New surveys at Bromholm Priory

Tim Pestell

The positive impact which metal-detecting has had on archaeological knowledge and artefact recovery rates hardly needs stating, yet the full potential of metal-detectors as an archaeological survey tool has rarely been explored. This has begun to be rectified by specific use of metal-detecting in a survey of the medieval priory site of Bromholm, in the parish of Bacton, on the north-east Norfolk coast. The project's aims are twofold. First, the survey will enhance our knowledge of a priory known to have been a site of pilgrimage. Here, both lay and ecclesiastical society interacted and it is hoped that evidence for this might be discovered within the monastic precinct, a known and tightly-defined area. Second, it is hoped that a detailed metal-detector survey can provide a useful methodological example. Not only might the potential of detectors for archaeological survey be demonstrated, the systematic retrieval of finds from the same area can be examined for information on the fall-off of artefact numbers in the ploughsoil as a result of detector use, year on year. In turn, this might enable the construction of a model to assess attrition rates of artefact assemblages in detected land.

Bromholm Priory was founded as a Cluniac community in 1113 by William de Glanville. The home to a relic of the True Cross, Bromholm attained national recognition as a place of pilgrimage through its royal patronage by Henry III. Its subsequent presence in the national consciousness is attested by references to the relic in *The Canterbury Tales* ('Help, Holy Cross of Broomholm' exclaims the miller's wife of the Reeve's Tale) and in *The Vision of Piers Ploughman* ('and bidde the Roode of Bromholm, Bryng me out of dette'). Now, like many rural monastic sites, the priory remains are at the centre of a working farm and its pilgrimage past is largely forgotten. Knowledge of the house derives almost entirely from a few contemporary documents and the remaining buildings. The site is set in low-lying open countryside on a knoll or 'holm' site now only about a quarter of a mile from the sea and the monastic precinct may be defined as a vaguely heart-shaped 28 acre site.

Modern agricultural use has led to most of Bromholm Priory's claustral area being destroyed or unavailable for archaeological investigation; it lies beneath concrete barn floors, sugar beet pads and yard metalling. Set amid the fertile soils of East Norfolk, none of the precinct or surrounding land has survived as earthworks. Instead, the area has long been under arable cultivation, establishing a deep ploughsoil which has undoubtedly removed much of the site's stratigraphy. Since the majority of the precinct is unscheduled this agricultural regime has made the site eminently suitable for exploration by metal detector.

In the first phase of the project standard archaeological survey techniques were used. All early cartographic evidence has been examined and combined with transcriptions of the available air photos of the site to produce a composite plan of the precinct. This area and a small piece of land originally immediately outside the walls – a total of some 26 acres (10.5ha) – was then fieldwalked in detail, using a 25m grid with three transects per gridbox. This has shown that the site had no Anglo-Saxon antecedent, with the earliest pottery tradition represented being of Local Medieval Unglazed wares consistent with the priory's known foundation in the 12th century. Material in the field to the west of the priory buildings was sparse, with the exception of a cluster to the north of the priory precinct walling suggesting extra-mural settlement. By contrast, the field to the north and east of the priory church showed far denser scatters. The pottery distribution may represent rubbish disposal patterns within the priory, these fragments being near (but not adjacent) to the kitchens. Alternatively, the presence of pottery may have been at least partly influenced by visiting pilgrims and members of the lay community circulating within one area of the precinct. A similar pottery distribution pattern continued in the Late Medieval/Transitional ceramics of 15th- to early 16th-century date.

Against the broad picture provided by ceramic evidence, metal-detection has allowed more detailed varieties of artefact to be studied. To enable direct comparison with the fieldwalking data, the 25m gridboxes were reused, but further subdivided into 12.5m boxes. Detection has been restricted to ploughsoil depth and an area of some 7.3ha or 18 acres of arable field has been covered. Of this, 3.4ha or 8.6 acres (the north-eastern field) has been fully detected twice in different seasons, allowing for fresh cultivation to turn the soil. The results have been overwhelming. In excess of 5,000 individual objects have been recovered so far, weighing over 60 kilos. From the beginning, ferrous material has been screened out to prevent paralysis from finds overload and this has undoubtedly led to some medieval iron finds not being recovered. However, in a small random sample of test boxes all metalwork was recovered and in these nearly all the iron objects have been undateable nails or lumps of farm machinery. The loss of ferrous data has therefore been considered a justifiable sacrifice.

The vast majority of the metal finds, perhaps about 97% by number, has been of lead. Most is in the form of sheeting, as offcut and trimming scraps, the gauge of the metal suggesting its use for roofing. This is certain in a

number of cases where the iron fixing nails, some having heads covered or wrapped in lead, still survive embedded in the sheeting. The quantity, as well as the smaller offcuts, make it likely that the lead represents various re-roofings and repairs carried out throughout the life of the priory. Other architectural fittings of lead include a few seals and plugs, for instance for iron glazing bars, and odd scraps of window caming. Because the sheeting has been so ubiquitous, it has not yet been possible to identify particular 'hotspots', suggesting either lost buildings or workshops.

A range of conventional small finds has also been recovered from the precinct area. All are of medieval date or later, confirming the conclusions of the fieldwalking that the priory site had previously been unoccupied. There are four broad categories of object: domestic and utilitarian; items related to trade and industry; personal dress fittings; and articles of faith and religious practice. Of those categorised as domestic and utilitarian, the most obvious examples are cauldron or cooking pot legs and walling. Nine cauldron feet, all of copper alloy, have been found, ranging from a crude tube flattened to form a foot, to examples with feet carefully and realistically formed as paws or, in one case, what appears to be a (?knight's) armoured foot. Fifteen wall and rim sherds of copper alloy vessels have also been recovered, some with heavy sooting. Most of these were found close to the claustral east range, a distribution reflecting the scatter of late medieval pottery. Lead pot repair plugs, two of which have been found, may also be placed in this category. Other items with an apparently domestic function are several lead spindle whorls and a spoon bowl of copper alloy, presumably fixed to an organic handle with a rivet.

Items relating to trade form one of the more obvious groups of material recovered from Bromholm. The site has so far yielded 45 hammered silver coins, of which seven are of post-Dissolution date. The remaining examples are of 13th- to 15th-century date. Eight trade jettons have also been found, mixing in well with the coinage distribution. Only four of these have been identified so far, including three Nuremburg issues of the familiar 16th-century 'Rose/Orb' type, and a well-preserved French Chatel Tournois type of 1373–1415. The coins are important in three ways. They attest to individuals carrying money within the priory precinct, which strongly suggests members of the lay community were circulating within areas of observed coin loss. The coinage also suggests the conduct of commercial activity within the precinct. Finally, the presence of an emerging coin assemblage offers the prospect of a valid sample for statistical analysis. In particular, it may prove possible to examine the coinage for periods of heightened commercial activity, perhaps indicating a particular period of prosperity for Bromholm as a place of pilgrimage.

The use of a tight survey grid for the recovery of metal objects is also a useful means of interpreting coin loss. The coins are almost entirely focussed on the area of the north-eastern field and within this they fall into two concentrations. The first is immediately to the north of the priory church, adjacent to the roadway into the precinct from the main gatehouse. A few coins to the west of the road are within a cropmark which appears to form a 'baffle' marking off the western field of the precinct and guiding people towards the priory church. The second concentration is to the immediate east of the claustral east range on the high ground of the holm site. A possible explanation for this coin distribution is apparent when a further class of object is considered. Some nine weights, eight of lead and one of copper alloy, were found to cluster in grid boxes L9/L10. Given their sparse distribution elsewhere in the precinct, this may represent the location of, perhaps, former market stalls. The weight values are also of interest; of those examined so far, five fit into a

Lead casting bearing a depiction of a woman, probably early 14th-century, and lead disc with the head of Christ (obverse) and a depiction of the cross of Bromholm (reverse) (Drawn by Steven Ashley)

reasonably accurate equivalent for Imperial ounces. The copper-alloy weight, for instance, is 14.745 grammes or 0.5202 ounces. We also have weights of 6.011, 2.072 and 1.0501 ounces.

If objects associated with a more commercial rather than monastic life are very visible, so too are everyday personal dress fittings. A variety of belt buckles has been found, usually of late medieval and post-medieval date, but including a stunning Romanesque example of *c*1080–1120, with animal heads gripping the vertical pin bar and the buckle pin emerging from the mouth of a third animal. There has also been a number of strap-ends and belt mounts, typically late medieval in style. The distribution of these finds is, again, limited to the field north and east of the priory church, appearing to show the use of this particular area by the laity.

A few items have more certain religious associations, including half a papal bull seal and a copper alloy cross plaque, badly bent. It is gilded, has enamel inlays and seems to bear an evangelist's symbol, possibly the calf of St Luke. Two items may relate more to the presence of shrines. The first is a cast rectangular lead sheet bearing the figure of a woman which, with its swaying posture, is probably of early 14th-century date (see figure). The sheet has no attachment points and is perhaps to be interpreted as an *ex voto* offering by a pilgrim at a shrine. One of the smallest objects found is a lead disc bearing on one side a face, probably that of Christ wearing the crown of thorns, and on the other a depiction of the cross of Bromholm (see figure). This may be some kind of a token, perhaps analogous to the boy bishop tokens. One of the most surprising features is the singular lack of any obvious pilgrim tokens or *ampullae* within the precinct. None have been identified so far and this may force a re-evaluation of the pilgrim trade at Bromholm, or at least the means and date by which such trinkets were sold. Alternatively, it may indicate the value attached to such items when newly bought.

The project at Bromholm has just completed its second season and the quantity of finds still being recovered stresses the need for continuing survey. With a total precinct area of 28.13 acres, of which 4.15 acres is beneath the modern farmyard, just over 66% of the total area of the precinct available for metal-detection has been surveyed, in addition to two acres immediately outside. Of this, nearly 36% has been completely detected twice. This is an impressive survey area for such detailed artefact collection and holds out the prospect of similar surveys doing much to elucidate other archaeological sites where little fieldwork is possible other than by non-invasive means. Given the widespread use of metal detectors across much of lowland Britain and the often *ad hoc* recording of finds made on sites, Bromholm shows the systematic use of detectors for site surveys is long overdue.

Acknowledgements

The project at Bromholm has been carried out with probity by members of the East Norfolk Detectors club; Wendy Brinded, Tom Dunn, Tim English, Geoff Featherstone, Nick Nudd and Allan Taylor. My co-director, Phil Emery of the Norfolk Archaeological Unit, had the idea for conducting such a survey and we are extremely grateful to the landowner, Mr Edward Deane, for his co-operation and help. Mr Brian Ayres, Dr John Davies and other members of Norfolk Museums Service have been of crucial importance in their enlightened support of the project.

Tim Pestell lectures in Landscape Archaeology at the University of East Anglia.

Discovery of tide-mill at Nendrum monastery

Norman Crothers

An archaeological survey of the intertidal zone of Strangford Lough (Co Down), which started in 1995, has revealed sites dating from the Mesolithic up to the present day and relating to the submerged landscape, defence, communications and economic exploitation of the shore. Many of them, however, have little or no parallel and excavation is required to decide the nature of each site and the period to which it belongs. One such site was an area beside the ancient monastic settlement site of Nendrum on Mahee Island marked 'pond' on the OS 1:2500 map. Excavation revealed that a sequence of three horizontal mills of the Early Christian period had been constructed on the site.

The first phase mill, dated by dendrochronology to AD 619 and currently the earliest dated horizontal mill in western Europe, proved to be a sophisticated and complex structure. No structural remains of the phase two millhouse or wheelhouse survived but excavation revealed evidence of its millpond walls which had been realigned on an east–west axis. No date has so far been obtained for this phase of the complex. This mill was replaced by a third phase on the same general alignment. Substantial remains of the third mill, comprising the clearly visible millpond wall and an infilled drystone-built wheelhouse and stone flume, survived.

Drystone wheelhouses are not uncommon in Ireland but the stone flume, at the time of writing, is unique. Immediately above the floor of the wheelhouse was a layer of silt containing souterrain ware pottery, two bone pins, discarded timbers and the remains of wattle screens. Two millstones and three horizontal wheel paddles were also recovered from this layer. The lower millstone was complete and still retained the wooden collar which allows the shaft to pass through to the upper stone. The upper millstone had been broken before deposition and was recovered in three fragments with a small portion missing. This mill has been dated by dendrochronology to late AD 788 – early AD 789. This site differs from the majority of other horizontal mills in that it uses the flow of the tide to fill the millpond and the water released from the millpond to drive the wheel when the tide has receded. Only one other tide mill of this period has so far been found in Ireland (Little Island, Co Cork).

The dendrochronological date for the first phase is the earliest confirmed date for any part of the Nendrum complex. No firm dating evidence was obtained from the excavation carried out in the 1920s; although the artefacts have been dated on stylistic grounds, they were not earlier than the late 7th century. It is interesting to note that this date also immediately pre-dates the first secure written reference to Nendrum, the death of bishop Cridán recorded in the Annals of Ulster in AD 639. The only entry prior to this is the death of Mochaoi, the founder of Nendrum, in AD 490, a date which may have been used to establish a link back to St Patrick.

Norman Crothers is a member of the Environment & Heritage Service (DOENI) Excavation Unit

Graffiti on the tower roof of St Michael, Cookley

Stuart Boulter

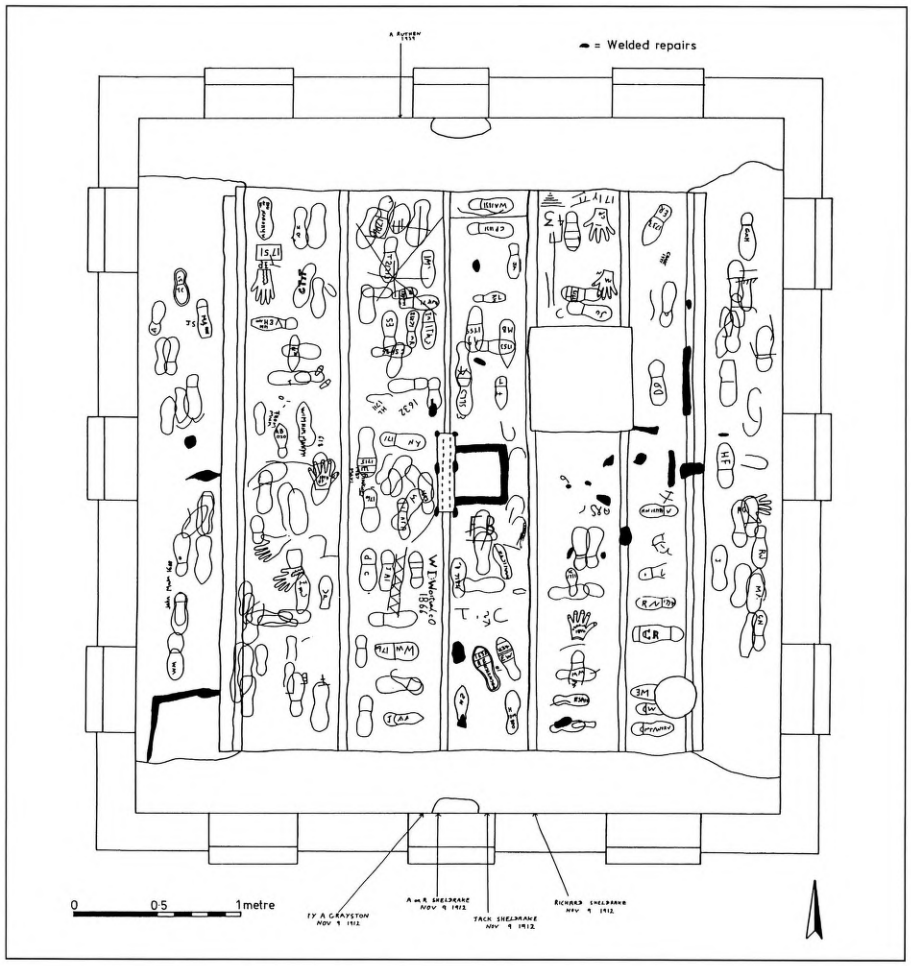
During archaeological recording as part of English Heritage grant-aided renovation and restoration at St Michael, Cookley (Suffolk) an unparalleled amount of graffiti was discovered on the tower roof, some dating back to the early 17th century.

The recording was stimulated by a recognition that, with the exception of the parapet, the tower appeared not to have been altered. The results confirmed that the tower was constructed in a single phase dating to the late 13th century. The parapet, with its characteristic decorative flushwork panels, was added later, almost certainly in the 15th century. The recording of the 13th-century tower wall provided invaluable information about its original surface treatment and appearance. The unbuttressed tower was built of uniform well-coursed pebble- to cobble-sized flints with some brown ferrugenous sandstone. The courses were tightly packed and gaps between stones filled with crudely knapped flint flakes, a technique known as galleting. These were inserted while the mortar was still plastic, suggesting shuttering was either absent or removed before the mortar went off. In this instance, galleting would have had limited structural benefit since the flints were already relatively closely packed and it would have been unnecessary if the primary stone facing was to be rendered or pointed in a way that would almost totally obscure the stones (harling). It therefore seems likely that the stone facing of the tower was always exposed and galleting used to give the desired effect of a more uniform finish. This theory is supported by the use of decorative brick detail round the window arches of the windows and the belfry openings. A similar wall fabric was identified in the 14th-century round tower of St John the Baptist, Onehouse (Boulter 1995). The evidence that the flint and brick were meant to be exposed is in stark contrast to construction techniques recorded elsewhere in Suffolk in various church walls of late 11th- to 12th-century date (eg All Saints, Darsham; Boulter 1999b), and late 14th- to 15th-century date (eg St Martins, Nacton; Boulter 1999a) where the flints of the wall facing were only meant to be marginally exposed.

The difference in fabric between the tower and nave and the lack of galleting in the nave fabric suggests the tower post-dates the nave wall, which shows all the characteristics of late 11th- to 12th-century workmanship. This is supported by the existence of a semicircular arched Norman doorway in the north wall of the nave (Mortlock 1992, 45).

A number of putlock holes were recorded in the tower wall. Effectively, each scaffolding level was serviced by a pair of putlock holes on each wall face, with each successive lift *c*1.5m above the last. It appears that the putlock holes were only meant to accommodate exterior scaffolding, with the diagonal orientation of the holes designed to add stability to a continuous platform around the tower.

The quoins on all four corners of the tower were of tooled Caen-type limestone. There was clear evidence that these had been salvaged and reused from a previous phase of the church. One of these found on the north-west corner of the tower was identified as a voussoir from the arch of a semicircular-headed 'Norman' window.



Plan of graffiti (drawn by Tony Fisher & Stuart Boulter, Suffolk County Council)

Tower roof graffiti

The tower roof at Cookley had a raised central platform with an outer, lower strip 0.4–0.5m wide, which almost certainly indicates the thickness of the tower wall. Lead sheeting had been used to cover all of the platform and the outer strip and continued for 0.5m up the internal wall face of the parapet. Graffiti were concentrated in the five lead strips on the raised platform (see figure), with fewer in the north–south orientated components of the outer strip. The east–west orientated sections of the outer strip were totally devoid of graffiti, although some were recorded on the lead covering the internal face of the north and south sides of the parapet.

Two types of tooling were used in the graffiti. These consisted of single incised lines or a wider zig-zag/chevron pattern formed by rocking a chisel-like tool backwards and forwards. Generally the latter technique was used on the more expertly executed designs. These techniques do not appear to be related to the date of the graffiti.

Where possible, the lettering and numbering of the graffiti were recorded. In some cases, later graffiti obscured the detail or general wear had made them indecipherable. In some cases the perpetrators, either as a deliberate attempt to disguise what they were writing (?mirror writing), or as a result of their limited literacy, appeared to have written some of the letters/numbers backwards.

By far the most common form of graffiti was based on the human foot, with the majority executed by the perpetrator tracing around his shoe. A total of 163 complete or part shoe/foot impressions was recorded. Most were within the range of sizes that could be expected from an adult foot, but occasionally much smaller examples were found. As it seems unlikely that children would often gain access to the roof, these were probably drawn freehand by adults.

The actual shape/forms of the shoe graffiti can be divided into three distinctive categories. The most numerous, with 140 examples, was that with rounded heel and sole. In the more detailed examples it is likely that the actual shape of the shoe was represented. In some of the untidier and less well-executed examples (usually those with no dating or initialling) the shape may be the result of absent-minded doodling rather than a deliberate effort to replicate an actual shoe. Dated examples of the rounded heel and sole type range from 1632, with the initials R E and a partially decipherable name, possibly 'Richard', through to two examples with the initials C P and W A from 1831. The second most common category (13 examples) was the rounded heel with a flat-fronted sole. The defining character of this form was the front of the shoe being cut off square. Only two of these were dated: one possibly of 1784 (some numbers written backwards) and one of 1838 with the initials E H. A rounded heel with pointed sole (eight examples) was the rarest type. Dates were recorded in three of the examples: the earliest (1720) was initialled A B and the latest that can be positively attributed was 1733 and initialled E R. In the third, the date (1753) may actually belong to a different shoe. This cluster of dates in the first half of the 18th century may be significant.

The second most commonly encountered form was names and initials (dated or otherwise) that were not obviously associated with line drawings. Approximately 17 graffiti can be included in this category, the most significant of which include a legible name and date. The earliest recognisable name and date is that of John Mum (possibly Munn) dated 1688, while the latest full name and

date recorded was E PINKNEY, 1987, MAY 1. One later date of 1997 was found. Included in this category are the five graffiti recorded on the internal face of the parapet. One, A RUTHEN, 1939, was found on the north side of the tower while the remaining four, all dated NOV 9, 1912 were located on the south side. Three of these obviously belonged to the same family: RICHARD SHELDRAKE, JACK SHELDRAKE and A or R SHELDRAKE.

Representations of the human hand were the third most common form of graffiti, with eight examples. These were all drawn by right-handed people tracing around their left hands. Two of the hands were clearly dated 1894; the first was initialled O T, while the second appeared to include a full, but unintelligible name. In another two, the hands were initialled C P and M A, while a further two had been drawn with a zig-zag motif on the back of the hand, possibly representing a glove.

The fourth most common image was that of small six-sided figures reminiscent of coffins. Three of these were identified, two close together, with the third more isolated.

The remainder of the graffiti consisted of random lines, patterns and what can only be described as 'spoiling' where a deliberate attempt has been made to disrupt earlier, better structured graffiti. A good example of the latter is a star-like motif over a series of shoe graffiti. There were also fragments that appear to represent unfinished/interrupted graffiti; for example, curved lines which could be part of a shoe and others which seem to be failed attempts at lettering.

If the graffiti is to be used as a dating tool, the basic assumption that the perpetrators were not using false dates has to be made. Given the range of dates present, combined with the stylistic variations and differential weathering levels, it seems likely that the graffiti represent an accumulation over a long period. Generally, the graffiti were dispersed evenly over the roof, with the exception of the north and south components of the outer strip and the vertical elements on the internal face of the parapet walls. The absence of graffiti in the latter coincides with lead that was in markedly better condition than that of the central platform and east and west parts of the outer strip, suggesting that the bare lead had been replaced relatively recently.

The earliest recorded dates for each strip are listed below with Strip 1 being to the west and Strip 7 to the east.

Location	Date
Strip 1	1688
Strip 2	1720
Strip 3	1632 (?1622)
Strip 4	1632
Strip 5	1711
Strip 6	1733
Strip 7	None

Given that the condition of the lead of these strips was similar and that the earliest dates in each strip fall within a range of *c*100 years, it is likely that all seven of the strips were introduced in a single phase of roofing. A *terminus ante quem* of 1632 (with a possibly earlier date of 1622) is provided by the graffiti. As it seems reasonable to assume that the roof was laid a relatively short time before the first dateable graffiti, an early 17th-century date can be suggested.

It is difficult to assess whether the graffiti were drawn by a few individuals in a limited number of widely separated visits or by a large number of people visiting over the same time period. With the first scenario, some of the perpetrators would each need to be responsible for a large number of graffiti, while the second envisages more people, each contributing fewer examples. It is clear that at least some of the names and initials are repeated, but further analysis would be necessary to quantify these factors. It is reasonable to assume that the majority of the graffiti was inscribed by various artisans who have worked on the tower over the last 400 years. These could include those working directly with the lead roof (traditionally plumbers, although more recently roofing contractors) and others (carpenters, masons, general builders) who may have had access to the roof, even if working in other areas of the tower. The use of chisel-like tools in the production of a proportion of the graffiti adds weight to this assumption. In addition, some of the graffiti were probably the result of opportunists, local people or others, who, for whatever reason, gained access to the roof and seeing the existing graffiti decided to leave their own mark.

While the recording was as detailed as possible given the time constraints, there is clearly potential for further work. This could usefully include transcription and detailed analysis of the written graffiti; quantification of repeated dates, names and initials; comparison of historically-dated styles of shoes with those present as graffiti; documentary research to tie up names and initials recorded in the graffiti with names appearing in parish documents, faculty records, church records, churchwardens accounts and on gravestones. It may then be possible to relate documented episodes of repair to dated and signed/initialled graffiti.

Stuart Boulter is a Senior Project Officer with Suffolk County Council's Archaeological Service Field Projects Team. While working on all types of archaeological project, he maintains a special interest in all aspects of church archaeology.

Bibliography

Boulter, S P, 1995 *The Church of St John the Baptist, Onehouse (ONS 002), A record of archaeological works associated with the underpinning of the tower*, Suffolk County Council Archaeological

Service Internal Report No 96/18
Boulter, S P, 1999a *St Martins Church, Nacton (NAC 024), A record of the programme of archaeological works associated with the repairs to the tower*, Suffolk County Council Archaeological Service Internal Report No 99/16
Boulter, S P, 1999b *All Saints Church, Darsham (DAR 011). Archaeological recording of the south walls of nave & chancel*, Suffolk County Council Archaeological Service Internal Report No 99/59
Mortlock, D P, 1992 *The popular guide to Suffolk churches, No 3 East Suffolk*. Acorn Editions

Formation of the Association of Diocesan & Cathedral Archaeologists

Simon Ward

In September 2000 the Association of Cathedral Archaeologists held its annual general meeting at Southwark Cathedral and reformed itself as the Association of Diocesan and Cathedral Archaeologists. The purpose of the Association is to represent the interests of, and provide a discussion forum for archaeologists working professionally on ecclesiastical buildings. The core of the membership comprises Cathedral Archaeological Consultants and Diocesan Archaeological Advisors. It also includes other professional archaeologists whose work is substantially devoted to the ecclesiastical heritage.

The Association of Cathedral Archaeologists came about following the Care of Cathedrals Measure instituted by the General Synod of the Church of England in 1990. This established the Cathedrals Fabric Commission for England (CFCE) and Fabric Advisory Committees for each cathedral, and required the appointment of Cathedral Archaeological Consultants. Initially the Association was supported and administered by the CFCE, but in 1998–99 it achieved organisational independence with its own voluntary committee. In 1999 it was suggested that membership be expanded to include Diocesan Archaeological Advisors, who did not as yet have their own association. Many of the issues and problems faced are similar and it was agreed that there would be significant benefits from forming a combined association. This was achieved at the annual general meeting in September 2000. John Schofield of the Museum of London, (CAC for St Paul's and DAA for London) was elected chairman.

The Association is currently considering various issues. These include the professional status and conditions of appointment for DAAs and CACs, levels of recording and inventories of stonework, conservation plans, treatment of human remains and archaeological mitigation. It holds an annual conference each autumn and also contributes to day schools and seminars. These are also open to non-members.

Enquiries about the Association, including those on membership, should be directed to the Secretary, Simon Ward, c/o Chester Archaeology, The Grosvenor Museum, 27 Grosvenor Street, Chester, CH1 2DD, email s.ward@chestercc.gov.uk.

Simon Ward is Senior Archaeologist for Chester City Council and has specialised in the medieval period. He has carried out excavations and building recording at Chester Cathedral and other ecclesiastical sites, and is the author of numerous reports on Chester's archaeology.

Church archaeology – the role of the Council for the Care of Churches

Joseph Elders

The Council for the Care of Churches (CCC) is a permanent commission of the General Synod of the Church of England. It was founded in 1921 as the central co-ordinating body in the system of care for the Church of England's architectural heritage. Its terms of reference have broadened with time to cover all aspects of churches, their furnishings and churchyards, including archaeology. In recognition of the importance of church archaeology the CCC commissioned an Archaeology Working Party which reported in 1988 and again in 1999. One of the main recommendations of both reports was finally realised in June 1999 with the appointment of the author as Archaeology Officer onto the staff of the CCC.

The 1999 report *Church Archaeology: its care and management* (available free from the CCC) summarised the state of the care and management of the archaeology of Anglican churches under the provisions of the Faculty Jurisdiction and concluded that, although the legal and administrative framework was adequate, there were failings in the execution of the relevant provisions (see Baker 1999). A lack of co-ordination from national to local level was identified as a pressing problem – one of the major challenges for an Archaeology Officer at the CCC.

One way of achieving better co-ordination, the report suggested, was to have a national policy guidance

document for the use of Diocesan Advisory Committees (DACs) to ensure a consistent approach to the archaeology of churches and sites in their care. This has now been drawn up and circulated to all DACs and Diocesan Archaeological Advisors (DAAs) in England. It is a simple one-page document, intended to provide the skeleton of a policy onto which individual DAAs and DACs can add as much flesh as they deem suitable.

Many DACs, for example St Albans, Peterborough and York, already had or were in the process of creating detailed and comprehensive policies, often based on models derived from the local authorities in which the DAAs in question were based. These documents contained the points made in the CCC document and have been offered to other DACs as suitable alternative models. In February 2000 the CCC organised a meeting of DAAs in Birmingham where the development of such policies was discussed. The CCC wishes to help each DAC to establish its own archaeological policy following the principles in the guidelines, rather than to impose a national document from above. Most dioceses now have fully fledged or embryonic archaeological policies and the CCC is actively encouraging the remainder.

The Birmingham meeting also discussed the formation of an Association for DAAs akin to that for Cathedral Archaeologists (ACA) as another way of raising standards through self-help, mutual support and training (see Simon Ward's article on p58).

The Working Party report also remarked that there is no central record of the archaeological work undertaken in each diocese each year and the costs involved, nor of the burden on overworked (and unpaid) DAAs. Most DACs had no clear estimate of these factors and the CCC undertook a survey which forms part of the report. The working conditions of DAAs were surveyed and several recommendations made to improve them, including that the DAA should be a full member of the DAC. The report also includes a draft job description for DAAs (although the reaction of most DAAs to this document has been to comment wryly: 'sounds great; what's the salary?'). A large part of the author's time has been taken up in discussing the role of the DAA with individual DACs, and occasionally suggesting suitable candidates for vacant posts. It is pleasing to record that suitably qualified candidates can always be found, showing the commitment of archaeologists to this fascinating and vitally important part of our national heritage.

The training of 'human resources' was identified in the report as a key factor, covering architects and surveyors, archdeacons and DACs, parish officers and incumbents, and archaeologists themselves. The introduction, in association with English Heritage, of training courses next year for DAC secretaries and similar practitioners at West Dean College is just one of the current initiatives of the CCC.

The Working Party report also considered the role of archaeology in the care of redundant and ruined churches, and expressed the hope that a proper archaeological component in the appraisal of potentially redundant churches could be ensured through the work of the new Archaeology Officer at the CCC. This has proved a major challenge as the role of the Archaeology Officer incorporates the writing of Pastoral Measure reports, a task formerly performed with such distinction by the late Donald Findlay (they are still sometimes referred to as the 'Findlay Reports'). The author has now written some 60 detailed reports. Six of these churches have since been earmarked for demolition, emphasising the importance of this process.

A major area for improvement defined in the report was the lack of a comprehensive record of church heritage with national coverage and the varying quality of those records which are held. To rectify this, in early 1999 the CCC and CFCE (in partnership with DCMS and English Heritage) commissioned a report on the church heritage record from the consultants David Baker and Gill Chitty. They reported in April 2000 and their results and recommendations are now at the consultation stage.

The treatment of human remains, a key issue in the report, was discussed at length at the ADCA inaugural conference, with papers by Simon May and Sebastian Payne of EH, and Glenn Foard, Peterborough DAA.

Progress has also been made in the preparation of new CCC publications in the field of church archaeology, notably the archaeology chapter of the new edition of *The Churchyards Handbook*, now published, and preliminary work on the new edition of the CCC Church Archaeology handbook.

This brief summary of activity over the last two years shows that considerable progress is being made to implement the recommendations of *Church Archaeology: its care and management*. There is still some way to go, but the CCC is committed to playing a central role and offers itself as a partner for all those who care for the heritage of England's churches and churchyards.

Joseph Elders is currently Archaeology Officer for the Council for the Care of Churches. He previously worked in Germany and the Middle East, specialising in monastic archaeology.

Bibliography

Baker, D, 1999 'Church archaeology: its care and management', *Church Archaeol*, **3**, 40–43

New research on stone sculpture in Wales

Nancy Edwards

Over 500 early medieval inscribed stones and pieces of stone sculpture are now known from Wales and they are of crucial importance to our understanding of the period between the end of Roman Britain and the coming of the Normans. Their archaeological context can help us to identify early burial and church sites, as well as revealing much about the development of Christianity and the patronage of major monasteries. A study of the form, ornament and iconography of the monuments, as well as the inscriptions, their formulae, languages (both Latin and Celtic) and epigraphy (including ogam) can shed valuable light on the functions and dating of the stones and indicate Christian contacts between different parts of Wales, and further afield with the Continent, Ireland, Anglo-Saxon England and the 'Irish Sea Province' in the Viking period.

In 1950 V E Nash-Williams published *The early Christian monuments of Wales*, an illustrated catalogue of the 415 monuments then known. It was based largely upon research carried out in the 1930s and replaced J O Westwood's *Lapidarium Walliae* (1876–79). A new *Corpus of early medieval inscribed stones and stone sculpture in Wales* is now being prepared in three volumes modelled on the British Academy's *Corpus of Anglo-Saxon Sculpture*. Volume 1 (the south and south-east) is the work of John Lewis and Mark Redknap of the National Museum and Gallery, Cardiff while the author is responsible for Volumes 2 (the south-west) and 3 (north).[1] Work on Volumes 1 and 2 is now well advanced.

The techniques used to record the monuments for Volume 2 have revealed much new evidence. Early antiquarian papers, particularly those of Edward Lhuyd (1660–1709) and his associates, have been scrutinised. They include illustrations of hitherto unknown monuments, unfortunately now lost, as well as full records of inscriptions such as that on the now fragmentary Llanboidy 1 (Nash-Williams 1950, no 149; NLW MS Llanstephan 185, 6). Rubbings have proved extremely valuable in refining readings of some inscriptions, especially those in ogam, as well as in making accurate records of letter forms. Most of the surviving monuments have been specially photographed, some for the first time, primarily by Ian Wright of the RCAHMW. Two main techniques have been used. Some monuments have been photographed using two flash-guns mounted on tripods at an angle producing oblique light across the carving (Gray & Ferguson 1997, 8–13). In other cases a generator has been used, often at night, to power studio lights positioned to provide oblique lighting. Some of the results have been extremely interesting. For example, a newly discovered pillar at Penwaun, Fishguard South (Pembs) appeared in natural light to be carved with a worn encircled cross with an additional horizontal line across the circle. Photography using the second method revealed the complexity of the carving, now very weathered, which includes ornament in the quadrants of the cross, a second encircled cross with herringbone ornament below, interlace motifs between the crosses and a small cross with hollowed circles in the top right-hand corner. The two different styles of carving could suggest a palimpsest.

The newly discovered cross-carved pillar at Penwaun, Fishguard South (Pembs) which is still in use as a gatepost to a field known as Park Maen Dewy ('The field of David's stone') (Photo: Crown Copyright: Royal Commission on the Ancient and Historical Monuments of Wales)

Research on the archaeological context of the monuments has proved particularly illuminating on the function of the carved stones. Many of the early inscribed stones do not originate from church sites. They are primarily commemorative and almost certainly acted as grave-markers. They may also have functioned as boundary markers and may signal land ownership (Handley 1998, 340–49). Those that do originate from church sites, such as Nevern 1 and 2 (Pembs) (Nash-Williams 1950, nos 353–54), suggest that these churches had their origins in the 5th to 7th centuries. In contrast, Penbryn 1 (Cards) (Nash-Williams 1950, no 126) which commemorates CORBALENGI IACIT ORDOVS ('Of Corbalengus, he lies, an Ordovician'), suggests the survival and possibly revival of a tribal identity which originated in the Iron Age (Jarrett & Mann 1968). In 1695 Lhuyd relates that it lay beside a cairn though until recently it had stood on the top (Camden 1695, 647). In *c*1806 the cairn was levelled and

found to contain a cremation urn together with some coins (Meyrick 1808, 178–79). Meyrick's report tallies with that of D H Davies (1905, 165–66) and letters and records in the National Museum and Gallery, Cardiff concerning the acquisition of a Roman cremation urn and a coin of Titus (AD 79–81). It appears that a Bronze Age barrow was reused for a Roman cremation in the late 1st or early 2nd centuries AD and finally became the location of the inscribed stone which may have marked an otherwise unrecorded early medieval inhumation set into the top of the mound. In contrast, simple cross-carved stones, which may have first come into use towards the end of the 6th century and functioned primarily as grave markers, are concentrated on modern parish church sites. They frequently came to light built into church fabric during restoration and rebuilding in the 19th century and demonstrate the early medieval origins of the sites. Others, for example two cross-carved pillars, one a new discovery, from Llanwnnwr Farm, Llanwnda (Pembs) (Nash-Williams 1950, no 326) come from sites associated with long-cist burials (James 1987, 72, no 14) and sometimes chapels which did not develop into parish churches but were abandoned at an unknown date. More elaborate sculpture, including the large freestanding crosses which probably first appear in the 9th century (Nash-Williams 1950, 17), are concentrated in distinctive local groups on the more important sites associated with monasteries such as Llanbadarn Fawr (Cards), Penally and St David's (Pembs). The range of sculpture at St David's is particularly extensive and includes two fragmentary crosses, four cross-slabs and three cross-carved beach pebbles and there is related sculpture from other sites in the immediate vicinity (Edwards 2001).

Heather Jackson has also completed a study of the geology of the stones. Although the majority of the stones used are local, there are a number of interesting exceptions. For example, the stone for the cross at Llanbadarn Fawr (Nash-Williams 1950, no 111) was found to be quartz albite orthoclase granophyre from the Cadair Idris area some 37km to the north; it would almost certainly have been transported by sea. Similarly, the shaft of the cross at Carew (Nash-Williams 1950, no 303) in south Pembrokeshire is of dark grey microtonalite which has been brought from Carn Wen in the Preseli hills 40km away. Identical stone has been used for the top of a very similar cross at Nevern (Nash-Williams 1950, no 360) in the north of the county which is 16km away from the source. The two monuments are probably by the same hand and suggest the presence of a peripatetic sculptor working for one or more patrons rather than one associated with a particular monastic workshop.

The dating of the monuments remains a major problem and is almost entirely dependent on typology, art-historical comparison, epigraphy and language. Nash-Williams (1938; 1950) attempted to build up a chronological framework using inscriptions which he believed named people mentioned in the documentary sources. While some of these markers still stand, the only two monuments dated in this way from the south-west can no longer be securely dated. Patrick Sims-Williams, who is working on the language of the inscriptions for the project, has shown that the bilingual ogam/Latin inscribed stone Castell Dwyran 1 (Carms) (Nash-Williams 1950, no 138) commemorating Voteporix the Protector cannot definitely be associated with Vortipor, the 6th-century tyrant of Dyfed mentioned by Gildas (Sims-Williams 1990, 226). Similarly the inscription on the cross at Carew had been thought to name Maredudd ab Edwin, king of Deheubarth (1033–35) (Radford 1949). A re-examination of the inscription has found this reading to be incorrect and the Maredudd named can no longer be linked to any known historical figure, leaving the dating of the cross and other similar monuments much more open.

The research for Volume 2 has also thrown up some important issues concerning the preservation of these monuments. Some are housed in museums but most are in churches, built into church fabric either internally or externally, or still standing in the churchyard. Others are located on farms – built into walls or standing in fields. Not all of them are scheduled. Weathering is certainly taking its toll. At Llawhaden (Pembs) (Nash-Williams 1950, no 343) much of the surface of the stone has flaked, destroying most of the carving, since the cross-slab was first photographed by the Royal Commission in 1987. Church redundancy can also pose a threat. When St Edren's Church (Pembs) was closed the sculpture (Nash-Williams 1950, nos 391–94) was dispersed to three different locations. One piece was actually stolen from the site and later turned up in the grounds of a nearby Youth Hostel. The church was then converted into a private dwelling and an additional fragment was discovered during the digging of a cesspit. In churchyards, for example Pontfaen (Pembs), modern gravestones have sometimes been erected too close to standing monuments, while encroaching vegetation in overgrown churchyards threatens to engulf some stones. In one instance the new incumbent was not aware of the existence of the monuments in her care. These problems have been drawn to the attention of Cadw and the Ancient Monuments Board to inform the current revision of their policy.

This project is offering an important opportunity to record, catalogue and illustrate the early medieval inscribed stones and stone sculpture of Wales to modern standards, and also to analyse them in new ways, including a consideration of their archaeological context and geology as well as a reassessment of their art-historical and linguistic significance. It is hoped that ultimately this project will help to secure future preservation of these monuments.

Dr Nancy Edwards is a Reader in Archaeology at University of Wales Bangor. She was on the steering committee which launched the Society for Church Archaeology in 1996 and is the new chair of the Society.

Notes

1. The project is under the aegis of the University of Wales Board of Celtic Studies and the National Museums and Galleries of Wales. In addition, Volumes 2–3 have received funding and other assistance from the RCAHMW, the University of Wales Collaboration Fund, the British Academy and the Cambrian Archaeological Association.

Documentary sources

National Library of Wales MS Llanstephan 185. Notebook of Edward Lhuyd.

Bibliography

Camden, W, 1695 *Camden's Britannia, newly translated into English: with large additions and improvements. Published by Edmund Gibson*. London

Davies, D H, 1905 'Romano-British remains', *Archaeol Cambrensis*, 6th ser, **5**, 161–68

Edwards, N, 2001 'Monuments in a landscape: the early medieval sculpture of St David's', in H Hamerow & A MacGregor (eds), *Image and power in the archaeology of early medieval Britain*, 55–79. Oxford

Gray, T E & Ferguson, L M, 1997 *Photographing carved stones*. Balgavies

Handley, M, 1998 'The early medieval inscriptions of western Britain: function and sociology', in J Hill & M Swan (eds), *The community, the family and the saint, patterns of power in early medieval Europe*, 339–61. Turnhout

James, H, 1987 'Excavations at Caer, Bayvil 1979', *Archaeol Cambrensis*, **136**, 51–76

Jarrett, M G & Mann, J C, 1968 'The tribes of Wales', *Welsh Hist Rev*, 4(2), 161–74

Meyrick, S R, 1808 *The history and antiquities of the county of Cardigan*. London

Nash-Williams, V E, 1938 'Some dated monuments of the 'Dark Ages' in Wales', *Archaeol Cambrensis*, **93**, 31–56

Nash-Williams, V E, 1950 *The early Christian monuments of Wales*. Cardiff

Radford, C A R, 1949 'The inscription on the Carew cross', *Archaeol Cambrensis*, **100**, 253–55

Sims-Williams, P, 1990 'Dating the transition to Neo-Brittonic: phonology and history', in A Bammesberger & A Wollmann (eds), *Britain 400–600: language and history*, 217–61. Heidelberg

Westwood, J O, 1876–79 *Lapidarium Walliae: the early inscribed and sculptured stones of Wales*. Oxford

Anglo-Saxon activity at St Aldate's

Ric Tyler

Recent excavation inside St Aldate's Church, Oxford by the Oxford Archaeological Unit has revealed important evidence of the Saxon origins of the site. The work was undertaken during reduction of the floor level to install a new concrete floor in August to December 1999. An additional watching brief accompanied excavation of the footprint of a new entrance building in January 2000.

St Aldate's is first recorded as an established church in the early 12th century (*Chronicon Monasterii de Abingdon*) though it is probable that it represents an earlier foundation, possibly of Saxon origin. The 12th-century church would have comprised an aisleless nave and chancel (VCH 1979, 135) of which only fragments of a much-restored Romanesque arcade, reset at the east end of the north aisle, survive. A western tower was added in the 13th century. In the early 14th century a three bay chantry chapel was added to the south side of the church including a two bay, vaulted crypt which survives today as boiler rooms below the south aisle (Fig 1). A further chantry chapel was added to the north side of the church (the western two bays of the north aisle) in 1456. This chapel remained separated from the nave until 1581 when the north arcade was erected. During the 17th century a small family mortuary chapel was added to the south side of the chancel and a classical south porch provided.

The 19th century saw two major phases of re-ordering and extension of the church. Firstly, in 1832 and 1843, H J Underwood extended the north aisle to the full length of the nave. Then, in 1862 a major campaign of alterations was undertaken by the architect J T Christopher, cousin of the evangelical A M W Christopher (rector 1859–1905). The works comprised not so much a refurbishment as a major rebuilding exercise: the 17th-century mortuary chapel and south porch were demolished, both the north and south aisles were extended eastwards alongside the chancel, the south aisle was extended westwards to the full length of the nave, both aisle arcades were rebuilt, the roofs were renewed and a new vestry was added to the north of the tower. The tower itself was rebuilt in 1873. Further alterations in the 20th century included a number of internal re-orderings, while a series of single storey buildings were added at the west end in 1961.

Excavation results

The most interesting results from the excavations comprised evidence for Saxon occupation which was

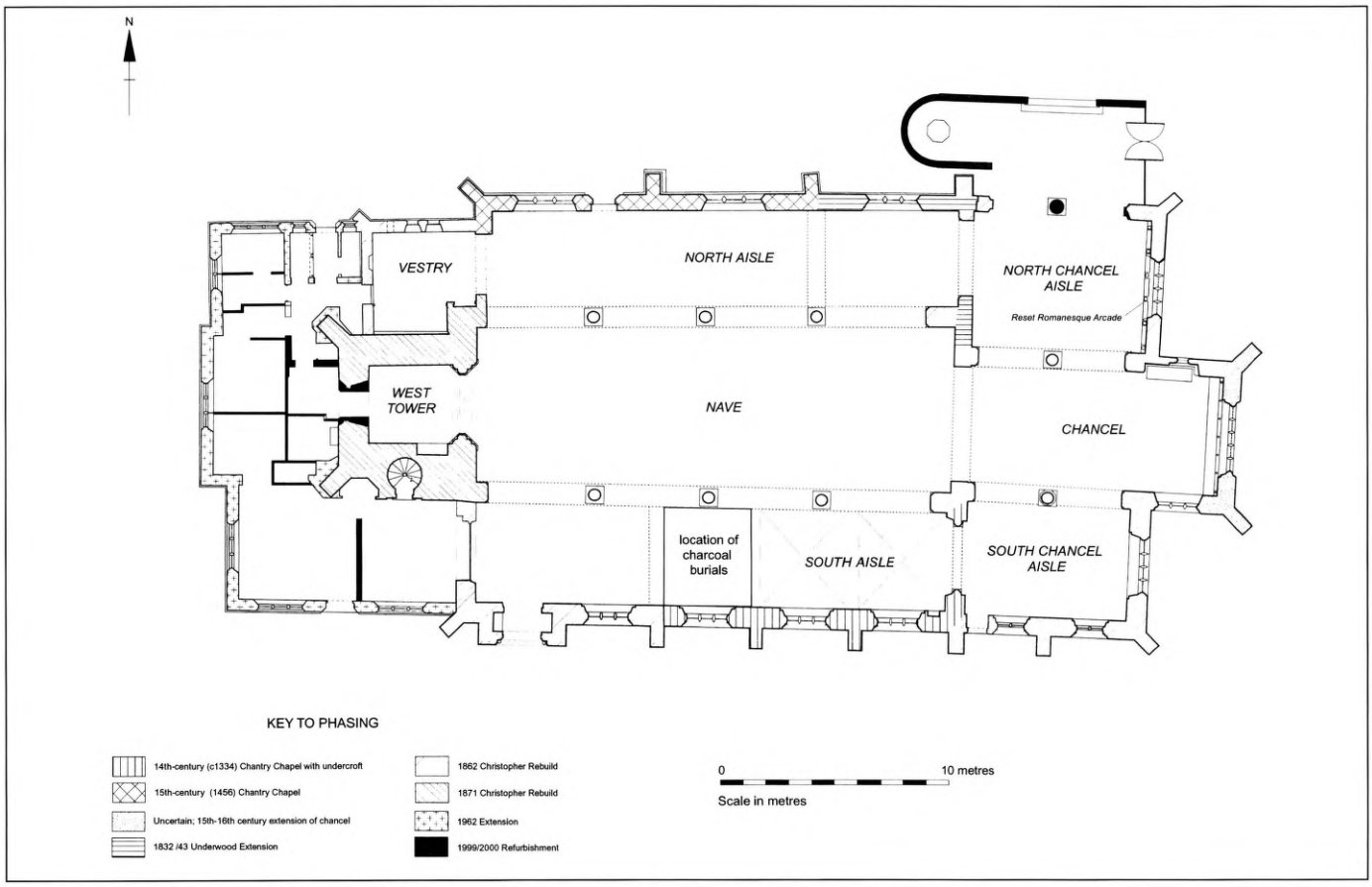


Fig 1: Phase plan of standing church fabric at St Aldate's Church, Oxford (Illustration: R Tyler, OAU)

revealed in three distinct forms. A small area of possible Saxon floor surface was discovered, a miraculous survival amongst the honeycomb of later grave structures (see below) which destroyed any related structural remains. Evidence of a far more tangible nature was revealed in the form of a fragment of fine, carved cross-shaft reused as building stone in a 14th-century wall. Each face of the stone displays single plain relief borders enclosing panels of interlace decoration: the two broad faces display a similar motif of six strand plaits while the narrow faces contain a four strand plait and a 'Stafford Knot' (Cramp 1995, fig 23 p xli, type 23e) respectively. The stone can be dated on stylistic grounds to the mid to late 10th century.

The most significant find came to light at the base of deep excavations within the area of the south aisle, undertaken for the installation of a new total immersion baptistry. Sixteen burials pre-dating the construction of the aisle (*c*1334) were recorded. Of these, 8 were of a form commonly referred to as 'charcoal burials'. All burials were aligned west–east (head to the west) and were in an extended supine position, unaccompanied by grave goods. In each case, the burial was on a bed of charcoal and, in some cases, further covered by a thin deposit of charcoal spread over the top of the skeleton. A series of bone samples was taken from three of the earliest stratigraphically related burials and was submitted to the Rafter Radiocarbon Laboratory, New Zealand for high precision radiocarbon dating. The results were calibrated using OXCAL v3.5 and the results can be summarised as follows:

Site code	Context number	Sample ref	^{14}C Age	Calibrated range @ 2 σ (95%) confidence rating
OXSTAL 99	846	NZA – 12347	1147 ± 28BP	781 AD to 980 Cal. AD
OXSTAL 99	835	NZA – 12349	1210 ± 36BP	690 AD to 940 Cal. AD
OXSTAL 99	855	NZA – 12348	1107 ± 28BP	888 AD to 998 Cal. AD

The results confirm that the burials are pre-Conquest in date.

Charcoal burials of this type are known from a number of sites in England dating from the 9th to the 12th centuries. A number of examples are known from Oxford, most notably at Christ Church where burials have been discovered in the Great Quadrangle (Hassall 1973, 270) and the cloister (Scull 1988, 33). The importance of the cemetery at Christ Church is twofold: it demonstrates the existence of a 9th- or 10th-century religious community and it may imply the existence of a contemporary religious foundation. Examples beyond Oxford include Romsey Abbey (Hants) in the periods AD 800–950 and AD 900–1100 (Scott 1996, 40), St Guthlac's Minster, Hereford (Heref) (Shoesmith 1980, 27) and in the 10th- to 11th-century cemetery at Old Minster, Winchester (Hants) (Kjølbe-Biddle 1975, 89–91). In his discussion of the cemetery at St Nicholas Shambles, London, White (1988, 25) concludes that burials of this type are comparatively rare in early medieval parish church cemeteries and most known examples are associated with cathedral churches. The significance of the burial rite itself remains unclear.

It is becoming increasingly evident that important minsters often, perhaps usually, had two or more subsidiary churches, and that these were frequently set out on axial alignments. Blair has proposed that the Anglo-Saxon minster at Oxford stood on the site of the north transept and north-east chapels of the cathedral; St Aldate's and St Ebbe's further west would lie on much the same topographical axis forming a line of three churches on the northern bank of the Thames, just within the limits of the defended Saxon town (Blair 1998, fig 93). The confirmation of such a theory obviously depends on defining more precise dates for the churches of St Aldate's and St Ebbe's, and establishing the contemporaneity of the three foundations. Activity from the 8th century onwards on the line of St Aldate's, the main river crossing and perhaps the Oxenford has been demonstrated archaeologically (Durham 1977; 1984). In this light, the recent discoveries are particularly significant, supporting the argument for an early origin for St Aldate's Church.

Little was exposed relating to early structural arrangements of the church, the result of extensive internal disturbance caused by grave digging. A total of 46 brick-lined shaft graves and one brick barrel vault were exposed within the church. Shafts were identified within both north and south aisles although the main concentration appears to be within the central section of the nave (Fig 2). Many retained capping slabs while a number contained the fragmentary remains of wooden and/or lead coffins. The Burial Boards Act prohibited intramural burial in the 1850s and the law was variously reinforced by pastoral measures. It is therefore interesting to note that one of the shaft graves exposed within the north aisle at St Aldate's was cut through the footings of the 1832 Underwood extension, suggesting that the grave was dug after this wall became redundant in 1862.

Ric Tyler is Historic Buildings Officer for the Oxford Archaeological Unit.

Fig 2: Shaft graves exposed within nave (Photo: D Stevens, Downland Partnership)

Bibliography

Blair, J, 1988 'St Frideswide's monastery: problems and possibilities', *Oxoniensia*, **53**, 221–58

Cramp, R, 1995 *A general introduction to the Corpus of Anglo-Saxon stone sculpture: grammar of Anglo-Saxon ornament*

Durham, B, 1977 'Archaeological investigations in St Aldate's, Oxford', *Oxoniensia*, **42**, 83–203

Durham, B, 1984 'The Thames Crossing at Oxford', *Oxoniensia*, **49**, 258–67

Hassall, T G, 1973 'Excavations at Oxford 1972: fifth interim report', *Oxoniensia*, **38**, 268–98

Kjølbe-Biddle, B, 1975 'A cathedral cemetery: problems in excavation and interpretation', *World Archaeol*, 7, 89–91

Scull, C, 1988 'Excavations in the cloister of St Frideswide's Priory', *Oxoniensia*, **53**, 21–74

Scott, I R, 1996 *Romsey Abbey: report on the excavations 1973–1991*, Hants Field Club Monograph, **8**.

Shoesmith, R, 1980 'Excavations at Castle Green', Hereford City Excavations **1**, CBA Res Rep **36**

Victoria County History, 1979 *Oxon Vol X*

White, W, 1988 *Skeletal remains from the cemetery of St Nicholas Shambles, City of London*. LAMAS