

CONTEXTUALISING METAL-DETECTED DISCOVERIES:  
THE STAFFORDSHIRE ANGLO-SAXON HOARD



A beastly  
hoard

K796

K1497

K297

K475



# Notes from the Project Manager

Stephanie is very busy with another project at present as she is rescuing Birmingham Archaeology's digital archives. So I am putting together this Newsletter which means, alas, the cartoon quotient will be much lower.

My part of the last Newsletter was written in late May at which time we were starting to explore the implications of the surface enrichment of the gold that Ellie had found during the pilot projects, and which she reported on in that Newsletter. In June I had one of the regular monitoring meetings with EH to review progress. As a result of discussions there, we were invited to prepare another Variation to Stage 1 which would allow an additional six months work on the analysis of the gold. It was also decided there would be a grouping exercise as part of Stage 1. This is to enable all the joins that Chris suspects he has spotted to be checked. We have not been able to do this before because the relevant bits have often been physically located in different cities. At one point over the summer the Hoard was spread across seven different venues which makes conducting research on it problematic at times.

The end result of all these developments is that Stage 1 has now been extended to the end of May 2014. By then we should finally be in a position to say how many different things there are in the Hoard and

thus scope the work for Stage 2 more accurately. The project is now running on a revised PD which was finalised in July whilst I was in Italy working at Pompeii. It is probably the only EH MoRPHE project design to have been completed within sight and sound of the Bay of Naples. Another first for the Hoard.

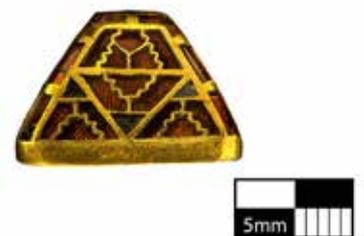
The additional funding for the gold analysis work has allowed us to be much more ambitious in our exploration of the issue of surface enrichment. Naturally the bulk of the items being analysed come from the Hoard and have been selected to cover the full range of functional types and decoration represented there. In addition a further 19 items have been selected from the British Museum collections, and we are most grateful to Roger Bland (Keeper of the Department of Prehistory and Europe) and Sue Brunning (Curator of the Early Medieval Insular Collections) for giving their permission for this. Leslie Webster who is both Chair of RPAP and Keeper Emerita at the British Museum helped to arrange this. We are also most grateful to Catherine Higgitt, (Head of Science Group, Dept. of Conservation and Scientific Research - and RPAP member) for her support, as she agreed to fund a part of the six month extension to Ellie's contract. English Heritage also deserves thanks for finding yet more money for the project in what we know are difficult times for them.



**K303**



**K1055**



**K377**

Some of the objects being analysed as part of the gold surface enhancement strand.

(Photos Guy Evans)

The British Museum material includes items that are military in character such as the Sutton Hoo clasp and the Taplow buckle, but also female items such as the Desborough necklace and composite brooches from Faversham and Sarre. The opportunity is also being taken to analyse the two other gold items contemporary with the Hoard found in Staffordshire. These are the Forsbook pendant from the BM collection and the necklace pendant found in the same parish as the Hoard from PMAG's own collection, and we are grateful to Deb Klemperer for allowing the latter to be included.

What we want to explore is whether or not the enrichment is happening across the whole range of seventh century goldwork, or is restricted to particular types. By the time the work is finished we will have an unrivalled collection of over 120 items where the gold has been analysed both at the surface and sub-surface, and where there are multiple analyses of different components of the objects. In the new year when all the analyses are completed, Ellie and Chris will jointly be writing two journal articles on the work for both scientific and early Medieval audiences so that we can get this innovative and interesting work into the public domain as quickly as possible. Its implications for other Treasure hoards that are found is obvious.

Making sure that Ellie has the Hoard pieces selected for the work whilst at the same time making sure that the exhibitions are not entirely denuded of some of the 'best bits', has at times been a challenge. I continue to be extremely grateful to the museum staff at Birmingham and Stoke-on-Trent for all the additional work they are undertaking for the research project in making and re-making exhibitions, and in acting as couriers whenever pieces travel.

There is an update on all of the work being carried out in the BM later in this newsletter, but can I draw your attention to a date for your diaries for those of you in London and the vicinity. Duygu and Ellie will give a gallery talk to the public visitors at the British Museum on **20<sup>th</sup> December** at 1.15pm. The talk, "Investigating the Anglo-Saxon metalwork at the British Museum", will draw on early medieval material in the Museum's collections, on temporary display in room 2. It will reference the recent BM scientific and conservation work on the Staffordshire hoard. Please check the talk is going ahead if you plan to attend.

Over the summer Alison Deegan was able to see the outstanding aerial photographs at Cambridge which had been unavailable during the work she did at the Assessment stage (Appendix 3 of the PD). We had hoped there might be additional information about the Hoard site. Alas there was not.

As well as the BM contribution, this Newsletter has an update about the conservation at Birmingham and Chris Fern's object of the month. Jenni Butterworth (Programme Co-ordinator) contributes a note on what is going on within the wider Mercian Trail where you can discover all the prizes that the museum teams are most deservedly winning. There is also a contribution from Mike Baxter which people currently reading the big *Anglo-Saxon Graves and Grave Goods* book might like to note.

I hope you enjoy it, and thank-you as ever to everyone who has contributed.

Hilary Cool



**The inscribed strip K550 is also being analysed as part of the gold surface enhancement strand  
(Photo Guy Evans)**

# Conservation at Birmingham - Update

Over the past few months the conservation team has been busy facilitating the movements of the objects for x-ray and to the BM. We have been cleaning the few remaining objects that still have soil on and making some connections between objects were they appear to be the same. This is a great example of a hilt collar that has been torn in two pieces. It is a finely constructed piece which has zoomorphic designs along its length

Future work will focus on finishing the conservation and supporting the research program with their needs.

Good news this month was that the Archaeological Institute of America (AIA) named Birmingham Museum & Art Gallery as the 2014 recipient of the AIA Conservation and Heritage Management (CHM) Award for excellence in the conservation of archaeological artefacts and the public education of archaeological conservation.

Pieta Greaves



K1148



K1118



Following our beast theme for this Newsletter, here is another one from K1148.

Photos- Birmingham Museum Trust

# Conservation and Metal analysis at the BM

Metals conservator Fleur Shearman has now taken over the conservation work from Duygu Camurcuoglu (Fleur was previously on the CAP team with fellow British Museum lead metals conservator Marilyn Hockey).

At the time of writing, all fragments from the 'foils project' received at the Museum have been cleaned, examined and sorted. Joins continue to be made across fragments of die-pressed panels and friezes, fluted strips and plain silver and silver-gilt metalwork. Fragments of copper alloy, gold, filigree, niello and a few garnets, plus their backing foils, have also been separated out. Soil has been kept and any organic fragments packed separately for future examination.

Join sequences have often included multiple fragments from as many as six different K numbers, and in other cases, multiple fragments from different pieces share the same K number. These have all been logged and drawn.

New discoveries following sorting and physical

reconstruction of fragments include the portrayal of a new shield type within the pressed foils (one of these joins to a previously unidentified helmeted warrior head) and a panel built up of seven fragments showing a serpentine animal body with 'paper clip' jaws and part of an eye. Some heavily corroded anthropomorphic silver foils have been grouped: one possibly shows the face and upper garments of a frontally facing male warrior wearing a typical front fastening 'kaftan' with tablet-woven border. Another fragment shows hands clutching what may be a pair of spears.

The reconstruction of parts of the widest gauge fluted strip (14 mm) follows a curved shape, the longest sections of which currently include as many as six different K numbers (Figures 1 and 2). Finally, a plain silver-gilt fragment has been built up which was formerly riveted or nailed to 8mm wide fluted strip and follows its pattern of attachment holes.

Marilyn Hockey started work on the silver-gilt frieze of crouching warriors and its curved silver tray having spotted associations at BMT with



Fig. 1. The fronts of the reconstructions of the widest gauge fluted strip. (Photo BM)



Fig. 2. The backs of the pieces in fig 1 showing the individual K numbers. (Photo BM)

K776 + 1208.

K1576 + K1689.

K147 + K526 + K1130 + K1213 + 1553 + K1678.

K36 + K99 + K794 + K1413.

Deborah Cane. This has now been passed to Fleur for progressing. The current stage of the foils project is scheduled to close at the end of December

Eleanor Blakelock has analysed over 100 Anglo-Saxon gold artefacts from the Staffordshire Hoard and British Museum. This is part of a continuing research project investigating the surface enrichment treatment seen on the hilt-plates, mentioned in the previous newsletter. Following on from the pilot study on the hilt-plates, a larger number of objects have been chosen from the range of artefact types

found in the hoard, including pommels, hilt-guards, mounts and the crosses. The scanning electron microscopy with energy dispersive X-ray analysis (SEM-EDX) is being used to examine the surface and sub-surface of these pieces (Figure 3).

The data is still being gathered but this analysis is continuing to support the theory that the enrichment is a deliberate treatment carried out by the smiths. More results will follow once the remaining objects have been analysed and all the data has been processed.



Fig. 3: The machine being used in the gold surface enhancement strand (Photo BM)

Caroline Cartwright has examined the textile fragments extracted from hilt collar K281 and identified the fibres as flax in a plain weave textile. It is not possible to determine with complete certainty whether the textile is directly contemporaneous with the hilt collar on the basis of the condition of the fibres alone, but the use of flax in a plain weave textile is not out of place for the 7<sup>th</sup> or 8<sup>th</sup> centuries.

In October the RPAP chair, Leslie Webster came to the Museum for an update on the foils project, followed by a visit by Deborah Cane and designer Andy Horn in preparation for their new gallery. The RPAP met at the British Museum in November and viewed all the work being carried out. The following week the foils project team showed Hilary Cool, Chris Fern and Pieta Greaves the current status of the project and the scientific and conservation teams were briefed on requirements for the documentation and closing report

# Object of the month – K791

K791 is a cast silver mount with the head of a bird, in profile, the curved beak suggesting an eagle or other bird of prey (Figure 1). The mount's triangular body is filled with triple-strand interlace, and the whole was gilded. It retains an original curvature, viewed in section, and was fixed with three nails (one through the eye of the bird). It has a pair in the hoard, K1525/K1603 (in two fragments), as well as a parallel in gold, K468 (Figure 2), with filigree and garnet decoration.

There are numerous other small mounts in the collection, of various forms, that also were originally fixed to curved or moulded surfaces; most are gold with filigree decoration, and some also have small nails. It is possible many were fixtures for sword-hilts. A surviving hilt of horn, of early 7th century date, with similar fittings on its grip and guards, fixed with nails, is in the British Museum, the so-called 'Cumberland hilt'. Figure 3 shows how K791 and its pair could have been positioned on the grip of a sword.

The style of the interlace (Figure 3), dense and non-zoomorphic, indicates K791 is one of the hoard's later objects. It can be compared to interlace on mounts from Faversham, Kent, and Hardingstone, Northants, and also with that on mould fragments for their manufacture from the Mote of Mark, Scotland (Speake 1989, 76–80; Laing and Longley 2006, fig. 57). These examples date no earlier than the second-quarter of the 7th century, and some may be closer to the middle of the century.

Laing, L. and Longley, D. 2006. *The Mote of Mark: A Dark Age Hillfort in South-West Scotland* (Oxford)

Speake, G. 1989. *A Saxon bed burial on Swallowcliffe Down* (London)

Chris Fern



Fig. 1: Silver-gilt mount K791 (Scale 3:2 - Photo Guy Evans)



Fig. 2: Gold Filigree mount K468 (Scale 3:2 - Photo Guy Evans)

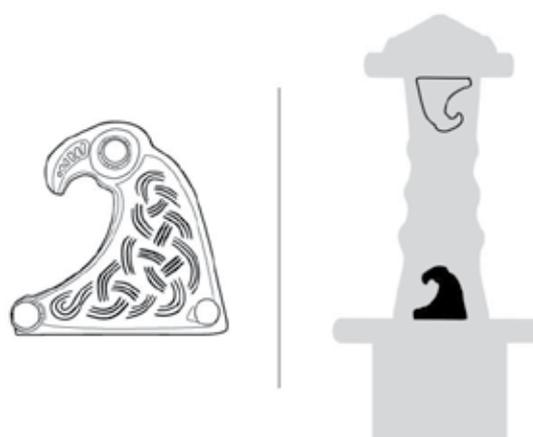


Fig. 3. Art of K791 (Scale 3:2) and reconstruction (Drawings C.Fern)

# Programme Co-ordinator's Round-up

It has been a busy few months for the owners and their Mercian Trail partners. In October, the Potteries Museum & Art Gallery launched a new family-friendly exhibition 'Anglo-Saxon Kingdom of Mercia' which explores the hoard in the context of other Saxon finds from the region for the first time. The Museum also won the '2013 Enjoy Staffordshire Tourism Award: Best Tourism Event' for their previous exhibition 'Dark Age Discovery'.

Meanwhile, Birmingham Museum and Art Gallery have been pressing ahead with preparation for their new permanent hoard gallery which opens next year, and have also won the 'Archaeological Institute of America Conservation and Heritage Management Award' for the Staffordshire Hoard conservation programme. Ellen McAdam, the new director of Birmingham Museums Trust, also joined the Hoard Management Group in October.

Staffordshire County Council launched a 'pop up' exhibition of replicas, information and activities about the hoard in August. It will be touring around the West Midlands region for two years to venues that are unable to host the hoard itself. It's a great opportunity for people to find out more about the hoard in their local library, school or community centre and has been gathering extremely positive reviews.

Finally, the hoard featured in a major exhibition at Durham over the summer. Over 97,000 visitors to the exhibition were able to see the hoard alongside the Lindisfarne Gospels and other Saxon treasures of comparable date.

Jenni Butterworth



PMAG Audience Development Officers Mel Firman (on the left, with the Hoard award) and Nerys Williams (with an award for the Gladstone Pottery Museum) at the event where they received the awards.

## Anglo-Saxon graves dating study

The publication of *Anglo-Saxon graves and grave goods of the sixth and seventh centuries AD: a chronological framework* by Alex Bayliss, John Hines, Karen Høilund Nielsen, Gerry McCormac and Chris Scull (hereafter ASG) has naturally been attracting much attention. The results have implications for the study of the Hoard, and the conference held at the Society of Antiquaries on November 8<sup>th</sup> was well-attended by members of both the core and wider

team associated with our project.

Correspondence analysis (CA) a statistical method used in Anglo-Saxon studies for inferring relative chronologies from grave-assemblages, and Bayesian modelling, used to attach calendar dates to the relative chronology, are central to ASG. Mike Baxter – part of our wider team and a statistician with a long-standing interest in applications of CA in

archaeology – was sufficiently moved by the obvious importance, ambition and (statistically) innovative aspects of the book to try to both replicate the CA analyses and explore alternative ways of looking at the data – something encouraged by ASG’s authors.

In the course of this it has become apparent that some members of our team (though obviously not those who are co-authors of ASG!) have found the book very difficult to follow. Some of this may be down to a lack of grounding in the statistical and scientific methodology used in it, but the amount of detail involved in the presentation of analyses in the book seems also to be hindering comprehension. Mike, as an offshoot of what he has already investigated out of his own interests, is preparing some notes on the central Chapters 6-7 of ASG on the chronologies for the male and female graves.

The intention is to try and isolate what is and isn’t essential reading for someone not interested in the finer detail of the analyses in ASG and not over-familiar with the statistical methods used. One member of the team who has seen an early version of the notes on the male graves, has described them as a Hitchhiker’s Guide to the Chronology. The notes need to be ‘road-tested’ with the intended audience – a ‘focus group’ if you wish – before deciding whether they merit wider circulation. Mike is willing to make what is currently available to interested members of the team on the understanding that this is a provisional and sometimes critical appraisal of ASG that he reserves the right to change in the light of constructive response.

## And finally ....

Congratulations to Ellie for spotting this version of one of our beasts on Flickr. It was knitted by Cynthia Owen. It formed part of a community knitting group’s project to celebrate the 100th Anniversary of the Federation of the Six Towns in 2010. The federation had created the city of Stoke-on-Trent.

This link takes you to a splendid gallery of the full collection.

<http://www.flickr.com/photos/plashingvole/sets/72157625112368213/?view=md>

<http://foter.com/photo/staffordshire-hoard-seahorse-cynthia-owen/>



## Next Newsletter

The next Newsletter will go out in early June 2014 and will sum up what we have achieved in Stage 1 and what we plan to do in Stage 2. All contributions as ever gratefully received. All that remains to do in this one is to wish you all a very Merry Christmas and a Happy and Prosperous New Year.