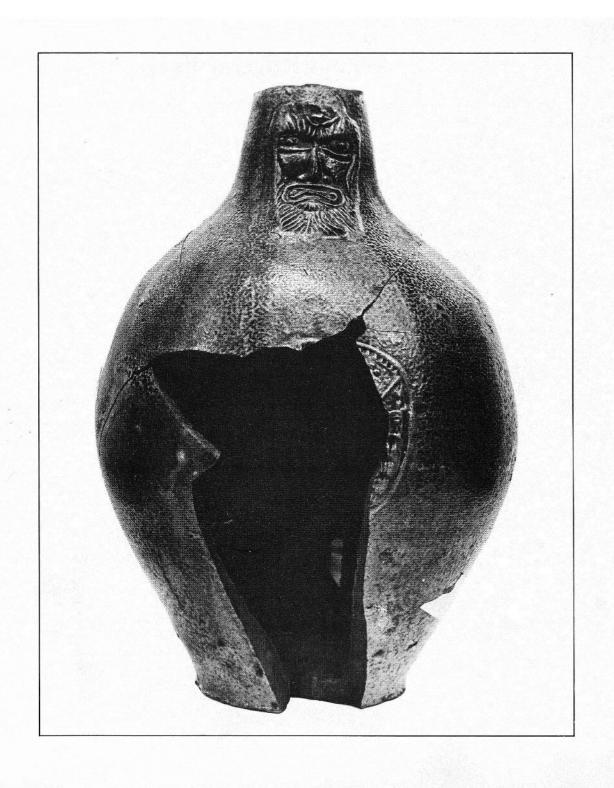


Durobrivae

A Review of Nene Valley Archaeology: 8 1980



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Editor's Note

The wide circulation which *Durobrivae* now enjoys both locally and nationally is due in no small measure to the efforts of Mrs Christine Mackreth over the past seven years. The news that she was to retire as circulation manager came therefore as a great blow. The Editor and the Committee owe her a lasting debt of gratitude; for without healthy circulation figures the Review could not be viable. From now on, sales will be handled by Mrs Lindsay Rollo at the Field Centre.

John Peter Wild

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The cover and title page show a late seventeenth-century salt-glazed stoneware jar with the 'mask' representing Cardinal Bellarmine, found recently at Queensgate. Shown on this page is the late Saxon Hedda Stone from Peterborough Cathedral.

Acknowledgements

Design and layout of this Review were once more in the capable hands of Mr Colin Ashfield of the Peterborough Development Corporation's Design Group, to whom the Committee is most grateful. Credit should also be given to: Miss Linda Purchas for fig 5, Mr Edward Curry for figs 6, 7, 13, 14, 16, Mr R. Powell for figs 10, 11.

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The Year's Work: 1979

by John Peter Wild

It was with great sadness that we learnt of the death of the Earl Fitzwilliam in September 1979. He was a strong supporter of all aspects of local historical and archaeological research and served as Patron of the Committee's Appeal in 1972. On a personal level we shall retain some pleasant memories of him; for the presence of Lord and Lady Fitzwilliam not only honoured, but greatly enlivened, our Commemorative Dinner for their Steward, Mr E. T. Artis, in 1978. Lady Fitzwilliam has our deepest sympathy, and we hope that the interest shown by the family in our work in the past which we value so much will continue in the future.

The planned reduction in public spending by the government and local authorities had begun to bite by the end of 1979. The excavation programme, while not so far materially affected, has been considerably delayed.

At Wansford Francis O'Neill examined a small area of the churchyard which had been earmarked for a northward extension of the church. A number of post-mediaeval burials were recorded, but the hoped-for structural remains of earlier church buildings were not located.

Sites for excavation in the area of the proposed new *Castor Township* have been selected according to carefully weighed criteria. The first to be tackled, however, was disappointing; for its most prominent feature was the foundations of a prisoner-of-war camp of Second World War vintage, and the underlying archaeological landscape was too thin to be worth exploring further.

Archaeological sites photographed from the air over *Werrington* have regularly been masked by natural geological phenomena (see p.7). On the strength of an aerial photograph, however, Donald Mackreth and Francis O'Neill excavated a substantial ditched enclosure of mid to late Iron-Age date (p.23). Evidence was found within it for circular house-gulleys, as at Monument 97 (*Durobrivae* 3, 1975, 26). In the late first century A.D. the site was absorbed into a larger Roman farming unit, which remained active until the fourth century A.D.

During recent fieldwork David Hall noted two mounds in *Orton Longueville* on the floodplain of the Nene (p.13). In view of the threat to them from gravel extraction Donald Mackreth and Francis O'Neill began in the autumn an investigation of Mound 1, which proved ultimately to be an upstanding Bronze-Age barrow. Work on the site continues.

The road-building programme for the Oundle bypass remains a threat — of confusingly variable intensity — to the Iron-Age and Roman settlement at Ashton. The 1979 season was conducted by John Hadman and Stephen Upex as a training excavation, a most successful venture. The area south of Building 1 (Durobrivae 7, 1979, 29f.) was found to contain three first- and second-century ditches, cut in the mid second century by a large pit. Once more the site provided some important dated stratified groups of earlier Nene Valley pottery. The industrial aspect of the site was emphasised by the discovery of another metalworking furnace.

Steadily rising costs have made it even more imperative to select for excavation only those sites which promise to plug some of the most serious gaps in our current knowledge of local and national archaeology. Information obtained about a site in advance therefore is at a premium, and the Committee has taken considerable pains to maintain and augment its sites-and-monuments record. The index of aerial photographs taken each year by Stephen Upex is kept up to date and has provided a most satisfactory basis for forward planning. It is not without its pitfalls, however (p.6).

Recently the Committee acquired its own fluxgate gradiometer and plotting system for detailed site-survey, paid for by its Research and Appeal Funds. Experience in the Nene Valley over the last 20 years has demonstrated the value of such apparatus to us, as Adrian Challands has described below (p.21). Survey by him this year has been directed to the mounds at Orton Longueville and the settlement site at Ashton.

David Hall and Paul Martin have now completed their fieldwalking of parishes in the lower Nene Valley, with encouraging results (p.13). Our knowledge of sites still buried is better than ever before: but we cannot afford to be complacent.

One of the most interesting — almost traditional — discoveries observed by Adrian Challands through his watching brief this year was of a log boat. Sections of it were removed from a site near Whittlesey and dated on geological evidence to c.2500 B.C.

Sound progress has been made this year by the Field Centre on the preparation of excavated material for publication. Work is advanced on the Orton Hall Farm report, and manuscripts on the Fengate and Castor (Elmlea) excavations are nearly complete. Mrs Gay Wilson, our palaeobotanist, should shortly be reporting on samples from Fengate.

The Committee was delighted to hear that Mr Martin Howe has been promoted to Curator of the Peterborough Museum and Art Gallery. We look forward to even closer cooperation between the Museum and the Committee.

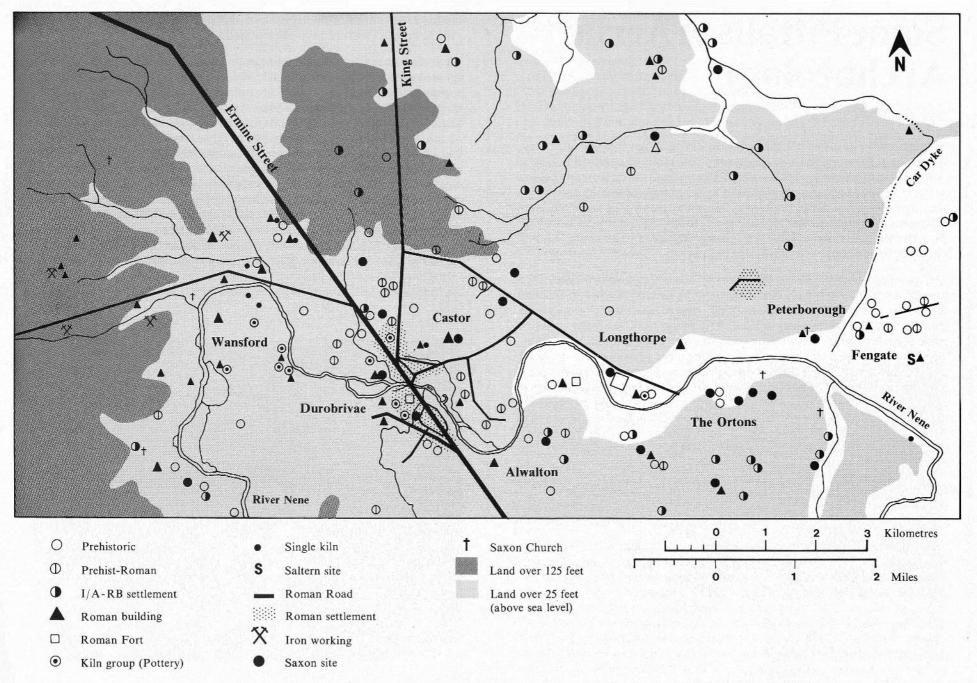


Fig 1 Map of the archaeological sites in the Nene Valley

Some Pitfalls in Aerial Archaeology

by Stephen Upex

'Confessions of an aerial photographer' might be an apt subtitle. In the last few issues of *Durobrivae* I have discussed various sites of a particular date or type. In this issue I want to outline a topic that perhaps is a taboo among many aerial photographers. People who take aerial photographs admit verbally, although not very often in print, that they photograph sites which on later examination are found to have no archaeological connections at all, but which from the air looked remarkably convincing. As I hope to demonstrate, it is very easy to misinterpret features from an aircraft.

The basic reason for the production of a crop-mark, simple disturbance of the subsoil, has been extensively discussed by many writers. Ancient or modern ditches, once cut and eventually re-filled, always retain a higher moisture content than the surrounding subsoil. The filling, too, generally contains more plant nutrients. Thus a crop growing over a filled-in ditch has more plant-food and moisture than crops growing over undisturbed soil. Such plants tend to grow better, reach a greater height and even remain greener for longer due to the underlying reservoir of moisture. The reverse happens when crops grow over stonework or other building materials. The plants seem starved of moisture and plant-food and their growth is shorter and weaker. When ditches and walls are located on the same site, the crop shows great variations in colour and height, as we can see at Castor (*Durobrivae* 4, 1976, 32, fig. 24).

From this it can be seen that any action that disturbs the soil or subsoil, at whatever date, tends to produce circumstances which are capable of providing crop- or soil-marks for the unsuspecting aerial archaeologist.

There is naturally an element of mis-interpretation common to all aspects of archaeology. For example it is notoriously difficult to assign a date or function to mounds in fields. They can range from the true barrow, through various classes of mediaeval monument such as rabbit warrens or windmill-mounds, to post-enclosure weed or ant-hill clearance mounds. At Brigstock (fig. 2) in 1978 a group of mounds was photographed overlying ridge and furrow of mediaeval date. The mounds themselves seemed to be flat topped and each had a small encircling ditch. From the air the date could only be calculated by the fact that they sat on the ridge and furrow, and no use or function could be

assigned to them. Local enquiries showed them to be the remnants of mounds used to support searchlight platforms in the Second World War.

Modern agriculture is notorious for producing marks in fields easily mistaken for real archaeological sites. The 'envelope' effect of a farmer ploughing, sowing or spraying a square or rectangular field by travelling around the field keeping parallel to the hedges can be very misleading. This produces a cross in a square field, or an 'envelope' pattern in a rectangular field. I suggest this has, on many occasions, given false hopes to those who are looking for Roman forts. Even the lines of tractor wheels through a standing or growing crop can, if taken from the wrong height and angle, produce odd photographs. Modern crop-sprays applied from the ground or air also give rise to differential crop-growth and colour if not applied correctly or evenly. Strip-grazing within an electric fence can cause odd linear marks; for the animals stand in lines, eat and at the same time manure a field, providing plant-food for the following season's crop. Manure heaps piled in field corners or distributed in regularly spaced heaps over a field also give rise to crop-marks which last several years.



Fig 2 Searchlight platforms at Brigstock (SP 946859) over ridge and furrow

Filled-in ponds provide blotches on air photographs easily interpreted as very large pits or even certain classes of prehistoric barrow. Quarries of all dates once filled in also need care in their identification. Many have regular edges representing working faces, others are haphazard in their overall plan. Recent removal of many hedge lines also gives rise to new crop-marks developing over the accompanying ditches. Hedges having ditches on either side, once the area is levelled, produce crop-marks closely akin to trackways of proven prehistoric or Roman date.

Geological and geomorphological features give rise to a variety of crop-marks. The gravel soils which are well suited to aerial photography and possibly represent over 75% of photogenic soils in the NVRC's area, exhibit a variety of natural features. They can be roughly divided into fluvial and periglacial. The fluvial features include many thousands of old and now filled water courses, formed as deltaic channels from the outflow of the Welland and the Nene into the Fen basin (*Durobrivae* 7, 1979, 8ff.). They can be of variable date, up to the mediaeval period, but one suspects that the majority were formed before the Neolithic period. Once filled in, these channels act in the same way as filled-in ditches and provide plant-food and moisture which in

Fig 3 Natural geological features and ring-ditch at Werrington (TF 17290412)

turn produces ditch-like crop-marks. Periglacial features are the result of our area being subjected to the cold climatic environment induced by the glacial ice cover of the last Ice Age. Ice veins, wedges and involutions are produced under frozen ground conditions. Extremes of cold caused contractions in the ground and resulted in cracks and splits developing. Over a period of time these cracks grew quite large and have been recorded up to 10 metres wide. During their formation they were constantly infilled with wind blown debris and their own collapsed sides. Viewed from the air today they present themselves as linear, rectlinear or even polygonal crop-marks (fig. 3).

Where archaeological sites sit directly on top of such patterned ground, the results can be very difficult to interpret. As a rule of thumb the archaeological ditches and associated features tend to be sharper and narrower.

The natural features have slightly blurred outlines and are much broader. The 'noise' factor of such natural features is increased if both fluvial and periglacial features occur together.

From a thousand feet I have discovered innumerable new Roman roads. These seemed to appear with the development of Greater Peterborough. Do



Fig 4 Crop-marks of the former aerodrome at Polebrook (TL 092858)

all Roman roads lead to Peterborough? The answer really appears to be: only some. But a large number of pipelines serving various uses do now cross the area and look remarkably like old road-lines. At Fengate during a flight designed to take photographs of the excavation area I recorded in an adjoining grass field a circle of 15 metres diameter and thought it was a ploughed-out burial site. In fact gipsies who were encamped in the area had tethered their horses here and it seems that horses always insist on walking and eating to the very edge of their tether, producing the circular pattern.

In addition to the searchlight emplacements at Brigstock, other features relating to the war effort remain. Disused airfields provide many deceptive types of crop-marking. Often the concrete runways and aircraft standings have been ripped up by huge plough-like machines. They leave the subsoil scarred with a distinct ridge and furrow. Once removed, the concrete still leaves soil-marks and when returned to agriculture crop-marks develop. At Polebrook (fig. 4) the aircraft stands and aprons still show very clearly. Great care needs to be taken when photographing near airfields or former military sites and all suspicious markings need to be checked on the ground.

My biggest scoop of recent years was the near-discovery of the deserted mediaeval village of Milton in Castor parish. It has for long been considered that the Elizabethan mansion of the Fitzwilliams was enlarged over the levelled remains of Milton village in the sixteenth century. Little archaeological or documentary evidence for this has been forthcoming. During 1976, however, I photographed a series of rectangular parch-marks immediately to the north of Milton Hall which looked as though they could represent mediaeval Milton. Alas! The markings were made the weekend prior to my flight. I had in fact spent a long time in the air photographing marks left by Milton garden fete. The rectangles were the outlines of the marquees with the grass trampled down as people walked around inside.

The conclusion to be drawn from this article ought to be reasonably clear. It is essential to check every site, certainly those that look odd or suspicious. Dating or interpreting sites from aerial photographs can only be based on comparison with other known, dated and excavated sites. The need to check sites by field-walking and by basic documentary research is vital. Once in the air I try to look for datable features which either respect or cut across a suspected archaeological site. Hedges or railway lines are useful basic guides, but caution still needs to be exercised. I have seen a huge circle running under a hedge and through two fields that looked remarkably like a prehistoric henge monument. Closer examination from the ground showed this to be a motor bike scramble-circuit!

Key to fig. 5

Vessel Forms (Scale 1/4)

- A. Narrow-mouthed Jar.
- D. Imitation samian form 37.
- B. Imitation samian form 30.
- E. Imitation samian form 18/31.

C. Carinated Bowl.

Motifs (Scale 1/2)

- 1 Form 37. Water Newton 1958. Fairly coarse fabric. Dark grey to dark greyish-brown core. Black external surface. Dark greyish-brown internal surface. Heavily burnished externally.
- 2 ?Form 37 or carinated. Chesterton 1958. Coarse fabric. Grey core. Grey to light brownish-grey surfaces. Unburnished. Decoration almost lost.
- 3 Carinated. Normangate Field 1962-3. Hard, light-grey ware. Burnished.
- 4 ?Form 37. Ashton 1976. Fairly coarse fabric. Grey and red-brown core. Dark grey surfaces. Burnished in places.
- 5 ?Carinated. Normangate Field 1962-3. Grey ware with smoothed surfaces.
- 6 Form 30. Chesterton 1958. Fairly sandy fabric. Dark grey core. Grey-brown surfaces. Lightly burnished.
- 7 Form 37. Ashton 1978. Dark grey core. Lighter grey surfaces. Burnished.
- 8 Form 37. Ashton 1978. Dark grey core. Dark grey to black surfaces. Burnished.
- 9 Form 37. Ashton 1978. Light grey-buff core. Light brown core edges. Dark grey surfaces. Burnished.
- 10 ?Form 30. Chesterton 1958. Dark grey core. Light brown core edges. Dark grey surfaces. Burnished.
- 11 Form 37. Normangate Field 1962-3. Medium to light grey ware. Lightly burnished.
- 12 Form 37. Grandford 1959. Fairly sandy fabric. Grey-brown. Lightly burnished.
- 13 Form 30. Chesterton 1958. Light grey core. Blue-grey surfaces. Burnished.
- 14 Form 30. Normangate Field 1962-3. Grey core. Brown surfaces.
- 15 Form 37. Ashton 1978. Dark grey to grey-buff core. Dark grey-brown to black surfaces. Burnished.
- 16 ?Form 30. Ashton 1978. Buff to buff-grey ware. Smoothed surfaces.
- 17 Form 37. Ashton 1978. Light buff-grey ware. Smoothed externally.
- 18 ?Form 37. Ashton 1978. Light grey core. Black, micaceous, surfaces.
- 19 Form 30. Chesterton 1958. Dark grey core. Light grey to grey-brown surfaces. Lightly burnished externally.
- 20 Carinated. Ashton 1978. Red-brown and grey 'sandwich' core. Dark grey surfaces. Burnished.
- 21 Form 37. Chesterton 1958. Light grey core. Darker grey surfaces. Lightly burnished.

(See page 10 for main article)

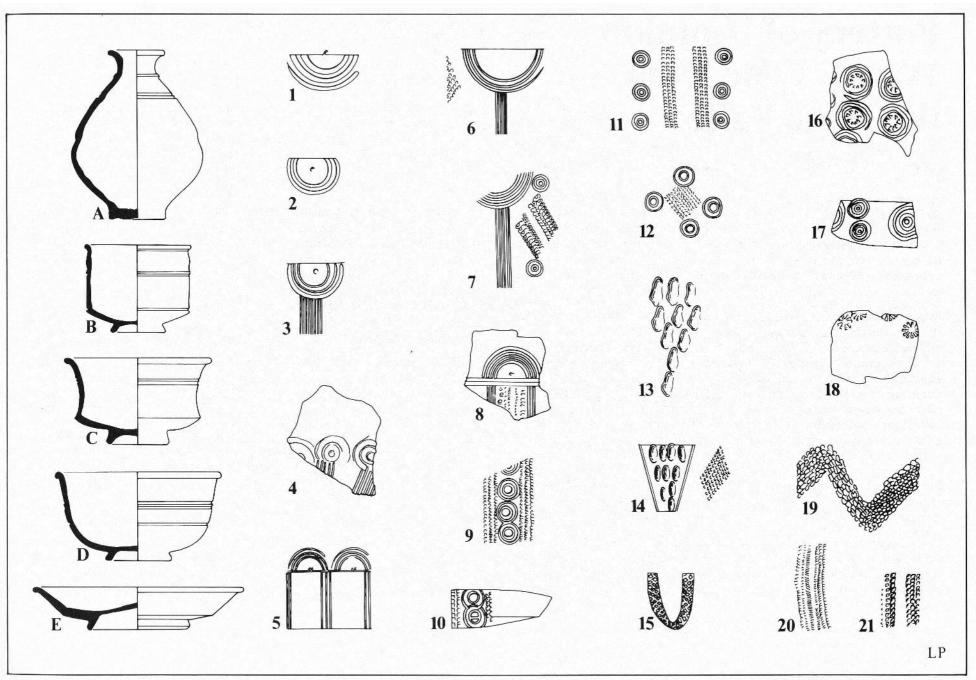


Fig 5 Decoration on some 'London Ware' in the Nene Valley

Pottery of 'London Ware' Type from the Nene Valley

by Robert Perrin

Many of the distribution maps in Dr W. Rodwell's recent preliminary study (1978) of the various wares which have been termed, often erroneously, 'London Ware' show few examples from the Nene Valley. Examples have in fact occurred on most of the sites so far excavated, including Orton Hall Farm, Monument 97, Castor, Water Newton, Werrington (David's Lane) and Billing Brook. Morever, Ashton, Chesterton and Normangate Field have produced quite large amounts, often in well dated archaeological deposits.

The Nene Valley vessels have a wide variety of fabric, form and decoration. The most common forms are imitations of samian forms 30, 31 and 37, but there are also other types of bowl and dish, together with one or two jar forms, and so far one narrow-mouthed jar (fig. 5A-E). The more usual fabric is hard, well-made, and only slightly sandy. The surfaces are usually smoothed or burnished. The fabric core varies in colour from red-brown through buff and grey to dark grey, with one or two having a brown and grey 'sandwich' core. The surfaces are usually a different colour, generally grey, greyish-brown or dark grey to black. One or two may have been slip-coated. Other fabrics are progressively more sandy with one or two examples being so coarse that the decoration is easily lost. These also range from brown to grey in colour. Decoration is even more varied. Pieces can have incised lines and grooves, compass-drawn circles or half-circles, and be rouletted, stabbed, dimpled or stamped. Designs incorporating one or more of these features are common.

It is not certain if any of the wares were locally produced, as no kilns making them have yet been located. There is a vessel in Peterborough Museum, marked 'Water Newton' which could well be a 'second' and is unlikely to have travelled far from its point of manufacture. The wide range of fabric, form and decoration is also perhaps indicative of some local production.

One or two of the motifs can be paralleled outside the Nene Valley, perhaps suggesting trade links, travelling potters, or areas of influence for local potters. The strongest link appears to be with West Stow, Wattisfield and the North Essex centres. Similar designs also occur on vessels from different sites

along the Nene Valley, such as Brixworth, Ashton, Kettering, Orton Hall Farm, Chesterton, Grandford, and Normangate Field.

It seems probable that the main period for production and use of these wares in the Nene Valley was in the first half of the second century. Some of the Normangate Field examples come from pit groups dated by samian ware to c. A.D. 130-150. Others from Chesterton and Monument 97 were also in layers of the second quarter of the second century. Pieces from Castor were associated with Trajanic-Hadrianic samian ware and mortaria. The Grandford sherd comes from a Period 2 layer dating to before c. A.D. 140. The site at Ashton should provide conclusive evidence for the date range; for it was occupied from the conquest period onwards.

A point of interest is that in the first half of the third century the potter INDIXIVIXUS, and perhaps others, working at Park Farm, Stanground (Dannell (1973)) produced stamped wares. It is uncertain exactly how this production relates to that of the earlier 'London Ware' type under discussion, which seems to have ceased around the middle of the second century. This and other aspects of the wares, such as the distribution, full range of fabrics and motifs, and possible links with other areas, are topics for future research.

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The Monastic Church before 1116

by Donald Mackreth

When the foundations for the new central tower of Peterborough Cathedral were duglast century, remains of the east end of the church burnt down in 1116 were found (Irvine (1894)). Part of the restoration scheme of the Cathedral included passageways to allow visitors to view the old walling. Since then a large amount of dirt had accumulated which made appreciation of what was on display difficult. When, in February 1979, snow and prolonged frost stopped all work outside permission was kindly granted by the Dean and Chapter to allow the dirt to be cleaned away.

For the first time in decades the ruins could be seen properly and it has been possible to carry out a new appraisal of them. What can be seen of the walls shows them to have been built of small rag above a base course of fairly large dressed blocks. In places the original hard plaster facing survives in good condition. The only wall to differ significantly from the norm is that marked A-B on fig. 6. Here the exposed south face is clumsily built and contains re-used material. The only other place where this clearly occurs is at C where a dressed block with a plaster face from an earlier building was recorded by Irvine in his papers, now in the Cathedral Library.

Three internal features can be seen. At the extreme east end is a rise in the mortar surface which suggests a platform set against the east wall. Against the face of wall B-D are the remains of a plaster-coated bench, while at E is the stub of a built feature which has usually been interpreted as an altar base; but cleaning showed that there was probably another bench-like feature here.

Other details which emerged were the quoins A and B. At the latter, the base of the quoin is formed by a large dressed block of stone with a projecting chamfer to the east. At A, although the base is not visible, the upper part is built from small pieces of rag, but below what appears to be a rebuild level, itself above the original plaster floor and over an accumulation of burial earth outside the church. What can be seen are three large blocks which look like a basal plinth with traces of rebating on the inside for the face of the wall itself. Perhaps the most interesting detail was that the east-west wall at D had a foundation which ran westwards to the face of the modern passage. The wall itself projects beyond the face of the wall to the north. There is no neat corner and there is likewise no trace of a respond for an arch spanning the entry into the eastern element. It would seem that there was no normal crossing

arrangement, and this removes a difficulty in restoring the known plan; for the east-west axis is half as long again as the north-south one. The only dating known for this building is that it is earlier than 1116 and later than a stone carved with interlace (found under the plaster floor) which may be post-Conquest.

It has long been known that J. T. Micklethwaite carried out excavations in the north-east corner of the cloisters, but, until Irvine's papers and those of Dryden in the Northamptonshire Records Office were examined, it looked as though all that was known of these was the corner of a building (VCH Northants II, opp. p.40). What has come to light is a plan prepared by Irvine and correspondence between him, Sir Henry Dryden and Micklethwaite, who undertook the excavation to prove his hypothesis that the original church of Medeshamstede had a plan like his restoration of that at Brixworth (Micklethwaite (1896), 299-303). Irvine held that what he himself had found under the Cathedral was at best an extension of the church of Aethelwold by Aelfsige to house his collection of relics. Irvine thought that there would be no aisles to the nave while it was essential to Mickelthwaite's views that there were. Neither expected what was actually found (F on fig. 6). The details of the discoveries are unevenly recorded. Irvine was unable to stay for the full term, but what he did record was well done. Micklethwaite's recording suffered from the weather: 'Unfortunately, heavy rain came on yesterday afternoon and I did not measure up all independently as I meant to do . . . ', and Irvine found it impossible to do more than guess where the wall revealed after he left (stippled on fig. 6) should be plotted. Micklethwaite could not fix the alignment or width of the wall properly as each face lay under rain-water or gas pipes. Micklethwaite said that the wall butted the work to the north, but his sketch leaves the matter in doubt. However, Irvine's drawing has the new wall marked in pencil and shows a butt joint. As both men had met after the close of the excavation, it may be that the drawing reflects a considered view. Only re-examination can hope to cast light on this point.

In a letter to Dryden Irvine mentions that 'the only item of a floor . . . places its level at least 3 Steps (sic) above plaster floor' of the early building to the east. The comment is tantalising. It should refer to the area within what might be taken as a very thick east wall in the cloister. If it was a floor, and Irvine was fully conversant with Saxon flooring both here and at Barnack, it would suggest a raised platform, perhaps an altar in the midst of the church burnt out in 1116.

What the building in the cloister may have been is open to question. Perhaps it was the east end of the original church that Micklethwaite vainly looked for. Or it might belong to the church attached to Aethelwold's refoundation. However, it might equally have been a temporary altar set up after the fire. It should be noted that its position lies well clear of the known earliest stages of

the rebuilding; there is no mention in Hugh Candidus of a temporary church, which may be significant as he was a witness of the fire and what happened later. Apparently a large part of the church described as destroyed was capable of being brought into use until 1140 when Martin de Bec led the monks into the new east end.

Micklethwaite's poorly recorded wall, if it is not part of the pre-1116 church (as it could be) may represent a temporary wall built to cut off the area where the masons were working from the monks in their damaged cloister. It is tempting to think, however, that the 'only item of a floor' was made up of plaster and that it belonged to the pre-Danish church of Medeshamstede, now largely under the grass and gravel of the cloisters beside the church which was finally dedicated in 1238 and survives substantially unaltered today as Peterborough Cathedral.

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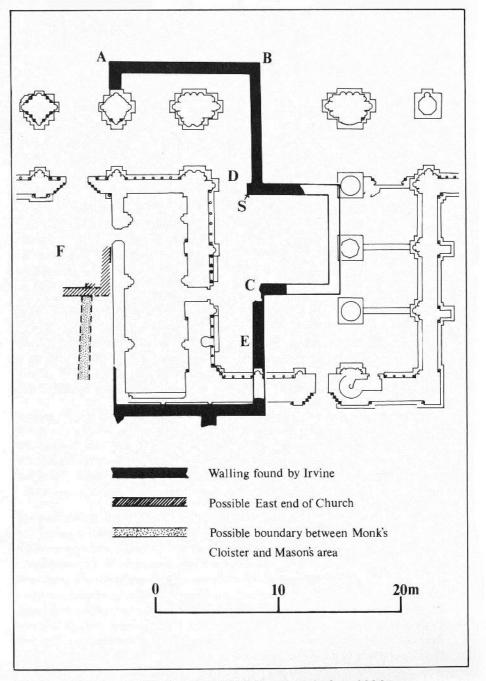


Fig 6 The monastic church of Peterborough before 1116

Fieldwork Survey of the Soke of Peterborough

by David Hall and Paul Martin

The present project began in 1974 when Adrian Challands invited us to record some ridge and furrow. We were engaged in a long term field-by-field survey of the whole of the historic county of Northamptonshire and were interested in that part of the county within the Nene Valley Research Committee's area. A three-year project was set up with grants from the Committee and Peterborough City Council to cover the whole of the Soke of Peterborough, except Borough Fen (45,000 acres).

The Soke of Peterborough lies on a ridge of Jurassic rocks and clays rising to just over 100 feet O.D., flanked by the gravels of the Welland on the north and the Nene on the south. The eastern part falls to the western edge of the Fen basin. The region is thus in a prime position for settlement of all periods. The rich loams of the river gravels attracted early agricultural communities; on either side the major rivers formed access routes inland, and to the east lay the extensive resources of the Fen for fowl, fish, fuel and fodder. The western boulder clay region offered woodland.

Much archaeological information was already known (RCHM (1960); (1969)). Aerial photography by the Committee has added to the picture. The present survey sought to put the whole region in context by trying to identify the complete settlement pattern, and to find the kinds of site not normally detected by aerial photography. Another aim was to record the ridge-and-furrow pattern with a view to identifying the mediaeval landscape using the surveys in the Peterborough Abbey manuscripts and in the muniments of the Cecil and Fitzwilliam families. Our fieldwork technique was to walk every field in 30 metre strips when in a ploughed, weathered state. Earthworks and concentration of flints, sherds etc. were recorded on a 1:10560 map. The results for the pre-mediaeval period are summarized on fig. 7.

Mesolithic material was limited to light, generally sandy soil, and as expected few sites were identified. Neolithic sites were represented by concentrations of worked flint, burnt stones and fragments of polished axes. Light soils were again preferred, particularly the heath regions of Barnack and Wittering. In spite of the large number of ring-ditches known few Bronze-Age settlement traces were found in the river gravels. At Orton Waterville an unploughed earthwork barrow partially buried by alluvium was identified.

Many new Iron-Age sites were recorded, some associated with previously undated crop-marks. At Deeping Gate an Iron-Age site yielded a piece of decorated Hunsbury ware — hitherto not found so far east. New Roman sites were identified on heavy ground and on the river gravels. At Marholm a site yielded a lead (repair) plug with *chi-rho* and *alpha-omega* graffiti. At Ufford the bowl of a silver spoon was discovered.

Perhaps the most exciting discoveries were the many Saxon sites. Most of them lie on the Welland gravels, but the largest (30 acres!) is at Castor — further evidence of the early importance of this village.

We were able to date by our fieldwork all the dense areas of crop-marks. Pre-Iron-Age sites were found on light soils only, especially sand, while Iron-Age and Roman sites occur on all types of soil. Saxon material is again limited to light soils, especially river gravels. No Saxon material was found on the boulder clay area in the west of the region. Here there are ramparted remnants of mediaeval woodland, and an abundance of iron-working sites that probably represent woodland clearance.

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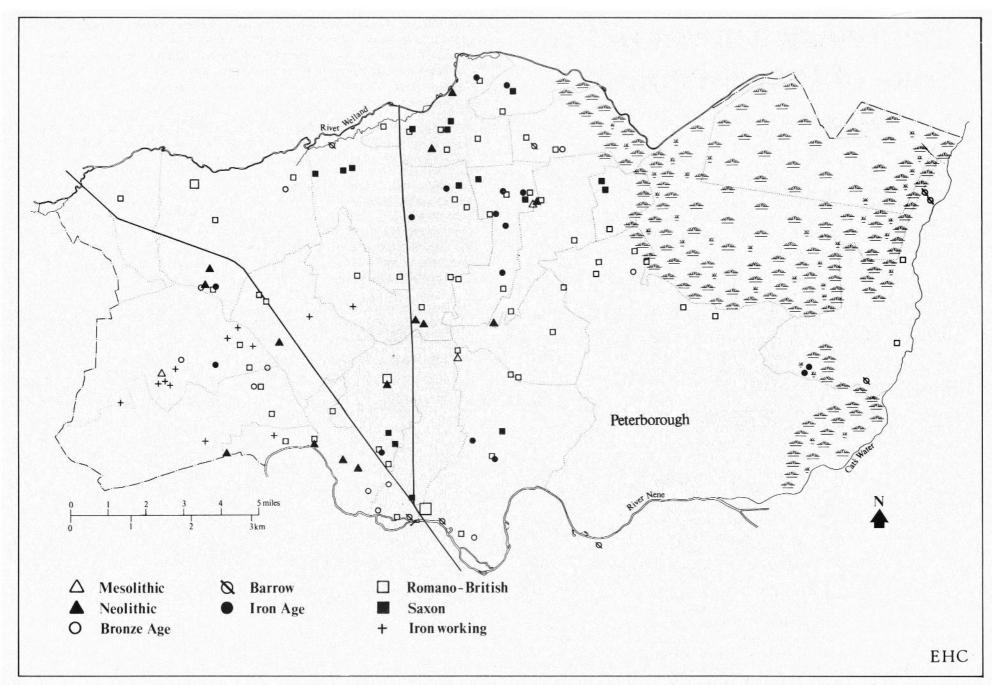


Fig 7 Pre-mediaeval finds from fieldwork in the Soke of Peterborough

Raising the Fengate Dead

by Francis Pryor

Visitors to the new Archaeology Gallery at Peterborough Museum can hardly fail to notice the case containing the earlier Neolithic multiple burial from Fengate. At first glance the casual visitor may notice nothing unusual about this exhibit, for bodies, particularly skeletons, are frequently encountered in our provincial and national museums. The big difference between the Peterborough display and those clsewhere is that the Peterborough bones have not been disturbed since their interment some 5000 years ago. The small, flint leaf-arrowhead that killed the young man whose crouched skeleton is so well preserved is still lodged between his eighth and ninth ribs, in the position in which it killed him, either as a straightforward wound or more probably as the result of subsequent infection.

This article will be given over to a detailed description of how we lifted the bodies intact and what subsequent measures were required to render them stable and suitable for permanent exhibition. First, however, the burials should be briefly described.

The earlier Neolithic multiple burial considered here was found in the 1975 season of excavation at Fengate on the Cat's Water Iron-Age settlement site. The burial itself was described in more detail elsewhere (Pryor (1976)) and the circumstances of the find are outlined in Durobrivae 4, 1976, 10-12. The principal points of interest were as follows. The remains of four individuals were found in one large grave which the stratigraphy proved to predate the later Iron Age. Other criteria led us to suspect that the grave could possibly be very much earlier than that, and these suspicions were subsequently borne out. The body of a young man was the first to be discovered. He was buried in the crouched position, lying on his back, with his legs drawn up to the right, and his lower arms placed over his chest (fig. 8a). At his feet were the remains of a baby, but these were much decayed and it was difficult to determine whether the body had been disturbed after burial, or not. It could not be raised intact and is not on display in the Museum. This gap in the grave-group is indicated by a narrow aluminium strip in the completed display. Beyond the baby were the semi-articulated remains of a young woman and child. These bones were either placed in the grave after a short period of exposure above ground, or else had been pushed to one side to make way for the young man's body. On balance, the former explanation seems the most probable in view of

the absence of loose bones in the area where the young man lay; for it would surely have been difficult to have accounted for every single loose toe and finger joint, had the much-decayed bodies simply been pushed to one side. The principal interest of the grave-group, however, lies in the Neolithic arrowhead which caused the young man's death. This fine flint point helps to date the burial and, it must be admitted, does improve the display value of the exhibit, since early examples of homicide in Britain are very few and far between (Pryor (1976) for other examples). The social implications of the Fengate multiple burial have recently been discussed by Whittle ((1977), 219).

Turning now from these rather grisly topics, let us consider the technical problems of physically raising the dead. First, the bones were very soft and generally poorly preserved, largely due to the action of soil acids during the five millennia since the bodies' burial. Second, the late summer and autumn of 1975 was very unsettled: storms hovered around the site and one serious downpour would have ruined the eventual exhibit; for it was impossible to rig up rain-shelters, given the size of the area we were using, the problems caused by chemical fumes and the strength of the winds.

We therefore had to act fast and the whole process of consolidation and lifting took just three days, from the inception of the idea to the bodies' temporary storage in the Museum of Archaeology and Anthropology at Cambridge. Many local individuals and firms rose to the occasion splendidly and I have acknowledged a few of them below. Those whom I have omitted to mention must forgive me, but 1975 seems a long time ago — even if one is accustomed to dealing with millennia in one's day-to-day work.

The preliminary stage in the operation was to dig a large hole around the burials so that we could work on them comfortably. This was done by machine. The next step was to recognise that the baby's bones could not be raised and that the lifting could best be accomplished if the bodies were raised in two blocks: one for the young man, the other for the woman and child. The technique employed for both blocks was identical, so we shall only consider the lifting of the young man here.

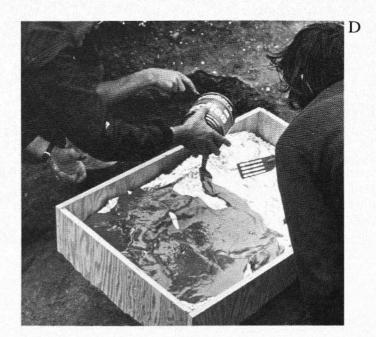
The first stage of the lifting operation proper was to consolidate the cleaned bones in PVA — a clear, hard-setting plastic solution — and then to chip carefully away the ground beneath the bones in such a way that the consolidated body lay atop a neat square pedestal of sand and gravel. The dimensions of this block were predetermined, and while this work was going ahead, another team bought thick plywood and made a stout four-sided frame which was lowered over the pedestal (fig. 8b). This operation was not as straightforward as it sounds; for gravel pebbles are not conveniently cut to size





Fig 8a, b, c, d Raising the dead at Fengate: first stage





and great care had to be taken to ensure that the loosely-packed sands and gravels which made up the pedestal, did not suddenly collapse.

The bottom of the frame was then temporarily sealed with packed damp sand to prevent further collapse and the bones were carefully covered with aluminium foil, weighted down to prevent it blowing away (fig. 8c).

Liquid polyurethane foam was then poured over the foil (fig. 8d). The foam soon started to react and had to be kept in place by a newspaper-lined plywood lid (fig. 9a). The bones were now sufficiently consolidated beneath the hard-setting foam to allow us to start the vigorous work of under-cutting the pedestal. This was achieved by placing a sheet of ½ mild steel, chamfered along one edge so that it cut upwards, towards the frame, immediately beneath the plywood (fig. 9a). The sheet was then gently hammered into the pedestal, loose gravel pebbles being removed with a slater's rip — a tool normally used to remove nails from underneath roofing slates (fig. 9b). After much rather tense work, the sheet was hammered right through (fig. 9c) and the block — all four hundredweight of it — was lifted clear of the gravel (fig. 9d) into a waiting vehicle for transport to the University Museum at Downing Street, Cambridge, where it was temporarily stored over winter.

I returned to Canada for the winter and visited the Museum at Cambridge on my return. A close examination of the two blocks showed that minute hair-line cracks were beginning to develop and it was quite apparent that conservation was urgently required. The cracks were caused by the slow drying-out of the grave floor and tell-tale traces of dry sand could be seen around the exhibit, confirming our fears. It was decided, after consultation with those who had helped with the original operation, to invert the bodies and replace the loose sand and gravel on which they lay with glass fibre chopped-strand mat. This was achieved by re-embedding the bones in foam. Specially-made roll-over jigs were then used to turn them upside-down, in which position they were transported back to the site laboratory at Fengate for further conservation.

The inverted bodies were then in effect excavated from the underside up: loose gravel-filling and natural gravel subsoil was removed until material which had been consolidated in PVA, applied from the other side, was encountered. Further PVA was added, and then glass fibre mat was applied. By now the bones were securely backed with fibre glass and the whole block only weighed a few pounds. It was not difficult, therefore, to re-invert it and remove the foam for the last time. Final cleaning was carried out in the Development Corporation Model Makers' Department and a fine case was made for them there. The display had its first public appearance at the 1976 East of England Show where it was keenly appreciated by the Queen Mother. Little could Her Majesty have realised just how much, skill, time and effort,

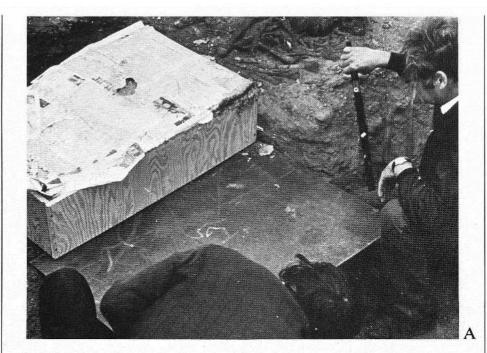




Fig 9a, b Raising the dead at Fengate: final stage





Fig 9c, d Raising the dead at Fengate: final stage

on the part of so many people, had gone into that single small display case. We all hope the visitor to the Museum will think it worthwhile.

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Acknowledgements

As mentioned above, this work could not have been successfully achieved without the unstinting help of many people. The principal brains behind the project were Mr Pat Smith and Mr Bernard Denston (Cambridge) and Mr Peter Shorer (British Museum). Charles French took the photos and applied the fibreglass mat. Mr Eric Ricketts and Mr David Rayner made the case and did most of the pre-display delicate conservation. The metal sheet was cut to size and donated by F. W. Brown (Engineering) Ltd, Newark Rd., Peterborough and the jig was built and transport provided by Quest 4, Ashton, near Oundle. Facilities in the Museum at Cambridge were kindly provided by Miss M. D. Cra'ster.

More Finds from the Fens

by Maisie Taylor

A Bronze-Age palstave and socketed spearhead were recently brought to Fengate by a local farmer's wife. Both items were found on a farm near Peterborough. We have decided, however, not to publish precise details of the findspots here as several local farmers have expressed concern about the activities of unauthorised metal-detector users in the area. Full details have been lodged with the appropriate sites-and-monuments record.

The two bronzes are generally in excellent condition, although both were treated for patches of bronze disease by Robert Bourne at Fengate. The fields where they were found are situated on the edge of a Fen island on land where the underlying clay is being ploughed to the surface. The palstave was actually found in a clod of clay in a potato field. The locality where the bronzes were found is one of the areas where Mr David Hall, Cambridgeshire Archaeological Committee's Fenland Field Officer (see p. 13), is planning intensive field-walking. It will be interesting to see if any settlement evidence is revealed by his survey work. The large number of stray bronze objects in the Fens suggests that considerable activity of some kind was going on. It is difficult to estimate the full extent of the distribution of Bronze-Age metalwork in the Fens, partly because so much remains in private collections and partly because so little systematic survey has been done in the area. The work of David Hall, we hope, will solve many of the problems caused by the lack of survey. It is apparent, however, that a good many finds have been made in areas that would have been Fenland in the Bronze Age. This point was considered by Francis Pryor in his account of some Fenland metalwork of the Bronze Age in Durobrivae 6, 1978, 14, and again by the present author in a survey of prehistoric sites in the Fens north of Cambridge (Proceedings of the Cambridge Antiquarian Society, forthcoming).

The Spearhead

The spearhead (fig. 10) is leaf-shaped with a slight bevel on the blade. The socket is broken, but the top of one side-loop remains. The spear is 12.4 cm long with the blade 5.0 cm wide at its widest point. It weighs 120 grams. Leaf-shaped spearheads with side-loops were mainly produced in the Middle Bronze Age and the larger examples are generally accepted to have been thrusting rather than throwing spears.

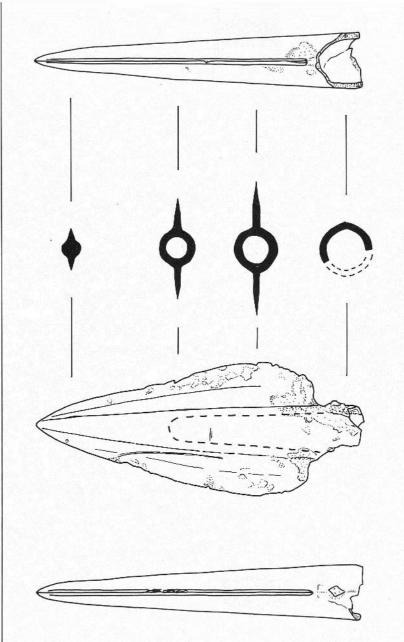
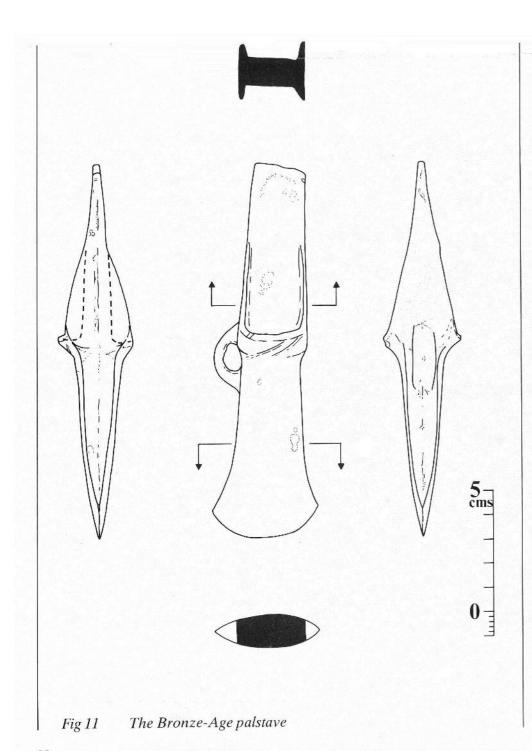


Fig 10 The Bronze-Age socketed spearhead



The Palstave

The palstave (fig. 11) is plain, looped and is comparable with the 'late' palstaves belonging to the Wilburton Complex of the Late Bronze Age. It is 15.5 cm long with the blade 2.4 cm wide at its narrowest part, flaring to 4.4 cm at the cutting edge. It weighs 400 grams.

An important and possibly unique feature of the palstave is that it retains the impression of a cord in its loop. The corrosion products of the bronze formed around the cord which then decayed. The impression of the cord is approximately 3 mm wide and shows a strong clockwise (S) twist. There are three twists in the 9 mm long impression. The surface of the impression is quite smooth and this, taken with the tightness of the twist in the cord suggests that the fibres which were used to make the cord must have been fairly fine. The cord impression is in the part of the loop furthest away from the cutting edge. This would be in keeping with the method of hafting illustrated by Langmaid (1976). The palstave was bound to its haft with the cord passing through the loop to make it more secure, and prevent it flying off, if the awkward elbow-shaped haft should break.

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Magnetic Geophysical Prospecting

by Adrian Challands

Over the last decade costs of archaeological excavation have risen dramatically due to a number of factors, including the high cost of removing topsoil on large sites. In order to clear archaeological sites for essential development quickly, expensive earthmoving machinery must be employed. As archaeological funds are limited, the maxim must increasingly be to make the most of available time and equipment.

Aerial photographs that show buried archaeological sites in the growing crop are a valuable technique for site location and preliminary interpretation (*Durobrivae* 7, 1979, 26f.). One problem is that most aerial photographs are oblique and difficult to plot on a map with a degree of accuracy which could save excavation costs. In addition, depending on the underlying geology, type of crop and the ground's moisture content, up to 90% of the archaeological features may not show up at all!

Archaeological geophysical prospecting is a rather off-putting technical term for what amounts simply to measuring the differences between the archaeological and the normal properties of the subsoil. Its main value lies in its ability to pinpoint archaeological features which may or may not show up on aerial photographs. So excavation costs are reduced and information is gained in advance of excavation.

In 1958 the Waternewton Excavation Committee, later the Nene Valley Research Committee, was one of the first archaeological organisations to employ magnetic geophysical methods to plan a series of rescue excavations on part of the suburbs of Durobrivae which were destined to be destroyed by the re-alignment of the A1 trunk road. Dr Martin Aitken of the University of Oxford Research Laboratory for Archaeology and the History of Art had developed an instrument for detecting slight changes in the earth's magnetic field, known as a Proton-Magnetometer. Most clays when burnt attain appreciable magnetic properties and this means that Roman pottery kilns are an ideal subject to seek and locate. Dr Aitken and his team rapidly surveyed the road-line and achieved their objective of accurately locating a number of Nene Valley Roman pottery kilns (Hartley (1972), 13-15). During the survey, an exceptionally important observation was made, that the instrument was also capable of locating weakly-magnetic pits and ditches. Thus the archaeological survey-potential of the instrument was widened.

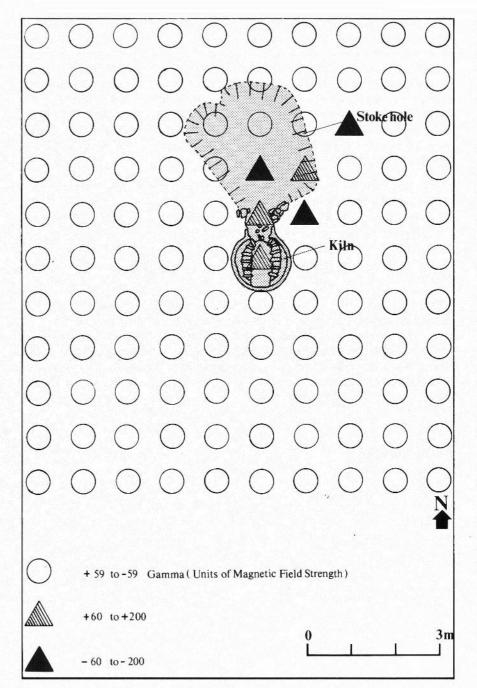


Fig 12 Geophysical survey of a Roman kiln at Stibbington

The proton-magnetometer is subject to considerable external magnetic interference caused by wire fences etc. To overcome this problem two detectors, one above the other, were employed; the resulting reading represented the strength of the archaeological anomaly deducted from the external magnetic effects. An improved and simplified version of this system, known as the 'Proton Maxbleep', was developed and commercially manufactured. This was the instrument which in past years the Committee borrowed or hired from various institutions and used to carry out major surveys within the New Town area at such sites as Normangate Field, Longthorpe and Orton Hall Farm.

The Committee has always kept abreast of progress in geophysical surveying techniques and when the 'Proton Maxbleep' went out of production and became increasingly difficult to repair, an alternative improved instrument was sought. Ultimately, in 1979, the Committee approved the purchase of the easily portable Fluxgate Gradiometer which has the added advantage of giving a continuous reading. With this instrument linked to an automatic plotting system instant site-analysis may be obtained.

Roman pottery kilns at Stibbington, first located by Dr Martin Aitken in 1968 using a proton-magnetometer and excavated in 1969 (Wild (1973), 135-138), were left *in situ*, providing a useful realistic test-bed for geophysical instruments. It was on this site that the new Fluxgate Gradiometer was tested. The appended small section of the survey shows large positive and negative readings where the kiln is situated. The furnace and stoke-hole of Kiln G are shown superimposed over the readings.

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Industrial and Vernacular Architecture, 1979

by Richard Hillier

The demolition continued of the Power Station at Peterborough. The main part of the 1948-51 station was dismantled, but the old 1898-1901 station has not yet been touched.

Some houses in New Road (nos 49-53), dating from the 1870's, have been demolished as part of the development for Peterborough Motors. And a row of houses in Bright Street dating from the 1880's has been demolished, whilst the opposite row (of the late 1860's or early 1870's) has been renovated. Seventeen houses in two small rows in Bourges Boulevard (nos 12-36) have also been demolished: these dated from 1897 to 1905.

In the city centre, the rear of Browns' former property (nos 8-8a Church St), was pulled down. Although it proved impossible to inspect the two small wings to this property, the evidence is that they ought to have been of at least eighteenth-century origin.

During the year the demolition of the main part of former Trinity Presbyterian Church at the junction of Trinity St and Priestgate took place. This part was built about 1864 behind an existing house (retained for offices) when the church was established.

The local radio station — Hereward Radio — has taken over the former Rose & Crown public house in Bridge St that had been vacant for several years. The buildings, probably dating from the early part of this century, are being altered, and additions are being made to form the studios.

As we have recorded much of the demolition in the Queensgate area in past issues of *Durobrivae*, it is pleasing to follow this by recording progress on the development in that area. The superstructure of the new shopping complex is beginning to make an impact on the pedestrian. The frontages to Long Causeway and Westgate are now stretching skyward, and views of the construction can be had from the Cumbergate-Westgate Arcade link. Indeed, the temporary footbridge which made this link for several months will no doubt be remembered by many for a long time!

Werrington: an Iron-Age and Roman Site

by Donald Mackreth and Francis O'Neill

The site at Werrington, recorded on a high-level vertical aerial photograph taken in 1964, showed as a single enclosure. It was excavated in advance of development in the expectation that it might be Iron-Age in date and would provide some evidence for the economy of the Fen Edge. The site was more complex than the aerial photograph suggested (fig. 13), being overlaid by a Roman site lying to the west.

Period One

The primary enclosure (black on fig. 13) may have been isolated, but the excavation limits could not be extended north and west to prove this. The boundary ditch was substantial, being 3 to 4 metres wide and over 1.75 metres deep. The deposits in the ditch did not yield evidence for a bank, but the internal features on the north and east stop short of the ditch, and this itself may be suggestive. A site in such an exposed position would have needed some shelter from the north-east at least. The only evidence for an entrance was in the south ditch close to the south-east corner. Here, the bottom of the ditch rose suggesting that there may once have been a causeway; but, by the time the deposits in the ditch were beginning to accumulate, any such had disappeared and may have been replaced by a bridge. A post-hole, suitable for a post some 40 cm across, was found in the middle of the ditch, while on the inside edge, and inclined to the south at an angle of 30°, was another which may have been a brace.

Inside the enclosure, and slightly off-centre, was a large ring-ditch about 15 metres in internal diameter and some 2 metres wide by 0.75 metres deep, which had a V-shaped profile. On the eastern side was a break 3.6 metres wide. Although various features were found inside, they all appear to belong to a time when the ring-ditch had gone out of use. To the north of the ring-ditch was a house site, internal diameter of which was c. 9.5 metres. The gulley defining the house was narrow and there were traces of posts having been set in it. The ring was not continuous nor of even depth. The entrance faced north-east and there were no internal features. A mediaeval headland ran down the eastern half of the site and the rest of it was cut about by furrows. (This accounts for the large break in the house on the western side.) Very slight traces of a house on the south side of the main ring refused to resolve

themselves and it had probably been ploughed away in mediaeval and later times.

Of the other features inside the enclosure which can be assigned to this period reasonably safely, those to the south and east of the house site seem to have been laid out in relation to that rather than the main ring, but may have acted with the latter in defining functionally separate areas. In the north-west quadrant was a long and deep trench which may have been used as a latrine, while in the south-east corner lay a hearth with a limestone core.

The date of Period One is based upon a preliminary examination of the finds, which suggest that the site may have started in the first century B.C. or earlier, and the primary occupation came to an end in the first decade after the Roman Conquest. Amongst the finds were thatch-weights, baked clay fragments and lumps of slag. Fragments of these occurred in later contexts, but they are probably all derived from Period One.

Period Two

The lack of domestic features in this and the next period suggests that Period Two (hatched on fig. 13) began with a marked shift of occupation which the subsequent development of the site as well as surface finds suggest was now placed to the west. Throughout this period the original enclosure survived as a substantial earthwork and the plan indicates that the enclosure was subsumed into a larger layout. Some re-definition of the main enclosure took place, principally in the north-west area.

Even though the early site was now part of a larger scheme, it was maintained as an entity and its layout shows that most of the incident was on the side next to the new focus. On the plan, the dominant feature lies in the north-east quarter. Superficially, it appeared to be a pond. Excavation showed that it was only 10-20 cm deep and it may have been the result of the area having been used as a crew-yard.

The dating evidence suggests that the centre for the re-organised site was established towards the end of the first century A.D. and that the old earthworks had been incorporated sometime near the beginning of the second century. Thereafter, the yard continued to be used in one form or another to the end of the third period.

Period Three

There appears to have been a major change in the layout of the main site in Period Three (stippled on fig. 13), at least so far as the excavated area is concerned. The eastern side of a large enclosure can be seen, with a return west at the north end and possibly an entrance in the south-east corner.

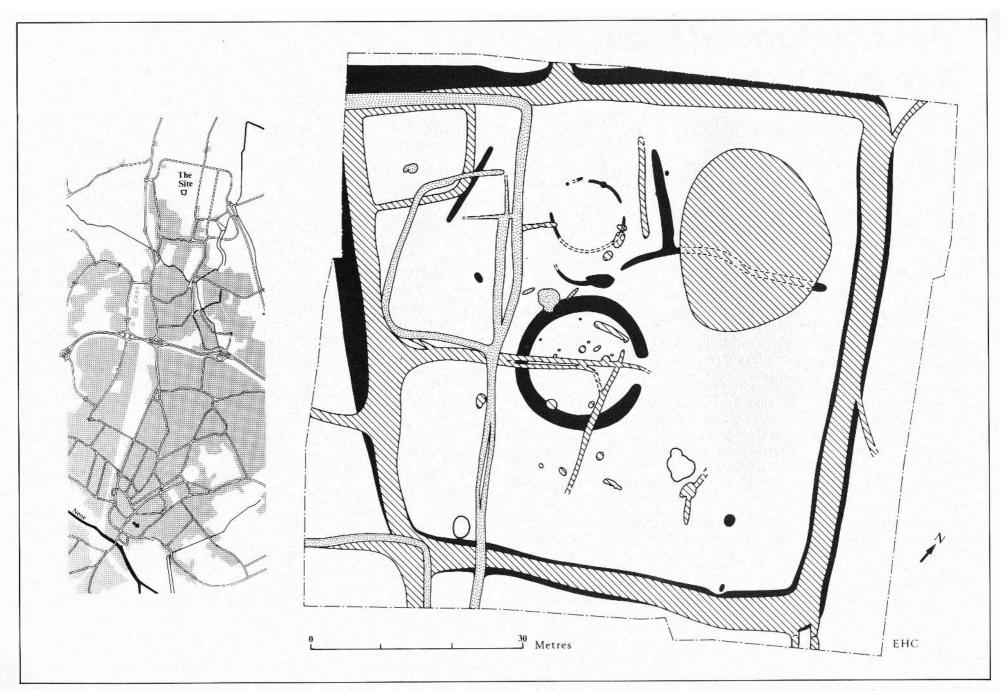


Fig 13 Plan of the Iron-Age and Roman site at Werrington

Attached to the centre of the east side is a small enclosure. It seems clear that by the time the new work was carried out, the western part of the original enclosure had become largely obliterated, but the eastern ditch had not filled completely, as fourth-century pottery was found in the upper filling.

Period Three began sometime in the third century and ran into the fourth, but it is uncertain for how long. There was certainly no Early Saxon pottery of the kind found at Orton Hall Farm (*Durobrivae* 2, 1974, 19) and there were no later features before the imposition of ridge and furrow. Without stripping the whole of the Roman complex, it is not possible to tell whether or not the fourth-century content of the excavated sample is typical of the whole.

Little can be said about the economy of the site, as only the snails have been examined so far (p. 26). However, the analysis seems to show that, both early and late, the area was largely grass and hence the essential economy should have been based upon animals, but what kinds and in what period must await the examination of the bones.

It had been hoped that much of the Roman complex in Werrington would be excavated in order to provide a useful comparison with Orton Hall Farm or with sites in the Fens or on the Fen Edge. However, the degree of plough damage is such that the allocation of large-scale resources to such a project promised only a very limited return.

The only features on the site which proved not to belong to the main run of its development are shown on the plan as plain with a thick outline. The south-western one produced an assemblage of pottery, all in small pieces, with a fair amount of animal bone, but with no pottery which can be assigned to the Late Pre-Roman Iron Age or later. It seems that the pottery can be paralleled in earlier Iron-Age contexts and that its date may be in the sixth or fifth centuries B.C.

A small selection is illustrated (fig. 14). The fabric is uniformly shell-gritted with two possible exceptions, which may be tempered with a very fine sand. The forms are mainly cooking pots with two or three bowls, an object which looks like a cresset, and a lid-like pot with a carefully made hole in the centre. Decoration is sparse: a few rims have finger-nail marks on them and two shoulders have finger-tip impressions.

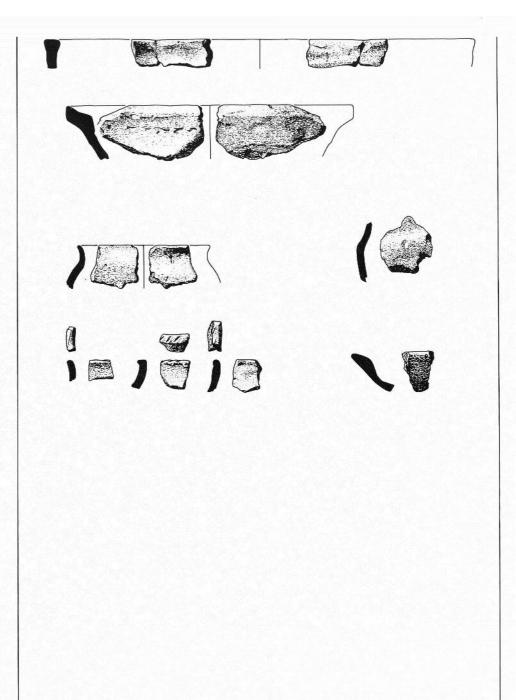


Fig 14 Some early Iron-Age pottery from Werrington

The Molluscs from the Werrington Enclosure

by Charles French

The settlement enclosure at Werrington (TF 16640390) is situated within the watershed of the River Welland on a Fen gravel subsoil overlying Oxford Clay at c. 11 metres O.D. Its occupation probably began in the Late Iron Age, but the main enclosure ditch probably remained open into the fourth century A.D. (p. 23). Samples for molluscan analysis were taken from the large enclosure ditch and the results are presented here in the form of a relative histogram (fig. 15). The enclosure ditch was infilled with silt loam with gravel (0-170 cm) and clay with gravel (170-200 cm).

The molluscan assemblage in the lower two-thirds of the enclosure ditch is dominated by freshwater species. The low numbers of exacting fresh-water species and the dominance of tolerant and slum species suggest that the water conditions in the ditch were poor and subject to change. These species are important as they are often found on prehistoric sites on river gravels in ditches, such as at Maxey (Cambs) (Evans (1972)), Fengate (Cambs), and Billingborough Fen (Lincs) (French (1980)). In particular, the alternating dominance of the tolerant and the slum groups of species indicates that the ditch was probably subject to alternate periods of drying out and stagnation, standing and slowly flowing water. But the time scale during which the ditch existed, three to four centuries, and the apparently slow natural infilling suggests that the picture represented by the molluscs is probably a compressed version of the actual events.

Although it would be easy to ascribe the presence of freshwater on the site to deteriorating climatic conditions, it is more probable that it is due to local subsoil and groundwater conditions. The exceedingly sticky clay loam with gravel subsoil drains very slowly and thereby creates considerable run-off. Consequently, the ditch was as much dug for drainage as for any other purpose. The land-snail species are incidental, either being washed in or having rolled in, until the ditch was all but infilled and had become a terrestrial habitat. The site then probably supported a damp, undisturbed grassland habitat.

Samples were also taken through the silt-loam infill of the internal ring-ditch. But the molluscan assemblage was not abundant enough to represent on an histogram. This was due to a combination of the lack of waterlogged conditions and borderline calcareous conditions. Nonetheless, the species

represented are similar to those found in the upper third of the main enclosure ditch, and suggest damp, open and undisturbed grassland.

Conclusions

- 1. The molluscs were largely preserved due to the waterlogging of the ditches, rather than to a calcareous subsoil.
- 2. The relatively impervious and slow-draining subsoil of clay loam with gravel made drainage a necessity and run-off a considerable problem. Poor drainage was part of the reason for the massive enclosure ditch around the settlement site.
- 3. The freshwater molluscan assemblage only reflects accurately the habitat conditions within the ditch itself; but the site was evidently subject to changing groundwater conditions.
- 4. Whether the site was used for arable, pasture or fallow land during the Roman period is unknown, but by the third or fourth centuries A.D. damp, open grassland had become established.

I would like to thank Mr D. F. Mackreth and Mr F. E. O'Neill of the Nene Valley Research Committee for allowing the writer to take and analyse samples from Werrington.

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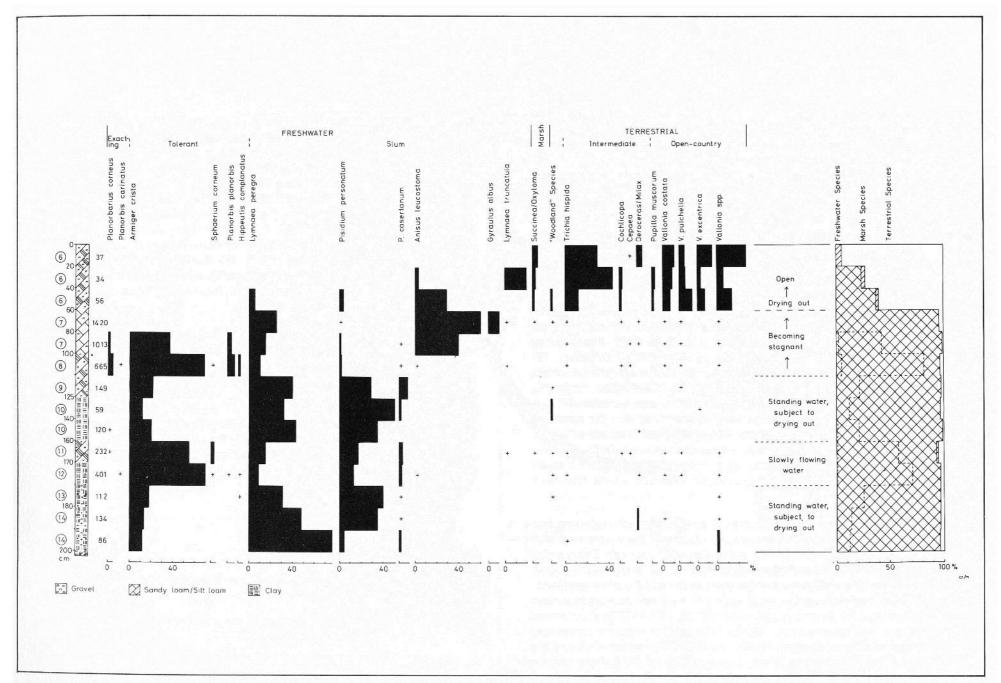


Fig 15 Histogram of the molluscan assemblage from Werrington

From the Museum

by Martin Howe

The village of Eye in Cambridgeshire was the home of the Leeds family and the birthplace of Mr E. T. Leeds, the great pioneer of the study of Anglo-Saxon archaeology. Thus it is particularly apt that the objects here described should belong to the Anglo-Saxon period and were discovered at no great distance from Eyebury Farm, the home of the Leeds family.

The funerary pot and brooch which are the subjects of this article have been in the collections of the City Museum and Art Gallery since the early years of this century, but have never been accessioned; for until recently little was known of their provenance and history. Such information as was available was limited to two hand-written labels on the pot and the knowledge that the pot and the brooch had been found together. The labels, one stuck to the interior of the pot and the other on its base, read 'S. Egar' and 'Peterborough' respectively. The 'S Egar' mentioned was a local man, Mr Samuel Egar, who had been Agent to the Earl Fitzwilliam and who observed and noted details of his surroundings. However, the information relating to the objects here considered, although in part obtained from Egar, is to be found in the notebooks of George Wyman Abbott, the celebrated local antiquary. He recorded details of finds made in a ballast pit under what is now the Eye works of the Northam Brick Company (TF 23050324). The entry reads: 'In removing the gravel cinerary urns were found; also human remains with iron knives and spear heads'. From these notes it is evident that the cemetery accidentally uncovered contained both inhumation and cremation burials. Unfortunately no detailed information on the contents of individual graves survives and it is more than likely that both the information and artifacts found were bought from workers in the gravel pits after the graves had been destroyed.

Both the pot and the brooch retain traces of sand and gravel suggesting that they came from an inhumation burial and are objects which were buried with the dead to accompany them on their journey into the after-life. The pot (fig. 16) is globular in form, 152 mm high and has lost over half its rim, probably due to a shovel blow. It is well formed with a short neck and a slightly everted rim. The shoulders and rim are decorated with four irregular and lightly incised lines and between the second and third of these lines is a wide band decorated with nineteen impressed swastika designs. These are at regular intervals and were executed using a stamp probably made of deer antler similar to the example excavated from the Anglo-Saxon village of West Stow (Myres (1969), pl. 8b). The decoration of the pot is completed by four triangular panels of alternating rosette and raised-cross stamped designs. The motifs

used in the decoration had a symbolic importance to the Anglo-Saxons. The swastika was associated with the cult of Thor, the hammer-wielding god who fought the forces of evil, and who was concerned with birth, marriage and death (Myres (1969), 137). The rosette and raised-cross stamps had similar religious significance and by thus decorating the pot the potter was giving it a mystic power and an individual personality.

The brooch, made of bronze, belongs to the type known as 'small-long' brooches (fig. 16). The small-long brooch was worn exclusively by women and is considered to be a specifically Anglian brooch type, although a number of examples are known from non-Anglian areas. The brooch is 66 mm in length and is decorated on the head, arms and foot with 26 stamped designs which resemble an arrow-head. E. T. Leeds divided this brooch form into a number of different types and derivatives (Leeds (1945), 1-106). The Eye brooch belongs to Leeds' 'cross-potent' type which has close parallels with continental material and appears to have come into England at an early stage of Anglo-Saxon settlement (Leeds (1945), 14). However, the Eye brooch has stepped angles between its arms and a splayed foot, features which, according to Leeds, make it a later variant on the earlier form which has a straighter foot and rounded angles between the arms.

The dating of these two objects must now be discussed. As stated above the small-long brooch belongs to a secondary type of the cross-potent. However, the faceting on the foot is a survival from the earlier form and thus places the Eye brooch in the earlier part of the date range of the developed form. The stamped pendent triangles which adorn the body of the pot from Eye are, according to Myres ((1977), 20), a fashion of the sixth century. Thus, taking the form of the brooch in conjunction with this information a date just prior to the middle of the sixth century would appear to be appropriate for the objects under discussion. It is unfortunate that no further information survives from the cemetery to enable us to establish a firmer date range.

Bibliography

Myres (1969)	J. N. L. Myres, Anglo-Saxon Pottery and the Settlement of England, 1969.
Myres (1977)	J. N. L. Myres, A Corpus of Anglo-Saxon Pottery of the Pagan Period, 1977.
Leeds (1945)	E. T. Leeds, 'The Distribution of the Angles and Saxons Archaeologically Considered', <i>Archaeologia</i> 91, 1945, 1-106

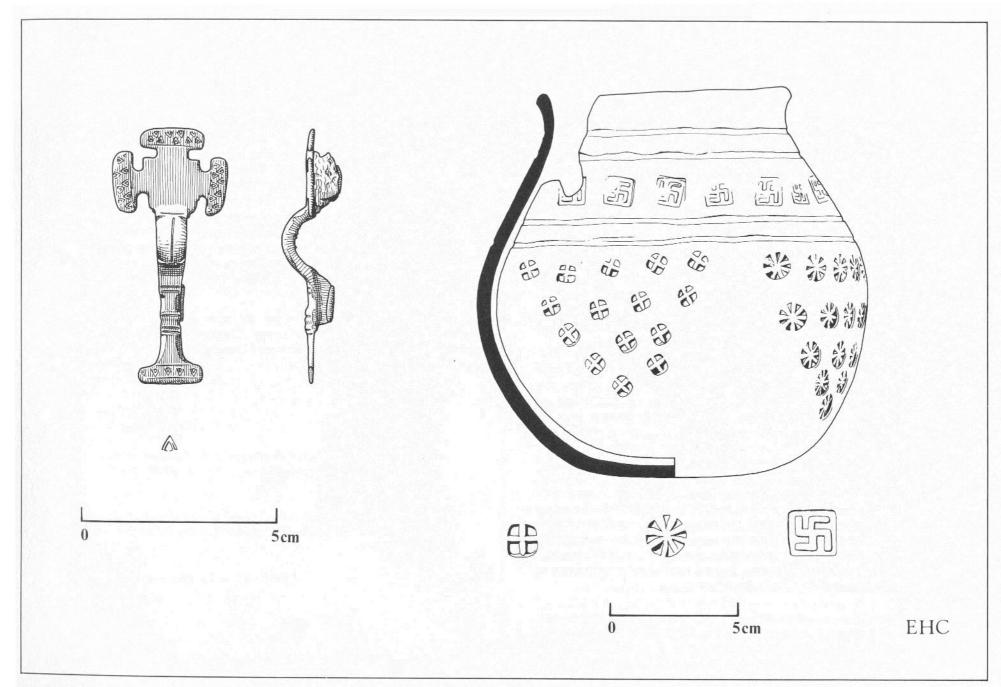


Fig 16 The Anglo-Saxon brooch and pot from Eye

Archaeology and Adult Education: One Centre's Approach

by Terry Stevens

Adult education is criticised for many things: 'it is a series of constant beginnings'; 'no real progression of learning'; 'middle class and middle aged'; 'no local relevance'.

Archaeology in part-time adult education is mostly provided by university extra-mural departments, or the WEA, and is unfortunately often a series of lectures to a passive audience; for the assumption is (and this does not only apply to archaeology) that if people are lectured to, they are taught, and therefore they have learnt. Often, the content of such lecture series is determined by the accident of whoever happens to be available to teach, on the basis of well used notes and not students needs.

At Oundle, a reasonably progressive course has been followed, aided by a happy symbiotic relationship between the adult education centre and the local archaeology group, MidNAG. An active local interest, and 'in-house' teacher involved with the local group, plus an embarrassment of local archaeological sites and materials, made it fairly easy to launch an *Introduction to Archaeology*. This was followed by *Roman Britain*, and then students, staff, and potential students with some experience of archaeology felt that the need was for something more taxing, more structured, wider, deeper, and providing for some a paper qualification at the end. Alternatives were looked at. Two solutions seemed to be a GCE 'A' level or the Leicester University Certificate in Archaeology. The latter was the more desirable for various reasons, but was rejected on two main grounds: the students felt unable to commit themselves to two evenings each week as well as travelling long distances to the University centre, and the University was reluctant to mount such a course at a local Adult Education centre.

The 'A' level course was run through two cycles of two years, meeting for two hours each week. Excellent grades have been achieved by the examinees (taking the course does not commit one to sitting the examination). The wide, perhaps even overloaded, syllabus has given ample scope for valuable learning experience. Local involvement has provided field experience and materials. Visits to other parts of the country have been made as well. The

written project that forms part of the course work has produced some very good original work (some already published in this journal), and has added to local archaeological knowledge. Other benefits to the local archaeology group are an increased awareness of the subject by many of its members, the new members it gains from the courses, a continuity of contact with many of its members out of the 'digging season' and a body of people to call on for practical help from time to time. A not inconsiderable spin-off is the actual 'A' level award, since some students have gone on to improve their professional status or to university.

An additional level of teaching is now in its second year for those who have done the advanced course, or who want to keep in touch with local archaeological developments. For such students a monthly series of seminars was planned with two main aims: firstly, to keep the subject local and topical; and secondly to give ample opportunity to students to discuss the subject matter. Once the original series could be observed in action, it was realised that it was of the same nature and quality as courses which an extra-mural department should be providing. Consequently, the seminars became a Leicester University provision.

All of this seems to have benefited the individual students, the Adult Education centre and local archaeology. Large numbers continue to enrol, aged from 16 to 70 plus, and come from a broad spectrum of socio-economic groups.

Publications

The Nene Valley Research Committee has published the following works:

J. P. Wild, *The Romans in the Nene Valley* (1972) Price 45p

F. M. M. Pryor, *Prehistoric Man in the Nene Valley* First edition (1973) out of print; second edition in press Price on application

D. F. Mackreth, *The Saxons in the Nene Valley* (1978) Price 45p

F. M. M. Pryor, Earthmoving on Open Archaeological Sites, Nene Valley Archaeological Handbook 1, 1974 Price 45p

Durobrivae 1, 1973 (out of print)

Durobrivae 2, 1974 Price 80p

Durobrivae 3, 1975 Price 95p

Durobrivae 4, 1976 Price £1.25

Durobrivae 5, 1977 Price £1.35

Durobrivae 6, 1978 Price £1.35

Durobrivae 7, 1979 Price £1.70

F. M. M. Pryor, Excavation at Fengate, Peterborough, England: The First Report, ROM Archaeology Monograph 3, 1974
Price £2.00

F. M. M. Pryor, Excavation at Fengate, Peterborough, England: The Second Report, ROM Archaeology Monograph 5, 1978 Price £6

(Prices above include postage and packing.)

These publications, together with this Review for 1980, are available from the Secretary, Archaeological Field Centre, Ham Lane, Orton Waterville, Peterborough, PE2 0UU.