The Beau Street Hoard

Stephen Clews

This hoard of 17,655 Roman silver coins was found on a cold wet November day in 2007. It was unearthed in the course of an excavation carried out by Cotswold Archaeology in advance of the development of the new Gainsborough Hotel in the old spa quarter of the city. The conditions were difficult and although archaeologists could see only a few coins, a metal detector had given a strong signal suggesting a high metal content, so they decided to proceed by lifting the hoard in its entirety. This meant that it could be transferred to a safe location for more careful and detailed examination. As we shall see later this proved to be a very wise decision.

The Gainsborough Hotel project was a redevelopment of the former United Hospital building, which had been built in 1825 by John Pinch the elder. Archaeological discoveries had been made at that time and again when the Hospital was extended in 1864. The architect J. T. Irvine, whose papers can be seen in the local history collection at Bath Library, recorded detailed evidence here of a Roman bath house adjacent to the Hot Bath spring. It was in close proximity to this, or possibly even within it, that the hoard was found.

Following the hospital's move to Weston the building has been used more recently by Bath College for teaching purposes. The conversion to a five star spa hotel was a project initiated by the Bath Hotel and Spa Company (part of the Osborne Group) and completed by YTL Hotels and it has provided the first opportunity for 150 years to investigate the archaeology of the site. The result of that has been the discovery of the largest hoard of coins of any period yet discovered in Bath and one of the largest hoards of Roman coins found anywhere in the country. Only one larger hoard is known from a Roman town, 22,000 coins from Dorchester, and the Beau Street Hoard is the largest yet uncovered by a professional archaeologist.

Excavation

When the hoard was found it was inserted in a rectangular pit, the sides of which were lined with large stones, adjacent to the wall of a Roman room. It was thought likely that it had been contained originally within a wooden box or placed on a wooden lining board, as some decayed wood but no metal or bone box fittings were visible. The sealing deposit had been removed in earlier developments so the terminus date of the hoard could not be determined from its archaeological context and reliance has to be placed instead on the dates of the coins themselves.

The archaeologists dug around the hoard, inserted a supporting board beneath, wrapping it tightly to prevent disintegration and then used a conveniently adjacent crane to lift up the hoard and remove it temporarily to a conservation laboratory in Wiltshire. Following a period in which it was formally designated by the coroner as Treasure it was then transferred in accordance with the requirements of the 1996 Treasure Act to the British Museum, which has a statutory duty to report on such discoveries.

fig 1: **Bag 5 with remains of leather** *(Copyright: The British Museum).*

fig 2: **Hoisting the hoard, which weighed 110 kilos, from the excavation site** *(Copyright: Cotswold Archaeology).*

Investigation

The report to the Coroner was based on a small sample of 303 coins from the surface, but weighing of the block at the British Museum and calculations of its specific gravity confirmed that there were likely to be many thousands of coins present. Indeed as the coins visible at the surface were late in date, small in size and of low weight the initial estimate of the number present raised the possibility that this might be the largest hoard from Britain ever found.

The administrative process of the Treasure Act had delayed the onset of investigation of the hoard at the British Museum, which was already struggling with a large backlog resulting from the success of the Act in encouraging the reporting of finds, and the growth in recent years of metal detecting as a hobby and pastime. This cloud did have a silver lining however as the delay meant that the hoard could be investigated as part of a new research activity being undertaken by the Museum in partnership with Southampton University into the application of scanning technology to archaeological materials. The hoard was taken to Southampton, but in the event it proved to be too big to fit into the scanning machine. However, the University was still able to provide the Museum with X-rays that its own machine could not produce, due to the great size of the hoard.

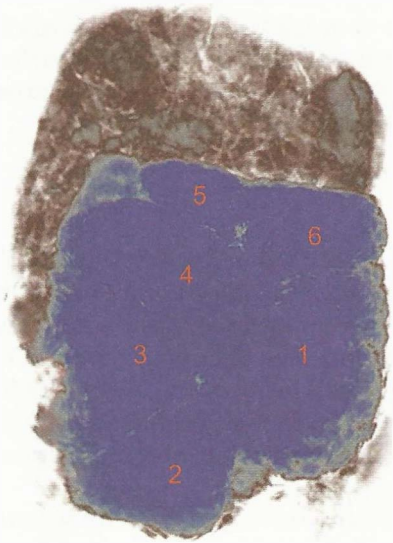


fig 3: **X-ray image of the hoard in plan with the coins in blue** *(Copyright: Southampton University).*

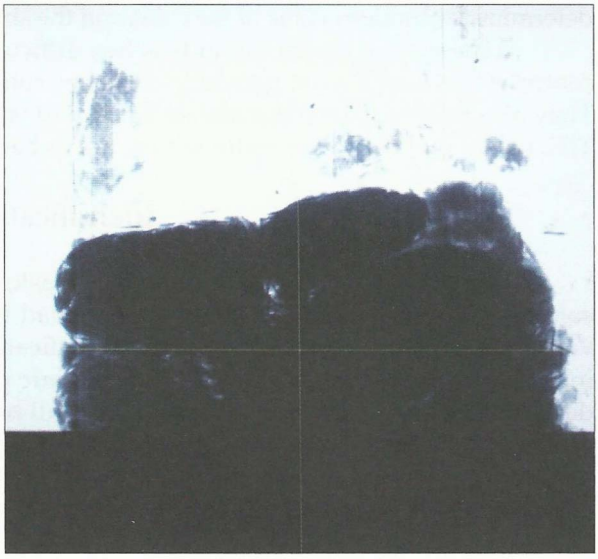


fig 4: **X-ray image showing sectional view** *(Copyright: Southampton University).*

The X-ray results were startling. They revealed six distinct groupings of coins massed together as irregular clumps. These were clearly coins in bags, as inside each clump the individual coins had aligned themselves in the same plane as their neighbours as coins generally do. The evidence from the X-rays meant that there was now a guide to assist a conservator in carrying out the lab-based excavation of the hoard and in separating the coins bag by bag. This was estimated as a year's work, way beyond the amount of time the British Museum is usually able to allocate to such projects or afford, but at this point the Bath Hotel and Spa Company stepped in and generously offered to sponsor the investigation and excavation of the hoard in the lab.

As work progressed the coins were carefully separated and those from each bag kept together. It became clear that there were in fact eight bags as two were hidden from view beneath the others. A number of coins could not be attributed to specific bags and these have been treated for statistical purposes as a separate group. Indeed the conservator has suggested that a rough scattering of coins on the top may have been the contents of at least one bag that burst apart in antiquity, perhaps when they were originally packed into the hole.[1]

As the coins were separated it became clear that around each grouping was a characteristic brown/yellow substance. Analysis with a scanning electron microscope revealed this to be leather. Attempts were made at both the British Museum and at York University to extract and identify DNA from this material to determine the species from which it came, but both attempts were unsuccessful.

Conservation

As the coins were separated they were also cleaned to facilitate simple identification. This was necessary to pave the way for a valuation as required by the Treasure Act which would

determine the modern value of the coins and the size of any payment due to the landowner.

The task of conservation was less difficult than first feared, as coins towards the centre of the hoard were generally in better condition than those visible at the surface. They also proved to be older and so larger and with higher silver content than later coins. This meant that they were more robust, not as badly corroded and fewer in number.

Identification

Identifying 17,655 coins is a major task, particularly when the condition of the coins is not always good. Once the coins had been given a primary identification for valuation purposes a more detailed identification was required to provide sufficient information for a full catalogue and academic publication. The results of that and the detailed analysis of it are not included in full here, but will be available when the full report on the hoard is published later this year.[2] That analysis has altered slightly the number of coins in each category, due to the inclusion of some broken and more closely identified coins than listed previously.

The coins range in date from 32BC to AD 274/5 and have been heavily selected from the range of coins minted within that time frame. It is unusual for a Roman hoard to have such a wide date range. It means that at the time of deposition the oldest coin was already more than 300 years old, the equivalent of us gathering together a hoard with a coin from the reign of Queen Anne. In the Roman Empire coins could, and some did, remain in circulation for a long time. This particular early coin is not rare but it is rather special. It is well worn, reflecting the fact that it was well circulated. The image it portrays is of a galley in the Egyptian fleet of Marc Antony and Cleopatra and the coin was produced just before Augustus defeated that fleet at the battle of Actium. In so doing Augustus created a unified Roman Empire. This story was well known in the Roman world, and no doubt children learned about it at school. So at the time the hoard was hidden this coin referred to famous events surrounding the founding of the empire, and whilst its modest silver content meant that it had previously escaped withdrawal from circulation, it was still good enough to be regarded as a reliable coin for exchange and would have had a particular cultural value and significance.

There are just two types of coin in the hoard, the Denarius and the silver radiate. The Denarius is an ancient coin type, first minted in the second-century BC and an enduring standard in the Roman currency. In AD 215 Caracalla introduced the silver radiate, the Roman name of which is not known. This had a face had previously escaped withdrawal from circulation it was still good enough to be regarded as a reliable coin for exchange and would have had a particular cultural value and significance of two Denarii, but only 50% more silver. There was clearly a problem here, and whilst this may have helped to meet the Emperor's immediate need for cash, it was not a good basis for managing a stable currency.

Although the hoard includes some early coins they are few in number and the great majority are from the third-century. In the case of the silver radiates the later issues of that coinage were heavily debased. The silver content was reduced, and cheaper copper increased in its stead to save the Treasury money. This soon became noticeable in the coins themselves, and although some issues were produced using a technique designed to disguise the visual effect of depleting the overall silver content, the youngest coins to be added to the hoard contained less than five per cent silver at which point they began to look like copper.

The coins were carefully sorted into separate bags in antiquity, both by age and by type, although the date ranges of some bags overlap. This led to the observation by Richard Abdy, the British Museum curator leading on the investigation of the hoard, that in one sense we may have not one hoard but eight! Table 1 shows the initial breakdown of coin types by bag. Additionally the detailed catalogue which will be published in the final report shows that within these ranges the peak dates for each bag are all in the third century. Even with Bag 6 which has the longest date range some seventy-five per cent of the coins are within a very tight period from AD 218–235 covering the reigns of the emperors Elagabalus and Severus Alexander.

Bag	Silver radiates	Bronze radiates	*Denarii*	Total	Oldest coin	Youngest coin
1	3745	32	21	3798	200	272-274
2	81	2950	2	3033	218	272-274
3	2678	96	7	2781	211	271-274
4	2257	31	27	2315	198	260-269
5	749	15	17	781	195	260-269
6	25	0	1780	1805	32BC	253-260
7	20	387	0	407	219	272-274
8	6	243	1	251	218	272-274
Loose coins - unallocated to any bag	2307	147	41	2494		
Total	11868	3901	1896	17655		

Table 1: The contents and date range of each bag

In every bag except six there was some representation of the bronze radiates produced in the western Gallic Empire, whose Emperors ruled independently of Rome in the later third-century. Their territory included Britain.

Calculating value

Although the earliest coins in bags one, three, four and five are from the turn of the second-century the content of those bags is dominated by good quality silver coins of mid third-century date from Gordian III to Gallienus. It is with these and Bag 6 that the great monetary value of the hoard lies. The enormous number of heavily debased radiate coins in Bag 2 and in the smaller bags seven and eight do not translate into a high value.

The modern value of the hoard was determined by the Treasure Valuation Committee to be £120,000, a value predicated on the market intelligence of specialist professional valuers. The modern price – an average of £6-79 each – is based on factors such as rarity and condition and is not much help in understanding what values might have been put on these coins in the past. Unfortunately good information on the value of coins in the third-century is in short supply.

In AD 301 some twenty six years after the last coin was added to the hoard the Emperor Diocletian issued his Edict on Maximum Prices. It was a short-lived attempt to control prices which had skyrocketed due to inflation and poor management of the currency by successive Emperors. It is thought the Edict lapsed within a short period. If we accept the caveat that the very inflation the Edict tried to arrest meant that the price of goods in AD 275 would have been cheaper than those quoted twenty six years later, it nevertheless gives us a useful guide to some relative values at the time. The two most expensive items listed were a pound of purple silk and a live lion, interesting choices in themselves for identifying what were clearly aspirational luxury goods, and the maximum price chargeable for these was set at 150,000 denarii. Neither would be likely to appear on any modern list, reflecting the enormous gulf in concepts of value between ourselves and the Roman world. Ordinary silk was a bargain at 12,000 denarii a pound. Wheat, lentils and salt were all priced at 100 denarii for a modius, a measure of eight dry litres. Some common place wages and services were a haircut at two denarii and a day's labour for a general workman, farm labourer or a bath attendant at twenty-five denarii. Skilled workmen such as a stonemason, carpenter or mosaicist could command up to fifty denarii a day and an artist 150.

If we take the value of the silver radiates and denarii in the hoard, using the two denarii to one radiate ratio that prevailed when the bulk of the coins were produced in the mid third-century we end up with a value of 25,632 denarii, which equates to 1028 general labourer days. This is about three years work, or 12,816 haircuts, or 256 modii of wheat or two pounds of silk. The 3,901 bronze radiates would have brought some additional value also, although much less. This Edict aside there is scarcely any surviving record of the value of goods at this time, so it is difficult to attribute a reliable value to the hoard with any confidence. What we can say is that it would have been a very large sum for an ordinary person, but a more modest amount for a rich person or a major institution.

The purpose of the hoard

The fact that the coins in the hoard were carefully sorted can tell us something about its purpose. The coins have been sorted by type and by face values, suggesting that the monetary value of the coins was significant to whoever assembled it. It may seem obvious to us, but this was not always the case with coin deposits in antiquity, particularly when coins were given as offerings at temples, or as gifts to neighbouring cultures that did not use coin. In neither of those cases would there have been a particular incentive to sort the coin. Indeed, there is little purpose in sorting coin unless it is intended to re-use it in some way or because there is a need to know what value it represents.

The sorting of the coin in antiquity, although reasonably careful, was not completely accurate. It is possible that some movement within the deposited hoard may have caused some small error in the number of coins attributed to each bag in the course of the investigation, but as all uncertain coins were allocated to the category of 'loose' this is unlikely to affect many coins. The 105 *denarii* and radiates in Bag 3 or sixty-six in Bag 1 are simply too many to be explained in this way. So the accuracy we see in sorting is not what we would expect today from an accountant or banker but, given the broad similarity in appearance of some of these coins, it may be that it was good enough for the purpose of our original sorter.

As the different bags have different end times, in one case at least fifteen years

before the last coin could have been added to the hoard, it may be that we have coins that were brought together at different times, or collected over a period of time. The bags were then only closed when full. This would be consistent with an interpretation of the hoard as being something for savings.

The hoard was in a room very close to the bath house or possibly even within it. Bath houses commonly levied small charges for admission and use of oil. Might this be the bath house takings, accumulated over a period of time, which could explain the restricted denominations and complete absence of gold coin in such a large sum. When a fixed fee is known it makes sense to bring the right money.

A benefaction, placed in a specially prepared cavity for safekeeping may be another possibility. Public philanthropy was commonplace, and brought honour and status to benefactors. In Bath there is an inscription, writ large in the frieze, referring to the restoration and redecoration of a building in the courtyard of the Temple of Sulis Minerva by Claudius Ligur.[3] He wanted people to know he had paid for it. Bath houses could also benefit from benefactions in which leading citizens might sponsor oil or building works. Knowing the value of a benefaction would be important, hence sorted coin, but again one might expect coins to be more contemporaneous with the latest coins than is the case here. Coins gifted for benefaction would need to be spent, and so currently circulating coin would be the most convenient form of donation to receive.

There are many reasons why a hoard might be brought together, and here are some other possibilities we can probably discount:

fig 5: **Fresco from the House of Julia Felix – Pompeii** *(Copyright: Soprintendenza Speciale per I Beni archaeologici di Napoli e Pompei).*

A tax collector's hoard. The collection of taxes is one possibility, but in that case one might expect the contents to be made up mostly of coin in current circulation, or for greater consistency in the number of coins in the bags awaiting remittance to a higher authority. Greater accuracy in sorting might also be expected.
A gift to the Gods. There is no need to sort the coin, as the deity would know its value.
A bullion hoard. A hoard brought together for its bullion value, perhaps with the intention of melting down of bagged coin and recycling would show sorting, but why bother at all with the heavily debased bronze radiates? It might also include other objects made of silver.
A pay chest. The coins would be from current circulation. A military pay chest in particular would be very likely to include new coin as one of the principal reasons for the state's interest in producing coin was to pay its troops.

Wider context

Coins have been found in a variety of containers, pots are common but other containers such as chests, a bucket and even flint nodules are known. The Dorchester hoard was found in three containers - a bronze bowl, a jug and the remains of a wooden box.[4]

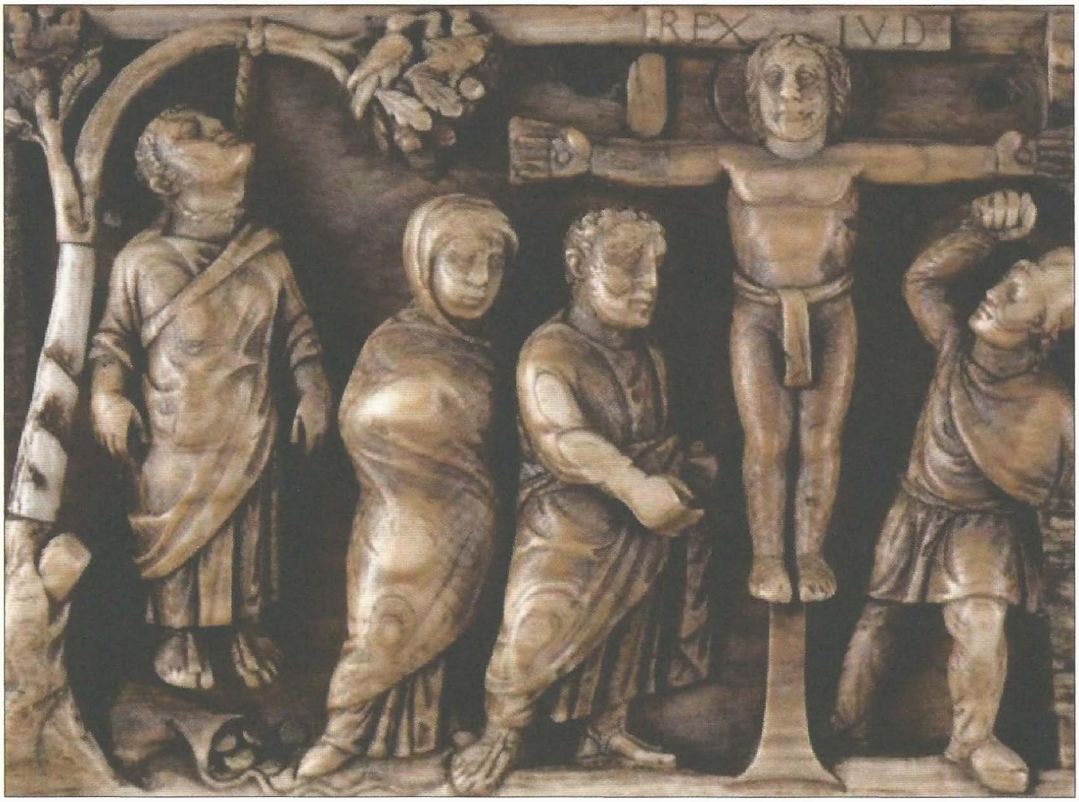


fig 6: **Panel from an ivory casket showing Christ's passion, Judas is to the left with his money bag at his feet** *(Copyright: British Museum).*

Whilst illustrations of coins in bags are known from the Roman world such finds in an archaeological context are extremely rare. In the UK the many finds of hoards made by metal detectorists are often disturbed or hastily excavated and information of this kind is easily lost. The fact that the Beau Street hoard was lifted under controlled conditions and was subject to investigation before the excavation in the lab began has made it a very exceptional find. Hints that coins in bags may be more widespread than hitherto realised have come from some other recent finds. A small group of *denarii* from Carlisle found in 2010 that were fused together suggesting they may have been in a bag or purse, and from Scotland an unusual find from Birnie, near Aberdeen consisted of two small pots each containing *denarii*. In one pot the coins were contained in two leather bags.[5]

Apart from these examples we have to look abroad for evidence of coins in bags. There are some artistic depictions. Scenes on mosaics from Tunisia and Sicily show bags of coin; in one scene offered as prize money in the amphitheatre and in the other as the reward for the victor of a divine prize fight between Pan and Cupid. There is a wall painting from the house of Julia Felix at Pompeii, sometimes known as 'the house of the banker', in which a bag of coin is shown, together with heaps of coin and other tools of the bankers' or accountants' trades. These include a wax tablet, stylus, scroll, inkwell and pen and a possible sandbox.

There is also an ivory casket from late antiquity, in the British Museum, that depicts what may be the most famous moneybag in the history of the world. It shows the reward of Judas for his betrayal of Christ lying at his feet as he hangs from a tree, with some of the thirty pieces of silver spilling from the bag.

From Herculaneum the remains of the poor souls who perished in the Vesuvian eruption were discovered in the boathouses by the beach where they fell, complete with their possessions, including a small wicker coin basket and the fused contents of a purse.[6]

fig 7: **An artist's reconstruction of the grand villa at Durley Hill, Keynsham where the earliest coin from the site is from AD 265.** *Illustration John Hodgson.*

Life in the later third century

A natural question about this hoard is whether there is anything we know from other sources about the broader context of life in Roman Bath or in the 3rd century that can help to explain why it might have been buried.

The archaeological story of Bath so far as we can see from its general development does not point to any great events that may have triggered

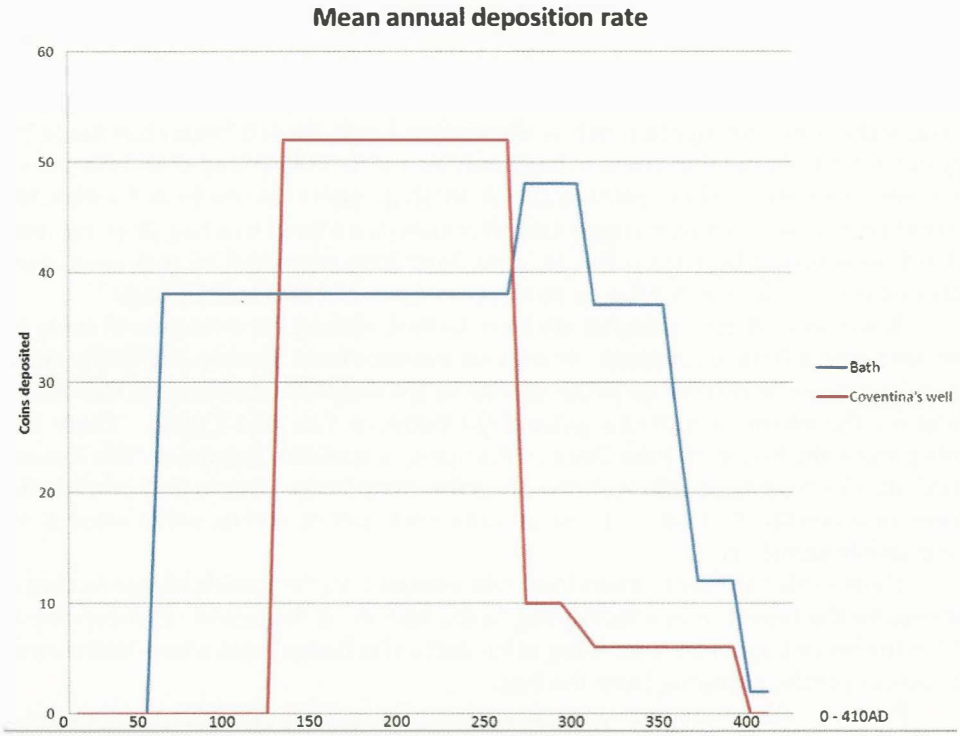


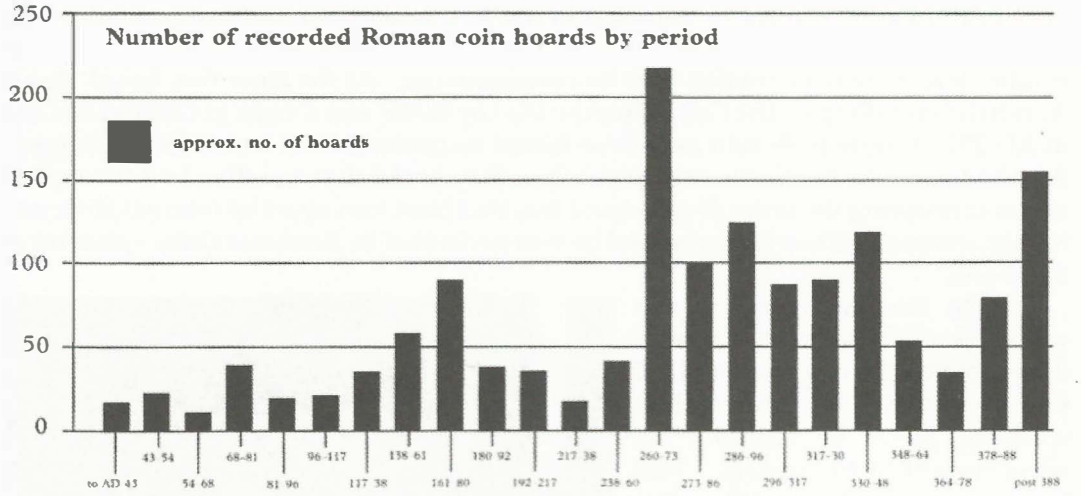
Table 2: The mean annual rate of deposition of coins at the spring of Sulis Minerva at Bath and Coventina's Well on Hadrian's Wall.[7]

the deposition of the hoard. There is no evidence for war and pillage or social unrest in Bath. In the vicinity of Bath this seems to have been a period of prosperity with new villas being built in the area or older ones enlarged; settlements that may well have been involved in a healthy and wealthy trade supplying an agricultural surplus to the continent. The wider picture is less certain. The market for that agricultural surplus may well have been armies defending the Empire from Barbarian incursion across the Rhine frontier, or engaged in civil war with the Central Empire.

A hint of how events elsewhere in Britain may have been playing out lightly differently can be derived from comparing another great assemblage of coins from Bath, the coins from the Sacred Spring, with those from the shrine and spring of another water deity – Coventina – on Hadrian's Wall.

As Table 2 shows there is a dramatic drop in coins offered to Coventina in the late third century, whilst in Bath things carry on much as before. Indeed there is a small rise in the rate of deposition of coins in Bath. Perhaps there was trouble up north affecting Coventina's shrine, or an exodus of troops from the wall to Europe undermining its prosperity. Records from and references to Roman Britain are very scarce and it is entirely credible that even large scale and significant events may be missing from surviving literary sources.

Other archaeological evidence comes from the temporal distribution of coin hoards. Table 3 shows the date of closure of hoards in Roman Britain as known until recently. There is an astonishing spike in the later third century that is closely



coincident with the closure of the Beau Street Hoard. Indeed the largest hoard yet found in Britain, from near Cunetio (Mildenhall) in Wiltshire has exactly the same closure date. Clearly something is going on and our hoard does seem to be part of this wider pattern.

Although there is no direct evidence for trouble in Britain at this time the political context of Britain known from other sources may have prompted hoarding behaviour. There was a breakaway Empire in the west from AD 260 until the restoration

fig 8: **Moorlands Road schoolchildren holding aloft replica coins made in maths based project work at the launch of the fund raising appeal** *(Copyright: Bath & North East Somerset Council).*

of central imperial control by Aurelian in AD 274. Associated political instability and insecurity may have prompted people to resort to hoarding, motivated not by actual conflict but by fear of conflict and its consequences. At the time this hoard closed Aurelian was taking on the Gallic Empire; the key battle was fought at Châlons in Gaul in AD 274. People in Britain may have feared recrimination or worse for the support they had given to the Gallic emperors when they heard that Aurelian had triumphed and was restoring the unity of an empire that had been torn apart by internal strife and foreign invasion. When he succeeded he was acclaimed as *Restitutor Orbis* – restorer of the world.

In the third century coin was subject to rapid debasement as those holding the reigns of political power sought to grow their spending power by reducing the silver content of the coinage. This happened several times. When this happens or is threatened it makes sense to hold onto the best quality silver you can, as a point may come when that coin is more valuable than its face value. Tax demands and consequent tax evasion in unsettled times can also lead to people squirreling money away.

fig 9: **Volunteers weighing and photographing coins** *(Copyright: Bath & North East Somerset Council).*

We know that the Emperor Aurelian tried to reform the coinage. In AD 271 he punished and executed rebellious mint workers in Rome who were accused of stealing silver that should have been included in coins. In AD 274 he also announced a recall of all the poor quality heavily debased bronze radiates and replaced them with a coin with higher silver content, albeit only 5% silver. Quite how the news of all these great events and imperial actions might have played out in the mind of the Beau Street hoarder is a mystery, and we do not know exactly when in this sequence of events the hoard was hidden.

The investigation and analysis of the metal content of coins from the Beau Street Hoard is underway, as part of a larger research project funded by the Arts & Humanities Research Council and under the direction of Professor Butcher of Warwick and Dr Ponting of Liverpool to try and determine exactly how and when the metal content of coin was altered, and whether this relates to known political events. This means the Beau Street Hoard will be one of the best studied and understood hoards in Britain.

A learning and social project

The story of the Beau Street Hoard from its discovery in 2007 to its display in 2015 has been a remarkable one. Along the way it has made the news in media as disparate as BBC World News, the *Straits Times*, Russia Today and the *Bath Chronicle*. The involvement

of the Heritage Lottery Fund meant that it was possible to deliver a project that was much more than a simple commitment to acquire and display the hoard. Indeed the Beau Street Hoard project has delivered thirty three actions with 215 events over a fifteen month period.

These included a national conference on Roman coin hoards held at the Assembly Rooms, a popular publication, fourteen sleepovers for young people at the Roman Baths, seventeen roadshows throughout the region and a current tally of fifty-five public lectures and talks to local organisations.[9] Special maths sessions using Roman coins were created and delivered in local schools and learning provided for undergraduate and postgraduate students in exhibition design, digital design and film making.

Volunteering opportunities for older people were created through a Shared Learning Partnership with the U3A and a money management course for vulnerable adults was developed with The Genesis Trust. Project partners included The Roman Society, The Association for Roman Archaeology, the U3A, The Genesis Trust, and The British Museum. Universities involved in research or learning include, Southampton, York, Liverpool, Warwick and Bath Spa. Coins have appeared in museum displays at The British Museum, Radstock Museum and the Roman Baths and a special display has been provided on the site of the hoard's discovery in the lobby of the new Gainsborough Hotel in Beau Street. In addition to Bath & North East Somerset Council other financial contributors to the project have been The Association for Roman Archaeology, The Headley Trust, Heritage Lottery Fund, The Osborne Group, The Roman Society, The UK Numismatic Trust, The Victoria and Albert Museum Purchase Grant Fund, YTL Hotels and not least the general public through some very generous donations.

The final event in the project will be the publication of the academic report and catalogue currently scheduled for December 2015.[10]

Notes

1. Julia Tubman (personal communication)
2. Benedict Sayers et al, *The Beau Street Hoard, Bath*, (Oxford, Archaeopress Ltd, forthcoming).
3. Robin G Collingwood & Richard Wright, *The Roman Inscriptions of Britain* N° 141, (Oxford, Clarendon Press, 1965).
4. Harold Mattingley, The Great Dorchester Hoard of 1936 in *The Numismatic Chronicle and Journal of the Royal Numismatic Society* (1939) Fifth Series, Vol. 19, No. 73 (1939), pp. 21-61.
5. McQ, Holmes, *Two Denarius Hoards from Birnie, Moray. British Numismatic Journal,* (2006) 76. pp. 1-44.
6. Antonio d'Ambrosio et al (eds.), *Storie da un'eruzione* (Milan, Electa, 2004).
7. Data derived from David Walker, The Roman Coins, in B. Cunliffe, *The Temple of Sulis Minerva at Bath* Vol 2 The Finds (Oxford, OUCA 1988).
8. Reproduced with permission from Richard Abdy, *Romano-British Coin Hoards* (Princes Risborough, Shire, 2002).
9. A popular publication written in 2014 by Eleanor Ghey, project curator at the British Museum, entitled *The Beau Street Hoard,* (London, British Museum Press).
10. Benedict Sayers *et al, op. cit.*