Recent, and not so recent, work in Roman Leicester (Ratae Corieltauvorum)

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Introduction

The growth of developer-funded archaeology over the last fifteen years has witnessed an unprecedented number of excavations in the area of the Roman town of Ratae and its suburbs. Sadly, with the notable exceptions of those at Causeway Lane (Connor and Buckley 1999) and Newarke Street (Cooper L. 1996), the results of many of these excavations are not yet fully published; the relevant reports having joined an ever-rising mountain of so-called 'grey literature' (reports written for developers) to which the public have limited access. This paper therefore provides an opportunity to bring some of this new information to a wider audience and update the otherwise most recent and comprehensive account of the town (Wacher 1974 and revised in 1995). Surprisingly, John Wacher's account in his Towns of Roman Britain stands, next to Francis Haverfield's (1918), as the only published overview of the city's Roman past, other than more popular accounts by Elizabeth Blank (1971) and Jean Mellor (1976), though all still form very useful introductions.

In particular, the recent excavations have shed light on two previously under-explored aspects of the town: the northeast quarter and the suburbs and cemeteries (Fig. 1; please note numbers in the text, (1), cross refer to location on this map). Work in the northeast quarter has included the largest-scale excavations ever undertaken in the city: firstly under the Shires shopping development in St Peter's Lane and Little Lane (2 and 3) (Lucas and Buckley 1989), and secondly under the new Inland Revenue offices in Causeway Lane (1) (Connor and Buckley 1999). Study of the suburbs and cemeteries (12-16 and 18) has involved a series of excavations outside the south and east gates of the town, with smaller-scale work outside the northern and western defences. Additionally, there have been opportunities to explore the public building complex and higher status private housing within the town.

Although many interventions have been small scale evaluations, all have shed light on the potential preservation of Roman deposits for the future, hidden from view since the city's major redevelopment in the late 60s and building on the pioneering work on deposit formation across the town by John Lucas (1980-81a). It is apposite that we take the opportunity to step back and review progress as the city once again stands at threshold of a new phase of redevelopment. Some eighteen percent of the walled area is currently available for redevelopment (notably the extension to *The Shires* shopping centre), much of it in the area previously redeveloped during the 1960s when the inner ring road (Vaughan Way) was first constructed, and although it is unlikely that many sites will go to full excavation, there is scope for large scale evaluation and reappraisal of potential for the first time since then.

The Origins of Roman Leicester

The Late pre-Roman Iron Age settlement of Ratae is thought to have covered an area of at least ten hectares, corresponding roughly with the civic centre of the Roman town in the area of St Nicholas Circle, on the east bank of the river Soar. Excavations at the Jewry Wall site by Kenyon in the late 1930s (7), first revealed imported Gallo-Belgic (from northeast France) and native pottery in a series of pits cut into the natural, and hinted at Ratae's pre-conquest importance (Kenyon 1948, 24). Excavations in Bath Lane and elsewhere in the St Nicholas (9) and West Bridge area of the town have revealed more extensive evidence for the settlement and its status including fragments of flan trays used in the preparation of coin blanks (Clay and Mellor 1985; 69 Fig.39, 18-20; Clay and Pollard 1994). Modern study of the pottery from these sites (Clay and Pollard 1994, 72) and reappraisal of the Jewry Wall material (Jarvis 1986, 12) indicates that the settlement's origin can be pushed back into the first century BC and that by late Augustan times it was receiving a wide range of Gaulish imports. The earliest structural evidence included a possible circular building within the area now enclosed by St Nicholas Circle (9), associated with pottery of the 1st century BC (Clay and Pollard 1994, 2, Site 6). The exact extent of the late Iron Age settlement is still unknown, and though whilst there are no clear signs of the ramparts that gave the settlement its name of Ratae (Rivet and Smith 1979, 443), excavations in Bath Lane (20) have revealed a possible boundary ditch of this date (Cooper, L. and Finn 1992). It is also interesting to note that the brooch assemblage from Causeway Lane, some way to the north and east of the settlement included an unusually high number of pre-conquest types and had more in common with assemblages from the south-east of Britain (Mackreth 1999, 247). The important conclusion to draw from this evidence is that in many senses, Ratae might already be considered to be within the Roman orbit before the Claudian conquest in AD43.

Placing Iron Age *Ratae* within its local context, Wacher's statement (1995, 345) that its hinterland was culturally backward compared with the land to the east can certainly be countered now, given the wealth of rural settlement evidence which has come to light in the last decade during developer-funded investigations, and which has recently been overviewed (Clay 2001). Of

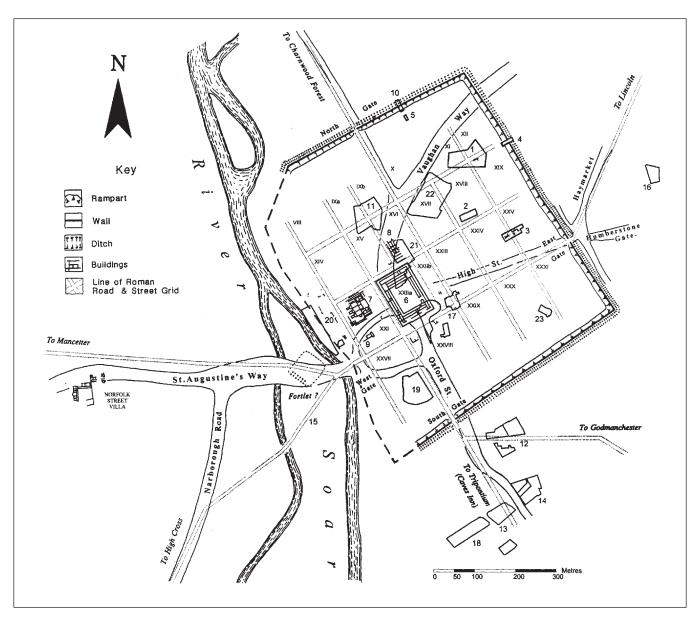


Fig. 1. Plan of Roman Leicester showing locations of sites mentioned in the text:

1) Causeway Lane; 2) St Peter's Lane and 3) Little Lane (The Shires); 4) Butt Close Lane; 5) Elbow Lane; 6) The Forum; 7) Jewry Wall Baths; 8) Blue Boar Lane courtyard house and *macellum*; 9) St Nicholas Circle *mithraeum*; 10) Elbow Lane and Cumberland Street (defences); 11) Stibbe building, 2001 *Insula IX*; 12) Newarke Street cemetery; 13) Bonners Lane; 14) York Road/Oxford Street; 15) Great Holme Street; 16) Clarence Street cemetery; 17) St Nicholas Place; and other areas recently or currently under investigation as follows 18) Mill Lane and Grange Lane; 19) Castle Street; 20) Bath Lane; 21) Blue Boar Lane 2003; 22) St Margaret's bath 2003; 23) Cank Street.

particular note are settlements close to the town, including a large poly-focal open site at Elms Farm, Humberstone (Charles, Parkinson and Foreman 2000), a series of enclosed farmsteads at Enderby (Clay 1992, Meek 1997) close to the line of the Fosse Way, and the early phases of a Roman period farmstead at Crown Hills (Chapman 2000). Significantly perhaps, with the exception of Crown Hills, all of the sites appear to go out of use in the immediately pre-conquest period.

Role of the Army

Given the importance of *Ratae* at the time of the conquest, and the strategic importance of the Fosse Way crossing of the River Soar, it would be surprising if there

were no military presence. Structural evidence for a first century fort is, however, still limited to a length of military ditch excavated close to the line of the Fosse Way, opposite its entry point through the west gate, on the west bank of the river. The small proportions of the ditch and the limited space available between the two arms of the river would indicate a small fortlet of perhaps 60m square (Clay and Pollard 1994, 21 Site 3), and the later first century dating of the fill might indicate a post-Boudican establishment. John Wacher identified a second length of possibly military ditch, not associated with the first, along the line of the town's northern defences at Elbow Lane in 1958 (10). The postulated military date for the ditch was based on the occurrence of Neronian samian pottery in its primary silting. However, in their overview of the defences, the dating of the associated coarse wares and the timber buildings in the vicinity is now considered to be second century and the ditch is instead thought to be part of the defensive circuit (Buckley and Lucas 1987, 42).

Finds of both legionary and auxiliary military equipment of later first and second century date continue to crop up in the town, even in the north east quarter where excavations at Causeway Lane yielded a scabbard fitting of Antonine date (Cooper 1999, 279, Fig.136: 210). Other notable occurrences include an auxiliary cavalry helmet cheek piece found in Bath Lane, of second-century date (Clay and Mellor 1985, 64 fig.38.2). It has not been possible to tie-in any recent finds with the occupants of the putative West Bridge fort, and it is unlikely that this will be possible unless further excavation in that area is undertaken. It is clear from the evidence of the strength report associated with the First Cohort of Tungrians at *Vindolanda* (Bowman 1994, 104) that many members of units were rarely at their headquarters and were more often seconded to other duties. Items of military equipment are therefore likely to occur as stray finds at a town such as Leicester, at the heart of the road network, through which army personnel and supplies were constantly travelling. Significant in this respect are the finds of military lead seals, attached to goods consignments belonging to sixth and twentieth legions, which have been found in the town in deposits dating to the second and early third century (Clay 1980, 317).

There is no clear evidence therefore for an immediately post-conquest military presence at *Ratae*, and this has a bearing on the growth and status of the settlement in the period between the conquest and its appointment as civitas capital of the *Corieltauvi*, at some point after the establishment of the *colonia* at Lincoln in the northern part of the tribal area between AD78 and 96 (Jones 1988, 154). Of course, following Martin Millett's model 2 (1990, 75, Fig.20), there is no reason why military presence should dictate the subsequent role of a previously established settlement, but it would be interesting to know whether the growth evident in the pre-Flavian period took the form of military style vicus or an independent settlement.

The Layout of the Early Town

Pre-grid activity

The earliest development of post-conquest *Ratae*, in the pre-Flavian period, appears to have concentrated on the east bank of the River Soar, opposite the proposed location of the fort and the recently confirmed line of the Fosse Way (Higgins 1998). Within the first century, up to four phases of timber building were detected, all on slightly different alignments, none of which match the subsequent street grid (Clay and Pollard 1994, 46, Fig.42). Most significantly, recent evaluation of a site in St Nicholas' Place (17), immediately east of the later

forum *insula*, suggested the presence of a substantial masonry building, again on a different alignment to the later grid (Kipling 2002, 18). The structure pre-dates a cobbled surface, interpreted as that laid down in advance of the construction of the public building complex. No single factor would appear to be dictating the layout of the settlement, and a more organic growth might therefore be suspected. How far east this initial phase of settlement extended is uncertain but the earliest activity detected on Little Lane (3) in the northeast quarter of the town and dating to the later first century, comprised probable field ditches suggesting cultivation, whilst early gravel quarrying is suggested at Causeway Lane. Certainly, all of the structures detected on sites in the northeast quarter of the town were aligned on the subsequent grid (Connor and Buckley 1999, 51).

Laying out of the grid

It is presumed that Ratae's award of self-governing status, towards the end of the century, broadly coincided with the formal laying out of a street grid at an angle of approximately 25° west of Ordnance Survey grid north. It would appear that the initial demarcation of insulae by ditches did not necessarily lead to the immediate laying of metalled roads, or at least not in the outlying parts of the grid. For example, at Causeway Lane the northsouth street shows that the first roadside ditch had already been filled and recut, late in the first century, before the first street metalling was laid. However, certainly in the St Nicholas area, metalling had been laid by AD120, and activity was spreading rapidly across the town during the first quarter of the second century (Clay and Pollard 1994, 47). That the full extent of the grid was utilised during the second century, is indicated by the timber buildings found sealed beneath the late second century rampart at Butt Close Lane (4) and Elbow Lane (Buckley and Lucas 1987, 49-50). The level of initial intensity however was variable as evidence from insula XIX at Causeway Lane, suggests some land was perhaps still under cultivation at the same time as the timber buildings were standing in *insula* XI opposite.

The excavations at Causeway Lane (1) revealed portions of four *insulae* radiating from a crossroads (XI, XII, XIX and the edge of XVIII going clockwise from top left). The north-south street was represented by only intermittent metalling, up to 0.5m thick, heavily truncated by medieval cultivation, with roadside ditches approximately 10m apart. The continuation of this north-south street separating insulae XXIV and XXV, was detected on the Little Lane site, close to its junction with the Fosse Way, at which point the street had been remetalled on five occasions, and was fronted on both sides by timber buildings, including one with a timberlined cellar dating to the early second century (Fig. 2; Lucas and Buckley 1989, 106). Subsequently, stonefounded strip buildings fronted on to the west side of the street, evidenced by the rectilinear robber trenches visible on the right hand side of Fig. 2.



Fig. 2. Excavations at Little lane in the northeast quarter, 1988.

Looking south down north-south street separating *insulae* XXIV and XXV, with second-century timber cellar on left, and robbed foundations of strip buildings on right (*Courtesy Leicestershire County Museums Service*).

The Public Building Complex

Leicester has long been considered a 'late starter' in its adoption of the municipal trappings of urban life and despite being a product of Wacher's (1995) 'Flavian expansion' programme, it evidently took some of his 'Hadrianic Stimulation' to get this aspect of town life kick-started. The two major public buildings recognized as products of this initial stage of civic development in the middle decades of the second century are the forumbasilica complex (6) (Hebditch and Mellor 1973) and the Jewry Wall baths (7) (Kenyon 1948). It is likely also, that the town's only recognized temple (9), situated to the south of the baths in insula XXI was also constructed at some time in the second century (Mellor 1969-70; Wacher 1995, 360, Fig.163). Its near-positive identification as a *mithraeum* has been strongly argued for recently by Sauer (2004). The detection of cobbled or gravelled surfaces on many of the sites in the central *insula*, including the forum and baths, has led to the idea that these areas were reserved for the public building programme for several decades, and that the area had presumably acted, in absence of evidence for a timber forum, as an open market place before funds allowed the programme to go ahead (Wacher 1995, 345; Hebditch and Mellor 1973, 7).

The last recognized building to join the complex was the proposed *macellum* (market hall) (8), constructed in the early third century to north of the forum in *insula* XVI. Trial excavations in the northeastern part of insula XVI (11) have revealed what might represent the north wall of this building, first recognised during John Wacher's excavations in the southeast part of the *insula* in 1958. The evaluation in 2001 (Meek 2002, 91) uncovered two parallel east-west walls, 2.8m apart, 0.8m in width and constructed on wider footings of at least a metre in depth. Though not as wide as some of the walls detected in 1958, it is quite possible that they represent internal divisions. If these do belong to the same structure, it would therefore appear that this market building occupies the entire half-sized *insula*, with dimensions of c.100m by c.55m. The long axis would therefore be oriented north-south rather than east-west as previously suggested (Wacher 1995, 352).

Private Housing

The same explosion of munificence which saw the construction of the town's public building complex, corresponded with a similar development of wealthy private housing and a mixture of domestic, commercial and industrial premises across the town (Clay and Mellor 1985; Clay and Pollard 1994; Connor and Buckley 1999).

Amongst the higher status housing, the courtyard house excavated by John Wacher in 1958 at Blue Boar Lane (8), still remains the most complete example (Wacher 1995, 352 and Fig.160), with remarkable above-foundation level preservation of the north and west ranges with painted wall plaster remaining in situ on the walls of the peristyled courtyard (Fig. 3) The significant fact in this respect, which is not often remarked upon, is that the walls of the building were constructed of unfired clay bricks cut to a standard size, and mounted on low, stone, walls. Two views from the Blue Boar Lane excavations show this well; the first is a section through the north wall of the courtyard (Fig. 4); the second is a collapsed partition wall between rooms in the west range (Fig. 5). The use of clay brick, rather than stone, in such wealthy housing may indicate a shortage of easily-dressed local building stone for domestic building, that could be used for facing. Such stone may have been confined to more prestigious public building projects, as evidenced in the survival of the Jewry Wall itself. The use of clay brick, seemingly for both external and internal walls, has serious implications for the survival of aboveground evidence for Leicester's domestic building and is particularly pertinent to the arguments put forward

Fig. 3. Excavations at Blue Boar lane 1958.

Wall-plaster *in situ* on north side of courtyard in secondcentury townhouse. John Wacher recording detail of clay brick superstructure in north range (*Wacher site archive, University of Leicester*)





Fig 4. Excavations at Blue Boar lane 1958. Section through north wall of courtyard showing detail of clay brick structure with plaster facing, right (*Wacher site archive*, *University of Leicester*).

regarding the decline of this form of housing in the late Roman period (Faulkner 2000, 37, Fig. 2.11) as discussed further, below. The survival of the Blue Boar Lane town house is a therefore particularly fortuitous example of preservation due to the construction of a major public building over it, and thus sealing it from the ravages of post-Roman activity. A similar scenario protected clay brick walling at the extra-mural villa site at Norfolk Street where the wall collapsed into a cellar (Lucas 1980-81b, 103).

However, the existing potential for preservation of private housing is still being recognized. Trial excavations in *insula* IX in 2001 (11), adjacent to the main north-south thoroughfare, and lying to the north of *insula* XVI containing the Blue Boar Lane town house, have revealed evidence for two further town houses containing tessellated and mosaic pavements (Meek 2002, 87). In contrast to the Blue Boar Lane town house, which only received one phase of refurbishment during its short life of c.75 years, evidence for Building 1, comprising three rooms and a corridor, indicates a number of re-flooring episodes. Two of the three rooms revealed were floored

Fig 5. Excavations at Blue Boar lane 1958.

Collapsed clay brick walling in west range of second-century townhouse (*Wacher site archive, University of Leicester*).



with red and grey *tesserae* respectively. The building appears to front on to a north-south street, which indicates that *insula* IX is another half *insula*, mirroring that occupied by the macellum to the south. Evidence for Building 2 lying to the east comprised a hypocausted room and evidence for a mosaic pavement with a guilloche border pattern. Historically, this *insula* is believed to have housed the Cyparissus Pavement, discovered in the seventeenth century, from which only the central octagon, showing the youth with stag and cupid, and one of the few figured panels from the region, survived.

Intramural Land use patterns

The map of the town published by John Wacher (1995, 344, Fig 154) includes, besides the three major public buildings and temple, the location of tessellated pavements, which are assumed to represent wealthier private housing. It is clear that their distribution is not even across the town and that trends are apparent in the pattern which might indicate zoning of land use rather than simply archaeological endeavour. While there is a clear concentration of pavements in the western half of the town and, in particular, the insulae surrounding the forum, there is also the tendency for properties to flank the prestigious line of the Fosse Way running east to west across the town as well and the major north-south thoroughfare. Additionally, there is a noticeable concentration in the area fronting on to the river in the northwest quarter which might have afforded pleasant views across to the Norfolk Street villa on the west side of the valley.

In contrast, the northeast quarter looks noticeably impoverished in this respect, and the fact that large-scale excavation has taken place in that sector without detecting further evidence for wealthier housing, has tended to emphasise a different character. During the Roman period, separate insulae within the northeast quarter tend to follow individual activity sequences and do not adhere to the perceived norm across the rest of the town, whereby timber buildings are replaced by stone-founded structures during the second century. For example land use in insula XI, after initial cultivation and possible gravel extraction, is characterised by intensive domestic occupation in the second century consisting of successive timber buildings with an associated metalled yard which was resurfaced on a number of occasions. A phase of abandonment or cultivation is followed by further phases of timber buildings and yard surfaces later in the second century, which continue into the later third and are associated with hearths, wells and possible smallscale craft working. Here the sequence ends or is truncated by twelfth century pits and cultivation. In contrast, diagonally opposite in insula XIX, a timber building was succeeded by a stone-founded strip building in the mid-second century, fronting on to the north-south street, whilst to the east, in *insula* XII, domestic occupation was replaced by large scale gravel

quarrying in the fourth century which still respected the street grid and internal plot boundaries.

The defences

Excavated evidence for the nature, sequence and dating of the town defences in the Roman and medieval periods was reviewed and published in 1987 (Buckley and Lucas 1987). The evidence was admittedly fragmentary: comparatively small sections cut across the lines of the northern, southern and eastern defences mostly in the 1950s-70s, and including John Wacher's 1958 site on the northern defences at Elbow Lane (10). No single site had produced the full sequence of rampart, ditches and wall and it was thus necessary to interpret the sequence using evidence from several sites. One of the main questions at that time was whether or not the sequence in Leicester was similar to that encountered elsewhere, commencing with an earthen rampart and ditch, perhaps in the late second century, the wall being added later in the third century and finally, so-called 'bastions' or interval towers added in the fourth. Hard stratigraphic evidence for the relationship between the rampart and wall was hampered by the fact that on every site examined, the latter had been entirely robbed in the late medieval period. However, the review concluded that an earthwork phase was likely, the best evidence for the rampart coming from the eastern defences on Butt Close Lane (4), where it survived to a height of almost a metre, with clear evidence for its construction, comprising layers of sand and gravel and turf sods. Finds from the rampart suggested that it was built in the late second century, the latest date being from a mortarium stamp of c. 135-165/70 from John Wacher's rampart section at Elbow Lane (Hartley 1987, 79, Fig. 34.62A). To the south, on Friar Lane, evidence for an earlier palisade had been encountered in the form of postholes beneath the robber trench of the town wall (Buckley and Lucas 1987, sites 2 and possibly 8). This was taken to suggest a timber breastwork and revetment fronting the rampart.

In the latest edition of 'Towns in Roman Britain', John Wacher still felt that there was insufficient evidence to prove an earlier earthwork circuit and it was not until a small scale excavation was undertaken across the line of the northern defences in Cumberland Street in 1997 (10) that rather more compelling evidence emerged (L. Cooper 1998). Here, a small fragment of town wall, just 0.75m in thickness, but up to 2.27m high, had survived fortuitously on the building line, presumably as a result of continuing uncertainty in the post Roman period over the precise line of the boundary. The site also produced a small section of rampart, although once again its stratigraphic relationship with the wall had been destroyed where the latter had been robbed out. Excavation of the rampart fragment, however, revealed important evidence for its construction. A series of halved logs with scorched lower sides, surviving as charcoal lenses, had been laid over layers of sand and gravel before being covered with layers of turf as on the

eastern rampart at Butt Close Lane (Buckley and Lucas 1987, site 4). The timbers were at right angles to the line of the rampart and presumably connected with a palisade or breastwork that revetted the front of a free-standing rampart (L. Cooper 1998, 96). Finds from the rampart suggested a second-century construction date.

This site also produced the first conclusive evidence for the thickness of the town wall, which at 4.5m (excluding any external facing stones), proved to be significantly greater than previously supposed. Lynden Cooper argues convincingly (1998, 103) for an initial earthwork circuit on a number of grounds. First, the late second-century date for the rampart would be rather early for a contemporary wall; second that one might expect stone waste and mortar debris from the construction of the wall within or beneath the rampart, had they been built together; third that the timber strapping within the rampart would be superfluous had it been revetted by a contemporary wall and fourth, that the narrow berm between the ditch and wall suggests that the former belongs to an earlier earthwork phase and was backfilled before the construction of the latter. As regards the construction of bastions or interval towers along the line of the wall in the fourth century, there is still no clear evidence. John believed he had evidence for this at Elbow Lane, in the form of a stone apron projecting over the inner lip of the ditch. Cooper, instead, believes this to represent consolidation of the inner lip of the ditch prior to the construction of the town wall (L. Cooper 1998, 104).

The existence of Leicester's western defences have been confirmed by recent excavations at the former Westbridge Wharf, Bath Lane (20). A turf-built rampart was constructed on made up ground some time during the second century. A later wall was inserted into the front of the rampart; the foundations were 3m wide comprising unbonded granite blocks set on a slight pitch. The superstructure was mostly robbed during the late medieval period, but a surviving block indicated a wall core of granite and concrete. An adjacent circular lime clamp kiln, presumably used during its construction, produced an archaeomagnetic date of AD 230-270. Eight late Roman extra-mural burials, immediately adjacent to the wall, were also located (L. Cooper *pers.comm.*)

The Suburbs

Recent excavation has revealed growing evidence for extensive suburban occupation at Leicester, beginning in the early second century prior to the construction of the defensive circuit in the later second century. A consistent sequence is emerging from a series of closely related sites excavated between 1993 and 1997 in the southern and northern extramural areas (**12-14 and 18**) and is echoed in the less extensive exploration of the eastern and western suburbs (**15 and 16**). Exploration in the southern suburb has centred on the line of the *Tripontium* road (Margary 1957, no.572) up to 350m south of the south gate, and the putative line of the Roman Gartree Road (the 'Via Devana' to Godmanchester) along modern Newarke Street (Finn 1994, Cooper 1996, Gossip 1998). All the excavations have detected ditched boundary enclosures broadly perpendicular to the *Tripontium* road, contemporary with, and corresponding to, the urban street grid established at the end of the first century. In most cases these boundaries are maintained and recut until at least the fourth century even where the plots become inhumation cemeteries, as at Newarke Street (12) (Cooper 1996). However, the evidence for activity within these plots is not easily characterised.

For example, at Newarke Street the plot boundary appears to form the southern limit of activity on the site throughout the Roman period. During the second century, activity to the north of it comprised a possible timber structure and pits suggestive of back yard activity (Cooper 1996, 8). Subsequently, the plot boundary was maintained and recut on at least four occasions but evidence of activity, other than the dumping of refuse (which might have come from within the walls), is sparse, before the area becomes a cemetery. At Bonners Lane (13) (Finn 1994), a site that straddles the Tripontium road, the plots on the west side witness little activity, suggesting perhaps cultivation or pasture. On the east side however, a gravelled surface was laid beside the road in the late second or third century, with activity including the use of an oven or kiln (with no plant remains as evidence for cereal processing), bone-working or glue making and iron-working. Subsequently, later in the third, or the fourth century a substantial timber building was constructed in the eastern part of the site which itself became the location of a sunken-featured building during the fifth or sixth century.

Further excavations on the east side of the Tripontium road at Oxford Street and York Road (14), revealed a similar sequence to Newarke Street with plots again, succeeded by an inhumation cemetery (Gossip 1998). Significantly, a sunken-featured building was detected on Oxford Street, which may be contemporary with that on the adjacent Bonners Lane. With the exception of the immediate road frontage represented at Bonners Lane, all the other suburban sites, including ones in the northern suburb on Sanvey Gate (Finn 1993) and Soar Lane (Buckley 1987), appear to witness a hiatus in activity after a spurt in the early to mid-second century, and this has brought into question the influence of the construction of earthen defensive circuit in the later second century. Construction of the circuit may have formalised the distinction between the inside and the outside of the town, which may have been only notional before, and then encouraged the outlying households to move inside (Finn 2002).

Similar roadside plots have also been detected adjacent to the proposed line of the Fosse Way through both the western suburb at Great Holme Street (15) (Mellor 1975-6), and the eastern suburb at Clarence Street (16) (Crank 2002). They seem to be comparable to those enclosures found outside other Roman towns, such as Ilchester (Cleary 1987, 94-6), and the pattern of activity at Leicester seems to confirm Cleary's assertion that the economic base of these areas was manufacture and trade (Cleary 1987, 197). For example, at Great Holme Street, there was a first-century pottery kiln and an abattoir and the occurrence of wool combs suggests textile working (Mellor 1975-6). However, the importance of agricultural processing close to the town, is evidenced at both the Norfolk Street villa, 700m outside the West Gate along the Mancetter Road, and at Crown Hills, where corn driers have been found associated with charred cereal remains that indicate the processing of cereals and the use of spelt wheat chaff as fuel (Monckton this volume).

The Cemeteries

The later phases of Roman period activity on many of these suburban sites comprised cemeteries. Work in both the southern and eastern suburbs during the last decade has greatly increased our knowledge of this aspect of the town's history which had scarcely progressed since Dare's work in the 1920s, in the Newarke Street and Gallowtree Gate areas, close the South and East Gates respectively (Dare 1927). Current work has been admirably overviewed by Lynden Cooper in his publication of the initial Newarke Street cemetery, excavated in 1993 (12), when it was estimated that two hundred inhumations and about sixty cremations were known from the town (1996). However, further discoveries in 2001 and 2002, have included a further 31 inhumations from the north side of Newarke Street (12) (Michael Derrick Pers. Comm.) and another 97 from the eastern suburb at Clarence Street (Crank 2002).

The southern suburb has produced intriguing evidence for zoning according to burial rite and corresponding ritual belief. The 39 inhumations excavated on the south side of Newarke Street in 1993 exhibited a consistent rite which Cooper has convincingly argued to be Christian and dated on the basis of occasional coin finds to the second half of the fourth century. The graves are laid out in rows with minimal intercutting, whilst within each grave, the body is consistently laid supine, extended with head to the west. There were no grave finds, but a significant feature of a majority of the graves (22) was the occurrence of discontinuous grave linings, using flat stones, Swithland roofing slates, or reused ceramic building tile (See Fig. 6). These linings were never roofed and their variable completeness appears to be a symbolic gesture in imitation of Christ's tomb that cannot be dismissed simply as packing to support fragile coffins (Cooper 1996, 21). The use of coffins could only be inferred from the occurrence of nails in 21 cases, and it is clear from preservation at Great Holme Street that wooden pegs were often used instead. This 'Christian' rite, with west-east orientation, little intercutting, and no grave goods, is also followed by the burials on the northern side of Newarke Street, and at the larger cemetery at Clarence Street in the eastern suburb



Fig.6. Excavations at Newarke Street cemetery, 1996. Detail of fourth-century grave with discontinuous grave lining (Courtesy Leicestershire County Museums Service).

(Crank 2002). On the Clarence Street site evidence for at least 31 coffins was recorded, whilst on the north side of Newarke St, discontinuous grave linings were recorded, with grave finds confined to two occurrences of bone hairpins (Michael Derrick *pers. comm.*).

Whether 'Christian' in the strict sense or following contemporary Christian fashion, these burials are different from those found recently elsewhere in the southern and eastern suburbs. A hundred metres south of the Newarke Street cemetery on Oxford Street (14) lay an inhumation cemetery of different character, but of broadly the same (but possibly earlier) date. Amongst the eight burials were examples of grave finds including hobnailed footwear, and a ceramic vessel with rites including the burial of a decapitated head between the legs of a complete individual, suggestive of pagan ritual. The grave of a young child apparently lay within a small enclosure or mortuary structure (Gossip 1998). Similarly the small portion of cemetery excavated at Haymarket, outside the East gate appears to be pagan, with examples of hobnailed footwear featuring amongst the twelve burials (Lynden Cooper pers. comm.).

It is possible that the late Roman burials encountered on the Oxford Street excavation site were directly associated with the later Roman period settlement remains at Bonners Lane, immediately to the west, rather than being members of the intramural population. The same combination of burials towards the rear of ditch-defined plots with domestic activity along the street frontage has been recorded at a number of other Roman roadside settlements, including suburban sites such as this (Smith 1987, 115-9). It is notable that the Oxford Street burials appeared to cluster along the plot boundary ditches and were aligned with, or at right angles to these, implying a degree of association. A similar arrangement is apparent at the York Road site, although the number of burials in this case is small (Finn 2002).

This work has clearly begun to hint at patterns within the burial archaeology of the town concerning the emergence of specific burial rites and possible zoning

between burial areas, but there are clearly many more questions that will only be answered through further exploration. It is ironic that the burial record becomes so much more visible just when occupation and population levels within the town become the subject of debate, and yet we have very little evidence for burial in the early Roman period when activity in the town is so vigorous. Cremations are known, predominantly from the east suburb, but very few have been found during controlled excavation. It may be that the cemeteries so far discovered represent the later outlying developments; certainly both Newarke Street and Clarence Street have definable southern and eastern extents respectively, whilst the earlier cremations may be closer to the town boundary. Alternatively, other burial ritual such as the scattering of ashes may have been prevalent and not left archaeological evidence (Lynden Cooper pers. comm.).

Diet and health

Excavations within the last fifteen years have provided the opportunity for environmental sampling of sites both inside and outside the walls. Sites in the northeast quarter have produced wide-ranging evidence of diet comprising cereals, mainly spelt wheat and barley; vegetables, including legumes and leaf beet; fruits such as sloe, wild plum and apple, and imports or introductions such as coriander, figs and lentils. Opium poppy, columbine and possible sweet violet may have been garden plants (Monckton 1999). Fish in the diet comprised freshwater varieties as well as herrings, eels (Nicholson 1999), mussels, whelks and abundant oysters, which are likely to come from the Essex coast.

Large assemblages of animal bone have also been analysed from the northeast quarter (Gidney 1999). The pattern of consumption recognised for civitas centres by King (1984) appears to have been broadly followed at Leicester with beef being the preferred meat throughout the Roman period, rapidly eclipsing the earlier popularity of mutton, whilst pig are at their most popular in the later Roman period. Domestic fowl and their eggs were also consumed alongside wild species including duck, goose, red deer, roe deer and hare. Amongst potential urban scavengers were raven (A. Gouldwell *pers. comm.*) and the highly unusual occurrence of a white tailed (or sea) eagle (Baxter 1993).

The health of the population is linked not only to food, but also to water supply, which mainly comes from wells in the northeast quarter. All six wells identified were used secondarily as rubbish and cesspits, which contained gut parasite ova and sheep liver fluke (Boyer 1999). The preservation and study of fly puparia also indicated the nature of these deposits and attested to attempts to control the smell through the scattering of lime (Skidmore 1999). It is hoped that a detailed examination of the skeletal material from the extensive cemeteries in the south and east suburbs, will allow a more direct overview of the health of the population in due course. Analysis of the cemetery on the south side of Newarke Street has revealed the familiar range of pathologies including arthritis and accidental trauma coincident with a hard life. Of most interest was a rare example of trephination, associated with a previous head injury, a surgical treatment from which the unfortunate patient did not survive (Wakely 1996, 50).

Trading Links

Large scale excavations in the northeast quarter have enhanced our knowledge of trading links and material culture generally, from the analysis of the largest finds assemblages ever recovered from the town (Clark 1999; Cooper 1999). Evidence for trade links is largely confined to the recognised sources of pottery supplied to the town. A number of studies of pottery supply to urban centres such as London (Marsh 1981), Chelmsford (Going 1987) and Cirencester (Cooper 1998) have started to establish a consistent pattern of consumption across the province which mirrors what is known of changes in both the location of production within Britannia and the declining level of commercial links with the Continent (Fulford 1977; Going 1992). The evidence from Causeway Lane (1) would tend to corroborate this pattern with shifts in the relative levels of local, non-local British, and continental suppliers of pottery over time. The following information is drawn from the analysis of pottery from Causeway Lane (Clark 1999).

During the mid-late first century supply is split between local sources for kitchen wares (80%) and continental sources for fine tablewares, which are confined to samian from Southern Gaul (18%). Specialist wares contribute less than 1% and include imported amphorae containing olive oil from Southern Spain, with mortaria from the Verulamium region. The late first to mid-second century sees a broadening of both the non-local British and continental sources of supply, although the contribution from local suppliers still amounts to over 70%. Samian ware contributes nearly 16% and though initially still from Southern Gaul, products from Central Gaul, an area that also supplied colour-coated and lead glazed wares, quickly eclipse this source. Although still only contributing less than 1% amphorae testify to links with the Eastern Mediterranean, Italy and Spain. Mortaria continue to be supplied from Verulamium but from the early second century, also come from Mancetter-Hartshill in Warwickshire. The presence of black burnished ware category 1 (BB1) from Dorset (2%), from the late first century onwards, prior to its expansion in the midsecond century, probably indicates the importance of the Fosse Way as a channel of trade from the south (Allen and Fulford 1996).

During the second half of the second century and into the early third, continental fine ware importation maintains a level of around 18%, although this is almost all Central Gaulish samian ware, before starting a steady decline during the rest of the third century. However, the latest continental imports still figure through much of the third century and include samian ware from Eastern Gaul and 'Rhenish ware' colour-coated wares from both Lezoux in Central Gaul and Trier in Eastern Gaul.

The most important changes to supply in the third and fourth century concern the rise of non-local British sources of both coarse wares and fine and specialist wares. Coarse ware supply is dominated by BB1 rising to a high of nearly 30% in the early fourth century; levels which are comparable to those much closer to the source such as Cirencester (Cooper 1998, Ceramic Phase 5, 333, Table 23). This period sees the growth of two major rural-nucleated industries in the south of Britain; Oxfordshire based in the Thames Valley, and the Lower Nene Valley around modern Peterborough, both of which supply a range of colour-coated fine wares and mortaria to the town. Leicester appears to lie on the watershed between the seemingly complimentary distribution networks of the two industries and supply is dominated by neither. This is most clearly demonstrated by the supply of mortaria, which come from both industries, as well as the traditional source of Mancetter-Hartshill.

If pottery can be safely used as an index of trade in other goods that do not survive, then it would appear that although centrally placed within the road network, Leicester drew products predominantly from the south and south east of this network. It must be borne in mind that the major centres of production of ceramics, as well as the 'down the line' trade route for imports (through London) lay in this direction, and so for manufactured goods and certain agricultural products, this may well hold true. However, it may be the case that a volume of products of a more primary nature, agricultural or mineral for example, which did not use pottery in their transport, could well have come from directions north and west, particularly given access along the Fosse Way and the River Trent.

The Fourth Century and After

The traditional view is that Romanised town life continued in Ratae until late in the fourth century (Mellor 1976, 21), with continuing maintenance and refurbishment of buildings attested by tessellated pavements of the period, both within the town (Clay and Mellor 1985; Clay and Pollard 1994) and at the extramural villa at Norfolk Street (Lucas 1980-81b). In terms of new buildings, at Butt Close Lane, a building was constructed adjacent to the rampart no earlier than AD321-2 (Buckley and Lucas 1987, 36) whilst at Little Lane (3) on the Shires development, the stone structures and associated gardens are believed to have continued in use into the fourth century (J. Lucas pers. comm.). However, against this picture of 'business as usual' there are isolated occurrences of activity which appear to indicate 'decline' such as the encroachment of pitting on to street metalling, as detected on Redcross Street (though quite possibly post-Roman: Clay and Pollard 1994, 48), together with evidence, possibly in the later fourth century, for the illegal extraction of silver from coinage within the outer west colonnade of the *macellum*, employing a circular furnace also used for glass manufacture (Fig. 7; Wacher 1995, 358; Price and Cool 1991, 24).

There is also clear evidence for fire destruction in the public building complex as indicated by layers of collapsed roofing tile and burnt roof timbers from the south western corner of the macellum (Wacher 1995, 362, fig. 164) and in the north aisle of the basilica and the adjacent room 2. The proximity of all three occurrences could relate to a single fire dated at the earliest by a coin of Valens to AD 364 on the floor of room 2 (Hebditch and Mellor 1973, 42). Other late fire damage was detected in the western and south-western part of the forum (Hebditch and Mellor 1973, 42), but whether this is related to the other occurrences is uncertain. Only in room 2 was there an attempt to re-floor after the destruction, and collectively the evidence has been seen to demonstrate a catastrophic late Roman fire from which no attempt at recovery was possible (Wacher 1995, 362).

There is an obvious danger in collecting together isolated pieces of evidence to construct a narrative, especially when the lack of datable artefacts after c. AD 410, could easily place some events in the post-Roman period. However, as Faulkner has stressed, we do have an obligation to try and write a history of our towns (1998, 371). The question is whether the evidence from Leicester is coherent enough to allow the kind of history that Faulkner has recently attempted? Neil Faulkner's recent overview of the evidence for the growth and decline of Roman towns in Britain represents the first systematic attempt to tackle this thorny issue beyond the extrapolation of essentially anecdotal evidence and this kind of approach is to be applauded (Faulkner 2000, 25). His study was based on assessing the number of rooms occupied across the town (total of 81) over time (2000, Fig 2.11). His analysis would tend to indicate a relatively steep decline in occupation within the town during the fourth century, after reaching a secondary peak around AD 300, with very little occupation after AD 350.

The detailed evidence upon which Faulkner's analysis rests is not known, but long experience of excavating within the city by one of the present authors (RB), would lead him to question the degree of confidence that can be placed, on estimates of the duration of occupation in many of the buildings recognised. The major problem concerning the validity of this claim concerns the heavy degree of truncation of all Roman deposits, not just late Roman ones evidenced across the town. Faulkner has strenuously argued for the validity of his method, claiming that early Roman deposits are as likely to be truncated by late Roman activity as the late Roman ones are by the medieval activity (2000, 26). However, the nature of medieval and later activity is far more damaging, ranging from extensive robbing (particularly

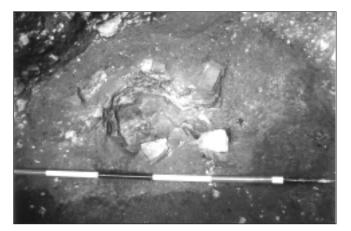


Fig. 7. Excavations at Blue Boar Lane, 1958. Circular furnace in outer west colonnade of the macellum, used for glass manufacture in the 4th century and possibly the illegal extraction of silver from coinage (Wacher site archive, University of Leicester).

in a town with poor building stone supply), to pitting and Victorian cellaring. Even cultivation, so apparent in the northeast quarter in the medieval and later periods has had a drastic affect and it is worth restating the evidence.

It may well be generally true that mortar floors would be resistant to truncation by cultivation and that we should also expect to find evidence for the walls of fourth century buildings where they cut deep into underlying deposits. However, evidence from the northeast quarter indicated that no floor levels for second century masonry buildings survived either at Little Lane or Causeway Lane. In addition, the tough concreted street metallings at Causeway Lane, attested by a large fragment, which had fallen into a medieval pit, had been largely destroyed, together with most horizontal stratification in insula XI and XIX. At nearby St. Peter's Lane, severe truncation resulted in medieval garden soils resting directly on the natural sand and gravel, leaving only earthfast features, including a possible robbed Roman cellar. The apparent lack of fourth century wall foundations may simply be explained by the longevity of second century masonry. Caution must also be observed in the phasing of robbed buildings; these are generally dated by underlying make-up deposits, but the association cannot be proved if truncation occurs after robbing and no floor levels are preserved, making a later date quite possible (Connor and Buckley 1999, 59).

Evidence of large deposits of building material in the late Roman period can also be open to interpretation. For example, the late gravel quarry pits in *insula* XII at Causeway Lane were backfilled with a very large assemblage of late 3rd- and early 4th-century pottery, as well as painted wall plaster and coins extending to AD 380. Finds of 'paint pots' amongst the wall plaster in the quarry pits could support the theory of a phase of refurbishment at a nearby building, comprising the removal of existing frescoes, followed by replastering and painting rather than simply demolition.

We are clearly a long way from characterising Late

Roman Leicester, and contradictory evidence abounds. For example, if Faulkner's view is correct then how do we account for the large numbers of fourth century inhumation burials now being discovered? On the other hand, and in support of Faulkner, Leicester has a very small numbers of stratified fourth-century pottery deposits, and the evidence of the decline of wearing otherwise common dress accessories such as bone hairpins has also been detected (Cooper 1999, 242, Fig. 111). The one thing we are certain of is that the nature of the urban landscape does change but we should expect this evolution and not view it necessarily as 'decline', on a town-wide basis. In a similar way we should treat the Early Anglo-Saxon evidence with optimism and as part of a continuum, even if the evidence, at present, appears so negative.

Structural evidence for occupation in the immediately post-Roman period and the subsequent Anglo-Saxon period is very limited. In a small number of cases flimsy timber structures have been claimed, at Causeway Lane (1) above the fills of the gravel quarry (Connor and Buckley 1999, 59) and at Blue Boar Lane (8) in the ruins of the macellum (Wacher 1995, 362). There are no examples of Anglo-Saxon sunken-featured buildings within the walls but 250m to the south of the town, adjacent to the Roman road to Tripontium the truncated remains of two sunken featured buildings associated with finds of the 5th-6th centuries have been identified (Finn 1994, 167; Gossip 1998, 159-60). It is likely that examples will be identified within the walls in due course as the quantity of Early Anglo-Saxon pottery coming from sites in the northeast quarter, though small, is still at a greater density than at the large rural settlement excavated at Eye Kettleby, near Melton Mowbray (Blinkhorn 1999; Connor and Buckley 1999, 83; Finn forthcoming). Although finds of pottery do seem to be restricted to the northeast quarter, further work could still show this to be substantial settlement. We should expect the townscape to have a more rural appearance during the Anglo-Saxon period. If many of the Roman domestic buildings were of timber or clay brick superstructure then they would be levelled relatively quickly, giving an open feel to much of the interior outside the civic centre. The longevity of Roman masonry structures such as the forum however, is highlighted by the fact that the main street of Leicester in the Saxo-Norman period was the north-south running axial road, the medieval 'High Street' (later renamed Highcross and Southgate Streets). This takes the shortest route between the north and south gates, and respects the Roman forum rather than running direct (Buckley and Lucas 1987, 56.).

Conclusion

This paper has hopefully demonstrated that the growth of developer-funded archaeology has greatly enhanced our knowledge of the Roman period in Leicester. Most importantly it has allowed us a much broader understanding of the town as a whole, including its suburbs, and not just the core of civic buildings surrounding St Nicholas Circle. We now know much more about the topography of the town and the degree of planning that went into it from an early date. Once that framework was in place, however, it is also becoming clear that activity within the urban area could vary from intense to almost rural in character depending on location.

We also appreciate more fully now the factors dictating the survival of archaeological deposits from the Roman town and in particular the impact of their truncation by medieval and later activity. At the time of writing (June 2003), excavations have just finished at 9, St Nicholas Place (17), where remarkable preservation of medieval buildings including a Norman undercroft has been recorded. Roman deposits were known to underlie these buildings but it was not appreciated to what height until the construction trench for the undercroft was seen to have cut through over 1.5 metres of street metalling belonging to Fosse Way at its junction with the main north-south thoroughfare.

Looking to the future, the major redevelopment of the City, which is currently underway, has the potential to enhance our understanding of its past even further. Excavations along Bath Lane (20), are already beginning to reveal the potential of this as a Roman residential, riverside area, whilst the extension of *The Shires* will allow exploration of parts of the town where little archaeological has ever been undertaken. When the Fieldworkers Group celebrates its fiftieth anniversary, there will no doubt be a different story to tell.

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References

- Allen, J.R.L., and Fulford, M.G., 1996 'The distribution of South-East Dorset black burnished category 1 pottery in South-West Britain', *Britannia* 27, 223-285.
- Blank, E., 1971 Ratae Coritanorum. London: Ginn and Company.
- Baxter, I.L., 1993 'An eagle, *Haliaeetus albicilla* (L.), skull from Roman Leicester, England, with some speculations concerning the palaeoecology of the Soar valley'. *Circaea* 10 (1), 31-37.
- Blinkhorn, P.W., 1999 'The Saxon pottery', *in* Connor and Buckley, 165.
- Bowman, A.K., 1994 Life and Letters on the Roman Frontier: Vindolanda and its People. London: British Museum Press.

- Boyer, P., 1999 'The Parasites', in Connor and Buckley, 344-46.
- Buckley, R. J., 1987 'A watching-brief at Soar Lane, Leicester', Trans. Leics. Archaeol. Hist. Soc. 61, 92.
- Buckley, R.J. and Lucas, J.N., 1987 Leicester Town Defences. Leicester: Leicester Museums Publication 85.
- Chapman, S., 2000 'Crown Hills, General Hospital (SK 621 041)', Trans. Leics. Archaeol. Hist. Soc. 74, 228-229.
- Charles, B.M., Parkinson, A. and Foreman, S., 2000 'A Bronze Age ditch and Iron Age settlement at Elms Farm, Humberstone, Leicester', *Trans. Leics. Archaeol. Hist. Soc.* 74, 113-220.
- Clark, R., 1999 'The Roman pottery', *in* Connor and Buckley, 95-164.Clay, P., 1980 'Seven Inscribed Leaden Sealings from Leicester', *Britannia* 11, 317-320.
- Clay, P., 1992 'An Iron Age Farmstead at Grove farm, Enderby, Leicestershire', *Trans. Leics. Archaeol. Hist. Soc.* **66**, 1-82.
- Clay, P., 2001 'Leicestershire and Rutland in the First Millennium BC', *Trans. Leics. Archaeol. Hist. Soc.* 75, 1-19.
- Clay, P., and Mellor, J.E., 1985 *Excavations in Bath Lane, Leicester.* Leicester: Leicestershire Museums Archaeological Report **10**.
- Clay, P. and Pollard, R.J., 1994 *Iron Age and Roman Occupation in the West Bridge Area, Leicester*. Leicester: Leicestershire Museums, Arts and Records Service.
- Cleary, S. E., 1987 *Extra-Mural Areas of Romano-British Towns*. Oxford: BAR British Series **169**.
- Connor, A. and Buckley, R., 1999 Roman and Medieval Occupation in Causeway Lane, Leicester. University of Leicester: Leicester Archaeology Monograph 5.
- Cooper, L., 1996 'A Roman Cemetery in Newarke Street, Leicester', Trans. Leics. Archaeol. Hist. Soc. 70, 1-90.
- Cooper, L., 1998 'New evidence for the northern defences of Roman Leicester: an archaeological excavation at Cumberland Street', *Trans. Leics. Archaeol. Hist. Soc.* 72, 92-109.
- Cooper, L. and Finn, N., 1992 An Archaeological Evaluation in Bath Lane, Leicester. LAU Archive Report.
- Cooper, N.J., 1990 Excavations at Blue Boar Lane, Leicester, 1958. Unpublished draft report held at Jewry Wall Museum, Leicester.
- Cooper, N.J., 1998 'The Supply of Pottery to Roman Cirencester', in N. Holbrook (ed.) Cirencester: the Roman Town Defences, Public Buildings and Shops, Cirencester Excavations 5, 324-350. Cotswold Archaeological Trust.
- Cooper, N.J., 1999 'The small finds', in Connor and Buckley, 239-282.
- Crank, N., 2002 'Clarence Street, Leicester', Trans. Leics. Archaeol. Hist. Soc. 76, 99.
- Dare, M.P., 1927 'The Cemeteries of Roman Leicester', *Trans. Leics.* Archaeol. Soc. 15, 33-57.
- Faulkner, N., 1998 'Urban stratigraphy and Roman history', in N. Holbrook (ed.) Cirencester: the Roman Town Defences, Public Buildings and Shops, Cirencester Excavations 5, 371-388. Cotswold Archaeological Trust.
- Faulkner, N., 2000 'Change and decline in late Romano-British Towns', *in* T.R. Slater (ed.) *Towns in Decline*, 25-50. Aldershot: Ashgate.
- Finn, N., 1993 Archaeological evaluation at 71-95 Sanvey Gate, Leicester' Trans. Leics. Archaeol. Hist. Soc. 67, 93-5.
- Finn, N., 1994 'Bonners Lane, Leicester', Trans. Leics. Archaeol. Hist. Soc. 68, 165-170.
- Finn, N., 2002 'Excavations at Bonners Lane 1993-4'. ULAS draft report, unpublished.
- Finn, N., forthcoming Eye Kettleby, Leicestershire: the Anglo-Saxon Settlement.
- Fulford, M.G., 1977 'The Location of Romano-British Pottery Kilns: Institutional Trade and the Market', *in J. Dore and K.T. Greene*, *Roman Pottery Studies in Britain and Beyond*, Oxford: BAR **\$30**.
- Gidney, L.J., 1999 'The Animal Bones', *in* Connor and Buckley, 310-329.
- Going, C.J., 1987 The Mansio and Other Sites in the South-Eastern Sector of Caesaromagus: The Roman Pottery. London: CBA Res. Rep. no.62.
- Going, C.J., 1992 'Economic Long Waves in the Roman Period: A Reconnaissance of the Ceramic Evidence', Oxford Journal of Archaeology 11, 93-117.
- Gossip, J., 1998 'York Road/Oxford Street', Trans. Leics. Archaeol. Hist. Soc. 72, 159-60.

- Hartley, K.F., 1987 'The *mortarium* stamps', in Buckley and Lucas, 79.
- Haverfield, F., 1918 'Roman Leicester', Archaeological Journal 75, 1-46.
- Hebditch M. and Mellor J.E., 1973 'The Forum and Basilica of Roman Leicester', *Britannia* 4, 1-83.
- Higgins, T., 1998 Westbridge Place, Duns Lane, Leicester: An Archaeological Watching brief. Unpublished ULAS Report 98/149.
- Jarvis, P., 1986 'The early pits of the Jewry Wall site, Leicester', *Trans. Leics. Archaeol. Hist. Soc.* **60**, 7-15.
- Jones, M., 1988 'Lincoln (Lindum)', in G. Webster (ed.) Fortress into City: the consolidation of Roman Britain, First century AD, 145-166. London: Batsford.
- Kenyon, K.M., 1948 Excavations at the Jewry Wall Site, Leicester. Oxford: Research Report Committee, Society of Antiquaries, London 15.
- King, A.C., 1984 'Animal bones and the dietary identity of military and civilian groups in Roman Britain, Germany and Gaul', *in* T. Blagg and A. King (eds.) Military and Civilian in Roman Britain, 187-217, Oxford: BAR 136.
- Kipling, R., 2002 An Archaeological Evaluation at St Nicholas Place, Leicester. Unpublished ULAS report 2002-046.
- Lucas, J.N., 1980-81a 'The debris of History: an archaeological survey of Leicester', *Trans. Leics. Archaeol. Hist. Soc.* 56, 1-9.
- Lucas, J.N., 1980-81b 'Norfolk Street Roman Villa, Leicester' Trans. Leics. Archaeol. Hist. Soc. 56, 103-4.
- Lucas, J. and Buckley, R.J., 1989 'The Shires excavation-an interim report', *Trans. Leics. Archaeol. Hist. Soc.* 63, 105-106.
- Mackreth, D.F., 1999. 'The brooches', in Connor and Buckley, 246-253.
- Margary, I.D., 1957. Roman Roads in Britain I. London: Phoenix House Ltd.
- Marsh, G., 1981 'London's Samian Supply and its Relationship to the Development of the Gallic Samian Industry', in A.C. Anderson, and A.S. Anderson (eds.) Roman Pottery Research in Britain and North-West Europe pt. i, 173-238.
- Meek, J.E., 1997 'Enderby (SP 550 999)', Trans. Leics. Archaeol. Hist. Soc. 70, 88-90.
- Meek, J.E., 2002 'Vaughan Way, former Maxim and Stibbe Buildings', Trans. Leics. Archaeol. Hist. Soc. 76, 87-91.
- Mellor, J.E., 1969-70. 'St. Nicholas Circle', Trans. Leics. Archaeol. Hist. Soc. 45, 74-5.
- Mellor J. E., 1975-6 'Great Holme Street, Leicester', Trans. Leics. Archaeol. Hist. Soc. 51, 59.
- Mellor, J.E., 1976 'Roman Leicester', in Ellis, C., History in Leicester (third edition), Leicester City Council, Recreational and Cultural Services Department.
- Millett, M., 1990 The Romanization of Britain: an Essay in Archaeological Interpretation. Cambridge, Cambridge University Press.
- Monckton A., 1999 'The plant remains', *in* Connor and Buckley, 346-362.
- Nicholson, R.A., 1999. 'The fish remains', *in* Connor and Buckley, 333-337.
- Price, J. and Cool, H. E. M., 1991. 'The evidence for the production of
- glass in Roman Britain', in Foy, D. and Sennequier, G., Ateliers de Verriers de l'antiquité à la périod pré-industrielle, Actes du 4e Rencontres d'Association Francaise pour l'archéologie du Verre 1989, (Rouen), 23-30.
- Rivet, A.L.F. and Smith, C., 1979 The Place-Names of Roman Britain. London: Batsford.
- Sauer, E., 2004 'Not just small change coins in Mithraea', in Martens, M. and De Boe, G. (eds.), Proceeding of the International Conference on Roman Mithraism: the evidence of the small finds, 7-8 November 2001, Tienen, Belgium 327-53.
- Skidmore, P., 1999 'The mineralised flies', in Connor and Buckley, 341-43.
- Smith, R. F., 1987 Roadside settlements in Lowland Roman Britain. Oxford: BAR British Series 157.
- Wacher, J., 1995. The Towns of Roman Britain (2nd edition). London: Batsford.
- Wakely, J., 1996 'Skeletal Analysis', in Cooper 1996, 33-51.