EAST ANGLIAN ARCHAEOLOGY

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#### THIS BOOK IS DEDICATED TO THE MEMORY OF THREE PEOPLE



Angela Simco at Newnham in 1975

#### Angela Heather Simco BA, MIfA 1952–2008

Angela Simco directed the excavations at Newnham from 1973 when, as a recent graduate from the London Institute of Archaeology, she joined Bedfordshire County Council's newly established Conservation and Archaeology Section of the Planning Department. Angela worked for the council until 1992, helping to guide its archaeology service through the formative period spanning 'rescue archaeology' to the more regulated system under PPG16. On completion of the fieldwork at Newnham, Angela embarked on the archive consolidation and managed the initial programme to analyse the results. However, changes in national funding priorities during the 1980s deprived her of the opportunity to complete the analysis and publish the work. We had intended that, as excavation director, Angela would contribute to the present publication, and it was with great sadness that we learned of her death just as we succeeded in securing English Heritage's support for the project.

#### Anna Maria Brindle-Slowikowski BA, MPhil, MAAIS, PGCE, MIfA 1955–2011

One of the foremost pottery specialists of her generation, Anna (known professionally under her maiden name) was an active and leading member of the Medieval Pottery Research Group, the South East Midlands Pottery Research Group and the Association of Archaeological Illustrators & Surveyors. She wrote and contributed to numerous publications and reports. She also strove to promote archaeology in the local community, working with schools and establishing a successful Young Archaeologists' Club branch in collaboration with Bedford Museum.

Anna championed the analysis and publication of the 1970s excavations at Newnham, believing it was important that this 'backlog' pottery assemblage in particular should be more accessible to those studying the ever increasing quantity of material recovered from recent developer-funded excavations in the Bedford area. It was undoubtedly Anna's commitment that won the funding for the present publication, and her considerable contribution herein is one of the last major projects that she worked on before her untimely death. Sadly, Anna did not see the final draft of this publication, but we hope that the end result appears as she would have wished.

#### David Edward Johnston MA, FSA 1934–2011

David Johnston, former lecturer at the University of Southampton, was well known as a classical archaeologist and acknowledged expert on the Roman villas of Britain — author, *inter alia*, of the Shire book on the subject and the report on the Sparsholt villa excavations. Less well known is the fact that, as a young man in the late 1950s, he was one of the first archaeologists to conduct field investigations of Bedfordshire crop-mark sites, and it was he who first identified the Newnham site as being Roman in date.

# Newnham: a Roman bath house and estate centre east of Bedford

## by David Ingham, Jeremy Oetgen and Anna Slowikowski

with major contributions by Pat Aird, Holly Duncan and Mark Maltby

and other contributions by Justine Bayley, Hilary Cool, Jill Eyers, Peter Guest, Kay Hartley, Rog Palmer, Terry Spencer, Jackie Wells and Felicity Wild

illustrations by David Ingham and Cecily Marshall

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For details of East Anglian Archaeology, see last page

#### **Cover illustration**

Artist's impression by Cecily Marshall showing a montage of activities that might have taken place at Newnham during construction of the Roman bath house (Albion Archaeology copyright reserved)

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Thanks are due to Bedford Museum (now known as The Higgins Art Gallery and Museum) and particularly the Keeper of Archaeology, Liz Pieksma, for loan of the excavation archive and help in locating the papers deposited by David Johnston. Selected photographs from the excavation archive are reproduced here with the kind permission of The Higgins. Background information on the site and its vicinity was provided by Stephen Coleman (formerly Historic Environment Record Officer of Bedfordshire County Council) and Vanessa Clarke (Senior Archaeological Officer, Bedford Borough Council).

# Fieldwork, initial post-excavation analysis and archiving

The excavations carried out between 1972 and 1975 were funded by a combination of grants from the Department of the Environment, North Bedfordshire Borough Council and Bedfordshire County Council. The work was managed by David and Evelyn Baker, of the recently formed Archaeology Service of Bedfordshire County Council, and the excavations were directed by the late Angela Simco. Many of the other peopled involved at the beginning could not be traced. Foremost thanks must go to the digging team, supervisors and technicians, without whom the Newnham site could not have been recorded any of them reading this should know that their invaluable contribution is acknowledged.

Analysis of the excavation results was begun in the late 1970s and early 1980s by Angela Simco, assisted by a number of other contributors, some of whom prepared notes or draft reports that were subsequently placed in the project archive. Those known to have worked on the post-excavation analysis include Pat Aird (pottery), David Devereux (chemical analysis of pottery fabrics), Brenda Dickinson (samian stamps), Paula Gentil (initial recording of the fired clay), Kay Hartley (mortaria), David Knight (pre-Roman pottery), Hedley Pengelly (samian) and Terry Jackman (now Spencer) (human bone). An appraisal of the slag was undertaken in 1988 by Justine Bayley, and in 1992 Rosemary Luff carried out a preliminary assessment of the animal bone. Where appropriate, the previous work is referred to in the present publication, and some of the original contributors have provided reports for inclusion here. The archive was eventually consolidated and prepared for deposition in line with the current standards; this process was managed by Holly Duncan and funded by English Heritage.

#### **Application for ALSF funding**

The initial project proposal and project design were produced by Anna Slowikowski and Jeremy Oetgen. This

# About this publication

#### Structure

The publication is divided into two parts:

Volume 1 is the printed monograph, comprising the chapters on the project background, summaries of evidence organised by chronological phase, and a thematic discussion of the site.

Volume 2 is the CD-ROM, which contains the full phasing hierarchy, full specialist reports, artefact illustrations and type series.

#### Date of writing

This publication was initially compiled during winter 2010/11, incorporating contributions that were mostly completed in 2010. Some revisions were made during 2012, including the addition of a study of aerial photographic evidence, and the revised draft was completed in March 2013.

#### Terminology and abbreviations

Structural features are referred to by Group number, abbreviated to G1, G2, *etc*. Where pottery fabric types are relevant to the discussion they are usually described briefly with the relevant fabric code, for ease of reference

to the type series (Slowikowski, Chapter 11). All nonceramic artefacts are registered with a unique number. Those prefixed with OA (for Other Artefact) are discussed or illustrated within the other artefacts report (Duncan, Chapter 15). Where the term RA (for Registered Artefact) is used it refers to the number sequence within the archive.

process was greatly assisted by Peter Busby (National

Terrestrial Aggregates Advisor, English Heritage). The

subsequent assessment was compiled by the authors and

In addition to the authors and contributors to this

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Albion Archaeology and The Higgins retain copyright of

all the photographs from the excavation archive. The

photographers are unknown. Copyright of Plate 1.1 is

reserved by CUCAP; J.K. St Joseph was the photographer.

contributors to this publication.

Analysis and publication

for internal project assurance.

**Photographs** 

All measurements are metric.

#### Tables

Tables within each chapter are numbered in a unique sequence, *e.g.* in Chapter 1 (Introduction) tables are numbered 1.1 and 1.2, and in Chapter 19 (Animal Bone) they are numbered 19.1, 19.2, *etc.* 

#### Figures

Illustrations are also numbered in a unique sequence, *e.g.* Chapter 3 (Phase 2) illustrations are numbered Figure 3.1, 3.2, 3.3, *etc.* 

Artefact illustrations are included within the chapter that discusses the relevant phase. Catalogue entries for illustrated finds are presented below or alongside the associated figure.

## Location of the archive

The project archive, comprising finds, site records and original draft post-excavation reports, will be returned to The Higgins Art Gallery and Museum, Castle Lane, Bedford, MK40 3XD, under accession number: BEDFM:

1975.70. The archive generated by analysis undertaken in preparation of this publication will be deposited with the museum under the same accession number.

## Summary

Excavations were conducted between 1972 and 1975 at the site of an elaborate Roman farmstead at Newnham, Bedfordshire. The site lies c. 2km east of Bedford town centre and is now within the Priory Country Park. Nearly all of the Roman remains have been destroyed by gravel quarrying that began in the 1950s. The excavations, under the direction of the late Angela Simco, recorded part of the core area of the farmstead and recovered significant assemblages of artefacts and animal bone. However, the post-excavation analysis and publication was not completed at the time and the site archive was eventually accessioned to Bedford Museum in 2000. Funding from the Aggregates Levy Sustainability Fund, distributed by English Heritage, has enabled the post-excavation programme to be carried to its conclusion with the delivery of this publication.

The farmstead probably originated in the 1st century AD, just before the Roman conquest, and was initially fairly typical of contemporary rural settlements in the Great Ouse Valley. This settlement was characterised by ditched enclosures, some of which were used for livestock management, with a mixture of roundhouses and buildings of simple rectangular earthfast-post construction. By the end of the 2nd century, however, the site had acquired at least one relatively substantial rectangular building with stone foundations, suggesting a degree of 'Romanisation' not normally apparent on farmsteads in the Bedford region. In the 3rd century an even more elaborate stone-founded building was constructed, which comprised a range of rooms with under-floor heating. All the stone buildings had been heavily robbed, thus hampering detailed interpretation of them, but three of the hypocaust rooms in the later building are thought to have comprised a bath suite.

Elements of the finds assemblage also suggest that the site had a higher status than that of other farmsteads in the region. Fine-ware pottery and continental imports are

relatively well represented, while ceramic building materials and painted wall plaster indicate a degree of prosperity, albeit not on the scale of many villa sites known elsewhere. The faunal assemblage has a species profile somewhere between that of contemporary farmsteads in the Bedford area and the classic villa sites of the wider region. There is a general absence of other high-status indicators, and the paucity of the coin assemblage suggests a largely unmonetised economy, at least prior to the 4th century AD. In view of this apparent ambiguity, the authors conclude that the Newnham farmstead should not be classed as a classic 'villa'. Instead it is suggested that the later buildings housed the administrative and/or communal functions of a large organised farm, without the luxurious domestic element of a villa. The focus of the farming operation is most likely to have been livestock (mainly cattle and sheep), which culminated at the end of the 4th century in a commercial butchery operation to supply lamb or wool to other settlements.

After the end of Roman administration in Britain the ruined farmstead seems to have been a site of early Anglo-Saxon settlement. This is evidenced by the presence of Anglo-Saxon pottery, although hardly any features can be dated to this period.

The main datasets analysed for this report consist of structural records, pottery (excluding the amphorae, which are now missing), ceramic building material, a range of other artefacts (including animal products, metalwork, glass, stone, plaster/mortar and slag), and animal bone. The small collection of human bone is fragmentary or from unphased contexts and is not analysed in detail. Because this is a rather unusual site for the locality, detailed specialist reports and full catalogues are included with this report on a CD-ROM, to help facilitate comparison of the Newnham assemblages with those from other sites in the region.

## Résumé

Entre 1972 et 1975, des fouilles ont été entreprises sur le site d'une remarquable ferme romaine à Newnham dans le Bedfordshire. Situé à environ 2 km à l'est du centre ville de Bedford, le site se trouve maintenant dans le Priory Country Park. Presque toute la totalité des vestiges romains a été détruite lors de l'extraction de gravier dont l'exploitation commença dans les années 50. Dirigées par feu Angela Simco, ces fouilles ont porté sur une partie de la zone centrale de la ferme et elles ont permis de mettre à jour d'importants ensembles d'artefacts et d'ossements animaux. Toutefois, ces fouilles n'ont pas été suivies à l'époque d'une analyse complète des données recueillies ni d'une publication et les archives du site ont finalement été transmises en 2000 au Bedford Museum. Sous l'égide de l'English Heritage, des fonds en provenance du Aggregates Levy Sustainability Fund ont permis de mener

à son terme le programme d'exploitation des fouilles qui fait l'objet de la présente publication.

La ferme date probablement du premier siècle après notre ère, juste avant la conquête romaine et elle était à l'origine assez représentative des établissements ruraux de la même époque dans la vallée de la Great Ouse. Cet établissement se caractérisait par des enceintes à fossés, dont certaines servaient à l'élevage du bétail avec un mélange de rotondes et de bâtiments rectangulaires reposant simplement sur des poteaux enfoncés dans le sol. Toutefois, à la fin du deuxième siècle, le site comportait au moins un bâtiment rectangulaire assez important reposant sur des fondations de pierre, ce qui suppose un certain niveau de « romanisation » qui n'apparaît pas habituellement dans les fermes de la région de Bedford. Au troisième siècle, on construisit un bâtiment doté de fondations de pierre qui était bien plus perfectionné; il comprenait en effet plusieurs pièces équipées d'un chauffage sous le sol. Tous les bâtiments de pierre ont été largement pillés, ce qui n'a pas facilité leur interprétation détaillée. Toutefois, dans le bâtiment le plus tardif, il semble que trois des pièces hypocaustes du bâtiment le plus tardif comprenait une suite de salles de bains.

En outre, certains des objets découverts laissent à penser que le statut de ce site était plus élevé que celui des autres fermes de la région. La faïence et les objets importés du continent sont assez bien représentés, tandis que des matériaux de construction en céramique et des enduits peints dénotent un certain niveau de prospérité qui n'atteint toutefois pas celui des nombreux sites de villas situés dans d'autres lieux. L'ensemble faunistique présente un profil d'espèces qui se situe entre celui des fermes de la même époque dans la zone de Bedford et celui des sites de villas classiques dans la région au sens large du terme. De façon générale, il n'existe pas d'autres marques de statut élevé et le nombre réduit des pièces rassemblées suggère une économie largement non monétisée, qui est au minimum antérieure au quatrième siècle de notre ère. Compte tenu de cette ambiguïté apparente, les auteurs concluent que la ferme de Newnham ne devrait pas être considérée comme une « villa » classique. Ils suggèrent à la place que les bâtiments tardifs abritaient les fonctions administratives et/ou communales d'une grande ferme organisée et étaient dépourvus des luxueux éléments domestiques propres aux

villas. L'essentiel des activités de la ferme s'est très probablement porté sur le bétail (principalement les bovins et les moutons). Ces activités ont culminé à la fin du quatrième siècle sous la forme d'un commerce d'abattage du cheptel destiné à fournir les autres implantations en agneaux ou en laine.

À la fin de la période de l'administration romaine en Grande-Bretagne, la ferme tombée en ruines semble être devenue le site d'une implantation de la première période anglo-saxonne. Cela est mis en évidence par la découverte de poteries anglo-saxonnes, bien que pratiquement aucune d'entre elles ne puisse être rapportée à cette période.

Les principales données traitées dans ce rapport concernent des structures, de la poterie (à l'exclusion des amphores qui ont disparu), des matériaux de construction en céramique ainsi qu'un ensemble d'autres artefacts (comprenant des produits animaux, du travail du métal, du verre, de la pierre, du mortier/enduit et des scories), et enfin des ossements animaux. Le petit ensemble d'ossements humains est soit fragmentaire soit dépourvu de contexte et il n'a pas pu être analysé en détail. Comme il s'agit d'un site assez inhabituel pour la localité, des rapports détaillés de spécialistes et des catalogues complets ont été intégrés au rapport qui est disponible sur CD-ROM. La comparaison des ensembles d'objets de Newnham avec ceux d'autres sites de la région s'en trouve ainsi facilitée.

(Traduction: Didier Don)

## Zusammenfassung

Zwischen 1972 und 1975 wurden am Ort eines komplexen römischen Gehöfts in Newnham, Bedfordshire Ausgrabungen durchgeführt. Die Stätte liegt etwa zwei Kilometer östlich der Stadtmitte von Bedford im heutigen Priory Country Park. Die römischen Überreste wurden im Verlauf des Kiesabbaus, der in den 1950er Jahren begann, fast allesamt zerstört. Bei den Ausgrabungen unter der Leitung der mittlerweile verstorbenen Angela Simco wurden ein Teil des Kernbereichs des Gehöfts dokumentiert und umfangreiche Artefaktkomplexe und Tierknochen geborgen. Allerdings wurde die im Anschluss an die Grabung vorgenommene Analyse damals weder abgeschlossen noch veröffentlicht; das Grabungsarchiv ging im Jahr 2000 schließlich in die Sammlung des Bedford Museum ein. Mit Hilfe von Mitteln aus dem von English Heritage verwalteten Aggregates Levy Sustainability Fund war es möglich, die Auswertung mit der Vorlage dieser Veröffentlichung abzuschließen.

Das wahrscheinlich im 1. Jahrhundert n. Chr. kurz vor der römischen Eroberung errichtete Gehöft war ursprünglich typisch für die damalige ländliche Besiedlung im Tal der Great Ouse. Die Siedlung war durch Grabenanlagen gekennzeichnet, von denen einige für die Viehhaltung verwendet wurden. Sie bestand aus Rundhäusern und rechteckigen Gebäuden in einfacher Pfostenbauweise. Noch vor dem Ende des 2. Jahrhunderts gesellte sich mindestens ein ziemlich massives, auf einem Steinfundament erbautes rechteckiges Gebäude hinzu, das auf eine gewisse Romanisierung schließen lässt und für die Gehöfte im Umland von Bedford ungewöhnlich ist. Im 3. Jahrhundert wurde ein noch komplexeres Gebäude auf einem Steinfundament errichtet, das mehrere Räumen mit Hypokaustenheizung umfasste. Die Steingebäude wurden allesamt stark geplündert, was eine detaillierte Interpretation erschwert, es wird jedoch angenommen, dass drei der beheizten Räume in dem späteren Gebäude ein römisches Bad darstellten.

Einige Bestandteile der Fundsammlung deuten darauf hin, dass die Stätte einen höheren Status besaß als andere Gehöfte in der Region - relativ stark vertreten sind Feinkeramik und Importe aus Kontinentaleuropa, daneben zeigen keramische Baustoffe und farbiger Wandputz einen gewissen Wohlstand an, wenngleich nicht im selben Maße wie in vielen andernorts gefundenen römischen Landgütern. Die Faunenzusammensetzung ist zwischen der zeitgleicher Gehöfte im Gebiet von Bedford und der klassischer römischer Landgüter in der weiteren Umgebung angesiedelt. Auffällig ist das Fehlen weiterer Indikatoren für einen höheren Status, zudem lassen die nur kargen Münzfunde auf eine weitgehend nichtmonetäre Wirtschaft schließen, zumindest in der Zeit vor dem 4. Jahrhundert n. Chr. Angesichts dieser offenkundigen Ambiguität gelangen die Autoren zu dem Schluss, dass das Gehöft von Newnham nicht als klassische "Villa rustica" einzustufen ist. Sie glauben vielmehr, dass die späteren Gebäude administrative und/oder kommunale Funktionen eines gut organisierten großen Gehöfts erfüllten und dass eine luxuriöse Unterkunft im Stile eines Landguts fehlte. Die Landwirtschaft war höchstwahrscheinlich auf die Viehhaltung konzentriert (vorwiegend Rinder und Schafe),



Plate 1.1 Aerial photograph of crop-marks, looking north, 19 July 1951. J.K. St Joseph GW0058. CUCAP, copyright reserved

die am Ende des 4. Jahrhunderts in einem kommerziellen Schlachtbetrieb gipfelte, der andere Siedlungen mit Lammfleisch oder Wolle versorgte.

Offenbar entstand am Ort des verfallenen Gehöfts nach dem Ende der Verwaltung Britanniens durch die Römer eine frühangelsächsische Siedlung. Hinweise darauf bietet die gefundene angelsächsische Tonware, obwohl kaum sonstige Befunde für diese Periode existieren.

Die für diesen Bericht ausgewerteten Datenreihen beziehen sich vor allem auf die strukturellen Befunde, die Keramik (mit Ausnahme der verloren gegangenen Amphoren), die keramischen Baustoffe, verschiedene andere Artefakte (darunter tierische Erzeugnisse, Metallarbeiten, Glas, Stein, Verputz/Mörtel und Schlacke) und die Tierknochen. Die nur geringen Funde menschlicher Knochen sind fragmentiert oder nicht zeitlich zugeordnet und werden daher nicht ausführlich erörtert. Da die Stätte für die Gegend eher ungewöhnlich ist, sind dem Bericht detaillierte Expertenberichte und komplette Kataloge auf CD-ROM beigefügt, um einen Vergleich der Fundkomplexe von Newnham mit denen anderer Stätten in der Region zu ermöglichen.

(Übersetzung: Gerlinde Krug)

# Chapter 1. Introduction

The Roman settlement site at Newnham was excavated in advance of gravel quarrying between 1972 and 1975, under the direction of Angela Simco. Unexpectedly found to contain the remains of substantial Roman buildings, including a range with a hypocaust heating system, the site proved to be one of the highest-status Roman rural settlements in Bedfordshire. It also produced intriguing evidence of Early Saxon occupation. The site has now been totally quarried away, but the results of the excavation were never fully analysed or published and the archive was accessioned to Bedford Museum in 2000.

Newnham is recognised as a regionally important site that is crucial to understanding the hierarchy of Roman settlement in northern Bedfordshire, and to the interpretation of the results of ongoing developer-funded fieldwork in the area. Its publication has now been made possible with a grant *via* English Heritage and DEFRA from the Aggregates Levy Sustainability Fund (ALSF), allowing archaeologists and the wider public to access the full results of investigation of this regionally important site.

#### I. Site location, topography and geology

(Pls 1.1 and 1.2, Figs 1.1 and 1.2)

The site of the Newnham excavation lies *c*. 2km east of Bedford town centre, within the popular Priory Country Park (Fig. 1.1). Formerly, Newnham lay in the parish of Goldington, which had its village nucleus some 1.5km north of the Roman site. Goldington became part of Bedford borough in 1934 and almost all of the former parish lands are now part of the conurbation. Only Priory Country Park remains as open land, part of the 'green finger' that extends along the River Great Ouse into the heart of Bedford.

Figure 1.2 shows the landscape as it was mapped in the 1950s, when the site lay on a broad, featureless floodplain at the approximate centre of an arc formed by a broad loop of the River Great Ouse, as indicated by numerous aerial photographs and site photographs (*e.g.* Pls 1.1 and 1.2). The site of the excavations is now occupied by a large body of water known as Priory Lake, created after quarrying had ceased, while the land to the north has been reinstated.

Ordnance Survey contours surveyed prior to the quarrying record that the land originally lay at a height of around 25m OD on the gravel terraces of the Great Ouse. The 6 inch edition published in 1980 shows that in fact the excavation was located on a localised high point marked by an isolated 25m contour. In the wider landscape, Newnham lies at the north-east end of the Marston Vale, bordered by the prominent Greensand Ridge to the south and east, and by low uplands to the north and west in areas of predominantly clay geology.

#### **II. Archaeological and historical context** (Pl. 1.3; Fig. 1.3)

The only obvious historic site in the immediate area is Newnham Priory, a scheduled monument of national importance. However, a lack of visible evidence belies the fact that the Great Ouse Valley is rich in evidence of past human communities. Since the 1950s, aerial photography and an ever increasing amount of archaeological fieldwork — particularly through the expansion of developer-funded archaeology since 1990 - have revealed numerous archaeological sites, mostly dating from the later Neolithic/Early Bronze Age (e.g. Malim 2000; Mustoe 1988) or the later Iron Age and the Roman period (e.g. Meade 2010, fig. 6.4). The most extensive of these fieldwork projects have related to the A421 highway improvements (Timby et al. 2007), mineral extraction in Willington Quarry (Oetgen forthcoming) and housing/ highway construction west of Bedford at Biddenham Loop (Luke 2008; Luke in press).

Human influence on the landscape in the later Bronze Age and Early Iron Age is less obvious but networks of straight boundary ditches have been found — including those immediately west of the site (Fig. 1.3) — that may date from this period. Pottery found at Newnham Priory in the 19th century includes a Bronze Age funerary urn (Simco 1985), as well as a Late Iron Age Belgic pedestal urn (Hawkes and Dunning 1930; Simco 1973a). Some evidence of Middle Iron Age settlement has been found by Albion Archaeology's work within Willington Quarry but this awaits publication.

Evidence for Early Saxon settlement is rare, although there are hints that people were living in the historic core of Bedford well before the establishment of the burh (Baker *et al.* 1979, 20, 63, 148, 151–4; Meckseper and Oetgen forthcoming). Dyer (1994, 1–9) also found Early–Middle Saxon pottery associated with the Cople 'b' round barrow, near Willington village.

Later Saxon and medieval hamlets and villages seem to have lain within the area occupied by modern settlements, with the majority of the Great Ouse floodplain given over to open-field cultivation or meadow (evinced by a range of evidence from historic maps, crop-marks and archaeological excavations). The place-name 'Newnham' is a fairly common one of Saxon origin, derived from either niwe- and -ham, meaning 'new homestead', or niwe- and -hamm, meaning perhaps 'new place surrounded by marsh or a bend in the river' (Bilikowska 1980, 34; Mills 1998, 254). Presumably the place-name predates Newnham Priory itself, which was established in the 12th century, thus implying pre-Norman settlement in the area. Following the Dissolution, the monastic estate passed to the Gostwick family (Page 1912, 202-9) and archaeological evidence suggests that the priory precinct was redeveloped as a private mansion house (BCAS 1988), although this residence seems to have been short lived. Apart from some remnants of fishpond earthworks, almost nothing of the medieval priory is now visible and only a few garden walls of the Tudor mansion are still standing.



Figure 1.1 Location plan



Figure 1.2 Crop-marks and investigations by David E. Johnston

In the post-medieval and industrial periods the Newnham loop of the river was modified for the Great Ouse Navigation, which reached Bedford in 1689, and for the Bedford to Cambridge railway line (opened in 1862 and closed on 1 January 1968 following Dr Beeching's restructuring of the railways). Various editions of Ordnance Survey maps demonstrate that the Newnham area was used for a variety of peri-urban functions from the 19th century onwards. Bedford Corporation used the land as a sewage farm, disposing of waste on agricultural land as a soil improver. Prior to the Second World War, an 'isolation hospital' is recorded just north of the Newnham Roman site, an 'observation hospital' is shown in the north-east corner of the Newnham Priory precinct, and a municipal waste destructor lay north of Barkers Lane. The 1950s Goldington Power Station was located just 800m north of the Roman site and it looms in the background on several of the excavation photographs (Pl. 1.3). The power station closed in 1983 and was demolished to make way for residential development.

Aggregate extraction seems to have begun at Newnham in the 1940s and ceased in 1978, when Priory Country Park was formed. One large gravel pit was landscaped to provide Priory Lake, while another, within the walls of Newnham Priory, became Newnham Marina.

#### **III.** Newnham Roman settlement: discovery and early investigation (Pl. 1.1; Fig. 1.2)

The Roman site was first identified in about 1950 when crop-marks (Bedford HER ref. 986) were spotted by Dr J.K. St Joseph (Pl. 1.1) who, in a letter deposited in the Bedford HER, was later to describe Newnham as one of the most important sites in Bedfordshire. They suggested an interlaced complex of rectangular enclosures, irregular enclosures and linear features and were initially interpreted as outlying features of the medieval priory (Johnston 1956, 92).

By the mid-1950s, the northern part of the crop-mark site had already been destroyed by quarrying (see Fig. 1.2) when David E. Johnston observed that a number of archaeological features had been exposed in section on the southern edge of the quarry (Johnston 1956). His article in The Bedfordshire Archaeologist, a newsletter produced by the South Bedfordshire Archaeological Society, includes section drawings but it is not clear exactly where these sections were located. The small archive of Johnston's papers deposited in Bedford Museum (accession no. 1973/13) does not shed light on this, but a tiny sketch section in the project archive seems to indicate the relative positions of the features along the entire length of the quarry face. It is not known who drew this section and when.



Plate 1.2 Setting of excavation looking south



Plate 1.3 Setting of excavation looking north

Johnston's most important observation was that the features contained Roman pottery and building material. Fortunately, quarrying had not extended south of this line and was contained within a triangle of land defined to the north by the Bedford to Cambridge railway, and to the east by the River Great Ouse Navigation Channel. Maps and aerial photographs suggest that most of the workable mineral within this triangle has been extracted.

Johnston was active throughout the late 1950s in promoting research into the crop-mark sites of the Great Ouse Valley (Johnston 1958), and returned to Newnham in 1957 with a small team from the Bedford Archaeological Society in order to excavate a trial trench across one of the crop-marks in the field to the east of Newnham Priory wall (*Bedfordshire Times* 1957; Johnston 1959). He demonstrated that the crop-mark was caused by a small boundary ditch, although he was unable to provide a date for it.

Newnham was listed in the Royal Commission's survey of crop-mark sites, *A Matter of Time*, (RCHME 1960, 53), where it was described as rectangular enclosures either side of a trackway. Its partial destruction by quarrying and the finds of Roman pottery were also noted. The Viatores refer to the site as Romano-British enclosures discovered by St Joseph (Viatores 1964).

# IV. The resumption of quarrying and background to the 1970s excavations

On 31 October 1970, the *Bedfordshire Times* reported that Bedfordshire County Council had granted planning consent to Bedford Corporation (henceforth referred to as Bedford Borough Council) to extract sand and gravel from eighty acres of land between the River Great Ouse and the New Cut. Afterwards, the whole area would be turned into a recreational park and marina for pleasure craft. The County Council's Planning Committee reportedly commented: 'If this were to come about, it would greatly enhance the appearance and character of the locality and provide for the ever-increasing demand for outdoor organised recreation', and that the land '... appears to be of no great agricultural value and, in its existing state, has no intrinsic amenity value apart from the riverside walk, which is excluded from the permission'.

Fearing the imminent destruction of a large part of Newnham Priory precinct, a number of local archaeologists and historians voiced their concerns to the Borough Council (recorded by correspondence retained in the project archive and HER). Those who made representation included James Dyer (then County Correspondent to the Ministry of Works), Richard Wildman (then Secretary to the Bedford Society), F.W. Kuhlicke (then Curator of Bedford Museum) and David Baker (then actively pursuing a number of archaeological rescue excavations in Bedford). In the end, the priory received a partial stay of execution: it was agreed that the precinct wall and the majority of the fishponds would remain intact, although extraction was to be allowed within part of the walled area where Newnham Marina now sits. Crucially, Bedford Borough Council also agreed that the archaeological remains that would be destroyed by quarrying should be excavated and recorded if at all possible.

Following his appointment as Archaeological Liaison Officer to Bedfordshire County Council, David Baker played a key role in securing agreements to help fund the investigations from various stakeholders. An initial grant of £500 from Bedford Borough Council was matched by a contribution from the Department of the Environment to employ an archaeologist to supervise the excavations and to cover subsistence payments to a small team of volunteer diggers. The project was administered by the County Council. Angela Simco, then still an undergraduate student at the Institute of Archaeology in London, was appointed to lead the team.

The site was designated 'Newnham Marina' - not to be confused with the present-day Priory Marina - and project-coded NWM72. Fieldwork began in September 1972 with a trial excavation that revealed a series of enclosure ditches/drainage gullies, part of a limestonepaved yard and a stone-lined well, suggesting an early Roman farmstead. However, one trial trench struck a series of hypocaust *pilae* set on a mortar surface. Even though the structural remains were poorly preserved and the stratigraphy was mostly quite shallow, it became clear in the subsequent years that the site had contained at least two substantial stone buildings, with the settlement tentatively described as a 'villa'. In 1975, the excavation was extended to the west to examine the system of field boundary ditches evident from the crop-marks, while a few finds of Iron Age and Saxon pottery were also recognised.

Short interim reports were published at the end of each excavation season in the *Bedfordshire Archaeological Journal* (Kennet 1973, 139; 1975, 80–1; 1976, 84), *CBA Group 9 Newsletter* (Simco 1973b, 17–18; 1974, 9; 1975b, 17; 1976a, 17), *Britannia* (Goodburn 1976; Wilson 1973; Wilson 1974; Wilson 1975) and other places (Simco 1985). Some post-excavation analysis was undertaken in the 1980s thanks to a grant from English Heritage but it was not possible to bring the results to publication. In 2000, the site record was archived and accessioned to Bedford Museum (accession no. 1975/70) with no further analysis.

In retrospect, it is ironic that the fate of a key part of Bedford's heritage was sealed in part by a desire to improve access to leisure facilities for the local community. However, given that the physical remains no longer survive *in situ*, there is all the more reason to publish an authoritative account of what the excavations uncovered, which can then be used to inform interpretation for the public within the Country Park.

## **V.** The crop-marks: defining the 'site' and reconstructing its extent (Pl. 1.2; Figs 1.2–1.4)

Aerial photographs of the site prior to gravel extraction are fairly numerous, thanks to the attention it received from St Joseph. Unfortunately, however, the clearest crop-marks are only recorded on oblique images. This hampers accurate mapping, although at least the relatively flat ground surface means that there is minimal error due to topography. Figure 1.2 shows the crop-marks as they have been drawn by Johnston (1956) and Simco (1985), while Figure 1.3 shows a combination of their drawings and a reinterpretation by Rog Palmer that was commissioned for this report. The two versions broadly correlate with each other, but differences do exist, while both also contradict the excavated evidence in places. Figure 1.3 primarily



Figure 1.3 Phased crop-mark plan



Figure 1.4 Plan of excavated features: all phases

uses Palmer's plot of the crop-marks but defers to the earlier version where this tallies more closely with the plan of the excavated features.

The crop-marks consist of two distinct groups: a sub-rectangular enclosure and linear boundaries located to the west, close to the priory wall; and the multi-phase, generally rectilinear enclosures of the Roman settlement. Ridge and furrow was also identifiable to the south. Crop-marks were mostly not visible in the fields to the east of the excavation trenches, presumably because of differential geology and land use. Limited phasing of the crop-marks has been tentatively achieved with reference to the excavated evidence, but it is still unresolved as to whether they are Roman, Late Iron Age or earlier in date (Fig. 1.3). The phased crop-marks are discussed where appropriate in subsequent chapters, but the following text gives a preview of the site narrative and considers the nature and development of the site as a whole.

The western group of crop-marks may well have been prehistoric, as their alignment is mostly contrary to both the medieval/modern and Roman enclosure systems. Johnston (1959, 16) found that the ditch segments he excavated contained no pottery, even though Roman pottery was present in an overlying buried soil. This might indicate that the crop-marks were pre-Roman and even pre-'Belgic', although it should be noted that the most westerly ditch within Simco's trenches produced only two sherds of Roman pottery, despite being one of the largest at Newnham and also much closer to the core of the settlement. Similar configurations of simple linear boundaries have been recorded south-east of the river at Willington Quarry (Oetgen forthcoming), where they seem from their alignment and lack of finds to date from the Late Bronze Age or Early Iron Age. The linear crop-marks appear not to be contemporary with the sub-rectangular enclosure, however, which may be later; enclosures of this kind are common on both Iron Age and Roman sites. Although most of the features represented by these crop-marks were destroyed by extraction without further record, it is possible that remnants still survive on the intact isthmus of land between Priory Lake and Priory Marina

The Roman site appears to have comprised a relatively regular system of enclosures attached to a NW-SE

Reference	Date of sortie	OS grid reference
AAV 5-8	01/6/1960	TL 074 492
AB 64–65	30/7/1947	TL 073 492
[AC 64]	-	[wrongly quoted by Johnston?]
ADO 72-73	06/7/1961	TL 072 491
AN 18-19	11/6/1948	TL 073 492
AXT 69	13/6/1969	TL 073 492
BJF 52–53	05/7/1972	TL 073 492
BNJ 96–97	18/6/1973	TL 073 492
BQJ 90	12/7/1974	TL 070 492
EY 86-87	04/6/1950	TL 073 492
GW 58-59	19/7/1951	TL 073 492
HF 32–33	07/6/1952	TL 073 491
LZ 23-24	27/6/1953	TL 072 492
TO 35-36	25/7/1956	TL 073 492
TO 37-38	25/7/1956	TL 072 492
TO 39	-	073 492

Table 1.1Oblique Aerial Photographs held by theCambridge University Collection of Aerial Photographs

drove-road or trackway. The extent of the recorded crop-marks suggests these covered a minimum of 3ha, although the lack of crop-mark evidence to the east means that the area may have been much larger. The trackway was marked by a pair of parallel ditches that were generally *c*. 18m apart but more closely spaced (*c*. 14m) where they crossed the core of the settlement. It may simply have been a drove-road for the local movement of livestock to and from the settlement or to and from riverside pastures, but alternatively it perhaps formed a link with contemporary neighbouring settlements, perhaps even linking up with the east–west Roman road that runs through Willington and Cople from Sandy (Viatores 1964; Simco 1984).

The Roman settlement enclosures mostly lay south-west of the drove-road, as far as can be determined from the crop-marks. The large and very regular Phase 1 enclosure that extends south-west from the drove-road gives the impression of a deliberately surveyed boundary, perhaps representing a more formally defined area. It had been cut across and subdivided by a complex series of enclosures and trackways that suggest several phases of remodelling and adaptation of the original pattern. Interestingly, neither of the stone buildings showed up as a crop-mark, but there were several circular or penannular features that may have indicated roundhouses up to c. 20m in diameter.

It is noticeable that the crop-marks seemed to peter out on the eastern side of the site and did not continue to the east of the field boundary. This was clearly a significant land boundary and was marked by a mature hedge: it can be seen in several photographs of the site (Pl. 1.2). As suggested above, it is likely that the crop-marks were not visible to the east of the hedge because of differential subsoil and drainage conditions. Later Iron Age and Roman settlements in the vicinity tended to be located on the edge of the first gravel terrace, 'overlooking' the alluvial plain, *e.g.* at Biddenham (Luke 2008, fig. 2.19) and Willington Quarry (Oetgen forthcoming).

In the hope that the likely south-eastern limit of the site could be conjectured, the available historical maps and aerial photographs were examined for evidence that might help to reconstruct the micro-topography and geology in the hope that the edge of the gravel terrace could be located. What emerged from this was an intriguing juxtaposition between the crop-marks and the post-medieval field system as recorded on then Goldington tithe map (BLARS ref: MAT 17/1). Figure 1.4 demonstrates that the crop-mark site has a certain symmetry that can be extended hypothetically. By mirroring the boundaries on the south-western and north-eastern sides of enclosure E1 about an axis that runs SSW–NNE through the centre of excavation Area 5 the south-eastern side of the site would lie approximately along the boundary between the field known as Short Doles Furlong and Great Meadow. If this rectangle is then mirrored on the corresponding WNW-ESE axis, the northeastern 'corner' of the site would coincide with the return of the post-medieval boundary. On this basis, we might speculate that the Roman settlement had once been bounded by a rectangle measuring c. 130m by c. 140m, which was centred on the area that in its most developed phase (Phase 3) was a paved courtyard with stone buildings on at least two sides.

Of course, this juxtaposition may well be coincidental — at least it is not in any way suggested that there was a direct continuity between the Roman landscape and the post-medieval field system — but it is plausible to suggest that the management of the medieval and later agricultural landscape and the Roman settlement were guided by similar topographical considerations.

#### VI. The excavation archive

The excavation archive and finds are held in Bedford Museum (accession no. 1975/70). The primary site record comprises nine bound notebooks that were used to record contextual information on site, which contain written descriptions of features and deposits, plus most of the section drawings that were produced, and a few small plans (there are 269 pages of drawings). Basic contextual information was transposed to individual *pro forma* context sheets when the archive was prepared. Irregularly sized sheets of drawing film were used for larger plans and for thirty-one larger section drawings. There are also over 300 monochrome and colour photographs.

A fairly systematic, context-based record was compiled, but the detailed recording protocols evolved over the four years during which the excavation was in operation. A composite alphanumeric recording system was used for identifying individual contexts, with a different letter for each segment of linear features, rather than the unique number series now favoured. This means that the number of context sheets in the archive (c. 1,900) exceeds the number of context numbers (c. 1,300).

#### Note on the recording system

The context numbering sequences were restarted for each area. Therefore, to avoid duplication and allow the data to be entered more easily on a database, individual contexts are identified in the appendices to this report using a composite number made up of the trench number and context number: *e.g.* structure 17 from Trench 2a is identified as 2a-17, while post-hole 27 from Trench 5a is referred to as 5a-27. For ease of reference and analysis, context numbers have also been amalgamated into Groups (denoted by a 'G' prefix) which represent (for example) a cluster of pits, all the post-holes associated with a single building, or the ditches and their fills that formed an enclosure.

#### Limitations of the data

For a site as stratigraphically complex as the one at Newnham, even a modern excavation with ample time and funding and an established recording system would struggle to make a detailed, accurate record of the remains. It is therefore no surprise that problems exist with an archive generated by a rescue excavation in the early 1970s.

Although individual elements of recording were mostly carried out to a high standard, the lack of a single prescribed recording system led to inconsistencies between different parts of the archive. The system of recording that was used evolved throughout the course of the excavation, making it hard to draw together records from different years. This was compounded by the absence of a detailed guide or manual for the recording system. This posed particular problems when trying to interpret the variable drawing conventions that were employed — for example, it is not always possible to distinguish how much of a feature was excavated. It is also clear that some phases of the excavation were more rushed than others, with no section drawings produced and only the briefest of contextual entries in the site notebooks. This has made it impossible to distinguish between primary and upper fills of features in many cases, and consequently no attempt has been made to separate them in the report for the sake of consistency. This decision was also influenced by a tendency not to formally record the re-cutting of ditches, meaning that even where primary fills were differentiated, they sometimes straddled the original ditch and its re-cut.

A further difficulty exists in identifying which parts of the archive represent primary recording and which secondary. While it is clear that the records in the site notebooks were produced on site, or at least contemporaneously with the excavations, the status of the drawn record is more difficult to determine. The section drawings mostly appear to have been drawn on site, although a few give the impression that they were recreated subsequently. The plans compiled on sheets of drawing film, however, include some that were produced on site, but most appear to be either composite or interpretative. Details that are present on the latter but not the former imply that further plans that once existed do not form part of the archive, or perhaps that amendments were made from memory shortly after excavation by people who had worked on site. Either way, there are a number of discrepancies between the plans that the intervening four decades have made it impossible to resolve definitively. Details on some of the plans and section drawings also fail to tally, a reflection of the lack of budget for checking records immediately after fieldwork, while some of the photographs show features that were not planned — was there not enough time to record them, or were they modern features which were habitually not recorded?

While almost any archaeological report requires a degree of creative interpretation of the data, the limitations of the Newnham archive described above have meant that a greater degree of interpretation (and in some cases guesswork) has had to be employed than usual. Allowing also for the fact that only a small part of the overall site was excavated, the report below is therefore not intended to be a definitive account of the settlement at Newnham, but merely a detailed explanation of the recorded remains that the authors believe to be most plausible.

## VII. Results of the excavations

(Figs 1.3-1.4)

The excavations focused on the 'busiest' part of the site and, although they examined only c. 0.25 ha of a settlement and field system that extended over at least 3ha, the excavated evidence has greatly assisted phasing and interpretation of the crop-marks. Conversely, the crop-mark evidence is useful for interpreting some of the excavated features.

The structural sequence as recorded in the site archive was originally divided into seven main phases covering periods from Late Iron Age to post-Saxon. The original Phase 1 was the largest in terms of the number of contexts assigned, but this was essentially a 'catch-all' phase used to include all pre-Roman and early Roman activity on the site. This was because the research focus of the original post-excavation analysis was the late Roman and post-Roman transitional phases — the potential of the early phases had not been recognised, and one of the aims of the present work was to redress this balance and provide a narrative that acknowledges all phases of the site's development.

The stratigraphy was relatively complicated for a Roman rural site in Bedfordshire, where remains generally comprise simple features sealed by subsoil and cut into natural deposits. There had been a reasonable accumulation of deposits near the stone buildings, including surfaces and demolition/levelling layers. Whilst this can often assist the analysis of stratigraphic relationships, it was not so useful at Newnham because the precise extent of many significant layers was not fully planned.

The finds assemblages were generally quite 'mixed', with late Roman or even Saxon material intrusive in stratigraphically early features, and a lot of Late Iron Age/early Roman material residual in some of the latest deposits. There may be more than one reason for this, not least that:

- the site had been considerably disturbed in the past by episodes of stone robbing and by ploughing (which had taken place since at least the medieval period);
- as a 'rescue' dig, the work was done with limited resources by a relatively inexperienced team;
- the seasonal nature of the fieldwork meant that partially excavated areas of the site — and in some cases partially excavated features — were left open to the elements for long periods before work resumed;
- a post-medieval barn once stood on the site, which is likely to account for many of the more modern finds.

The revised phasing that was developed for the present programme of analysis was based primarily on the evidence of stratigraphy and interpretation of structural associations. Because they had no clear association, a number of isolated features such as burials G49 and G82 and oven G50 were deliberately omitted from the 'dated' phases (see Chapter 7) even though they clearly had intrinsic importance. These 'unphased' features were *probably* Roman, but cannot be linked to any particular stage of the site's development.

The relatively high degree of contamination does mean that the artefact and bone assemblages should be interpreted with caution, but because this site was so unique for this part of Bedfordshire it was important that

Phase	Description	Plan (Fig. no.)
1	Late Iron Age to early Roman	2.1
	farmstead settlement	
	(early 1st to early 2nd century)	
2	Early to mid-Roman	3.1
	(early 2nd to early 3rd century)	
3	Mid-Roman	4.1
	(early 3rd to late 3rd/early 4th)	
4	Mid- to late Roman	5.1
	(late 3rd/4th to late 4th)	
5	late Roman to Saxon	1.4
	(late 4th/early 5th to Saxon)	
0	Unphased features	1.4
	(probably Roman)	
6	Phase 6: modern	1.4

Table 1.2 Phase summary

all this material was studied and published to facilitate comparison with other sites in the area.

The phases as revised for this analysis are summarised below and are discussed in subsequent chapters. Figure 1.4 depicts all phases superimposed.

None of the excavated features pre-date the Late Iron Age, and the only earlier find recovered was a single sherd of Early Iron Age pottery. Indeed, the settlement's inception may date to the 1st century AD: sherds of Romanised pottery vessels were present in most of the features assigned to this initial phase, whilst many of the characteristically Iron Age sherds belong to a ceramic tradition that continued well into the 2nd century.

#### VIII. Objectives of analysis and publication

Newnham, with its substantial stone buildings and hypocausts stands out among the Roman period settlements of Bedfordshire, of which 'The vast majority were single farmsteads, with undistinguished dwellings and farm buildings ...' (Simco 1984, 24). Had it not been destroyed already by gravel extraction, the site would rank among the most significant 'heritage assets' in the county. Simco tentatively identified the site as a villa (Simco 1984, 97) and this interpretation has been perpetuated in the literature (e.g. Dawson 2007, 73). Therefore, at the outset of the present study, Newnham was considered one of a small number of possible Bedfordshire villa sites and one of only two — the other being Totternhoe (Matthews et al. 1992; Simco 1984, 120 and passim) — which have seen systematic excavation. It was clearly lamentable that the results of the investigation of such a significant site languished unpublished in the archives and so this project was conceived with the principal aim of realising the research potential of the archive and making it more accessible through publication. Funding of the project through the Aggregates Levy Sustainability Fund was appropriate.

The project objectives were broadly in line with what might be expected of publication had the Newnham excavations been undertaken under current minerals planning procedures and they were drafted with reference to current regional, local, and project-specific research objectives. In summary the project sought to:

- establish the date, nature and extent of activity or occupation on the site;
- explore evidence for the pre-Roman landscape and its relationship to the Roman site and its estate;
- investigate the site's place in the river valley distribution of villas suggested by Dawson, as well as its relationship to other known sites in the region;
- consider the demise of the Roman site and investigate its place in the Saxon transitional landscape, as well as investigating the site's relationship with the town of Bedford;
- establish the nature and extent of industrial activity on the site;
- explore the questions of ritual and disposal of the dead;
- investigate the pre-Roman, Roman and Saxon ceramic assemblages and incorporate them into the Bedfordshire Ceramic Type Series;

- investigate the evolution of the landscape within the area of aggregate extraction, from the Iron Age/Roman transition through its floruit the Roman period, the Saxon transition into the medieval period and the present day, as defined by the area of aggregates extraction;
- complete the analysis and publication of this important site to make the information available for on-going developer-funded projects in the region;
- make the results of archaeological excavations arising from aggregate extraction available to the public;
- contribute to the management of the archaeological resource in future by providing an integrated synthesis of the results of one of the most significant sites in the Bedford area.



# Chapter 2. Phase 1: Late Iron Age to early Roman farmstead (early 1st–early 2nd century AD)

## I. Overview

(Fig. 2.1)

It is clear from the stratigraphic evidence that not all the features assigned to this phase were contemporary. This is most readily apparent in Area 2, where stock enclosure G35 gave way to roundhouse G29. Spatial patterning observed in the other excavated areas shows that not all the features assigned to Phase 1 would have been able to co-exist, although there is insufficient evidence to allocate them to clearly discrete sub-groups. There is also a mixture of the curvilinear and the rectilinear: roundhouses G9 and G29 neighbour rectangular building G22, while a similar dichotomy is evident in the shapes of enclosure G35 and the more rectilinear ones whose northern edge is defined by G4. However, similar contrasts are a familiar sight on sites representing the transition from the later Iron Age to the early Roman period, and the dating evidence is insufficient to test the possibility of a change from one style to the other. The overall pattern suggests continually evolving and fairly long-lived settlement, which is reinforced by the lack of a clear temporal or organisational distinction between Phases 1 and 2.

Aside from the three main buildings present in Phase 1 roundhouses G9 and G29 and rectangular building G22 - several groups of post-holes were recorded, at least some of which can be resolved into the outlines of either buildings or lesser structures. There were also several lengths of gully — some straight, some curvilinear which are likely to have been associated with structures that did not otherwise leave any archaeological traces. Despite this clear structural evidence for occupation, however, there was relatively little other evidence: only eight pits (in G46, G87 and G88) could confidently be assigned to this phase, and no other types of discrete feature were recorded. This may in part be due to truncation by later phases of activity or the impossibility of assigning a close date to some of the discrete features that remain unphased, but it could also reflect the limited extent of the archaeological excavations that were undertaken, with the majority of the overall settlement either unrecorded or unexcavated (p.9).

#### **II. Summary of finds**

(Figs 2.3-2.6)

For fuller discussion see specialist reports in Part 2 (on compact disc)

Large quantities of pottery in Late Iron Age forms and fabrics suggest a pre-Roman origin for this phase of occupation, but also a continuation of native traditions well into the post-Conquest period. This material was recovered alongside a comparable quantity of pottery that dates stylistically to the early Roman period, possibly the end of the 1st or beginning of the 2nd century (Figs 2.3 and 2.4).

With the exception of roundhouse G29, which contained only early Roman pottery, all other features in this phase contained a consistently mixed fabric profile. A variety of grog-tempered and shelly wares in 'Belgic' forms were present, alongside smaller quantities of early Roman fabrics — principally flagon wares, white wares from Verulamium, and also a variety of Romanised fine grey wares and black-surfaced wares, including fabrics of the Black Burnished tradition (Table 11.4).

Imports are rare, but samian was found in small quantities (Chapter 12), as well as a colour-coated beaker recorded as being 'of continental origin'. Other fine wares are Terra Nigra and a lead-glazed fabric which can be dated to the late 1st to 2nd century, possibly originating in Staines (Arthur 1978, 300).

The pottery indicates a community of moderate wealth, able to acquire fine table wares in grog-tempered fabrics as well as the local domestic shelly wares and — as soon as they became available — Romanised wares which included samian dishes, lead-glazed pottery and continental colour-coated beakers. The presence of amphora was noted at the time of excavation but the sherds and any records made are missing from the archive; it is therefore not known where they were found, nor in which phase they were first used. Mortaria, however, are clear indicators of Romanised ways of food preparation and cooking, and were used on the site from the 2nd century (Hartley, Chapter 13).

Most of the fired clay from the site (slabs and daub: Fig. 2.5) was recovered from Phase 1 features, the majority of the fragments coming from the central area of the site (Area 5), especially building G22 and pit group G46. The rest of the ceramic building material is sparse and likely to be intrusive (Table 14.8).

The assemblage of other artefacts from Phase 1 deposits is likewise small, and it is evident from intrusive finds that roundhouse gully G9 and gully G12 had been heavily disturbed (Table 15.2). The assemblage, although limited, confirms not only domestic occupation at Newnham in the earlier Roman period, but also that the occupants had access to markets and the resources to purchase 'imported' goods. Although there are no finds amongst the stratified 'other artefact' assemblage that reflect subsistence or craft-level activities, it should be noted that part of a lower quernstone in Hertfordshire puddingstone (Fig. 7.2, RA306) was found within unphased deposits (Chapter 15 — the production of these querns is thought to have ceased by AD 200: King 1986, 71). A typically Iron Age triangular loom-weight was found in post-built building G22 (Chapter 14). The presence of a studded ring from a Roman soldier's satchel (Fig. 2.6) is hard to explain; perhaps it was lost by a visiting or retired soldier, but it could equally well have been a useful item of 'army surplus' obtained through trade.



Figure 2.2 Building G22 and Phase 1 sections

The faunal assemblage indicates that cattle was the most common species, followed by sheep/goat, pig, horse, dog and cat. The high percentage of cattle matches results from similar samples taken at other late Iron Age/early Roman sites in Bedfordshire (Chapter 19). High percentages of cattle are often found in the ditches of Iron Age and Romano-British enclosures and it should be noted that the great majority of this sample derived from such features. The low occurrence of pig bones is a feature of Iron Age and Roman samples from Bedfordshire. They usually make up less than 10% of faunal assemblages; the Newnham sample therefore includes a relatively high percentage (8%) for this species in the area. The presence of cat bones is quite unusual at this early date in this region.

Only three bird bones were identified, including a bone from domestic fowl. This latter species was originally imported into Britain probably in the later Iron Age although it is not found in large numbers, if at all, on most Iron Age sites. It has been found in varying quantities on different types of Romano-British settlements, most commonly towns, military sites and, to a lesser extent, villas (Maltby 1997). Chicken bones have been recorded in other Late Iron Age and early Roman deposits from the county (Chapter 19). The carpometacarpus of a mute swan (*Cygnus olor*) is an unusual find; the species has not been recorded on any of the other prehistoric and Roman sites investigated in recent years in Bedfordshire.

#### III. Livestock-management enclosures

(Figs 2.1 and 2.2)

Enclosure ditch G35 probably represents the earliest stage in the site's stratigraphic sequence (although its relationship with gully G37, immediately to its south, is unclear), and it does appear typologically earlier than the other enclosures. Its distinctive funnel-like shape is similar to that of enclosures at Butterfield Green, Luton (Luke and Preece in press) and Bourn Airfield, Cambridgeshire (Abrams and Ingham 2008, 33–5), which have been dated to the early–middle Iron Age and pre-Roman Iron Age respectively. The latter bears a particularly strong resemblance. The narrower part of the enclosure, to the south-west, was c. 16m long and c. 9m wide, with an exit to the south-west; two short gullies just inside this exit may have been designed to assist with stock control. The enclosure ditch itself had a 'v'-shaped profile, varying from 1.2m to 3.3m in width; much of its course had been truncated by later features.

The fills of enclosure ditch G35 contained largely Late Iron Age pottery of the 'Belgic' tradition and a smaller quantity of early Roman pottery. The large size of many of the sherds and the assemblage's sherd-to-weight ratio of 1:26 suggest that pottery had not been abraded and fragmented by animal and soil movement. In other words it must have been deposited soon after breakage, or preserved in long-standing midden deposits that had not been subjected to animal or soil movement. Although largely undiagnostic, a number of forms could be identified, including bowls, cordoned bowls and platters.

Undiagnostic shell-tempered body sherds from the ditch probably derive from cooking pots and storage jars. These shelly vessels may have come from Stagsden, 8km north-west of Newnham, where one of the kilns producing pottery of this type was dated archaeomagnetically to around the time of the Conquest (Dawson 2000). If these shelly fabrics did come from Stagsden, then their association with Verulamium wares that date to the post-Conquest period places the infilling of the ditch at the end of the 1st or possibly into the 2nd century. The single sherds of late Roman and possibly Saxon pottery are intrusive, attesting to the high degree of disturbance that the ditch suffered from later features.

Other finds from G35 comprise a single slab of fired clay and a moderate assemblage of animal bone, including



Figure 2.3 Histogram of Phase 1 pottery expressed as a percentage of phase total

the complete carpometacarpus of a mute swan. One of the cattle bones (the shaft of an ulna) had been fashioned into a point but the purpose of this modification is unknown.

Two ditches in the central area of the excavation, **G17**, represented part of another possible livestock management enclosure which produced predominantly Iron Age pottery. Only short lengths of these two ditches fell within the recorded areas, but more of the western ditch (Fig. 2.2, d) can be traced from crop-mark evidence (Fig. 2.1). The pottery assemblage from G17 includes a range of Iron Age forms, as well as a number of grey wares which, although in fully Romanised fabric R06, still retain vestiges of 'Belgic' design in the form of cordons. Only a small faunal assemblage was recovered.

#### **IV. Rectilinear enclosures**

(Figs 1.3 and 1.4, Figs 2.1 and 2.2)

In the western part of the site, the ditches recorded as G4 and G94 are believed to have marked the boundaries of two large enclosures, E1 and E2. Only a small percentage of these boundaries' overall length fell within the excavation trenches, and most of their layout relies on crop-mark

evidence (Fig. 1.4). The crop-marks in this area relate to multiphase enclosures, however, and are susceptible to a range of interpretations. The identification of enclosures E1 and E2 is based on the stratigraphic evidence recorded on site and the dating evidence provided by artefacts that were recovered from the ditches.

Enclosure E1 appears from the crop-mark evidence to have been a rigidly rectilinear outer enclosure, defined by ditches on two sides and measuring 155m by at least 70m (Fig. 1.3). The crop-marks indicate that the boundary ditch on the north-western side continued as far as the main trackway **T1**, which is likely to have been in use throughout the settlement's existence. Enclosure E2 seems to have been a smaller, possibly concentric enclosure within E1, defined by ditches on three sides and measuring 50m by at least 40m. The two enclosure ditches were linked by the north–south element of G4, which may represent a slightly later subdivision of enclosure E1.

The ditches that defined the enclosures were up to 1.9m deep and potentially up to 4.8m wide (Fig. 2.2, a, b and i), although re-cutting was not always recorded explicitly in the site record. The recorded north–south element of G4 had clearly been re-cut, with the individual ditches no more than *c*. 1.5m wide; G94 was recorded as a



Figure 2.4 Phase 1 pottery nos 1–10

- 1. Lid-seated jar (DV34); shelly (F23); G4
- 2. Lid-seated jar (DV37); shelly (F23); G47
- 3. Slashed rim jar (DV190); shell/grog (F05); G4
- **4.** Bead rim jar (DV314); shelly (F23); G85
- 5. Handmade jar (DV112); sandy (F09); G35
- 6. Necked jar (DV135); sandy (F09); G4
- 7. Jar with rippled shoulder (DV181); shell/grog (F05); G4
- 8. Globular jar hand-built (DV193); shell/grog (F05); G35
- 9. Platter (DV283); grog (F06A); G4
- **10.** Strainer (no form number); base with pre-firing holes; shelly (F07); G4

single ditch, but the 'stepped' profile that was described in the site notebook for the northern segment in particular suggests re-cutting here too. A large volume of both Iron Age and Roman pottery was recovered throughout the fills of G4, accounting for a substantial proportion of the Phase 1 assemblage, whereas only two small sherds came from G94.

G4's large assemblage of pottery has a relatively high sherd:weight ratio of 1:32 and contains some particularly large and unabraded fragments. The fabric profile is the same as that of G35, with a preponderance of 'Belgic' late Iron Age sherds, although more imported pottery was recognised among the early Roman wares.

'Belgic' forms comprise a variety of platters, bowls, jars and a girth beaker in grog- and grog and shell-tempered fabrics. The slashed rims on some of the lid-seated jars are a common design found in the Northamptonshire/ Bedfordshire/Hertfordshire region dating to the mid–late 1st century (Thompson 1982, 249; Friendship-Taylor 1999, 16). Internal residues on two of the jars suggest that they had been used as cooking pots.

The small quantity of Roman pottery mostly comprises Romanised fabrics which still retain some 'Belgic' characteristics such as cordons and grooves. There are also two sherds of samian from a Flavian dish and a probably Hadrianic to early Antonine cup (the latter sherd possibly intrusive), and a sherd from a colour-coat beaker that may have come from either Lezoux or the Rhineland.

Ditch G4 also contained fragments of at least five fired clay slabs, small quantities of fuel ash slag, and the tubular pushed-in base ring of a blue-green translucent glass vessel. A body sherd from a similarly coloured glass vessel was recovered from ditch G94. The faunal assemblage from G4 is dominated by cattle, but with cat and dog both present.

A smaller ditch **G5**, measuring no more than 0.75m wide and 0.45m deep, extended north-eastwards from G4. It probably formed one side of a further enclosure to the north-east of G4, but its course beyond the excavation area

could not be traced as a crop-mark. Its pottery assemblage ranges from a transitional 1st-century shelly fabric to a tiny scrap of Nene Valley colour coat, which may be intrusive. The recovery of only three small sherds of pottery from G5 is a marked contrast to that from G4, and suggests that the material recovered from G4 either derived from the interior of the two enclosures to the south-west, or was deposited at a different time.

#### V. Roundhouses and structural gullies

(Figs 1.3 and 1.4; Figs 2.1 and 2.2)

One definite and one probable roundhouse (**G29** and **G9** respectively) were recorded, located c. 55m apart. The evidence for these consists only of narrow ring-ditches: no structural post-holes survived within their circuits, despite the good conditions of post-hole preservation across the site as a whole. The one or two external post-holes recorded as part of each roundhouse may have been tethering points rather than structural components. None of the structures can be related to any of the known crop-marks, but penannular crop-marks of similar diameter were recorded on land to the north that was quarried in the 1950s (Figs 1.3 and 1.4).

Roundhouse G29 was the larger of the two, with its gully encircling an area c. 18m in diameter: this puts it at the upper end of the dimensional scale for roundhouses and means that it was almost certainly domestic. Re-cutting of G29's ring-ditch on the north-east side at least suggests a certain degree of longevity. Although no post-holes relating to the building's outer structure were recorded, a cluster of post- and stake-holes and a possible short beam slot (G30) survived near the centre of the building. They were mostly 0.05–0.1m deep, although one of the two smallest stake-holes at the centre of the cluster was 0.3m deep. Two pits (G88) were recorded adjacent to G30, measuring 0.9–1.2m wide, 1.3–1.4m long and c. 0.4m deep (Fig. 2.2); their association with the roundhouse is based primarily on spatial evidence, but



Figure 2.5 Fired clay (all phases) nos 1–7

- 1. Slab in ORG/SHL fabric; flat, rounded with trimmed edge; Ph1 G4
- 2. Slab in GRG/ORG fabric; neatly shaped, round diameter approx. 180mm; one trimmed/scraped surface; Ph1 G4
- 3. Slab in ORG/SHL fabric; rounded with turned up edges; Ph1 G46
- **4.** Slab in ORG/SHL fabric; knife trimmed edges (polygonal?); Ph3 G64
- 5. Slab in ORG/SHL fabric; turned up edge; Ph4 G34
- 6. Kiln bar fragment in ORG/SHL fabric; one tapering end; Ph2 G60
- 7. Kiln bar fragment in ORG/SHL fabric; roughly hexagonal in profile; Ph3 G45

their location near its centre makes the link seem plausible.

The fills of the ring-ditch around roundhouse G29, beam slot G30 and pits G88 all contained small quantities of early Roman pottery. Both pits in G88 contained evidence of burning, while the intrusive presence of mortar and fragments of tile in their upper fills perhaps represents levelling of the ground surface in Phase 2.

A further feature (**G83**) within the circuit of G29, which lay partially beyond the recorded area, consisted of a partially robbed-out limestone foundation overlying a shallow gully, on top of which limestone slabs had been set. Its function is unknown, and there was no evidence of burning, but the recovery of several large sherds of Iron Age pottery, including one sherd weighing 500g, suggests it may have been a contemporary structure within the roundhouse. The only other finds from it were four fragments of animal bone.

The gully for probable roundhouse G9 defined an area c. 10m in diameter. However, the fact that it straddled two excavation areas, with its central part unrecorded, necessitates a certain degree of caution in associating the two lengths of gully — there is a possibility that they were unrelated and belonged to lesser structures. Very little of the roundhouse's interior was recorded, with no evidence observed of internal features.

Three other arcs of curvilinear gully (G18 and G37) recorded immediately south-west were also of roundhouse G29. The two shallow gullies in G18 (Fig. 2.2) are unlikely to have related to roundhouses and may represent wattle fences or windbreaks. There is also some doubt as to whether the southernmost gully cut through the Phase 2 cobbles or was sealed by them - evidence in the site archive is contradictory, although the recovery of only Late Iron Age/early Roman pottery from the gully supports the earlier date. G37, however, may have been the ring-ditch of a third roundhouse. Although only a semicircle of gully and a pit or large post-hole survived, the northern part of its circuit, if present, would have been completely truncated by later features. The gully was much larger than that of either G29 or G9, measuring up to 1.4m in width; it is therefore possible that the large post-hole at the eastern end of the gully held a gate- or door-post, despite measuring 1.2m in diameter. There would have been room for G29 and G37 to have existed simultaneously and it is possible that G37, which had an internal diameter of only 8m, was an ancillary structure to G29

Further structural remains of uncertain form were recorded south of roundhouse G9, although they were not necessarily contemporary with it. G13 comprised two gullies: the northern one was curved and measured 0.1-0.2m deep, while the southern one was mostly straight, with a post-pit 0.35m deep in the middle. Both contained a relatively large amount of pottery, dating to the Late Iron Age and early Roman period and occurring in a wide range of fabrics. The presence of this post-pit in the southern gully suggests that it may have held ground beams or a wattle fence; its sinuous shape may indicate the use of naturally shaped wood, rather than fully converted timber. There was also a smaller post-hole to the south of the post-pit. The structure's apparent irregularity makes it unlikely that it was a substantial building. It may have been a hut, a windbreak or perhaps an animal pen.

**G12** may have been associated with G13, either holding ground beams or representing a partially truncated gully that surrounded the structure — at no more than 0.12m deep, it is hard to tell whether the gaps between the three features that constitute G12 were genuine or the result of truncation.

#### VI. Post-built rectangular structures

(Figs 2.1 and 2.2)

One of the main buildings in Phase 1 was G22. The main part of the building measured 14m long on its NE–SW axis and 6.5m wide, while a type of veranda may once have existed on its north-west and south-east corners. The arrangement of its post-holes suggests that it was split into two rooms; further post-holes within the north-east room suggest that it was partitioned. The post-holes were noticeably larger on the south-east side of the building, where they were up to 0.8m across and 0.5m deep; this sturdier construction might indicate that this side of the building had been the front. The function of the small semi-circular gully near the centre of the building, which measured less than 1.5m across, is unknown.

The finds assemblage from building G22 suggests that the deposits here had been disturbed, leading to some degree of contamination. Its component features contained a large amount of Late Iron Age and early Roman pottery, including three fragments of central Gaulish samian dating to the mid-late 2nd century, but also a small number of late Roman and post-medieval sherds. The latter came from the region of the semi-circular gully (the site notebooks are unclear on their precise provenance), in the approximate location of a post-medieval barn — demolition of this later structure may account in large part for the disturbance. Two nearby post-holes also produced daub, slabs of fired clay and possible fragments of *tegula*; both post-holes had been truncated by a Phase 2 ditch (G20), and the absence of such material in any of the other post-holes suggests that it was intrusive from the later feature.

A post-hole at the north-east corner of building G22 contained a large sherd of pottery weighing 162g which has been identified as Anglo-Saxon. This sherd may also be intrusive; alternatively, it is possible that this sherd might be from a misidentified Iron Age vessel, in which case it would be one of only two sherds from the whole site dating to the pre-'Belgic' Iron Age. If this sherd is indeed of Iron Age date, then its position in one of the post-holes may have ritual significance, since the placing of objects or fragments of objects within the foundations of buildings is an established phenomenon in the Iron Age (Hill 1995, 21; Slowikowski 2005, 115). The southwesternmost post-hole also contained a loom weight, the presence of which may similarly have had ritual significance.

Smaller, less substantial buildings may be represented by **G23** and **G27**. The shape of these is unclear — both were located on the edge of the excavation trenches, and further post-holes may have existed in the unrecorded areas — but sufficient straight lines and right angles can be detected to indicate the outlines of structures. The post-holes of G23 were broadly comparable with those of G22, measuring up to 0.65m in diameter and 0.25m deep, which indicates a relatively substantial building. In contrast, the post-holes of G27 were smaller in diameter but mostly no more than 0.1m deep. A clear north–south line is visible, with a possible room or building measuring 3.7m by 1.4m to the east of it, but no obvious plan can be discerned from the other post-holes.

Three further structures are represented by **G24**, **G25** and **G28**, although these were less substantial and perhaps formed sheds, animal pens or windbreaks. The clearest in plan was G28, which measured 2.7m by 2m; it is conjectured from the layout that this may even have been a six-post structure, with two other posts unobserved due to the challenging excavation conditions (according to the records, there was no time to excavate the four post-holes that were identified). The other structures are less clear in plan, and G24 may have continued to the north-east beyond the excavation limits. None of the post-holes in G24 or G25 were substantial, with only two of the larger ones measuring more than 0.1m deep, and doubts exist over the validity of a few of those in G24.

A further group of post-holes (G26) was located on either side of ditch G35. They formed no coherent pattern, unless the eastern ones defined a fence along the edge of the ditch, and it is possible that these represent nothing more than tethering posts for animals.

#### VII. Other features

In addition to pits G88 within roundhouse G29, six other pits (G46 and G87) were recorded. The four in **G46** were up to 2m wide and 3.5m long; the depths of the western three were not recorded, while the eastern pit was not fully excavated. All four produced moderate assemblages of pottery, dominated by Iron Age fabrics; these sherds were particularly prevalent in the eastern pit, maybe indicating that it was slightly earlier than the others. The pits also produced a relatively large assemblage of daub and fragments of fired clay slabs. Some are too small and abraded to identify with certainty but they may represent intrusive fragments of brick/floor tile and *tegulae*. The faunal assemblage from the pits is generally well preserved, and includes mallard alongside the dominant sheep/goat and cattle bones.

The three pits in G87 lay just a few metres north of roundhouse G29, the smallest of them largely truncated by a later gully. Whereas few finds were recovered from the eastern two pits, the western one produced a sizeable assemblage of Late Iron Age/early Roman pottery and animal bones. Twelve of the latter — all either sheep/goat or unidentifiable - were charred. These may well represent cooking waste and suggest that the pit was used for disposing of rubbish. The northernmost pit also had a layer of burnt material along its base. Potentially the most significant find it contained, however, is a cast copper alloy ring with a headed stud (Fig. 2.6, RA60). Similar studded rings have been found on a number of Roman military sites. Previously described as harness fittings, they are now believed to have served to secure the closure of a flap on a soldier's satchel (Fuentes 1991, 93-5). Its



Figure 2.6 Phase 1 Other Artefacts

RA60 Bag ring. Copper alloy. Cast annular ring of circular cross-section with protruding knob at right angles to body. Diameter 47mm; width 6mm; thickness 6.5mm. G87 Phase 1

presence at Newnham is intriguing: eight of the ten sites that Fuentes identified as producing such rings had 1st-century military camps or forts (1991, 93), but none of these lay near Newnham, nor indeed within Bedfordshire.

A fragmentary assemblage of human bone was also recovered from G87, representing at least two individuals, possibly infants aged two years and under. It is not clear whether this is a deliberate deposit or whether the bones were residual.

The remaining features assigned to Phase 1 on the basis of their pottery assemblages are difficult to set within the context of the site at this time. Two ditches G47 were located either within or crossing the ring-ditch of roundhouse G29, but truncation by other features and their location near the limits of the recorded area mean that little can be said about them. They did, however, produce a substantial collection of pottery with a wider range of forms and decoration than that seen elsewhere within the Phase 1 assemblage, while the presence of forty-seven fragments of animal bone suggests that this material was accumulating from nearby domestic activity. G85 was also located on the very edge of Area 2; it is assumed to have been part of a ditch, but even that is in doubt. G91 was similar to some of the other structural gullies in Area 5c but was recorded in isolation: again, it lay near the edge of the excavation trench.



Figure 3.1 Plan of excavated features: Phase 2

# Chapter 3. Phase 2: early to mid-Roman (early 2nd–early 3rd century AD)

# **I. Overview** (Fig. 3.1)

The transition from Phase 1 to Phase 2 was characterised by an overall continuity of plan and alignment in the layout of the landscape, even though numerous individual elements of the settlement were altered. In reality, the distinction between Phases 1 and 2 is not a sharp one. There seems to have been a fairly constant series of changes to the settlement during the first half of the Roman period, without any hiatus in activity or major reworking of its layout—the sort of changes that might be expected over a century or two of occupation.

The two Phase 1 enclosures defined by ditch G4 appear to have remained largely intact, but with an element of remodelling, and a series of changes to the area north-east of them (Fig. 1.4). The main change in Phase 2 is that there seem to have been fewer buildings and other structures in this part of the settlement. This may be a false picture, however: it is unclear how many of the Phase 1 buildings were contemporaneous, with some of them perhaps only lasting for a short time, whereas Phase 2 building G39 is more substantial in construction and is likely to have remained in use into Phase 3, and possibly beyond. It would also have been spatially possible for some of the small structures from Phase 1 (e.g. G23 and G26: Fig. 2.1) still to have existed, although their comparatively insubstantial nature probably makes this unlikely. The presence of a possible roundhouse G21 in addition to building G39 and the creation of widespread cobbled surfaces suggest that the excavated area still lay at the heart of the wider settlement, even though there were still fewer pits recorded than might have been expected, and a smaller finds assemblage was recovered than from the Phase 1 deposits.

#### **II. Summary of finds**

(Figs 3.2–3.4)

For fuller discussion see specialist reports in Part 2 (on compact disc)

The pattern of ceramic use in Phase 1 continued largely unaltered into Phase 2, although there was a distinct decrease in 'native' grog-tempered fabrics towards the end (Table 11.5). Nene Valley colour-coated vessels made an appearance in the latter part of the phase, while the Verulamium region was a source for white wares throughout the 2nd century. Fine wares occur in relatively small quantities, including samian tablewares (Chapter 12) and colour-coated beakers imported from the Continent, as well as mica-dusted and lead-glazed wares from Britain (Fig. 3.2). The presence of these imported wares, along with the introduction of mortaria, suggests that this was the phase of occupation when a truly Romanised lifestyle was taken up by the inhabitants (Chapter 13).

There was little pottery directly associated with the use of the main building G39, but material found in the cobbled area outside the building indicates a household of middling prosperity with aspirations to a 'Roman' lifestyle. It cannot be certain, however, that the building



Figure 3.2 Histogram of Phase 2 pottery expressed as a percentage of phase total

had a primarily domestic function, nor is there any evidence of how the building was appointed or furnished.

The other artefacts, whilst confirming continued occupation and access to a market, provide little insight into the settlement's economic basis. The only indicator of monetary activity from this period is a coin of Faustina II (AD 161-188) which was found in overburden deposits overlying G39 (Chapter 15: Unphased).

In contrast to Phase 1, bones of sheep/goat and cattle were found in roughly equal amounts. The percentage of pig bones increased slightly to 10% of the total assemblage, whereas horse and dog are poorly represented. Red deer is represented only by an antler fragment, but small quantities of bones from duck (possibly wigeon Anas penelope) and domestic fowl were also recovered. It is rare for sheep/goat elements to outnumber those of cattle on Roman sites from this area; cattle elements usually make up over half the identified bones in mammal assemblages (Chapter 19). Roman assemblages from Bedfordshire containing more than 10% pig fragments are rare, although the percentage of pig from Newnham in this period is only slightly higher than from nearby Roman sites at Biddenham Loop (8%) and Kempston (9%) (Chapter 19).

Whether the difference in species proportions represents a significant change in the diet is, however, unclear. In the bone assemblage derived mainly from ditches, cattle fragments outnumber sheep/goat, whereas sheep/goat are demonstrably better represented than cattle in pits and deposits associated with structures and occupation levels. The percentage of pig is also slightly higher in the latter. Despite the small sample, it can be suggested that relatively more sheep and pig bones were processed and deposited in areas central to domestic activity such as cooking and eating.

#### **III. Enclosures and drove-ways** (Plate 3.1, Fig. 3.1)

Ditch system G2 represents a redefinition of the Phase 1 subdivision within enclosure E1 (Fig. 3.1). The new subdivision was concentric with E1, enclosing an area of 70m by at least 30m and creating a trackway (T2) along its north-west and south-west edges. It also defined a second trackway (T3) along the north-east edge of Phase 1 enclosure E2, which continued in use throughout Phase 2.

The finds from ditch G2 are likely to derive mostly from the topmost levels, while the presence of joining pottery sherds in the assemblages from G2 and the Phase 1 ditch G4 betrays a degree of contamination. Most of the pottery assemblage is not closely datable, but it does include samian bowls, cups and dishes (see Chapter 12) dating to the late 1 st to early 2nd century as well as a mid to late Antonine dish. Much of the ceramic building material is likely to be intrusive, although the daub and the slab fragments could have derived from Phase 1 activity, while the concentration of fuel ash slag suggests an intense fire rather than metallurgical activity. A relatively small and fragmentary animal bone assemblage was recovered.

G1 consisted of a ditch system c. 20–25m to the north of G2. The NW-SE ditch is traceable as a crop-mark beyond the excavated area, whereas the one perpendicular to it — a partial but substantially larger re-cut of Phase 1 ditch G5 (Fig. 2.1) — was not. These ditches were up to 1.75m wide and 0.5m deep, and are likely to have defined additional enclosures.

G1 contained a large assemblage of mainly Late Iron Age/early Roman pottery, although two later sherds



Figure 3.3 Phase 2 Other Artefacts

RA4 Brooch. Copper alloy. One piece brooch with four coil spring with internal chord, shallow triangular-sectioned bow with flat back, apex of triangle, forming ridge down centre of bow front, with a narrow groove down either side of apex. Bow is a tapering elongated triangle in plan, solid trapezoidal catch plate. Pin incomplete. Length 55mm; bow width 7mm. G1 Phase 2



Plate 3.1 Area 5c Phase 2 looking west towards Newnham Priory wall

suggest that the enclosure ditches had started to fall out of use in the mid-2nd century. A Nauheim Derivative brooch (Fig. 3.3, RA4) was also recovered from the ditch; such brooches occurred commonly during the middle of the 1st century AD, although increasing numbers of these brooches are being found in 2nd-century contexts (Olivier 1988, 38). Intriguingly, a number of large, grog-tempered sherds (Fig. 3.4, nos 12–13) are recorded as 'many vessels with pitted interiors'. These vessels may all have been used for the same purpose, probably as containers for acidic liquids, and were perhaps used and discarded at the same time.

Only half of the moderate faunal assemblage from G1 could be identified to species level, with a medium-sized duck joining the usual domesticates cattle, sheep/goat, pig and horse. The cattle bones include part of a cattle skull with horn cores still attached; at least one of the horns had been removed and the skull had been skinned. A fragment of human skull was also found among the animal bone from G1.

Drove-way **G20** was only c. 2m wide, and was defined by two shallow, heavily truncated ditches which measured less than 0.75m across. A narrow entrance existed between this drove-way and enclosure system G2 to the north-west, while the truncated remains of a ditch that was perpendicular to the drove-way on the opposite side may have related to further enclosures to the south-east. The pottery assemblage from drove-way **G20** has a similar profile to that of G1 (Fig. 3.4, nos 14, 16, 18), although the presence of an Oxford mortarium dating to the late 2nd to mid-3rd century may indicate the drove-way's greater longevity. Five small sherds of late Roman Oxford colour coat were also recovered; these might provide further evidence of the drove-way's longevity, although the possibility that they were intrusive cannot be ruled out. One sherd of grey ware from G20 joins a sherds recovered from ditch G36, indicating that at least some of the broken pottery was being spread across distances of 10m or more.

Drove-way ditches **G20** produced a wheel-cut, colourless glass beaker with a separately blown base, a relatively common form which can be closely dated to the early to mid-2nd century (Price and Cottam 1998, 91–2). A modified boar's tusk was also recovered which may have been used as an amulet. The use of pigs' teeth — particularly boars' tusks — as amulets can be traced back to the late Roman period (MacGregor 1985, 109); as with



Figure 3.4 Phase 2 pottery nos 11-19

- 11. Butt beaker (DV115); sandy (F09); G2
- 12. Hollow cordoned beaker (DV120); grog (F06A); G1
- 13. Girth beaker (DV121); shelly/grog (F05); G1
- 14. Necked jar (DV132); sandy (F09); G20
- 15. Necked jar (DV144); grey ware (R06C); G62
- **16.** Necked jar (DV93); shelly (R13); G20

- 17. Dish with moulded rim (DV205); grey ware (R06B); G62
- Base sherd (no form number) with possible maker's mark similar to those found at the pottery manufacturing site at Stagsden Bypass; shelly (F07); G20
- 19. Base sherd as no.18 (no form number); shelly (F07); G2

the sherds of late Roman colour-coat pottery, however, we cannot be sure whether the amulet was intrusive within these deposits. The drove-way ditches also produced a relatively large assemblage of animal bone — due in part to the ditches' complete excavation — which includes the radius of a neonatal sheep/goat and part of a gnawed pig's skull.

The land between ditches G1 and G2 was subdivided by ditch **G6**, which was much smaller than the other two and had been re-cut on at least one occasion towards its south-west end. Mostly 2nd-century pottery was recovered from the ditch, although some later material was also present — a fragment of modern plant pot is clearly intrusive, but the late Roman pottery might or might not be. In contrast, the pottery from the north-east end of the ditch is mostly earlier, dating to the Late Iron Age. The ditch also produced a corner fragment of a possible loom weight, the fragmentary nature of which suggests that it was residual, and a small amount of ferrous slag which suggests that ironworking was taking place somewhere in the vicinity.

Further subdivision was effected by ditches **G14** and **G90**, which were similarly insubstantial, and which may have created funnels or races to assist with stock control. However, while it appears that they were not

contemporary with G6, it is unclear whether they pre-date or post-date it: G6 had no physical relationship with G90, and its stratigraphic relationship with G14 was tentative. The ditches' pottery assemblage suggests that they went out of use towards the end of this phase, although the same can be inferred of G6. The faunal assemblage from G14 includes a burnt antler fragment of red deer.

Three other ditches have been assigned to Phase 2 but little can be said about them. Two of them (G42) may be related to ditch G2, whose south-eastward continuation is attested by crop-mark evidence (Fig. 1.4), or G42 may have represented a re-routing of drove-way G20 which they cut across.

The pottery from G42 is of a similar date to that from ditch G14. At least four sherds of different fabrics joined with pottery from Phase 3 enclosure ditch G43, however; this is likely to be due to contamination from G43, which cut across G40. This may also account for the presence of an Oxford colour-coat flanged bowl and a large sherd of Oxford mortarium dating to the mid to late 3rd century (Chapter 13). The faunal assemblage — much of which displays signs of gnawing — is small, but does include evidence of domestic fowl.

The third ditch (G36) was located in Area 2, away from the rest of these ditches; too little of it survived to



Figure 3.5 Building G39


Plate 3.2 Phase 2 building G39 looking north



Plate 3.3 Excavated features in Area 5 looking north-east

comment on its function. Its pottery assemblage is largely Late Iron Age/early Roman in date, and includes a cross-context join with pottery from G20 (see above).

#### IV. Building G39 and cobbled surfaces

(Plates 3.2 and 3.3; Figs 3.1 and 3.5)

The main building constructed in Phase 2 was **G39** (Fig. 3.5) which consisted of at least three rooms on a NE–SW alignment. Its central room was square, measuring c. 4.6m across, while the south-west room was the same length but only half as wide. Only part of the north-east room was revealed within the recorded area, making its width unknown, but its length appears to have been slightly greater at c. 4.9m. A fourth room may have existed to the north-west. An apparently discrete patch of stones on this side of the building was recorded as 'cobbles', suggesting that they related to a yard surface rather than the building's foundations, but they were noticeably larger than the cobbles used in yard surfaces elsewhere at Newnham. It is quite possible that the building continued in use in Period 3, but this cannot be proven.

Despite extensive robbing of building G39 and its truncation by other features, enough survived to suggest that it was a wooden construction on stone footings: its foundations — 0.9–1.0m wide, c. 0.5m deep and made up of pitched blocks of limestone — were covered with extensive burnt deposits, suggesting that the building ultimately succumbed to fire. The dearth of ceramic building material recovered from within and around the building also suggests a timber superstructure, with either thatch or wooden shingles used on the roof.

The top of the wall foundations was level with a compact layer of cobbles G61 that formed the building's floor (Pl. 3.2); the cobbles were rounded and mostly c. 40-50mm in diameter, set in a single layer that was overlain by pea gravel. These were distinct from the 'cobbles' immediately north-west of the building. Above this surface was a mixed deposit of orange-brown loam G63, c. 50mm thick, that was interpreted as an occupation layer; it contained three shallow patches of burning, which may have been the remains of burnt posts or ground beams. Few finds were recovered from this layer, suggesting that it perhaps represents re-flooring of the building rather than occupation debris; the bulk of the structural ironwork that presumably formed part of the fabric of this building was recovered from Phase 5 destruction deposits.

An extensive area outside building G39 was also cobbled (G60). The excavation records are slightly unclear as to the precise extent of the cobbles, which were frequently disturbed by later features, but it is at least apparent that they covered most of Areas 4 and 5 (Pl. 3.3; Fig. 1.4). The cobbles were similar in size to those used inside the building, and patchy deposits of pea gravel overlying them were also noted. There seems to have been some distinction between the quality of the cobbles around the building and those further north and west, including those in Area 2 (G59): at least some of those around the building were set in yellow clay flecked with mortar, whereas no such bedding layer was evident elsewhere. The layer of cobbles near the building was also c. 0.1m thick, twice the thickness recorded elsewhere. It is possible that this distinction is artificial, and an artefact of either preservation or recording. However, it may indicate a difference in function of the cobbles: the more robust layer near building G39 perhaps formed a road, with the rest of the area constituting a yard surface.

Relatively few finds were recovered from cobbled layers G59 or G60 — the latter produced more, but this is probably just due to their greater extent. Most of the pottery comprises small sherds of early Roman material, with a few intrusive Oxford colour-coated pieces; the ceramic building material is also fragmentary, but does include a kiln bar (Fig. 2.5, no. 6) from G60.

Unsurprisingly, more finds were recovered from layer G62 which accumulated on top of cobbles G60. Little ceramic building material was recovered, however, supporting the theory that building G39 had a wooden superstructure; this is likely to have accounted for the nineteen nails that were found. The large assemblage of pottery is 2nd-century in date, with a few sherds of Oxford mortarium and east Gaulish samian that date to the late 2nd-mid-3rd century. A small sherd of unidentified colour coat with barbotine decoration possibly represents a Continental import. The other finds from G62 include a few fragmentary pieces of iron, a fragment of a glass prismatic bottle and a pale greenish colourless body sherd from a second vessel. Prismatic bottles are relatively common finds on rural sites, dating most commonly to the later 1st to 3rd centuries (Price and Cottam 1998, 194-200), whereas the pale greenish colourless sherd is made in the typical bubbly glass of the 4th century, suggesting some intrusive activity. Sheep/goat dominates the faunal assemblage, with cattle, pig, horse and dog all represented, while a human hand phalanx was also found among the animal bones.

### V. Other structures

(Fig. 3.1)

A somewhat irregular single line of post-holes G10 crossed the area between ditches G1 and G2, extending over a distance of at least 10m. The post-holes were mostly of similar size in plan, measuring c. 0.5m across, but they varied in depth from 0.1m to 0.45m. Some were 'V'-shaped in lower profile while others had vertical sides. These large post-holes were accompanied by several stake-holes, two of which at the south-west end formed a right angle; they were probably also associated with a perpendicular line of three further stake-holes G11 to the east. The function of this line of post-holes is unclear. They may have held fence posts that subdivided the area between G1 and G2, or they may have formed one side of a building that was otherwise constructed with shallower post-holes or ground beams. Alternatively, they were perhaps dug for planting trees, shrubs or vines, with the stake-holes representing the remains of support work.

The post-holes in G10 contained a small assemblage of fragmentary pottery ranging in date from the late Iron Age to the 2nd century, plus a single intrusive Saxon sherd. The only other finds were a few pieces of fired clay and animal bone, with none at all from G11.

Curving ditch **G21** may have been the ring-gully for a roundhouse, continuing the juxtaposition of curvilinear and rectilinear planforms that was observed in Phase 1. Little of the feature was recorded within the excavation trenches, however, with no trace of it in Area 2. The western arc of its circuit appears to have been visible as a crop-mark (Fig 3.1), but the relevant aerial photograph is

susceptible to different interpretations in this area. If it was the gully of a roundhouse then it was roughly the same size in diameter (c. 18m) as the large Phase 1 roundhouse G29, for which it may have been a direct replacement. The gully was much deeper than that for G29, however — its maximum recorded depth was 0.72m — and it is possible that G21 was no more than a drainage gully round a lesser structure or a working area.

Although **G21** contained a kiln bar, suggesting pottery manufacture in the vicinity, none of the pottery within the same gully was recorded as wasters. The presence of a blue-green glass rim fragment from a spouted globular jug of the 2nd to 3rd centuries (Price and Cottam 1998, 157–60) and a small amount of plaster perhaps indicates that the fill of the gully accumulated during the subsequent phase, as no other plaster was recovered from Phase 2 deposits.

Three further sets of features that were recorded in the eastern corner of Area 2 (G31, G33 and G48) are likely to have had a structural function. The posts in structure G31 were similar in size to those in G10, measuring c. 0.5m in diameter and up to 0.33m deep, and appear to have formed a rectangular structure that was 2.3m wide and at least 4.6m long, with the south-east end lying beyond the recorded area. Post-holes G33 to the north-west may have been related to each other, although they were slightly smaller and formed a less obviously coherent pattern. The ends of three small gullies G48 were also recorded immediately north-east of G31. Indeed, the southern gully may even have held a ground beam for the north-east side of structure G31 — it was straight and 0.25m deep, but its lower profile was unrecorded. The two curving gullies one presumably a replacement for the other - may have been similar features to G18 in Phase 1, perhaps holding a wattle fence for an animal pen or shelter. Alternatively, they may have been drainage gullies to take water away from G31.

Few finds were recovered from the post-holes in G31 and G33, with the pottery assemblage suggesting a date in the second half of the 2nd century. Slightly more material was recovered from gullies G48, but this included residual sherds of late Iron Age pottery.

## VI. Pits

#### (Fig. 3.1)

As in Phase 1, few pits were recorded that can confidently be assigned to Phase 2. Four of these (**G54**) were clustered in the western corner of Area 2; small in plan and no more than 0.38m deep, they produced only a small assemblage of finds, although this did include an iron ring. Such rings are extremely common and could have had many functions, with their size providing little guide to their possible use (Manning 1985, 140). The pits were located within the area defined by possible ring gully G21, but it is not possible to conclude that they were contemporary with this structure.

Pit G40, the largest pit identified from any phase of activity, lay partly beyond the recorded area. Although in section it resembled a re-cut ditch (Fig. 3.1, p), it clearly terminated at its south-east end and it appeared to be nearing a terminus to the north-west, a short distance beyond the excavation limit. The pottery from G40 is predominantly Late Iron Age, and it is likely that pit G40 was one of the first features in Phase 2 to go out of use. It may even have belonged to the end of Phase 1, perhaps in association with the adjacent building G22, although this itself may have continued in use into the early part of Phase 2.



Figure 4.1 Plan of excavated features: Phase 3

# Chapter 4. Phase 3: mid-Roman (early 3rd–late 3rd/early 4th century AD)

#### I. Overview (Fig. 4.1)

The settlement at Newnham underwent continuous occupation and reconfiguration throughout its lifespan. However, a partial hiatus can perhaps be detected in the earlier part of the mid-Roman period. The settlement established in Phases 1-2 seems to have declined somewhat, with some of the old enclosures and structures falling out of use and fewer new ones being constructed to replace them. The small percentage of the overall site that was recorded, however, makes it possible that the main focus of activity was simply relocated to another part of the settlement. It is also possible that the settlement (or this part of it) changed in character at this time. In addition to the substantial Phase 2 building G39, which probably remained in use, a larger building G65 - also with stone foundations and with a hypocaust as well - was constructed towards the end of Phase 3. The function of building G65 is discussed in detail later (Chapter 9, p.67-8), but at least part of it is believed to have been used for bathing, and it is possible that this particular area of the settlement became less involved with the basic functions of agricultural or domestic activity.

Once again, not all of the features assigned to Phase 3 were contemporary: for example, building G65 was clearly constructed after ditch G38 had been filled in. However, it is interesting to note a greater degree of contemporaneity than in Phase 1 and to a lesser extent Phase 2. This might reflect a less intensive use of the site, although the contrast is probably reduced by the continued use of some of the Phase 2 buildings and structures. The scarcity of pits observed in previous phases now becomes a complete absence, although a well was dug just south of building G65. A background presence of disarticulated human remains continued, while an intact neonate grave was also recorded.

#### **II. Summary of finds**

(Figs 4.2, 4.3, 4.5 and 4.6)

For fuller discussion see specialist reports in Part 2 (on compact disc)

The pottery finds suggest that the settlement was at its wealthiest in Phase 3. Mortaria are most common in this phase (1.58% of the phase total: Chapter 13) and samian numbers, although never very high, increase to 3.25% (Fig. 4.2; Table 11.6). The character of the samian, with its preponderance of South Gaulish wares and high numbers of certain unusual forms such as form 30, suggests higher social status (Chapter 12).

Rough-cast beakers, although not occurring in large quantities, appear to have been restricted to this phase. They were the result of continental influences upon the Nene Valley industry, and possibly even the products of migrant potters from the Lower Rhineland (Howe *et al.*) 1980, 8). Some may even have been imported from the continent.

Shelly wares form a much smaller proportion of the total Phase 3 assemblage than the grey wares. This is unexpected, as the Harrold industry was in full production by this time and there is a preponderance of shelly wares elsewhere in the region. The two wares differed in their functions: shelly wares are mainly jar forms and were used primarily for storing, preparing and cooking food, whereas grey wares, though used for cooking as well, were also used as table wares, with a wider repertoire of forms including bowls, beakers and lids. It is possible that food preparation and cooking were being carried out most intensively in a part of the settlement that was not recorded, although it is equally possible that the market influenced the supply of pottery to the site (Chapter 11).

The extensive robbing of buildings G39 and G65 means that few artefacts relating to the occupation of these structures were found within them, and hence the nature of any activities carried out there is unclear. Finds recovered from open areas adjacent to the buildings may, however, provide an indication of such activities and help suggest the buildings' functions. A whetstone and a possible flesh hook recovered from gullies adjacent to building G39 are suggestive of tool maintenance and food preparation, while the whetstone and quern from the deposits that were used to repave this area (G67) give a similar suggestion of household chores and basic maintenance activities that were being carried out in this area. Recovery of a bone hair pin indicates that some Roman fashions were being followed, but this is an artefact that was probably made on site and does not suggest any great degree of disposable wealth.

The presence of a seal box — an object type whose use was in decline in the 3rd century — and a spouted globular jug of 2nd- to 3rd-century date in deposits immediately predating the construction of building G65 suggests that the building was constructed in the latter half of the 3rd century. The material in these deposits is likely to represent rubbish generated by activities associated with earlier buildings — probably G39, or possibly one of the other buildings in this area. The presence of the seal box, and the security measures evidenced by the remains of a key, might indicate that someone of higher status resided in the earlier building. Sizeable quantities of ceramic building material were found in G64 (Chapter 14). This might also have derived from other buildings in Area 2, or they might represent debris from the construction of G65.

The recovery of glass vessels and the seal box, along with querns, shingle and whetstones of imported stone, all indicate access to a market and the resources to purchase items from it. The source of some of the stone (*e.g.* the whetstones and Collyweston Slate) suggests that this market, or the residents of Newnham, had connections with Northamptonshire.



Figure 4.2 Histogram of Phase 3 pottery expressed as a percentage of phase total



Figure 4.3 Phase 3 pottery nos 20-30

- **20.** Storage jar (DV110); shelly (F07); G38
- **21.** Butt beaker (DV117); white ware (R18B); G7
- **22.** Carinated bowl (DV240); white ware (R03D); G64
- 23. Plain rim bowl (DV279); sandy (F09); G64
- 24. Plain rim bowl (DV276); grey ware (R06J); G64
- 25. Pinch-necked flagon (DV1); white ware (R03B); G32 and G68
- **26.** Necked jar (DV52); sandy (R03D); G68
- 27. Bowl with moulded rim (DV228); grey ware (R06B); G68
- 28. Carinated bowl (DV272); grey ware (R06A); G65
- **29.** Flanged bowl (DV254); shelly (R13); G45
- **30.** Body sherd re-shaped into a potter's tool (no form number); Hadham ware (R22A); G68

The pattern of species representation in the Phase 3 faunal assemblage is more typical of Roman sites in Bedfordshire, with cattle providing over half of the identified bones. Bones of domestic fowl, duck and hare were also recovered alongside the main domesticates. There is again some spatial variation in the relative abundance of bones recovered: cattle provide over half the mammal assemblage from enclosure ditches, followed by sheep/goat, pig, horse and dog, whereas cattle and sheep/goat are much more evenly represented in occupation layers and other deposits associated with buildings. As in previous phases, pig is better represented in such deposits, whereas horse decreases (Chapter 19). Differential preservation of bones in different types of feature, and spatial variations in the processing and deposition of bones of different species, are both likely to have played a part in creating this variability. However, cattle percentages are greater in both the ditch and other assemblages compared with the equivalent features in Phase 2, so there is a possibility (despite the small sample of bone examined) that beef consumption became more important during this period.

### III. Enclosures, drove-ways and drains

(Pl. 3.3; Fig. 4.1)

Phase 1 enclosures E1 and E2 are likely to have gone out of use by this point, although the alignment they established still persisted in the layout of the site. The crop-mark evidence also suggests that ditch G3 cut across the western ditch of trackway T3 (Figs 1.4 and 3.1) to form a new enclosure E4, indicating that the trackway was no longer in use. The crop-mark evidence suggests that G3 cut across the ditch defining enclosure E2 as well, but the crop-mark evidence is ambiguous at this point and it is possible that part of E2 remained in use, with trackway T2 along its northern edge reduced to just 2.3m wide at its narrowest point. Crop-marks show G3 extending to the south-east beyond the edge of Trench 5c. However, it appears that this evidence relates to the ditch's re-cut, with its original course diverting northwards, possibly to connect with G19.

The fragmentary nature of the pottery assemblage and the relatively small amount of animal bone from ditch G3 suggest that it lay at some distance from any domestic activity. The same is true generally for the enclosure and drove-way ditches from this phase. Residual Late Iron Age sherds are still present in the assemblage from G3, along with mid–late 2nd-century samian, while the remainder largely comprises grey wares that were in use from the 2nd century onwards. Identifiably later material is represented by two Oxford colour-coated sherds, a rim sherd from a 3rd century mortarium from Mancetter-Hartshill and two Anglo-Saxon sherds. These latter finds may be intrusive, or they may reflect the continued use of G3's re-cut throughout Phase 4 and its existence as an earthwork hollow in Phase 5.

The assemblage of building material from G3 consists mostly of roof tile but also includes small quantities of fragmentary brick/floor and flue tiles, with a small number of nails as well. Cattle dominate the faunal assemblage.

As in both previous phases, the land to the north-east of G3 was divided up by ditches, with G7 following the perpendicular alignment established by its predecessors. It is unclear whether any of the Phase 2 ditches here were still in use — G6 or G14 in particular (Fig. 3.1) — though it at least seems apparent that G1 had silted up by this point. All three gullies in G7 were steep-sided, with the longest of them measuring up to 0.55m deep despite being no more than 0.9m wide. Their arrangement is difficult to interpret, but the two parallel ones probably formed part of a drove-way that tapered north-eastwards from 3.2m to 2m wide. Similar but smaller assemblages of pottery, ceramic building material and animal bone were recovered as from G3.

Although there was a gap of 25m between ditches G3 and G19, it seems likely that they represent two lengths of the same feature. The profile of G3 suggests it may have had an earlier re-cut than the one that was identified during excavation (Fig. 4.1, r); the deepest part of the earlier phase of the ditch would then equate with the distinctively deep and narrow re-cut of G19 (Fig. 4.1, s). The fact that ditch G19 appeared to respect the possible Phase 2 roundhouse G21 to its south may be significant, suggesting that the latter was still in use. However, the line of ditch G38 would have left insufficient room for the full circuit of a roundhouse gully, supporting the theory that G21 encircled a lesser structure or a work area. G38 seems to have defined a large enclosure to the east of G19, with a c. 5m wide entrance between the two. A faint crop-mark traces the line of the ditch south-eastward beyond the excavation limits, although there is no evidence for any northward continuation. The enclosure was only short-lived, however, with the ditch built over at the end of Phase 3 by building G65.

The pottery from ditch G19 mostly dates to the 2nd century, but includes some Nene Valley colour-coated wares that may be later. Fragments of building material were also recovered. Some of the seven relatively large pieces of daub have smoothed surfaces and could have had a structural use in one of the nearby earlier buildings; two of the fragments of wall plaster retain a flat surface which has been red-washed. The moderate faunal assemblage includes domestic fowl and a skull fragment of a neonatal calf.

Over two-thirds of the relatively large pottery assemblage from **G38** is residual late 1st- or early 2ndcentury material. Nearly all is of local origin, with a small fragment of a black-burnished BB2 bowl and a mortarium fragment representing the only forms that could be identified. Cattle accounts for nearly two-thirds of the animal bones, although sheep/goat, pig, horse and dog are all represented.

Three short curving lengths of ditch (G43 and G45) were recorded in Areas 4 and 5, all of them passing beyond the excavation limits at one or both ends. They may have been associated with stock control; however, their deep, narrow profiles (Pl. 3.3) make it more likely that they were drainage gullies to deal with surface run-off from the metalled yard through which they had been dug.

A moderate amount of pottery and animal bone came from G43. Its ceramic profile is much the same as that of the enclosure ditches in this phase, though with a slightly larger component of later Roman pottery. In addition to the ubiquitous Oxford colour-coats, twelve sherds were recovered from two late 3rd–early 4th-century Oxford mortaria. Eleven of these were from a white-ware vessel, and one from a vessel that had been red-slipped. A sherd of Hadham ware is dated to the late 4th or even the 5th century and is clearly intrusive, perhaps from Phase 4 ditches G44. Conversely, some of the material from G43 is likely to have been incorrectly assigned to Phase 2 ditches G42, as evidenced by the presence of joining sherds between the two sets of ditches.

As well as a Nene Valley colour-coated basal sherd which appears to have been fashioned into a spindle whorl, G43 also produced a whetstone, the possible remains of an iron flesh hook, and building remains that include fourteen nails, a limestone shingle and a mixture of ceramic building material. The faunal assemblage is relatively large, but with only cattle, sheep/goat, pig and horse represented.

G45's pottery assemblage was also mixed in date, but with a slightly greater emphasis on earlier fabrics. A rim from a flanged bowl in a shelly fabric is of a type that first occurred at Harrold in the late 2nd century (Brown 1994, fig. 27: 122), while samian sherds from the mid-late 2nd century and the late 2nd or early 3rd century were also found. Additional sherds from the latter came from destruction deposit G73 in Phase 5, indicating a level of disturbance. A Nene Valley colour-coated beaker has barbotine scroll decoration, a motif common in the early-mid-3rd century (Howe et al. 1980, 8). As well as this pottery, G45 also contained a wide range of ceramic building material, and fragments of wall plaster. Only a moderate faunal assemblage was recovered, but this includes a fairly complete cattle skull; signs of weathering and an absence of teeth indicate that this skull was a secondary deposition. This is also likely to be the case for the partial human skull, which perhaps came from a grave that was disturbed during ground-works for the construction of building G65.

# IV. Hypocaust building G65 and other structures

(Pls 4.1–4.5; Figs 4.1 and 4.4)

Building G65, the main focus of the 1970s archaeological excavation, was constructed towards the end of Phase 3 (Fig. 4.4). It is believed to have been a bath house. The ground surface was levelled prior to its construction, with the deposition of a mixed layer of material (G68) that was mostly c. 0.05–0.12m thick. The extent of the area covered by this deposit could not be determined with any degree of precision, partly due to the circumstances of the excavation and partly due to the layer's mixed nature, which varied between reddish clay and black loam. Much of this material was fairly sterile and seems to have derived from either the contemporary topsoil or undisturbed subsoil, although a few deposits displayed signs of burning and may have come from nearby ash pits or middens. Pottery from these deposits includes mid-late 2nd-century samian and Verulamium-region white ware fabrics (Fig. 4.3, nos 22, 25–6), with very few other finds.

Nothing of building G65 survived above the level of its foundations (Pls 4.1, 4.2 and 4.3), which comprised limestone rubble set at an angle; these were not dissimilar to the foundations of the Phase 2 building G39, which may well still have been in use when G65 was constructed. Even the wall foundations had largely been robbed in the late Roman and Saxon periods, making the layout of the building and the question of whether it was constructed in a single episode uncertain. The recovery of just one possible tessera from the whole site, however, suggests that the building did not have any tessellated pavements.

The building seems to have consisted of two parts, the smaller of which comprised a suite of three rooms to the south-east, each containing a hypocaust (Fig. 4.4). The



Plate 4.1 Team at work in Phase 3 building G65



Figure 4.4 Building G65



Plate 4.2 Hypocaust flue in Phase 3 building G65



Plate 4.3 Hypocaust pilae in Phase 3 building G65



Plate 4.4 Hypocaust ducts in Phase 3 building G65



Plate 4.5 Hypocaust ducts in Phase 3 building G65

smallest of these (Room 1) was roughly square and measured only *c*. 2.5m across. Room 2 was the same width but 3.8m long, while Room 3 was 'L'-shaped, with maximum dimensions of 3.8m in each direction. The hypocaust was constructed from ceramic *pilae* set on a bed of mortar; the surviving *pilae* were arranged in stacks of up to five, while sandy patches in the mortar indicated where further *pilae* had once been. No trace of the suspended floor of the hypocaust remained, so its method of construction may only be surmised. Gaps in the internal wall foundations of these three rooms indicate where hot air was channelled between the rooms. The written excavation records refer to a stokehole to the south-east of these three rooms, but unfortunately no trace of it could be found on the plans or in the photographic record.

The remainder of building G65 contained no more than the occasional *pila*, although evidence was found for flues to channel hot air underneath the floors. The flues were arranged in a cross, each comprising a mortar base on which lay two parallel lines of limestone blocks with roughly squared inner faces (Fig. 4.4; Pls 4.4 and 4.5). Only three of the four mortar bases survived, while only the north-east flue retained any of its limestone sides. It is

unclear how many rooms the hypocaust heated: Room 5 was one of them, measuring 4.45m long and 3.1m wide, but the precise layout of the building to the east of Room 5 is uncertain. No evidence of a hypocaust was found in Room 4, which was 6.8m long, 6.5m wide and had an apse; intriguingly, however, it did contain what appears to have been a 0.3m deep raking pit which could have served either or both of the building's two hypocausts. Simco (1984) has suggested that this raking pit was in fact a modification. This could mean that as the building aged, the outer suite of rooms went out of use and only the three core rooms were maintained and heated. Alternatively, it might have replaced a raking pit associated with the lost stokehole south-east of the three core rooms, sited to serve both hypocausts.

The structural features of building G65 produced a mixed assemblage of residual pottery, dating to no later than the late 2nd century except for a small fragment from an Oxford white-ware mortarium. Few other finds were recovered, even though a few areas of internal limestone paving survived; this may indicate that the building's users kept the floors clean, or may simply reflect extensive robbing.



Figure 4.5 Phase 3 Other Artefacts

- RA25 Chape. Copper alloy. Possible chape formed from sheet folded round to form a truncated cone, the narrowed end having an inner lip, possibly to hold in place a flat disc forming the closure of the chape end? Damaged and flattened. Height 16.6mm; width (flattened) 27.4mm; thickness of sheet 0.5mm. G64 Phase 3
- RA6 Seal box. Copper alloy. Base of seal box with four circular perforations in a Y-shape pattern, two perforated lugs for hinge. The upper edge of the box has a U-shaped notch on either side

on axis at right angles to hinge/cup line. Length 18.8mm; width 17m. G64 Phase 3

- RA176 Whetstone. Coarse calcareous sandstone, Inferior Oolite Beds-Northants. Incomplete primary whetstone of sub-rectangular plan and cross-section. Upper and lower faces worn smooth through use. Roughly squared on one, opposing end broken. Length 66.5mm; width 20mm; thickness 14mm. G67 Phase 3
- RA187 Hair pin. Bone shaft of large mammal longbone. Greep type A1. Head slightly conical, tapering shank of rounded cross- section, tip missing. Length 70mm; diameter 7.8mm. G67 Phase 3

A line of post-holes **G32** was identified running along the north-east edge of building G65 (Fig. 4.4). The post-holes were 0.35–0.70m in diameter and up to 0.35m deep and were packed with fragments of limestone. Their size suggests that the stone settings supported substantial structural posts, and it is possible that they related to a timber element or annexe of building G65. Some of the post-holes were either intercutting or slightly out of alignment with the others, suggesting an episode of repair or rebuilding. Alternatively they might represent supports for a scaffold used during the construction of building G65 — although the use of stone settings might seem extravagant in such a context — or an attempt to shore it up in its decline.

Post-holes G32 contained a relatively large assemblage of pottery, with less fragmentation than for other groups in this phase evidenced by a sherd to weight ratio of 1:21. As well as a gritty white ware flagon, grey ware bowls and a Nene Valley colour-coated dish, a fairly large (45g) sherd of Hadham ware was recovered, suggesting that at least some of the post-holes did not become backfilled after the structure's demise until the late 4th century.

Two short gullies **G55** were located immediately north-east of post-holes G32, the steep sides and flat bases of which suggest they may have held ground beams (Fig. 4.1, u). Both were c. 0.15m deep, with the north-west one measuring c. 0.15m wide at the base and the south-east one c. 0.4m. They may have been related to post-holes G32 and/or building G65; however, their alignment was more akin to that of Phase 2 structure G31, and G55 may thus have pre-dated both G32 and G65. Its pottery assemblage is comparable with those of other features belonging to Phase 3, but the date of the assemblage is too broad to conclusively rule out a Phase 2 origin.

## **V. Cobbled surfaces and occupation deposits** (Fig. 4.1)

Building G65 was built on top of a variety of deposits (G64) that were distinct from its make-up layers, and which are thought to represent occupation debris pre-dating the building's construction that accumulated primarily on top of the Phase 2 cobbled surfaces. The precise extent of these deposits is hard to determine from the excavation records, but they appear to have covered most of Area 2 in a layer that was up to 0.2m thick. As well as thin layers that accumulated over a period of time, these deposits also included discrete dumps of material — one such discrete deposit comprised an almost complete neonate burial. The layers as a whole produced a large number of finds, although the fairly high proportion of Iron Age fabrics within the pottery assemblage suggests a certain degree of residuality.

The pottery collection includes twenty-one samian vessels dating to the mid–late 2nd-century, more than half of which are dishes in form 18 or 18/31. Other fine wares are four mica-gilded dishes and at least five rough-cast beakers, plus two red-slipped mortaria, possibly from the Verulamium region, which date to the first half of the 2nd century.

Relatively few non-ceramic finds were recovered from G64, with the ironwork in particular surviving in a poor and fragmentary condition. Despite this, there is evidence which indicates the use of a padlock, in the form of a ward from a padlock key. Tools are also evidenced by a stem

from a small punch or chisel(?) and possibly part of a hammer. The terminal of a possible knife or dagger scabbard chape was also present (Fig. 4.5, RA25), along with a handle fragment from a blue-green glass spouted globular jug, a form in use in the 2nd to 3rd centuries, and part of a square bottle. One item which suggests a high-status resident is the seal-box base (Fig. 4.5, RA6), which is circular and can be closely paralleled by examples from Gorhambury (Wardle 1990, 130 and fig. 126: 204) and Verulamium (Goodburn 1984, fig. 13: 99). Seal boxes have a proposed *floruit* of the 1st and 2nd centuries (Cool 1998a, 99), rarely occurring on sites of the late 3rd and 4th centuries; their use may have diminished during the 3rd century as the use of intaglio finger rings declined (Cool 1998a, 99).

As well as an almost complete neonate burial (Burial 3), the deposits in G64 produced a substantial animal bone assemblage of 273 fragments. Although cattle and sheep/goat dominate, pig is quite well represented and dog, horse and hare are also present. In addition, six bird bones were recovered; three belong to domestic fowl and one to a medium-sized duck, while one of the two unidentified fragments could be from a mallard-sized duck.

G66 represents resurfacing of the Phase 2 cobbled yard to the south and west of building G65, where the greatest depth of deposits in G64 occurred. The new



Figure 4.6 Phase 3 Other Artefacts

RA310 Quern. Calcareous sandstone, source unknown. Portion of a sloping skirt, flat base and flat, pecked grinding surface. No feeder or spindle hole survives and it is difficult to determine if this is an upper stone or a lower stone. Thickness 123.6mm; estimated diameter between 600–650mm. Phase 3



Plate 4.6 Phase 3 well G51

surface consisted of limestone paving as before, although the quality does not seem to have been quite as high. Occasional areas of floor also survived within building G65, though these were limited to a few isolated areas of limestone paving overlying compacted tile, rubble and mortar. Few finds were recovered from this new surface, all of which could be either contemporary or residual.

A new paved or cobbled surface with occasional patches of brick rubble (G67) was also constructed across most of the northern half of Area 5. It appears to have been slightly more extensive than the Phase 2 surface that it overlay, although its precise extent could not be determined from the site records. Pottery from it includes two Saxon sherds, which may well have been intrusive from Phase 5 gully G56, while numerous fragments of brick/floor tile and also some roof and flue tile fragments were incorporated. Other finds from the material that comprised this surface include a large quern (Fig. 4.6), a bone hairpin which is thought to be mid-Roman in date, and part of a whetstone that is similar to the example from ditch G43, which is thought to have come from the Northamptonshire area. A moderate but largely unidentifiable assemblage of animal bones was also recovered.

#### VI. Other features

(Fig. 4.1)

Two discrete, non-structural features were excavated in close proximity to building G65: oven G41 to the east and well G51 to the south.

The oven **G41** comprised a ring of packed yellow clay, roughly 1.6m long and 1.1m wide; fragments of limestone lay on top, but these showed no signs of burning and

appear to have been unrelated to the oven. No pieces of fired clay or ceramic building material were recovered, and the only finds were four scraps of pottery and an unidentifiable animal bone.

Well G51 (Pl. 4.6) was lined with blocks of limestone and had an internal diameter of 0.9m; the limestone had been packed in with gravel, giving the lining a maximum thickness of 0.7m. The base of the well does not seem to have been reached during excavation, although it is clear that it was more than 1.2m deep. Relatively few finds were recovered, perhaps indicating that it was allowed to silt up naturally rather than being deliberately backfilled. As well as a fragmentary assemblage of pottery, pieces of roof and flue tile (presumably demolition debris) and eleven cattle bones, the well contained a fragment of iron bar, scraps of leather which no longer survive, and part of a stone shingle of Collyweston slate, pointing to further links with Northamptonshire. The shingle appears to be of a similar shape to other examples, also of Collyweston slate, from the Roman villa at Gadebridge, Hertfordshire (Neal 1974, 193 and fig. 83: 695-6), and has been exposed to heat, as evidenced by a pinkish colour and one lightly sooted surface. The walls close to a hypocaust stoke-hole at Gadebridge Park were faced throughout with roofing tiles (Neal 1974, 8), and it is possible that the Newnham example may have been put to a similar use.

**G78** probably represents the terminal of a ditch. There is some suggestion in the site records of a second terminal to the east, possibly suggesting that this represents the original form of G38, although the evidence is far from conclusive. G78 did, however, contain a relatively large assemblage of pottery comprising a range of mid-2nd-century fabrics, with some particularly large sherds. The

two mortaria that are present, one from Mancetter-Hartshill and one possibly of local origin, also date to the mid–late 2nd century. Only a fragmentary assemblage of ceramic building material came from G78, although it did also produce an iron double-spiked loop that has an association with buildings. The animal bone is dominated by a partial skeleton of a possible immature female dog, while a human long-bone shaft was also recovered.

The end of a small ditch (**G81**) was also found to the east of building G65; it was on the same alignment as G65, but too little was revealed to comment further. The ditch contained a mixed assemblage of pottery, with the latest sherd coming from a possible 4th-century Nene Valley colour-coated bowl. Intriguingly, part of the base of an Oxford white-ware mortarium was found that comes from the same vessel as another sherd from Phase 4 ditches G44, more than 30m away. Ditch G81 also contained

crushed fragments of lava quern, which petrological analysis has confirmed came from the Eiffel region (Chapter 18). By the 3rd century the lava quern trade appears to have declined (Buckley and Major 1998, 245), suggesting that this example is residual.

Pit **G93** was one of the largest recorded at Newnham, although its precise depth is unrecorded. It contained a sizeable assemblage of pottery comprising a large quantity of grey ware fabrics and a smaller amount of shelly ware. The paucity of the latter may be indicative of function, as these were usually used for cooking and storage vessels, while the grey ware vessels were mostly used for food preparation and serving. While the assemblage includes a samian bowl sherd dating to AD 55–75, it also contains a flanged bowl in Oxford colour coated fabric that dates to the mid-3rd to 4th centuries. Relatively few animal bones were recovered.



Figure 5.1 Plan of excavated features: Phase 4

# Chapter 5. Phase 4: mid- to late Roman (late 3rd/early 4th–late 4th century AD)

## I. Overview

(Fig. 5.1)

Following the erection of building G65 in Phase 3, little new construction activity seems to have occurred within the excavated area. Further reworking of the enclosures in the south-western half of the area took place, but it seems unlikely that any buildings or other structures were still present there by this time. Building G65 was still in use, however, and the pits dug to the north and south are likely to have been associated with it. Repairs to the building were also probably necessary, with robbing of Phase 2 masonry building G39 perhaps beginning at this point as a convenient source of stone. Despite the apparent reduction in activity in the excavated area large finds assemblages were recovered from the Phase 4 deposits: these included more pottery than from any other phase, although more than a quarter of the Phase 4 assemblage still comprises Iron Age fabrics.

#### **II. Summary of finds**

#### (Fig. 5.2)

For fuller discussion see specialist reports in Part 2 (on compact disc)

By the late Roman period, samian use had declined and there was less variety in pottery types, with fewer locally sourced wares (Fig. 5.2; Table 11.7). The market was now dominated by the large manufactories which had a wide distribution network. In this area, the shelly industry at Harrold (Bedfordshire) was the predominant source for basic domestic kitchen and storage vessels, but table wares were dominated by the Oxford and (particularly) the Nene Valley industries.

Building G39 had gone out of use by this phase, as evidenced by ditch G57 which cut through the outer edge of its south-east foundation. The finds from nearby trackway ditches G44, however, continue to reflect subsistence activities such as small-scale crafts and grain processing, and these may be residual from Phase 3 activity associated with the building.

Most of the other artefacts derive from cobbled surfaces immediately outside and to the south of building G65, as well as nearby water pit G52 within this cobbled area. In common with previous phases, the finds from these surfaces include iron nails evidence of locking mechanisms and vessel glass. There were also personal items, such as a light bangle bracelet and a toiletry item, but only one coin (of Valens, AD 375-378) was recovered. This must have been lost at the very end of Phase 4. The overall quantity of finds recovered is greater than from previous phases. While this could reflect an increase in prosperity, it could also indicate a lack of regard for maintaining the environs. The latter suggestion may find some support when considering the contents of water pit G52, which contained over 10kg of wall plaster and 363 fragments of ceramic building material. This suggests that building G65 was in a poor state of repair, or had been



Figure 5.2 Histogram of Phase 4 pottery expressed as a percentage of phase total

partly demolished. Certainly if water pit G52 was related to the use of this structure, its infilling with this volume of material suggests at the very least a change of use and more likely abandonment, presumably at the close of Phase 4.

The wall plaster recovered does indicate a degree of prosperity, but not on the scale exhibited at Gorhambury (Neal, Wardle and Hunn 1990) or Gadebridge (Neal 1974), for example.

Overall percentages of identified mammal fragments are similar to those from Phase 3, with cattle providing over half the total, followed by sheep/goat, pig, horse, dog, cat, red deer and badger. There is slightly less variability in species representation in different types of feature than in previous phases: around half the identified mammal fragments in ditches, occupation deposits and pit fills are of cattle, while sheep/goat are again less well represented in ditches than in occupation layers and pits. Unusually, pig is better represented in the ditches than in occupation layers and pits, though their overall percentage is similar to that from previous phases. Horse continues to be poorly represented.

Overall species diversity is slighter greater than in earlier phases. In addition to the small numbers of dog, cat, red deer and badger bones, four species of bird are also represented: domestic fowl, goose, duck and pigeon. This is the earliest appearance of goose on the site. The bone is a good match for domestic/grey lag goose, while the duck bone is comparable in size to a wigeon. The pigeon bone is possibly a domestic pigeon/rock dove (Chapter 19).

#### **III. Enclosures and drove-ways**

(Figs 5.1, 5.3 and 5.4)

Although only five new ditches clearly originated within the span of Phase 4, it is probable that some of the earlier ditches were still in use. There is nothing to disprove the continued existence of Phase 3 enclosure **E4** (Fig. 5.1). Indeed, the location of water pit G15 on the boundary of E4, with ditch G3 draining into it, suggests that this enclosure was still in use.

Ditches **G8** followed the NE–SW enclosure orientation established in previous phases, although (at up to 2.05m wide and 0.65m deep) the larger of the two was more substantial than all but one of the earlier ones on this alignment, Phase 1 ditch G94 being the exception. Cropmark evidence shows this ditch continuing to the southwest at least (Fig. 1.4), although its course in both directions becomes obscured where it merges with cropmarks from earlier phases. The function of the shorter length of ditch that was recorded is unclear, nor could it be traced further from crop-marks.

The disturbed nature of the ditches' infill is shown by the presence of residual Late Iron Age/early Roman wares alongside fragments of modern plant pot. Of intrinsic interest, however, is a fragment from a triple ring vase (not illustrated), a rare find in this area. The function of these vessels is unknown, but their presence on cemetery and temple sites suggests that they were associated with ritual activity. Few other artefacts were recovered, but the ditches produced a relatively large assemblage of animal bones. Cattle and sheep/goat dominate, but pig, horse, dog and domestic fowl are also present. The shaft of a human long bone was also identified.

North-east to south-west aligned ditches G44 may have defined another drove-way measuring c. 4m wide, or at least have had some connection with either the movement of livestock or acting as drains on either side of a track. The north-west ditch cut across Phase 3 ditch G43, indicating that this latter feature was no longer in use, but it is unclear what other features from Phase 3 may have co-existed alongside G44. A mixed assemblage of pottery was recovered from its fills, but with relatively little residual material: grog-tempered and handmade shelly fabrics are present, but there is no samian, even though its percentage in this phase assemblage is still relatively high. Contemporary vessels include a triangular-rimmed jar with rilling on the body, characteristic of Harrold products in the early 4th century (Brown 1994, 74 and fig. 34: 241), and a colour-coated flanged bowl (Fig. 5.3, no. 35) and plain-rim pie, two of the standard 4th-century Nene Valley products. Intriguingly, a piece of Oxford white-ware mortarium found as a basal sherd in Phase 3 ditch G81, more than 30m away, comes from the same vessel. A small Saxon sherd was also recovered and this may also be contemporary with the ditches' final infilling, although the probable sherd of Brill/Boarstall ware is certainly intrusive.

Other artefacts from G44 are mostly nails, but crushed fragments of a Niedermendig lava quern, an off-cut from a red deer antler, and a possible fragment from the blade of an axe were also recovered, along with a possible gaming piece or counter which may well have been formed from a broken whetstone (Fig. 5.4, RA52). The ditches produced a moderate faunal assemblage, with a similar profile to that from G8.

Ditch **G57** followed a similar alignment to G8 and was one of the largest recorded at Newnham, measuring up to 3m wide. It had been cut through the foundations of the Phase 2 building G39, indicating conclusively that the building was no longer in use, but little else can be said about it. It was not visible as a crop-mark, and its recording on site was less than comprehensive — no record exists of its depth or profile, and even its course in plan is slightly conjectural.

The pottery assemblage from G57 is relatively large, with a strainer, a round-rimmed dish and several bowls present in a variety of grey wares. A black-burnished carinated bowl was also identified, along with fragmentary and abraded late 2nd-century samian, whereas the two mortaria — one from Mancetter-Hartshill, dating to the 4th century, the other from Oxford, dating to the late 3rd — and the Oxford colour-coated sherds are likely to be contemporary with the use of the ditch. A cross-fitting mortarium sherd was recovered from pit G52, attesting to a certain degree of redeposition which may also account for the recovery of two Saxon sherds and piece of post-medieval tin-glazed ware.

The ceramic building material from G57 is predominantly brick/floor tile and roof tile, while nails and small quantities of plaster and fuel ash slag were also recovered. These could have derived from the use and occupation of building G39. The lead sheet that was found may have been rolled ready for recycling, or it may be a net weight for fishing (Steane and Foreman 1988, 162). A relatively large number of animal bones came from the ditch; cattle is the dominant species, while pigeon makes a rare appearance in the assemblage.

#### **IV. Occupation deposits**

(Figs 5.1, 5.3–5.8)

The Phase 4 deposits that accumulated as a result of occupation activity can be split into two groups: those located outside building G65, mostly to the south and west (G69 and G72), and those inside the building (G70 and G71). The former comprised a variety of deposits overlying the Phase 3 cobbled yards G66 and G67 (in Areas 2 and 5 respectively), which contained a moderate density of finds. They are likely to have derived from a mixture of deliberate dumping and natural silting.

Deposits **G69** in the immediate vicinity of building G65 contained a similar ceramic assemblage to that in the Phase 4 ditches, including an intrusive fragment of modern plant pot. Much of the pottery is residual, with the samian dating to no later than the mid-2nd century. An Oxford white ware mortarium dating to the late 2nd–mid-3rd century might be contemporary, however, since it is worn through use and slightly burnt. Among the later pottery are a shelly necked jar, two sherds of Oxford colour-coated ware and five sherds of Nene Valley colour-coats, one of which can be identified as coming from a rough-cast beaker.

Brick/floor and flue fragments account for most of the ceramic building material from G69, along with a smaller quantity of roof tile, two fragments of which have been burnt. Other finds include four nails, the stem and looped-over head of a padlock or lift key, a prismatic bottle, an annular iron ring and part of a large iron cylindrical collar that may have come from a small wheeled vehicle. A moderate number of animal bones were recovered, but the fact that two-thirds are unidentifiable reflects the heavily fragmented nature of the assemblage. A fragment of human humerus was also found among the animal bone.

Deposits **G72**, lying further south of building G65 in Area 5, had a similar ceramic profile to that of G69. The assemblage contains slightly more late material, however. The latest Roman pottery is Hadham ware, which dates to the 4th century and possibly continues into the 5th, while fourteen Saxon sherds were also recovered. Brick/floor tiles account for most of the ceramic building material, though the presence of two fragments of modern roof tiles again points to an intrusive element within the deposits.

The other finds from G72 include several of the same elements noted in G69, such as nails and double-spiked loops, a padlock key and a prismatic bottle fragment, but also items of a more personal nature and the first instance



Figure 5.3 Phase 4 pottery nos 31–38

- **31.** Ring-necked flagon (DV2); white ware (R03B); G72
- 32. Lid-seated jar (DV10); grey ware (R08); G34
- 33. Necked jar (DV61); grey ware (R06K); G34
- 34. Lid-seated jar (DV25); shelly (R13); G69
- **35.** Flanged bowl (Dii12); (R12B); G72
- 36. Dish with moulded rim (DV233); grey ware (R06C); G57
- **37.** Castor box lid (Dii20); (R12B); G52
- **38.** Necked bowl (Dii25); (R11D); G52

of a coin. The coin, an AE3 of Valens, must have been deposited towards the end of this phase as it dates to AD 375–378. This not only serves to confirm activity in the later 4th century but also that the residents had access to currency and hence were continuing to take part in commerce. A fragment of quern from G72 is the first instance of millstone grit, as opposed to lava, at Newnham. This probably follows a general decline in the trade of lava querns by the 3rd century, with millstone grit querns first appearing in quantity in south-east England during this period (Buckley and Major 1998, 245–6).

The more personal items from occupation layers G72 include part of a bracelet (Fig. 5.4, RA253) with continuous vertical grooves, a type of light bangle bracelet which was in use throughout the 4th century. The first occurrence of what is thought to be a toilet implement (Fig. 5.4, RA53) also occurred in G72: a pair of cast copper alloy sickle-shaped instruments with suspension loop in the opposite plane to the sickle, with both objects suspended from an 'S-shaped' wire link. This does not appear to be a common type of implement, nor is its function certain: suggestions include a tooth pick or nail cleaner. A pin (SF57) probably made from the shaft of a sheep-sized mammal's long-bone was also found among the large but heavily fragmented collection of animal bones. The faunal assemblage is again dominated by cattle and to a lesser extent sheep/goat, with

pig, horse, domestic fowl and, for the first time, badger also represented.

Deposits G70 and G71 which accumulated within building G65 contained a high proportion of burnt material, resulting from their association with the operation of one or both of the hypocausts. They included a thin layer of ash (G71) in Room 3. Its recovery from this location suggests that the hypocaust in Rooms 1–3 was heated by a stokehole to the north-west, as is also suggested by the presence of the raking pit immediately north-west of Room 3 (Fig. 4.4). Few finds were recovered from G71, which is unsurprising as material in this area would regularly have been cleared into the raking pit.

The fill of the raking pit (**G70**) comprised a mixture of charcoal, ash and burnt clay. It would be unusual to have had a raking pit inside a building such as this one; this might indicate that Rooms 1–3 pre-dated the rest of the building, yet a shallow channel leading north-east from the pit would be consistent with its use for the northern hypocaust as well, suggesting that the two hypocausts were used contemporaneously for at least some of the time.

Pit G70 contained a fragmentary pottery assemblage of mixed date, with a large proportion of residual Late Iron Age/early Roman pottery but no demonstrably 4thcentury material. Its relatively large assemblage of ceramic building material is made up primarily of shelly



Figure 5.4 Phase 4 Other Artefacts

- RA52 Gaming piece/counter. Sandstone, slightly micaeous source unknown. Cuboid block, retaining steep arises. Sub-rectangular in plan and cross-section. The block, possibly sawn(?) from a broken whetstone?) has flat fairly smooth surfaces. One surface has a single drilled dot, not centred, and one 'end' has a rough circle of eight drilled dots encircling an off-centre dot. Length 39.5mm; width 34.7mm; thickness 34.2mm. G44 Phase 4 (Fig. 5.4)
- **RA253** Bracelet. Copper alloy. Light bangle type, D-shaped in crosssection with continuous vertical grooves. Fastening does not

survive. Length 28mm; width 4mm; thickness 1.6mm. G72 Phase 4

RA53 Tooth pick or nail cleaner? Copper alloy. Two cast hooks. The heads of the hooks comprise a loop which is inset from the main stem. An S-shaped link of circular sectioned wire has been threaded through both loops. The curving stems are of flat rectangular section. One hook retains its tip which is narrowed and at roughly right angles to the curve of the hook. Length of hooks *c*. 72mm. G72 Phase 4







E

6



4





0

40mm

- 1. One fragment of a sandy *tegula* with finger smeared 'signature' in the form of a loop on upper surface; flange type 11. Ph 4 G52
- 2. One fragment of a sandy *tegula* with animal paw print on upper surface; flange type 11; cut out type 5. Ph 4 G70
- 3. One fragment of a sandy *tegula* with post-firing hole possibly for a nail or peg; flange type 11. Ph 4 G52
- 4. One fragment of a shelly *tegula* with faint finger groove at base of flange; flange type 1. Ph 5 G73
- 5. Complete end of a sandy *imbrex*. Ph 4 G34
- 6. One fragment of a sandy *tegula* with post-firing hole possibly for a nail or peg and finger smeared 'signature'. Ph 5 G73



Figure 5.6 Ceramic Building Material (all phases) nos 7-10

7. Complete shelly wedge-shaped flue tile with wavy line and cross combing on opposing sides and remains of mortar on edges. Ph 5 G73

9. One fragment of a shelly flue tile with figure-of-eight combing. Unphased

8. One fragment of a shelly flue tile with cross combing. Ph 4 G52

10. One fragment of a shelly flue tile with wavy line and cross combing. Ph 4 G52

flue tiles, all of which have either wavy-line or cross-comb keying (Fig. 5.6, nos 8 and 10). The consistency of fabric and keying types suggests they were used in the same structure, or at least were part of the same batch. Few other finds were recovered, perhaps largely due to extensive robbing down to foundation levels. A few nails, fragments of iron sheet and some undiagnostic ferrous slag were all retrieved, but these items convey little of the building's appointments or the activities of the people using it. The one exception to this is a piece of moulded wall plaster with two whitewashed surfaces, one convex and one slightly angled. This was presumably part of a reveal, but whether from a doorway, window or recess is unknown (Fig. 5.8, no. 7). Few animal remains were found in G70.

## **V. Pits** (Fig. 5.1, 5.8)

Two water pits were identified, one (G15) dug through Phase 3 enclosure ditch G3, the other (G52) through Phase 3 ditch G38. Both were also situated at the junction between these Phase 3 ditches and earlier ones, at a point where a hollow is likely already to have existed.

Pit **G15** was c. 3.8m in diameter and 1.4m deep, and the steepness of its profile suggests that it was designed for the extraction of water rather than to let animals drink at it: this might indicate that it was used to fill troughs for sheep/goats or pigs, rather than for cattle. Unsurprisingly, as the pit had been dug through the fills of earlier ditches, the pottery from G15 is mostly Late Iron Age or early



Figure 5.7 Ceramic Building Material (all phases) nos 11-14

11. One fragment of a shelly flue tile with cross combing and oval cut-out in blank wall. Ph 5 G73

13. Complete sandy brick/floor tile with random stabbing on one surface. Ph 5 G73

One fragment of a sandy flue tile with cross combing and oval cut-out in blank wall. Ph 3 G51

One fragment of a shelly brick/floor tile with pre-firing scoring on one surface. Ph 1 G88

Roman and most, if not all, would appear to be residual. The only other finds were small amounts of ceramic building material and a small assemblage of animal bones, including one from a cat.

Pit **G52** was a similar size in plan to G15, measuring 4.1m in diameter, and is likely to have been at least as deep as G15, although no record was made of its precise depth. It may also have provided water for animals, although its proximity to building G65 (and Phase 3 well G51) suggests that it was related to the building's use,

particularly if bathing was one of its functions. The pit was backfilled with deposits that produced a large assemblage of pottery and animal bone, as well as over 10kg of wall plaster and 363 fragments of ceramic building material, including flue tile, *imbrex* and *tegula*.

The pottery assemblage, although large, comes from mixed sources: most of the pottery is residual Late Iron Age or early Roman in date, yet late medieval and post-medieval sherds are also present. Contemporary wares are limited to small amounts of 4th-century Oxford



Figure 5.8 Plaster (all phases)

- 1 Fabric type 2. Angled piece 45 degree angle with slight inset along length, plain flat surfaces. Phase 5 G73
- **2–3** Fabric type 2. Angled pieces with two surfaces at a 45 degree angle, only one face red washed. Phase 5 G73
- **4–5** Fabric type 2 Two shaped pieces 45 degree angle; red wash on one face only. Phase 5 G73
- 6 Fabric type 1 Shaped fragment with two angled faces, both white washed. Phase 5 G74
- 7 Fabric Type 6. Shaped piece retaining three faces, flat back 82.1mm long (no wash), short flat angled face 43.6mm long (white wash) and gently convex face (white wash), 100.3mm long. Total length of surviving piece 246mm. Phase 4 G70
- 8 Fabric Type 2 Convex piece with red wash over curved surface. Phase 5 G73
- **9** Fabric Type 4 shaped piece, thickness 74mm, plano-convex in profile, possibly traces of white wash on convex face, reverse has impressions of (?)bricks (1062g). Phase 4 G52
- 10 Fabric Type 4 large piece (247mm long) of shaped moulding, (window or door surround?), no wash. Phase 4 G52

- 11 Fabric Type 2 Small fragment of possible corner/intersection of two right angled planes, white wash or skin overlain with dark red paint. Phase 5 G73
- 12 Fabric type 2 One piece with flat red wash has scratched parallel lines. Phase 5 G73
- 13 Fabric type 2 Concave piece with white wash and 2 red bands of paint. Phase 5 G73
- 14 Fabric Type 4 Large flat piece (66mm thick, 1078g), white washed skim (1mm or less in thickness) with areas of off-white/ yellowish paint surviving on the surface. A dark red linear band (39mm wide) occupies one side of the painted surface, and appears to overlie the off-white/yellowish paint. Adjacent to the red band are remnants of two intersecting curvilinear bands (one *c*. 6mm wide, the other *c*. 10mm wide), three narrow linear bands and two further narrow curving bands of paint (*c*. 3–4mm wide), all in a very pale grey. The reverse of this fragment has an impression of a corner of a brick/tile or perhaps stone. white wash and red band (39mm wide) painted on top. Phase 4 G53

colour-coats and 4th–5th-century Hadham ware, plus two sherds of Mancetter-Hartshill and Oxford white-slipped mortaria, one of which comes from the same vessel as one in ditch G57 (see above).

While the construction and use of the water pit G52 may have been contemporary with the use of building G65, the contents of its disuse fills is more suggestive of at least partial demolition or disposal of portions of a dilapidated structure. The bulk of the assemblage comprises building materials. If building G65, or parts of it, were falling into disrepair late in Phase 4, then pit G52 would have provided a convenient means of disposing of the material if the pit was no longer required for drawing water. There is a small component of the assemblage which is related to domestic life and associated craft-level activities — *e.g.* a beaker sherd, a fragment of knife blade, a bone off-cut and ferrous slag — but similar elements occurred in earlier phases, and much of this may be residual.

The building materials recovered from G52 comprise ceramic building material, stone shingle, two small slabs of mortared limestone and over 10kg of wall plaster. The large quantity of ceramic building material is made up predominantly of shelly flue tiles, while the stone shingles are both in Collyweston Slate, as was the one from Phase 3 that came from nearby well G51. One of the shingles is complete and is similar in size, shape and stone type to an example from the villa at Gadebridge Park, Hertfordshire (Neal 1974, fig. 83: 696). Although this might suggest that at least part of G65 had a stone-shingle roof, it should be noted that at Gadebridge Park the walls of the bath house had a double bonding course of roofing tiles, which were also used to face the walls close to the stoke-hole (Neal 1974, 8). The mortared slabs of limestone are very roughly shaped, the mortar applied unevenly and the upper slab placed slightly inset from the edge of the lower slab. Whether this represents part of a simple garden wall or part of a bonding course is uncertain.

All types of plaster fabric (see Chapter 15 for full descriptions) are represented in the 10,245g assemblage

from G52 (Table 15.6), most being either pink or white. The range of surface treatments is restricted, most fragments having either a white or red wash, but in some cases none. Few pieces have painted decoration, which is mainly restricted to linear bands; only one fragment has a more complex motif (Fig. 5.8, no. 14). The fragments possessing painted linear bands are generally too small to determine whether they represent panels or borders. Three pieces were mouldings, possibly from reveals such as doors, windows or recesses. The diverse character of the fabric types might indicate that the plaster derived from more than one room, although it is possible that the differing colours were used to reflect changes in the vertical face of the wall, or perhaps for walls versus ceilings.

The large faunal assemblage from G52 is dominated by cattle and sheep/goat, with small numbers of pig, dog, horse, goose and duck. Among the cattle bones were three bones of neonatal calves. A split and whittled shaft of a large mammal long-bone provides evidence of boneworking.

Pit G34, located just to the north of building G65, had been dug into the top of one of the Phase 1 pits in G87 (Fig. 2.1). It was covered with limestone on its eastern side, perhaps acting as a capping layer. Much of its pottery content is residual, but Nene Valley and Oxford colourcoated vessels dating to the 3rd-4th century are present, as is 4th-5th-century Hadham ware. The complete end of an imbrex in a sandy fabric (Fig. 5.5, no. 5) was also recovered, along with four nails and a small amount of ferrous slag. Whereas none of the ferrous slag from earlier phases is diagnostic of smithing or smelting, this piece is a fragment of smelting tap slag, but the quantity is too small to suggest where a furnace was located. Three-quarters of the faunal assemblage is unidentifiable but sheep/goat dominates the remainder, with a cat bone also noted. A perforation near the distal end of one sheep/goat tibia shows that it has been worked.

# Chapter 6. Phase 5: late Roman to Saxon (late 4th/early 5th century AD–Saxon)

#### I. Overview

There is no structural evidence to suggest that the Roman settlement at Newnham carried on into the Saxon period to any substantial degree, or at least not within the recorded area. However, enough Saxon pottery was recovered to show that the settlement was not simply abandoned at the end of the Roman period. The demolition and robbing of building G65 may have begun by this point, but there was no evidence of any Saxon stone structures in the excavated areas so the shell of the building may well have remained substantially intact for several centuries further.

#### **II. Summary of finds**

(Figs 6.1-6.4)

For fuller discussion see specialist reports in Part 2 (on compact disc)

The Phase 5 pottery assemblage contains a large amount of residual material, but this is to be expected from a site that had been occupied more or less continuously for over 350 years by then (Table 11.8). The quantity of pottery present is still as high as ever, with the assemblage dominated by shelly wares from Harrold, grey wares and colour-coated wares from the Nene Valley, and colourcoated wares and mortaria from the Oxford industries. These large manufactories had all but disappeared by the mid-5th century due to the collapse of market networks (Young 1977, 240). Saxon pottery — now contemporary with the deposits from which it was recovered — is also present in the assemblage but the quantities are relatively small and fragmentary.

The other artefacts from Phase 5 deposits are limited to features associated with the robbing of buildings G39 and G65, and comprise in the main elements encountered in earlier phases. A large proportion of these may be residual, possibly disturbed and redeposited during demolition, and are more likely to reflect occupation in the 3rd and earlier part of the 4th centuries. The general picture provided is one of a fairly well-off, but not luxurious establishment.

A particularly large and well preserved assemblage of animal bone was recovered from destruction deposits within the hypocaust of building G65. Sheep/goat provide by far the largest percentage, at 88% of the identified mammal bones from this deposit, followed by cattle; a minimum of twenty-six individual sheep/goats can be identified. There is no doubt that this accumulation is mainly derived from the disposal of bones associated with the processing of sheep carcasses on a large scale.

Pig, cat and horse are all poorly represented but fortysix bird bones were recovered, mainly from domestic fowl and goose (Table 19.1). Numbers of goose bones on British sites tend to increase in the later Roman period, and on Saxon sites they are quite common (Albarella 2005); the increase at Newnham may indicate that domestic birds were now being kept. Both mallard and a wigeon-sized duck are also present. All the jackdaw bones could have belonged to the same bird, which could have been a resident on the site and attracted to abandoned buildings.



Figure 6.1 Histogram of Phase 5 pottery expressed as a percentage of phase total

#### **III. Structural features**

(Figs 1.4, 4.4, 6.3)

The only features whose construction can be dated with some degree of confidence to Phase 5 are post-hole **G86**, which had been dug through the backfilled robber trench for the north-eastern wall of building G65 (Fig. 4.4), and gully **G56**, located at the northern limit of Area 5 (Fig. 1.4). Gully G56 is likely to have had a structural function,

since it contained three post-holes in its base that were up to 0.16m deeper than the gully itself. Each feature contained two sherds of Saxon pottery in organic fabric A01, although these finds in themselves are not conclusive evidence for the gully's date. Intrusive Saxon sherds were recovered from a number of other features that can confidently be assigned to earlier phases, and the post-hole and gully are assigned to this phase primarily on stratigraphic evidence.



Figure 6.2 Phase 5 pottery nos 39-50

- **39.** Necked jar (DV73); shelly (R13); G76 and G69
- **40.** Flask (DV6); grey ware (R06C); G73
- **41.** Flask (DV75); shelly (R13); G74
- **42.** Storage jar (DV99); shelly (R13); G73
- **43.** Storage jar (DV101); shelly (R13); G79
- 44. Flanged bowl (DV256); shelly (R13); G73
- 45. Bead rim shallow bowl (Dii17); (R12B); G73
- **46.** Beaker (Dii39); (R38); G73
- **47.** Beaker (Dii22); (R11D); G73
- **48.** Narrow mouthed jar (Dii23); (R11D); G73
- **49.** Imitation samian form 38 (Dii26); (R11D); G73
- **50.** Straight sided dish (Dii33); (R11D); G73



Figure 6.3 Saxon pottery (all phases) nos 1-13

9.

- 1. Plain rim sherd (61g) burnished exterior; sand and calcareous fabric A04. Unphased (1-0)
- 2. Plain rim sherd (25g) with clear fingering and very thin walls; sand and calcareous fabric (A04). Ph 5 G76
- **3.** Rim and neck from a jar (10g) with lightly burnished exterior; sand and calcareous fabric (A04). Ph 5 G 77
- 4. Plain rim sherd (5g) burnished interior and exterior; fabric (A04). Ph 5 G77
- 5. Rim sherd (9g) with horizontal grooves and burnished internally and externally; fabric (A04). Unphased
- 6. Rim and body of a bowl (35g) with internal black residue and clean exterior; sand and calcareous fabric (A04); Ph5 G76
- Body and shoulder sherds (7 sherds, 207g) burnished above shoulder roughened surface ('schlikung') below shoulder; sandy fabric (A06). Unphased
- 8. Rim sherd (45g) burnished exterior; row of pinched rustication on shoulder; sandy fabric (A06). Ph 5 G56

- Body sherd (3g) stamped with three motifs: large eightsegmented rosette: surrounded lower half of rosette with circular dimples, ending in a small quadranted circle; fine version of sandy fabric (A06). Ph 5 G56
- **10.** Faceted shoulder sherd (3g) with horizontal grooves below shoulder; fine version of sandy fabric (A06). Ph 3 G3
- **11.** Body sherd (26g) stamped with row of concentric diamond stamps above grid stamp(s) in panel segregated by diagonal grooves; sandstone fabric A23. Ph 5 G73
- 12. Body and base sherds (4 sherds, 156g) decorated with vertical grooves; surface harsher on the interior than exterior, possibly pitted through use; sandstone fabric A23. Unphased
- 13. Rim and shoulder from a wide-mouthed jar (162g) with oxidised surfaces. This is both an unusual form and firing, although oxidised firings are not unknown in the Saxon period. Its fabric is coarsely tempered with sub-rounded quartz typical of fabric A16 and no other inclusions are visible. This could, however, be a misidentified pre-'belgic' Iron Age vessel, one of only two on the site; coarse sandy fabric (A16). Ph1 G22

#### Figure 6.4 Phase 5 Other Artefacts (see illustration on facing page)

- RA30 Awl? Copper alloy. Leatherworking awl? Lower body square in cross-section, tapering to a point. Mid-section rounded, tapering in thickness to a square-sectioned top. Bent. Length c. 101mm; lower shank 2mm by 2mm; mid-point 3.3mm diameter. G80 Phase 5
- RA26 Bracelet. Copper alloy. Incomplete, portion of a three strand cable bracelet, fastening does not survive. The cables are made of circular sectioned wire (diameter 1.7mm). Length (straightened) c. 99mm; width 3.2mm; thickness 2.8mm. G73 Phase 5
- RA33 Handle. Copper alloy. Small cast 'drop' handle, ends narrowed and folded over in same plane as body, tips in the shape of acorns. A single copper alloy link is threaded through either

end. Main body of handle is lozenge-shaped in cross-section. Length 53mm; width 4mm; thickness 4mm. G74 Phase 5

- RA39 Spatula. Copper alloy. Cast spatula with expanded 'coneshaped' terminal, rounded stem which expands in width but thins to form a flat rectangular-sectioned spatulate end. Length 149mm; width spatulate end 7.5mm; thickness 1.2mm; diameter of stem 3.6mm. G76 Phase 5
- RA234 Whetstone. Coarse calcareous sandstone, Inferior Oolite Beds-Northants. Incomplete primary whetstone of rectangular plan and cross-section. Both faces and edges worn smooth through use. One end squared (but damaged), opposing end broken. Length 63mm; width 24.7mm; thickness 19.5mm. G77 Phase 5



Figure 6.4 Phase 5 Other Artefacts (see catalogue on facing page)

Gully **G56** contained a mixed pottery assemblage ranging in date from the Late Iron Age to the early Saxon period, but the Saxon pottery is quite substantial in comparison with fragments from other features. Both sherds are from jars; one has a row of pinched rustication on the shoulder (Fig. 6.3, no. 8), which is relatively rare in this area, while the other is highly decorated with a pattern made up of three different stamps — a large wheel, a small 'hot-cross bun' and plain round indentations. A few fragments of animal bone were also recovered from G56, including a neonatal calf, while four animal bones and two fragments of fired clay came from post-hole G86.

#### **IV. Robber trenches and destruction layers**

(Figs 4.4, 5.8 and 6.2-6.4)

Very little of the wall footings for Roman-period buildings G39 and G65 survived: their extent is known primarily from robber trenches **G80** and **G79** respectively. The date of this robbing is unknown since artefact assemblages from the backfill are very likely to be dominated by residual finds. A mid-4th-century *terminus post quem* for the fill of the robber trenches is suggested by two coins, one recovered from each trench. However, the robbing of G65 may have occurred at a much later date, whereas building G39 had probably begun to be robbed several decades earlier during the span of Phase 4.

The pottery assemblage from **G80**, the robber trench of building G39, contains a few sherds of small, undiagnostic Saxon pottery but is dominated by relatively large quantities of Roman shelly ware and Nene Valley and Oxford colour-coated fabrics. This suggests that the foundations had been robbed in the late 3rd or early 4th century — probably to supply stone for repairs or additions to G65 — with the robber trenches becoming infilled, perhaps gradually, with rubbish generated during the 4th and 5th centuries.

The pottery from **G79**, the robber trench of building G65, is similar in character to that of G80 but without any Saxon element. An Oxford colour-coated bowl and shelly wares dated to the late 4th or 5th century are the latest material present. It should be noted, however, that the finds from G79 came almost exclusively from the north-west half of the building, with the robber trenches that removed the walls around Rooms 1-3 (Fig. 4.4) producing no more than a handful of sherds. This suggests that the north-west half of the 4th century, with destruction and robbing of the remainder probably not happening until several centuries later.

Other finds from the robber trenches include a small number of nails, a small mixed assemblage of ceramic building material (mostly from G79), what appears to be a cast copper alloy leatherworking awl from G80 (Fig. 6.4, RA30), and a small quantity of red-washed wall plaster from G79. Both trenches produced small quantities of animal bone. Cattle and sheep/goat were represented in both, along with pig and pigeon in G79. Two fragments of human bone, a left humerus and an ulna, were also found in G80. These might have derived from Roman-period foundation burials that were disturbed during the robbing of building G39.

Layers G74–77 represent material associated with the destruction of the two Roman-period buildings. They contained a large assemblage of ceramic building

material, including the full range of forms and fabrics, but not a great quantity of building stone, which had presumably been removed before the footings. Much more pottery and animal bone was recovered from layers G76 and G77 (Areas 4 and 5 respectively) than from layers G74 and G75, which were more directly associated with building G65. The non-ceramic assemblage shows a similar (though less pronounced) variation, while G76 produced a relatively large quantity of structural ironwork that supports the theory that building G39 had been halftimbered. These contrasts suggest that distinctly different activities were taking place in building G65 and its vicinity than were occurring in the other areas: the possible nature of these activities is discussed later (p.68). A terminus post quem is provided by a coin of Valens (AD 367-375) from G77.

Destruction layer **G75** lay inside the apsidal area of building G65. In addition to large quantities of residual material, a fragment of modern plant pot shows that there was also some intrusive disturbance. The Roman pottery includes a flanged bowl that is typical of the Harrold industry in the late 4th and 5th centuries (Brown 1994, 73), while Nene Valley and Oxford colour-coated fabrics were found in small quantities. Relatively few other finds were found. Apart from a limited range of wall plaster there were nails, a possible chisel and also a possible iron ladle, although the last-named item's poor condition makes certain identification impossible. Cat and goose were both represented within the faunal assemblage.

Layers G74, located outside building G65 within Area 2, produced a similar range of pottery to that from G75 but in slightly greater quantity, with Hadham ware also present alongside a single scrap of Saxon pottery. A coin of Constantius II gives a terminus post quem of AD 330-335 for these deposits. G74 also contained a small assemblage of building fasteners and fittings, including two nails and a small L-shaped wall hook. No furniture survived, but a small cast drop handle with knobbed terminals attests to the presence of a small chest or box (Fig. 6.4, RA33). A moderate quantity of wall plaster mostly bore a red wash, although some surfaces were left untreated and one angled moulding has a white wash on two exposed faces (Fig. 5.8, no. 6). The faunal assemblage is dominated by sheep/goat and cattle, including two bones from neonatal calves, while domestic fowl and pig were also identified.

Destruction layers G76 and G77 were located in the area immediately surrounding building G39 and in the area to the north-west respectively. They contained a similar assemblage of pottery to G74, though in much larger quantities. Later disturbance affected G77 with the result that late medieval and post-medieval pottery was mixed in with earlier material. Both deposits contained Saxon pottery, with a number of single large sherds present. Two vessels from G76, a jar and a bowl (Fig. 6.3, no. 6), have internal black residues with clean exteriors, the result of burning some unknown substance inside the pot. The late Roman pottery includes the usual Nene Valley and Oxford colour-coated wares and a large assemblage of shelly vessels (Fig. 6.2, no. 39). A 4th-century Harrold-type flanged bowl occurs in both deposits, while a strainer/colander and a lid are both in forms that were being made at Harrold in the late 4th century (Brown 1994, 76, fig. 40 nos 364 and 372). Some of the other shell-tempered sherds, despite their large size,

may be residual. One of the shell-tempered basal sherds has a post-firing hole bored through it, possibly for re-use as a spindle whorl, while a smaller hole (5mm in diameter) that was bored through a sherd of Black-Burnished ware could possibly be a repair hole. Nine mortaria were also found in these two destruction levels, six of which are Oxford wares dating to the late 3rd to 4th centuries.

Layers G76 and G77 both produced a range of other artefacts that are not closely datable, with the exception of a coin of Valens (AD 367-375) from G77. Many are clearly residual, including part of a possible cylindrical bottle from G76 that dates to the later 1st to early 2nd century, while two fragments of modern glass in G77 also indicate an intrusive element. Both deposits contained large numbers of nails, in addition to which two doublespiked loops and an L-shaped wall hook were recovered from G76. These may all have served as building fittings within the half-timbered structure G39, while the small quantity of wall plaster from G76 is also likely to have come from this building. Two rectangular-sectioned bars with hooked ends from G77 may have served as pot hooks, but neither is complete enough for firm identification. Other artefacts from G76 and G77 include long-handled tools from the former, such as a straight-sided spatula with conical top (Fig. 6.4, RA39), which could have been used either for surgery or the application of medicines, or other purposes such as the preparation and application of cosmetics (Cool 1998b, 83). Remains of a lead sheet and a rolled lead sheet from G77 possibly represent robbing activity, although the rolled sheet could also have been a weight for a net; another example was recovered from Phase 4 ditch G57. A whetstone made from coarse calcareous sandstone is another indication of trading links with Northamptonshire. A fairly large assemblage of animal bones was also recovered from both sets of deposits. This is dominated by cattle and to a lesser extent sheep, with small numbers of horse, dog and domestic fowl.

An anomaly within the destruction deposits is layer **G73**, which was located within the hypocaust of Rooms 1–3, and in particular Room 1. It accounts for more than 70% of the animal bone from this phase — exceeding in fact the total amount of bone recovered from any other phase — as well as almost 34% of the pottery, by weight. The animal bones, which are better preserved than those from any other deposit at Newnham and were probably deposited within a short period of time, mostly derive from juvenile sheep or goats. It is possible that the assemblage represents the remains of commercial butchery (Chapter 19), which may have taken place after the rest of building G65 had been demolished.

Altogether, 1,317 animal bone fragments were recovered from G73, 792 of which are from sheep/goats. At least fifty-two animals are represented, with the assemblage dominated by fragments of skull, mandible, metacarpal and metatarsal. Many of the bones are complete, but the presence of butchery marks on some of them indicates that at least some of the carcasses were processed. Cattle bones account for a much smaller percentage of the assemblage, though still form a fairly large collection in their own right. Most of these are also from immature animals, with several neonatal calf bones recovered. Neonatal bones are also present among the pig assemblage while two cats were also identified, though horse elements are poorly represented. The largest assemblage of bird bones from the site was also recovered, with domestic fowl, goose, jackdaw, mallard and medium-sized duck all identified.

The large pottery collection from G73 survives in appreciably better condition than the other pottery from this phase, suggesting that, like the animal bones, this assemblage was deposited within a fairly short space of time. Despite having an average sherd weight of nearly 30g, however, more than a third of the assemblage is Late Iron Age or early Roman in date, indicating a significant degree of residuality. The material also includes only one sherd of Saxon pottery, suggesting that G73 accumulated at the very start of the 5th century at the latest. A single coin of Constantinopolis (AD 330–340) is consistent with this.

G73 contained the largest assemblage of ceramic building material at Newnham, giving an idea of the material that had been used in the construction of Roman building G65. Examples of roof tile, flue and brick/floor tiles were found in both shelly and sandy fabrics, including complete examples from the hypocaust pilae measuring approximately 198mm square, the correct size for square tiles of the type known as bessales. All are stabbed on the underside to facilitate drying prior to firing and to help mortar adhere well. Soot-blackening is evident on some of the flue tiles. In addition, nearly 20kg of wall plaster and a single piece of what is thought to be opus signinum were recovered from G73 (Fig. 5.8; Table 6.1), including four of the six types of wall plaster identified at Newnham. Over half of the plaster fragments are finished in a red wash, with a white wash the next most common. Unfortunately it is not known whether this collection came from more than one room. The paucity of any wall-painting might suggest a plain decorative scheme, but the possibility of selective retention of painted designs when the building was robbed should not be overlooked.

A large assemblage of other artefacts associated with internal features of a building also derived from G76. Much of the material resembles the composition of assemblages from earlier phases, including the presence of nails, annular rings, a possible chisel, a blade fragment from a large knife or cleaver, fragments of iron strips and sheet, and sherds of blue-green vessel glass of the 1st to 3rd centuries. There is one sherd of colourless bubbly glass that may date to the 4th century and is the only

Plaster fabric type	Weight (g)	%	Surface treatment
Type 1 (dark pink coarse)	436	2.2	Red wash
Type 2 (light pink coarse)	18,837	94.8	No wash; white wash; red wash, painted (red over white wash); angled moulding no wash (Fig.5.8, no.1); red wash (Fig. 5.8, nos 2–3); plano-convex red wash
Type 3 (buff coarse)	414	2.1	White wash
Type 6 (dark pink fine)	181	0.9	White wash; red wash
Total	19,868	100	

Table 6.1 Plaster from G73 by fabric type

possible example of window glass. This sherd is cast, however — not a method generally thought to be used by Roman window glass makers (Harden 1961, 44–8), which suggests that it may be intrusive. Personal items are limited to a single example of a three-strand cable bracelet (Fig. 6.4, RA26), a style that was in use throughout the Roman period.

# Chapter 7. Unphased – probably Roman

#### I. Overview

Excavation at a settlement that was used as intensively and for as long as the one at Newnham will almost inevitably reveal a number of features that cannot be assigned to a specific phase of the site's development. This was the case at Newnham, where some Roman features or deposits were not closely dated enough by artefactual evidence, physical relationships or stratigraphy to allocate them to a phase. A few more features that were almost certainly Roman have also had to be left unphased due to gaps in the archaeological record. Although the record is commendably coherent given that this was an excavation undertaken over four years in challenging circumstances and with a nascent recording system, some of the features referred to in the written record could not be traced on the plans. Numerous instances occur in the record whereby features were assigned more than one context number, either as the result of duplication or as further excavation of the feature revealed additional deposits. Linking the associated numbers was often not easy even when it was possible, and it is probable that many of the unphased context numbers relate to features that had already been phased, rather than to additional ones. Only the most significant features are described below: two burials (G49 and G82) and corn-drying oven G50.

#### **II. Summary of finds**

Most of the unphased features were a mixture of post-holes, pits and gullies which produced few finds. Although disturbed, these finds, particularly the coins, are of intrinsic interest and are discussed summarily below. No animal bone was recorded.

#### III. Corn-drying oven

(Pl. 7.1; Figs 1.4 and 4.1)

Oven **G50** (Pl. 7.1) was located north-east of building G65, within the area defined by Phase 3 structural gullies G55. The balance of probability suggests that it was associated with building G65, but the stratigraphic evidence is not sufficiently secure to confirm or deny this, while three sherds of undiagnostic shelly ware were the only finds recovered from it.

The oven was 0.85m wide and at least 1.55m long and was lined with slabs of limestone on three sides. The north-east side had no such lining and the burnt red clay that filled the oven petered out on this side, making the feature's overall length uncertain. Various layers of burnt material overlay the clay, with large quantities of charcoal evident.



Plate 7.1 Unphased groups - corn-drying oven G50



Plate 7.2 Unphased groups - Burial 1

## IV. Burials and other human remains

(Pls 7.2 and 7.3; Figs 1.4 and 2.1)

**Burial 1 (G49)** lay near the north-east edge of Area 2, just outside the gully of Phase 1 roundhouse G29. The grave was 0.7m long and 0.45m wide, with the body placed in a slightly flexed position, its head to the east (Pl. 7.2). The body was that of an infant up to four months old, with the skeleton almost complete. The burial contained no finds.

**Burial 2** (G82) lay near the centre of Area 5, just within the north-east end of Phase 1 building G22, and was that of an adult male who was at least 30 years old. The skeleton was again almost complete although no grave cut was visible: the legs were removed by the grave's excavator before it became apparent that they belonged to an articulated burial (Pl. 7.3). The fill around the burial produced sherds of early Roman grey ware, but these are small single sherds and are unlikely to be associated with the burial.

In addition to these burials, a small but nonetheless significant assemblage of scattered human remains was collected from non-funerary contexts. Several individuals are represented but the assemblage is too fragmentary for estimations of sex to be determined. None of the longbone shafts bear evidence for epiphyseal union, and most appear to be infants aged two years and under. Most probably derive from Roman burials disturbed and scattered during the destruction and robbing of the buildings, or during the digging of new ditches and pits.





Plate 7.3 Unphased groups – Burial 2

# **V. Finds** (Figs 7.1 and 7.2)

A mixture of mainly roofing tile, brick/floor and flue tiles, including a flue tile recorded as being almost complete (L215mm; H135mm) was recovered from unphased or unstratified deposits and overburden. Eight Roman coins were found in the overburden (Table 15.9; Chapter 16), which include the earliest coin from Newnham а sestertius of Faustina II (AD 161-180; RA 28) from Area 4, which might perhaps be associated with the occupation of building G39. Only five of the remaining seven coins could be identified with confidence to a ruler's reign or numismatic period-of-issue. These were two Constantinian issues from the 320s to 360s, two Valentinianic coins of the 360s and 370s, and a single Theodosian VICTORIA AVGGG from the very end of the 4th century.

Since items of personal adornment were few and far between within the phased finds assemblage, it is worth noting that a further two bracelets were found within unphased deposits. A second example of a cable bracelet (the first being from Phase 5 destruction deposits G73 within building G52) was found in Area 4, in this instance consisting of two strands (Fig. 7.2, RA41). This bracelet type was in use throughout the Roman period. The second bracelet type, found in the overburden in Area 1, is the only example from Newnham (for illustration see Simco 1984, fig. 35a). It is a multiple unit bracelet with hook and eye closure, an aggrandised version of the light bangle bracelet type (Cool 1993, 89). Multiple unit bracelets were in use throughout the 4th century, but possibly developed during the late 3rd century (Cool 1993, 89).

Five quern fragments found within unphased deposits include a lower quernstone made of Hertfordshire puddingstone (Fig. 7.2, RA306), recovered from the overburden in Area 5. This is the only instance of this stone type at Newnham; examples from other sites range in date from the Late Iron Age to the end of the Roman period, although most are thought to pre-date AD 200



Figure 7.2 Unphased groups: Other Artefacts

- RA306 Quern. Puddingstone, Herts or Chilterns. About half of a lower stone with convex worn grinding surface and half of the central spindle hole which perforates the stone. Estimated diameter 300mm; thickness 58mm. Unphased
- RA41 Bracelet. Copper alloy. Small fragment of two-strand cable, made of twisted circular-sectioned wire. Length c. 15mm; width 3mm; thickness 3mm; wire diameter 1.5mm. Unphased

(King 1986, 71). The dates of stratified examples from other sites suggest that the one from Newnham was associated with occupation in Phase 1, perhaps being used as part of the activities associated with structures G23–25. Three lava querns were also found in unphased deposits, two from Area 5 and one from Area 2. Lava querns were first recorded in phased deposits at Newnham in Phase 3; however, querns only enter the archaeological record after they are broken and therefore it is probable that these imported querns were in use at Newnham during the span of Phases 1 and 2. The examples from Area 5 might therefore have also been associated with Phase 1 structures G23–25, or with the occupation of Phase 2 building G39. The final unphased quern was of millstone grit. This stone type was first discarded at Newnham in Phase 4 deposits in the cobbled area outside building G39. The unphased example was also found in the environs of G39: both examples might therefore reflect grain-processing carried out during Phase 3, perhaps within building G39, following the decline by the 3rd century of the trade in lava querns.

In addition to the three Collyweston slate shingles found within Phase 3 and 4 deposits in Area 2, a fourth example was recovered from the overburden in Area 2. Similar to the nearly complete example from Phase 4, this was presumably also used on or within building G65.
# Chapter 8. Phase 6: post-medieval to modern

### I. Overview

There is little evidence from the excavations for what happened to the site at Newnham after the Saxon period. While no evidence of ridge and furrow cultivation was recorded this is not surprising, given that the priority for the investigation was the Roman remains. However, aerial photographs do record small areas of ridge and furrow earthworks in the area (Fig. 1.4) and field names on the 1843 tithe map of Goldington (BLARS: MAT 17/1) allude to the furlongs of medieval strip field cultivation. The excavation site lay within a field formerly known as 'Middle furlong south of narrow highway' (Fig. 1.5). The riverside meadows would have been used for grazing throughout the medieval and post-medieval periods.

A barn reportedly stood in the approximate location of Roman building G39, probably in the early 20th century, but this is not depicted on any maps seen by the authors. The archaeological record makes virtually no mention of this barn, and its possible location could only be deduced from gaps on the plans, but this building and the activities associated with it are likely to account for the handful of irrefutably modern post-holes encountered across the site, as well as the small number of modern artefacts. A combination of bioturbation and ploughing probably accounts for the remainder of the modern finds collected from archaeological deposits.

Around 1900, the land was in use as a sewage farm (shown on OS mapping of 1901) — *i.e.* the land was fertilised by pumping sewage onto it as a means of disposal. It is interesting that an artificial accumulation of relatively modern soil was observed in the sections of the 1957 trial

trench (Johnston 1959, 16). Initially, night soil and midden muck from Bedford may actually have been carted onto the land, possibly explaining why the material was found so far from modern habitation. Another potential source of early 20th-century artefacts was the 'isolation hospital' located *c*. 150m to the north of the site and/or the 'observation hospital' 400m to the north-east (Chapter 1, Introduction).

### **II. Summary of finds**

Pottery recovered from modern features ranges in date from Late Iron Age through to post-medieval, representing all periods of activity on the site (Table 11.10). The only non-ceramic artefact from these deposits that could be Roman is the lower portion of a circular-sectioned cast pin or needle shank, but a number of other items were found that date to the 17th century or later. These mostly comprise sherds of bottle glass, which, combined with a teaspoon, a spoon handle and two cast-iron pulley wheels from a clothes airer are suggestive of some form of domestic activity. Four post-medieval coins include a Charles I 'rose' farthing (1625–1649) and another farthing of George V (1910–1936). Interestingly, the other two are exotic coins that are rarely found in Britain. RA73 is a most unusual coin or token, heavily worn, which is very similar to coins issued by the church in the Low Countries in the 18th century. Two holes that pierce the coin indicate that it had been used as a decorative element on clothing or jewellery. RA21 is a large module Ottoman 40 para piece struck in Cairo for Sultan Abd al-Aziz in 1870-1. Many Ottoman coins were brought back by soldiers who fought in Turkey, Palestine and Egypt in the First and Second World Wars.



Figure 8.1 Histogram of Phase 6 pottery expressed as a percentage of phase total

# Chapter 9. Discussion

### I. Development of the settlement

The settlement at Newnham probably originated at a time before this part of Bedfordshire came under Roman administration. This surmise is based primarily on the morphology of Phase 1 enclosure G35, whose distinctive shape is similar to that seen on Iron Age sites at Butterfield Green, Luton (Luke and Preece in press) and Bourn Airfield, Cambridgeshire (Abrams and Ingham 2008, 33-5) — the latter bears a particularly strong resemblance. Enclosures of this shape are, of course, not confined to pre-Roman settlements, but this layout does contrast markedly with the predominantly rectangular or rectilinear format of the other Phase 1 enclosures. Unfortunately, the other features that occur early in the stratigraphic sequence produced few finds that are closely datable — the pottery recovered from them is the primary dating tool, but most of this is of a local type that was in use both before and after the Roman conquest. The general absence of distinctively Iron Age material, however, does suggest that the vast majority of the settlement at Newnham originated after the conquest. There is certainly no evidence of significant activity here before the Late Iron Age.

The large rectilinear enclosures in Phase 1, and indeed their successors, generally seem to have respected the NW–SE trackway that was identified from crop-marks to the north of the excavation trenches (Fig. 1.3). Long, straight trackways or drove-ways such as this were a common feature of the Roman rural landscape around Bedford, where there seem not to have been any longdistance metalled roads. One has been suggested from crop-mark evidence running due east from Cople towards Sandy (Simco 1984, 66-7, figs 64 and 66), but this has never been excavated and may simply have been another drove-way. The generally greater size and straighter boundaries of the Phase 1 enclosures than those in later phases suggest that they were created as part of a concerted effort to mark out plots of land. In subsequent phases the enclosures became more organic in form, in some places perpetuating the original layout but in others reshaping it, as the original spatial 'master plan' was adapted to suit the changing needs of the community over more than three centuries.

The evidence for buildings in Phase 1 suggests that all were made of timber. This is typical of rural settlements in the area, although the density of buildings and other structures at Newnham was much higher than that often observed. The existence of roundhouses in Phase 1, and possibly in Phase 2 also, indicates that native traditions continued into the period of Roman administration. This continuation of roundhouse building could perhaps be seen as an expression of native British identity, although it could simply have persisted as a useful method of cheap building using readily available materials. In contrast, the presence of rectangular building G22 early in the settlement's stratigraphic sequence points towards a strong degree of Roman influence not long after the conquest — substantial rectangular buildings are rarely found on Roman rural sites in the Bedford region.

The settlement diverged further from the local norm during the span of Phase 2 (early 2nd-early 3rd centuries). Building G39, possibly a direct replacement for building G22, was built with stone foundations and a cobbled internal floor, plus an external yard surface on its north and west sides. While its status may have remained equally high throughout the settlement's history in relation to the surrounding settlements, its identifiable level of affluence at least increased. G39 was a grander structure than its predecessor, while the hypocaust building G65 that was built during Phase 3 (early 3rd to late 3rd/early 4th centuries) would have been one of the most impressive contemporary buildings in the region. Even so, the absence of mosaics and the paucity of high-status finds suggests that the settlement's occupants did not occupy the highest level of society. It is possible, of course, that the recorded part of the site merely contained the outbuildings of a luxurious villa that was located nearby. No such villa has been identified, however, and it seems unlikely that such a substantial building would have been completely destroyed by quarrying without anyone raising the alarm.

Unfortunately, very little trace of the stone buildings survived. Nothing above the level of the foundations remained, including the suspended floor of the hypocaust, and even the foundations themselves had largely been destroyed. Photographs taken during the excavation do not show a vast amount of building rubble remaining on the site and it is likely that it was extensively robbed in antiquity. This process appears to have begun already by the late Roman period, when rooms 4–7 of building G65 were demolished. Further robbing was probably carried out either by the monks of Newnham Priory or by the builders of the nearby Tudor mansion, although fieldwork on that site has not revealed any identifiably Roman building material (Bedfordshire County Archaeology Service 1991; Oetgen *et al.* in prep).

Rooms 1-3 of building G65 continued in use in the 4th century after the rest of the building had been demolished. The creation of an ash pit within what had previously been Room 4 suggests that the hypocaust remained in use during the span of Phase 4 (late 3rd/4th to late 4th centuries), and possibly into Phase 5 (late 4th centuryearly Saxon period). Recovery of a large volume of animal bone from in amongst the pilae points towards large-scale and fairly specialised butchery of sheep during Phase 5. The precise date of this is uncertain, but the general absence from these deposits of Saxon pottery, which was more widespread across the rest of the site, suggests that it took place at the very end of the Roman period. The suspended floor in Rooms 1–3 may or may not have been intact at this point. If it had been previously used as a bath house, it may have had waterproof floors and drains that were useful to the butchery operation, but the building could by this time have been ruined, and merely a convenient place to dispose of the carcasses.

Post-Roman activity is attested by the presence of Saxon pottery: relatively few sherds were recovered, but they were fairly widespread across the trenches. No new structures could be identified within the recorded part of the settlement, however — even the two Phase 5 features may have been late Roman rather than Saxon — and the nature of any Saxon activity at Newnham consequently cannot be determined.

# II. Economy, industry, trade and external contacts, and status

#### Economy, craft and industry

With the exception of the Phase 3 building G65, at least part of which was probably a bath house, the structural evidence gives no real indication of the use to which any of the buildings were put. The only structure that may have had a purely economic purpose was the corn-drying oven G50, but this cannot be reliably dated and therefore remains unphased (p.57).

#### Animal husbandry

The best evidence for the settlement's economic basis is the network of enclosures and boundary ditches that can be traced using a combination of excavation and crop-mark interpretation. This suggests that the settlement lay throughout its life at the core of a landscape managed for stock-keeping. Other than the corn-drying oven G50, there was no definite evidence for processing associated with arable agriculture, but of course this may have taken place in one of the parts of the settlement that was not investigated.

The animal bone provides abundant evidence that animals were both slaughtered and butchered on site. This seems to have become even more significant during the late Roman period in Phase 5, when part of bath house G65 appears to have been the focus of a specialist processing facility after the remainder had either fallen down or been demolished. Cattle and sheep seem to have been exploited throughout the life of the settlement but the late Roman butchery here concentrated on sheep/goats. A possible cleaver was found in Phase 5 (Chapter 15, RA106).

#### Manufacturing

There is some evidence of pottery manufacture within the settlement or very close by. At least two kiln bars and a possible potter's rib — objects which would not have travelled far from their place of use — were found. Although there is no direct evidence of potting on the site in the form of either kilns or wasters, this is likely to have occurred nearby. Recent fieldwork in the Bedford area has demonstrated that it was not unusual for even quite ordinary farmsteads to have had at least one small kiln, *e.g.* at Biddenham (Luke 2008), the Great Barford Bypass (Timby *et al.* 2007) and Willington Quarry (Oetgen forthcoming).

Previously unidentified mortarium types have been assigned to possibly local manufacture. There is no evidence of a specialised mortarium workshop in the area, however, and these vessels were probably made by generalist potters either producing for the local market or specifically for the home estate. As these mortaria have not been recognised on other sites in the region it is possible that the Newnham estate had a 'standing order' with the potter for these specialist vessels.

The presence of fuel-ash slag in Phases 1 and 2 suggests that some metallurgical processes were being carried out, although on its own it cannot be regarded as clear evidence of this. There is some small evidence for ironworking taking place in the general area but not enough to define it further. Small quantities of ferrous slag were found, including a fragment of smelting tap slag, but the quantity is too small to suggest the location of a furnace.

A number of tools were found, some for general use and others associated with specific crafts such as leatherworking (Chapter 15, awl RA30), but these are too few to suggest a focus on any particularly economic activity.

#### **Trade and external contacts**

#### The monetary economy

Apart from one unstratified late 2nd-century coin, the fourteen Roman coins from Newnham all date from the 4th century. This implies either that those who frequented the site were very careful or that coinage was rarely used on the site prior to the later 4th century. In fact, given that four post-medieval and modern coins were found, the total number of Roman coins seems particularly small. It is not possible to say whether or not this was because the residents had restricted access to currency or whether the activities conducted on the site did not require any use of coinage. Residents may have been low-status workers or even slaves, but that would contrast with the otherwise relatively high status of the buildings recorded here. It is also hard to explain the presence of items such as imported querns and pottery without the process of commerce, perhaps indicating the prevalence of a barter economy.

#### Sourcing of goods

The range of ceramic products found at Newnham indicates the length of trade/exchange routes open to the community. It is clear that most pottery was sourced locally or regionally, although there is pottery present from further afield, including the Continent. The different types of pottery reaching the site through the succeeding phases are summarised graphically in Figures 2.3, 3.2, 4.2, 5.2, 6.1 and 7.1.

The large quantities of grey wares and shelly wares found on the site probably came from the many small pottery workshops that are known to have existed in the area. These produced pottery for the local market, exploiting easy access to the raw materials — clay, water and wood for fuel — that have made Bedfordshire ideal for ceramic manufacture, whether of pottery or building materials, until modern times. Indeed, there is indirect evidence (see above) that Newnham might actually have had its own kiln — or kilns — producing pottery for use within the settlement and probably traded with other communities in the vicinity.

Shelly wares are almost ubiquitous on Late Iron Age and Roman sites in the county. The materials suitable for this type of pottery are to be found in the north of the county and a number of kiln sites have been excavated, among them those at Clapham (Dawson 1988), Harrold (Brown 1994), Stagsden (Dawson 2000), Willington Quarry (Oetgen forthcoming), Biddenham Loop (Luke 2008) and on the line of the Bedford Southern Bypass (Bedfordshire County Archaeology Service 1995). Most are dated to the early Roman period, when there was a large number of small workshops operating throughout the area. Harrold, however, grew in importance and continued as a large manufactory into the 4th century, distributing its products widely.

Only in rare cases is it possible to say which kiln supplied the site. Several small kilns found at Stagsden lie only 8km away from Newnham, and the same distinctive marks found on the bases of some Stagsden products are seen on pottery found at Newnham. Stagsden ceased production at about the same time that Harrold was expanding and in the late Roman period, if not before, most of the shelly pottery used at Newnham is likely to have come from Harrold, whether directly from the kiln site or via the local markets.

Among the known workshops producing grey wares is the kiln site at Elstow (Swan 1994). As part of the early analysis of the Newnham pottery assemblage, a selection of grey wares were compared with similar pottery from the Elstow kilns, at that time the nearest known kilns to Newnham producing this type of pottery. This suggested that the Elstow kilns were not the source of the grey wares, although only a very small sample was compared. Since then more grey ware kilns have been uncovered, among them more kilns at Elstow (Bedfordshire County Archaeology Service 1995), and further work needs to be carried out before the nature of the pottery industry and its markets can be established for this area.

In addition to the shelly pottery, Harrold was producing ceramic building material which was supplied to Newnham. The distance between Newnham and Harrold is less than 15km, with river transport available between the two, and it is likely that the shelly brick/floor tiles and flue tiles for the hypocaust were supplied as a direct order. The source of the sandy roof tiles is not known but is likely to lie outside the immediate area.

Regional imports are predominantly from the Verulamium region, both for the white gritty wares and possibly also the slipped orange wares. These make up most of the white or white-surfaced fabrics R03 and R05 in the early Roman period. Small quantities of the widely traded wares from Oxfordshire and the Nene Valley were reaching the site from the 2nd century onwards but it is not until the 4th century that these were present in significant amounts.

In the later Roman period Oxford wares were important, including mortaria from the Oxford workshops, which dominate the pottery collections from this site and the region more generally from the late 2nd century well into the 4th century. Of smaller significance is the presence of Hadham ware from the Hertfordshire production site at Much Hadham. This type occurs regularly but in small quantities on most Roman sites in the region, particularly in the 4th century but possibly also into the 5th century. In the 4th and early 5th centuries at Newnham, the pottery being used predominantly comprised shelly wares from Harrold, grey wares from local sources as well as from the Nene Valley, colourcoated wares from the Nene Valley and especially from Oxford as well as a small quantity of oxidised wares from Hadham.

There appear to be no mortaria from the Nene Valley at Newnham although grey wares and colour-coated wares from there are present. The pattern of contacts and marketing appears to be different for mortaria than for other pottery, with largely local products used in the early Roman period and Oxford and Mancetter-Hartshill predominating in the later phases (Chapter 13). Elsewhere in the area Nene Valley mortaria are as common as the Oxford vessels, if not more so.

Evidence of repair on pottery, in the form of repair holes, suggests that large numbers of vessels were not stocked and that new supplies were not always easily available. The repair holes seen on a vessel of black burnished fabric R07A might suggest that this type of pottery was marketed centrally, rather than being made locally for the community, and was therefore not regularly available to the people at Newnham. However, even the local coarse wares such as the shelly fabric R13 showed signs of repair, implying some difficulty in acquiring even these vessels. The worn interior of a mortarium from Mancetter-Hartshill indicates heavy and prolonged usage — and possibly difficulty in finding a replacement.

Stone is another commodity which was traded from within the region and from the Continent. Limestone for building is available from the north Bedfordshire/east Northamptonshire area and there is at least one stone roof tile in Collyweston slate, from north Northamptonshire. Whetstones from the area between Blisworth and Kettering also reached the site.

The earliest instance on the site of the use of Niedermendig lava querns was in Phase 3 (Chapter 15), although these querns were imported from the Mayen-Eifel region of Germany from the Conquest period onward. Further fragments also occurred in Phase 4 deposits. This trade declined by the 3rd century, to be replaced by material in Pennine millstone grit. The fragments found in Phase 4 are possibly from Derbyshire and would point either to changes in site contacts or a change in supply.

#### Status and Continental imports

Personal items are relatively few in number, of common types and not indicative of any particularly high status. Aspirations to a Romanised way of life, however, can be seen particularly in changes to ways of cooking and eating. Fragments of amphora were found but the sherds themselves and any records that were made are missing from the archive. Mortaria, on the other hand, were used more widely and one from Mancetter-Hartshill, in particular, was well-worn through use.

The local shelly ware fabric R13 was used for cooking and storage vessels such as jars. The grey wares, on the other hand, although also used as kitchen wares, were used primarily for food preparation and serving. A comparison with the pottery from Odell confirms a difference in the function and status of the sites (Dix, no date). Odell had fewer imported wares and a higher proportion of local shelly wares throughout its life, while the proportion of grey wares was greater at Newnham than at Odell. Dix suggested that this was an indicator of the relatively low status of Odell.

The finewares from Newnham show no signs of sooting or wear and were used solely for table wares. A number of these finewares are relatively rare in the area. A single vessel in lead-glazed fabric R32A was found — only small quantities are known in the area, particularly from towns such as Sandy and Dunstable, perhaps

because only a small proportion of the population were wealthy enough to afford this kind of display. Mica-gilded fabric R02 is more common locally, but is still not found in large quantities. At least seven vessels were found at Newnham. Imported colour-coated beakers R38 are equally sparse in the area, although nineteen were found. Among these are rough-cast beakers, possibly imported from the Lower Rhineland although similar beakers were also made in the Nene Valley.

Samian ware was available at Newnham throughout the 2nd and into the 3rd centuries. The bulk of the samian is Antonine in date but most of the decorated wares are South Gaulish in origin. This might indicate higher social connections. Also unusual is the high number of bowls of form 30 (five, of which four are from South Gaul) in comparison with the very much commoner form 37 (eight in total). The material as a whole suggests that the period of maximum import is likely to have been around the middle of the 2nd century, probably coinciding with construction of the first stone-founded building G39.

These signs of aspiration to a Romanised life-style may also be seen from the presence of glass on the site, although vessels such as the prismatic bottles are also relatively common on lower-status farmsteads. One item that does indicate high status, however, is the seal-box base (Chapter 15, RA6). Seal boxes were used to protect the wax seals on important packages, but whether this belonged to a resident or to a visitor is uncertain.

### **III. Religion and ritual practices**

Religion and ritual would have been a significant part of everyday life, although it is not clearly visible in the material culture of the site. Despite this, however, a few insights can still be gained into the practices and beliefs of Newnham's inhabitants.

Evidence for ritual or religious activities associated with the treatment of the dead is poor. Only three intact burials were found. These were an almost complete neonate burial from Phase 3 occupation deposits G64 beneath the bath house and two others which could not be dated, one of an infant and the other of an adult male. In addition to these burials, a small but nonetheless significant assemblage of scattered human remains was collected from pits, ditches, occupation deposits and the robber trench of building G39. The most likely explanation of these finds is that they derive from Roman burials disturbed during the destruction and robbing of the buildings or subsequent cultivation of the site.

A triple vase was recovered from the fill of a ditch in Phase 4. This is a rare find in the Bedford area, although another example from the county has recently been excavated at Marston Park, Marston Moretaine (Luke and Barker forthcoming) and four were found at Leagrave Marsh, near Luton, in the 1950s (Luton Mus acc. nos 1/32/54; 2/32/54; 3/32/54; 4/32/54). Activity at Leagrave Marsh ended in the early Roman period around AD 80. Elsewhere, however, these vessels have been dated to the late Roman period: ones in the Ashmolean Museum, for example, are dated to the 4th century (Ashm. Mus. 1934.105). The form appears to have continued in use throughout the Roman period, albeit in different fabrics. The function of these vessels is unknown but their presence on cemetery and temple sites suggests that they were used in ritual activity. The contexts of all the Bedfordshire vessels have been very close to water — the River Lea in the case of the Leagrave Marsh vessels, the Elstow Brook in the case of Marston Park and the River Great Ouse in the case of Newnham. The hollow forms of the vessels suggest association with water and it is possible that they were used in some form of riverine ritual activity (Tim Vickers, pers. comm.). They may have been multi-purpose ritual vases which could equally have been used in the worship of household gods or in rituals conducted at a domestic shrine.

Evidence of superstitious behaviour can be inferred from artefacts of a more personal nature. For example, a boar's tusk amulet was found in the fill of Phase 2 drove-way ditches G20. This is a common use of pig's teeth, and especially boars' tusks, particularly in the late Roman period (MacGregor 1985, 109). The two pottery fragments from bases with potter's marks on them (Fig. 3.4, nos 18–19) might also have been kept as charms, but they may equally well have been collected as curiosities, perhaps by children. The marks were made centrally and only the central portions of the bases survive, although of course the vessels may have broken accidentally along these lines.

A possible instance of ritual deposition of ceramics in the form of fired clay objects can be suggested from building G22 (Phase 1), two of whose constituent post-holes contained fired clay objects. One contained daub, presumably derived from a previous structure that had burnt down, while the other contained a loom weight and fragments of fired-clay slabs. Although these objects could have been used to prop up unstable or rotting posts, they would not have been very effective. The apparent sorting of objects is unlikely to have occurred by chance and could therefore be interpreted as evidence of deliberate deposition with some ritual significance, possibly associated with the function of the building. The placing of objects or fragments of objects within buildings, particularly around doorways, has been recognised as a ritual activity in the Iron Age (Hill 1995, 21; Slowikowski 2005, 115). Although it is not possible to interpret the meaning behind these deposits it does suggest the continuity of this particular Iron Age ritual practice into the Roman period, even in conjunction with a Romanised building style such as that of G22. It is perhaps significant that although a large assemblage of pottery was recovered from the post-holes of building G22, none appears to have been placed in any 'special' deposit, although this has been recognised as a common feature of the Late Iron Age (Hill 1995).

# IV. Newnham's status and its place in the local Roman landscape

In contrast with many parts of the country, comparatively little synthetic analysis has been carried out of the Roman landscape in the Bedford region, although Meade's recent work on identities in the Middle and Upper Great Ouse valleys has helped to redress this imbalance (Meade 2010). Simco's survey of 1984 remains a useful, though now somewhat dated, guide to the county's Roman heritage, while a brief resource assessment for Roman archaeological remains in Bedfordshire (Dawson 2007) and an overview of the Great Ouse valley as a whole (Dawson 2000) have been published in more recent times. However, the wealth of development-led archaeology carried out in the last two decades, particularly around Bedford itself, largely remains to be integrated into a composite picture. This lack of a detailed overview makes it more difficult to appreciate how Newnham fitted into the Roman landscape around Bedford. The task is further complicated by questions over the validity of the hierarchical model suggested by Dawson (2007, 73–4), and by uncertainty about the nature of the settlement at Newnham itself.

Dawson suggests a four-level rural structural hierarchy for Roman Bedfordshire that was dominated by substantial farms or 'villas', which he describes as occurring in two areas - upstream of Tempsford along the Great Ouse valley, where Newnham lies, and in an approximate north-east to south-west line from Eyeworth to Totternhoe (Dawson 2007, 73-4). Below this top level lies the gridded, possibly planned settlement at Kempston (Dawson 2004) — probably the only example of its type in the county, although paralleled elsewhere. The next rung down, Dawson argues, was occupied by settlements comprising linear series of enclosures, with single farmsteads at the bottom of the hierarchy. While such a hierarchy is plausible for other parts of the country, and perhaps for Bedfordshire's periphery — in particular the southern part of the county in the vicinity of Watling Street its application to the area around Bedford is questionable, since it begs the question of whether there actually were any villas there to occupy the 'top level'.

Meade's study of the Bedford region concludes that no villas can be positively identified there (Meade 2010, 47). Totternhoe is the only villa in the county of Bedfordshire that can be identified with certainty, as the result of substantive archaeological excavation (Matthews et al. 1992); the other sites listed by Dawson as villas depend upon the evidence of crop-marks, fieldwalking, and excavations that suggest the presence of a high-status building nearby. Simco's earlier survey is more equivocal, and lists some of Dawson's examples as only 'possible villas' (Simco 1984, figs 69-76). While these sites clearly seem to have contained high-status Roman buildings, it has yet to be proved that they constituted extensive villa-type buildings of the sort that traditionally formed the centre of large, wealthy agricultural estates. The details in Simco's gazetteer make it clear that some of the 'villa' designations are based on very little evidence, of the sort that may relate to structures no more substantial than the aisled building at Shefford (Luke et al. 2010). In view of the number of villas that are known along the upper reaches of the Great Ouse and particularly in neighbouring areas such as the Nene Valley, the continued failure to find anything in the Bedford region - either through excavation, geophysical survey or aerial photography --- that can unequivocally be called a Roman villa does make one wonder whether there are any there to be found.

Newnham was originally classified as a villa, although Simco herself generally referred to it only as a possible villa. This classification was made at a time when studies of the Roman rural landscape were less advanced than they are now and when any rural stone building, especially a probable bath house such as building G65, was often assumed to be part of a villa unless there was positive evidence to the contrary. Now, however, Newnham's classification even as a possible villa no longer seems tenable. Aside from the absence of any sufficiently

high-status buildings other than G65, the finds assemblage lacks the opulence that would be expected from a villa in the south of Britain. Equally, however, the settlement was clearly not one of the low-status farmsteads that are so common to this area, exceeding the status of even the larger ones around Bedford such as Eastcotts (Dawson 2000, 123-4; Bedfordshire County Archaeology Service 1995), Norse Road (Edgeworth 2001), Marsh Leys Farm, Kempston (Luke and Preece 2011), Water End East, Great Barford (Timby et al. 2007) and Willington Quarry (Oetgen forthcoming). Although Newnham was a relatively poor settlement when compared with villas such as Totternhoe or those of the Nene Valley, it was still an exceptional one for this area. Stone was seldom used as a building material in Bedfordshire, despite a reasonably abundant local supply, and elsewhere in the Bedford area the presence of stone wall foundations and extensive cobbled areas dating to the Roman period is restricted almost exclusively to Kempston. Timber and clay, of course, may have been used for high-status buildings as well as the lesser ones that are more common to Roman Bedfordshire, and are less easy to detect than stone in the archaeological record. However, the use of stone as a building material does seem to have been restricted to higher-status sites such as Kempston, Totternhoe villa and the town at Sandy, and its extensive use at Newnham does suggest relatively high status. It may be the case that the conjectured 'villa' sites such as Newnham at the top of Dawson's hierarchy do form a typologically distinct group, but with status only equal, or perhaps slightly inferior to that of Kempston.

Although the settlement at Newnham was relatively opulent for this part of Bedfordshire from at least the mid-2nd century onwards, when building G39 and its surrounding cobbled surfaces were constructed, its initial character is more difficult to determine. Part of the problem lies in the rushed and limited nature of the excavations that were carried out in the 1970s. The full extent of the settlement is unknown, while the extensive robbing of the structures has contributed to a somewhat piecemeal picture of the establishment. Crop-mark evidence indicates that only a very small part of the overall site was examined, making it impossible to tell how extensive the settlement was at its inception. Continued re-use of the site over a period of c. 400 years has made even the excavated area difficult to interpret due to the truncation of earlier features, the persistence of features across phases, and a significant degree of residuality amongst the finds assemblage.

The finds assemblage from the 1st-century settlement at Newnham is fairly typical of those recovered from low-status farmsteads in the area. A relatively large amount of typologically Late Iron Age pottery was recovered, but native ceramic traditions in this region are known often to have continued into the early 2nd century, making it impossible to know for certain whether the site represents the continuation of a native settlement into the Roman period or the establishment of a new one. Analysis of the building styles offers no assistance — at least two roundhouses were present, and further examples are suggested by crop-marks, yet the construction of roundhouses continued on some sites throughout the Roman period (Upex 2008, 117-18). The finds assemblage does at least indicate a certain measure of prosperity by the second half of the 1st century AD, with evidence that the occupants were able to afford imported glassware, fine table-wares in grog-tempered fabrics, and, as soon as they became available, Romanised wares including samian dishes, lead-glazed pottery and continental colour-coat beakers.

An early military presence at Newnham might be inferred from the singular evidence of a copper-alloy studded ring (p.19 and Fig. 2.6, RA 60), thought to have acted as a fastener on a soldier's satchel. As these rings are more normally found in military settings, it is possible that the site began as a veteran settlement; a similar theory was proposed for Kempston (Dawson 2004), although Meade is sceptical (Meade 2010, 39). The recovery of a single military artefact is rather insubstantial evidence for this a soldier's bag would have been a useful item with many potential uses in civilian life and could simply have arrived on site through trade or exchange — yet it would tally with the indications of early Roman influence provided by the presence of a substantial rectangular building (G22) in the 1st century AD.

The settlement's status, or at least its affluence, appears to have increased from the middle of the 2nd century, when building G39 was constructed and the first layer of cobbles was put down. Even though the finds assemblage from Phase 2 is relatively poor, much of the material deposited in Phase 3 is likely to represent continued use from the earlier period, or to have been residual. The Phase 2 deposits do, however, provide the earliest examples of mortaria at Newnham, which, along with the imported wares, indicate the adoption of a truly Romanised lifestyle. The bulk of the samian is Antonine in date (see Chapter 12), and the number of regional and continental imports is highest in the Phase 3 deposits. Interestingly, most of the decorated samian is South Gaulish. This may reflect the greater availability of decorated ware in the late 1st to early 2nd centuries, or may show that the area had better social connections at this time. Other finewares, such as the lead-glazed ware and mica-gilded ware, are also of this date. They are relatively rare in the Bedford region and usually only occur as single vessels on rural sites. Imported colourcoated and rough-cast beakers are equally sparse in the area but at least nineteen were found at Newnham.

Intriguingly, the greatest evidence of wealth attested by the finds assemblage comes from the end of Phase 2 and the earlier part of Phase 3, prior to the construction of building G65. Although G65 clearly represents the greatest display of opulence from within the excavated area, this suggests that a building of at least equal status preceded it. This theory is supported by the recovery of a seal box from deposits underlying G65, while security measures are evidenced by the remains of a key. Both of these suggest the residence here of someone of relatively high status, perhaps an administrator. From the excavated evidence, the most likely candidate for this earlier building is G39, which may itself have been a direct replacement for the Phase 1 building G22. The volume of ceramic building material recovered from features that went out of use prior to the construction of G65 certainly suggests the presence of another high-status building. Little ceramic building material was recovered from the vicinity of G39, however, and the possibility must be considered that further substantial buildings lay within the unrecorded part of the site. Building G39 was so heavily robbed in Roman or immediately post-Roman times that

its status and function are purely conjectural, with no more than its plan surviving. It was large enough to have served as a principal domestic residence, with at least three rooms, yet it may equally have had an agricultural purpose.

The layout of building G65 strongly suggests that it was a bath house, which is the interpretation originally offered by Simco. It is perhaps surprising that there were no remains of bath flasks or toiletry items to support this: the two toiletry items recovered — a spatula and a pair of possible toothpicks/nail cleaners --- were found in closer proximity to building G39. However, this may be due to the building's extensive robbing, combined with its apparent change of function towards the end of the Roman period, when it seems to have been used for the large-scale processing of sheep carcasses (see below). Nielsen (1990, I, 142–4) also comments that it was customary, at public baths at least, for bathing items such as strigils and oil flasks to be brought along by the bathers; if their domestic quarters lay beyond the area of the excavation trenches at Newnham, then such items (which may also have been made from organic materials that would not have survived) are more likely to have been left there. No plunge pool was clearly identified, but such a feature was not a fundamental element of a bath suite. It is also possible that a cold plunge pool may have been located in the apse of Room 4 — semi-circular plunge baths were a relatively common feature of bath houses in Roman Britain (Burgers 2001, 69-82). The site records and photographs give no indication of this, but one of Simco's published drawings (1984, 27 fig. 14) shows the apse separated from the rest of Room 4 by a wall; maybe something was spotted here during excavation which there was no time to investigate further. This could also explain why no drain was located, since it may well have lain beneath the baulk to the south of the apse.

Despite the settlement's relative prosperity, the general impression gained from the overall finds assemblages for the 2nd to 4th centuries is one of a well-off, but not affluent, working estate. Resources were available to afford imported goods such as glass, stone shingles and quern stones, as well as plastered walls, yet the virtual absence of coinage pre-dating the 4th century suggests that any economic activity on the site was not monetised, restricted instead to bartering and the payment of taxes in kind, unless the site focussed on activities such as storage and production, with the exchange of goods being conducted elsewhere. Whilst the wall plaster indicates some degree of prosperity, it does not indicate opulence on the scale of Gorhambury (Neal, Wardle and Hunn 1990) or Gadebridge (Neal 1974), for example. This further supports the identification of building G65 as a bath house: the expense and effort of running a hypocaust would surely have been an unnecessary luxury in ordinary domestic quarters.

The faunal assemblage (Chapter 19) tentatively supports other impressions of the settlement's relative level of prosperity and status. In a wide-ranging survey of bone assemblages from the Roman Empire, King (1999) included ninety samples from Romano-British villas. Although there is a lot of variation between these assemblages, the average percentage of cattle from these sites was 56% of the total, with sheep/goat at 30% and pig at 15%. Excluding the bones from the Phase 5 deposit G73, which relate to the large-scale, presumably commercial processing of sheep, Newnham produced percentages of 52% cattle, 39% sheep/goat and 9% pig from Phases 2-4. Therefore, sheep are rather better represented than they tend to be in villa assemblages, and pigs less so. High percentages of pig are often associated with high-status sites in historic periods, and pigs tend to be better represented on more 'Romanised' sites (King 1999). Although they are still poorly represented, it should be noted that there are slightly higher percentages of pigs from Newnham than from most of the other Roman settlements in the region, suggesting at least that the settlement at Newnham had higher status than its neighbours. The way in which animals were butchered is also suggestive of a higher-status site: some of the pig jaws had been split open in a manner found frequently in assemblages from Roman towns, showing a degree of Roman influence on methods of carcass-processing. Distinctive blade marks associated with filleting were found on a range of cattle bones, particularly scapulae, although it is possible that some of these bones are from preserved joints prepared elsewhere by specialist butchers and imported to the settlement.

In contrast, however, the faunal diversity is much lower than would be expected from a villa site, with the range in meat diet being little greater than on contemporary low-status farmsteads around Bedford. There is very little evidence that game provided much of the meat diet — a single bone of hare is the only definite example — and there is no evidence that fish were eaten. Similarly, only a small number of wild bird bones are represented. The mallard and goose bones could represent birds kept in captivity, as could one of the pigeon bones, though the jackdaw bones are probably from a bird resident around the abandoned buildings. The presence of mute swan is fairly unusual, but even if this bird was eaten, dietary diversity is still low.

Despite the evident expenditure of resources in constructing building G65, much of it seems to have been demolished or at least allowed to fall into disrepair at some point in the mid-4th century, with the remainder converted perhaps after a short further period of domestic use into a facility for processing sheep carcasses. Phase 4 water pit G52, which presumably supplied the building, was filled in with a large amount of debris at the end of its life, including over 10kg of wall plaster, more than 5kg of pottery and 363 fragments of ceramic building material. Furthermore, the recovery of large amounts of animal bone from the flue spaces in the hypocaust indicates that its suspended floor was at least partially removed around this time. This would ordinarily suggest abandonment, although in this instance a change of use is more likely: the animal bone represents waste from the large-scale processing of sheep carcasses, which may indicate that a commercial butchery operation was set up at Newnham for the supply of lamb or wool to other settlements. Earlier assemblages from Newnham also contained relatively high percentages of juvenile lambs, although older animals are commonly represented too. This suggests that Newnham was still an important settlement in local terms at the very end of the Roman period, or possibly even in the following decades; a small quantity of stamped pots and organic-tempered sherds can be dated to the early Saxon period. There is no indication that the settlement continued in use beyond the 5th or 6th centuries however - the subsequent establishment of Newnham Priory to

the west is more likely to represent the re-use of a favourable location during the medieval period, rather than reflecting the influence of an existing settlement nearby.

Newnham can thus be seen to have held unusually high status for a settlement in the Bedford region throughout the Roman period. Even though the finds assemblages do not betray a significantly greater degree of portable wealth than those from many of the contemporary farmsteads nearby, the buildings and extensive cobbled surfaces are striking, while much of the settlement's wealth may well have been invested in its livestock. Although clearly inferior in quality to villas such as Totternhoe to the south (Matthews et al. 1992) and those of the Nene Valley to the west — being more comparable with the barns and other ancillary buildings that occupy the outer areas of villa buildings G39 and especially G65 were estates significantly superior to the vast majority of Roman buildings known in the Bedford region. Even the timber Phase 1 building G22 would have stood out on most known sites.

The apparent combination of high status but relatively low affluence poses the question of what the site was, and thereby how it related to the surrounding area. The construction of building G65 around the end of the 3rd century could be viewed simply as a display of wealth by an estate owner who was becoming more affluent, or who perhaps decided to build a bath house for his workers as a display of public munificence. However, the site seems to have had higher status than the surrounding farmsteads throughout the Roman period, and to have at least partially adopted Roman building styles in the 1st century with the construction of building G22. This may support the theory that the land was allocated to someone of continental origin as a veteran settlement, perhaps not long after the Roman conquest. Such a person may have pursued a Romanised lifestyle for himself while allowing local workers on the estate to continue with their native traditions.

An alternative explanation for the apparent contrast between the wealth and status of the buildings, and the relative poverty of the finds assemblages recovered from them, is that the site at Newnham was not self-sufficient, instead being part of an estate whose owner resided elsewhere. The fact that much of the overall settlement was not subject to archaeological recording makes it possible that the main residential area simply lay in another part of the site. However, no evidence of such a settlement core is visible from aerial photographs, which suggest that the excavated area occupied the central part of the settlement, and no observations were made of further substantial buildings during quarrying. Newnham may therefore have been an agricultural estate centre owned by someone who lived at Kempston, which was the nearest large settlement, or perhaps the small town at Sandy. It might have been run on a daily basis by a bailiff who lived on site, and whose personal wealth was greater than average but not comparable with that of the estate's owner. Newnham may even have been part of a publicly-owned estate. The land on either side of the Great Ouse valley in the Bedford region seems not to have been as densely populated in the late Iron Age as the surrounding areas, perhaps through its marginal presence in terms of Iron Age tribal boundaries, and may thus have been acquired by the Roman state with relatively little objection in order

to distribute it to veterans. There is no conclusive evidence to support this, of course, nor even to prove that Newnham was not self-sufficient. However, if Newnham was an administrative centre for a large estate, it would have held considerable status within the surrounding area.

### V. Newnham in the Saxon period

The evidence for a Saxon presence at Newnham comes largely from the ceramics (Chapter 11). The remains of more than seventy vessels were recovered, although the majority are represented only by single small sherds. This pottery was compared with the Saxon assemblage from Bedford, less than 3km away, to determine whether there were any links.

Although scatters of Roman and Saxon pottery have been found throughout the town, the greatest concentration so far has come from the site of Bedford Castle (Baker and Hassall 1979, 148–59; Wells 2009). Whilst the difficulty of dating plain wares is acknowledged, the assemblage from there has been dated to the early part of the Middle Saxon period. The Bedford Castle collection also includes identifiable Middle Saxon pottery, such as Maxey and Ipswich wares, that was not found at Newnham. The characteristics of the Newnham pottery — the presence of stamped decoration, the facetted carination, the small quantity of organic-tempered wares and the absence of diagnostic Middle Saxon pottery — point to a date in the 5th century AD.

Both sites featured sandy fabric A06 and sand-andcalcareous fabric A04, but these were probably locally made (Williams 1979, 152). The sources for the pottery were the same but not necessarily exploited at the same time. In all likelihood, occupation of the Roman site at Newnham had ceased by the time that a settlement on the castle site at Bedford was being established. When Newnham Priory was founded in 1165 the monks may therefore have had no idea that a settlement had once existed so close by, unless they were in fact the ones responsible for robbing the Roman bath house.

### **VI. Concluding remarks**

The principal aim of this project was to realise the research and public potential of the archive generated by gravel extraction at Newnham, by analysing and publishing the results of excavations carried out there during the 1970s. This publication restores a degree of significance to an important archaeological site that for many years has only 'existed' as a dot on the Bedford HER and an unsynthesised excavation archive deposited in the museum vaults. Publishing and summarising the evidence and reinterpreting it in the light of current knowledge gives the site its due prominence in the archaeological literature for Bedfordshire.

Analysis has demonstrated that the excavations uncovered the core of a large, fairly high-status agricultural estate. Its increasing affluence allowed the construction of a bath house around the end of the 3rd century, but this is more likely to have been a facility for estate workers than the private bath suite of a villa — no evidence exists to suggest the presence of any additional buildings with a sufficient degree of opulence to class them as a 'villa'.

The origins of settlement at Newnham can probably be traced to the period just before the Roman conquest but the vast majority of the excavated remains date to the Roman period. Crop-marks to the west and north of the excavation trenches show that the overall settlement was much more extensive and may have had a greater Late Iron Age presence than that noted during the project, but none of the crop-marks is conclusively indicative of pre-Roman activity.

Signs of Roman architectural influence date back as far as the 1st century AD, with the construction of a rectangular timber building. Its affluence increased throughout the 2nd and 3rd centuries, with the construction of a second rectangular building, this time with stone foundations, and subsequently of a bath house. Small-scale industrial activities such as metalworking and pottery manufacture were probably carried out nearby but the economic focus of the settlement was agriculture, ostensibly of the pastoral variety. The site was at its peak in the late Roman period, when the bath house was built; at this time, the excavated part of the settlement may thus have become associated with leisure activities as well as those that were purely domestic or agricultural. Decline came at the end of the Roman period, although only after the bath house was altered to accommodate a substantial industry associated with butchering or otherwise processing sheep carcasses. There is no structural evidence to suggest that settlement carried on into the Saxon period to any substantial degree, but the presence of a moderate quantity of Saxon pottery indicates that it was not simply abandoned at the end of the Roman period. The pottery indicates that activity had ceased by the end of the 6th century, however, suggesting that there was no longer a settlement at Newnham by the time that Bedford Castle was established.

# **Appendix: Pottery quantification tables**

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These tables are reproduced from Chapter 11 (on CD)

CTS fab code	NWM fab codes	Fabric definition	Sherds	Wt (g)
Late Bronze Age/Ea	rly Iron Age (total:1sherd, 15g)			
F01A	NB01	Coarse flint	1	15
Late Iron Age/Early	Roman ('Belgic' tradition) (total: 2079 sherds, 45791g)			
F05	B01; B02/03.1; B02/03.2; B03.1/2; B11; B21; B22; B31;	Grog/shell	349	5238
	B31/2; B32; H111; H112; H121; H222		01	700
F06A	A01 A01/02: A02: A02/02	Grog fine	91	192
FUGB	A01/02; A02; A02/03	Grog medium	313	4/54
F00C	AU5 H: NA01: NA02: NA07: NA11: NA14: NA16: NA17:	Shally	37 740	925
F07	NA18. NA23	Sherry	/40	19919
F08	C11: C12: C21: C22: H02: H212: H221: NA03	Shell/grog	102	2444
F09	B02; D01; D01/02; D02; D02/03; D03; D12; D21; D22; J21	Sand/grog	212	4772
F23	H321; NA13	Grog/shell/sand	104	2214
F24	NA08; NA09; NA12	Buff shelly	119	3983
F30	H211	Sand/calc	5	550
F34	D31	Belgic sandy	7	200
Roman (total:5380 s	herds, 70693g)			
R	MISC; NAX; NX; X	Misc Roman	8	37
R01A	CG	Samian central Gaul	158	0
R01B	SG	Samian southern Gaul	43	0
R01C	EG	Samian eastern Gaul	9	0
R02	MICA	Mica gilded	9	205
R03A	K01/02; K01/02W; K01/03; K02	Fine white ware (VRW)	36	312
R03B	G/K02W; K01W; K02/03W; K02A; K02W; K02W/A;	Gritty white ware (VRW)	84	1195
	K03; K03W; N25; NB08			
R03C	GW; NA28	Smooth white ware	4	30
R03D	misc	White ware with fine shell	40	930
R05A	K01	Orange sandy	55	417
R05B	NBII	Fine orange	5	40
RUSD	NB11	Orange sandy – white slipped	10	2012
R06A	NUI; N35	Grey ware – Nene Valley	1/9	3012
R06B	N14; N15; N10;	Grey ware – coarse	362	3240
RUOC	N00; N08; N09; N10; N11; N13; N19; N23	Grey ware – nne	1300	10435
R00D R06E	N20 111: N05: N18: N32: N33: N34: N36	Grey ware _ calc	173	2207
R06G	N07· N21	Grey ware – cale	6	53
R06H	N29	Grey ware – white slipped	39	250
R06J	N03	Grey ware – black core	277	2881
R06K	N04: N26: NB16	Grey ware – glauconite	83	1176
R07A	BB1: BB1/2: N12	Black burnished BB1	66	699
R07B	N17: N20	Black ware – sandy	113	1476
R07F	N27	Black ware – silty	23	211
R07G	BB2	Black burnished BB2	32	535
R08	N02	Black micaceous	200	2421
R10B	misc	Fine buff	1	49
R11	misc	Oxford oxidised ware	1	5
R11D	OXCC	Oxford colour coat	202	3060
R12B	NVCC	Nene Valley colour coat	280	3041
R13	J22; NA04; NA05; NA06; NA10; NA15; NA19; NA20; NA21: NA22	Shelly	1265	25927
R14	N31; NB09; NB12	Red-brown harsh	32	398
R18A	N24; N30	Pink gritty (VRW)	33	582
R18B	G; G01; NB07	Pink fine	37	429
R22A	Recorded as OXCC	Hadham oxidised	26	663
R26	TN	Terra Nigra	7	50
R28	J31	Gritty calcareous	2	20
R32A	GR GL	Lead glazed	1	0
R36	misc	Orange gritty	1	25
R38	CCX	Colour coat - source unknown	21	151
1		Mortarium – local?	1	75

CTS fab code	NWM fab codes	Fabric definition	Sherds	Wt (g)
2		Mortarium – Oxford white	39	1175
3		Mortarium – Oxford white-slipped	1	20
4		Mortarium - Oxford red-slipped	2	40
5		Mortarium – Mancetter-Hartshill	8	330
6		Mortarium – local?	1	70
7		Mortarium – local?	1	30
8		Mortarium – local?	1	30
9		Mortarium - red-slipped	2	45
		(Verulamium?)		
10		Mortarium – local?	2	940
11		Mortarium – local?	3	1255
Anglo-Saxon (total	l:96 sherds, 1203g)			
A01	NB13	Organic	3	63
A04	NB02; NB14; NB15	Sand and calcareous	61	442
A06	NB06; NB17	Sandy	18	310
A06 fine	NB04; NB18	Fine sandy	3	11
A16	NB03	Coarse sandy	1	162
A23	NB05	Sandstone	10	215
Medieval (total:15	sherds, 402g)			
B09		Lyveden/Stanion	2	19
C09		Brill/Boarstall	3	28
E02		Late Medieval Oxidised	10	355
Post-medieval and	Modern (total:75 sherds, 546g)			
P14		Black ware	2	21
P25		Frechen	3	45
P32		Staffs Refined Redware	4	60
P33		Tin glazed	1	3
P36A		Nottingham stoneware	2	14
P39		Mocha	1	36
P43		Pearlware	5	8
P48		English stoneware	4	38
P55		White earthenware	19	81
MOD		Modern	34	240

Table 11.1 Pottery fabric totals and definitions

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Fabric	Fabric definition	1	2	3	4	5	6	Unphased /topsoil/ unstrat
F01B	Fine flint		1:15					unstrat
F05	Grog/shell	183:2487	58:1145	54:832	23:372	10:53		21:349
F06A	Grog fine	36:269	27:305	8:30	8:85	2:10		10:93
F06B	Grog medium	78:1716	82:1171	101:1114	23:382	8:80	1:5	20:286
F06C	Grog coarse	6:212	10:360	8:175	8:111	2:20		3:47
F07	Shelly	160:7716	81:1441	132:2456	128:3831	128:2063	4:45	105:2354
F08	Shell/grog	33:1159	23:472	10:154	15:246	9:181	1.5	12:232
F09	Sand/grog	88:2748	44:1006	29:359	21:412	9:89	1:5	20:153
F23	Sand/calc	2.525	10:255	11:119	18:303	2.15		1:10
F34	Belgic sandy	2.525		7.200		2.15		1.10
F24	Buff shelly	3:7	11:114	33:2404	32:332	29:982	1:5	10:139
R26	Terra Nigra	1:15			2:10	2:10		2:15
R32A	Lead glazed	1:0						
R02	Mica gilded		1:2	6:175	1:20			1:8
R01A	Samian central Gaul	5:0	6:0	42:0	25:0	11:0		69:0
R01B	Samian southern Gaul	1:0	6:0	13:0	3:0	2:0		18:0
ROIC	Samian eastern Gaul	7.105	15.209	4:0	25.700	2:0	1.10	2:0
RU8 D02 A	Black micaceous	/:105	15:208	02:470	35:722	08:55U 5:15	1:10	12:350
R03R	Gritty white ware	2.37	2.35	23.526	35.387	10.76		12.11
R18A	Pink gritty	1.5	1.60	10.48	7.89	7.320		7.60
R18B	Pink fine	16:231	4:27	10110	1:10	3:9		12:142
R03C	Smooth white ware		1:1	1:1	2:28			
R03D	White ware with fine shell		3:35	15:532	18:310	2:33		2:20
R06J	Grey ware - black core	15:245	14:84	118:1069	40:414	43:495	1:5	45:349
R07A	Black burnished BB1	3:30	9:38	11:210	15:190	10:117	1:5	17:109
R07G	Black burnished BB2	2:45	6:122	3:63	15:205	3:65	1:5	2:30
R07B	Black ware – sandy	6:400	10127	33:257	21:355	26:243	1:20	16:74
RU/F	Black ware – silty	1:5	2.5	2:8	3:27	4:05	1.10	13:105
RUGD	Grey ware _ calc	7.86	0.155	25.180	14:262	53-01/	1:10	28.223
R06G	Grey ware – silty	2.10	9.155	25.180	2.13	2.30	4.15	56.525
R05A	Orange sandy	3:50	2:17	20:120	13:141	8:41	3:6	6:42
R05B	Fine orange							5:40
R05D	Orange sandy – white slipped		1:1	9:55				
R06A	Grey ware - Nene Valley	5:115	15:163	58:1390	37:660	51:559	4:58	9:67
R06B	Grey ware – coarse	8:77	34:390	135:1376	66:532	83:700	2:15	34:150
R06C	Grey ware – fine	55:694	152:1403	446:3138	241:1857	301:2278	9:48	156:1017
R06H	Grey ware – white slipped	5.60	5:35	12:88	9:74	4:31	0.165	9:22
R06K D12	Grey ware – glauconite	25:1222	21.2240	14:183	34:481	15:150	2:105	0:28 210:542
R15 R14	Shelly Red-brown barsh	55:1552	81:5240 2·4	184:3034 5·35	11.100	5.115	10:1502	210:342
R28	Gritty calcareous		2.4	5.55	2.20	5.115		2.54
R36	Orange gritty				2.20	1:25		
R38	Colour coat – source unknown	1:30	4:8	2:17	5:53	3:6		5:37
R12B	Nene Valley colour coat	10:23	21:132	27:251	62:724	60:718	4:59	96:1134
R12D	Nene Valley mortaria - orange-brown			3:50				
R11	Oxford oxidised ware							1:5
R11D	Oxford colour coat	3:17	15:91	19:202	43:699	70:1468	1:5	51:578
R22A	Hadham oxidised	1:10	1 10	3:70	12:54	5:487		5:42
R A 01	Misc Roman	1:1	1:10	2:20	3:60	4:10		1:5
A01	Sandy		1.5	2.8	16.01	2:5		1:58
A04 A06	Sandy	1.7	1.5	1.10	1.2	3.65	1.1	12.232
A16	Coarse sandy	1.162		1.10	1,2	5.05	1.1	12.252
A18	Fine sandy	11102		2:8		1:3		
A23	Sandstone		1:5			2:27		6:176
B09	Lyveden/Stanion							2:19
C09	Brill/Boarstall				1:16			2:12
E02	Late Medieval Oxidised	1:4			5:291	4:60		
P14	Black ware					2:21		
P25	Frechen					3:45	2.50	4 4 5
P32	Statts Refined Redware				1.2		3:50	1:10
гээ Р36л	r in glazed Nottingham stonewore	1.4			1:3			1.10
F 30A P30	Mocha	1:4					1.36	1:10
P43	Pearlware				1.2		1.50 A·6	
P48	English stoneware				1:10		2:17	1:11
P55	White earthenware					2:16	17:65	
MOD	Modern	4:31	1:4	2:13	15:92	6:45	4:9	

Weights for samian (R01) and lead glazed ware (R32A) were not recorded

Table 11.2 Pottery fabrics in chronological order, by phase quantified by sherd count: weight (g)

Form	Form name	1	2	3	4	5	6	Unphased /topsoil/ unstrat
BKR	Beaker	1	8	7	6	4	1	10
BKRA	Girth beaker	1						
BKRB	Butt beaker	2	3					
BKRC	Cornice rim beaker			1	1			
BKRF	Folded/indented beaker				1	1		
BWL	Bowl	6	8	20	17	18	2	18
BWLA	Reeded rim bowl	1	1	4	2	1		1
BWLC	Carinated bowl	2	1	3	3	2		
BWLF	Flanged bowl	3	4	11	17	24		19
BWLN	Necked bowl	17	14	21	11	22		13
CAST	Castor box lid				2			
DIS	Dish	3	7	26	15	6		31
DISP	Plain rim dish	1	7	13	9	11		11
FLA	Flask					1		1
FLG	Flagon	1		3	4	2		4
JAR	Jar	14	7	18	14	17		15
JARA	Carinated jar		2	1				
JARB	Bead rim jar			1				
JARC	Cordoned jar	2						
JARN	Necked jar		1	4	5	5		4
JARS	Storage jar		1	5		2		
LID	Lid		1	15	5	5		5
PLAT	Platter	2		6	3	2		4
STNR	Strainer/colander	1			2	1		2
TRIP	Triple vase				1			
VESS	Vessel (undiagnostic sherds)	508	633	1409	1114	1226	67	850

This is likely to be an underestimate of recognisable vessels as the forms of many more sherds could be identified but were not recorded.

Table 11.3 Pottery forms by phase quantified by vessel count

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											Groul	SC									
Fabric	Fabric definition	4	ŝ	6	12	13	17	18	22	23	29	30	35	46	47	83	85	87 8	80	6 6	16
F05	Grog/shell	57:1145					3:260						6:130 1	8:422	95:505			1:5	3:2	0	
F06A	Grog fine	4:90							12:52				1:5 1	8:102	1:20						
F06B	Grog medium	29:835				1:15 1	0:133		5:56				3:80 1	9:267	10:325			1.	5		
F06C	Grog coarse	5:197							1:15												
F07	Shelly	67:3317			1:5 2	2:145	4:96	3:30	3:20	3:55		7	:295 2	3:514 19	):2680		Ξ	:582	1:1	5	
F08	Shell/grog	9:150			1:110		4:275			1:10			1:60	7:82	1:20	8:450		1:2			
F09	Sand/grog	49:1985				1	0:220		3:30				6:51	4:15	6:70	6:62	7	:315			
F23	Grog/shell/sand	41:1262		1:15	1:5			1:15							3:65		1:45	1:25			
F30	Sand/calc															2:525					
F24	Buff shelly	1:1	1:3		1:3																
R26	Terra Nigra					1:15															
R32A	Lead glazed														1:0						
R01A	Samian central Gaul	1:0				1:0			3:0												
R01B	Samian southern Gaul	1:0																			
R08	Black micaceous	2:25				1:10			1:1		1:10		2:55								
R03A	Fine white ware	1:30											1:7								
R03B	Gritty white ware																	2:4	0		
R18A	Pink oritty													1:5							
RISB	Pink fine	14.226												2					ć	ر د	
DUKI	Grew ware – black core	4.175				1.7			6.87		0.11	1.20		1.5					i	2	
R07A	Urey wate – Utaux COLE Rlack hurnished RR1	C71.4				1.4			0.02 1.7		1.75	1.40		C. I							
DUTC	Dlack building bD2	C. 1				30.1			1:1		77.1		1.20								
	Dlack builtshed DD2	1.200				27:1							07.1							ų	
KU/B	Black ware – sanuy	4:290				CI CI														0	
KU/F	Black ware – suity				01																
K06D	Grey ware – micaceous													1:2	!						
R06E	Grey ware – calc					1:2	1:1		1:8					2:25	1:45					5	
K06G	Grey ware – sulty							:I							<u>.</u>						
R05A	Orange sandy																2:10			1:4(	<del>1</del> 0
K06A	Grey ware – Nene Valley	4:110					1:5														
R06B	Grey ware – coarse	5:57			2:5	1:15								1							
K06C	Grey ware – tine	31:447			I:40	c6:9		:I	16:6		2:11		c:I	3:7	3:30	2:3		3:30			
KU6K	Grey ware – glauconite	3:40	t,			201	5.1.1	201	1:13	5 1 1				cl:1				0.1	ć		
CIN	Sheliy	001:77	1:1			C7:1	C1:1	C7:1	00:7	C1:1				C0:7				1:00	0. 1	Ģ	
R38 D17D	Volour coat – source unknown	1:30	1.1			1.1															
	Nelle Valley colour coat	07:1	1:1						1.1				51.1								
	UXIOIU COIOUT COAL Hadham ovidised			1.10		7:7							C1:1								
U7771	Mise Roman			01.1					÷												
A06	Sandy								1.1				1:7								
A16	Coarse sandy								162												
E02	Late Medieval Oxidised								1:4												
P36A	Nottingham stoneware								1:4												
MOD	Modern								3:15		1:16										
NB samia	n and lead-glazed wares have no w	eights record	ed																		

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Table 11.4 Phase 1 pottery fabrics by group quantified by sherd count:weight (g). See also Fig 2.3 (histogram)

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										9	roups									
abric	Fabric definition	1	2	9	10	14	20	21	31	33	36	40	42	48	54	59 6	0 6	2 63	96	
201B	Fine flint		1:15																	
F05	Grog/shell	7:187	22:392	7:74	2:13	1:1	3:12	3:30		6	:245	1:95		1:1	:80	1:1	5			
F06A	Grog fine	2:60	2:10	6:147		1:5	12:61	1:1				1:15					2:	9		
F06B	Grog medium	20:222	34:542	2:10	6:24		2:10	3:30			1:50	1:5		41	:93 1	10	7:17	5		
F06C	Grog coarse	1:80	9:280																	
F07	Shelly	14:155	36:810	6:37		1:30	4:45	3:25				3:90	1:10			2:2	5 10:19	4 1:20	-	
F08	Shell/grog	8:60	6:217				5:160					1:25					3:1	0		
F09	Sand/grog	11:79	12:148	2:10	1:20		6:661	8:40		1:8				-	:25		2:1	5		
F23	Grog/shell/sand	1:25	8:120		1:5				1:5			1:25	1:10	(1)	:45					
F24	Buff shelly		3:55		1:3		5:50										2:	9		
R02	Mica gilded			1:2																
R01A	Samian central Gaul		3:0	1:0													2:	0		
R01B	Samian southern Gaul		2:0		1:0											1:0		2::(	_	
R01C	Samian eastern Gaul																1.	0		
R08	Black micaceous		3:40	2:30		4:70	1:20	2:35									3:1	3		
R03B	Gritty white ware (VRW)		1:30															5		
R18A	Pink gritty (VRW)									1:60										
R18B	Pink fine		2:10	1:7		1:10														
R03C	Smooth white ware															1:	1			
R03D	White ware with fine shell																3:3	5		
R06J	Grev ware – black core		5:32	2:7		1:2							1:3		1:5	1:5	2:2	5 1:5		
P.07 A	Block humished BR1	3.6	1.15	i		1							1	1.1	1.5	2				
ULUA	Diack Utilities DD	0.0	CT.1											1.1	L.1		1.0	1		
			0.122														Ċ			
K07B	Black ware – sandy	1:2	1:15	1:2	1:5	3:92		1:5									2:	9		
R06D	Grey ware – micaceous	1:3		1:2																
R06E	Grey ware – calc	1:25	1:25				1:12				2:28						3:5	5 1:10	_	
R05A	Orange sandy															÷	5 1:1	2		
R05D	Orange sandy – white slipped																 T	1		
R06A	Grey ware – Nene Valley		3:27				2:20										10:11	9		
R06B	Grey ware - coarse		6:260	2:5	1:5	3:14	1:5						1:3			5:	3 18:9	5		
R06C	Grey ware – fine	5:16	43:545	13:76	7:53	4:72	1:145	4:12	1:6			2:8	4:68	3:1		4	4 48:37	7 1:10	2:10	
R06H	Grey ware – white slipped	2:15				2:15												1:5		
R06K	Grey ware – glauconite		2:13	1:5			1:60										2:1	5	1:2	
R13	Shelly	4:89	19:860	7:279		2:50	3:450	3:247	1:800				4:45 3	3:31 1	:40	7:9	0 16:25	8 1:1		
R14	Red-brown harsh			1:2									1:2							
R38	Colour coat – source unknown	1:1	2:2															5		
R12B	Nene Valley colour coat	1:10	8:29	2:16			4:10						1:2	2:35		2:2	5 1:	5		
RIID	Oxford colour coat	1:5	1:15	2:15			5:12	1:10					1:15			3:1	4	5		
Fabric 2	Mortarium – Oxford	1:30					4:45					1	100				1:6	5		
R	Misc Roman											1:10								
A04	Sandy			1:5																
A23	Sandstone				1:5															
MOD	Modern			1:4																

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Table 11.5 Phase 2 pottery fabrics by group quantified by sherd count:weight (g). See also Fig. 3.2 (histogram)

NB samian wares have no weights recorded

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										Grou	sd								
Fabric	Fabric definition	33	7	19	32	38	41	43	45	51	55	64	65	99	67	68	78	81	93
F05	Grog/shell	5:80				10:327					2:10	35:371	1:4			1:40			3:80
F06A	Grog fine	3:22	2:4									3:4							
F06B	Grog medium	16:135	1:10			41:582		1:1	1:25		1:10	37:323		1:8			2:20	(1)	:195
F06C	Grog coarse					2:20						6:155							
F07	Shelly	12:147	1:30	2:31	3:15	15:372	1	1:191	7:116 10	):336	4:22	50:1020			6:45	6:86	1:10	4:35 3	:138
F08	Shell/grog		4:15			3:115						2:22						1:2	2:25
F09	Sand/grog	2:40				7:157			1:15		2:7	10:53	3:58	1:4	1:5	2:20		41	:105
F23	Grog/shell/sand	1:3	2:7	1:10		1:40					1:3	4:55		1:1				12	:250
F34	Belgic sandy											7:200							
F24	Buff shelly	1:30			1:1	1:5		2:6				24:2066		1:15	1:20	1	260	1:1	1:30
R02	Mica gilded											5:130					1:45		
R01A	Samian central Gaul	6:0			2:0			1:0	3:0	5:0		20:0		1:0		4:0			
R01B	Samian southern Gaul							1:0				12:0							1:0
R01C	Samian eastern Gaul								1:0	2:0		1:0							
R08	Black micaceous	9:57	2:130					11:24	1:1		4:10	22:120	5:90		6:36			2:2	
R03A	Fine white ware (VRW)	1:5		1:5							1:1	4:60						1:5 11	:112
R03B	Gritty white ware (VRW)			1:5	7:299	2:40						1:2			3:100	2:25	1:30	6:25 15	:175
R18A	Pink gritty (VRW)											8:18					2:30		3:50
R18R	Pink fine		1.10																2
DUSC	Current white work		1.10															-	
	White work with face shall							1.2		1.15	1.20	2.201	1.15		2 00.1	.155		1.1	
								010		CIT	1:20	100:20	0000	1:7	17.7 17.7	000		1.1	t c
K06J	Grey ware – black core	9:135	3:72	62:1		8://		2:10				669:06	7:70		ü	2:30			4:8/
R07A	Black burnished BB1	5:60	3:95						2:10				1:45						
R07G	Black burnished BB2		1:45			1:15		1:3											
R07B	Black ware – sandy	3:21	4:67		1:5	1:15	2:10	1:10			1:5	16:103		2:1	1:5		1:15		1:1
R07F	Black ware – silty	1:5			1:3														
R06D	Grey ware - micaceous											2:16			1:1				
R06E	Grey ware – calc	6:54				3:20		3:7	2:12		2:1	5:36	1:20	1:10			1:15	1:5 (	6:136
R05A	Orange sandy									1:10		17:98		2:12					
R05D	Orange sandy – white slipped											8:50				1:5			
R06A	Grey ware - Nene Valley		1:5		2:30			3:17	1:5	1:1	3:20	32:1052	4:85	1:10	8:125		1:35	1:5	
R06B	Grey ware - coarse	14:317	10:32	1:20	2:150	2:20		7:15	3:30		4:11	67:549	2:60	2:2	5:17	2:21	5:75	9:57	9:14
R06C	Grey ware – fine	40:229	15:131	3:11	3:32	8:28	1:2	11:50	4:36	2:85	3(	3:1996	3:172	5:27	9:116	4:20 4	:141 1	1:62 ]	1:72
R06H	Grey ware – white slipped	8:40	1:5					1:25	1:15								1:3		1:5
R06K	Grey ware – glauconite	2:5			1:15		1:1	3:17		1:5	1:80	5:60							2:90
R13	Shelly	17:273	13:264	3:35	11:180	10:132	(,)	5:451	9:165	1:30	5:52	41:455	4:97	3:350 1	1:261	3:50 4	:116 14	:123 18	3:645
R14	Red-brown harsh	4:25						1:10											
R38	Colour coat - source unknown	1:2												1:15					
R12B	Nene Valley colour coat	4:18		2:6	3:13			3:105	4:25	2:35	1:1	4:10		1:2	2:6			1:30	
R12D	Nene Valley mortaria - orange-brown											3:50							
RIID	Oxford colour coat	2:21	2:12	1:5		1:1		6:125	4:27			1:1			1:5		1:5		1:5
R22A	Hadham oxidised				1:45			1:5								1:20			
Fabric 1	Mortarium – local?					1:75													
Fabric 2	Mortarium – Oxford white						1	1:435					1:10					1:20	
								1 vess											

										Groul	sd								
Fabric	Fabric definition	3	7	19	32	38	41	43	45	51	55	64	65	99	67	68	78	81 9	3
Fabric 4	Mortarium – Oxford red-slipped							1:20											
Fabric 5	Mortarium - Mancetter-Harsthill	1:90														1	:70		
Fabric 9	Mortarium											2:45							
Fabric 1(	) Mortarium - local															2:	940		
																1	'ess		
R	Misc Roman														1:10				
A04	Sandy	1:3													1:5				
A06	Sandy														1:10				
A18	Fine sandy	1:3										1:5							
MOD	Modern					1:11										1:2			
NB samia	in wares have no weights recorded																		

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Table 11.6 Phase 3 pottery fabrics by group quantified by sherd count:weight (g). See also Fig. 4.2 (histogram)

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						Gr	oups				
Fabric	Fabric definition	8	15	34	44	52	57	69	70	71	72
F05	Grog/shell	8:102		1:15	1:20	1:15		9:140			
F06A	Grog fine	6:70				1:5		1:10			
F06B	Grog medium	7:124		1:2	2:5	2:13		5:25			3:18
F06C	Grog coarse	2:32		3:40	1:7						2:32
F07	Shelly	17:167	3:425	10:245	14:123	32:340	8:134	26:411	3:1665		11:148
F08	Shell/grog			1:10				7:105	1:1		4:105
F09	Sand/grog		2:40	1:35		1:90		11:140			1:2
F23	Grog/shell/sand	3:25		1:15		1:5		1:10			
F24	Buff shelly	1:5		7:100	2:8	9:72		5:37		4:30	3:50
R26	Terra Nigra						1:5				1:5
R02	Mica gilded	1:20									
R01A	Samian central Gaul	4:0		2:0		2:0	6:0	11:0			
R01B	Samian southern Gaul							1:0			1:0
R08	Black micaceous	4:32	7:210	2:175	3:20	8:86		4:40	4:145		3:14
R03A	Fine white ware (VRW)			1:5	3:3	3:23		1:30			
R03B	Gritty white ware (VRW)			13:111				4:82	2:9		1:10
R18A	Pink gritty (VRW)	2:21				1:15		1:3			
R18B	Pink fine		1:10								
R03C	Smooth white ware							1:3	1:25		
R03D	White ware with fine shell					1:35		16:260			1:15
R06J	Grey ware - black core	4:8	5:135	3:17	3:30	8:49	4:45	3:20			6:23
R07A	Black burnished BB1	3:15			1:5	3:35	2:65				6:17
R07G	Black burnished BB2					1:1	6:80	3:36	3:65		2:23
R07B	Black ware - sandy			2:12	1:15	5:119	6:116	2:6	3:71		1:15
R07F	Black ware - silty		1:7			1:5				1:15	
R06D	Grey ware - micaceous	1:2		1:1		6:86	5:153				1:40
R06E	Grey ware - calc	1:2			3:26	6:85	1:35	8:112	1:10	4:70	7:60
R06G	Grey ware - silty		1:3		1:10						
R05A	Orange sandy			3:15	2:2	6:112	1:7	1:5			
R06A	Grey ware - Nene Valley			3:80		9:130	2:36	19:386			4:28
R06B	Grey ware - coarse	11:77	1:40	2:21	3:12	5:52	12:187	15:64	2:5		6:60
R06C	Grey ware - fine	17:101	5:115	52:358	18:101	43:346	25:308	44:262	13:122		10:42
R06H	Grey ware - white slipped			1:6	3:28	1:25					3:10
R06K	Grey ware - glauconite	1:5		4:49	3:10	19:290	2:17	1:5			2:15
R13	Shelly	33:492	1:40	32:1040	41:471	78:1822	16:287	47:837	4:92		128:1360
R14	Red-brown harsh	4:30				3:80	4:80				
R28	Gritty calcareous				2:20						
R38	Colour coat - source unknown					1:8					4:45
R12B	Nene Valley colour coat	6:30		3:26	10:129	19:290	4:25	5:17	3:65		12:142
R11D	Oxford colour coat	2:15		1:1	2:4	22:501	5:17	2:25			8:131
R22A	Hadham oxidised			1:5		1:2					10:47
Fabric 2	Mortarium - Oxford white				1:25		1:20	4:100			
								1 vess			
Fabric 3	Mortarium - white-slipped					1:20					
Fabric 5	Mortarium - Mancetter-Hartshill					1:15	2:50				
Fabric 8	Mortarium – local?				1:30						
R	Misc Roman	1:49		1:1							
A04	Sandy						2:10				14:81
A06	Sandy				1:2						
C09	Brill/Boarstall				1:16						
E02	Late Medieval Oxidised					5:291					
P33	Tin glazed						1:3				
P43	Pearlware					1:2					
P48	English stoneware					1:10					
MOD	Modern	4:34				5:20		6:38			

NB samian wares have no weights recorded

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Table 11.7 Phase 4 pottery fabrics by group quantified by sherd count:weight (g). See also Fig. 5.2 (histogram)

						Groups				
Fabric	Fabric definition	56	73	74	75	76	77	79	80	86
F05	Grog/shell			1:7	1:2	3:14	3:20	2:10		
F06A	Grog fine							2:10		
F06B	Grog medium			3:25	2:35		1:10	2:10		
F06C	Grog coarse						2:20			
F07	Shelly		39:861	14:260	9:63	25:302	27:378	7:175	7:24	
F08	Shell/grog	1:10	3:80	1:10	1:15			2:65	1:1	
F09	Sand/grog	1:5	1:5	3:22	2:50		1:5		1:2	
F23	Grog/shell/sand		2:40				1:3	1:5	1:5	
F30	Sand/calc			1:5			1:10			
F24	Buff shelly		9:705	5:45	2:45	8:122	4:50	1:15		
R26	Terra Nigra						2:10			
R01A	Samian central Gaul		2:0	1:0	1:0	3:0	3:0	1:0		
R01B	Samian southern Gaul							2:0		
R01C	Samian eastern Gaul		2:0							
R08	Black micaceous		2:20	2:30	2:20	30:338	29:130	2:10	1:2	
R03A	Fine white ware (VRW)					4.5			1.10	
R03B	Gritty white ware (VRW)		2.25	1.1		3.7	1.7	2.35	1.10	
R18A	Pink gritty (VRW)		1.280			2.25	1.3	1.2	2.10	
R18B	Pink fine		1.200			2.20	110	112	1.5	
RO3D	White ware with fine shell		1.30			2.1	1.3		1.5	
R061	Grev ware – black core		10.81	5.85	2.205	5.13	11.30	8.78	2.3	
R07A	Black hurnished BB1	1.5	10.01	1.5	3.12	2.40	3.55	0.70	2.5	
R07G	Black burnished BB2	1.5		1.5	1.15	1.15	1.35			
R07B	Black ware _ sandy	1.5	2.30	4.28	4.40	3.20	6.62	4.42	1.5	1.2
R07E	Black ware – silty	1.5	2:30	7.20	7.70	2.25	0.02	7.72	1.5	1.2
R0/1	Grev ware - micaceous		2.40	1.1		4.57				
R06E	Grey ware - calc	1.20	12.542	6.46	3.30	8.57	13.120	0.04	1.5	
ROOL ROGG	Grey ware silty	1.20	12.342	0.40	5.50	0.57	15.120	J.J <del>4</del>	1.5	
R000	Orenge sendu		1.23	1.5		1.2	1.20	2.12	1.1	
R05A R06A	Grav ware Nene Valley	1.5	6.115	7.37	2.25	1.2	1.20	3.12 10:150	3.25	
D06D	Grey ware – Neile Valley	1.10	2.21	0.04	4.20	27.242	12.01	0.150	4.40	
R00D	Crew ware - coarse	1.10	20.514	9.94	4.50	37.343	10.91	0./1	4.40	
RUOC DOGU	Grey ware – line		39:314	19:95	10:84	130:1033	45:260	55:162	15:64	
RUOH DOGV	Grey ware – white supped			1.1	1.5	2.06	2.20		1:10	
R00K	Shally		71.2522	4:55	0.262	00.0140	2:20	20.727	10,101	
K15 D14	Ded hussen hand		1.10	30:702	9:202	00:2140	98:1559	20:757	10:191	
K14	Quanta a mitta		1:10			2:50		1:50	1:5	
R30	Orange gritty		1.0			1:25	1.5			
K38 D10D	Colour coat – source unknown		11.0	( 70	1.5	12 242	11.5	0.50	4.00	
RI2B	Nene Valley colour coat		14:207	6:79	1:5	13:243	14:104	8:58	4:22	
RIID	Oxford colour coat		25:985	2:5	3:10	16:211	1/:200	4:31	3:26	
R22A	Hadham oxidised		3:476	2:12		( 205	4.05			
Fabric 2	Mortarium – Oxford white					6:205	4:95			
Estado 6	Mantaniana Manaattan II.atahill					5 vess	2.00			
Fabric 5	Mortarium – Mancetter-Hartshill						2:90 2 yess			
Fabric 7	Mortarium local?			1.30			2 1033			
Paulic /	Miss Roman			1.50		2.10				
к 101	Mise Rollian					5.10				2.5
A01 A04	Sandy					0.117	18.101		2.5	2:5
A04	Sandy	1.45				0.117	10.101		2.3	
A00	Sandy Eine sendy	1.45				1.10	1.10			
A18	Fine sandy	1:5	1.00	1.1						
A23 E02	Jata Madiaval Ovidizad		1:20	1:1			1.60			
EU2 D14	Diach wore						4:00			
r14 D25	Diack Ware						2:21			
r23 D55	riechen						5:45			
132 MOD	white earthenware		1.17		0.10		2:16	2.10		
MOD	wodern		1:17		2:10			5:18		

NB samian and unrecognised colour coated wares have no weights recorded

Table 11.8 Phase 5 pottery fabrics by group quantified by sherd count:weight (g). See also Fig. 6.1 (histogram)

				Group	)S		
Fabric	Fabric definition	16	50	53	58	82	84
F05	Grog/shell			1:12		2:2	
F06A	Grog fine			1:5		6:43	
F06B	Grog medium			2:18		1:5	1:20
F06C	Grog coarse			2:45			
F07	Shelly	2:5		32:1241			14:151
F08	Shell/grog	1:5		2:100			
F09	Sand/grog			1:10		3:30	1:6
F30	Sand/calc			1:10			
F24	Buff shelly			2:41			
R01A	Samian central Gaul						2:0
R08	Black micaceous	1:10		1:5	1:5		
R03A	Fine white ware (VRW)				1:10		
R03B	Gritty white ware (VRW)			2:5	1:1		
R18A	Pink gritty (VRW)			4:51			
R18B	Pink fine	2:2					
R03D	White ware with fine shell			2:20			
R06J	Grey ware – black core			1:15		2:8	1:1
R07A	Black burnished BB1						2:23
R07G	Black burnished BB2						2:30
R07B	Black ware – sandy			1:2			2:15
R07F	Black ware – silty	1:15					
R06D	Grey ware – micaceous			2:1	2:5		2:25
R06E	Grey ware – calc			8:75			4:16
R05A	Orange sandy			1:1		1:10	1:15
R05B	Fine orange			4:25			
R06A	Grey ware – Nene Valley			1:35	2:10		1:10
R06B	Grey ware – coarse			5:16			8:34
R06C	Grey ware – fine	6:34		8:29	2:3	1:1	4:6
R06H	Grey ware – white slipped			1:1	2:10		
R06K	Grey ware – glauconite			1:10			
R13	Shelly	4:17	3:12	18:160	2:10	1:1	7:205
R14	Red-brown harsh			1:5			1:20
R12B	Nene Valley colour coat	1:20		6:33	5:10	1:10	2:41
R11D	Oxford colour coat			2:40	1:5		
R	Misc Roman			1:5			
A04	Sandy						2:10
A06	Sandy			3:13			
B09	Lyveden/Stanion			1:9			
C09	Brill/Boarstall			1:3			
P36A	Nottingham stoneware						1:10
P48	English stoneware	1:11					

NB samian and unrecognised colour coated wares have no weights recorded

Table 11.9 Unphased pottery fabrics by group from quantified by sherd count:weight (g). See also Fig. 7.1 (histograms)

		Groups
Fabric	Fabric definition	92
F06B	Grog medium	1:5
F07	Shelly	4:45
F09	Sand/grog	1:5
F24	Buff shelly	1:5
R08	Black micaceous	1:10
R06J	Grey ware – black core	1:5
R07A	Black burnished BB1	1:5
R07G	Black burnished BB2	1:5
R07B	Black ware – sandy	1:20
R06D	Grey ware - micaceous	1:10
R06E	Grey ware – calc	4:13
R05A	Orange sandy	3:6
R06A	Grey ware - Nene Valley	4:58
R06B	Grey ware - coarse	2:15
R06C	Grey ware – fine	9:48
R06K	Grey ware – glauconite	2:165
R13	Shelly	10:1362
R12B	Nene Valley colour coat	4:59
R11D	Oxford colour coat	1:5
A06	Sandy	1:1
P32	Staffs Refined Redware	3:50
P39	Mocha	1:36
P43	Pearlware	4:6
P48	English stoneware	2:17
P55	White earthenware	17:65
MOD	Modern	4:9

Table 11.10 Phase 6 pottery fabrics by group quantified by sherd count:weight (g). See also Fig. 8.1 (histogram)

Table 11.11 Phase 0.1 pottery fabrics by group (see overleaf)

Phase	Phase date	Vessels	Sherds
1	Late Iron Age to early Roman	6	6
2	Early to mid-Roman	11	13
3	Mid-Roman	41	60
4	Mid- to late Roman	25	27
5	Late Roman to Saxon	13	15
6	Modern	0	0
0-0.1	Unphased, topsoil, overburden and	60	89
	unstratified		

Table 11.12 Samian totals by phase expressed as vessel and sherd counts (weights were not recorded)

Fabric         Fabric definition         0           F05         Groø/shell         6:25	<b>0.1</b> 12:310
F05 Grog/shell 6-25	12:310
0.23	
F06A Grog fine	3:45
F06B Grog medium	13:218
F06C Grog coarse 1:2	
F07 Shelly 31:396	23:501
F08 Shell/grog 2:50	7:77
F09 Sand/grog 6:30	9:77
F23 Grog/shell/sand 1:20	4:50
F24 Buff shelly	8:98
R26 Terra Nigra	2:15
R02 Mica gilded	1:8
R01A Samian central Gaul 5:0	62:0
R01B Samian southern Gaul 1:0	17:0
R01C Samian eastern Gaul 1:0	1:0
R08 Black micaceous	9:336
R03A Fine white ware (VRW)	1:1
R03B Gritty white ware (VRW) 1:2	8:123
R18A Pink gritty (VRW) 1:3	2:6
R18B Pink fine	10:140
R06J Grey ware – black core 3:7	38:318
R07A Black burnished BB1 1:25	14:61
R07B Black ware – sandy	13:57
R07F Black ware – silty 6:53	6:38
R06D Grey ware – micaceous	1:5
R06E Grey ware – calc 4:18	22:214
R05A Orange sandy 1:10	2:6
R05B Fine orange	1:15
R06A Grey ware – Nene Valley	5:12
R06B Grey ware – coarse 3:20	18:80
R06C Grey ware – fine 22:105	113:839
R06H Grey ware – white slipped 4:6	2:5
R06K Grey ware – glauconite	5:18
R13 Shelly 11:208	164:1109
R14 Red-brown harsh 3:6	4:23
R38 Colour coat – source unknown	5:37
R12B Nene Valley colour coat 5:28	76:992
R11 Oxford oxidised ware 1:5	
R11D Oxford colour coat 3:30	45:503
R22A Hadham oxidised	5:42
Fabric 2 Mortarium – Oxford white	2.20
Fabric 4 Mortarium Oxford red slinned	1.20
Fabric 5 Mortarium Mancetter Hartshill	1.20
Fabric 6 Mortarium Jocal?	1.15
Fabric 11 Mortarium Jocal?	1.70
$A01 \qquad \text{Organic} \qquad \qquad$	1.58
A04 Sandy	12.105
A06 Sandy	0.2103
A23 Sandstone	9.219 6.176
R00 Lyweden/Stanion	1.10
C09 Brill/Boarstall	1.10
P32 Staffs Refined Redware	1.9
MOD Modern	2:46

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NB samian and unrecognised colour coated wares have no weights recorded

Table 11.11 Phase 0.1 (topsoil, overburden and unstratified) pottery fabrics by group quantified by sherd count:weight (g)

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