Excavations at The Classics Centre, 65–67 St Giles, Oxford

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SUMMARY

Investigation works carried out by Oxford Archaeology in advance of an extension to the Classics Centre, at 65–67 St Giles, Oxford, provided occupation evidence from the eleventh century to the present day. A brief initial phase of settlement was represented by five eleventh- to thirteenth-century pits, containing butchery or tanning waste, overlain by a cultivation soil. A thirteenth- or fourteenth-century stone wall and a stone floor formed the first structural evidence. Significantly, a large collection of late medieval ceramic oil lamps was discovered in the northern part of the site, comprising over a third of the pottery excavated. On the basis of comparison with similar finds from nearby academic sites, it is argued that 65 St Giles was an academic hall in the thirteenth and fourteenth centuries. The paucity of pottery finds from 1400 to 1475 supports documentary evidence that the site was uninhabited in the fifteenth century, although possibly cultivated. Later pottery indicates that 66 St Giles was a public house in the sixteenth century, a century earlier than previously thought.

Between September 2005 and January 2006 Oxford Archaeology carried out an excavation and watching brief on land to the rear of 65–67 St Giles, The Centre for Classical and Byzantine Studies, Oxford (NGR SP 5116 0662). The work was carried out in advance of a new building and refurbishment of the existing structures. The development site is bounded by Blackfriars Alley to the north, Pusey Lane to the west, St Giles to the east, and by the Ashmolean Museum to the south. It covers an area of approximately 0.07 ha (Fig. 1).

The site is located on quaternary river gravels of the second (Summertown-Radley) terrace deposits.[1] The terrace forms a north-south ridge of higher ground between the river Thames, about 1 km to the west, and the river Cherwell, about 1.5 km to the east. The area of proposed development lies at about 64 m ordnance datum, with variations in ground levels owing to variations in building (stairs, basements, etc.).

This report comprises a discussion of the site followed by the stratigraphic, artefactual, and environmental results. A total of 59 pits was revealed during the excavation; although the majority of the pits were fully or partially excavated, they will not all be discussed in detail. For clarity, only pits of particular significance have been fully described. Pits of similar function or type are generally discussed together and not necessarily individually numbered on the relevant plans. The pits can be broadly divided into two types, those measuring between 2 m and 3 m wide, about 3 m deep and vertically sided, were most likely gravel-extraction pits. Pits measuring between 1 m and 2 m wide, and between 0.5 m and 1 m deep, were probably dug to extract soil and/or dispose of waste. The presence of organic fills and ashy lenses indicated that some of the pits may have had primary or secondary uses as cess pits.

[1] British Geological Survey sheet 236, 1:50,000.

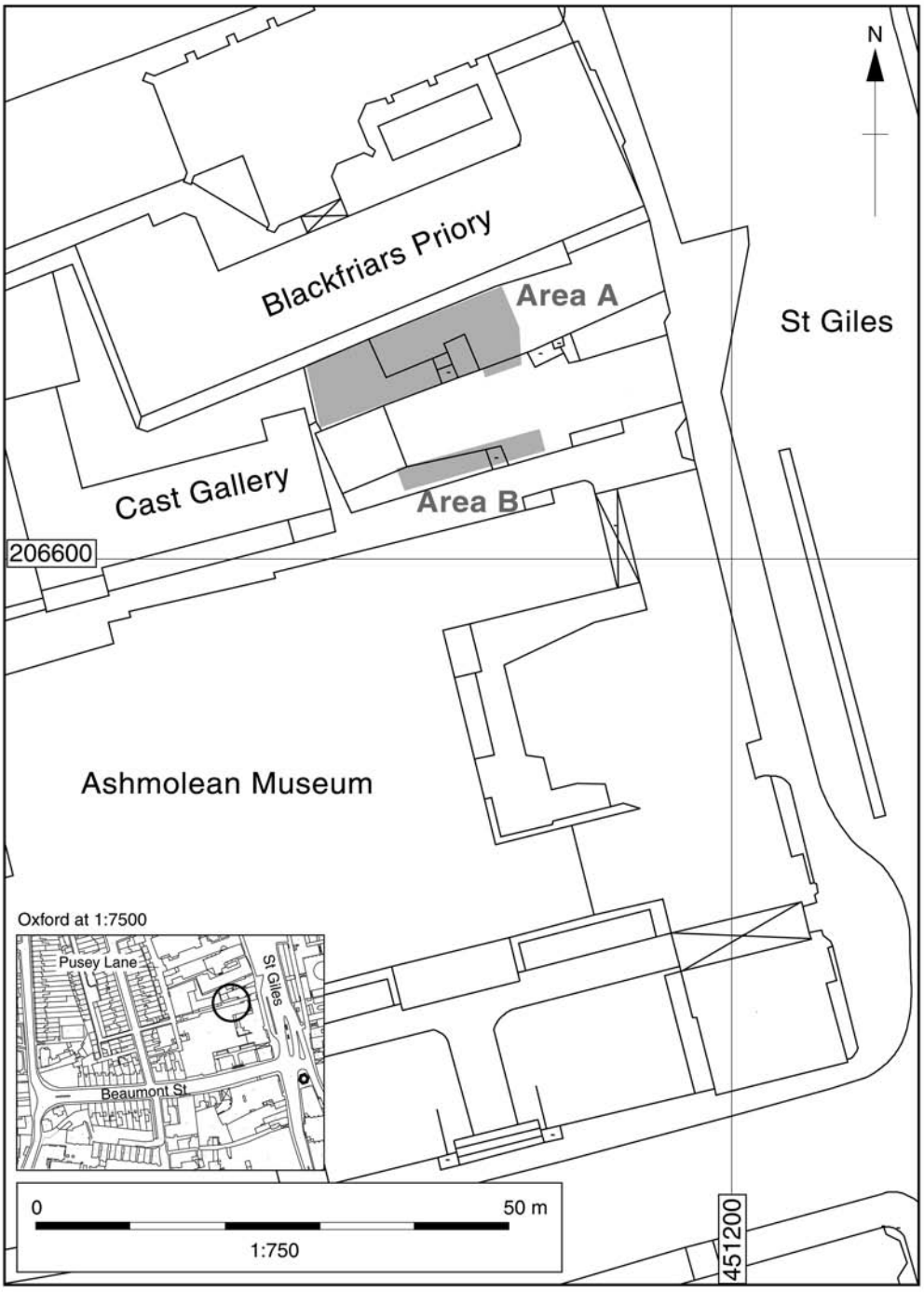

Fig. 1. Site location

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The historical and archaeological background to the evaluation has been the subject of a separate desk-based study, the results of which are summarized below.[2] The site lay within the ancient parish of St Mary Magdalen, just outside the medieval town, about 200 m to the north of the town wall and about 45 m east of the grounds of the royal palace of Beaumont. The palace was built in *c.*1132 by Henry I, and it became a favourite resting place for the Angevin kings en route from London or Windsor to the palace at Woodstock, from where they would hunt in nearby Wychwood Forest.[3] The east end of the site fronts St Giles, which is recorded as being fully built up by the time of the 1279 Hundred Rolls survey, and several excavations outside the north gate of Oxford suggest that development of the suburb began no earlier than the late twelfth century.[4] Salter's *Survey of Oxford* (and *The Oxford Deeds of Balliol College*), compiled from examination of medieval deeds relating to tenement ownership, provides the following description of two plots (nos 94 and 95) that lie within the development site:

> *Plot 94: No. 65 St Giles (northern half of the development area)*: First mentioned in *c.*1220, when it was held by William Molendinarius. Mentioned again throughout the thirteenth–eighteenth centuries. The property has belonged to Balliol College since 1454. Leases dated to 1697 and 1769 show that Quakers were situated to the north (No. 64 St Giles).
> *Plot 95: Nos 66 and 67 St Giles [southern half of the development area]*: First mentioned in 1279 when Henry Viel inherited it from his father Robert. Mentioned again in 1291 and in 1346. Recorded as vacant land of the church in 1405 but in 1430 was rented out. Although evidently originally one property 38 yards wide, in 1457 it may have possibly comprised two adjacent tenements, and by 1772 it was three tenements, each 4 yards wide. Tenants are recorded in the seventeenth–nineteenth centuries. At one time it was recorded as a public house named 'The Horse and Hounds.'[5]

Both the Agas map of 1578 and the Loggan map of 1675 (Fig. 2) show the site occupying the eastern third of two long tenement plots fronting St Giles to the east. The western two thirds, outside the site, appear to be largely back gardens, with the tenements' western walls backing on to Beaumont Palace. Within the area of proposed development Loggan's map shows the street-front properties on St Giles, along with a number of buildings and open yards to the rear. These buildings may have been cottages, as from the seventeenth century the expanding population of the town resulted in the creation of living spaces at the rear of most of the properties fronting St Giles.

Between 1869 and 1871 (following the demolition of previous structures on the site), the ironmonger George Wyatt built nos 66 and 67 St Giles as a single design, described as a 'Gothic house', in the eastern part of the development area. The buildings demolished prior to the construction of nos 66 and 67 St Giles appear to be shown on a photograph held by the Ashmolean Museum, Oxford (Fig. 3). The photograph is annotated 'Old houses pulled down about 1871'. Mr Levi, a jeweller, occupied no. 66, while Mr Cripps, a chemist, occupied 67. From 1881 Mr Cripps also occupied no. 65, which dates from the early eighteenth century.[6]

Several archaeological investigations have been carried out in the area bordering St Giles. The

2 'Proposed Classics Centre, 65–67 St Giles, Oxford, desktop assessment' (OA TS report, 2004).

3 H. M. Colvin, R. Allen Brown, and A. J. Taylor, 'The Kings Houses 1066–1485', in H. M. Colvin, ed., *The History of the King's Works,* 2, *The Middle Ages* (London, 1963), p. 120.

4 A. Dodd, ed., *Oxford before the University: the Late Saxon Crossing and Norman Archaeology of the Town,* Thames Valley Landscapes Monograph, 17 (Oxford, 2003), p. 62.

5 H. E. Salter, *Survey of Oxford,* 2, OHS, ns 20 (1969), pp. 213–14; H. E. Salter, *The Oxford Deeds of Balliol College*, OHS 64 (1913), pp. 212–18.

6 *Jackson's Oxford Journal* (Oct. 1868); St Giles' Oxford website: http://www.headington.orguk/oxon/stgiles/tour/west/65_67.htm, accessed 17 Jan. 2007.

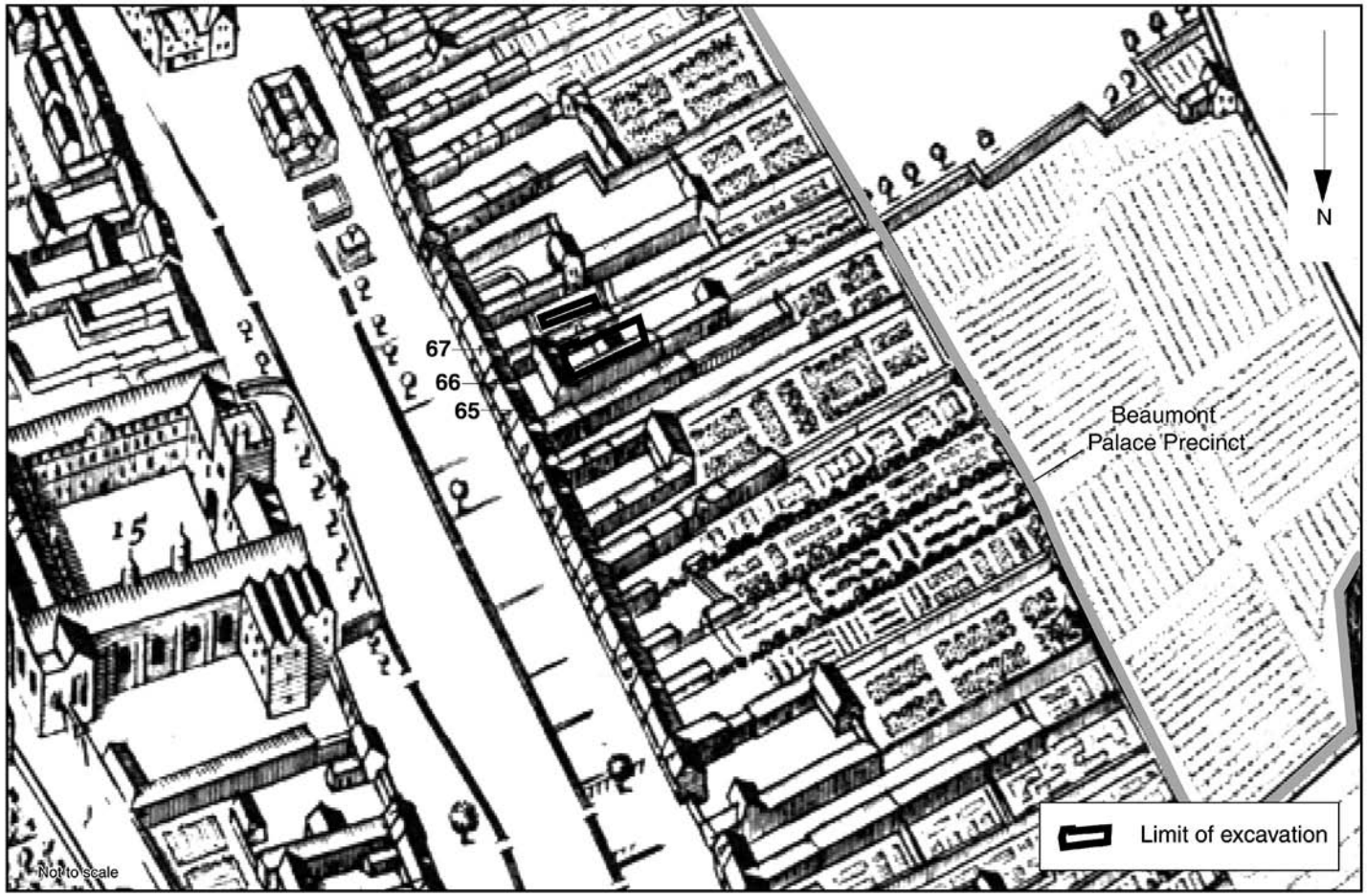

Fig. 2. Detail from Loggan's plan of 1675 (looking south)

Fig. 3. Nos 65-67 St Giles, prior to George Wyatt's redevelopment in 1869. (*Photograph by courtesy of the Ashmolean Museum, Oxford.*)

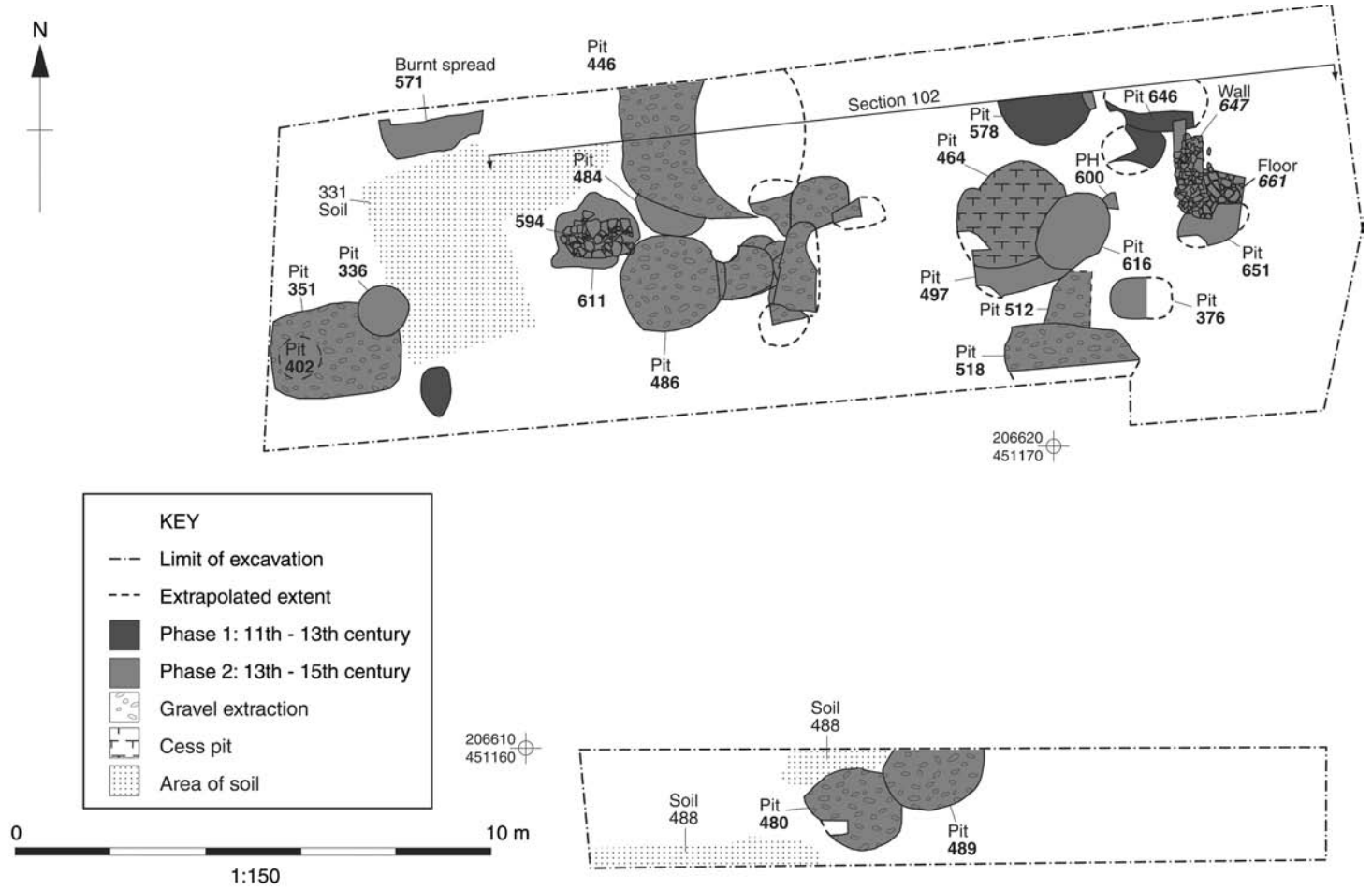

Fig. 4. Site plan, Phases 1 and 2

most substantial were an excavation prior to construction of the Sackler Library, about 50 m to the south-west of the development area, in 1998–9, and an excavation by Wessex Archaeology on the site of the Ashmolean Museum forecourt, about 50 m to the south of the development area, in 1994.[7] The former revealed evidence of two probable Bronze Age ring ditches. The development site was situated at the eastern limit of the precinct of Beaumont Palace, and numerous medieval pits were found aligned in rows, possibly representing tree planters in a formal garden. A substantial, east-west aligned, buttressed stone building may originally have been built as part of the palace, but ultimately formed part of the White Friars complex, which superseded the palace. A second possible medieval building was revealed a short distance to the north-east and also stone-lined garden features, probably associated with early nineteenth-century development of terraced housing along Beaumont Street and St John Street.[8]

The museum forecourt produced evidence of a continuous sequence of occupation beginning in the late twelfth century, in the form of two successive buildings dating to the thirteenth and possibly fourteenth centuries, along with a series of domestic backyard rubbish pits. Two large fourteenth-century bread ovens were recorded in the adjacent property to the north.[9]

In addition to these major investigations, observations made during the construction of the Cast Gallery of the Ashmolean Museum, immediately west of the development area, revealed a number of pits with pottery dating from the thirteenth to nineteenth centuries. These finds were also believed to be consistent with the use of the land as yards and waste ground to the rear of housing fronting St Giles.[10] Most recently a test trench was dug in the lane between the Ashmolean Museum and the south side of the Classics Centre, as part of a separate watching brief on trial trenches for the current Ashmolean Museum redevelopment.[11] The trench revealed a large pit cut away by the foundation trench for a crude wall footing of possible medieval or post-medieval date.

EXCAVATION METHODOLOGY

The excavation was located over the proposed footprint of the basement structure. The site was divided into two main areas, Area A and Area B (Fig. 1). Non-archaeological deposits were removed by mechanical excavator, under close archaeological supervision, to the levels of the highest significant archaeological horizon. All mechanical excavation was undertaken using a toothless ditching bucket to minimize disturbance to archaeologically sensitive strata. Hand excavation to the top of the pre-settlement geology then took place. Where large quantities of dumped deposits were revealed (such as garden soils) a sample of the soil was hand excavated, and the remainder removed by mechanical excavator. Due to health and safety restrictions the excavation of Area B was limited to a 0.5 m-wide, hand-dug slot through the exposed archaeology. Further observations were made during an ongoing watching brief on the grubbing out of existing foundations.

7 D. Poore and D. Wilkinson, 'Beaumont Palace and the White Friars: excavations at the Sackler Library, Beaumont Street, Oxford', OAU Occasional Paper, 9 (Oxford, 2001); P. Andrews and L. Mepham, 'Medieval and post-medieval extra-mural settlement on the site of the Ashmolean Museum forecourt, Beaumont Street, Oxford', *Oxoniensia*, 62 (1997), p. 179.

8 Poore and Wilkinson, 'Beaumont Palace', pp. 35–6.

9 Andrews and Mepham, 'Ashmolean Museum forecourt', pp. 191–4.

10 H. Case and D. Sturdy, 'Notes and news', *Oxoniensia*, 24 (1959), p. 101.

11 'Ashmolean Museum Oxford, archaeological watching brief report' (OA TS client report, 2005).

DISCUSSION

Early Medieval Development (Fig. 4)

A single sherd of redeposited hand-built early/middle Saxon pottery was recovered, adding to the increasing, but still modest, evidence for occupation of this part of Oxford. The earliest evidence for use of the site comprised five eleventh- to thirteenth-century pits. The pits were filled with domestic waste, including sherds of utilitarian pottery vessels and head and hoof bones. The evidence suggests occupation, primary butchery, and/or at least small-scale use of carcass products may have taken place on the site (see Poole below). Although no structural evidence was found, it is likely that any earlier property would have been situated closer to the street frontage and been destroyed by the existing building. The pits were overlain by a possible cultivation soil, and the initial phase of settlement may have been short lived. It is possible that the pits predate the establishment of the property divisions evident in the Hundred Rolls of 1279, and settlement may have been loosely structured. Alternatively, the rear part of the property may have been used for rearing livestock, most likely a pig or a few chickens.

Later Medieval Developments (Fig. 4)

The thirteenth and fourteenth centuries saw an increased level of activity on the site, and substantial structures indicated by a stone wall (647) and stone floor (661) were revealed immediately to the rear of the existing properties. These structures may have formed part of the first formalized building on the site. Salter's *Survey of Oxford* details a northern property (no. 65) on the site by *c.*1220 and a 38-yard-wide (35 m) southern property (nos 66 and 67) by 1279.[12] A stone foundation pad (594) was also revealed to the west of the area, probably associated with a structure within the yard.

A cess pit, gravel extraction pits, rubbish pits, and shallow scoops were identified. The scoops were of uncertain function, although they may have formed garden features or been dug to obtain material to backfill the cess pits. The general material assemblage indicated that the inhabitants of the properties were of modest status. However, it is notable that ceramic lamps formed over a third of the pottery assemblage from the northern part of the site. Recent excavations on property belonging to Merton College also revealed a pottery assemblage containing significant proportions (8 per cent) of lamps from the thirteenth century onwards.[13] The authors suggest that such lamps may have formed a major part of the lighting regime at the college. It is possible to argue that 65 St Giles (the northern property) provided lodgings to scholars; quantities of similar double-shelled lamps have been recovered from the sites of other possible academic halls around Oxford, including Jowett Walk, to the north-east of the northern town walls, and the Ashmolean Museum forecourt, to the south.[14] Exeter College owned a property (latterly Batayl Hall) on the site of the Ashmolean forecourt from 1320 to 1803, and it is possible that property on Jowett Walk was also college owned.[15] Lamps were also found at St John's College, Manchester College, and on the site of the New Bodleian Extension in 1939, the site of Deep Hall, an academic hall or approved lodging house for students dating from the mid-thirteenth century to the mid-fourteenth century.[16] By

[12] Salter, *Survey of Oxford*, p. 214.

[13] Paul Blinkhorn, 'Pottery' in Daniel Poore, David Score, and Anne Dodd, 'Excavations at No. 4A Merton St., Merton College, Oxford: the evolution of a medieval stone house and tenement and an early college property', *Oxoniensia*, 71 (2006), p. 263.

[14] L. Brown, 'Pottery', in M. R. Roberts, 'Excavations at Jowett Walk, Oxford', *Oxoniensia,* 60 (1995), p. 237; Andrews and Mepham, 'Ashmolean Museum forecourt', p. 182.

[15] Ibid.

[16] E. M. Jope, H. M. Jope, and S. E. Rigold, 'Pottery from a late twelfth century well-filling and other medieval finds from St John's College, Oxford, 1947', *Oxoniensia,* 15 (1950), pp. 57–60; R. L. S. Bruce-Mitford, 'The archaeology of the site of the Bodleian extension in Broad Street, Oxford', *Oxoniensia,* 4 (1939), pp. 89–146; W. A. Pantin, 'The recently demolished houses in Broad Street, Oxford', *Oxoniensia,* 2 (1937), p. 188. The lamps from the site have been further studied by Carole Wheeler for the Ashmolean Museum's potweb: Carole Wheeler, 'Conspicuous liquid consumption: a

contrast, not one lamp fragment was found during the excavations at 4–7, 54–5, 64–6, and 67–9 St Thomas's Street, an area to the west of the town walls that was occupied by craftsmen and artisans, such as brewers and tanners.[17] It would appear that there is a link between large quantities of double-shelled lamps and academic halls or student lodging houses, and these seem to have been predominantly located in the medieval centre, close to the university core. Double-shelled lamps are rarely found in Britain in large quantities, although larger assemblages have been recovered from kiln sites such as Laverstock, Wiltshire.[18] Similar lamps have also been found in Cambridge, and it may be that they were also associated with the sites of academic halls.[19] Individual lamps have been found at monastic sites, such as Cumnor Place, Oxford, a grange of the abbots of Abingdon, and Kelso Abbey, Scotland, though these are rare finds, and it may be that in such institutions candles were preferred.[20]

There was also continued evidence for primary butchery and/or at least small-scale use of carcass products in the animal-bone assemblage. If the property did house students, it may be that small-scale food preparation took place on the site. However, the pottery assemblage was devoid of the types of cooking vessels associated with food-production sites, and this characteristic was also noted in the Jowett Walk assemblage.[21] There was evidence for horn-working on the site, with thirty-four fragments of horn core recovered from pit 351, four of which displayed evidence of cut marks. Similarly a total of sixty-four fragments of horn core was recovered from a pit dating from the eleventh to thirteenth centuries during the Merton College excavations.[22] The horn core could be used to manufacture horn objects, such as knife handles, or the sheaths could be flattened or moulded to produce decorative boxes or drinking vessels.

The pottery assemblage suggests a hiatus in activity between 1400 and 1475, and only a single gravel extraction pit could be dated to the fifteenth century. The southern property (66–7 St Giles) was recorded as vacant land of the church in 1405, but in 1430 it was rented out – possibly as garden space.[23] By 1457 the single property possibly comprised two adjacent tenements, and Balliol College owned the northern property (65 St Giles) from 1454.[24] The contraction of extra-mural Oxford from the late fourteenth century onwards was also indicated by the paucity of fifteenth-century pottery recovered from the excavations at the Ashmolean Museum forecourt and those at St John's College, on the opposite side of St Giles.[25]

There is a possibility that the material assemblage recovered from the gravel pits originated from elsewhere in north Oxford. Gravel-extraction pits have been revealed during recent work by OA at the Ashmolean Museum, where it is thought that gravel was removed and waste material imported in equal volumes.[26] However, the gravel-extraction pits at the Ashmolean Museum were at the rear of the tenement yards and formed a discrete zone of activity.[27] The pits at 67–9 St Giles were immediately to the rear of properties and were more likely to be filled with the inhabitants' household waste.

re-evaluation exercise of the New Bodleian extension site, Broad Street, Oxford, 1937' (2002): http://potweb.ashmolean.org/NewBodleian/HomePage.html, accessed 19 Feb. 2007.

17 Andrew Norton, 'Excavations at 67–69 St Thomas' Street, Oxford', *Oxoniensia*, 71 (2006), pp. 347–92.

18 J. Musty, D. J. Algar, and P. F. Ewence, 'The medieval pottery kilns at Laverstock, near Salisbury, Wiltshire', *Archaeologia*, 102 (1969), pp. 136–7.

19 Jope, Jope, and Rigold, 'Pottery from … St John's College, Oxford', p. 57.

20 Ibid., p. 59; G Haggart, 'Ceramic material', in C. J. Tabraham, 'Excavations at Kelso Abbey', *Proceedings of the Society of Antiquaries of Scotland*, 114 (1984), p. 398.

21 Brown, 'Pottery', in Roberts, 'Jowett Walk, Oxford', p. 237.

22 Poore, Score, and Dodd, 'Excavations at no. 4A Merton St.', p. 218.

23 Salter, *Deeds of Balliol College*, pp. 212–18.

24 Ibid.

25 Andrews and Mepham, 'Ashmolean Museum forecourt', p. 220; Steve Lawrence, 'Excavations in St John's College, Oxford, 2003', *Oxoniensia*, 70 (2005), p. 330.

26 Brian Durham, personal communication.

27 Ben Ford, personal communication.

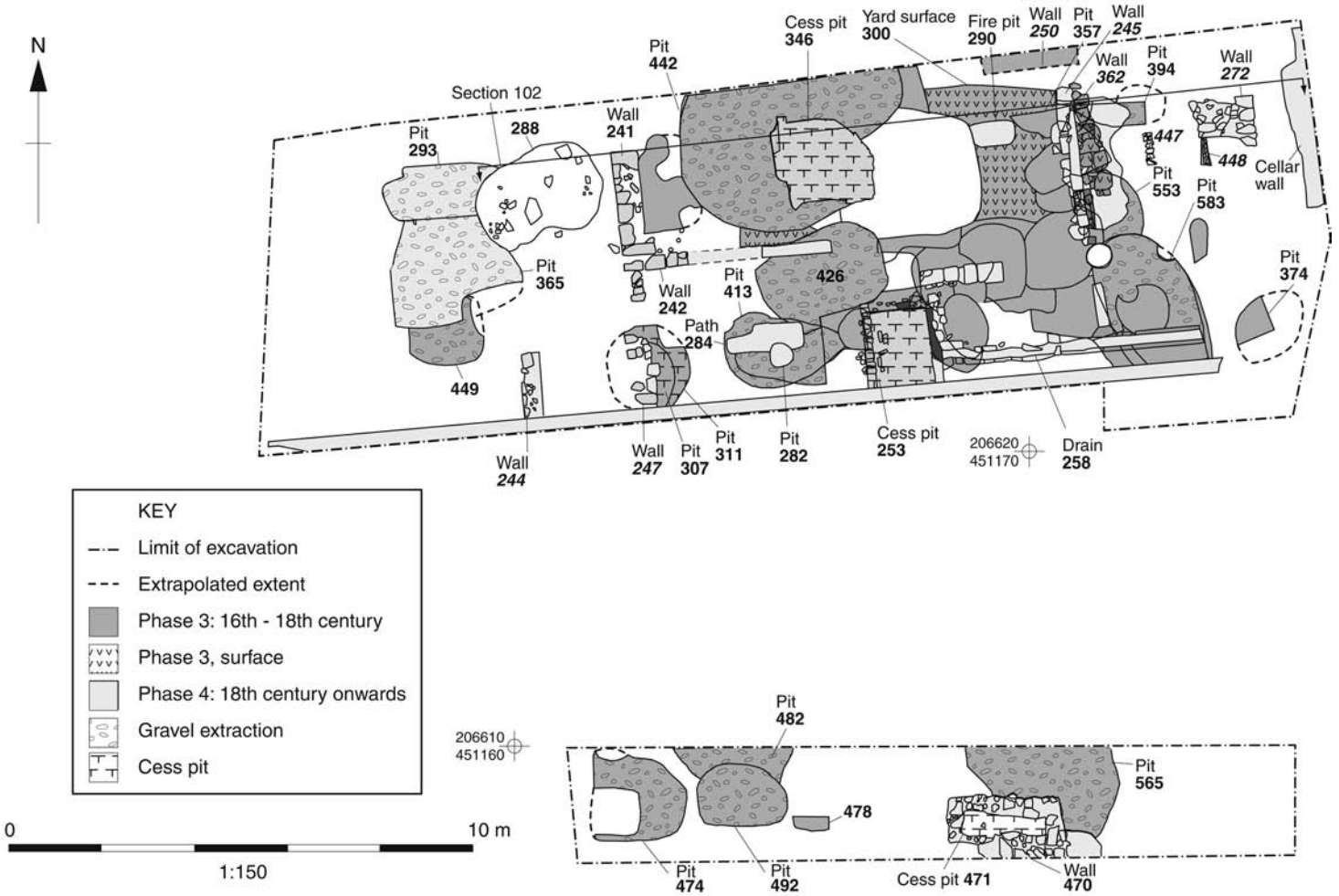

Fig. 5. Site plan, Phases 3 and 4

Post-Medieval Activity (Fig. 5)

The archaeological nature of the site changed little from the end of the fifteenth century; evidence for structures was revealed immediately to the west of the existing building, and quarry and rubbish pits were revealed in the yard spaces. It is significant that the material assemblage was dominated by sixteenth- and seventeenth-century drinking vessels. At 66 St Giles was a public house known as 'The Horse and Hounds' or 'The Hare and Hounds' from the seventeenth century to the late 1840s.[28] The excavated evidence suggests that the establishment had its origins in the sixteenth century. Similar vessels (post-medieval Redwares, Rhenish stoneware mugs, and at least two Martincamp flasks) were recovered from the excavation of a probable public house at Market Way, in Reading, although there domestic vessels were also present.[29] It is likely that brewing also took place in St Giles, as straight or indeterminate barley (*Hordeum vulgare*) grain was noted, the occurrence of which is often associated with brewing. Overall, the environmental remains suggest that the occupants of all three sites (65–7 St Giles) continued to be of modest status.

Loggan's map of 1675 (Fig. 2) shows the street-front properties along St Giles, with a number of buildings and open yards to the rear. These buildings may have been cottages, as from the seventeenth century the expanding population of the town resulted in the creation of living space in the backs of most of the properties fronting St Giles.[30] Evidence for seventeenth-century walls and the partial footprint of an eighteenth-century building were revealed in the yard space behind no. 65, which was leased by the architect Henry Keene between 1769 and 1777.[31] Keene is thought to have remodelled the property extensively, and it may be that the building within the yard can also be attributed to him. However, the remains probably formed part of 'The Cottage', a recently demolished late nineteenth-century building (see building report below and Fig. 6).

Evidence for nineteenth-century demolition deposits was also revealed and probably related to the demolition of nos 66–7 by George Wyatt in 1868. Following the construction of the existing buildings, 67 was occupied by Wyatt, and his brick-built workshop-cum-showroom/storeroom buildings were demolished as part of the development. No. 66 was leased out and used as a chemist's shop from 1893 to 1958, and stained-glass panels reflecting this use were revealed in the rear wall. 'The Cottage' is shown on the first edition OS map of Oxford (1876), as are the buildings fronting St Giles. The location of post-medieval walls 245 and 362 corresponds with the rear of 65 St Giles.

CONCLUSIONS

The oil lamps recovered from the site strongly suggest that for a period in the thirteenth and fourteenth centuries 65 St Giles was the site of a student lodging or academic hall. Students would need light to enable them to study in the evening. Wax candles were highly prized and were used for churches and great houses, although tallow candles or rush lights might be found in less affluent premises.[32] There was no evidence of candlesticks at the site, although these are not common until the late medieval or early post-medieval period; before that candles were probably put on spikes.[33] Pottery lamps, although well known in Saxo-Norman deposits, are less common thereafter. However, in the developing university it is likely that lamps were favoured by

[28] Salter, *Deeds of Balliol College*, pp. 212–18; *Hunt & Co's Oxford Directory* (1846), (ORO PAR 208/13/ID 6/).

[29] Paul Blinkhorn, 'Pottery', in N. Scott and A. Hardy, 'The excavation of medieval pits and a probable sixteenth- to seventeenth-century tavern or inn at 7–8 Broad Street, Reading, Berkshire', in *Excavations on Broad Street, Reading*, OA Occasional Paper 13 (Oxford, 2007), pp. 6–9.

[30] 'Proposed Classics Centre' (OA TS report, 2004).

[31] Salter, *Deeds of Balliol College*, p. 218.

[32] John Steane, *The Archaeology of Medieval England and Wales* (London, 1985), p. 202.

[33] Ibid.

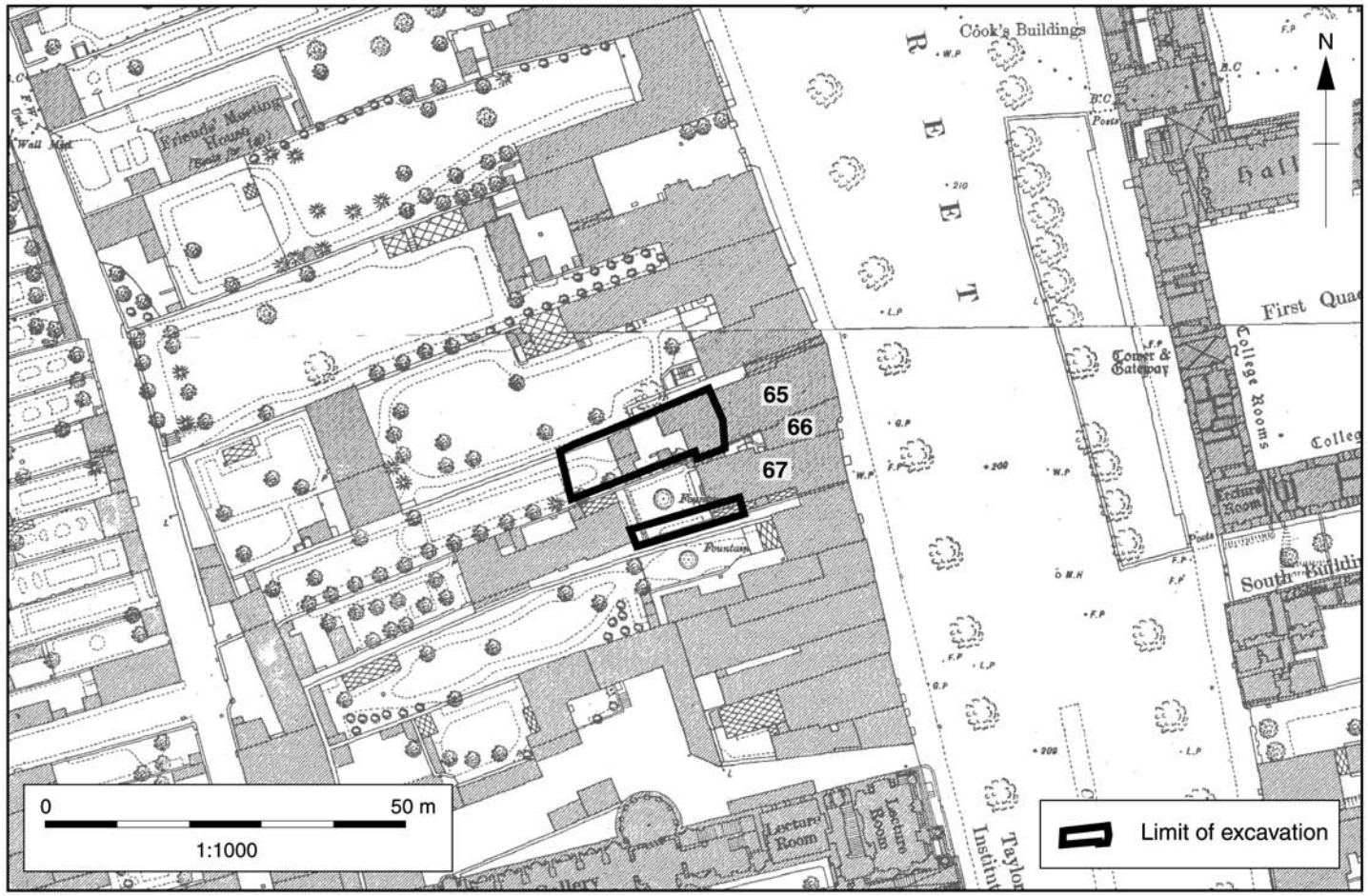

Fig. 6. Detail from first edition Ordnance Survey map

scholars because of their stability and portability, and it is possible that they were being produced specifically for the university.[34]

In the early thirteenth century the university had little to do with domestic arrangements; scholars found what accommodation they could.[35] They might lodge independently in town, or students of standing might take over a whole house; 'disorderly houses' were formed when scholars shared their houses with common criminals.[36] Landlords might be prominent citizens, local religious houses, clergy beneficed in the Oxford region, or bedels.[37] In 1313 there were over a hundred academic halls in Oxford, and the nearest to 65 St Giles was Batayl Hall, which lay on the site of the Ashmolean forecourt, to the south of the site.[38] The halls could be commodious dwelling-houses, where scholars lived together, sharing with friends, though in some cases masters might have shared a house.[39] The halls might also have been small, with limited facilities and no pretensions to be permanent or independent institutions.[40] Halls might also have been located near schools or had schools located within the buildings.[41]

It is known that 65 St Giles was owned by Balliol College from 1454, although at this time additional properties were probably for investment by the college rather than to house scholars.[42] Balliol College dates from the 1260s and was (and is) located on Horsemonger Street, now Broad Street.[43] It originally housed sixteen poor scholars, and it is unlikely to have required an additional lodging house on St Giles at that time.[44]

The evidence would suggest that 65 St Giles was the site of a private house leased to poor scholars. The animal bones recovered from 65 St Giles might reflect the diet of poorer scholars, although, based on the lack of cooking vessels, it is reasonable to suggest that the scholars ate elsewhere. The evidence from pit 351 indicates that a horn-worker also lodged at the property, not necessarily at the same time as the scholars. The property appeared to become unoccupied in the early fifteenth century, shortly before being sold to Balliol College, and coinciding with the contraction of Oxford. Despite the drop in Oxford's fortunes, lodging houses would have been under far greater control after 1410, when the university forbade scholars to live outside the authority of the principal of a hall.[45] In 1444 no academic halls were recorded along the western side of St Giles.[46]

Although only limited excavation took place within the area of the southern property (66–7 St Giles), the occupants of the property were probably of similar status to the scholars next door in the medieval period. The two properties were probably similar - large and complex buildings, which were often used as academic halls and inns.[47] The ceramic assemblage recovered from across the site indicates that an inn or tavern was located on the site from the sixteenth century. This was probably located at 66 St Giles, which we know served as a public house from the seventeenth century to the mid-nineteenth century. The probable size of the property makes it unlikely that it

34 Michael R. McCarthy and Catherine M Brooks, *Medieval Pottery in Britain, AD900–1600* (Leicester, 1988), pp. 116–17.

35 John Jones, *Balliol College: a History 1263–1939*, 2nd edn (Oxford, 1997), p. 1.

36 J. I. Catto, 'Citizens, scholars and masters', in J. I. Catto, ed., *History of the University of Oxford,* 1, *The Early Oxford Schools* (Oxford, 1984), pp. 175–6.

37 Ibid.

38 Ibid., map 3, 'Academic Halls in 1313', pp. xxxvi-vii.

39 Ibid., p. 175.

40 Jones, *Balliol College,* p. 1.

41 J. R. L. Highfield, 'The early colleges', in Catto, ed., *The Early Oxford Schools*, p. 226.

42 Salter, *Deeds of Balliol College,* pp. 212–18; Jones, *Balliol College*, p. 3.

43 *VCH Oxon*, 3, p. 82; Jones, *Balliol College*, p. 3.

44 Ibid.

45 Catto, *Early Oxford Schools*, p. 176.

46 J. I. Catto and T. A. R. Evans, *History of the University of Oxford,* 2, *Late Medieval Oxford* (Oxford, 1992), map 2, 'Academic Halls in 1444, after John Rous', pp. xlvi-vii.

47 *VCH Oxon,* 4, p. 34.

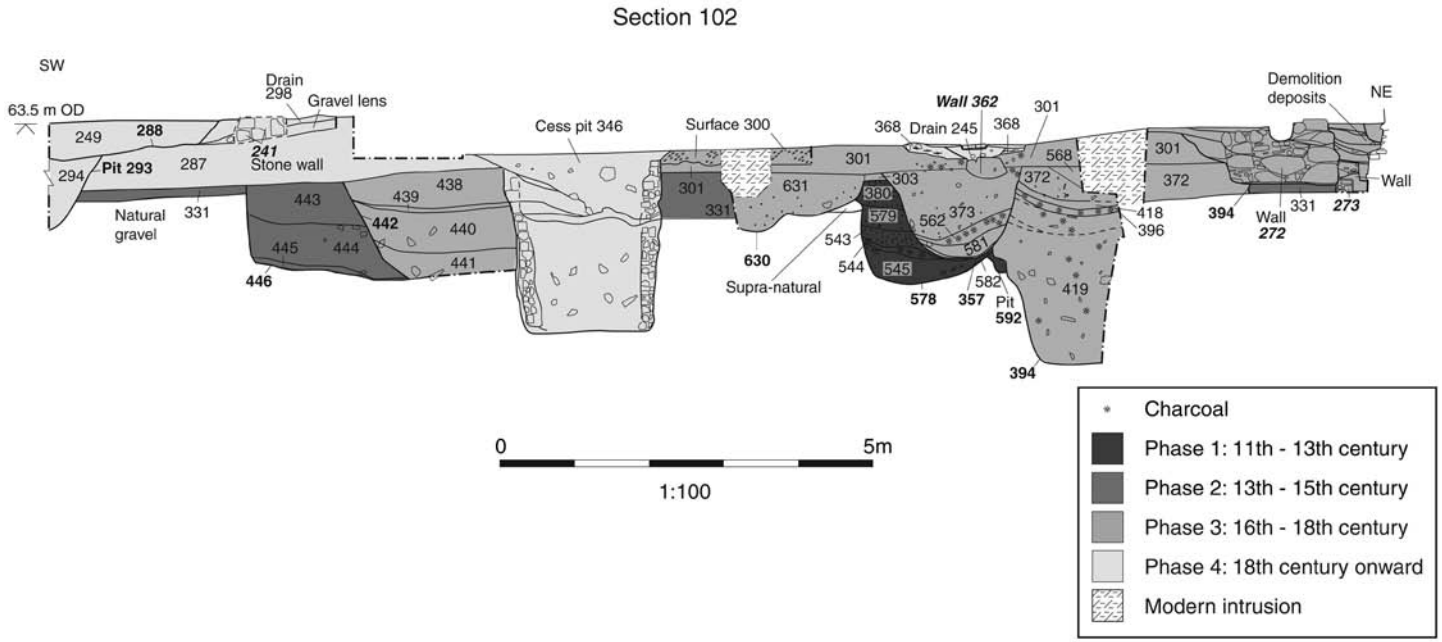

Fig. 7. Section 102, 65 St Giles yard deposits

housed an alehouse, as these were located in much smaller premises. Taverns were drinking houses where wine was drunk, and they were larger than alehouses, and inns were larger still and could provide accommodation of some comfort.[48]

RESULTS

GENERAL

The site predominantly comprised pits filled with free-draining sandy silt and silty clay deposits, derived from the natural geology, and dumped garden soils. The natural gravels were revealed about 1.5 m below ground level, and the present water table was not reached during the excavations. Large areas of Area A had been disturbed by modern piling and removal of obstructions for those piles, and a small number of large modern pits had also truncated significant areas of the site (NI). However, once these modern intrusions had been cleared, it was seen that the stratigraphy of the site was well preserved.

ARCHAEOLOGICAL DESCRIPTION

Phase 1: Eleventh to Thirteenth Centuries

Area A (Figs 4 and 7). The early ground level of the site was not observed, having been truncated by later activity (see below). A patch of disturbed supra-natural was observed to the east of the site at 62.6 m OD, above natural gravel at 62.45 m OD. Five pits were revealed within Area A, cut through supra-natural and the natural gravel, four of which were located to the east of the site. These were generally oval and between 1 m and 2 m in diameter. Their relatively shallow depth, between 0.5 m and 0.75 m, indicated that they probably functioned as rubbish pits, not being of a depth that would have made gravel extraction practicable. Pit 578 (Fig. 7) was backfilled with thick layers of dumped silty clays containing domestic waste, including a bar mount with a dog-tooth design (SF53) and dumped hearth waste (layers 544 and 545). These fills were overlain by a cess-type material (543) that was capped by gravel fills (579 and 380). A total of 866 g of animal bones (2.7 per cent of the site's bone assemblage) included horn cores, head and hoof bones from sheep and cattle, and bones from geese and a raven. Pottery dating from 1075 to 1225 was also recovered. Pit 592 was revealed to the east, but was very truncated. Pit 646, a large oval pit, contained two fills (640 and 641) of compact sandy silt and clay that produced pottery dated 1075 to 1225. The uppermost fill (640) appeared to be scorched, suggesting that there was a fire in this area prior to the building of the Phase 2 structures (see below).

Phase 2 (Thirteenth and Fourteenth Centuries)

Area A (Figs 4 and 7). Structures and soils. The earliest structural evidence comprised a stone floor (661) and a N-S aligned limestone wall (647), immediately to the rear of the existing properties. The floor was 0.5 m below the upper level of the Phase 2 pits, and may have formed the base of a sunken room. Constructed within the fills of Phase 1 pit 646, wall 647 survived to a height of 0.3 m (3 courses) and was 1.5 m long. It was made up of roughly hewn limestone blocks, bonded with silty clay. Wall 647 formed the western extent of floor 661, which was made up of tabular limestone slabs. Pottery dating from the thirteenth century was recovered from the backfill of the sunken room

A stone pad, 594, was seen in the centre of the site within truncated construction cut 611. This rectangular structure measured 1.5 m by 0.9 m wide and consisted of roughly hewn limestone blocks approximately 0.2 m by 0.15 m by 0.1 m; there was no evidence of any bonding material.

Throughout the site, particularly to the west, a redeposited layer of reddish silt supra-natural was revealed (331 – Fig. 7), probably the remnants of a cultivation soil. Pottery dating from the thirteenth century was recovered that included two oil lamps; a bone gaming piece (SF46) and herring bones were also retrieved. Similar deposits of soil (385 to the west, and 360 to the east – NI) contained slag and a redeposited prehistoric flint flake.

Pits. Phase 2 saw an intensification of domestic activity, and 24 pits were observed. In the eastern part of the site smaller intercutting pits were common. The majority of the pits were oval features, with medium to steep sides and a concave base. Typically these features were about 1.5 m in diameter and between 0.5 and 1 m deep. They were filled with alternating bands of silts and gravel. Pottery dating from the thirteenth century was recovered from the features, and of note were fragments of double-shelled lamps recovered from pits 497, 616, and 651. The animal-bone assemblage was relatively small, with most bones recovered from pits 376 (including sheep/goat, geese, birds, fowl, pig, rabbit, and cattle) and 497 (including cattle, horse, sheep/goat, and geese).

[48] John Schofield and Alan Vince, *Medieval Towns: the Archaeology of British Towns in their European Setting* (London, 2003), p. 91.

Pit 484 in the centre of the site was bell-shaped in profile, measuring 0.7 m in diameter and over 3.1 m in depth. It appeared to have been rapidly backfilled with mixed silts and gravel, the undercut areas of the gravel pit surviving as voids. The fills of this feature contained pottery dated to the thirteenth and fourteenth centuries. A sub-rectangular pit (518), at least 1.6 m deep, with alternating fills of mixed ash and domestic waste and gravels, was revealed to the east; this may have had a secondary use as a cess pit.

Pit 464 in the eastern part of the site cut through the fills of pit 497 (see above) and may have been dug towards the end of Phase 2. It was 2.8 m wide at the top, 1.8 m wide at the base, and 3.3 m deep; the base was lined with roughly hewn irregular limestone blocks, measuring 0.3 m by 0.2 m by 0.1 m. Its primary fill was a 2.2 m-thick dump of green-grey silt, and cattle, horse, domestic fowl, and pig bones were recovered. Pottery and ceramic lamps dating to the thirteenth and fourteenth centuries were also recovered from its fills. The feature probably formed a cess pit, and to the east of 464 was posthole 600, possibly representing an associated superstructure.

Large probable gravel extraction pits were revealed in the centre and west of the site. These measured up to 3 m in diameter and up to 3 m in depth and were generally vertically sided. Pit 446 (Fig. 7) cut the fills of pit 484 (see above) in the centre of Area A, and was backfilled with a dump of silt and gravel (445) containing fourteenth-century pottery and burnt material. Fill 445 was overlain by similar deposits (443 and 444) that contained thirteenth-century pottery and almost 2 kg of bones from cattle, pig, sheep/goat, horse, rabbit, dog, goose, duck, domestic fowl, herring, eel, and possibly sprat. The majority of the large mammal assemblage comprised head and hoof bones. Pit 486, to the south, also contained a large amount of head and hoof bones, as well as the remains of a padlock key handle.

Quarry pit 351, in the south-west corner of the site, was also backfilled with domestic waste. This material comprised almost 4 kg of animal bones, including thirty-four horn cores (with four displaying cut-marks) and other cattle and sheep bones, as well as bones from cat, bird, and fowl. Pottery dating from the thirteenth century and a silver, cut halfpenny (SF17), of Henry III (1216–72) or Edward I (1272–1307) and probably deposited before 1281, were also recovered.

Towards the western end of the site several shallow pits or spreads were observed, measuring up to 1.5 m wide and 0.6 m deep. Spread 571 represented an episode of burning, and charred evidence for wheat, barley, rye, oats, beans/peas, hazel-nut shells, plum, and weeds was recovered. Two pits (336 and 402) to the west were probably dug to extract small quantities of soil, possibly for using within the cess pits. The gravelly fills of the pits contained fragments of ceramic lamps.

Area B (Fig. 4). The earliest archaeological layer seen in Area B was a deposit of reworked supra-natural (488 – equivalent to 331 in Area A), containing pottery dating from the thirteenth century. Cutting this layer were two vertically sided circular, probable gravel, extraction pits (480 and 489), measuring respectively 1.35 m and 2.5 m wide. For safety reasons, they were excavated only to a depth of 0.5 m. They were backfilled with bands of silty clay and sandy gravel from which thirteenth-century pottery, along with bones from cattle, sheep/goat, domestic fowl, and goose were recovered.

Phase 2b (Fifteenth Century)

Area A (Fig. 4). A probable gravel pit (512) was revealed in the east of the site. It had undercut sides and was excavated only to a depth of 0.8 m, due to its proximity to the southern edge of the site. It was 1 m wide and filled with sandy silt that contained forty-six sherds of pottery dating between 1400 and 1475 (72 per cent of the site's fifteenth-century pottery assemblage), characterized by Brill/Boarstall ware. Eighteen similarly dated, residual sherds of pottery were recovered from later features.

Phase 3 (Sixteenth–Eighteenth Centuries)

Area A (Figs 5 and 7). Pits. Large pits were revealed within the central (413, 426, and 442), western (449), and eastern (394, 553, and 583) parts of the site. These were either sub-rectangular or square, between 1.7 m and 3.5 m in width, and between 1.0 m and 1.4 m in depth. They are characteristic of gravel extraction pits, later utilized as rubbish pits. In general, they were backfilled with mixed silts and gravel, for instance, fills 415 and 416 (NI) of pit 413. Pottery dating from the sixteenth century onwards, including many fragments of seventeenth-century drinking vessels and a fragment of a Brill/Boarstall ware cauldron, were among the finds recovered from these pit fills. A mid-sixteenth-century glass goblet stem, with optic-blown vertical ribbing, was recovered from the fill of 413. Bones from cattle, pig, sheep/goat, cat, and fish (including cod) were also recovered. Among the charred plant remains were straight or indeterminate *Hordeum vulgare* grain, the latter suggesting the possibility of the two-row variety most commonly associated with brewing.

Pit 394 (Fig. 7) in the NE part of the site was of particular note; it was at least 1.7 m in diameter and 2.6 m deep, with near-vertical sides and a flat base. It was backfilled with a dump of redeposited clay silt midden material (419), which was 2 m thick and contained sixteenth-century drinking vessels and a large assemblage of bone (including cow, sheep/goat, pig, rabbit, dog, fowl, goose, and cod). A buckle frame (SF34), lace tags, and a number of pins were also recovered. Overlying fill 419 was a band of dumped hearth waste (396), below a silty fill (418). Above 418, fill 372 contained a copper-alloy jetton (SF24), dated 1550–90, and slag from around an oven wall. Ashy and

silty fills (569 and 568) overlay 372. Pit 357 (Figs 5 and 7) cut pit 394 on its western edge and was filled with thin bands of ashy fills (582, 581 and 562) containing redeposited pottery and large mammal and pig bones. By contrast, its upper fill comprised redeposited garden soil 373. Pit 311 and recut 307, to the south of the site, were of similar dimensions and were filled with organic layers that contained bones from cattle, sheep/goat, and domestic fowl, a lace tag, pins, a knife handle, a button, and seventeenth-century drinking vessels. These pits were likely to have been utilized as cess pits. Several smaller pits were revealed to the rear of the structure fronting St Giles, ranging from 0.6 m to 1.2 m in diameter, and 0.5 m to 1 m in depth; for instance, pit 630, fill 631 (Fig. 7) and pit 558 (NI). Typically the pits were filled with similar material to the larger pits, and worthy of note was pit 374 in the eastern part of the site. Pit 374 was filled with almost 1 kg of animal bones, fifteenth- to seventeenth-century drinking vessels, brick and tile fragments, copper pins, lace tags, a jetton (SF11), and dumped ashy layers. The pits were probably dug for small-scale soil extraction, possibly for use in cess pits, and utilized as rubbish pits.

Structures and soils. A thin cultivation soil (303 – NI) was noted in the eastern area of the site, probably formed from the reworking of the uppermost fills of Phase 1 and 2 pits. Cattle and sheep/goat bones and pottery dating from 1475 to 1550, which included the remains of a skillet, were recovered from this layer. Associated with this soil were two parallel N-S running walls (447 and 448). Made up of limestone slabs surviving to a maximum of four courses, and only 0.2 m wide, the walls may have defined a path, or division within the backyard.

A N–S aligned limestone wall (362) was constructed to the west of the Phase 2 sunken room, probably forming the rear or western wall of a later structure. This wall survived to a length of 3.5 m and was 0.5 m wide. Large limestone blocks measuring 0.5 m by 0.35 m by 0.1 m made up its outer face, whilst the central core was infilled with limestone rubble. Wall 272 (see Section 102, Fig. 7) may have formed an extension of wall 362. Associated with this was a heavily truncated E-W aligned wall footing (250), which was possibly the remains of a plot division. Wall 250 measured 1.6 m long and 0.4 m thick, although it was truncated by modern piles to the west and could not be accurately plotted (Fig. 5).

A wall (273) consisting of brick and small limestone fragments was found immediately to the west of the existing building. Due to its truncated nature, and concerns over undermining the existing building, this structure was recorded only in section (Fig. 7). It is possible that the wall formed the eastern limits of a structure formed by wall 362 (see above). The wall was overlain by demolition deposits, which contained the majority of the stone and ceramic roof tiles recovered from the site.

A thick layer of garden soil (301) was observed to the west of wall 362, which contained cattle and sheep/goat bones, a loop fastener (SF7), and seventeenth-century drinking vessels. A similar soil was revealed to the east (280), which contained a highly polished bone knife handle (SF8). Soil 301 was overlain by a dumped deposit (368) and the remains of a 0.02 m-thick patchy yard surface (300) of compacted light yellow-brown clay sand, situated within the area enclosed by walls 362 and 250. Pottery was recovered from layer 300, dating from the sixteenth century, and a fire pit (290) was recorded cutting through the surface.

Area B (Figs 5 and 7). Four sub-rectangular gravel extraction pits (474, 482, 492, and 565) were revealed that were similar in dimensions and profile to those seen in Area A. A rectangular feature was also observed (478), measuring 1 m long and 0.5 m wide, with steep sides and a flat base. This feature was backfilled with limestone rubble and although very truncated may have formed an E-W aligned foundation pad. Fragments of fifteenth- to seventeenth-century pottery were recovered from the features, which included evidence for drinking vessels. Pit 474 contained bones from cattle and sheep, head and hoof bones forming the majority of the assemblage.

Phase 4 (Eighteenth Century Onwards) (Figs 5 and 7)

Area A. Structures and soils. The footings for a probable rectangular structure were revealed to the rear of the northern property (65 St Giles) and could be seen occupying the north central area of the site. The southern footings of the structure comprised a 3.8 m long W-E aligned limestone wall (242), and the western footings comprised a 2 m long N-S aligned limestone wall (241). These footings were 0.5 m thick and were made up of limestone slabs measuring roughly 0.4 m by 0.3 m by 0.2 m and bonded with lime mortar and fragments of tile and brick. Associated with this structure were similarly constructed walls 244 and 247, and a garden soil (287) that contained pottery with a date range of 1780 to 1830. A garden path (284) made of gravel could be seen running E-W, to the south of the rectangular building, up to wall 247.

Two large rectangular probable cess pits (253 and 346) were revealed in the centre of the site. Contemporary stone drains (258 and 298) were also revealed, which drained into the pits. The cess pits were constructed from rough limestone rubble walls; they were only partially revealed, but they appeared to be roughly 1.8 m square and 2.4 m deep. They were filled with dumped deposits that contained nineteenth-century pottery and glass bottles. No evidence for organic deposits was found, although it is probable that cess deposits were removed at regular intervals, and the pits infilled with household waste once they fell out of use. Any evidence for overlying superstructures had also been removed.

Pits. There was much less evidence for backyard activity in the eighteenth and nineteenth centuries. Two large rectangular pits (365 and 293 – Fig. 5) were found to the west of wall 241. Backfilled with brick and rubble (294), they may have originated as gravel extraction pits. A fragment of an eighteenth-century lead glass goblet was

recovered from pit 293. The pits were truncated by a shallow scoop (288) filled with rubble (249), indicative of a demolition episode (Fig. 7). A small pit (282), measuring 0.5 m wide and 0.2 m deep, was also discovered to the south-east of wall 242. This pit contained pins, a bone assemblage dominated by fowl, duck, and goose, and pottery dated from 1780 to 1830.

Area B. A rectangular cess pit (471) was revealed in the centre of Area B. Extending north from the edge of the site, it measured 2.3 m east to west, and was at least 1.2 m from north to south. The cess pit was of similar form to cess pits 253 and 347 in Area A. The pit was overlain by a 1.5 m long stone structure (470), possibly the remains of a superstructure. All the features within Area B were overlain by garden soil 467, up to 0.5 m thick and containing redeposited late seventeenth-century pottery.

BUILDING SURVEY by SIMON UNDERDOWN

The following summarizes the findings of a historic building assessment and building survey conducted by OA prior to and during the archaeological excavation.[49] The survey involved keyhole investigation of the fabric and photographic recording of the parts of the building being altered or demolished prior to the works. A watching brief and further photographic recording took place during the works.

Area A, no. 65. Agas's map of 1578 appears to show buildings along the street frontage of the site and one wing extending a short distance back to the west, probably on the plot of no. 65. Loggan's map of 1675 (Fig. 2) appears to show a long range of buildings along the north side of the plot, and Taylor (1750) and Faden (1789) show buildings extending to the north boundary of the plot, along the entire length of the site and to the west. The excavation produced no evidence of these earlier buildings, and they may have been of a very insubstantial nature, such as lean-tos against a boundary wall, or they may simply have had shallow foundations, perhaps timber framed with dwarf wall footings.

It is likely that the earlier buildings had been removed after 1789, so possibly the site was cleared about the time the pre-Wyatt house was being constructed on the street frontage. The house was rebuilt with a timber frame, stone chimney breasts, and east gable wall in the late eighteenth century and also underwent some additional alteration in the late nineteenth century. A chinoiserie staircase and first-floor bay window were completed before 1793 and may be attributable to the period when Henry Keene (the architect of the Radcliffe Observatory) leased the house from 1769 to 1777.[50]

A stone Gothic arched shopfront was added to 65 before George Wyatt (ironmonger and builder) acquired the three properties in 1869. Although the shopfront was largely replaced by a twentieth-century plate-glass window, the tops of the Gothic arches had survived and were revealed during the development work. The arches have now been reconstructed. The ground-floor rear room of the house had been altered in the nineteenth century. It had been extended by about 1 m to the south, with the construction of a new bay, which incorporated some reused early eighteenth-century oak windows, consisting of two twelve-pane glazing-bar sashes within nineteenth-century softwood frames. These were removed during the development works.

A nineteenth-century extension was built on to the rear of 65 before 1876. This was of three storeys, like the house, with a single room on each storey. The ground floor was of solid masonry, while the upper two floors were of light softwood framing. A brick stack serving the upper two rooms had been built on to the back of the existing stone stack. There was an arched opening in the west wall, north of the original stack, which had been blocked in stone. On the other side of the fireplace an opening had been made into the extension by removing the side wall of the chimney and blocking the earlier chimney arch with brick. Later in the nineteenth century, also before 1876, further two-storey extensions in similar materials were made to the west and south of the first extension, and all were rendered. The southern extension contained a scullery, with a worn flagstone floor.

Also in 1876 there was a small outbuilding to the west, and west of that a narrow building in two sections that spanned the plot from south to north. Foundations found during the excavation that probably belong to the latter building were stratigraphically dated to between the late seventeenth and early nineteenth centuries. By 1900 these small structures had gone, and the two-storey brick extension had been added, and that, together with the earlier two-storey extensions, made up a separate dwelling, known as The Cottage, with its own entrance in Blackfriars Alley.

The ground-floor north wall of The Cottage, and the extension, incorporated parts of an earlier limestone wall on the boundary line of the property, which may have been part of an earlier building. There was no evidence such as blocked openings to confirm this, but, as mentioned above, Loggan appeared to show buildings extending along the plot, and it would seem possible, therefore, that this wall dated to before 1675.

[49] 'Historic building assessment at the Oxford University Classics Centre, St Giles, Oxford' (OA TS report, 2005); 'Oxford University Classics Centre, 65–67 St Giles, Oxford, historic building investigation and recording' (OA TS report, 2006).

[50] Salter, *Deeds of Balliol College*, p. 218.

Area B, nos 66–7. These were largely demolished and rebuilt by Wyatt in 1869 as one construction. The unified Gothic revival façade is a rare surviving example in Oxford of the use of this style in a commercial building. Wyatt's construction was well received at the time and received a glowing review in *Jackson's Oxford Journal* of October 1868:

> The two houses which he (Wyatt) has erected will bear comparison with any in Oxford for solidity of material and originality and excellence of design. These two houses are splendidly built in stone, and throughout are constructed in a style of durability and completeness which is seldom seen in these days of rapid building and "railway contracts". The staircases are of stone. The frontage is full of original design, being handsomely built and adorned with carvings of animals, birds, heads of human beings, &c. (thought to be members of the Wyatt family), which reflect great credit on the skilled workmen Mr. Wyatt employs, one of whom drew up the plans, while another carved the stone. The whole work is a durable monument of local talent, wrought out by "cunning hands", with something of the olden spirit of enthusiasm, when "clerks of works" were Secretaries of State, and when builders dwelt for years on the scene of their beloved labour.[51]

From 1893 to 1958 no. 66 was leased out and used as a chemist's shop, and it had stained-glass panels reflecting this in the rear wall. This wall was demolished as part of the development, but the panels were retained for reuse. The second floor over no. 66 appears to have been accessed only from 67 and used by Wyatt as part of his household.

Wyatt's house and shop were at 67, and he extended it at the rear, adding brick-built workshop-cum-showroom/storeroom buildings, which were demolished as part of the recent development. The building immediately adjoining the rear of the house was of one storey and consisted of one large open room. It incorporated an earlier brick boundary wall, between 66 and 67, in its north wall. This was built after 1900 and infilled the space between the two-storey structure, to the west, and the house that was formerly occupied by a garden with a circular fountain, as shown on the 1876 (Fig. 6) and 1900 OS maps. There was formerly a first-floor conservatory, accessed via French windows from the house, built on to the east end of the roof of this structure, which was flat at the sides and ends, with a raised central lantern.

At the rear of the plot, adjoining the single-storey structure, was the earlier two-storey building with attic, square in plan, which may have been used as a workshop or storeroom. This had arched windows in the south wall of the first floor, with cast-iron multi-paned frames, and a bull's-eye window in the east gable, also with a cast-iron frame. This building formerly extended further west, but was truncated when the rear of the properties were later divided off; they are now occupied by the Oriental Institute and the university Cast Gallery. The west wall of the building shows evidence of the truncation. This is also in brick and has been painted, but it is clear that this wall is not so well built as the main structure and was added later and bonded into the existing side walls.

The 1876 plan shows a long building in this position, and this may have been built by Wyatt as a workshop, but it extended only to the north boundary of the plot at its west end and appears to have been replaced by another building by 1900. This later building extended to the north boundary along its entire length, and it was probably the east end of this building which survived until the recent redevelopment.

The city records of approved building works were examined for nos 65–7 and revealed one application dated 1889 for a long, two-storey building, with smith's shop on the ground floor, showroom on the first floor, and a raised attic for storage.[52] The application drawing had some differences from the remnant of the building that was recorded, notably a raised attic roof and no windows in the upper floor. It is possible that the design was modified subsequently, perhaps during construction or later. The arched first-floor windows appear to have been altered, as there were areas of later pointing beneath them, indicating both windows were originally larger, although the arches and jambs had not been changed.

A small extension was built on to the south end of the rear of the house, over a former passage, between 1876 and 1900. This was probably used as an office by Wyatt, from which he could overlook the comings and goings to his premises via Ashmolean Lane. This extension, and the rear bay of the house, along with a surviving run of the south stone boundary wall, were also demolished as part of the development.

Beneath the rear buildings was an extensive contemporary brick-built basement. Underneath the main house was the earlier basement, incorporating some stone walls and vaulted rooms from the pre-Wyatt properties. Three small barrel-vaulted rooms, probably used as coal cellars, extended east under the pavement of St Giles, the central one having a small square opening in the vault. Some nineteenth-century alterations, including brick arched bays in the south basement wall, either by Wyatt or pre-dating his ownership, were exposed during the development works, when plaster was stripped from the walls. The rear walls of these bays were composed of earlier stone masonry that is at a slight angle to the later wall, and it probably aligns with the south boundary of the plot, possibly indicating that the former house demolished by Wyatt extended right to the boundary line.

51 Ibid.

52 Oxford City Archives (OS microfiche).

THE FINDS

A number of the finds were of an unexceptional nature and are not considered here in detail. The full original reports are available in the project archive.

POTTERY by PAUL BLINKHORN

The pottery assemblage comprised 2,095 sherds, with a total weight of 34,000 g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference, was 16.26. The assemblage consisted entirely of medieval and later pottery, apart from a single sherd each of residual Romano-British and early/middle Anglo-Saxon hand-built material. The medieval and later wares show that there was virtually unbroken activity at the site from the end of the eleventh century until the present day. However, there appears to be a hiatus in the earlier part of the fifteenth century that corresponds with the known history of the site, which was derelict at that time.

Analytical Methodology

The analytical methodology used conformed to standard OA practice, full details of which are available in the archive. The terminology used is that defined by the *Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms* and to the minimum standards laid out in the *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*.[53] All statistical analyses were carried out to the minimum standards suggested by Orton.[54]

Fabrics

The pottery was recorded utilizing the coding system and chronology of the Oxfordshire County type-series, as follows:[55]

F200: OXAC – Cotswold-type ware, AD975–1350. 140 sherds, 1,604 g, EVE = 0.60.
F202: OXBF – North-East Wiltshire ware, 1050–1400. 90 sherds, 1,696 g, EVE = 0.68.
F300: OXY – Medieval Oxford ware, 1075–1350. 325 sherds, 3,641 g, EVE = 2.01.
F330: OXBK – Medieval shelly coarseware, 1100–1350. 7 sherds, 115 g, EVE = 0.20.
F352: OXAM – Brill/Boarstall ware, 1200–1600. 1,187 sherds, 17,892 g, EVE = 8.73.
F355: OXBB – Minety ware, early 12th–15th century. 1 sherd, 50 g, EVE = 0.
F356: OXBG – Surrey whiteware, mid-13th–mid-15th century. 9 sherds, 100 g, EVE = 0.
F403: OXBN – Tudor Green Ware, late 14th century – *c.*1500. 8 sherds, 58 g, EVE = 0.08.
F404: OXCL – Cistercian ware, 1475–1700. 86 sherds, 933 g, EVE = 2.03.
F405: OXST – Frechen stoneware, 1550–1700. 40 sherds, 1,307 g, EVE = 0.34.
F408: OXAM – Brill/Boarstall 'Tudor Green' type ('BBTG'), *c.*late 15th–16th century. 43 sherds, 645 g, EVE = 1.59.
F410: OXCE – Tin-glazed earthenware, 1613–1800. 13 sherds, 193 g.
F413: OXST – Westerwald stoneware, *c.*1590–1800. 1 sherd, 9 g.
F425: OXDR – Red earthenwares, 1550+. 84 sherds, 3,166 g.
F428: OXBEW – Staffordshire manganese wares, *c.*1700–1800. 2 sherds, 208 g.
F436: OXBEWSL – Staffordshire-type slipwares, *c.*1650–1800. 1 sherd, 7 g.
F439: OXNOTTS – Nottingham stonewares, *c.*1750–1800. 1 sherd, 6 g.
F451: OXFH – Border wares, 1550–1700. 2 sherds, 13 g.
F1000: WHEW – Mass-produced white earthenwares, mid-19th–20th century. 53 sherds, 2,348 g.

In addition, a single sherd (7 g) of residual Romano-British pottery was noted, along with another, also residual, sherd (5 g) of early/middle Anglo-Saxon hand-built pottery. The latter was in a sandy fabric which is typical of similar finds in the city of Oxford. Hand-built pottery of this type is a relatively rare find in Oxford. The first group of pottery of this period to be discovered in the city came from a ditch at St Ebbe's, and included three stamped

53 'Guide to the classification of medieval ceramic forms', MPRG Occasional Paper, 1 (1998); 'Minimum standards for the recording, analysis and publication of post-Roman ceramics', MPRG Occasional Paper, 2 (2001).

54 C. Orton, 'Minimum standards in statistics and sampling', *Medieval Ceramics*, 22–3 (1998–9), pp. 135–7.

55 Maureen Mellor, 'A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the sixteenth to the nineteenth century', in T. G. Hassall, C. E. Halpin, and M. Mellor, 'Excavations at St Ebbe's', *Oxoniensia*, 49 (1984), pp. 181–219; Maureen Mellor, 'Oxford pottery: a synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford region', *Oxoniensia*, 59 (1994), pp. 17–217.

sherds of probable sixth-century date.[56] The site also produced small groups of other redeposited hand-built early/middle Saxon material.[57] A small number of organic tempered early/middle Saxon sherds was noted during the excavations in the cloister of St Frideswide's Priory, and twenty-one sherds were noted at recent excavations at Oxford Castle.[58] In addition to this, four sherds occurred during excavations at Merton College.[59] One of the sherds from that site had incised line decoration, and is likely to be of fifth- to sixth-century date.

It is possible that the sherd from this site may be of middle Saxon date. Excavations at the site of the nearby Beaumont Palace, around 45 m to the west of these excavations, produced four sherds of middle Saxon Ipswich ware, but no hand-built pottery.[60] The close proximity means that it is entirely possible that they came from the same settlement. Caution is required, however, as evidence from elsewhere in Oxfordshire, such as from excavations at Eynsham Abbey, suggests that there may have been a hiatus in the manufacture of hand-built pottery in the eighth century in the region.[61] It is not known whether this was the case at Oxford, but the lack of hand-built pottery from the Beaumont Palace site, despite there being datable middle-Saxon wares there, means it is entirely feasible. The situation will hopefully be clarified by further work in this area of the city in the future.

Generally the assemblage comprised a range of local and regionally imported fabrics which is very typical of that found at numerous other sites in Oxford.

The Assemblage

Chronology. Each context was given a seriated ceramic phase date, based on the wares present, as shown in Table 1. The dating has been adjusted with reference to the stratigraphic matrix to allow identification of assemblages which are lacking contemporary wares.

TABLE 1. CERAMIC PHASE CHRONOLOGY AND DEFINING WARES

Phase	Date	Defining fabric
CP 1	Early–late 11th c.	OXAC
CP 2	Late 11th–12th c.	OXY, OXBF
CP 3	13th c.	OXAM, OXBG
CP 4	14th c.	OXAM
CP 5	15th–late 15th c.	OXBN
CP 6	Late 15th–mid 16th c.	OXCL, BBTG, OXST
CP 7	Mid 16th–17th c.	OXDR, OXFH
CP 8	17th–late 17th c.	OXREWSL, OXCE
CP 9	Late 17th–mid 18th c.	MANG
CP 10	Mid–late 18th c.	OXFM, CRM
MOD	19th c.	WHEW

The pottery occurrence per ceramic phase is shown in Table 2. It shows that there was considerable variation in the amount of pottery deposited at the site during each ceramic phase. There were no pottery assemblages from the site dating to before the Norman Conquest, with the earliest groups dating to Ceramic Phase 2 (early to late eleventh century). Ceramic Phases 3 and 4 (thirteenth to fourteenth centuries) produced a large assemblage of pottery, which is perhaps unsurprising, given that the Hundred Rolls survey of 1279 shows the area as having been fully built up at that time, but very little pottery occurred in CP5 contexts (fifteenth century). The historical record suggests that part of the excavated area was vacant during the first half of the fifteenth century, and the pottery evidence supports this. The largest assemblage comes from CP6 (late fifteenth to mid-sixteenth century), by which time the land was occupied by tenements. The post-medieval assemblages are rather small, but correspond with occupation at the site.

56 Maureen Mellor, 'Pottery' in T. G. Hassall et al., 'Excavations in St Ebbe's, Oxford, 1967–1976: part 1: Late Saxon and medieval domestic occupation and tenements, and the medieval Greyfriars', *Oxoniensia*, 54 (1989), p. 198.

57 Ibid., p. 201.

58 Maureen Mellor, 'Pottery', in C. Scull, 'Excavations in the cloister of St Frideswide's Priory, 1985', *Oxoniensia*, 53 (1988), p. 34; Paul Blinkhorn, 'Post-Roman pottery from excavations at Oxford Castle', OA (forthcoming).

59 Blinkhorn, 'Pottery', in Poore, Score, and Dodd, 'Excavations at no. 4A Merton St.', pp. 264–6.

60 Paul Blinkhorn, 'Pottery,' in Poore and Wilkinson, 'Beaumont Palace', pp. 37–46.

61 Paul Blinkhorn, 'The pottery', in A. Hardy, A. Dodd, and G. D. Keevil, *Ælfric's Abbey. Excavations at Eynsham Abbey, Oxfordshire, 1989–92*, Thames Valley Landscapes Monograph, 16 (Oxford, 2003), p. 165.

TABLE 2. CERAMIC PHASING: POTTERY OCCURRENCE PER PHASE BY NUMBER AND WEIGHT OF SHERDS AND EVE, ALL FABRICS (INCLUDING RESIDUAL MATERIAL)

Phase	No. Sherds	Weight (g)	EVE	Mean sherd weight (g)
CP 1	0	0	0	0
CP 2	154	1,897	1.73	12.3
CP 3	773	9,878	5.10	12.8
CP 4	65	1,571	0.39	24.2
CP 5	26	323	0	12.4
CP 6	646	10,317	8.64	16.0
CP 7	120	3,362	0.32	28.0
CP 8	88	1,194	0	13.6
CP 9	33	426	0	12.9
CP10	68	1,029	0.08	15.1
MOD	122	4,003	0	32.8
Total	2,095	34,000	16.26	16.2

Pottery Occurrence. The pottery occurrence by weight of sherds, major fabrics only, is shown in Table 3. The occurrence pattern is generally that which would be expected for medieval and later pottery assemblages in Oxford. One trait which is worthy of comment is the relatively high occurrence of pottery fabrics generally associated with the production of vessels for the serving and consumption of drink in the late medieval and early post-medieval phases (CP6–8). The three fabrics OXCL, BBTG, and OXST form 17.4 per cent of the assemblage in CP6, 17.7 per cent in CP7 (mid-sixteenth to seventeenth century), and 26 per cent in CP8 seventeenth century). This is a pattern which is reflected for the vessel occurrence pattern in CP6 (see below), although the assemblages from CP7 and CP8 did not produce large enough assemblages for such analyses.

Residuality seems fairly low in most of the medieval assemblages. Around 10 per cent of the pottery is residual in CP5, 14 per cent in CP6, and less than 3 per cent in CP7 (although many of the lamps are likely to be residual). The later post-medieval phases show a lot of variation; residuality is very high in CP8 (about 60 per cent) and CP9 (about 35 per cent), but very low in MOD features (about 8 per cent).

TABLE 3. POTTERY OCCURRENCE BY WEIGHT OF SHERDS, MAJOR FABRICS ONLY, EXPRESSED AS A PERCENTAGE OF THE PHASE ASSEMBLAGE

Phase	OXAC	OXBF	OXY	OXAM	OXCL	OXST	BBTG	OXDR	WHEW	Total (g)
CP 2	11.5%	2.1%	84.3%	-	-	-	-	-	-	1,897
CP 3	9.3%	11.7%	9.8%	68.2%	-	-	-	-	-	9,878
CP 4	1.7%	3.1%	9.4%	83.1%	-	-	-	-	-	1,571
CP 5	0.6%	0	9.9%	80.2%	-	-	-	-	-	323
CP 6	3.6%	3.0%	7.1%	68.2%	7.1%	4.4%	5.9%	-	-	10,317
CP 7	0.2%	1.4%	0.5%	44.9%	5.1%	12.0%	0.6%	34.7%	-	3,362
CP 8	2.7%	2.9%	5.8%	47.2%	1.8%	24.0%	0.2%	4.6%	-	1,194
CP 9	4.9%	5.4%	6.1%	27.9%	1.4%	2.6%	0	42.3%	-	426
CP10	0	2.1%	3.2%	27.3%	0	0	1.2%	43.1%	-	1,029
MOD	0.3%	0.5%	0.4%	1.9%	0.2%	3.7%	0	33.0%	58.7%	4,003
Total	0.348	0.322	1.365	4.489	0.156	0.467	0.079	1.577	0.587	34,000

Vessel occurrence. The vessel type occurrence, based on rimsherd evidence and expressed as a percentage of the total phase assemblage in EVE, is shown in Table 4. The pattern is fairly typical of medieval and later sites in Oxford, although with some interesting variations. Generally jars dominate the earliest medieval assemblages, with jugs becoming much more common with time. What is perhaps of interest is the large quantity of lamps present in CP3 and CP7 assemblages (e.g., Figs 8.1–8.3). A few non-rim fragments were also noted in assemblages of these phases, and also in CP6 and CP7. In the case of the latter phase, it is likely that the value is simply a distortion, due to the very small assemblage size, but this cannot be said of CP3. Two bowls were also noted in the CP3 assemblage, one of which had a very unusual lug handle (Fig. 8.4). The CP4 phase assemblage was considerably smaller than the preceding one,

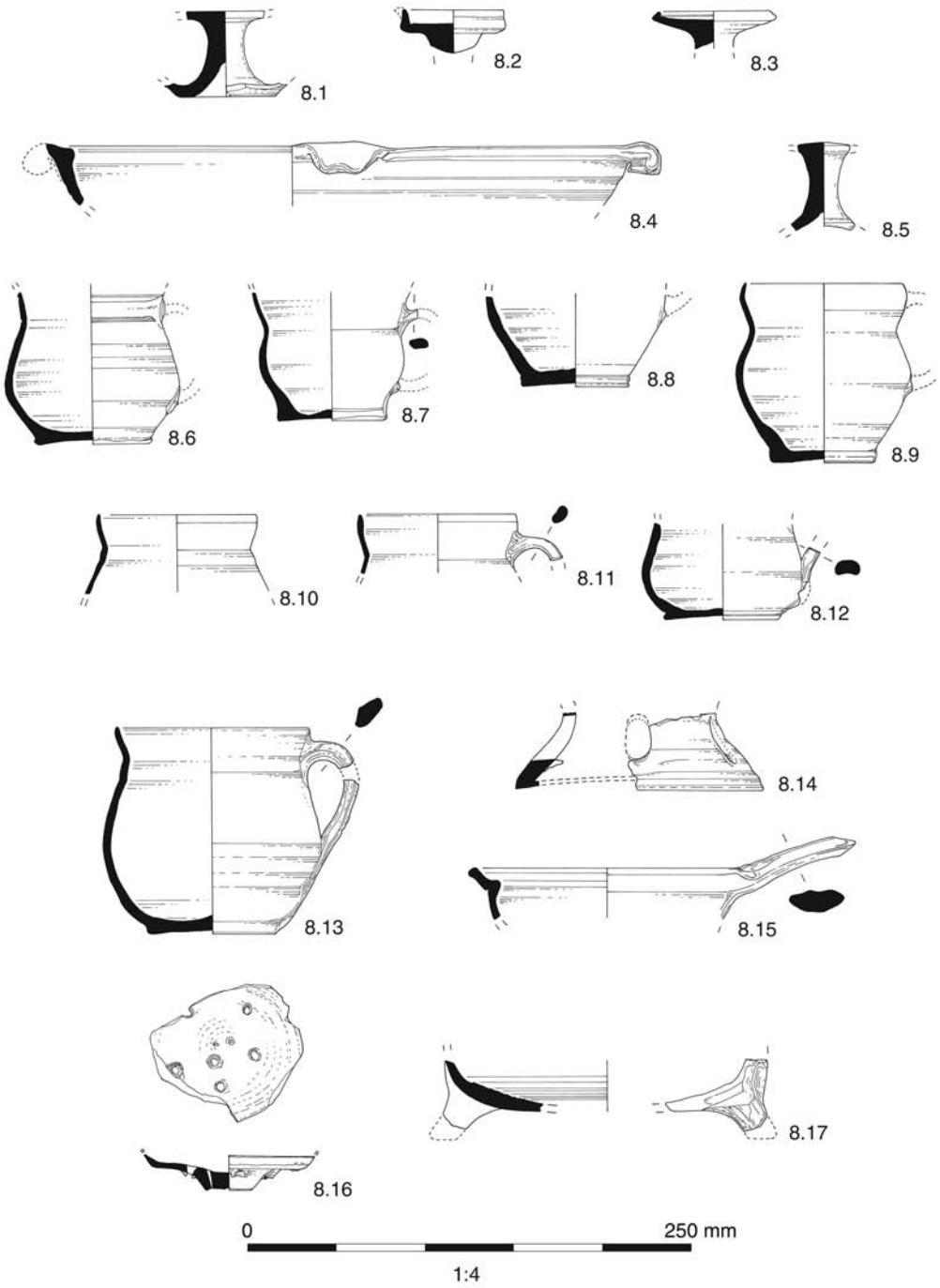

Fig. 8. Pottery

but showed a similar general pattern in terms of the range of pottery types consumed at the site. Brill wares make up an even greater proportion of the assemblage and included the stem of a Brill lamp (Fig. 8.5).

The quantity of pottery associated with the consumption of drink in CP6 is of interest as it is unusually large. As well as the rimsherds, five largely complete Cistercian Ware (OXCL) cup bases were noted in CP6 contexts (e.g., Figs 8.6–8.11), and one in a CP7 context. Four Brill/Boarstall, Tudor Green (OXAM) cup bases were also noted in CP6 contexts (e.g., Figs 8.12 and 8.13), as well as a Frechen Stoneware (OXST) mug base. This is a pattern which has been noted at other sites in the region: at Merton College, for example, lamps formed quite a significant percentage of the pottery assemblage from the thirteenth century onwards, although not perhaps in the quantities seen here. It is likely that OXAM pottery lamps were a major part of the lighting regime at the college.[62] Merton College also produced another parallel with this site: the late medieval and early post-medieval assemblages produced an unusually large collection of pottery associated with the serving and consumption of drink. One major difference is that that site also produced large quantities of cooking pottery, in the form of dripping dishes. This site did not produce any cooking pottery, but some tableware, in the form of an OXAM chafing dish fragment from a CP6 context (Fig. 8.14) was noted. Such vessels, which were used for keeping food hot at the table, were extremely unusual in Oxford at that time. Non-rimsherds from a skillet (Fig. 8.15), a bottle, and a lamp were also noted. Brill/Boarstall chafing dishes are somewhat unusual finds, and indeed are unusual in any fabric during this period, although they are more common in the early post-medieval period. The vessel from this site is not dissimilar to a fragment of another from the Oxford Dominican Priory.[63] Sherds from two other OXAM examples are known from Oxford, one unstratified, the other of late fifteenth-century date.[64]

A rather unusual pierced sherd (Fig. 8.16) is probably from a lamp or candlestick, but it has no obvious published parallels. The phase also produced a fragment of an OXAM footed cauldron (Fig. 8.17). Like chafing dishes, these are extremely unusual in this fabric at that time. It could have been used for cooking or serving, and the same is true of the skillet from CP6. The pottery from Merton College appears to be kitchen refuse; the same is not true of this assemblage, which appears to be waste from dining and drinking rather than cooking and serving. If it was kitchen waste, then unlike at Merton, spit-roasted meat, with which dripping dishes are associated, was seldom on the menu.

TABLE 4. VESSEL TYPE OCCURRENCE PER CERAMIC PHASE, IN EVE, EXPRESSED AS A PERCENTAGE OF THE PHASE TOTAL

Phase	Jars	Bowls	Jugs	Lamps	Skillets	Mugs/cups	Bottles	Total (EVE)
CP 2	92.5%	1.7%	5.8%	0	0	0	0	1.73
CP 3	16.5%	3.5%	41.6%	38.4%	0	0	0	5.10
CP 4	35.9%	43.6%	20.5%	0	0	0	0	0.39
CP 5	0	0	0	0	0	0	0	0
CP 6	24.9%	7.6%	32.2%	0	1.3%	33.3%	0.7%	8.64
CP 7	0	31.3%	0	68.7%	0	0	0	0.32

Pottery Illustrations

Fig. 8.1 – Lamp stem. Grey fabric with patchy mottled green glaze.
Fig. 8.2 – Upper part of lamp/candlestick. Orange-buff fabric with patchy mottled green glaze.
Fig. 8.3 – Upper part of lamp/candlestick. Orange-buff fabric with patchy mottled green glaze.
Fig. 8.4 – OXAM bowl rim with perfunctory handle. Pale grey fabric with pale orange surfaces. Thin, mottled green and orange glaze inside and out.
Fig. 8.5 – Lamp stem. Pale orange fabric with patchy mottled green glaze.
Fig. 8.6 – OXCL. Cup. Brick-red fabric with glossy greenish-brown glaze on both surfaces.
Fig. 8.7 – OXCL. Cup. Brick-red fabric with dark brown glaze on both surfaces.
Fig. 8.8 – OXCL. Cup. Brick-red fabric with dark brown glaze on both surfaces.
Fig. 8.9 – OXCL. Cup. Brick-red fabric with dark brown glaze on both surfaces.
Fig. 8.10 – OXCL. Cup rim. Brick-red fabric with very dark brown glaze on both surfaces.
Fig. 8.11 – OXCL. Cup rim. Brick-red fabric with very dark brown glaze on both surfaces.
Fig. 8.12 – BBTG. Cup. Brick-red fabric with glossy dark green glaze on both surfaces.
Fig. 8.13 – BBTG. Full profile of mug/cup. Pale orange fabric with glossy green glaze on both surfaces.

62 Blinkhorn, 'Pottery', in Poore, Score, and Dodd, 'Excavations at no. 4A Merton St.', pp. 264–6.
63 Mellor, 'Oxford pottery', Fig. 54, no. 12.
64 Ibid., nos 15, 16.

Fig. 8.14 – OXAM. Base sherd from a chafing dish. Pale orange fabric, a few splashes of thin glaze on the outer surface.
Fig. 8.15 – OXAM. Handle and rim from skillet. Pale orange fabric with darker surfaces. Upper surface of handle and top of rim lightly and evenly sooted.
Fig. 8.16 – OXAM. Pierced bowl from a candlestick or lamp. Pale orange fabric with buff surfaces, yellow-green glaze on upper face.
Fig. 8.17 – OXAM. Base sherd with broken applied foot, possibly from a cauldron. Pale orange fabric with browner surfaces, runs and patches of very glossy green glaze on the outer surface.

GLASS by HUGH WILLMOTT

The Assemblage

A total of fifty-eight fragments of glass, from a minimum of twenty-one vessels and windows, was recovered. All the fragments are post-medieval in date, and much of the glass is extremely fragmentary. A significant proportion of the glass comes from windows. Window glass is notoriously difficult to date accurately, and there are no edge pieces in the assemblage. However, a broad period can be assigned to the fragments on their general appearance and the extent to which they are weathered, and pieces range in date from the sixteenth to the twentieth century.

The larger portion of the assemblage consists of vessel glass. Only three fragments are from tablewares. The first, from the fill of pit 413 (604) is an upper portion of foot from a pedestal-stemmed goblet, decorated with optic-blown vertical ribbing. Made in a clear-tinted glass, this can be dated to around the middle of the sixteenth century. The second tableware, from the fill of pit 293 (294), is a rim from a lead glass goblet, which dates to some time within the eighteenth century. The final fragment from the fill of pit 307 (304) is too small for positive identification, but appears to be early seventeenth century. The remaining vessels are all containers, and the majority of these are wine bottles. Some, such as the fragments from the core of wall 471 (472), come from early 'onion' types, and there is a reasonable sequence of different cylindrical forms stretching through the eighteenth and into the nineteenth century. The remaining containers are a seventeenth-century phial base from (364) and two nineteenth-century mould-pressed bottles from wall 247 and the fill of cess pit 370 (369).

METALWORK AND COINS by LEIGH ALLEN and MARTIN ALLEN

A total of 253 metal objects was recovered from the archaeological investigations. The assemblage comprises 2 silver objects (both coins), 96 copper alloy objects, 152 iron objects, and 3 lead objects. The silver, copper alloy, and lead objects are in reasonable condition, but the ironwork is in poor condition, heavily corroded, and with very little of the original metalwork surviving. The assemblage has been x-rayed in order to aid identification.

The six numismatic finds from this site consist of two English silver coins of the thirteenth to fourteenth centuries, two corroded seventeenth-century tokens (one of them only tentatively identified as such), and two Nuremberg jettons from the second half of the sixteenth century. The number of finds is relatively small, but the mixture of fractional silver denominations, tokens, and jettons is reasonably typical of urban sites.[65]

The largest functional group of finds comprises personal items, and pins, lace tags, and fasteners predominate. The remaining personal items are buckles, buttons, and mounts – utilitarian objects common in the late medieval and post-medieval periods. The structural objects are almost all nails, with the exception of a hinge pivot and a 'U'-shaped staple. The domestic items comprise a vessel repair and three fragmentary knives. The earliest phase of occupation (Phase 1) produced only a single rectangular iron bar mount (SF 53) from a pit to the east of Area A (578), into which a backfill layer of domestic and hearth waste had been dumped (context 545). The mount is incomplete but has a rivet with a square rove at one end (the other end is missing) and is decorated with a dog-tooth design (Fig. 9).

A total of 2 silver, 7 copper alloy, and 25 iron objects was recovered from Phase 2 contexts. The remains of a padlock key handle (SF 49), with an expanded terminal and backward-facing hook, were recovered from context 487 (fill of pit 486); unfortunately the bit which could have dated the key more precisely is missing. Padlock keys of this basic form have their origins in the pre-Conquest period, but continue in use into the post-medieval period.[66] A decorative bar mount and the remains of a knife were recovered from pit 605. The mount form has a suspension loop (it is curved over at the lower end and riveted to the back of the mount) for use with pendant loops or in

[65] N. J. Palmer and N. J. Mayhew, 'Medieval coins and jettons from Oxford excavations', in N. J. Mayhew, ed., *Edwardian Monetary Affairs (1279–1344). A Symposium held in Oxford, August 1976*, BAR 36 (1977), pp. 81–95.

[66] I. H. Goodall, 'Locks and keys', in Martin Biddle, *Object and Economy in Medieval Winchester* (Oxford, 1990), p. 1006.

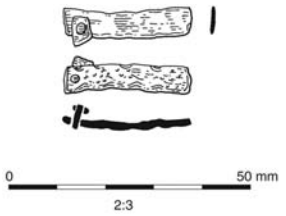

Fig. 9. Iron bar mount with a dog-tooth design, SF53

pairs to hold arched pendant mounts on girdles.[67] The knife from context 607 is a scale tang knife, with a heavily damaged blade, copper-alloy shoulder plate, and two copper-alloy rivets through the handle to secure the scales. Scale tang knives are thought not to appear before the thirteenth century.[68] The very corroded remains of a whittle tang knife (SF 19) were recovered from context 405 (backfill of quarry pit 351). Whittle tang knives were in use throughout the medieval and later periods.[69] Whole and fragmented wire pins were recovered from soil layers and the fill of a posthole. Pins with wire-wound heads are common finds in late medieval and post-medieval contexts. Often found in huge numbers, they were used to secure light clothing and headdresses. A silver cut halfpenny (SF17), of Henry III (1216–1272) or Edward I (1272–1307), and a silver farthing (SF42), of Edward I (1272–1307) or Edward II (1307–1327), were recovered from pit fills.

A number of Phase 3 contexts also produced finds. Backfill layers 305 and 602 within cess pit 307 and gravel extraction pit 413 produced a button, a handle, a knife, three pins, and a lace tag. The button (SF 50) is a plain discoidal button, with an integral attachment loop. The handle (SF 52) is a small decorative drop-handle, with openwork decoration, designed for use on a small cupboard door or casket. The knife fragment is very corroded and comprises a short section of the blade and the whittle tang. These objects, together with the wire pins and the lace tag, are all post-medieval.

Rubbish/gravel extraction pits 374 and 394 also produced a number of objects: contexts 279, 372, and 375 within pit 374 together produced fifteen wire pins and three lace tags. Lace tags are common finds on later medieval and post-medieval sites. A lace tag and a paper-clip rivet were recovered from context 447 (a garden wall). The paper-clip rivet SF38 would have been used to repair sheet metal vessels, a form of repair that has been in use from the Saxon period through to the late medieval/early post-medieval period.[70] A further eight pins and three lace tags were recovered from contexts 396, 418, and 568 in pit 394, which also produced a buckle frame, a mount, and a U-shaped iron staple. The buckle frame (SF34) has an undecorated cast double-oval frame, with the corroded remains of an iron pin attached to the central bar. The cinquefoil sheet-metal mount (SF32), in the form of a flower, would have been used singly or in combination with other mounts to decorate girdles or straps.[71] A buckle and a lace tag were recovered from pit 558. The buckle (SF56) has a double oval frame made from a sheet-metal strip, the ends of which overlap and are pierced by the central bar; a similar form of buckle was recovered from a post-Dissolution context at Eynsham Abbey, Oxfordshire.[72] The only other Phase 3 contexts to produce finds were garden soil 301, a burnt deposit (354) associated with fire pit 290, and make up level 395, which overlay the fills of the Phase 2 pit 651. Again pins and lace tags predominate, but context 301 also produced a loop fastener (SF7), an object used to secure light clothing and often found in association with assemblages of pins and lace tags.[73] Make up level 395 also produced the lower half of a small sheet-metal pellet bell (SF44) used to decorate clothes and animal collars or leashes from the early medieval period onwards.[74]

67 Geoff Egan and Frances Pritchard, *Medieval Finds from Excavations in London,* 3: *Dress Accessories c.1150–c.1450* (London, 1991), p. 210.

68 I. H. Goodall, 'Knives', in Biddle, *Object and Economy*, p. 835.

69 Ibid.

70 Geoff Egan, *Material Culture in London in an Age of Transition. Tudor and Stuart Period Finds c.1450–c.1700 from Excavations at the Riverside Sites in Southwark*, Museum of London Archaeology Service Monograph, 19 (London, 2005), p. 101.

71 Egan and Pritchard, *Medieval Finds from Excavations in London,* p. 186.

72 L. Allen, 'The finds', in Hardy, Dodd, and Keevill, *Ælfric's Abbey*, pp. 258–9, Fig. 9.3, no. 33.

73 Susan M. Margeson, *Norwich Households: the Medieval and Post Medieval Finds from Norwich Survey Excavations 1971–1978*, East Anglian Archaeology Report, 58 (Norwich, 1993), p. 20.

74 Ibid., p. 213.

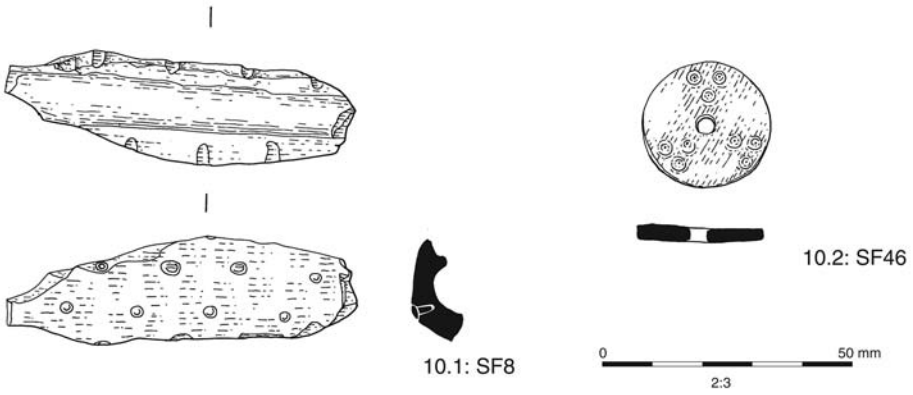

Fig. 10. Worked bone knife handle and counter, SF8 and SF46

OTHER FINDS by REBECCA DEVANEY, ROSE GRANT, LUKE HOWARTH, ANDREW NORTON, and RUTH SHAFFREY

The excavation produced thirty-two fragments of clay tobacco pipes, found in well-dated dumped pit fills and cultivation soils. The bowls were recorded and dated to the mid-seventeenth or mid-eighteenth century, according to Oswald's general typology.[75] None of the bowls displayed a maker's mark or stamp.

Two bone artefacts were recovered from the site, a whittle tang-knife handle and a counter. The highly polished knife handle (SF8 – Fig. 10.1), recovered from a Phase 3 soil (280) would originally have had a hexagonal section. It has facets cut into the surface and is decorated with rows of copper-alloy rivets along its length, of which seven are still *in situ*; holes for seven more are visible in the broken section. The counter (SF46 – Fig. 10.2), recovered from a Phase 2 soil (331), is made from a section of a large mammal long bone. It has a hole through the centre and is decorated with ring-and-dot motif. In Exeter other bone counters have been found in contexts dating to 1660, and an almost identical example was found in an unstratified context at excavations in Norwich.[76]

The stone assemblage comprised three pieces of very slight interest. These were two fine-grained limestone sheets, both very thin and possibly used as roof-stones; one has a worked edge, but both are small fragments, and little more can be said about them. The third piece is a thin fragment of oolitic limestone, also possibly having served some structural purpose, but with no worked surfaces.

A total of thirty-three fragments of slag was recovered from pit fills and cultivation soils. The largest quantities were sunken-hearth fragments and undiagnostic material recovered from a Phase 2 disturbed natural subsoil (context 385 – 433 g) cut by a Phase 2 pit, and part of a possible kiln wall from the fills of a Phase 3 pit (context 372, 109 g). The assemblage adds little to our understanding of the site, beyond indicating that metalworking was probably taking place on or near the site as early as the thirteenth century.

Three pieces of residual worked flint were recovered from a soil deposit (360) and the fills of pits 413 and 651 (411 and 604). A further two pieces (6 g) of burnt unworked flint were recovered from pit 394 (fill 372). The flakes and irregular waste are not diagnostic and so only a broad later prehistoric date can be suggested.

CERAMIC BUILDING MATERIALS by JOHN COTTER

The site produced a total of 393 fragments of ceramic building materials (CBM) weighing 30.207 kg. Table 5 gives a breakdown of the types and quantities recovered. All is of medieval and early post-medieval date, save for a single modern piece. The majority is flat roof tile, with a much smaller collection of ridge tiles and floor or quarry tiles, and a very minor presence of brick and unidentifiable CBM. A smaller additional assemblage of thirty-seven fragments (8.710 kg) of stone roof tile is also reported on here. The condition of the material is variable, but in general rather poor. All of it came from Phases 2 and 3.

75 A. Oswald, *Clay Pipes for the Archaeologist*, BAR 14 (1975).
76 Margerson, *Norwich Households*, pp. 216–17, Fig. 164.

TABLE 5. TYPES AND QUANTITIES OF CERAMIC BUILDING MATERIALS

Type	No. fragments	Weight (g)	% Fragments	% Weight
Flat roof tile	310	23880	79%	79%
Ridge tile	54	3942	14%	13%
Floor tile	24	2352	6%	8%
Brick	1	5	<1%	<1%
Uncertain	4	28	1%	1%
Total	393	30207	100%	100%

Excel catalogues of all CBM and stone roof tiles have been compiled following standard practice, details of which are available in the archive. Where possible tile fabrics have been related to the established medieval tile fabric series for the Oxford region first devised for the Hamel site, Oxford, and to the related reference collection housed by Oxford Archaeology.[77]

Description

Flat roof tile. As might be expected, this is the most abundant category of CBM, with 310 fragments (23.880 kg) identified and comprising 79 per cent (by count and weight) of the CBM assemblage. These are of standard medieval/post-medieval flat rectangular form, with two circular nail (or peg) holes near their upper end. This type was current in Oxfordshire from the later twelfth century onwards.[78] No complete lengths or widths were preserved. The maximum surviving length recorded was 180+ mm, and the maximum width 158+ mm. The complete width of two tiles can be estimated at about 164 and 170 mm. Nail holes vary in diameter from 10 to 19 mm, but 13 mm is by far the commonest diameter recorded (also at the Hamel site). Two separate tiles have what appear to be circular ring-like stamps (16 mm diameter) on their sandier underside. These are weakly executed and may be the impression of the circular tool or corer used to create the nail holes. The edges of several tiles show a slight recessing on the upper face, which may be an impression of the wooden moulds used in their manufacture. The upper surface of one corner fragment, recovered from Phase 3, pit 512 (fill 513), shows an irregular cluster of shallow circular dimples up to 7 mm across, possibly raindrop impressions.

Superficially most of the roof tiles have a broadly similar orange-red or orange-brown hard sandy fabric, not dissimilar to Fabric IIIB – the predominant medieval tile fabric in Oxford – with a presumed source to the south of the city, probably on the London clay. However, there is considerable variation within the assemblage, and only a minority of pieces match the very sandy fabric of IIIB. The predominant fabric has less quartz sand. It is predominantly orange-buff in colour, with varying amounts of medium to very coarse red clay pellets and also pellets and quite often streaks of white clay or marl, similar to Fabric IVA or IVB. It is possible that the roof tiles originate from south-east Oxfordshire or the Penn/Chiltern tileries in Buckinghamshire. They might also originate from outcrops of paler firing Oxford clay, similar to those in the south-east of the county. As this is the dominant roof tile fabric in Phase 3, a late medieval/early post-medieval dating (fifteenth–seventeenth century) might be suggested, although some tiles could have been very old before breakage. Splashes of greenish-brown lead glaze occur only on less than a dozen tile fragments.

Ridge tiles. A total of fifty-four fragments of ridge tile weighing 3,942 g was recovered. These were made to sit on the apex or ridge of the roof. Those recovered are probably all medieval. The majority (42 fragments, 2873 g) are from Phase 2 contexts (thirteenth–fifteenth centuries), as one would expect. Of all ridge tiles, 73 per cent (by weight) therefore come from Phase 2 and only 27 per cent from Phase 3, where perhaps they are mostly residual. Phase 2 comprises only flat roof tile, ridge tile, and one intrusive scrap of modern brick. Ridge-tile fragments therefore comprise 58 per cent (by weight) of the entire Phase 2 CBM assemblage. The ridge-tile assemblage is mostly very fragmentary, although a few fairly large pieces have survived. Where it can be determined, the usual range of crested and plain ridge-tile forms are present and in the usual range of fabrics found in the Oxford region.[79] Most distinctive perhaps are ridge-tile fragments of pale brown, limestone-tempered Fabric IB, sometimes with a pale greenish glaze. These are thought to come from a source to the north-west of Oxford and are datable to the thirteenth and early fourteenth century. The crests have usually been separately applied and then hand-moulded

77 S. Robinson, 'The tile', in N. Palmer, 'A beaker burial and medieval tenements in The Hamel, Oxford', *Oxoniensia*, 45 (1980), p. 196 (microfiche 2. D09-D14).

78 N. Mitchell, 'The floor and roof tile', in Hardy, Dodd, and Keevill, *Ælfric's Abbey*, p. 214.

79 K. Atherton and N. Mitchell, 'Ceramic building material', in Poore and Wilkinson, 'Beaumont Palace', pp. 69–74; Mitchell, 'The floor and roof tile', in Hardy, Dodd, and Keevill, *Ælfric's Abbey*, p. 214.

or knife-trimmed. A lower corner fragment in this fabric (length 130+ mm, context 444, Phase 2) has on its side a single surviving incised diagonal line – originally one of a group. This was a fairly common type of decoration – as shown by examples from Eynsham Abbey.[80] The twelve fragments (1,124 g) of Fabric IB identified comprise 29 per cent (by weight) of the ridge-tile assemblage from St Giles. The remaining bulk of ridge-tile fragments are all in sand-tempered fabrics, mostly variants of the orange-red sandy Fabric IIIB, which often shows evidence of a clear or greenish-brown glaze. These include a fragment with an angled or 'Gothic' apex – a fairly rare type, also known from the Hamel and Merton College. One of the largest pieces is from the upper end of a crested ridge tile (length 115+ mm), with four surviving very precisely cut pyramidal crests or spurs and a band of bright orange-brown glaze just below the line of the crests. Fragments of two ridge tiles in a pale smooth orange-buff fabric, with a copper-flecked green glaze, may be fourteenth-century products of the Brill kilns in Buckinghamshire.

Floor or quarry tiles. The twenty-four fragments recovered, mostly in a very poor condition, are all from Phase 3 and appear to be types of thick late medieval and/or early post-medieval quarry tiles (plain flooring tiles). The thickest example is 46 mm thick and unglazed. Only one fragment has surviving traces of a dark greenish-brown surface glaze. A single, very worn fragment of medieval (thirteenth–fourteenth century) floor tile, with traces of white-slip decoration, was noted during the evaluation.

Stone roof tile. A total of thirty-seven pieces of stone roof tile (8,710 g) were recovered. Nine pieces (673 g) came from Phase 2 contexts, twenty-six (7,775 g) from Phase 3, and two (262 g) from Phase 4. By weight, the bulk of this, 89 per cent, came from Phase 3, with 8 per cent from Phase 2, and the remainder from Phase 4. All of these are in pale grey or yellowish limestone, mostly shelly limestone, occasionally quite sandy, and all quite roughly hewn. Traditionally Stonesfield slate, from north-west Oxfordshire, was commonly used, but several other sources in the Cotswolds area were also exploited in medieval times.[81] The use of stone slates in Oxfordshire is documented from the twelfth century onwards, and they were commonly used in Oxford until the Victorian period. Nearly all examples are in a fragmentary state. Full details are available in the archive.

Conclusions. The assemblage gives the impression of average status tenements on the site during the medieval and early post-medieval period, although the number of medieval ridge-tile fragments is relatively high for a site of this size. The virtual absence of decorated medieval floor tile is in keeping with ordinary domestic occupation, while the sparse and worn assemblage of late medieval or early post-medieval quarry tiles could suggest that stone flags or wooden flooring was predominantly used.

ENVIRONMENTAL REMAINS

ANIMAL REMAINS by KRISTOPHER POOLE

A total of 1,861 refitted fragments of animal bone weighing 32,466 g was recovered from the site. Bone was recovered from all phases, but only small quantities came from Phases 1 and 4, the vast majority coming from Phases 2 and 3 (Table 6). Material was recovered by both hand collection and sieving and was identified using standard OA methodologies, details of which are available in the archive.

Results

Bone condition ranged from very good to poor, with the majority being good to moderate. Overall, a reasonable proportion of the bone (46.3%) has been identified to species, partly due to the low level of fragmentation in the assemblage, as indicated by the very small percentage of loose teeth.

Species represented. Cattle dominate the assemblage, making up 64.9 per cent and 54.8 per cent of the main domesticates in Phases 2 and 3 respectively, based on raw counts of identified refitted fragments. However, thirty of the cattle bones from Phase 2 were horn cores recovered from the fill of a large quarry pit (351). Excluding this specialized deposit (see below), cattle make up 59.9 per cent of the Phase 2 main domesticates. One bone in each of Phases 2 and 3 could be identified as goat, a horn core and a humerus respectively, but where caprine bones could be distinguished most came from sheep, and so it is assumed that these make up the majority of the total caprine bones. Horse, dog, and cat are the other domestic mammals identified in the bone assemblage. The representation of horses in Phase 3 has, however, been inflated by an articulating foreleg, consisting of left scapula, humerus, radius, ulna, six carpals, and a metacarpal (pit 558). Fallow deer, rabbit, hare, and rat were identified from small numbers of bones. Domestic fowl and goose were relatively common in Phases 2 and 3, whilst other avian species identified were duck in Phases 2 and 4, raven in Phases 1 and 2, and moorhen in Phase 2.

[80] Ibid., p. 215, Fig. 8.3.6.
[81] William Joscelyn Arkell, *Oxford Stone* (London, 1947).

TABLE 6. INCIDENCE OF ANIMAL BONE PER PHASE

	Phase				
Species	**1**	**2**	**3**	**4**	**Total**
Cattle	12	155	205	8	380
Sheep/goat	10	56	140	3	209
Sheep	1	6	29	–	26
Goat	–	1	1	–	2
Pig	4	21	36	11	72
Horse	–	16	17	–	33
Dog	–	1	2	–	3
Cat	1	2	4	–	7
Fallow deer	–	–	1	–	1
Rabbit	–	4	2	2	8
Hare	–	–	–	3	3
Rat	–	–	1	–	1
Large mammal	23	186	213	30	452
Medium mammal	13	107	137	40	297
Small mammal	–	–	1	–	1
Domestic fowl	2	19	35	8	64
Goose	2	10	5	11	28
Duck	–	1	–	9	10
Raven	1	1	–	–	2
Moorhen	–	3	–	–	3
Bird	–	4	5	–	9
Unidentified	14	31	55	147	247
Total	83	624	882	272	1,861

Ageing and sexing. Lack of teeth and mandibles to which an age could be assigned (except for the Phase 3 sheep) means that assessment relies on epiphyseal fusion, although even then there is sufficient data only for Phases 2 and 3. From the rather limited data, it seems that the cattle identified in Phase 3 were generally slaughtered at a younger age than those from Phase 2; only 31 per cent of animals from this earlier phase were alive at 4 years old, compared with 43 per cent in Phase 3. Cattle represented in the assemblage of horn cores from Phase 2 included one sub-adult, nine young adult, seven adult, and ten elderly animals. For sheep, fusion data suggests that the majority of animals were still alive at 2 years old, while in Phase 3, 91 per cent were still alive at 42 months, a figure that contrasts with 50 per cent in Phase 2, although it must be noted that this is based on a small number of mandibles. At these ages the sheep would have provided several clips of wool before being slaughtered for meat. Little meaningful information could be obtained on the ageing of the pigs, horse, dog, and cat, and very little sexing information was available from any phase.

Butchery and body-part patterns. In Phase 2, cattle are represented by all parts of the body, but there is a clear bias towards non-meat-bearing elements, including the metacarpals, metatarsals, horn cores, and mandibles. Such a bias is also evident, although to a lesser degree, in Phase 3. Unfortunately the sample was too small to consider anatomical representation of sheep in Phase 2, but in Phase 3 the assemblage was again dominated by mandibles, but metapodials and phalanges were scarce. As with cattle, there is also a slight bias towards bones from the lower limb (especially the forelimb), compared with those further up the leg. Body-part data is limited for pigs, but 12 of 21 bones (57 per cent) in Phase 2 derive from heads and feet, compared with 17 of 34 (50 per cent) in Phase 3. Although based on a small amount of butchery data, there is some evidence for portioning of cattle carcasses, with a tendency to separate the front limb by chopping through the neck of the scapula and the humerus mid-shaft. Various other cut marks representing the skinning and disarticulation of cattle carcasses were also present. In contrast to cattle, most of the butchery on sheep bones consisted of knife cuts. However, as an even smaller number

of sheep bones were butchered than cattle, no consistent pattern could be discerned. Both domestic fowl and goose are represented by all parts of the body. For domestic fowl, butchery was observed on three bones, all tibiotarsi.

Metrics. Only a relatively small number of bones could be measured, making it difficult to examine the size of animals within the assemblage. However, it was possible to reconstruct withers heights for some of the bones recovered. The measurements all fit within the range from other medieval and post-medieval towns, such as Exeter, Lincoln, and within Oxford itself (for example, at the Hamel and St Ebbe's).[82]

Discussion

Animal bones from urban bone assemblages, perhaps more so than any other site type, are likely to result from a range of activities. The Classics Centre bone seems to fit with this; the body-part patterns, with high proportions of head and foot bones (namely horn cores and metapodials), are suggestive of possible small-scale primary butchery and/or at least small-scale use of carcass products, as well as table waste. Horn cores have no meat on them, and metapodials provide little meat and are likely to be removed relatively early on in the butchery process. It is possible that these remains derive from the work of a butcher living in the suburbs north of Oxford. Evidence for a standardized method of butchery, albeit based on a small sample, may support this, and the practice of cleaving sheep vertebrae along the sagittal line was also noted on remains recovered from the nearby Sackler Library site.[83] Of the other bones present within the sample, very few came from the prime meat areas, and it is possible that we have evidence for the processing of animal carcasses for transport into the town itself, or even to the residents of Beaumont Palace. However, sheep are well represented by mandibles, not horn cores or metapodials, and it may be that some sheep carcasses were partially dressed before reaching the site.

At the same time there is some potential evidence for the use of animal by-products, namely cattle hides and/or horn. A range of evidence suggests that in medieval and post-medieval towns butchers would often remove cattle hides with the horns and hooves still in the skin before selling them on to a tanner.[84] These may then have either been discarded or sold on to bone and horn-workers. This may result in accumulations of horn cores, with possible evidence for hide and/or horn processing being unearthed at a number of contemporary towns, including Oxford itself at the sites of Park End Street and the Hamel.[85] At the latter, especially, a number of discrete deposits of horn cores were found. The cut marks observed round the base of some of the Phase 2 cattle horn cores could certainly have resulted from removal of the horn for use. However, they could equally be due to cutting of skin around horns, and it has been suggested that one can confidently attribute a deposit to activities associated with the leather trade only when both horn cores and metapodials are found in the same context.[86] When considered along with the presence of skinning marks on the remains of non-food animals, such as dog and horse, the evidence is suggestive of some sort of industrial process linked to the processing of hides and/or horns taking place at the site or in the surrounding area, even if only on a relatively small scale.

The assemblage also provides evidence for table waste, with most of the other bones present coming from the lower leg (that is, the radius, ulna and tibia), perhaps representing the meals of those living in or around the excavated area. The presence of chicken and goose bones may further support this interpretation. Primary butchery of bird carcasses is typically a kitchen activity, thus suggesting domestic occupation and consumption is also represented. Cut marks on the distal tibiotarsi suggest removal of the lower leg, and the fact that most areas of the skeleton are represented suggests that the whole carcass was present.

The species present are generally congruent with other contemporary Oxford bone assemblages. As with remains at the nearby site of the Ashmolean Museum forecourt, the limited species range and body-part patterns (even excluding the possible tanning evidence) are generally not suggestive of high status.[87] It would seem that in

[82] M. Maltby, *The Animal Bones from Exeter 1971–1975*, Exeter Archaeological Reports, 2 (Sheffield, 1979); K. M. Dobney, S. D. Jacques, and B. G. Irving, *Of Butchers and Breeds. Report on Vertebrate Remains from Various Sites in the City of Lincoln*, Lincoln Archaeological Studies, 5 (Lincoln, 1996); B. Wilson, 'Animal bone and shell', in Palmer, 'A beaker burial', p. 198 (microfiche 2, E04-F09); B. Wilson, 'Medieval and post-medieval bones and marine shells', in T. G. Hassall, C. E. Halpin, and M. Mellor, 'Excavations in St Ebbe's, Oxford, 1967–1976: part I,' *Oxoniensia*, 49 (1984), pp. 265–8 (microfiche M VI A4-M VI D3); B. Wilson, 'Medieval animal bones and marine shells from Church Street', in T. G. Hassall, C. E. Halpin, and M. Mellor, 'Excavations in St Ebbe's, Oxford, 1967–1976: part II', *Oxoniensia*, 54 (1989), pp. 258–68 (microfiche M V B7-M VI A6).

[83] B. Charles and C. Ingrem, 'Animal bone', in Poore and Wilkinson, 'Beaumont Palace', p. 79.

[84] D. Serjeantson, 'Animal remains and the tanning trade', in D. Serjeantson and T. Waldron, *Diet and Crafts in Towns*, BAR BS 199 (1989), pp. 129–46; U. Albarella, 'Tawyers, tanners, horn trade and the mystery of the missing goat', in P. Murphy and P. E. J. Wiltshire, *The Environmental Archaeology of Industry* (Oxford, 2003), p. 73.

[85] K. Poole, 'The animal bone', in Norton, 'Excavations at 67–69 St Thomas' Street', pp. 378–82; B. Wilson, 'Animal bone and shell,' in Palmer, 'A beaker burial', p. 198.

[86] Albarella, 'Tawyers, tanners, horn trade', pp. 74–7.

[87] S. Hamilton-Dyer, 'The animal bone', in Andrews and Mepham, 'Ashmolean Museum forecourt', pp. 212–16.

Phases 2 and 3, whoever was living at the site had a relatively limited diet and consumed poorer cuts of meat. The cattle ageing data suggests that in Phase 2 older cattle were kept for traction, and in Phase 3 younger cattle were used for meat.

Chicken and geese would have been used for their eggs, meat, and feathers and could have been kept at the site itself. Moorhen bones, on the other hand, are relatively rare, examples coming from Newbury, Berkshire, and the site of the Dominican Priory, Oxford.[88] There would appear to be no reason why they could not have been eaten, although they do not provide much meat. Ravens, on the other hand, are unlikely to have been considered food in the medieval period. The scavenging nature of these birds would have made them a common sight in medieval towns, where waste disposal was a particular problem. Despite their ominous connotations, corvids would have proved extremely useful in helping to limit diseases which might otherwise have been spread by rubbish strewn about the town. Indeed, in many cases ravens and other scavengers in Britain were actively protected by law, and public opinion, for their good services.[89]

FISH BONE by REBECCA A. NICHOLSON

Despite sieving soil samples from a number of large pits, the fish assemblage was generally sparse, although mostly well preserved. Most bones were from marine fish, and many, particularly herring, may have been preserved by pickling or smoking ('reds' or 'red herrings'). The few bones from large cod and cod-family fish in Phase 2 were all bones usually retained in a dried fish ('stockfish'). A small number of bones from Phases 2 and 3 were from freshwater fish, cyprinids, perch, and possibly small brown trout. The tiny cottid bone (a vertebra) may also have derived from a freshwater species, the bullhead (*Cottus gobio*).

TABLE 7. ALL RECOVERED FISH REMAINS (NISP), BY PHASE

		Phase 1	**Phase 2**	**Phase 3**	**Phase 4**	**Total**
Eel	*Anguilla anguilla*	3	3	10		16
Herring	*Clupea harengus*	9	81	19	8	117
Herring/sprat/pilchard	Clupeidae		1	2		3
Cf. trout	cf. *Salmo trutta*			1		1
Cyprinid	Cyprinidae		1	2		3
Cod	*Gadus morhua*		2			2
Cod family	Gadidae		2			2
Cottid	Cottidae			1		1
Gurnard	Triglidae				1	1
Perch	*Perca fluviatilis*			1		1
Right-eyed flatfish	Pleuronectidae			1		1
Flatfish nfi			15			15
Unidentified			18	7		25
Total		12	123	44	9	188

Although interpretation is limited by the small number of bones, it is clear that fish were available in Oxford throughout the medieval and post-medieval centuries, and the small size of many of the fish represented in the assemblage would suggest that some fish were probably relatively cheap. The marine species represented can all be found in Oxford market today, but small freshwater fish are now usually considered more-or-less inedible and would have no market value.

[88] J. Coy, 'Animal bones from Newbury, Berkshire. Excavations in Cheap Street, 1981–82', Ancient Monuments Laboratory Report (1986); M. Harman and D. Bramwell, 'The animal and bird bones', in G. H. Lambrick, 'Further excavations on the site of the Dominican Priory, Oxford', *Oxoniensia*, 50 (1985), pp. 190–2.

[89] R. S. R. Fitter, *London's Natural History* (London, 1945), p. 51; D. Ratcliffe, *The Raven. A Natural History in Britain and Ireland* (London, 1997), p. 16.

Elsewhere in Oxford a similar range of fish has been identified from deposits dating from the medieval and post-medieval centuries. At Merton College a range of gadids, cyprinids, pike, salmon, flatfishes, gurnards, and sea bream was recorded, in addition to the ubiquitous herring and eel.[90] It is likely that local river fishing supplemented a regular supply of fish traded inland from ports in southern England, particularly those situated close to the mouth of the Thames.

THE CHARRED AND MINERALIZED PLANT REMAINS by RUTH PELLING

Samples were taken for the extraction of charred plant remains from hearths, burnt deposits, floors, pits, garden soil, and a cess pit. Samples of ten to sixty litres were processed, using a modified siraf-type floatation machine and flots collected on to 250μm mesh sieves. Eight samples from Phases 1 to 4 (eleventh century onwards) were selected for full analysis. Sorting and identification were conducted under a binocular microscope of x10 to x20 magnification. Identification was by comparison with modern reference material held by the author and the Institute of Archaeology, University College London.[91] Nomenclature and taxonomic order of wild plants follows Clapham, Tutin, and Moore.[92]

Discussion

Samples tended to be rich in cereal grains (particularly barley and wheat), with only rare contaminants of weed seeds and/or chaff. Such deposits are characteristic of urban assemblages in which cereals usually enter the site as processed grain. Four cereal taxa are represented: free-threshing *Triticum* sp. (wheat), hulled *Hordeum vulgare* (barley), *Secale cereale* (rye), and *Avena* sp. (oats). Two rachis segments of *Triticum aestivum* type (bread-type wheat) were tentatively identified in a Phase 2 pit fill. Given the absence of asymmetric grains of *Hordeum vulgare*, the two-row variety may be present, the type most commonly associated with brewing, although this cannot be positively demonstrated in the absence of well-preserved rachis. This range of cereals is characteristic of medieval period settlements.

Contemporary archaeobotanical assemblages from the dry northern suburbs of the medieval town include processed cereal grains and flax, processing waste used as fuel within fourteenth- to fifteenth-century bread ovens in front of the Ashmolean Museum, and processed grain in early twelfth- to thirteenth-century deposits in the precinct of Beaumont Palace (Sackler Library site).[93] This area therefore seems to have been receiving processed grain for bread and other activities from the twelfth to thirteenth century onwards.

THE WOOD CHARCOAL by DANA CHALLINOR

A total of 315 pieces of charcoal was recovered from three (Phases 1–3) pit deposits, which represented refuse dumps. Since there was no *in situ* burning, the assemblages may have been generated from several burning events. The presence of processed grain in all three samples suggests that the majority of charcoal represents mixed fuel wood from cooking fires, although the possibility that some structural or artefactual wood is present cannot be discounted.[94]

From the medieval period onwards, firewood was usually collected from the underwood species of local managed woodlands, which were then bound into faggots for transportation to the towns.[95] It is of interest that oak was dominant in all three samples, including oak heartwood, which indicates some mature trees. It is possible that either structural timbers are represented or that the wood used was already converted to charcoal, in which case species such as poplar, willow, or elm would be appropriate.[96] In any case, all of the taxa identified at the site would have been available locally.

90 R. A. Nicholson, 'Fish remains', in Poore, Score, and Dodd, 'Excavations at no. 4a Merton St.', pp. 306–11.

91 S. Jacomet, *Identification of Cereal Remains from Archaeological Sites*, 2nd edn, Archaeobotany Lab., Institute for Prehistory and Archaeological Science, Basel University, part translation by James Greig in private circulation (2006); G. C. Hillman, S. Mason, D. de Moulins, and M. Nesbitt, 'Identification of archaeological remains of wheat: the 1992 London workshop', *Circaea*, 12 (1996), pp. 195–210.

92 A. R. Clapham, T. G. Tutin, and D. M. Moore, *Flora of the British Isles*, 3rd edn (Cambridge, 1989).

93 P. Hinton, 'The charred plant remains from ovens 166 and 167', in Andrews and Mepham, 'Ashmolean Museum forecourt', pp. 216–17; Ruth Pelling, 'The charred plant remains', in Poore and Wilkinson, 'Beaumont Palace', pp. 82–4.

94 Ruth Pelling, 'The charred and mineralized plant remains', above.

95 Oliver Rackham, *Trees and Woodland in the British Landscape* (London, 1996).

96 H. L. Edlin, *Woodland Crafts in Britain: an Account of the Traditional Uses of Trees and Timbers in the British Countryside* (London, 1949), p. 165.

The evidence from other sites in Oxford have suggested a shift in the use of firewood resources from oak and hazel, in the earlier medieval period, to beech in the later medieval period.[97] At Lincoln College, beech charcoal dominated the deposit from the sixteenth- to eighteenth-century kitchen fireplace and seemed to be the preferred species for cooking.[98] The results from the Classics Centre do not entirely fit with this picture, since there is still much oak in the Phase 3 sample. It is notable, nonetheless, that almost 20 per cent of the assemblage was beech.

In conclusion, there appears to be consistency in the use of wood resources for firewood throughout the periods represented, but the analysis is too limited to provide more than a superficial survey. There are indications that a shift away from oak towards beech, which has been suggested at other sites in Oxford, may apply, although oak remains the main fuel wood used at the Classics Centre.

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97 D. Challinor, 'The charcoal', in Z. Kamash, D. R. P. Wilkinson, B. M. Ford, and J. Hiller, 'Late Saxon and medieval occupation: evidence from excavations at Lincoln College, Oxford 1997–2000', *Oxoniensia*, 67 (2002), pp. 199–287; 'Postmasters Hall Yard, Merton College, Oxford, post-excavation assessment and updated project design' (OA TS report, 2003).

98 Challinor, 'The charcoal', in Kamash, Wilkinson, et al., 'Excavations at Lincoln College', pp. 199–287.