapons and chariot/horse gear.

Metalwork in these styles survived into the 2nd century AD and was clearly produced and consumed on both native and Roman sites with evidence for stylistic and technological exchange between the two groups. However, there are more subtle patterns to be teased out which may help reveal variation in the consumption of these frontier styles e.g. dragonesque brooches where certain decorative styles are more prevalent on either native or Roman sites or Piggott group IV sword hilts where there are important differences with regards to both the presence or absence of Celtic decoration and in blade width. These approaches are beginning to reveal how artefacts served to express identity on a number of different levels. Other classes of artefacts including weaving combs and perhaps glass bangles also seem to show some interesting regional patterning.

Philippa Walton provided a fascinating introduction to an important riverine assemblage from the River Tees at Piercebridge including thousands of small finds, coins and many kilos of pottery discovered by divers. There are good reasons to think that the assemblage is in some sense military, particularly the coinage which contained a high proportion of silver comparable to military sites and shows peaks in coin deposition which tally well with known phases of campaigning in the north. Military equipment and other classes of finds such as knee brooches which have probable military associations are also well represented.

Work is ongoing and the character of this varied assemblage is still being defined. A large number of studs may suggest that some of the material entered the river in a chest but other forms of deposition are also possible and some of the material may have been thrown off of bridges or other structures which projected into the river. There is also an important religious component to the material including figurines and a large assemblage of curse tablets. Perhaps some or all of it should be interpreted as
votive offerings. The coins show an unusually high prevalence of alteration by clipping/perforation/rolling etc. also suggesting some kind of special treatment. An intriguing possibility is that the deposit is associated with troops travelling along the military road and with the special role of the river crossing as a major transition on the route between the Roman province and Barbaricum.

The Vindolanda Writing-Tablets: a selection
Anthony R. Birley, Vindolanda Trust

The 20 items discussed here are the ones that were shown to the members of the conference by the writer. They are just a selection, to give a flavour of the information supplied by the tablets. The first one (now on display in Vindolanda Museum) is a fragment from the end of a letter to the best known person in the tablets, Flavius Cerialis, prefect of the Ninth Cohort of Batavians in Period 3. This is no. 632: iube dari set et hospitium ubi caballi belle sunt vale mi frater karissime Back: FLAVio CERIALI. The unknown writer, who ends with ‘farewell, brother dearest to me’, was evidently going to visit Vindolanda. He tells Cerialis: ‘order’ something ‘to be given—but also a lodging where the horses are well (looked after)’. He spells the word for ‘but’ set instead of the usual sed, and for horses uses caballi, from which Romance languages derive cheval, etc., rather than equi.

The next example, no. 242, is a fragment from another letter: ‘tomorrow really early in the morning come to Vindolanda so that you can [take part in] the counting of the cen[sus?]: cras bene mane Vindolandam veni ut numerationi cen[sus? ...]. The recipient clearly brought his letter with him.

The next three tablets are all documents rather than letters. No. 581 is a set of five sheets, three of them written on both sides, all evidently dealing with expenses, expensa, in the Period 3 commanding officer’s residence, praetorium, on a total of 111 lines. The individual entries are dated by day and month, and in two cases the year is also preserved, with the consuls of AD 103 and 104. The editors take a different view to my own about the order in which the sheets were originally written. The particular sheet shown in my lecture, which the editors place at lines 59-72, was, it can be argued, in fact the first one. It opens with a date, 10 June, iiiii Idus Iunias and on the following line is registered missio Flavi [...], ‘discharge of Flavius ...’ Five lines further on, an entry for 1 January is followed by three letters, the first a little uncertain, but can be read as Ser[ ...], to be expanded as Ser[viano], the first consul of AD 102. The Flavius who was being discharged was, it can be suggested, Flavius Genialis, the predecessor of Flavius Cerialis as commander of the cohors VIII Batavorum.

The next item, no. 596, is a ‘delivery note’, for miscellaneous goods delivered to Cerialis’ praetorium, including headbands, underewear, a saddle, saga corticia, now interpreted as ‘cloaks dyed with bark (cortex)’, kit-bags, ladles or bowls (trullae), reins, and curtains (vela) of four different colours, scarlet, green, purple and yellow. One may infer that the curtains were chosen by the prefect’s wife Sulpicia Lepidina, to brighten their living-quarters in the praetorium. It is also interesting that the prices are given per item, with totals, and show a rare set of symbols for fractions, not merely the well-known s(emissis) for half a denarius, but also those for 1/4, 3/8, 5/8 and 7/8.

No. 155+add. is an important ‘work-sheet’: the first line, previously read as vii Kalendas Maia [ric] fabricis h(omines) cccxxxxiii, ‘25 April, in the workshops, 343 men’, is now in a revised version published as: vii Kalendas Maia [ric] in officis (short for officinis, still meaning ‘workshops’) h(omines) cccxxxxiii. No. 291 is the now famous birthday invitation from Claudia Severa, wife of Cerialis’ fellow-officer and friend Aelius Brocchus, to Sulpicia Lepidina, ending with a very tender personal greeting in Severa’s own handwriting.

No. 255+add. is a detailed letter to Cerialis from a centurion called Clodius Super, reporting on the delivery of clothing from Gaul. Another letter from Super, no. 629, seems to include an apology that he is unable to attend Lepidina’s own birthday party.

No. 650 is from Ascanius, a former soldier in the Batavians (so one may infer), who calls himself a ‘companion of the emperor’, apparently meaning that he was now in Trajan’s newly formed equites singulares Augusti, the elite Imperial Horse Guards. Ascanius writes about money he is owed, and ends with greetings to Verecunda, Sanctus, Lupus, Capito, and omnes cives et amicos, ‘all the (fellow-)citizens and friends’. By cives he surely meant Batavians, a sure sign of the sense of ethnic identity that these Batavians had. By contrast, they can be seen to have had a low opinion of the native Britons, whose poor qualities as fighting men are disparaged in no. 164: the Batavians had. By contrast, they can be seen to have had a low opinion of the native Britons, whose poor qualities as fighting men are disparaged in no. 164: the writer even calls them Brittunca, ‘little Brit’, a pejorative diminutive, previously unattested, for which one may compare the contemporary poet Juvenal’s
xenophobic remark about the Graeculus esuriens, ‘the greedy little Greek’, whose presence in excessive numbers he thought was ruining Rome.

No. 310 is a long letter from a man with a resoundingly Germanic name, Chrauttius, to his ‘brother’—i.e. ‘brother-in-arms’—‘and old messmate’ Veldedeius, the ‘governor’s groom’. One may infer that both men were Batavians who had previously served together in the Ninth Cohort. The address on the back carries the place-name LONDINI, ‘at London’, at the top left. This ought to indicate the place where the letter was written; but the editors now believe that it means the destination. At all events, Veldedeius must have brought the letter with him and there is evidence for his presence in Cerialis’ praetorium: he presumably came with his chief, the governor, who is known to have visited Vindolanda.

The Batavians were only to stay at Vindolanda for a little over ten years. In 105 they were summoned to the Continent, along with other auxiliary regiments from Britain, to reinforce Trajan’s armies on the continent at the outbreak of the Second Dacian War. (Their new base was in Bavaria, where they were to stay until the end of Roman rule in the west, at Passau, Batava castra.) A good many of their writing-tablets were piled up to be burned, with other rubbish, as the cohort prepared to leave. Clearly a heavy shower put out the bonfire and a fair number of the tablets survived, including several of those already mentioned, and, a final example from Period 3, no. 593, a list of ‘nets that we have left behind’, for catching thrushes and ducks, a drag-net for fishing, and snares or lassos for swans. Some of them were entrusted to a veteran, who clearly stayed behind.

The new garrison was the First Cohort of Tungrians, which had already been at Vindolanda in Period 1, as its first known garrison, and had very probably rebuilt the fort at double the original size after the cohort had been upgraded to a double-strength, or ‘miliary’ unit. No. 295+add., found in a Period 4 context, is a letter to Priscinus, clearly the prefect of cohors I Tungorum: the first sheet reads Oppius Niger Priscino [suo] salutem Crispum et Pe[...mili[it]es coh(ortis)·i· Tungrorum quos cum epistulis ad consularem n(ostrum) miseras, a Bremetennaco... ‘Oppius Niger to his Priscinus greeting. Crispus and Pe..., soldiers of the First Cohort of Tungrians, whom you had sent with a letter for our governor, [I have sent on?] from Bremetennacam...’ One may infer that another tablet, no. 663, which has rather more about feelings and emotions than most other letters, was written to Priscinus’ wife:... qua me [...] cunde consolaris sicut mater faceret. hunc enim · adjectum animus meus... et comm[ode] conyalescebam · tu [...] quid agas cum Priscinó tuo ..., ‘with which you ... console me, just as a mother would do. For my mind...this sympathy (?) ... and I was convalescing comfortably. As for you, what are you doing with your Priscinus?’

No. 645 is a long letter from a man called Major. In the address position on the back we find Vindolande, ‘at Vindolanda’. If this means that Major was writing at Vindolanda, the tablet must be a draft, and, indeed, there are several ink blots, perhaps to be explained by a sentence at the end of the letter, ‘when I was writing this I was making the bed warm’. Otherwise, if the letter was sent to Vindolanda, it was the addressee, Cocceius Maritimus, who was there. Whichever the case, Major asked Maritimus to let him know if he had had dealings with the Caesariani, imperial freedmen; the two men and also Major’s father, were involved in grain-dealing.

Another tablet, no. 643, is almost certainly a draft, since it contains two separate letters, one to Titus, the other to Caevolarius, both from Florus. Both have more spelling mistakes than any of the other tablets—perhaps he found a more literate scribe to write fair copies.

Two accounts from Period 4 contexts are particularly interesting. No. 180 comprises three separate sheets with an ‘account of wheat measured out’. There are fascinating details about the recipients, including legionary soldiers and ‘the oxherds in the woods’, as well as some named individuals, such as ‘Amabiliis at the temple’, Amabili ad fanum and ‘Lucco, at the pigs’, Lucconi ad porcos. On the back of two sheets is a draft letter of protest, no. 344, evidently written by the merchant himself, bitterly complaining that he had been beaten till he bled by the centurions and his goods had been ‘poured out’. Presumably he was thought to have been caught out in some kind of corruption, but he insists that he should not have been beaten, as he was from overseas as well as being innocent, hominem tran(s)marinum et innocentem— the unspoken implication is that beating of native Britons was acceptable, whereas those from the Continent deserved better.

No. 181 is another account from the same merchant, listing names of those who owed money, including the equites Vardulli, 7 denarii, and, in the next line, contubernalis Tagamatis vesculari, the ‘companion
of Tagamas the flag-bearer’, 3 *denarius*. The ‘Vardullian cavalry’, clearly a detachment from the part-mounted First Loyal Cohort of Vardulli, were a further addition to the garrison, as well as the legionaries in no. 180. The unnamed companion of Tagamas was no doubt his common-law wife. By happy coincidence, over ten years later further excavation in a Period 4 level produced another account, no. 860, which listed the same flag-bearer, this time charged one *denarius* for his spear. The slightly divergent spelling of his name in this account, Tagomas, was evidently the way he himself preferred, since a short distance away the handle of a Dressel 20 amphora was found, with his name scratched on it: TAGOMAS (Inv. no. 8487).

In the same area were found scraps of writing-tablet, recycled letters on which lines of poetry were written, all from Vergil (with one possible exception). The most notable, no. 854, was a particularly well-known line from Vergil’s *Georgics*, 1.125, harking back to the Golden Age of Saturn, the classical view of the age of hunter-gatherers, when the hard grind of cereal cultivation was not necessary: *ante Iovem nulli subigeb[a]n[t] arva coloni*, ‘Before Jupiter no settlers used to plough the fields’. It is quite likely that young recruits were taught to read and write by having to copy out such verses.

The sources

**The Vindolanda periods** may be summarised as follows:

**Period 1**: c.85-92. Only the defensive ditches (four on the west side and one on the south) have been examined; dated principally by a deposit of La Graufesenque *terra sigillata* in the innermost west ditch. The two strength reports, nos. 154 and 857, and an unpublished stylus tablet, show that the garrison was the coh. *I Tungrorum*.

**Period 2**: c.92-97/100. A much larger fort, of which the central buildings, with *via principalis* running north-south, were built above the innermost Period 1 ditch and rampart. The garrison was perhaps at first coh. *I Tungrorum*, now *milliaria*; then certainly coh. *VIII Batavorum equitata*, probably *milliaria*. The south gate and part of the praetorium have been excavated. West of the *via principalis*, overlying the outer Period 1 ditches, was part of a Period 2 and 3 building, probably a barrack-block, overlaid by a Period 4 structure, perhaps a *schola*.

**Period 3**: c.97/100-105. The garrison was coh. *VIII Batavorum equitata*. Numerous tablets derive from this period, mostly from the *praetorium* and adjacent roads. Dating evidence includes tablets with consular dates for AD 98, Inv. 87.725 (unpublished stylus tablet), AD 103 and 104, perhaps also AD 102, no. 581. The main excavated structures, part of the *praetorium* and south gate, were largely a more substantial rebuilding of the underlying Period 2 ones.

**Period 4**: c.105-120. The garrison was coh. *I Tungrorum milliaria*, plus a cavalry detachment, *equites Vardulli*, from the coh. *I fida Vardullorum equitata*, no. 181, and some legionaries, no. 180. Buildings excavated include a barrack-block overlying levelled remains of the Periods 2-3 *praetoria*; part of another barrack-block further west; a possible *schola* adjacent to the Period 4 *praetorium*; a possible hospital; and a ‘palatial building’ originally assigned to Period 5. Dating evidence includes a tablet dated by the consuls of AD 111, no. 186, coins of Trajan and one coin of Hadrian. It is difficult to fix the exact date at which Period 4 ended.

**Period 5**: c.120-128, in which a *fabrica* replaced the Period 4 barrack-block overlying the earlier *praetorium*.

**Vindolanda’s Collection of Iron Tools**
Justine Blake, Vindolanda Trust

Excavation at Vindolanda has produced some 275 iron tools (518 if knives and cleavers are included), making it one of the largest such collections from Roman Britain (Fig. 1). It offers a valuable insight into the types of iron hand tools used during the Roman period in the north of England and, by inference, gives some idea of the range of skilled craftsmen at work in and around a typical frontier fort and its extramural settlement.

![Figure 1. Numbers of iron hand tools in the Vindolanda collection, broken down into craft types.](image-url)
Occupation at Vindolanda spanned over three centuries, between c. AD 85 and the mid-5th century, during which time at least nine successive forts were constructed and garrisoned by various auxiliary cohorts, a list of which is reproduced from Birley (2009, 183) in Figure 2.

<table>
<thead>
<tr>
<th>Period</th>
<th>Date</th>
<th>Garrison</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>c.79-85</td>
<td>Possible occupation by unknown unit</td>
</tr>
<tr>
<td>I</td>
<td>c.85-90</td>
<td>Coh I Tungrorum</td>
</tr>
<tr>
<td>II</td>
<td>c.90-100</td>
<td>Coh I Tungrorum, succeeded by Coh VIII Batavorum</td>
</tr>
<tr>
<td>III</td>
<td>c.100-105</td>
<td>Coh VIII Batavorum</td>
</tr>
<tr>
<td>IV</td>
<td>c.105-120</td>
<td>Coh I Tungrorum</td>
</tr>
<tr>
<td>V</td>
<td>c.120-130</td>
<td>Coh I Tungrorum</td>
</tr>
<tr>
<td>VI</td>
<td>c.130-165</td>
<td>Possibly Coh II Nerviorum</td>
</tr>
<tr>
<td>VIA</td>
<td>c.165-205</td>
<td>Unknown</td>
</tr>
<tr>
<td>VIIB</td>
<td>c.205-212</td>
<td>Unknown</td>
</tr>
<tr>
<td>VII</td>
<td>213-late 290s</td>
<td>Coh IV Gallorum</td>
</tr>
<tr>
<td>VIII</td>
<td>c.300-360s</td>
<td>Coh IV Gallorum</td>
</tr>
<tr>
<td>IX</td>
<td>c.370-400</td>
<td>Unknown</td>
</tr>
<tr>
<td>X</td>
<td>c.400 onwards</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Figure 2. Vindolanda periods along with dates and garrisons.

Excavation has concentrated primarily on the internal buildings of the successive military forts (Bidwell 1985; Birley 1994; Birley, Birley & Blake 1998; 1999; Birley & Blake 2000; Birley 2003; Blake 2001) however, a number of other buildings have also been excavated inside the extramural garrison settlement of third century date (Birley 1931; 1932; Birley, Richmond & Stanfield 1936; Birley 1977; Birley 2001; Blake 2003; Birley & Blake 2005; 2007). From these contexts a wide variety of craftsmen’s tools have been found, ranging from smithing and carpentry tools to agricultural implements, the relative proportions of which are shown in Figure 3.

Anaerobic preservation conditions in the pre-Hadrianic levels at Vindolanda have meant that many artefacts recovered from those contexts are in remarkably fine condition. Such soils, perhaps more commonly associated with the preservation of the ink writing tablets and Roman leatherwork at Vindolanda, have also been responsible for the exceptional preservation of a number of iron tools. Details such as maker’s marks and saw teeth, typically lost to corrosion when tools are recovered from aerobic levels, are still visible on several of the pre-Hadrianic examples.

Two significant challenges face any researcher of Roman tools. First is the definition and application of the term ‘tool’ and secondly, the multiplicity of tool usage in antiquity. ‘Tool’ as applied to the Vindolanda collection has been taken to mean ‘an instrument used or worked by a handicraftsman or labourer in his work’ (Webster’s 3rd International Dictionary). As such, carpentry, smithing and farming tools have all been included but, clamps, pins, etc., although they could be classed in a certain respect as tools, have been omitted. Classification has followed W. H. Manning’s catalogue of iron tools in the British Museum (Manning 1985), which grouped tools by their particular craft type. It should be recognised, however, that a number of the Vindolanda examples could have served variant, or additional, purposes to those for which they have been classified.

As shown in Figure 4, there is a relatively even spread between the numbers of tools found in each time period at Vindolanda, especially when the bias of the proportion of excavation having taken place in each phase is taken into account. For example, the remains of Period I lie over 7 m beneath the modern ground surface in places and have seen relatively little excavation. Similarly the later 2nd-century remains in Periods VIA and VIIB have been heavily damaged by later Roman building in Period VII during the early 3rd century.
Perhaps the overwhelming impression is that the collection represents industry taking place across each major craft type at the site throughout the Roman occupation, albeit on a small scale. Tools are an ever present artefact from each of Vindolanda’s occupation phases without appearing in any huge number in proportion to the rest of the site’s assemblage of material culture. It is, however, very possible that the high intrinsic value of iron for scrap and subsequent recycling in the Roman period might mean that the number of surviving tools has been artificially lowered in comparison to other artefacts more readily discarded by the site’s inhabitants.

Figure 5. A breakdown of individual tools within each craft type.
What has been left behind appears to represent the efforts of a series of typical auxiliary garrisons to construct and maintain their successive forts and surrounding buildings, as well as exploit the local landscape for raw materials, including agricultural produce, at a relatively low level. Vindolanda, as represented through its tools, does not appear to have been a major industrial centre for any particular craft type. It does, however, give us a glimpse into the typical tools used on a day to day basis by some of the auxiliary soldiers engaged in construction and maintenance work while patrolling and controlling the northern frontier.

The charts in Figure 5 show a more detailed breakdown of the numbers and types of tool by craft type. They show that most of the more common Roman hand tools within each industry are represented, but highlight some notable omissions. Plough shares and coulters, for example, have not as yet been recovered from the site. Similarly large smithing anvils and tongs are absent. However, the site has produced some exceptionally well preserved examples of various tools types and some notable rarities, some of which are highlighted in more detail below.

Among the metalworking tools is a fine example of a small set of tongs (Fig. 6). These provide a good example of the details that have been preserved on several of the pre-Hadrianic tools because of the exceptional preservation conditions. A copper-alloy washer has been used on the axis of the jaws and it is clear that the tips of the tongs had tapered to a fine point, perhaps to allow precise gripping on items such as small casting crucibles.

The collection of agricultural tools includes an intriguing branding iron (Fig. 7), which appears to represent the letters C (retro.) E. Given its provenance in the praetorium of the prefect Flavius Cerialis (Birley 1994, 82) it is possible that this represents an effort by Cerialis to separately identify livestock of his own by branding them with his name. Perhaps he had a personal collection of animals that were to be separated from those of the garrison.

Among the sculptors, masons and plasterers tools is a finely preserved mason’s trowel (Fig. 8). Found buried under a wall that had collapsed during a fire in an early 2nd-century schola (Birley 2003, 19), it would appear that its owner had been engaged in plastering one of the building’s walls immediately prior to its accidental destruction.

The miscellaneous tools include a number of unusual and rare types, but a number of well-preserved wrecking and crow bars have been found, such as the example in Figure 9. These are a salient reminder that, as well as building structures, a significant proportion of soldiers’ time was spent on demolition and repair, amply borne out by the structural archaeology at Vindolanda (e.g. Birley 2009, 91).
A note concerning ‘ox goads’

One type of agricultural tool commonly found on Roman sites, including Vindolanda, is the so called ‘ox goad.’ Usually having a short iron point of c.10-20 mm with a circular barrel for attachment to a wooden shaft, these small artefacts were first noted by Pitt-Rivers in his Cranborne Chase reports as being used for encouraging oxen (Rees 2011, 96). The use of such devices during the Roman period is attested by Columella (Rust. VI.2.11), however, the theory was challenged by Robin Birley in a report on the writing materials from Vindolanda (Birley 1999, 28). Birley was convinced that such items were in fact ink pens, noting traces of ink at the foot of the shaft of one example (no. 3613 shown in fig. 10). Since 1999, several more examples have been found at Vindolanda and it can now be argued that there is substantial evidence for at least some of these small artefacts being ink pens rather than ox goads.

Vindolanda has produced 18 examples of this type of artefact, all ranging in length between 15 and 20 mm with a barrel diameter of c.12 mm. One example, no. 3460, shown in Figure 10, had part of its wooden shaft still surviving. It has a pronounced upward curve to meet the iron nib, at which point the shaft has been hollowed out to form a 2 mm diameter capillary that runs through its centre (see inset of fig. 10). On a replica used by the author this feature was found to act very well in drawing ink up into the shaft and subsequently dribbling it to the nib to prolong flow during writing.

In comparison, the effort needed to manufacture a shaft such as this is difficult to justify for merely prodding livestock if used as an ox goad. Similarly, the diameter of the shaft at just 12 mm would make it very flimsy for encouraging animals if any longer than c.250 mm. It is, however, a very comfortable diameter to grip with a hand if used for writing.

The provenance of several of these items at Vindolanda also suggests a more likely use as pens. At least five (no’s 1603, 3460, 3613, 9209 and 13898) have been found in contexts clearly associated with writing tablets (Birley 1994, 71), while none of the 18 examples have been recovered from contexts that could be considered likely for their use as ox goads, such as agricultural buildings, or outbuildings, etc.

While it still cannot be proven beyond doubt, surely the circumstantial evidence is enough that, on balance of probability, these relatively delicate objects are more likely to have been used by the Romans as ink pens than ox goads.

Bibliography

The Clayton Collection: the 19th-century creation of a 21st-century resource
Frances McIntosh, English Heritage and Newcastle University

This short note summarises the paper I gave at the RFG October meeting in Vindolanda regarding my PhD work on the Clayton Collection. The Clayton Collection is a large collection of archaeological material, mainly from the Central Sector of Hadrian’s Wall, collected mostly by John Clayton. It is a collection many people know about and certain items have been extremely well studied, but there is still much that has been neglected. The six main aims to my PhD are as follows:

- Set John Clayton in context as a 19th-century antiquarian
- Understand the history of the collection
- Analyse the significance of the collection
- Complete case studies on some parts of the collection
- Promote the collection to the research community
- Highlight future avenues for research

John Clayton was born 10th June 1792 and died 14th July 1890 aged 98. He was the fourth of 11 children of Nathaniel and Dorothy Clayton (Welford 1899). Nathaniel Clayton bought the Chesters estate (which includes the Roman fort) in 1796 (Bidwell & Snape 1993, 7) and so John Clayton would have grown up there from the age of four.

Having succeeded to the Chesters estate in 1832, Clayton wasted little time in beginning to investigate the site he now owned. From the early 1840s, when he first began to excavate at Chesters, Clayton conducted an excavation somewhere along Hadrian’s Wall nearly every year until his death. These excavations were led by his foreman William Tailford Senior, and then by his son, William Tailford Junior. Early on, Clayton began purchasing other parts of Hadrian’s Wall, owning from Acomb to Cawfields by the time of his death. In his memorial it was said ‘Whenever an estate came into the market having on it some portion of the Wall, he strove to become its possessor’ (Anon. 1890, 33). A list of the sites he purchased, and when, can be seen in Woodside and Crow’s book on the National Trust’s estate along the Wall (1999, 85). As well as excavating, Clayton had an active interest in preserving Hadrian’s Wall for future generations, with work carried out to conserve the Wall in certain places, and farm-houses moved off the line of the Wall or fort.

The Clayton Collection contains objects from the following sites which Clayton excavated between 1843 and 1890: Carrawburgh, Carvoran, Coventina’s Well, Haltwhistle, Housesteads, Milecastles 29, 37, 39 and 42, and Turrets 26b, 29a and 45a. In addition to this there is material in the collection from the following sites which were not excavated by Clayton: Great Chesters, Kirkby Thore, Nether Denton, Pompeii, Vindolanda and Walbottle. This material came into the collection by various routes, both whilst Clayton was alive and after he had died.

After John Clayton’s death his estate passed to his nephew Nathaniel George Clayton (1833–1895). In his will he asks his executors to catalogue within a calendar month ‘the pictures and framed prints and the statues marbles Bronzes Shells Mineral Specimens and other Articles of virtue and all the Altars Vases Sculptures and all and every the Roman remains
which shall be in or about or belonging to my Mansion house of Chesters or the gardens or pleasure grounds’ (John Clayton). A catalogue is not known until 1900 when H.R. Hall (an Egyptologist from the British Museum) was asked by John Bertram Clayton (Nathaniel George’s son) to construct a hand-list. Nathaniel did, however, contract F.W. Rich to design and build a museum for the collection, and the building was complete by 1895, with material being moved from the house to there in 1896.

With John Bertram’s death in 1900, Nathaniel’s wife, Isabel became the sole resident of the house at Humshaugh, with John Bertram’s brother Edward Francis (1869‒1922) and then Edward’s son John Maurice, allowing her to live there, whilst they resided in London. Throughout this time the museum remained open to visitors, with the guidebooks (held in archive of the collection at Corbridge Museum) running from 1896‒1954 (with an unexplained gap from 1912‒1924, which is probably due to a book having been lost). When Isabel died in 1929, John Maurice decided to sell up, and split up the Wall estate into saleable chunks. Captain A.M. Keith then comes into the story of the collection.

Captain Keith bought the family house at Humshaugh, and the Chesters estate, but not the collection. Archaeologists who knew about the collection were outraged that it was going to be split up and sold. C.R. Bosanquet and others persuaded John Maurice to sign a Deed of Trust giving over the whole collection to the care of the Trustees. The Clayton Trustees was quickly set up, with the guidebooks (held in archive of the collection at Corbridge Museum) running from 1896‒1954 (with an unexplained gap from 1912‒1924, which is probably due to a book having been lost). When Isabel died in 1929, John Maurice decided to sell up, and split up the Wall estate into saleable chunks. Captain A.M. Keith then comes into the story of the collection.

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Within my PhD I aim to complete some object case studies, as well as a site case study on the material from Chesters. Currently I am working on the militaria which comprises just over 600 items. These come from all of the sites within the collection, and so I will discuss militaria from the Central Sector of Hadrian’s Wall, rather than a specific site. I will then look at the brooches and conduct a case study on the Chesters material. Nearly 40% of the material has been assigned to Chesters (with varying degrees of confidence) and so this is a large data set with which to conduct analysis. Throughout my project I will also be noting down areas for research which I cannot complete within the timescale of the project. Dr. Peter Guest and I hope to publish the Throckley/Walbottle hoard material as it has all been identified by Pete and would be an important group of data to make available.

This is obviously just a short introduction to my PhD work, and I am only a third of the way through the project so there is much more to be discovered. I hope to publish much of my work, in order to highlight the potential of this collection for future research.

Bibliography

The Vindolanda Bead Collection
Barbara Birley, Vindolanda Trust

Introduction
The last six excavation seasons at Vindolanda have increased the bead collection by 496, bringing the total (in 2012) to 881, more than doubling the number previously reported by Birley & Greene (2006). Such a large increase is a testimony to the continuous meticulous nature of the excavations, as much as the areas that have been under investigation. The size of the dataset now makes it possible to reassess the make-up of the assemblage and to offer a broader perspective on the depositional/recovery pattern of beads from across the site.
Beads are defined by predetermined criteria. These relatively small artefacts had to have a hole or perforation (or evidence of drilling) which could then be strung to make jewellery such as necklaces, bracelets or ear rings, or some other personal adornment or decoration. Each bead was classified according to the following criteria: shape, material, colour and opacity (if glass) and context (for more information about classification see Birley 2012).

**Beads from 2007-2012, new evidence**
Initial results of the 2007-2012 beads have shown increases in some areas, including colour and shapes from those recorded in previous work. For example, up to 2006 the Vindolanda collection had only eight red glass beads (Fig. 1) but this number has now grown to 27. This could be due to the large areas of 3rd- and 4th-century excavation on the site, as generally these periods have produced the most beads in the past (Birley & Green 2006,12). Examination of the bead shapes, materials, glass colours and the periods of deposition allows conclusions to be drawn about the use and deposition of beads at Vindolanda. Current work into the spatial distribution of the bead collection from Vindolanda is further helping to identify patterns of deposition from which new insights can be drawn.

**Figure 1. Red glass bead.**

As the most current excavation programme has only just been completed, exact dating information for all of the beads recovered between 2008 and 2012 is not yet available. However, it is possible to examine the depositional pattern based on basic divisions into 3rd- and 4th-century contexts.

<table>
<thead>
<tr>
<th>Overall</th>
<th>Melon</th>
<th>Small Biconical</th>
<th>Spherical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intramural</td>
<td>64%</td>
<td>78%</td>
<td>69%</td>
</tr>
<tr>
<td>Extramural</td>
<td>31%</td>
<td>18%</td>
<td>31%</td>
</tr>
<tr>
<td>North field</td>
<td>4%</td>
<td>4%</td>
<td>-</td>
</tr>
<tr>
<td>Unstratified</td>
<td>1%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Figure 2. Proportions of melon, small biconical and spherical beads 2008-2012 by area.**

The 2008-2012 excavations were carried out in three areas on the site: the intramural excavations of the north-west quadrant and granaries of the 3rd/4th-century stone fort in which 64% of the beads were found and an area of the 3rd- and 4th-century extramural vicus in which 31% of the beads were found (Fig. 2). Some of the extramural excavations have examined levels which probably predate the 3rd- to 4th-century occupation at Vindolanda. While stratigraphic analysis has produced initial dates for these levels, until the final coin reports are available the dating must remain unconfirmed. Another smaller excavation was conducted in 2009, 2010 and 2012 in the field to the north of the main Vindolanda site. As might be expected, just 4% of the beads were found in this area and further post excavations analysis is needed before definite conclusions relating to the dates of these beads can be deduced.

**Bead Shape**
There was a sizable increase in three different shapes from the pre-2006 material to the post-2007: melon beads, small biconical beads and spherical beads. When looking at the percentages of beads being deposited inside the fort wall, over three quarters of the melon beads came from this area and over two thirds of the small biconical. In comparison, the spherical beads are more closely split in half. This could be because the melon beads and the small biconical were being used for a specific purpose, but further excavation will help to confirm this. It may be that melon beads and small biconical bead numbers are found there in higher numbers because they were significant to the inhabitants of the north-western quadrant or the whole fort itself. Over the next five years excavation of the south-east quadrant of the site will provide a comparative assemblage of artefacts.

The 1970-2006 bead dataset has indicated that a substantial number of the beads come from Period VII (AD 213, IV cohort of Gauls, Stone Fort II; Birley & Greene 2006, 12). The intramural excavations carried out in 2008-2012 were largely concentrated on the 3rd-century levels, but initial stratigraphic analysis has revealed that buildings dating to period VI (AD 140, possible Nervian cohort) Period VIA (AD 160), VIB (AD 200-213, Severan Fort) and considerable new evidence for Periods VIII (4th-century), Period IX (post AD 369) and Period X (post AD 400) were discovered (publication forthcoming). These excavations will help to give tighter dating sequence to different areas on the site and also to help with identify bead distribution by period.
Bead Material
Glass beads make up the bulk of the collection (70%), with the next largest category being faience (19%). In the post-2007 material there was a slight drop in amber (2%) and copper alloy beads (2%), but this is not surprising as these bead materials have not previously been found in significant numbers across the site. Jet (7%) also shows a small decrease.

Glass
With over 613 glass beads it is vital to look at the colours of the glass to better understand the collection. Blue and green beads have remained the most abundant glass beads from the site (Fig. 3). Made to imitate the precious sapphires and emeralds that were so popular in the Roman period, they are found on many sites (Guido 1979, 91-102). Blue beads have stayed constant in numbers but the green glass beads have seen a 6% rise. Further spatial analysis needs to be carried out to determine where these beads are coming from.

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
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<tr>
<td>Blue</td>
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<td>43%</td>
</tr>
<tr>
<td>Green</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Gold in glass</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Blue white red</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Yellow</td>
<td>5%</td>
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</tr>
<tr>
<td>Red</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Specialist</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>White</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>Blue with white wave</td>
<td>-</td>
<td>1%</td>
</tr>
</tbody>
</table>

Figure 3. Comparison of glass beads by colour.

Melon beads
As there was a sizable increase in the frequency of melon beads, both faience and glass, it is worth looking at these beads more closely. Although beads tend to be considered female artefacts which were strung to make jewellery, it is unlikely that these beads would have been worn this way, as due to the large perforations they do not easily lend themselves to necklaces. It is possible that some were used in this fashion but there is a growing number of artefacts which shows a different use of these beads, such as the well-preserved cavalry tombstone from Cologne in Germany now in the collection at the Römisch-Germanisches Museum. This pictorial evidence for the use of beads dates to the last decade of the 1st century and shows a strap which circles the horse’s neck and five incised round objects evenly spaced (Dixon & Southern 1992, 39). The strap would not have had any purpose other than for decoration, but it could also have been carved to symbolically represent the rider’s rank, wealth, nationality or cultural allegiances. The inscription on the stone suggests that he came from the Dansala tribe in Thrakia (north of Greece/Bulgaria), an area well known for horsemanship. Other parts of the Roman Empire also show signs of this type of horse decoration. In Iberia, surviving depictions of cavalry are often shown with a similar strap wrapped around the top of a horse’s neck. It is plausible to assume that this was a common form of horse adornment (Bennett 1998, 77-9). Three melon beads from pre-Hadrianic contexts at Vindolanda were found still strung on a piece of leather thong and could have been use for a similar purpose (Fig. 4).

Figure 4. Three melon beads found on leather thong from pre-Hadrianic excavations at Vindolanda.

Another object that indicated alternative uses for melon beads also comes from Germany: a richly decorated dolabra (entrenching tool) sheath found in Bonn, near Jesuitenhof (a place to the north of a legionary camp, between the Rhine and the Limesstrasse that linked Bonn with Cologne). This sheath (Inv. 6961, length 15.5 cm) was found in 1890. Although this was a surface find and therefore did not have any associated archaeological information, its decoration can still be seen as informative. The sheath is of copper alloy with eight melon beads suspended on thin wire and lead-shaped attachments at the base. Two further melon beads, now missing, are likely to have been suspended from the remaining two fitments. Dolabra sheaths, such as this, were presumably used to protect the blade of this very sharp tool while on the march.

With the increase of melon beads from the recent intramural excavations it will be imperative to plot each bead and look at the spatial distribution to further understand the use of these common artefacts. This may show some interesting relationships between the depositional pattern of beads and the more general use of space at Vindolanda. Unless the beads are found strung on wire, cord or thong, they could have been used for multiple purposes and possibly recycled.
giving them a much broader time of use. Melon beads, unlike some of the smaller beads, would not be so easy to accidentally move through a site, i.e. in mud on the bottom of feet.

Figure 5. 3rd-century bead overview

Figure 6. 4th-century bead overview
The 2008 granary beads
Andrew Birley undertook a significant study of the spatial distribution of artefacts across the site as part of his PhD completed in 2010. He plotted not only the beads but other artefacts such as hairpins, bracelets, whetstones and inscriptions. His study began to build a picture of the depositional spread of beads in the 3rd and 4th centuries across the site but did not include any of the beads found after 2008 (Birley 2010, 183-90).

Figures 5 and 6 show his spatial deposition maps from the 3rd and 4th centuries. Here the most significant deposits of 3rd-century beads are in the extramural settlement, with only a few coming from inside the walls of the fort. In the 4th century there is an abandonment of the vicus and the current interpretation is that the whole community moved within the walls of the fort. Such a hypothesis is clearly reflected in the bead distribution across the site from this period. Due to the work in the last six years this picture will undoubtedly change, the most dramatic aspect of which will be the addition of many more beads from 3rd-century contexts within the walls of the fort, showing a greater balance in the depositional pattern across the site. However, the numbers of 3rd-century beads deposited within the walls of the fort will still be dwarfed by the rate of 4th-century deposition. Although this work is ongoing, it is possible to look at the double granaries excavated in 2008 to start to see how this picture might change. The granary analysis is nearing completion and the report on the work undertaken will be produced in the spring of 2013.

The Vindolanda bead collection was increased by 46 beads in 2008, most of which were glass (37 beads) in keeping with the rest of the bead collection as a whole (Fig. 7). There are more green glass beads than blue, an absence of some of the other colours of glass beads such as yellow and red beads and only one each of the gold-in-glass and blue long biconical bead with white and red bands at the centre. There are only six melon beads which is not surprising given the granary’s function and location. There is also an absence of amber and bronze, although these beads usually date to the earlier periods (Periods V to VI) on the site. There is a slight reduction in the percentages of both jet and faience and one bone bead was recovered. The site has not produced many bone beads, despite some exceptional levels of preservation, so this is an interesting addition to the collection.

All of the shapes found during the 2008 excavations are bead shapes found elsewhere on site. The most common shaped bead from these excavations is annular and the least common is reverse oblate, which is also fairly uncommon in the rest of the collection. It is interesting that there are relatively few melon beads and few square sectioned, which are the two most prevalent on the rest of the site. This could indicate a military use for the buildings, although only a few of the beads were actually found inside the buildings (Fig. 8).

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The granary excavations produced more green than blue glass beads, which is a deviation from the pre-2006 collection with 43% blue and 26% green glass beads. (Birley & Greene 2006, 17). There was only one each of the gold-in-glass beads and the blue beads with red and white waves at the centre. Both of these are also seen across the site but not in high numbers. The large annular blue glass bead with white wave is the only specialist glass bead to come from this area and adds its number to an increasing frequency across the site.

The 2008 beads date to the later periods, the highest numbers being from Periods VIII-IX on the site. There are also a high number of unstratified beads (8) which is similar to the collection as a whole. There is an absence of jet beads found in Periods VIII-IX. This is surprising as jet is a frequent bead material in the later periods on the site due to its rise in use in the post-Severan period on this site and others in Roman Britain (Allason-Jones 1996, 9). The bone bead comes from period VII. Most of the other bone beads from the site come from the earlier periods (Fig. 10).

**Bead Deposition**

By looking at the bead deposition in the 3rd and 4th centuries a very interesting picture comes to light. In the 3rd century, only five beads were lost in the granary buildings. All but one, no. 5 on Figure 9 were found inside buildings. In the 4th century the loss of beads is very different. 25 of the 28 beads plotted were found on the roadways outside the buildings. Only one was found inside the west granary and two were found in the building north of the road. There were also a number of beads which were recovered from the 2006 rampart excavations closer to the fort wall (indicated in darker grey on fig. 9) and when looking at the area as a whole in the 4th century there is a ring around the two granaries of beads. The discrepancy between 3rd- and 4th-century depositional patterning within the granaries is most likely tied to a change in use from one period to another.

The forthcoming granary excavation report shows how these buildings were transformed from utilitarian horrea into possible commercial premises during the 4th century, and the recovery of almost 1000 coins from the via principalis in front of the buildings would support the idea of market activity in this period, as had been speculated for other military bases such as at Carlisle and Newcastle.

As with many areas of artefact research, more work is needed to complete the next phase of research on the Vindolanda beads, not only continuing the work started with the 2008 bead distribution but also plotting the depositional patterning of the 2009-2012 beads. The continuing research excavations will undoubtedly continue to produce further beads, providing further opportunities for a broader and comparative analysis with other sites, not only in the north but across Britain and the Empire as a whole. This work illustrates in part how small and, in many cases, randomly deposited artefacts can help to offer new insights into the use of a site like Vindolanda.
Bibliography
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A case of mistaken identity? The Great Chesters lorica squamata
Evan Scherer, Newcastle University

Figure 1. The Great Chesters lorica squamata (Photo: Evan Scherer).

Introduction
Great Chesters Roman Fort is located on the central sector of Hadrian’s Wall, roughly 3 km north of Haltwhistle. The site was the focus of numerous excavations beginning in 1894 and continuing throughout the first half of the 20th century (Gibson 1903; Hull 1926; Wright 1940; Birley 1961; Heywood & Breeze 2010). Aesica, as it was known in antiquity (Not. Dig. Occ. 60.42),¹ is mainly noted for the celebrated Aesica Hoard, which was discovered in the first extensive excavation of the site in 1894 (Charlton 1895, xxvii-xxviii). Little known, however, is an assemblage of very fine, small scales belonging to a lorica squamata (Fig. 1) which over time became disassociated from the hoard.

Although small finds were not listed in any of the original publications on Great Chesters, two assemblages were noted in the initial 1894 report. The first of these is the Aesica Hoard, recorded as including a large quantity of lorica scales. The hoard was found in the west guard chamber of the southern gate (Fig. 2). The other find consisted of a second set of scales, which was found just outside the guard chamber (Charlton 1895 xvii-xxviii). Despite both of these finds being noted, only the excavation details of the hoard are given, recorded as being found in a hollow 3 ft. 6 in. below the surface of the ground level (PSANT 1894, 243). This lack of information on these finds from Great Chesters would lead to a mix-up in the provenance of the two sets of lorica squamata that would last until the present day.

Figure 2. The 1894 excavations at Great Chesters. The west guard chamber is highlighted by the arrow (after Charlton 1895, pl. 1).

The case of mistaken identity
The first time the Aesica Hoard is mentioned in the literature predates actual excavation report. It is detailed in a list of acquisitions for the Society of Antiquaries of Newcastle upon Tyne in the Society’s Proceedings (PSANT 2nd ser. 6, 241-5). The list notes
two fibulae, two gold rings, a silver chain with carnelian pendant, a silver bracelet, and a quantity of scale armour. These scales are illustrated in the list, but most importantly are listed as being found with the jewellery (Fig. 3). Furthermore, in the 1894 excavation report where two sets of scales are mentioned, the set found outside of the west guard chamber is not illustrated, but a comparison is given to a set of scales found at Walltown Crags (Charlton 1895, xxvii; Fig. 4). While no quantity of either set is given, the description of the hoard clearly states the discovery of ‘a small parcel of fibulae, rings, silver necklet, scale armour, etc…’ (ibid.). These scales, however, are illustrated in the excavation report (Fig. 5). Crucially, the excavators found it important enough to differentiate between the two sets of scales, going as far as to illustrate the scales found with the hoard and giving a comparison for the scales found outside of the guard chamber.

Although there was a clear distinction between both of the finds in the excavation report, this would not last. In 1897, Sir Arthur Evans wrote a piece in *Archaeologia* on the hoard, listing its jewellery, but failing to mention the fine scale armour found with it (Evans 1897, 179-98). He does, however, go on to mention the scales found outside the guard chamber twice, even giving the aforementioned Walltown Crag comparison (ibid. 180, 197). Importantly, it was later noted that Evans had neglected to mention one of the gold rings in his description of the hoard (Charlesworth 1973, 225-6). Despite this, the omission of the scale armour remained overlooked.

Following the publication of Evans’ article, the provenance of the scale armour from Great Chesters became even more confused. J.P. Gibson compiled a summary of excavations in 1903, wherein a ‘find of very fine scale armour forming part of a *lorica*’ is documented as coming from near the western wall of the west guard chamber (Gibson 1903, 22). Gibson then lists a ‘rich hoard of fibulae, rings, chains, and other articles of jewellery’ without mentioning the other set of scales (ibid.). Curle (1911, 160), however, makes note of a set of miniscule scales from Great Chesters in the monograph on Newstead. In the catalogue of the *Aesica* Hoard from 1973, a set of scales is mentioned in passing but is not directly associated with the hoard (Charlesworth 1973). Finally, in the small finds catalogue of Great Chesters,
only one set of scales is mentioned. This is noted as having been found outside of the west guard chamber (Allason-Jones 1996, 193 no. 37). The illustration and description of the scales, however, directly match those of the set found with the hoard (Fig. 6). Over time, it appears that the set of scales found with the hoard had come to be associated with those found outside of the guard chamber.

Figure 7. Illustration of the scale armour on display at the Great North Museum.

These scales are currently on display at the Great North Museum in Newcastle upon Tyne with the accession number 1956.150.22A (Fig. 7). Most of the finds in the Great Chesters catalogue have accession numbers beginning with ‘1956’, due to a reorganisation of the Society’s inventory in that year (Andrew Parkin pers. comm.). Although a definitive date of accession cannot be ascertained due to this, an 1894 acquisition date per the Society’s proceedings of that year is likely (PSANT 1894).

**Discussion**

There are 96 well-patinated copper alloy scales on display, many of which suffer from corrosion. They are arranged in six rows of ten and four rows of nine. The entire assemblage is attached to a felt-backed wooden mount in ten vertical rows. There are 180 scales in total from Great Chesters (Allason-Jones 1996, 193). The dimensions for the entire set of scales on exhibition, not including the wooden display are 60 mm by 53 mm. Each scale has an individual dimension of roughly 11 mm by 7 mm by 0.5 mm. They are pentagonal in shape with a flat top, elongated parallel sides, and a tapered bottom. The middle of each scale is slightly domed. At the top are three parallel columns of two punched holes 1 mm in diameter, spaced 1 mm apart. The scales are then connected horizontally to each other by a twisted copper wire through the third and first set of holes on each scale. Due to the potential damage caused by removing the scales from the display mount, it is impossible to see if there is any remaining backing or binding material. The conventional typology for scale armour is over a century old, constructed by von Groller (1901), and based on finds at Carnuntum. Although this typology is in-depth, the scales from Great Chesters do not directly fit, with the punched hole patterns closest to type IV, while the shape is closest to type 6 (ibid. taf. XV). Sim and Kaminski have developed a newer, quick-identifying typology based on form and cross-section of the scale. In this typology, the scales are a type Fii (Sim & Kiminski 2012, 96).

Comparisons for these scales are rare throughout the Roman world. Only four other sites have similar examples. Also along Hadrian’s Wall, an assemblage of 110 scales from Corbridge was first published in the *Museums Journal* (Anstee 1953; fig. 8). Unfortunately they are not listed in any of the excavation reports available for the site. Although similar in shape, their dimensions are slightly different and measure 14.24 mm by 9.91 mm by 0.24 mm. Moreover, the holes are drilled rather than punched. Further finds come from two sites in Austria: Vindobona (Neumann 1967, taf. XXXV) and Carnuntum (von Groller 1908 33-35; Grünewald 1981, taf. XVIII). The largest assemblage of similar scales, however, comes from Dura-Europos in Syria. Although the exact find spot is unknown, excavations in the first half of the 20th century turned up individual scales as well as two large fragments of a scale shirt (James 2004, 120-2).

Figure 8. The scale armour from Corbridge (Photo: Evan Scherer).

Although the scales from Dura-Europos are clearly from a shirt, the function of the scales from Great Chesters is still in question. The idea has been put forward that they might have been part of a specialised piece of armour such as a neck guard (Allason-Jones 1996, 193). Conversely, the original account of the Great Chesters scales assumed them to be from ‘parade armour’ (PSANT 1894). Furthermore, different accounts of the Corbridge scales state that these were most likely part of a shirt or for cavalry sports based on their delicate nature (Anstee 1953; Robinson 1975,
155). Augmenting these claims, the Dura-Europos fragments were noted for the unusual highly-skilled craftsmanship for *lorica squamata*, being expensive and tedious to repair and lacking in defensive qualities (James 2004, 120-2).

Recently, a fragment of *lorica squamata* from Carlisle has been interpreted to be part of a neck guard due to its size and contour (McCarthy, Bishop & Richardson 2001). This specimen is made entirely of iron except for the ties and one column of copper alloy scales (Bishop & Howard-Davis 2007, 689-91). Furthermore, these scales form a rigid type of *lorica squamata* that would have fastened neighbouring scales horizontally and vertically, allowing for little movement (Chapman 2005, 90). This type is first seen in the 2nd century AD from an Antonine ditch at Mušov in southern Moravia and at Corbridge (Tejral 1990, 795; Forster & Knowles 1911, 189-93). Conversely, the example from Great Chesters is of flexible construction where scales are attached in rows and then sown onto a backing, forming a quincunx pattern (Bishop & Coulston 1993, 117). This style of scale armour was used throughout the Republican and Imperial periods (Robinson 1975). Flax has been identified as the backing on the scales from Corbridge as well a fragment of a scale shirt found in a Severan ditch at Carpow in Scotland (Anstee 1953; Coulston 1999). The fragments from Carlisle and Dura-Europos also display evidence for leather edging around the neck (Wild 1981; James 2004, 122).

**Interpretation**

The hoard was originally attributed to the garrison commander who hastily buried it in anticipation of a Caledonian raid in the late 3rd century (Gibson 1903, 23-4). This was due to the discovery of a coin hoard found in the extramural bathhouse with no stratigraphic connection (Gibson 1903, 23-4). The hoard was later dated to the same period on stylistic grounds of the latest-dateable objects in the assemblage (Charlesworth 1973, 233). Likewise, the destruction of Dura-Europos gives a possible 3rd-century context for the type of scale found with the hoard (James 2004, 110-39). Beginning in the 3rd century the *cohors II Asturum* took over garrison of the fort (Breeze 2006, 270-1; RIB 1738). While the *Notitia Dignitatum* lists the *cohors I Asturum* as the fort’s garrison in the late 4th century (Not. Dig. Occ. 60.42), there is debate as to whether this actually refers to the *II Asturum* (Breeze & Dobson 2000, 273). This gives the possibility to continual occupation by the unit throughout the 3rd century.

Therefore the hoard could have been deposited by someone of rank in the *cohors II Asturum* in the late 3rd century. Conversely, there is always the possibility that it is a collection of stolen items. Charlesworth (1973, 233) ties its deposition to Allectus’ levy of troops to oppose Constantius Chlorus in 296. Although this conclusion is tempting, caution should be used in tying any deposition to the historical record. The real mystery lies in the set of scales found outside of the west guard chamber, mixed up and assimilated with the *lorica* found with the hoard.

**Acknowledgements**

I would like the thank Lindsay Allason-Jones of the Society of Antiquaries of Newcastle upon Tyne and Dr. James Gerrard of Newcastle University for their guidance while researching this scale armour. Additionally, I would like to thank Andrew Parkin of the Great North Museum and Nicky Clarke of Durham University for access to the finds and relevant literature. Finally, I would like to extend my gratitude to Aaron Creamer for the illustrations.

1 *Aesica* in the *Notitia Dignitatum* but *Esica* on the Amiens Skillet and the Ravenna Cosmography (Breeze & Dobson 2000, 259).
2 Note that although the scales do not fit into von Groller’s typology, the published finds from Carnuntum (1908) post-date the publication of the typology by 7 years (1901).

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Vindolanda Museum – the displays

Stephen Greep & Jenny Hall

Following Patricia Birley’s explanation of how the museum was envisaged and conceived, the conference members were free to go around and view the new displays. It was refreshing to hear that the Trust’s brief to the designers was that they did not want to dumb down the evidence. They had messages, not stories, they wished to get across with the display of the objects of paramount importance. One of the problems with many museum displays today, is that the objects play second fiddle, either to the design (when designers won’t listen to the curators) or by giving the briefest of information (because ‘the visiting public won’t want it’) or by cherry-picking certain themes (perhaps to fit the National Curriculum) rather than giving the whole story.

With collections as strong as those at Vindolanda, the main problem is what and how much to include. There is a fantastic display of some of the many leather shoes that have been found and conserved. The leather chamfron from the head of a cavalry horse was food for thought as small cut shapes of copper alloy, as applied decorative mounts, could easily be identified as scrap! The coins and other metalwork have survived in an amazing condition and can only enhance the displays of money, jewellery and tools. The wig, hairnet and numerous wooden combs are also rare survivals and, with more artefacts being found each digging season, we can only wait and watch.

During the conference, Jenny Price had talked about a painted glass cup that showed a series of gladiators fighting and it was so much better when seen in the flesh. There had also been much discussion about whether one particular artefact was an iron ‘pen’ or an ox goad and although Andrew Birley, in his talk, made a very good case for it being a pen, we think the jury is still out on this one. London examples are just too hefty to work like that and London has examples of copper-alloy pens. Do you have any of these and what is their context? We would welcome any comments on this from other members!!

The highlight of the display is, of course, the Vindolanda writing tablets - documents about the garrison in the early 2nd century that provide a huge amount of information about military and private life in the fort. For preservation reasons, the lighting has to be low and only a few can be displayed but images of more are available as pull-out explanatory panels and an informative film about their discovery and content.
explains their importance. While it’s a shame there are not more writing tablets on display, there are good interpretations available for everyone.

The display cases are large and well lit, although the height of some of the displays may cause difficulties for some to view, especially those in wheelchairs. Some of the captions are white or yellow lettering on black, something that the Museum of London introduced back in 1976 and which was the subject of criticism for those with visual impairments – we hope they escape such criticism! Part of the brief was the ability to change displays to include new finds and the design has had to reflect this, so perhaps the displays might be regarded as lacking atmosphere and context.

It may be that the history of the site is rather lost by the thematic nature of the displays. The reconstruction of Eric Birley’s study ties the history of the excavation to the finds but the displayed material is not tied into the site geographically and perhaps not enough distinction is made between finds from the fort and the civilian settlement or from the earlier forts and later occupation. This could be regarded as a weakness in the story-telling. However, this has to be one of the best museum displays for the finds specialist in the UK. Unlike many modern re-displays they have managed to include a wealth of objects but have still maintained the information content. The museum shows that Vindolanda probably has one of the best dated collections of material from Roman Britain and certainly from the Wall – it deserves to be better known than it is. Significant investment has gone into the Museum, the excavations continue apace, and yet there is still little actually published from the site. From a specialist point of view, it’s a shame that there are not more publications (or, better still, full catalogues!) about the actual finds from the site – such things are expensive and time consuming to produce. The minuses are far outweighed by the good points. We thought this was really excellent all round and they should be congratulated - we didn’t actually hear anyone criticise the displays at all – for a group of archaeologists that must be a first!!

The museum at Vindolanda deliberately displays the research while their other new museum, the Roman Army Museum at Carvoran which opened at the same time, interprets the sites looking at life on the Roman frontier. As such, it is obviously designed more for adult groups and school parties with life-size replicas and a 3D film, the trailer for which can be found on Youtube (http://www.youtube.com/watch?v=zTPUFsqIHcs). A must-see when you next go that way!

This is one of the best re-displays we have seen for a while - there is something for everyone, from school children to the academic, but it should also be placed in the context of other things going on on the Wall over the last few years. In particular, the excellent museum and reconstruction of the bath-house at Wallsend, the recent small re-display at South Shields, the new Great North Museum (although there are reservations about the nature of some of the displays there) and the re-display at Tullie House Museum, Carlisle. All these together reflect a significant investment in the interpretation of Hadrian’s Wall.

The Silchester Eagle, a comment
Martin Henig

I was delighted to read Emma’s stylish and well-reasoned comment on the Silchester eagle, which is certainly one of the finest bronzes from Roman Britain. It certainly opens up the possibility of it having served as a legionary Aquila, and if so why not the ‘eagle of the Ninth’ though perhaps if so laid to rest here after the forces of Petullius Cerialis were badly mauled by Boudica’s rebel army? This would surely fit in with a scenario whereby Boudica was attempting unsuccessfully to sack Calleva and cut off the main Roman forces from any hope of relief from the south, an attempt eventually thwarted by Suetonius Paulinus doubtless with help from Togidubnus (see Henig 2010, 43). Stylistically the richness of the modelling could as well be Neronian as Flavian, though the bronze still seems to me to be of good provincial, rather than metropolitan, workmanship. Would an Aquila have been made locally? And would not such an important object have been silver gilt rather than base metal as here?

On the whole I think it more likely that it was part of a statue of Jupiter or even the emperor whether full sized or not. There is, incidentally, a regular type on coins and gems based on a Classical statue of Zeus Aetophoros where the god stands holding an eagle on his outstretched right hand. A cornelian intaglio from Pompeii of approximately the same date as the Silchester bronze displays the type (Pannuti 1983, 4-5 no.2).

Such a statue possibly stood in an earlier timber basilica, where it would have been part of a striking manifestation of precocious artistic and cultural development within one of the chief cities of the
Atrebatic Client Kingdom. Just possibly, but less likely because of its small size, the eagle was free standing, simply mounted upon a globe maybe resting on a thunderbolt at a prominent position in the room. The object brings to mind the contemporary eagle carved in Purbeck marble, from the legionary fortress at Exeter (Henig 1993, 83-4 no.3) possibly part of a group destroyed at Nero’s damnatio memoriae. If we ascribe the eagle and any accompanying statue to Togidubnus, we might bear in mind the eagle an earlier client ruler – Herod the Great of Judaea – set up above the gate to the Temple at Jerusalem (cf. Josephus, AJ 17, 149-63) though the Atrebates would presumably have lacked the resentment of the Jews to this symbol of Roman power and Roman religion.

**Bibliography**


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**RFG AUTUMN MEETING AT CHERDWORTH AND CIRENCESTER 27th-28th September 2013**

The autumn meeting of the RFG will be held at Chedworth Roman villa and Corinium Museum, Cirencester. Full details will be included in the summer Lucerna. If you would like to offer a paper on villas or rural settlement in the Cotswolds or the south-west please contact Emma Durham (emma.durham@reading.ac.uk).

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**Membership**

Please remember that membership is due in October. Membership is still only £8 (for individuals) and £11 for two people at the same address. Standing order is also available, please ask Angela for a form or print one from the website.

In order to reduce costs and keep members better informed, we would be grateful if members could provide an email address. This will only be used to relay up and coming information on events such as the study days and the newsletter will continue to be printed.

It has been suggested that in order to facilitate communication between members, the RFG could produce a database of all members. This would include contact details (such as a postal address and/or email and areas of interest or specialist interest. The list would be circulated to members only and you have the option to opt out if you do not wish to be included.

If you are happy to have your details circulated, please contact Angela with your name, specialist interest and contact details (postal or email address).

During the 2009 Pilgrimage of Hadrian’s Wall Ernst Künzl, the foremost expert on Roman enamelled vessels, was invited to deliver a lecture placing the newly-discovered Ilam Pan in its setting. Tullie House Museum, Carlisle, also prepared a special exhibition containing the Rudge Cup, Amiens Patera and Ilam Pan to coincide with the Pilgrimage; these vessels had only once previously been displayed together, at the 2008 Hadrian exhibition at the British Museum. These three decorated small pans recording the names of some of the forts on Hadrian’s Wall are the subject of this volume.

The contributors to this book, including Lindsay Allason-Jones, Paul Holder, Fraser Hunter, Ralph Jackson, Ernst Kunzl, Noel Maheo and Sally Worrell, are all experts in the field of Roman archaeology. The authors describe and discuss each of the vessels and related objects, placing them in their international context. The place of manufacture and use of the pans is also considered.

This beautifully illustrated full colour volume will appeal to all those with an interest in Roman history, Hadrian’s Wall and ancient artefacts.


Objects made of metal, glass, baked clay, jet and shale, bone, antler and ivory, and of stone — the ‘small finds’ discovered on archaeological sites — help us weave a narrative about aspects of life in Roman Britain. They hold the essence of the past.

This book is about objects from Roman Britain and about how they were used. It is also about ideas sometimes encapsulated within those objects and in certain artistic images from the province. Some objects were produced specifically for the purpose of carrying symbolic meaning while some otherwise functional objects sometimes had symbolism thrust upon them.

Iain Ferris explores the sophisticated consumer culture of the Roman world. Finds or objects are used in this book to write an alternative history of Roman Britain in the form of a series of narrative snapshots of the past at certain locations and at certain times.


In 2002 the fullest evidence so far recovered for the Roman settlement at Nantwich, a historic salt-producing centre in Cheshire was revealed. This uncovered a previously unknown Roman road, and, positioned along this, evidence for the collection and storage of brine and the production of salt, together with buildings, enclosures, a well and a small number of cremation burials. Waterlogged conditions meant that organic remains, including structural timbers, were well preserved on the site. These included the two finest examples of timber-built brine tanks excavated from Roman Britain. This volume presents the wide-ranging finds of these investigations.


The book includes a thorough catalogue of seal-boxes from Britain. It offers a typology of shapes, looks at the chronology and manufacture and discusses possible uses as well as designs and significance.
The site of Delamere Street lies just outside the north gate of Roman and medieval Chester and in recent years has been subject to intensive investigation as part of the Gorse Stacks development. This publication represents the culmination of those investigations carried out by Birmingham Archaeology during 2006 and 2008.

Available from Archaeopress:
http://www.archaeopress.com/ArchaeopressShop/Public/defaultArchaeopress.asp

CONFERENCES

TRAC 4th-6th April 2013
Theoretical Roman Archaeology Conference
King’s College London

Of particular interest to RFG members are the sessions on finds- Minima Maxima Sunt: realising the theoretical potential of small finds and Deconstructing Roman material culture: new labels, new narratives?

For full conference details see:
http://www.trac2013.org/

RoMEC 10th-14th June 2013
XVIIIth Roman Military Equipment Conference
National Museum of Denmark in Copenhagen

The main theme of the conference is IMITATION AND INSPIRATION. On Wednesday the 12th of June there will be an excursion to Moesgård Museum near Aarhus in Jutland, where we will be shown highlights of the weapon sacrifice from Illerup Ådal.

The official languages of the conference will be English, German and French. The deadline for submission of abstracts for both papers and posters is the 1st of February 2013. Further information can be found at the conference website http://romec.natmus.dk and through the conference email romec@natmus.dk.

18e Colloque International sur les Bronzes antiques 3rd-7th September 2013
University of Zurich and Paul Scherrer Institute, Villigen, Switzerland

The main aim of the conference is to provide an up-to-date overview of the many different areas that bronze research has dealt with in recent years. To this end we have invited eight internationally renowned experts to give keynote lectures on individual subjects, which will give an introductory insight into the current state of research. The themes are: 1. Greek and Italic bronzes from Iron Age Central Europe; 2. Greek bronzes in the Mediterranean region; 3. Large-scale bronzes; 4. Roman figurines; 5. Roman toretics; 6. Manufacturing and restoration techniques; 7. Methods of analysis; 8. Written sources.

Offers of papers and posters are invited, to be received by 31 March 2013. For further details contact bronze2013@bluewin.ch or see the website at www.prehist.uzh.ch.

Romano-British Towns Conference
Assessing the Impact of Commercial Archaeology on the Towns of Roman Britain
30th November 2013

One day conference at the University of Reading. Organised by the Roman Society in collaboration with the University of Reading, English Heritage and Cotswold Archaeology.
Further details will be available Spring 2013.

RAC 27th-30th April 2014
11th Roman Archaeology Conference
University of Reading

In 2014 we are bringing RAC back to where it was first held in 1995 in Reading. We hope that TRAC will as usual be organising their own parallel sessions. We are inviting proposals for conference sessions. Each should contain up to six papers of 30 min in length (there will be a call for papers for an open session at a later date). Proposals should comprise a title and abstract no more than 250 words in length. They should also come with a list of proposed speakers and draft titles (all of which should have agreed in principle). Send proposals by Friday 22 March 2013 to j.d.creighton@reading.ac.uk