### Three Excavations in Bedford, 1979-1984

### **EVELYN BAKER**

with contributions from

Georgina Brine, Annie Grant, Mark Robinson, Mike Wilkinson

### INTRODUCTION

Three excavation reports on small sites in Bedford are presented as a group with common location plan (Fig. 1), finds illustrations, catalogue and bibliography. Pottery reports and finds analyses have been completed for individual sites, but published material has been grouped in order that it may utilize and expand the Type Series in D. Baker et al., 'Excavations in Bedford 1967-1977', Beds Archaeol J 13, 1979 (henceforth Bedford 1967-77). Only significantly new or better examples are published.

Objects of all types are published with a Catalogue number. Types mentioned in the text which are the same as objects already published will be referred to as 'as Cat. no. . . .' and no further illustration will be published. Code numbers for these sites are also the accession numbers for Bedford Museum. They are

> Liberal Club, 1979/1/-; Bennett's Works, 1980/1/-; Duck Mill Lane, 1984/2/-.

Objects of all periods have been treated together within classes of material. In the case of an intrinsically dateable object, the date has been placed before the code number. Dates following the code number derive from the context itself.

The excavation archive is deposited in Bedford Museum, and consists of all written and drawn records, photographic material and finds. It contains all unpublished analyses and tables of records and finds, including support material for specialist reports.

Many people have contributed to the preparation of these reports, including staff funded by the Manpower Services Commission. Thanks are due to Mrs D. Blaxter, A. Pinder, Miss N. Simpson and Mrs P. Walsh for the illustrations; Mrs Walsh and Mrs H. Duncan processed the finds. Mrs Duncan also examined the slag according to type as defined by McDonnell. The work would not have been possible without the kind cooperation of J. Turner, Curator of North Bedfordshire Borough Council's Bedford Museum, who provided storage, working space and grant aid. All the excavations were undertaken by the Archaeological Field Team, Planning Department, Bedfordshire County Council. David Baker read the texts in manuscript and made a number of helpful comments.

### THE FINDS

Figure 2 shows Saxon and medieval pottery from these excavations. Descriptions of catalogue numbers 1569-1571 under the excavations at Bennett's Works (this paper site 2); descriptions of catalogue numbers 1572-1575 are given under the excavations at the site of the Liberal Club (this paper site 1).

For convenience all finds other than pottery have been drawn together on figure 3 and these are described below.

Flora and Fauna are discussed by single site analysis.

### 1. EXCAVATIONS ON THE SITE OF THE LIBERAL CLUB, MIDLAND ROAD, BEDFORD, 1979

Evelyn Baker

#### SUMMARY

Evidence was found for iron working fuelled by woodland clearance in the later 9th century, followed by metal working in the late Saxon and Saxo-Norman periods. The excavation did not locate the Saffron Ditch, although it is possible that a natural predecessor to it was encountered.

#### INTRODUCTION

Excavation on the site formerly occupied by the Liberal Club was undertaken during two weeks in August 1979 in advance of redevelopment by Richard Thomas and Robert White under the direction of David Baker. The intention was to clarify the course of the Saffron Ditch and test the date and nature of activity on both street frontage and back area of the plot (Figs. 1 and 4).

Two mechanical trial trenches, 1 and 2, were placed at right angles to cut across the ditch. The third trench was a small area 5 m square set as close as possible to the street frontage. The scope of the excavation was restricted by the time and resources

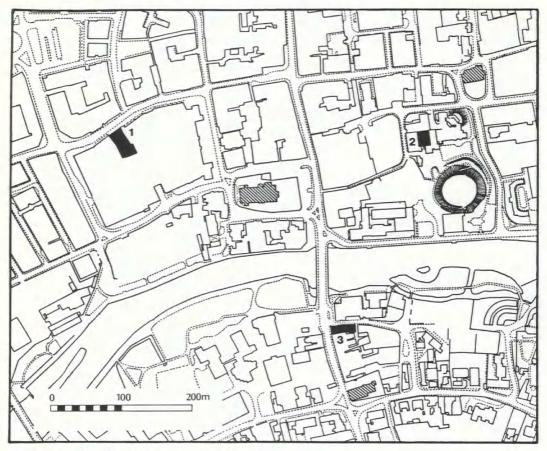


Fig 1 Location Plan showing excavation areas

- 1 Liberal Club
- 2 Bennett's Works
- 3 Duck Mill Lane

available and the need to reinstate ground disturbance; it was undertaken with the kind permission of Marshman, Warren and Taylor, architects to the developers, and funded by Bedfordshire County Council.

### THE EXCAVATION

Trenches 1 and 2 produced no archaeologically significant stratigraphy, except that there were traces of alluvial deposition, indicating periodic flooding.

Trench 3 was excavated mechanically to a depth of 0.6 m followed by hand digging. Four main periods of activity were recognised.

Period 1 Late Saxon
Phase A Iron Working
Phase B Occupation

Period 2 Saxo-Norman Industrial Activity

Period 3 Late Medieval Occupation

Period 4 Post Medieval Occupation

Period 5 Activity post 1800.

### Period 1A Late Saxon Iron Working

Excavation was possible to a depth of 2 m where it cut into a layer of organic material 0.26 m thick which overlay gravel (23, 24). Soil samples were taken and are discussed by Robinson below. Among the woody fragments identified separately by R. Thomas were pieces of oak, hazel, blackthorn hawthorn, dogwood, willow, ash and field maple. The majority of blackthorn showed signs of cutting or tearing, and the presence of tree stumps, a

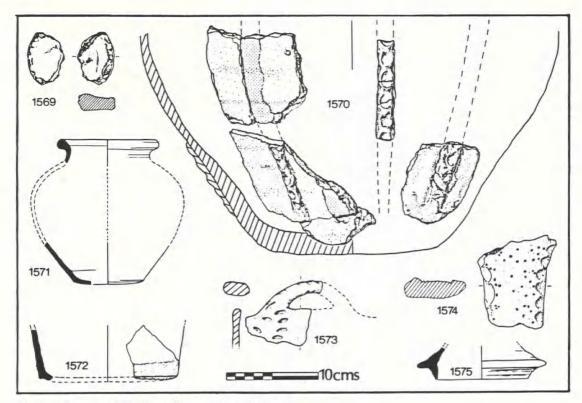


Fig 2 Saxon and Medieval Pottery from Bedford Cat nos 1569-1571 Bennett's Works Cat nos 1572-1575 Liberal Club

fragment of hazel stool and chips from a large roundwood of ash was established. Together these might suggest the bringing of wood to the site from some form of scrub clearance, possibly to act as fuel for iron working. Only small samples of slag were kept from these levels, all of it tap slag. See Period 2 below. Pottery indicates a date in the late Saxon period, probably towards the end of the 9th century.

### Period 1B Late Saxon Occupation

Set above and also cut into the organic deposits of Period 1A was a wall footing (25). This comprised of three courses of rough limestone slabs which protruded from the N section and sloped markedly down to the W. Associated with it was a dark silty deposit containing pottery and animal bone which may have seeped up from (24) below. Similar silty clay containing occupation and organic material formed a sealing layer (26) over the footing. The presence of tap slag, and the fragment of Stamford ware crucible discussed below may indicate metal working activities.

### Period 2 Saxo-Norman Industrial Activity

Thick deposits of clay loams (15, 22) showing traces of ash and burning were mixed with tip layers of slag (16, 17, 21). Tap slag, fuel ash slag, cinder, smelting/smithing slag and ironstone were all present (Fig 5). These appeared to be entering the site from the west. Probably contemporary with the slag heaps were two clay filled post holes (18, 19) and a shallow pit (21). The evidence is too slight to suggest a positive structure, and the features cannot be ascribed to an industrial building.

All the slag found resulted from iron working, but smelting slag tends to be utilized for hardcore and metalling and thus can be found at a considerable distance from its origin. It is also suggested (McDonnell 1983, 83) that smelting slag is perhaps more common in the low smelting technologies of the Iron Age or Anglo-Saxon periods. No furnace lining or bottoms were identified. Since the slag could have been imported for a secondary purpose, the location of the actual iron working site must remain uncertain.

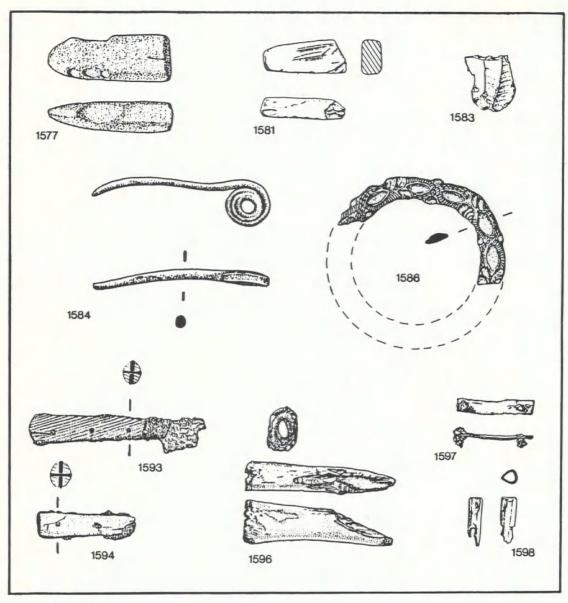


Fig 3 The Finds Scales: Cat nos 1584, 1586 at full size; remainder  $\frac{1}{3}$ 

### Period 3 Late Medieval

Two substantial clay loam layers (7, 11) containing occupation material sealed Period 2. This may represent deliberate dumping from elsewhere to cover industrial waste.

Cut into the top of the clay loam were two substantial post pits (12, 13) both packed with limestone slabs.

### Period 4 Post Medieval Occupation and Later Activity

There was considerable activity on the site during the two hundred years after about 1600. Parts of two structures (5, 6) were recognised. All that remained of the southern building (6) was what appeared to be a floor surface of sandy brick earth with limestone debris and brick fragments. The northern structure (5) was similar in appearance, having a base layer of sandy brick earth (5/1) under a gravelly mortar layer (5/2) upon which a rubble wall (5/1) was built. The reason for the more substantial base may have been recognition of the need for adequate consolidation of the pit (14) which lay directly beneath it.

One of the buildings shown on the OS map of 1882 (published 1884) is in the correct position to be structure 6, but this building did not appear on the Inclosure map of 1795. Structure 5 appears to be a little too far west, but there is a possibility that it is the building shown. Three other features were recognised at this level: a cess or rubbish pit (4), a post hole (8) and a probable slot (9).

### Period 5 Modern

A thick accumulation of garden soil (3) covered the post medieval activity, and was succeeded by Victorian make-up layers. The construction trench for the Liberal Club cut through these, and all the stratigraphy in the NE part of the area. This in turn was sealed by the contemporary hard standing.

### MAP EVIDENCE

The Saffron Ditch is first shown on John Speed's map of Bedford (1610), crossing Midland Road and Horne Lane beneath small bridges. Recent work by Christopher Pickford, County Record Office, has enabled closer identification of the route, showing it to flow along the western and southern boundaries of the Liberal Club Site rather than through it (Fig 4). This evidence was not available at the time of the rescue excavation.

The Inclosure Map of 1795 (CRO: MA26, 1795) has the Liberal Club site marked as Plot 46 with the ditch flowing around it, and a large structure on the western side. The Inclosure Award of 1797 (CRO: A26, 1997) lists the property as being a homestead, tenanted by Widow Smith but owned by the Corporation of Bedford.

The Ordnance Survey Map of 1882 (published in 1884) shows two structures on the site which may have been the post medieval structures located by excavation. Fig 5 (see below).

The Liberal Club was built in 1884 to the designs of the architects Usher and Anthon of Bedford, and the block plan for this is deposited in the County Record Office (CRO: Bor. B.P. 1215).

In retrospect it is clear that neither the 1977 excavation by Hassall and Woodward, *Bedfordshire Archaeology*, 16, 1983, p. 37, nor the excavation under discussion, could have located the Saffron Ditch. The ditch found by Hassall and Woodward

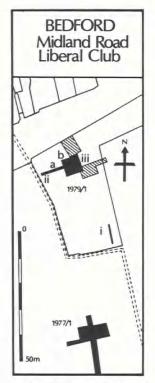


Fig 4 The Saffron Ditch and Liberal Club Excavation Location Plan

was almost certainly a rectangular water filled feature, possibly a quarry pit, shown on Plot 44 of the Inclosure Map. The Saffron Ditch, draining field boundaries from NW outskirts of the town to the river, missed the Liberal Club site altogether.

#### CONCLUSION

Not surprisingly the excavation failed to find the Saffron Ditch. The two linear excavations showed a barren plot with indications of flooding. The small area excavation located a grazed flood marsh adjacent to a stream channel. In the late Saxon period wood was brought to the site, possibly for use as fuel for iron working. This was immediately followed by occupation which caused a substantial change in the vegetation of the site to weeds of nutrient enriched wet soil. Metal working activity both here and on the opposite side of the street at the Empire Cinema site (Hassall, 1983, 37) would suggest that this was a metal working area in Bedford in the Saxo-Norman period. After a hiatus in the medieval period the site is densely occupied by structures fairly close to the modern street frontage.

### THE FINDS

### THE POTTERY

### Georgina Brine

The excavation produced over 16 kilogrammes of pottery. The pottery from each context was sorted into fabric and then into form for quantification using the fabric series developed by Baker and Hassall (Baker & Hassall, 1979 — 147ff). One new fabric A13 has been added to the Saxon wares series and is described below. Typological features (rims, bases, handles, decoration et cetera) were compared to the types already published (op cit) and only new forms have been illustrated (Fig 2).

Quantification involved weighing all the sherds of a particular form within each fabric. In addition rim sherds were measured to give the percentage of the vessel they represented (Estimated Vessel Equivalent — EVE). The use of weighing and EVEs has been adopted in preference to sherd count because it gives greater scope for statistical analysis.

The information was entered on micro-computer which facilitated analysis using programmes developed by Dr Paul Tyers, Department of Urban Archaeology, London. A full Level III Report is available in the excavation archive. This report gives a summary of the results dealing with the pottery period by period.

#### Fabric A13

Fabric A13 has sparse mixed inclusions of very coarse, sub-angular limestone and grog, with medium to coarse red and white quartz. There are also occasional red, ochreous (iron ore?) and sparse black (organic?) inclusions. The core is an even dark grey and the surfaces are pinky-brown with voids on both the inside and the outside where the limestone has leached out and/or the organic inclusions have burnt away. This gives the fabric a corky 'feel' and appearance. The one sherd found in the fabric is from a cooking pot with a depressed convex base which is heavily sooted on the outside (Cat No 1572). The external surface has been knife-trimmed 3.6 cm up the sides of the pot from the base and the internal surface has been smoothed. The pot was possibly coil built and then finished on a wheel. It occurs in a context dated 850+.

#### Period 1

The pottery from period 1 was mostly early St Neots type (B1) giving a date of late 9th to 10th century.

Some sherds of A11, A12 (local Bedford types) suggest earlier activity on the site, to which the A13 sherds might belong (see above). A few Stamford ware (C12) crucibles make up the assemblage.

There is a clear predominance of shelly wares which would seem to characterise the late Saxon—early medieval pottery record in Bedford. The total lack of local sandy wares, apart from A13 may be noted but the assemblage is too small to come to any positive conclusions.

The shelly forms fit in with those usually recognised as 'domestic' in function: cooking pots and bowls. Some of the sherds show traces of sooting which shows they must have been used in a heating process of some sort. The Stamford ware crucibles, however, are a clear indication of industrial activity and were associated with slag deposits. It is possible that the other pottery was used in an industrial context but there is no direct evidence for this.

One crucible sherd is encrusted with a residue which has been analysed by Justine Bayley, Ancient Monuments Laboratory, English Heritage. X-ray fluorescence has indicated the presence of silver, copper, zinc and a trace of lead which would suggest the melting of silver debased by brass.

### Period 2

Period 2 is characterised by a high proportion of early medieval shelly wares (over 70%) with a few fine and coarse sandy wares, mostly thought to be local to Bedford. Of the shelly wares, the harsher B4 fabric (again thought to be a local Bedford product) is the most frequent.

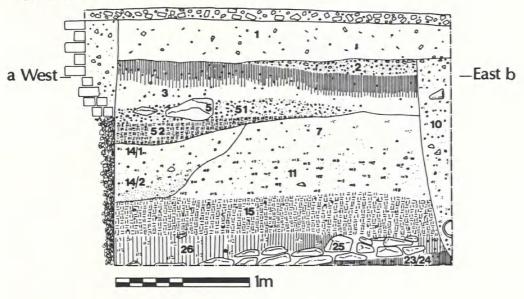
Most sherds are from cooking pot and bowl forms though there are several Olney Hyde/Harrold ware (B5 and B8) jugs represented. There is a sherd from a Stamford ware (C12) jug and several sherds of Brill/Boarstall type (C9) jugs which suggest that most of the finer vessels were being imported. (The term Brill/Boarstall is now used rather than just Brill because fieldwalking at Boarstall has produced pottery indistinguishable from that found at Brill, see Farley, 1982.)

The pottery appears to be domestic in function and there are no crucibles from this period on the site. The dating is from the 12th to the 13th century.

#### Period 3

Two spreads with a moderate amount of pottery have been analysed together in this group. Both assemblages are very mixed and include residual material and some sherds which are regarded as

# Bedford, Liberal Club Section



## Bedford, Liberal Club

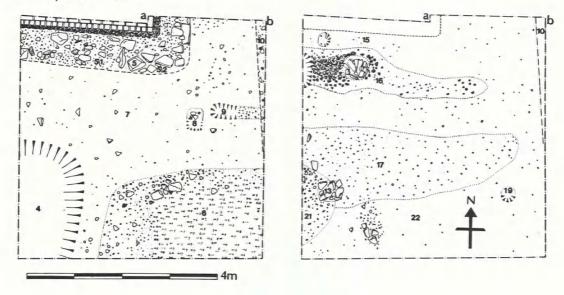


Fig 5 Liberal Club; Plans and Section

intrusive. The occurrence of late medieval coarsewares in both contexts suggests a date of 1450+.

There is a great variety of residual Saxon and Medieval shelly wares in this group. As in period 2 though, fabric B4 is the most common with smaller amounts of Olney Hyde/Harrold types (B5 and B8), developed St Neot's type (B7) and St Neots type (B1).

Of special note is a St Neots type (B1) decorated basket handle Cat 1573, probably from a two-handled bowl or shallow pan. The form is known in Bedford in a Saxon fabric (Baker & Hassall, 1979, cat 111-112) but the form is long-lived, appearing at the Lyveden kilns in the late 12th to early 13th century (Webster, 1975, fig 23 nos 1.03, 1.04).

A broad strap handle in the developed St Neots type fabric (B7) comes from a large pitcher; this fabric is generally dated 12th to 13th century in Bedford.

Local imports occur such as Potterspury ware (C10), Oxford and Brill/Boarstall type (C9 and C11) and one sherd in a fabric reminiscent of Nottingham/Scarborough ware.

Imported wares include a fine Saintonge (C31) lid (Cat No 1575) and other sherds from a jug. The lid has parallels from Southampton (Platt and Coleman-Smith, 1975, fig 190 no 1061) but it is a much more unusual find for Bedford which has very few examples of such imports.

### Period 4

Group 4 consists of those contexts dated to the post medieval period. Most of the material fits in with the post medieval types found at other sites in Bedford (Baker & Hassall, 1979, 217-240). The various glazed and unglazed earthenwares, from various sources including most probably Brill, Pottersbury/Paulerspury, are the most conspicuous, with small amounts of local slipware, Nottinghamshire/Staffordshire stoneware and Staffordshire slipware. One jar rim occurs in a rather micaceous fabric and may be a Spanish import (not illustrated).

The residual material included the base of a Tudor Green cup (not illustrated).

### Discussion

The industrial evidence found in period 1 is similar to that found at the nearby Empire Cinema site in the initial period of that site dated 9th to 12th century (Hassall, 1983). The suggestion must be that there were workshops and ironworking in this part of Bedford during that period.

The rest of the pottery record suggests general

urban refuse. The presence of St Neots-type (B1) and no B4 fabric from period 1 might be significant but the assemblage is not large enough to make conclusions from this.

Certainly the pottery from period 2 with its contrasting predominance of fabric B4 fits in generally with evidence from the other sites excavated in this area. This contrasts with the Castle area where B1 dominates. Further work is needed to establish whether this has any chronological, sociological or functional implications.

Fig 2 Liberal Club Saxon and Medieval pottery Cat nos 1572-1575.

(Note: Hatched sections denote the pot has been handmade, filled sections denote use of wheel.)

- 1572 A13 base of cooking pot with sooting indicated by stippling 1979/1 III (24).
- 1573 A11 basket handle from a bowl with impressed and stabbed decoration 1979/1 III (11).
- 1574 A11 handle from pitcher with thumbing and stabbing decoration 1979/1 II (11).
- 1575 C31 lid with traces of copper green glaze on upper part, mostly abraded 1979/1 III (11).

### FLORA AND FAUNA

Waterlogged Seeds from Middle to Late Saxon Deposits at the Liberal Club, Bedford

### Mark Robinson

A sequence of four soil samples from the waterlogged sediments at the bottom of Trench 3 were investigated for plant and invertebrate remains. 250 g of each sample was washed through a stack of sieves down to an aperture size of 0.2 mm and the residues sorted. The results are given in Table 1 available in the archive.

#### Interpretation

Layer 24, brown humic silt overlying the terrace gravels, was probably a riverine deposit which accumulated at or near the margin of a channel or water course. An aquatic element in the three samples from layer 24 was represented by caddis fly (*Trichoptera*) larval cases, and a few seeds of aquatic plants including water crowfoot (*Ranunculus* S. *Batrachium* sp.), and pondweed (*Potamogeton* sp.). The majority of the remains from these samples, however, were seeds of marsh plants, especially from: tussock rushes (*Juncus effusus* gp.), other rushes (*Juncus articulatus* gp.), sedges (*Carex* spp.),

spike rush (*Eleocharis* S. *Palustres* sp.), mint (*Mentha* sp.) and lesser spearwort (*Ranunculus flammula*). These species are all tolerant of grazing and some require a high level of illumination. Together they comprise an assemblage of grazed marsh.

There was no evidence from the seeds for the presence of woodland. Therefore it is likely that the wood recovered from this layer during the excavation, which showed signs of cutting, had been brought to the site. There was no other evidence from the plant remains from layer 24 for human activity on the site.

The seeds from Layer 23 suggest that although conditions on the site remained as wet as they were when Layer 24 accumulated, the vegetation was very different. The most abundant seeds were from celery-leaved crowfoot (Ranunculus sceleratus) and stinging nettle (Urtica dioica). Red shank (Polygonum persicaria) was also well represented. R sceleratus is an annual or biennial herb of nutrientrich mud either submerged by shallow water or exposed. From medieval archaeological contexts, it is a species which seems to be particularly characteristic of waterside and ditch habitats on occupation sites where the soil had become enriched with dung and experienced frequent disturbance. The other two species favour disturbed habitats, U. dioica likewise tending to grow in nutrient-rich places. Seeds from another plant which was formerly associated with settlements and farmyards, henbane (Hyoscyamus niger), were present. Seeds of most of the plants of marsh pasture identified from Layer 24 were either absent or occurred in much reduced numbers in the sample from Layer 23. Layer 23 was rich in charcoal and other occupation debris. It is clear that there was much human activity on the site when it was accumulating.

Some seeds from plants of economic importance were present in Layer 23, and they suggest some possible activities on the site. A seed of hemp (Cannabis sativa) might have resulted from the processing of hemp plants for fibre at the site. Hemp was a significant crop during the Saxon period and the plants require retting (rotting) in water-filled pits or ponds to free the fibres. The site, with its high water table, would have been an ideal place for such an activity. Several seeds of teasel (Dipsacus fullonum) were also discovered. Unfortunately, the receptacular bracts were not found, so it is not possible to determine whether the seeds were from wild teasel (ssp. fullonum) or the cultivated fullers' teasel (ssp. sativus).

During Period 1A of the site (Laver 24) the site was an open grazed marsh that experienced at least periodic flooding. It was probably adjacent to a stream or river channel, indeed it is possible that the Saffron Ditch ran along the course of a natural channel close to the site. The presence of cut wood which had been brought to the site, however, showed that human activity was beginning. In Period 1B there was much human activity on the site probably resulting from it becoming part of an urban tenement. While the first buildings of the tenement were presumably on higher ground, debris from the various industrial processes which took place on the tenement were deposited on the wetter ground. This dumping, perhaps combined with the rationalisation of the drainage system with the digging of the Saffron Ditch probably represented the start of the reclamation of this land which made it suitable for habitation from the medieval period onwards.

# 2. SALVAGE EXCAVATIONS AT BENNETT'S WORKS, BEDFORD

Evelyn Baker

### SUMMARY

Two mechanically excavated linear trenches produced six distinct periods of occupation delineated by a turf line and a cultivation level. No major structures of Bedford Castle were seen, but indications of substantial Early Middle Saxon to Saxo-Norman activity were identified.

- Period 1 (A) Early Middle Saxon features sealed beneath turf line (B).
- Period 2 (B) Early Middle/Middle Saxon turf line.
- Period 3 (C) Middle Saxon/Late Saxon features cut into turf line (B) and sealed by agricultural deposit (D).
- Period 4 (D) Late Saxon/Saxo-Norman agricultural deposit.
  - (E) Intermediate occupation and features within (D).
- Period 5 (F) Saxo-Norman structures.
  - (G) Saxo-Norman occupation.
- Period 6 (H) Modern.

### INTRODUCTION

Ground disturbance for the new link block for

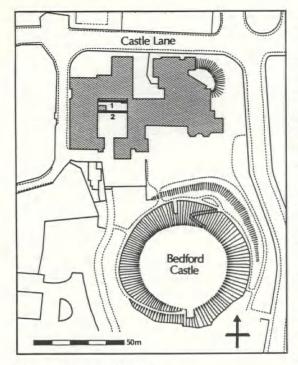


Fig 6 Bennett's Works, Location Plan for Trenches

Bedford Museum gave an opportunity to examine part of the NE quadrant and probable outer bailey of Bedford Castle (Fig 1). Lying within a hitherto unexamined part of the castle, the development was inside a modern courtyard surrounded by buildings and cellars (Fig 6).

Two narrow trenches were machine cut by the contractors. They ran E W on either side of the cellar entrance. Archaeological investigation was restricted to a three day watching brief. It consisted of cleaning the trenches, sampling features surviving in their bottoms and recording stratigraphy from the sections (Fig 7). The area was surprisingly undisturbed given the proximity of the extant buildings, and the build-up of recent occupation material was shallow.

This report acknowledges an incomplete record, but nevertheless the date and type of activity has been established. This is best demonstrated by the recorded lengths of sections (Fig 8) upon which the report is largely based.

Permission to enter the site was given by North Bedfordshire Borough Council, and the excavation was funded by Bedfordshire County Council. I am grateful to colleagues who laboured with great efficiency under less than ideal circumstances: Penny Spencer, Archaeology Officer at Bedford Museum, with Robert Mustoe, Nicholas James, Teresa Moore (now Jackman) and Patricia Aird, all members of the Bedfordshire Country Council Planning Department's Archaeological Field Team. The contractor's workmen (Ward) were most co-operative, and it is thanks to them that the assemblage Pit 39 was completed after the end of the watching brief. Diana Blaxter, Patricia Walsh, Andrew Pinder and Nicola Simpson assisted with the drawings. The policy for publishing finds material has been described in the general introduction. One sequential numbering system covering both trenches was utilized, with allocation to contexts as they were recognised. It doubles as the Accession number for Bedford Museum.

### THE EXCAVATION

The key for allocating contexts to trenches is the site matrix, Fig 9.

### PERIOD 1

### Phase A Early Middle Saxon

Six features were recognised, cut into natural brick earth and sealed beneath a substantial turf line 2B. All were filled with brown loamy clay. Some contamination by mechanical excavation is reflected by the pottery dates which range from about AD 650 to AD 850+. The features consisted of two slots 64 and 67, two post holes 21 and 22 together with a hearth 23 and a hearth pit 63.

### PERIOD 2

### Phase B Early Middle/Middle Saxon

This took the form of an old ground surface or turf line at first indistinguishable from the subsoil. A substantial layer of clay loam, it formed a seal over Period 1 features, and was recognised as contexts 9, 26, 33 and 36.

#### PERIOD 3

### Phase C Saxon

Fourteen features, all filled with dark loamy clay, were cut into the Period 2 turf line and were sealed by a thick black agricultural deposit (Period 4). Probably representing buildings and occupation, the features were seen in both cuttings. Pits, post holes, slots and burnt layers were represented. Some may have been cut from Period 2 Phase D, but it was not possible to verify this. The context numbers were 10, 11, 12, 19, 20, 35, 40, 45, 46, 49, 53, 57, 58 and 59. Several produced finds, including tap and smelting/smithing slag, perhaps indicating iron

working nearby. Context 19 was subjected to soil analysis and would appear to be a cess pit containing plant and invertebrate remains, and perhaps most significantly, both freshwater and sea fish. Context 10 contained a small fragment of human skull.

### PERIOD 4 SAXON/SAXO-NORMAN

Phase D Late Saxon/Saxo-Norman Cultivation

### Phase E Occupation

Phase D was represented by a well churned layer of dark loam up to 0.5 m thick. Such a thick, homogenous deposit was probably accumulated by continuous cultivation over a long period. Contexts representing this activity are 13, 14, 18, 32 and 48.

Phase E consisted of a sequence of features situated midway in Phase D stratigraphy. A post pit 41 and associated burnt clay floor levels 42, 43 and 54 may represent a burnt timber structure built and destroyed half way through the cultivation time span.

### PERIOD 5 SAXO-NORMAN

### Phases G and F, Saxo-Norman Structures

Fourteen features were recognised as post dating the Period 4 cultivation levels. It is possible, but by no means certain, that they belong to the early Castle.

In Phase F the chief structure's main component was a dwarf stone footing, 16, seen in the S section of Cutting 1 (Fig 8). Two further walls, 17 and 60 appeared to join it at right angles and went into the N section (Fig 7). Machine disturbance prevented investigation as to whether 60 was indeed associated and contemporary with 16, or was an earlier pit or robber trench.

A second possible structure was represented by a post pit 8 and associated burnt floor levels 2, 3 and 4. The superstructure had been destroyed by modern disturbance.

A substantial pit 25 (with 39, 61 and 65) was seen in the southern trench. Its stratigraphical relationships were partially obscured by the modern cellar, but it appeared to be cutting phase D in Period 4. The soft loose fills were excavated archaeologically to a depth of 1.30 m, with the bottom fill 65 being subsequently donated by workmen. Mark Robinson has confirmed its function as a cess pit (see below) and M. Wilkinson has shown that both freshwater and sea fish were present. The pottery gives the feature a date of 850+ to 1100, with perhaps a

preference for the earlier end of that span. It contained quantities of tap, smelting/smithing slag, iron stone and cinder, again suggesting some iron working in the vicinity. There was some slight evidence of bone working.

Phase G is represented by part of a substantial pit 5 and 6. Although it was seen to cut the floor levels belonging to Phase F above, the two phases are thought to be nearly contemporary. A single pot sherd was recovered, with a date of 900+.

### PERIOD 6

### Phase H Modern

This consisted of recently deposited material which cut directly into the tops of phases F and G (1, 7, 8, 15, 27, 28, 29. 30, 31, 34, 37, 44, 47, 54, 55 and 56). Post medieval finds were largely absent, and the modern accumulation appeared to be almost exclusively associated with the construction of the present complex of buildings, either as construction trenches, service pipes, or ground consolidation for courtyard services.

### CONCLUSION

The marked absence of late medieval and post medieval activity has greatly assisted the survival of evidence for earlier periods. It is unwise to generalise from the data provided by the two narrow mechanically excavated trenches alone, but the soil conditions can be compared with previous excavations further SW. The tantalizing remains of the earliest periods, 1A, 2B and 3C, sealed under the black layer represented by Period 4, represent a similar stratigraphic sequence to that encountered S of Castle Lane, Baker et al, Excavations in Bedford 1967-77, Beds Arch J, 13, 1979, pp. 17-27 covering trenches 10, 12, 15, 16 and 25.

It seems probable that timber structures of early date lie under the Museum complex, though it was not possible to isolate building plans in such limited excavations. They are a significant extension to the early Middle Saxon settlement so far found in Bedford. Some of the finds may date to the mid to late 8th century possibly strengthening the theory that substantial occupation N of the river pre-dated the laying out of the southern burh of Edward the Elder in 915.

So far this early occupation appears to be confined within the area later defined in Bedford Castle, and it would seem that there may have been a hiatus in building activity when housing was replaced by some sort of agricultural or horticultural process.

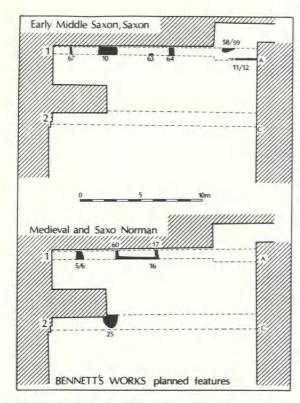


Fig 7 Bennett's Works Planned Features

The fish bone report on context 19 in Period 3 has important implications for Bedford trading in the late Saxon period since it suggests that by that date there must have been a well developed trade between Bedford and the coast.

The Period 5 Saxo-Norman structures seem to be small scale and short lived. They could represent late Saxon occupation possibly with some industrial activity wasted by the building of the early Norman Castle, activity outside a smaller early castle precinct, or outbuildings within either the early or later castle area.

The noticeable lack of post-twelfth-century finds confirms previous theories that the castle was abandoned early, this particular area being an open space during the castle period, and not used for dumping rubbish after the slighting of 1224.

### THE FINDS

### THE POTTERY

### Georgina Brine

### Introduction

Five hundred and seventy-three sherds of mainly Middle Saxon to Saxo-Norman pottery were recovered from the Bennett's Works. They have been quantified by each context according to the sherd count and estimated vessel equivalent (EVE) of particular forms within each fabric present. (The EVE has been taken as the proportion of the rim present.)

The summary below deals with all the pottery for each period of the site.

The Bedford fabric types series (see *Bedford*, 1967-77) has been used and gives full descriptions of the fabrics. One new fabric occurred at Bennett's Works and is described below.

### Fabric C55

C55 is a hard, fine, sandy fabric with abundant small mineral inclusions and sparse, small inclusions of grog and mica. The sherds in the fabric are burnt and sooted but the colour seems to range between black external surfaces, a core which varies from black to light grey, and a pinky buff internal surface. Seven sherds have been identified coming from one or more small cooking pot forms (see Cat No 1571). The fabric has similarities with Stamford ware but whether it is a local or imported product has not yet been established. The sherds come from a context dated to the 10th century (1980/1/10).

#### Period 1

Only two sherds of pottery relate to period 1. One in fabric A6 would suggest an Early Middle Saxon date for period 1, contemporary with Castle Period 1 in the nearby excavation at Castle Lane South (BC70 15, Baker *et al*, 1979, 21). The other is from a pitcher in fabric A12, however, which is often found in rather later context (*ibid* 155) but was found in association with Early Middle Saxon fabrics at the Castle Lane South excavation (cf Structure 3, *ibid* 25).

#### Period 2

The single sherd from the turf line is of Early Middle Saxon date and is from an A6 cooking pot.

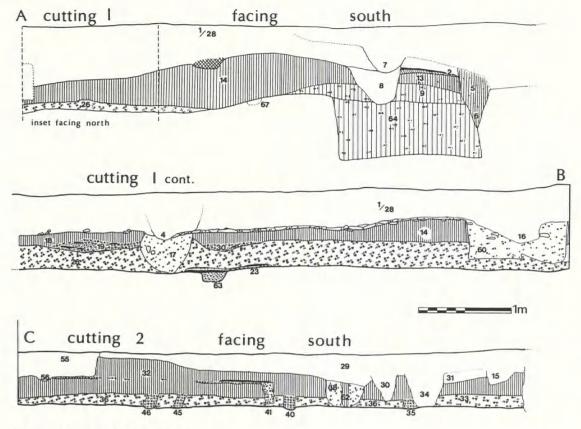


Fig 8 Bennett's Works, Sections

### Period 3

The pottery mostly consists of shelly Saxon wares (A11, A12) and St Neots type ware (B1) which again place this period well before the Conquest. There is a sherd of Stamford ware (C12) which gives a date of 900+ and the sherds in fabric C55 (see above and Cat No 1571), which are similar to Stamford ware come from this period.

The forms are all domestic and the C12 jug is the only finer table ware. This jug is the only definite import but the C55 cooking pot is probably another, although its source is not known.

#### Period 4

Ten sherds from this period are mostly from St Neots type (B1) cooking pots with one sherd in a local sandy ware (C1), which would suggest a date from the 10th to 11th century.

### Period 5

A single sherd of fabric C43 (local sandy) with a date of 1100+ was found but with the exception of this sherd, the pottery could date from the 10th century. Again it is mostly St Neots type wares in cooking pot and bowl forms. There are a few sherds of the coarser, local B4 shelly fabric, which make up less than 5% of the assemblage (according to sherd count), and some sherds from an A11 storage jar (Cat No 1570). A large proportion of St Neots type ware has been previously encountered in the black occupation layers of Castle Site Period 2, dated Middle Late/Saxon to early Norman (Baker et al,

1967-77, 26). The preponderance of B1 in association with A11 and B4 would make the deposit in this period most likely in the early life of the Castle, and could possibly pre-date it.

The forms are again domestic and one St Neots type (B1) sherd may come from a lamp (Cat No 1569).

### Period 6

This is modern disturbance on the site and produced 2 sherds of residual medieval pottery dated 1100-1300.

### Catalogue of Pottery

Fig 2

(Note: Hatched sections denote the pot has been hand made, filled sections denote use of wheel.)

1569 B1 lamp? 1980/1/65.

1570 A11 storage jar with applied, thumbed strip decoration. 1980/1/25 and 39.

1571 C55 cooking pot 1980/1/10.

### FLORA AND FAUNA

Plant and Invertebrate Remains from Two Contexts at Bennett's Works.

### Mark Robinson

Two soil samples were examined from pits within the area of Bedford Castle:

Context 19 — Middle Saxon Period 3C Context 39 — Saxo-Norman Period 5F

10 litres of each sample was floated over water onto a 0.5 mm aperture sieve to extract carbonised plant remains. The residues were sieved on a 2.5 mm aperture mesh to recover bone fragments. 1 kg of each sample was washed onto a 0.5 mm sieve and the residues were sorted for mineralised plant and invertebrate remains.

The results are available within the archive in tables 1-3. In addition, context 39 contained much charcoal, especially of oak. Both samples also contained shells of the mollusc *Cecilioides acicula* (Mull), encrusted with calcium phosphate.

The two contexts contained relatively similar assemblages. The occurrence of remains mineralised with calcium phosphate suggests that the pits

were either cess pits or contained soil reworked from cess pits (Green 1979). However, the pits also contained a range of refuse including pottery, large bone fragments and slag. The carbonised seeds were mostly from cultivated species, including cereals and beans, and they perhaps represent kitchen waste. The mineralised seeds comprise dietary remains, especially sloe or plum stones, and a few weed seeds. The pits contained a few fly puparia but there were abundant mineralised millepede fragments. It is very likely that differential mineralisation had occurred, favouring millepedes because they contain calcium carbonate in their exoskeletons. Millepedes preserved by calcium carbonate replacement have been recovered from archaeological contexts elsewhere (Girling 1979) but, along with the other anthropods, the remains from the two pits had been preseved by calcium phosphate replacement. The millepedes had probably been feeding on dead plant material amongst the refuse dumped in the pits.

The presence of the *Cecilioides acicula* shells in the pits is interesting, because it is regarded as a recent introduction to Britain (Evans 1972, 168) *C. acicula* is a subterranean species, so it is difficult to obtain reliable archaeological records of this mollusc. However, the calcium phosphate encrustations on these shells suggest them to be contemporaneous with the other contents of the pits.

Fish Bone Remains from Bennett's Works, Bedford

#### Mike Wilkinson

1980/1/19

Two contexts were shown to have fish bones surviving. The general description of the deposits lies within the excavation report, and these results should be read with the report on the plant and ivertebrate remains by Mark Robinson, and the animal bone report by Annie Grant that deal with the same contexts.

| 1900/1/19                   |                   |
|-----------------------------|-------------------|
| Eel (Anguilla anguilla)     | vertebrae (10)    |
| Herring (Clupea harengus)   | vertebrae (13)    |
| Mackerel (Scomber scombrus) | vertebrae (2)     |
| Cyprinid sp                 | vertebrae (4)     |
| 1980/1/39                   |                   |
| Eel (Anguilla anguilla)     | vertebrae (2)     |
| Herring (Clupea harengus)   | vertebrae (13)    |
|                             | hyomandibular (1) |
|                             | scale (1)         |
| Mackerel (Scomber scombrus) | vertebrae (2)     |
| Cyprinid sp                 | vertebraa (1)     |
|                             | pharyngeal (1)    |
|                             |                   |

### BENNETTS WORKS Site Matrix

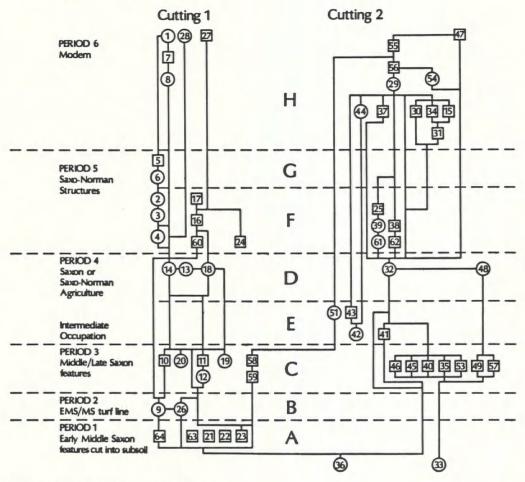


Fig 9 Bennett's Works, Site Matrix

Little more can be said of the assemblage as it is very small and comes from a single context type. It demonstrates the existence of marine fisheries and trade in pelagic shoaling fishes (herring, mackerel) alongside fresh water fisheries for cyprinids and eel.

The animal bones from the excavation at Bennett's Works, Bedford

### Annie Grant

A small number of animal bones found during the salvage excavations at Bennett's Works were examined by the present writer. While some bones were found in features dated to all the recognised periods of occupation at the site, only two groups, those from periods 3 and 5, were large enough for analysis to be worthwhile.

### Period 3 Middle Saxon/Late Saxon

The features and occupation deposits of this period produced 164 identifiable animal bones and bone fragments, of which 41 were rib fragments. A further 90 small fragments were not identified.

A small piece of human skull bone was found in context 10.

The majority of the animal bones were cattle bones, but sheep, pig, horse and bird bones were also found (see Tables 1 and 2). As far as it was possible to determine from such a small number of bones, all parts of the skeleton of cattle, sheep and pigs were represented. The single horse remain was an upper molar, the extensive wear suggesting that it came from an elderly animal.

The cattle, sheep and pig bones were from animals of a range of ages, from juvenile to old. The only two complete mandibles found were both from fully mature cattle. There were no remains of very young animals.

### Phase 5 Saxo-Norman

The majority of the bones from this phase came from a single pit, whose function as a cess pit was subsequently confirmed by analysis of the organic remains. A total of 160 bones, including 40 rib fragments, were identified from the period 5 features as whole. Four hundred fragments could not be identified. A large proportion of these unidentified fragments were recovered when part of the contents of the cess pit was sieved.

The majority of the bones were sheep and bird bones, but cattle and pig bones were also found (see Table 1). Cat was represented by a single mandible. Two small mammal bone fragments were found in the sieve residue, but could not be identified as to species.

There was no evidence that any particular parts of the skeletons of cattle, sheep or pigs were preferentially represented, and the range of ages was similar to that deduced for the period 3 remains. The only mandible found that gave a clear indication of age was from a mature sheep.

### Butchery

There were cut marks on bones from both periods of occupation, giving evidence for the methods and tools used for butchery. Many of the cuts had been made by fairly heavy chopping tools, but there were also traces of finer knife cuts. The cut marks and the rather fragmented condition of the bone are typical of their period. Cuts seen on the vertebrae of bones from period 3 deposits were all at right angles to the line of the spine, while two out of the three sheep lumbar vertebrae found in the period 5 deposits had been cut longitudinally. A review of major developments in butchery techniques in England suggested that during the medieval period there was a change in the treatment of carcasses, seen in an increased incidence of split vertebrae (Grant, in press).

Table 1: Species represented
No. = Number of fragments, excluding ribs

| Phase 3 |                | Phase 5                         |   |
|---------|----------------|---------------------------------|---|
| No.     | %              | No.                             | %   |
| 63      | 51             | 13                              | 13  |
| 39      | 31             | 46                              | 25  |
| 18      | 15             | 12                              | 12  |
| 1       | 1              |                                 |   |
|         |                | 1                               | 1   |
| 2       | 2              | 29                              | 19  |
| 123     |                | 101                             |   |
|         | No. 63 39 18 1 | No. % 63 51 39 31 18 15 1 1 2 2 | No. % No. 63 51 13 39 31 46 18 15 12 1 1 2 2 2 29 |

Table 2: Proportions of cattle, sheep and pig bones

|         | Phase 3 |    | Phase 5 |    |
|---------|---------|----|---------|----|
| Species | No.     | %  | % No.   |    |
| Cattle  | 63      | 53 | 13      | 18 |
| Sheep   | 39      | 33 | 46      | 65 |
| Pig     | 18      | 15 | 12      | 17 |
| Total   | 120     |    | 71      |    |
|         |         |    |         | _  |

### Bone working

A small strip of bone approximately 7 cm long and probably cut from a rib was found in feature 39 (period 5). It had broken where a hole had been bored through the bone. There was no other evidence of bone working.

There were no horn cores found in either period 3 or period 5 deposits. While in such small samples this could be due to chance, it is worth noting that at other Bedford sites horn cores were either rather uncommon, or were found in unusually large numbers, suggesting local hornworking industries (Grant, 1979a, 288).

#### Discussion

There is a significant change in the relative proportions of cattle and sheep bones in the two phases of occupation discussed here. In the earlier phase, cattle bones predominate, but sheep bones predominate in the later phase (Table 2). The relatively high proportion of sheep bones found in the period 5 deposits is also typical of the majority of other Bedford sites of late Saxon and early medieval date (Grant, 1979a, 286), although there were more cattle than sheep bones in some of the Bedford Castle contexts dated to twelfth and early thirteenth centuries (Grant, 1979b, 60-61). More information from the sites contemporary with the period 3 occupation at Bennett's Works will be required before the increase in sheep and decrease in cattle bones seen at this site can be assumed to have wider implications.

There is no evidence for any change in the importance of pigs at the site. Very similar proportions of pig bones were found at other Bedford sites (Grant, 1979b, c, d, e, f, 60, 72, 95, 105, 135).

Very different proportions of bird bones were found for the two phases, with significantly larger numbers being found in the later period. This cannot simply be due to the fact that some of the deposits dated to this phase were sieved, since many of the bird bones came from layers which had not been sieved. Other contemporary sites at Bedford have been found to have varying proportions of bird bones, but similarly high proportions were found during the Bedford Castle excavations, particularly in area C (Grant, 1979b, 62).

The scarcity of horse remains and the absence of dog and wild deer bones are not at all unusual features of the faunal assemblages at other Bedford sites of the period (Grant, 1979a, 287) nor indeed at other urban sites of the Saxon and medieval periods. Dogs were clearly kept at or near the site as several of the animal bones had been gnawed.

Analyses of small collections of bone material are rarely very informative, but in this case the value of the sample was increased by the considerable amount of comparative material available from other excavations in Bedford.

### 3. A WATCHING BRIEF AT DUCK MILL LANE, BEDFORD

Evelyn Baker

### SUMMARY

Minor ground disturbance connected with the construction of a surface car park has provided the opportunity to examine a site on the relatively unexplored east side of St Mary's Street (Fig 1). Material recovered from a probable cess pit has given valuable insight into environmental conditions in the 11th to 13th centuries.

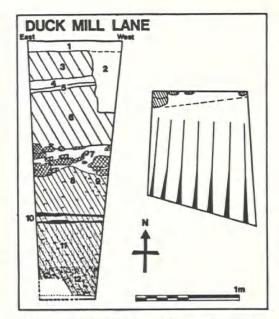


Fig 10 Duck Mill Lane, Plan and Section

### INTRODUCTION

The corner plot of 4 St Mary's Street leading into Duck Mill Lane was developed into a surface car park needing a soakaway pit. Evelyn Baker and Andrew Pinder recorded the excavation of the 1 m square soakaway with the kind permission of the owner, Mr Giorgo Garofolo, who had himself removed the upper fills. Richard Compton assisted with the excavation. The work was funded by Bedfordshire County Council.

### THE EXCAVATION

PERIOD 1

Early Medieval Waterlogged Deposits

Contexts 8 to 15 inclusive.

The earliest activity seen within the trench took the form of a waterlogged silt filled feature which might have been a ditch or rubbish pit, but was more likely a cess pit. The bottom fills, 10, 11 and 13 consisted of grey and black silty clays with high organic content. These were interlaced with dirty clays 12 and 14 which had slumped in from the N side of the excavation.

Sealing the feature were thick deposits of loamy clay, 8 and 9 which may have formed its final and deliberate back filling, the organic content of which appeared to derive largely from processing grain. See Robinson overleaf.

The pit would appear to have been open and filled during the 11th to 13th centuries.

### PERIOD 2

Later Medieval, ? Occupation

Context 7

The remains of what was probably a dwarf stone wall, 7, was seen in the N part of the trench. It had been partially destroyed by non-archaeological excavation, making the interpretation as to whether it was a wall or destruction levels of a structure difficult to determine. It consisted of randomly laid limestone rubble without mortar, set in a clay loam matrix, and dates probably to the 13th century.

### PERIOD 3

Later Medieval, ? Horticultural Activity

Context 6

Sealing Period 2 was a thick deposit of grey brown loam. Seen only in section, the layer appeared to be very homogenous as if constantly turned over, possibly indicating an agricultural or horticultural process. A 13th century date is likely for this activity.

#### PERIOD 4

Post Medieval and Later

Contexts 1 to 5 inclusive

All the upper levels of the excavation appeared to be associated with the remains of a brick structure dating possibly between the 17th and 18th centuries. This was interpreted as construction 5; occupation 3 and 4; destruction 2, topped with a concrete and rubble surface 1.

Research by S. Coleman has shown that the property was occupied by drapers from the mid 19th century, changing to motor agents from the time of the first world war until 1959. During the late 19th century it was known as Bridge House.

#### CONCLUSION

The information received from this 'keyhole' into Duck Mill Lane was disproportionate to the size of the excavation and the method imposed upon it. While no firm conclusions should be drawn from such a tiny sample, it has nevertheless provided data

which support ideas as to the nature of activity in the locality.

Waterlogged deposits so close to the river were expected, and there were indications that water meadows or waste land lay close by. The cess pit provided insight into horticultural and agricultural pursuits, as well as into the living conditions of the nearby population. Other finds indicate a date late in the Saxo-Norman period, for occupation on this E side of the St Mary's Street, but again, the area looked at was very small. There were some signs of structural evidence in Period 2, but this may have been short lived and replaced by some sort of gardening or horticulture, and the plot may have been left barren and empty for some considerable time thereafter.

### THE FINDS

THE POTTERY

Georgina Brine

The excavation yielded a small sample of pottery. This has been sorted into fabric groups according to the Bedfordshire fabric type series (see Baker & Hassall, 1979).

Period 1 - Early Medieval Waterlogged Deposits

Lower Fills

Most of the pottery fits in with Olney Hyde/Harrold (B5 and B8) types, comparable with Northampton fabric group T2 (McCarthy 1979, 156) broadly dated 1100-1400. One jug compares closely with a Harrold kiln type (Hall 1972, no 27), which suggests a date from the thirteenth century. In addition there are a few sherds of local, early medieval, sandy wares and shelly fabric B4.

Upper Fills

No significant chronological difference appears between the upper fills of the pit and the lower waterlogged deposits in the pottery record. Again, most of the sherds are from Olney Hyde/Harrold types with fewer examples of B4, St Neots-type (B1) and local sandy wares C1 and C4.

Period 2 - Later Medieval? Occupation

This contained a late medieval E ware dish, which would give a fifteenth century date. In addition there were residual sherds of Olney Hyde/Harrold (B5/B8), Brill/Borstall (C11) and St Neots-type (B1).

Period 3 — Later Medieval? Horticultural Activity
There were only a few fragments of pottery from the loamy layer deposit above the destruction layer, but they included a late medieval coarseware.

Period 4 — Post Medieval and Later
Two post medieval earthenware forms were recovered.

### FLORA AND FAUNA

Plant and Inverterbrate Remains from Early Medieval Deposits at Duck Mill Lane, Bedford

### Mark Robinson

A sequence of six soil samples was examined from the Saxo-Norman layers encountered at the bottom of the trench in Duck Mill Lane. Contexts 15 and 13 were found to contain a wide range of plant and invertebrate remains variously preserved by waterlogging, calcium phosphate mineralization and charring. Context 8 contained much carbonised plant material. These samples were then processed as follows:

| Context                                   | Weight of sample processed (kg) |    |   |  |
|---|---------------------------------|----|---|--|
|   | 15                              | 13 | 8 |  |
| Floated over 0.5 mm aperture mesh         | -                               | _  | 5 |  |
| Washed through sieve stack down to 0,2 mm | 1                               | 2  | - |  |

The relevant flotants and residues were sorted and the remains identified are listed in Tables 1-7 (available in the site archive).

### Interpretation

It was unclear from the excavation whether these layers were the fill of a ditch or a pit. Context 15 did contain a few aquatic molluscs, as might be expected in a ditch with running water, but some of these shells contained a white calcareous silt with Chara fragments. Both Contexts 15 and 13 were waterlogged organic dark grey silt, so it is likely that the shells had been redeposited, perhaps from water-lain silts cut by the feature. The occurrence of calcium phosphate mineralisation and the range of plant remains from these two contexts show the presence of sewage. Layer 14, the intervening deposit between 15 and 13, was inorganic clay with very heavy iron panning. It is probable that the Saxo-Norman feature excavated was a cess pit and

Layer 14 was a sealing layer dumped into the pit when the contents had become too noisome. Other aquatic invertebrates were absent from the samples, even though 15 and 13 accumulated below the water table, and this was probably the result of very polluted conditions.

Context 15 was very rich in cereal bran and also smashed fragments of corn cockle (Agrostemma githago) and cornflower (Centaurea cyanus) seeds. This would have been the result of the users of the pit eating products made with impure wholemeal flour containing many weed seeds which had been milled along with the grain. Corn cockle was well known as a serious contaminant of grain and medieval cess pits are often rich in fragments of its seeds. Cornflower was a familiar weed in medieval husbandry but its seeds are not normally abundant in archaeological deposits; the occupants of Duck Mill Lane seem to have been using especially contaminated flour. Bran and seed fragments of these two weeds were present in context 13, which also contained calcium phosphate concretions in which bran and monocotyledonous plant stems (perhaps straw) were evident.

Contexts 15 and 13 contained remains of several species of fruit that had probably been consumed: blackberry and wild strawberry seeds, plum and sweet cherry stones and fragments of apple core. All but the blackberry are likely to have been horticultural crops, perhaps grown in the tenements of the town. The possible inclusion of field/horse beans (Vicia faba) in the diet is suggested by the presence of the bean beetle (Bruchus rufimanus). The beetle lays its eggs on flowering beans and the larvae develop to maturity in the growing bean seeds. The adult beetles remain dormant at harvest time and do not emerge from the dry beans until the following season, so are quite likely to be inadvertently eaten. Alternatively, infested beans could have been discarded into the pit or stored nearby. Another crop species, flax, was represented by a single seed fragment in Context 15 and ground linseeds could have been eaten, for example as an ingredient of porridge.

Most of the intact seeds in the two waterlogged samples were not from culinary species but either from weeds of disturbed ground or from plants of wet grassland. It is, however, possible that the calcium phosphate-replaced *Brassica* or *Sinapis* seeds were from cultivated mustard. Some of the smaller weed seeds, for example those of poppy (*Papaver argemone*) might have been flour contaminants, but they do not have the close dependence on

cereal cultivation for their survival in Britain that corn cockle and cornflower show. They are just as likely to have grown on disturbed ground on the site in company with such non-arable weeds as hemlock (Conium maculatum). The wet grassland to marsh plants, such as kingcup (Caltha palustris) and meadow rue (Thalictrum flavum) might have grown in the vicinity. The presence of frond fragments of bracken (Pteridium aquilinum), however, suggests that plant material had been brought to the site, in this case perhaps as bedding. It is quite possible that many of the seeds of wet ground species, such as sedges (Carex spp.) and bulrush (Schoenoplectus lacustris) were from cut vegetation imported for thatch, floor coverings etc.

The Coleoptera from the waterlogged samples, with the exception of Bruchus rufimanus, are all species associated with dead or decaying plant material of one sort or other. The two most numerous species, Anobium punctatum and Ptinus fur both show a close association with buildings and indoor habitats. A. punctatum is the woodworm beetle, while P. fur occurs amongst stale food remains, in mouldy straw etc. Both these beetles can live away from human influence, but they are common synanthropic species and the overall composition of the coleopteran assemblage suggests that their origin was domestic refuse.

Context 8, black gritty loam, seems to have been soil used to backfill the cess pit. It was very rich in carbonised bread-type wheat. A little wheat chaff was also present and about 12% of the carbonised seeds were from weed species, especially stinking mayweed (*Anthemis cotula*). Either this assemblage resulted from the accidental charring of rather badly cleaned wheat or the carbonised remains were derived from several different grain processing activities.

### CATALOGUE OF FINDS OTHER THAN POTTERY Fig 3

### Clay Pipe

Type F, early to mid 18th century, incomplete, 1979/1 III (4), 1600-1800 (as Bedford 1967-77, Cat. No. 1010) not illustrated.

### Objects of Stone

### Whetstones

- 1577 Sandstone, one end broken, edges damaged, showing signs of wear. Portion of a v-shaped groove survives on the obverse face. Remaining length 101.25 mm.
- 1979/1 III (3). 1600-1800.

- 1578 Mica schist, fragment only, remaining length 76 mm.
- 1979/1 III (3). 1600-1800. Not illustrated.
- 1579 Mica schist, fragment only, remaining length 91 mm.
- 1979/1 III. (3). Not illustrated.
- 1580 Slate, squared edges, showing signs of wear, top half only. Remaining length 60 mm.
- 1979/1 III (3). 1600-1800. Not illustrated.
- 1581 Siltstone, one end broken, edges shaped, smooth, remaining length 71 mm. Several shallow, narrow grooves visible on obverse face.
- 1979/1 III (7). Late 15th century.
- 1582 Mica schist, fragment only, remaining length 75 mm.
- 1979/1 III (7). Late 15th century. Not illustrated.

### Flint

- 1583 Scraper, end of blade retaining striking platform and bulb on one side, opposing side has three parallel flake scars. Heavily worn along one edge and scratched along face, length 23.5 mm.
- 1980/1/39 Saxo-Norman.

### Objects of Copper Alloy

- 1584 Strip, rolled into spiral at one end, slightly hooked at opposite end. Scrap, length 50 mm.
- 1979/1 III (3), 1600-1800.
- 1585 Tiny fragment of copper alloy and lateen? Waste, length 8 mm.
- 1979/1 III (11) mid-15th century. Not illustrated.
- 1586 Portion of decorated brooch/buckle, estimated diameter c 45 mm.
- 1979/1 III (4). 1600-1800.
- 1587 Off-cut, triangular in plan, of copper alloy, length 55 mm.
- 1984/2 I US.

#### Objects of Iron

- 1588 Blade from shears or a knife, curved backed blade, straight cutting edge.
- 1979/1 III (?) mid-15th century.
- 1589 Large nail or spike, end broken, head and shank rectangular.
- 1979/1 III (7) mid-15th century.
- 1590 Portion of an 'L-shaped' pivot (7), both ends broken.
- 1979/1 III (7) mid-15th century.
- 1591 Unidentified object (?) of iron, partly forged iron (?).
- 1979/1 III (7) mid-15th century.
- 1592 Strip or rod of iron, both ends broken, poor state of preservation.
- 1980/1 39, Saxo-Norman.

#### Objects of Bone

1593 Riveted, composite bone knife handle with iron tang, portion of blade and 3 rivets in situ.

- 1979/1 III (3), 1600-1800.
- 1594 Riveted, composite bone knife handle, incomplete, with portion of iron tang and two iron rivets in situ.
- 1979/1 III (3), 1600-1800.
  - Spindle whorl, polished and shaped patella, slightly offcentre drilled hole.
- 1980/1/10 middle to late Saxon. (As Bedford 1967-77 cat. 1529.) Not illustrated.
- 1596 Gouge, hollowed, one end split diagonally, worn smooth and polished.
- 1980/1/65, Saxo-Norman.
- 1597 Plate, broken at one end, retaining two iron rivets, possibly from a composite bone comb.
- 1980/1/25 Saxo-Norman. (As Bedford 1967-77 cat. 1523.)
- 1598 Hollowed and polished bone flute pierced by two subrectangular perforations in line. One end broken, the opposite end has been cut and the edges smoothed and polished.
- 1984/2 I US.

#### **BIBLIOGRAPHY**

- Baker, D. et al., 1979; 'Excavations in Bedford 1967-1977', Beds Archaeol J 13.
- Baker, E. and Hassall, J., 1979; 'The Pottery' in Baker et al., 1979, 147-240.
- Evans, J.G., 1972, Land Snails in Archaeology.
- Farley, M., 1982; 'A medieval pottery industry at Boarstall, Buckinghamshire' Recs Bucks XXIV 107-117.
- Girling, M.A., 1979; 'Calcium carbonate replaced arthropods from archaeological deposits', J Archaeological Science 6, 309-320.

- Grant, A., 1979a: 'The animal bones from Bedford'. In Baker et al., 1979, 286-88.
- Grant, A., 1979b: 'The animal bones from Bedford Castle'. In Baker et al., 1979, 58-62.
- Grant, A., 1979c: 'The animal bones from Caudwell Street'. In Baker et al., 1979, 70-2.
- Grant, A., 1979d: 'The animal bones from Midland Road'. In Baker et al., 1979, 94-5.
- Grant, A., 1979e: 'The animal bones from St John's Street'. In Baker et al., 1979, 103-6.
- Grant, A., 1979f: 'The animal bones from St Mary's Street'. In Baker et al., 1979, 135.
- Grant, A. (in press): 'Some observations on butchery in England from the Iron Age to the medieval period'. Anthropozoologica (Paris), 3.
- Green, E.J., 1979: 'Phosphatic mineralisation of seeds from archaeological sites'. J. Archaeological Science 6, 279-284.
- Hall, D.N., 1972: 'A thirteenth century pottery kiln site at Harrold, Bedfordshire', Milton Keynes J Archaeol Hist 1, 23-32.
- Hassall, J., 1983: 'Excavations in Bedford 1977 and 1978', Beds Archaeol 16, 37-64.
- Hassall, J. and Woodward, P.: Beds Archaeol, 16, 1983, see Hassall, 1983.
- McCarthy, M., 1979: 'The Pottery' in Williams, J.H. St Peter's Street, Northampton, Excavations 1973-1976, 1979, 149-229
- McDonnel, G., 1983: 'How to identify slags' Current Archaeology VIII No. 3, No. 86, 81-83.
- Platt, C. and Coleman-Smith, D.C., 1975: Excavations in Medieval Southampton, 1953-1969, 2 The Finds.
- Webster, P.A., 1975: 'Pottery Report' in Steane, J.M. and Bryant, G.F., 'Excavations at the Deserted Medieval Settlement at Lyveden' J Northampton Mus Art Gallery 12, 1975, 60-105.

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