

## 5. THE ROMAN PERIOD (AD43-c.410): UPDATED RESEARCH AGENDA

### 5.1 Chronology

1. How can we enhance our knowledge of developments in regional pottery industries, particularly during the Conquest period and third to fourth centuries?
2. How may information on temporal and intra-regional variations in ceramic forms, styles of surface treatment and fabrics best be disseminated?
3. How may our understanding of sites known only from metal-detected and fieldwalking finds be enhanced?
4. How can we advance our knowledge of the chronology of metal finds, particularly brooches?
5. What are the priorities for scientific dating, particularly radiocarbon, and how may targeted dating programmes be developed?

### 5.2 The military impact

1. How far was the military conquest a motor of social and economic change?
2. To what extent is the pivotal location of the region between civil south and military north reflected in the archaeological record?
3. Can we define more closely the distribution of early military installations and evidence for their continuing presence into the late Roman period?
4. How far did the supply needs of major military garrisons and of armies along the northern frontier impact upon the economy and transport infrastructure?
5. How did the withdrawal of Roman political and financial support impact upon the established society and economy?

### 5.3 Growth of urban centres

1. What was the impetus for the foundation of extramural settlements (*vici*) adjacent to early forts and how was the development of *vici* and forts related?
2. How does the distribution of public towns and secondary urban centres correlate with Iron Age foci, and how far may their social, political and economic roles have overlapped?
3. What processes may have spurred the growth of secondary urban centres?
4. How were towns organised, what roles did they perform and how may their morphology and functions have varied over time?
5. How and why did the urban landscape change in the late Roman period, and what roles may fortifications have played in this period?

### 5.4 Rural settlement patterns and landscapes

1. What was the impact of the Conquest upon rural settlements and landscapes, and can we elucidate patterns of continuity, abandonment and relocation?
2. How and why did settlement forms and building traditions vary within the region and over time?
3. How did rural settlements relate to each other and to towns and military sites, and how may this have varied regionally and over time?
4. How did field and boundary systems relate to earlier systems of land allotment, and can we identify continuity or dislocation of boundary networks over time?
5. What patterns can be discerned in the location of settlements in the landscape?
6. Can we elucidate further the daily life of rural settlements and their role in the processing and marketing of agricultural products?

### 5.5 The agricultural economy

1. How is the continuing upland-lowland divide manifested in the regional agricultural economy, and how is this contrast reflected in other aspects of the archaeological record?
2. How may integration into the Roman Empire have impacted upon the agrarian economy, including the introduction of new crops, herbs and fruits?
3. What is the evidence for the diet of people of high and low status in urban and rural settlements, especially those close to military sites?
4. Can we chart more closely the processes of agricultural intensification and expansion (most notably on the heavier clays) and the functions and date of the extensive field systems that developed in some areas?
5. Can we define more precisely the networks developed for the trade and exchange of agricultural produce and fish?

### 5.6 Artefacts: production, distribution and social identity

1. What resources moved in and out of the region during this period?
2. How can we add to our understanding of the nationally important iron and lead industries?
3. How may studies of the production, movement and consumption of Roman pottery contribute to our understanding of the developing regional economy?
4. What production techniques and exchange networks were involved in the manufacture and marketing of salt and building materials?
5. How can we utilise most effectively the regional coin resource as evidence for the transition to a monetary economy?
6. What can artefact research contribute to studies of eating, drinking and other manifestations of social identity?

### 5.7 Roads and waterways

1. Can the chronology of road construction and links between road building and campaigns of conquest be clarified?
2. How were rivers and artificial waterways integrated with the new road network?
3. To what extent may communication routes have been influenced by Late Iron Age settlement patterns and routes of movement?
4. How may roads and waterways have impacted upon established communities and how may roads have influenced urban morphology?

### 5.8 Ritual and religion

1. How far is the location of Roman religious sites related to Late Iron Age activity and to what extent may preferential deposition of human/animal bones in settlement/boundary features have continued into the Roman period?
2. How far may data from surveys and the Portable Antiquities Scheme assist in locating religious or ritual sites?
3. Can we elucidate the beliefs and practices associated with religious or ritual foci and may certain classes of site have been associated with particular activities?
4. Why have so few burials of the early Roman period been found, and may practices have varied intra-regionally and/or between different communities?
5. What may studies of later Roman inhumation cemeteries teach us about changing burial practices and population characteristics?

## 5. THE ROMAN PERIOD (AD43-c.410): RESEARCH OBJECTIVES

Updated Research Agenda Research Objectives	5.1 Chronology					5.2 The military impact					5.3 Growth of urban centres					5.4 Rural settlement patterns and landscapes						5.5 Agricultural economy					5.6 Artefacts: production, distribution and social identity						5.7 Roads and waterways				5.8 Ritual and religion													
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<b>5A</b> Create regional pottery corpora and publish key production sites	•	•	•		•	•	•	•	•	•				•				•									•		•			•		•																
<b>5B</b> Disseminate and synthesise information on Roman finds	•	•	•			•	•	•	•	•				•				•									•	•	•	•	•	•		•												•				
<b>5C</b> Promote systematic application of scientific dating techniques	•			•	•			•						•		•	•	•	•						•								•													•			•	•
<b>5D</b> Support scientific analysis of human remains																									•																					•			•	•
<b>5E</b> Promote integration of studies of subsistence, diet and health												•	•	•							•	•	•	•	•	•																								
<b>5F</b> Develop access to Lincoln and Leicester Urban Archaeological Databases	•			•		•	•	•	•	•	•	•	•	•	•			•						•			•						•	•	•	•		•		•						•			•	•
<b>5G</b> Promote further synthesis and analysis of secondary urban centres	•			•		•	•	•	•	•	•	•	•	•	•			•						•			•						•	•	•	•										•			•	•
<b>5H</b> Investigate landscape context of rural settlements																•	•	•	•	•	•	•			•																									
<b>5I</b> Support publication of landscape syntheses																•	•	•	•	•	•				•									•	•	•														
<b>5J</b> Instigate regional scale characterisation study of industry	•								•	•	•	•	•	•						•						•	•	•	•			•		•																

## Research Objective 5A

### Create regional corpora of Roman pottery and publish information on key production centres.

#### Summary:

The East Midlands was an important area for the manufacture of pottery, which in the case of Nene Valley colour-coated wares and mortaria produced in the Hartshill and Mancetter kilns of the Leicestershire-Warwickshire border were distributed nationally<sup>1</sup>. Several regionally important production sites have also been identified, together with a variety of pottery fabrics whose production location is less well understood<sup>2</sup>. Comparative studies of the chronology, production and distribution of local and regional wares are hindered by inconsistencies in terminology and variability in recording methodologies<sup>3</sup>. Research on these subjects would benefit from the development of a region-wide fabric and form series<sup>4</sup>, building upon existing county schemes and the National Roman Fabric Collection<sup>5</sup>. The compilation of a catalogue of pottery in museum collections<sup>6</sup> and publication of key groups from sites such as Stanwick and Ashton in Northamptonshire<sup>7</sup> would also strengthen the infrastructure for research<sup>8</sup>. Syntheses of the nationally important Lower Nene Valley and Mancetter-Hartshill industries are long overdue, together with synthetic studies of the key regional industries represented by the Swanpool, Knaith, Bourne and Market Rasen kilns of Lincolnshire, Upper Nene Valley greywares, the Lower Trent Valley kilns, Derbyshire wares, the problematic shell-tempered fabrics of Lincolnshire and south Nottinghamshire<sup>9</sup>, and the mid-first century fineware industries of Northamptonshire<sup>10</sup>. Such work would greatly enhance knowledge of the pottery industry in the region and beyond, and by assisting the development of training programmes would address the growing skills shortage in Roman ceramic analysis<sup>11</sup>.

**Agenda topics addressed:** 5.1.1, 5.1.2, 5.1.3, 5.1.5 and 5.6.2.

**East Midlands Resource Assessment and Research Agenda:** 154.

**SHAPE 2008 sub-programmes:** Understanding artefacts and material culture (11111.510); Realising the research dividend from past unpublished historic environment excavations (11113.110).

#### Other research frameworks:

Willis, S.H. 2004 The Study Group for Roman Pottery research framework document for the study of Roman pottery in Britain 2004, *Journal of Roman Pottery Studies* 11, 1-20 (especially Sections 3.5.2, 3.5.3; 3.6.2, 5.3.2 and 5.3.3).

#### References:

- <sup>1</sup> Swan, V. 1984, *The Pottery Kilns of Roman Britain*, Royal Commission on Historical Monuments, Supplementary Series 5. London: HMSO, 95-97, 98-101.
- <sup>2</sup> Taylor, J. 2006, The Roman period, in Cooper, N.J. (ed) *The Archaeology of the East Midlands*, 151-152.
- <sup>3</sup> Taylor 2006, 140-141; see also Darling, M. 2004. Guidelines for the archiving of Roman pottery, *Journal Roman Studies* 11, 67-74.
- <sup>4</sup> Willis 2004, 5-6: 3.3.2; Taylor 2006, 152.
- <sup>5</sup> Tomber, R. and Dore, J. 1998. *The National Roman Fabric Reference Collection: A Handbook*. London: Museum of London Archaeological Services
- <sup>6</sup> Willis 2004, 5: 3.2,
- <sup>7</sup> Taylor 2006, 152,
- <sup>8</sup> As Lincoln: Darling, M. and Precious, B. forthcoming. *A Corpus of Roman Pottery from Lincoln*. Oxford: Oxbow Books.
- <sup>9</sup> Taylor 2006, 151-152; Willis 2004, 10: 4.4.1.
- <sup>10</sup> e.g. Rushden: Woods, P. and Hastings, S.1984. *Rushden: The Early Finewares*, Northamptonshire County Council.
- <sup>11</sup> Willis 2004, 7-8: 3.6.2; 14: 5.3.2; Allason-Jones, L. 2001. Material culture and identity, in James, S. and Millett, M. (eds) *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 24-25

## Research Objective 5B

### Support the dissemination and synthesis of information on Roman finds

#### Summary:

Opportunities should be taken to encourage appropriate recording and analysis of pottery, metalwork, coinage, querns and other finds derived from fieldwalking and metal-detecting by individuals and groups<sup>1</sup>, including finds deposited in museums, and the wider dissemination of this information<sup>2</sup>. This has particular potential for enhancing our understanding of regional exchange networks and wider social issues such as eating and drinking<sup>3</sup> and the development of social identities. By providing greater opportunities for public engagement in the research process, this would also promote the role of the voluntary sector in the regional Research Strategy.<sup>4-6</sup> The Portable Antiquities Scheme is well placed to promote the dissemination of information and to assist in the formulation of guidelines for the recording and analysis of finds. In addition, as much of this material continues to elude county Historic Environment Records, there are opportunities for ensuring closer liaison between the public, Historic Environment Record staff and other heritage professionals. The importance of finds as an educational resource should also be emphasised, bearing in mind particularly the inclusion of the Roman period as a National Curriculum subject<sup>7</sup>.

**Agenda topics addressed:** 5.1.1, 5.1.2, 5.1.3, 5.6.1, 5.6.2, 5.6.3, 5.6.4, 5.8.2

**East Midlands Resource Assessment and Research Agenda:** 139, 154, 158, 290

**SHAPE 2008 sub-programmes:** Understanding artefacts and material culture (11111.510); Realising the research dividend from past unpublished historic environment excavations (11113.110)

#### Other research frameworks:

Willis, S.H. 2004 The Study Group for Roman Pottery research framework document for the study of Roman pottery in Britain 2004, *Journal of Roman Pottery Studies* 11, 2: Section 1.2.1

#### References

- <sup>1</sup> Cooper, N.J. 2005 Promoting the study of finds in Roman Britain: democracy, integration and dissemination. Practice and methodologies for the future, in R. Hingley and S. Willis (eds) *Roman Finds: Context and Theory*, Oxford: Oxbow Books, 34-51
- <sup>2</sup> Curteis, M., Jackson, D. and Markham, P. 1999 Titchmarsh Late Iron Age and Roman settlement, *Northamptonshire Archaeology* 28, 164-174
- <sup>3</sup> Cool, H.M. 2006. *Eating and Drinking in Roman Britain*, Cambridge: Cambridge University Press
- <sup>4</sup> Cooper, N.J. 2006 Cross-period research and the foundations of a research strategy, in Cooper, N.J. (ed) *The Archaeology of the East Midlands*, 290
- <sup>5</sup> Bingham Heritage Trails Association: survey of Bingham parish, Nottinghamshire, including fieldwalking of Roman sites in the hinterland of the small town of *Margidunum* (<http://www.binghamheritage.org.uk>); BHTA 2010 *Bingham: Back in Time*
- <sup>6</sup> CLASP (Community Landscape and Archaeology Project): fieldwalking survey of Roman sites in the Upper Nene Valley (<http://www.claspweb.org.uk>)
- <sup>7</sup> Willis 2004, 2: 1.2.1

## Research Objective 5C

### Promote the systematic application of scientific dating to sites of the Roman period.

#### Summary:

The chronology of the Roman period is fairly well established, although complicated for the non-specialist by inconsistencies in dating terminology and hindered by an over-reliance upon pottery, imprecision in the dating of much metalwork and a continuing reluctance to embrace scientific dating methods<sup>1</sup>. The problem is especially acute in the Peak District, where both Iron Age and Roman artefacts are scarce<sup>2</sup>, and is compounded by the longevity of native artefact traditions<sup>3</sup> and the particular problems of dating third and fourth century AD pottery<sup>4</sup>. Further problems, arising from a paucity of regional pottery corpora and non-publication of certain key assemblages, have been discussed above (Objective 5A). Radiocarbon dating methods have particular potential for refining chronologies, especially through the application of Bayesian analysis<sup>5</sup>, and despite calibration difficulties in the late Roman period systematic programmes of radiocarbon dating should be encouraged. Resources should also be targeted upon dendrochronology, which has significant potential for dating the waterlogged wood recovered not only from deeply stratified urban contexts but also from rural sites with favourable conditions of preservation<sup>6</sup>. These and other scientific techniques such as archaeomagnetic or rehydroxylation dating<sup>7</sup> are especially relevant for the late Roman period, which with the cessation of Roman coin production from around AD402 loses an important dating tool, and have particular potential for elucidating the tradition of late and post-Roman inhumations lacking associated grave-goods<sup>8</sup>.

**Agenda topics addressed:** 5.1.1, 5.1.4, 5.1.5, 5.2.1, 5.2.2, 5.3.4, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.5.3, 5.7.1, 5.8.1, 5.8.4, 5.8.5

**East Midlands Resource Assessment and Research Agenda:** 140-141, 154

**SHAPE 2008 sub-programme:** New frontiers: clarifying poorly understood chronologies (11112.510)

#### Other research frameworks

Willis, S.H. 2004 The Study Group for Roman Pottery research framework document for the study of Roman pottery in Britain 2004, *Journal of Roman Pottery Studies* 11, 13: Section 5.1

#### References:

<sup>1</sup> Taylor, J. 2006 The Roman period, in Cooper, N.J. (ed) *The Archaeology of the East Midlands*, 140-141, 154

<sup>2</sup> Bevan, B. 2005 Peaks Romana: the Peak District Romano-British rural upland settlement survey, *Derbyshire Archaeological Journal* 118, 26-58; Makepeace, G.A. 1998. Romano-British rural settlement in the Peak District, *Derbyshire Archaeological Journal* 118, 95-138.

<sup>3</sup> e.g. Friendship-Taylor, R.M. 1998 *Late La Tène Pottery of the Nene and Welland Valleys, Northamptonshire*, Oxford: British Archaeological Reports 280

<sup>4</sup> Taylor 2006, 141, 154; Willis 2004, 13: 5.1

<sup>5</sup> Stuiver, M, Reimer, P. J., Bard, E., Beck, J. W., Burr, G. S., Hughen, K. A., Kromer, B., McCormac, G., van der Plicht, L. and Spurk, M. 1998 INTCAL98 Radiocarbon age calibration, 24000-0 BP, *Radiocarbon* 40, 1041-83

<sup>6</sup> Garton, D. and Salisbury, C.R. 1995. A Romano-British wood-lined well at Wild Goose Cottage, Lound, Nottinghamshire, *Transactions Thoroton Society of Nottinghamshire* 99, 15-43

<sup>7</sup> Wilson, M.A, Carter, M.A., Hall, C., Hoff, W.D., Ince, C., Savage, S.D. McKay, B. and Betts, I.M. 2009. Dating fired-clay ceramics using long-term power law rehydroxylation kinetics, *Proceedings of the Royal Society A*, 1-9, <http://rspa.royalsocietypublishing.org/site/misc/RSPA20090117.pdf>

<sup>8</sup> Taylor 2006, 154, 159; Esmonde-Cleary, S. 2001 The Roman to medieval transition, in James, S. and Millett, M. (eds) *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 96.

## Research Objective 5D

### Support the application of scientific analysis to human remains.

#### Summary:

Despite the excavation of a number of moderately extensive Roman cemeteries in the region<sup>1</sup> and of isolated burials on and around settlements, sometimes in boundary features<sup>2</sup>, there has been little analysis of skeletal remains of this period. The application of radiocarbon and isotopic analysis<sup>3</sup> would enable these burials to be placed more securely in their chronological and environmental context, while DNA analyses of bone samples have the potential for elucidating the genetic relationships between individuals preserved in cemeteries<sup>4</sup>. To some extent, because of the antiquity of many excavations, such analysis may have to await the discovery of new large-scale cemeteries. Of the many burials recorded from Lincoln, for example, relatively few have survived for modern analysis<sup>5</sup>. It is recommended, in view of the potential research value of such remains, that adequate provision for appropriate scientific analysis be included as a standard requirement in archaeological schemes of treatment relating to sites likely to yield evidence of Roman activity.

**Agenda topics addressed:** 5.5.2, 5.8.1, 5.8.4, 5.8.5

**East Midlands Resource Assessment and Research Agenda:** 158-159

**SHAPE 2008 sub-programme:** Understanding past populations of Britain (11111.710)

#### References:

<sup>1</sup> e.g. Leicester: Cooper, L. 1996. A Roman cemetery in Newarke Street, Leicester, *Transactions Leicestershire Archaeological and Historical Society* 70, 1-90; *Margidunum*, Nottinghamshire: Todd, M. 1969. Margidunum: excavations 1966-8, *Transactions. Thoroton Society of Nottinghamshire* 73, 7-104.

<sup>2</sup> Taylor, J. 2006 The Roman period, in Cooper, N.J. (ed) *The Archaeology of the East Midlands*, 154; e.g. Ashton, Northamptonshire: Dix, B. 1985 Ashton, *Northamptonshire Archaeology* 20, 148-149

<sup>3</sup>e.g Leach, S., Eckardt, H., Chenery, C., Müldner, G. and Lewis, M. 2010. A 'lady' of York: migration, ethnicity and identity in Roman York. *Antiquity* 84, 131-145  
<http://www.reading.ac.uk/archaeology/research/Projects/arch-Diaspora.aspx>

<sup>4</sup> Esmonde-Cleary, S. 2001 The Roman to medieval transition, in James, S. and Millett, M. (eds) *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 96

<sup>5</sup>Jones M. J., Stocker, D. and Vince, A. (eds) 2003 *The City by the Pool: Assessing the Archaeology of the City of Lincoln*, 108-114

## Research Objective 5E

### Promote the integration of specialist studies of material relating to subsistence, diet and health

#### Summary:

Excavations have generated a substantial body of data that may be applied to studies of intra-regional and temporal variations in subsistence and diet, and hence to assessment of the impact of Roman cultural traditions upon the dietary preferences of native communities<sup>1-3</sup>. The full potential of this information may only be realised by ensuring adequate dialogue between specialists and by promoting the integration of disparate specialist data in site reports and regional syntheses. Particular emphasis should be placed upon the integration of studies examining the functional composition of pottery groups<sup>4</sup> and the residues preserved on pottery<sup>5</sup>, querns and other material associated with food production, processing and storage<sup>6</sup>, and associated faunal and palaeobotanical remains<sup>7,8</sup>. Scientific analyses with significant potential for the reconstruction of ancient diet and health, exemplified by residue analyses of ancient pottery<sup>5</sup> and stable isotope analyses of human remains<sup>9</sup>, need to be encouraged as routine practice<sup>10</sup>. There is also considerable scope for enhancing the palaeoenvironmental record – notably by encouraging regular sieving for fish bones<sup>11</sup> and by ensuring that bulk samples are large enough to yield sufficient floral and faunal data to permit meaningful analysis<sup>12</sup>.

**Agenda topics addressed:** 5.3.2, 5.3.3, 5.3.4, 5.4.3, 5.5.1, 5.5.2, 5.5.3

**East Midlands Resource Assessment and Research Agenda:** 277

**SHAPE 2008 sub-programmes:** Understanding artefacts and material culture (11111.510); Understanding past populations of Britain (11111.710)

#### Other research frameworks:

Dobney, K. 2001 A place at the table: the role of vertebrate zooarchaeology within a Roman research agenda for Britain, in James, S. and Millett, M. (eds) *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 36-45

Van der Veen, M., Livarda, A. and Hill, A. 2007 The archaeobotany of Roman Britain: current state and identification of research priorities, *Britannia* 38, 181-210 (especially 202-207)

Williams, J. 2009. *The Use of Science to Enhance our Understanding of the Past*, National Heritage Science Strategy, Report 2, 16-18 ([http://nhss.english-heritage.org.uk/upload/pdf/nhss\\_report\\_2\\_web.pdf?1285144599](http://nhss.english-heritage.org.uk/upload/pdf/nhss_report_2_web.pdf?1285144599))

Willis, S.H. 2004 The Study Group for Roman Pottery research framework document for the study of Roman pottery in Britain 2004, *Journal of Roman Pottery Studies* 11, 6: Section 3.4.1-3.4.2; 15: Sections 5.5 & 5.6

#### References:

<sup>1</sup> Dobney 2001, 36-37; Monckton, A. 2006 Environmental archaeology in the East Midlands, in Cooper N.J. (ed) *The Archaeology of the East Midlands*, 273-279

<sup>2</sup> Cool, H.M. 2006. *Eating and Drinking in Roman Britain*, Cambridge: Cambridge University Press

<sup>3</sup> Stallibrass, S. and Thomas, R. (eds) 2008 *Feeding the Roman Army*, Oxford: Oxbow Books

<sup>4</sup> Willis 2004, 15: Section 5.6

<sup>5</sup> Willis 2004, 6: Section 3.4.2

<sup>6</sup> Taylor, J. 2006 The Roman period, in Cooper (ed) 2006, 153

<sup>7</sup> Monckton A. 2006 Environmental archaeology in the East Midlands, in Cooper (ed) 262: Table E1, 273-277

<sup>8</sup> Albarella, U. and Pirnie, T. 2008 *A Review of Animal Bone Evidence from Central England*,

[http://ads.ahds.ac.uk/catalogue/resources.html?animalbone\\_eh\\_2007](http://ads.ahds.ac.uk/catalogue/resources.html?animalbone_eh_2007)

<sup>9</sup> e.g. Richards, M.P., Hedges, R.E.M, Molleson, T.I. and Vogel, J.C. 1998 Stable isotope analysis reveals variations in human diet at the Poundbury Camp cemetery site, *Journal Archaeological Science* 25, 1247-1252

<sup>10</sup> Willis 2004, 6: Sections 3.4.1-3.4.2

<sup>11</sup> Dobney 2001, 41-42; Locker, A. 2007 *In piscibus diversis*; the bone evidence for fish Consumption in Roman Britain, *Britannia* 38, 141-180

<sup>12</sup> Williams, J. 2009. *The Use of Science to Enhance our Understanding of the Past*, National Heritage Science Strategy, Report 2, 16-18

## Research Objective 5F

### Develop public and professional access to Lincoln and Leicester Urban Archaeological Databases as a basis for further work

#### Summary:

Online access to the Urban Archaeological Databases (UADs) for Lincoln (*Lindum Colonia*) and Leicester (*Ratae Corieltauvorum*), together with the continuing publication of excavation backlogs for these cities, is proposed as a springboard for the development of hinterland and community archaeology projects focused upon these key urban centres – as recently completed for Wroxeter<sup>1</sup>. At Lincoln, both the early legionary fortress, established by the AD 60s, and the later *colonia*<sup>2</sup>, founded by AD 96, have been extensively excavated. A review and an outline research agenda have been produced for the initial military phase of Lincoln and the subsequent period of civil consolidation<sup>3</sup>, and much information on the Roman heritage of the city is now readily available on line via the innovative Heritage Connect website<sup>4</sup>. The major public town at Leicester, which was appointed capital of the *Civitas Corieltauvorum*<sup>5</sup> in the late first/early second century, has seen more recent excavation on an extensive scale<sup>6</sup>; the results of these investigations have been incorporated in a UAD, which is now an integral part of the Historic Environment Record<sup>7</sup>. It is proposed that the information contained in these databases be made available online and be revised regularly by the addition of new archaeological data, ensuring that they remain up to date research resources. In terms of further work, it is recommended that particular emphasis be placed initially upon characterising the Late Iron Age settlements known to have existed at both locations and exploring the impact of urbanisation upon their hinterlands.

**Agenda topics addressed:** 5.1.1, 5.1.4, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.4.3, 5.5.1, 5.5.2, 5.5.4, 5.6.2, 5.7.1, 5.7.2, 5.7.3, 5.7.4, 5.8.1, 5.8.3, 5.8.5

**East Midlands Resource Assessment and Research Agenda:** 155-157

**SHAPE 2008 sub-programmes:** Realising the research dividend from past unpublished historic environment excavations (11113.110); Realising the research dividend of community research (11113.210)

#### Other research frameworks:

Burnham, B., Collis, J., Dobinson, C., Haselgrove, C.C. and Jones, M. 2001 Themes for urban research, in James, S. and Millett, M. (eds) 2001. *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 67-76

Jones, M.J., Stocker, D. and Vince, A. 2003 *The City by the Pool: Assessing the Archaeology of the City of Lincoln*, 54-55 (The Roman military era) and 138-140 (The *Colonia* era)

Millett, M. 2001 Approaches to urban societies, in James and Millett (eds) 60-66

#### References:

<sup>1</sup>Gaffney, V. and White, R. 2007. *Wroxeter, the Cornovii and the Urban Process*, Journal of Roman Archaeology Supplement vol.68

<sup>2</sup> *Colonia*: in Britain, a town founded to house those who had completed their military service and had been granted Roman citizenship (Wacher, J. 1995 *The Towns of Roman Britain*, 2<sup>nd</sup> ed., Chapter 4; Hurst, R. (ed) 1999 *The Coloniae of Roman Britain*, Journal of Roman Archaeology Supplement vol 36)

<sup>3</sup> Jones *et al* 2003, 54-55 and 138-140

<sup>4</sup> <http://www.heritageconnectlincoln.com>

<sup>5</sup> *Civitas*: the basic unit of Roman government in Britain, reflecting Roman understanding of the territorial extent of pre-Roman tribes such as the Corieltauvi (previously 'Coritani': e.g. Whitwell, J.B. 1982 *The Coritani: Some Aspects of the Iron Age Tribe and the Roman Civitas*, Oxford: BAR British Series 99)

<sup>6</sup> Taylor, J. 2006 The Roman period, in Cooper, N.J. (ed.) *The Archaeology of the East Midlands*, 147

<sup>7</sup> Taylor 2006, 146

## Research Objective 5G

### Promote further synthesis of secondary urban centres and targeted post-excavation analysis and publication

#### Summary:

The secondary urban settlements of the region are comparatively poorly known, but formed an important tier of the regional settlement hierarchy that was closely integrated with the developing road network<sup>1-3</sup>. They represent a particularly prominent element of the East Midlands landscape, of interest within and beyond the region, and a detailed review is recommended to elucidate further their character and to explore comparisons with urban centres elsewhere in Britain. This could build upon important work undertaken for Northamptonshire<sup>4</sup> and could usefully be combined with detailed analysis and publication of key sites such as Ancaster, Lincolnshire<sup>5</sup>, Ashton, Northamptonshire<sup>6</sup>, Thistleton, Rutland<sup>7</sup> and Brough-on-Fosse<sup>8</sup>, Nottinghamshire<sup>9</sup>. Detailed analyses of the structural remains, artefacts and palaeoenvironmental data from these secondary urban centres should enhance significantly our understanding of their origins, morphology and socio-economic, political and religious functions, their relationship to the road network, outlying rural settlements, villas and larger public towns, and their impact upon the neighbouring rural landscape. In addition, many of these secondary urban centres may have developed from nucleated Late Iron Age settlements, as shown by excavations at the key Lincolnshire sites of Dragonby<sup>10</sup> and Sleaford<sup>11</sup>, and from the national perspective have significant potential for elucidating the origins of urbanisation and the balance between military and indigenous motors of change<sup>12</sup>.

**Agenda topics addressed:** 5.1.1, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.4.3, 5.5.1, 5.5.2, 5.5.4, 5.6.2, 5.7.1, 5.7.2, 5.7.3, 5.7.4, 5.8.1, 5.8.3, 5.8.5

**East Midlands Resource Assessment and Research Agenda:** 155-157

**SHAPE 2008 sub-programmes:** Understanding place: assessing the national resource (11111.140); Understanding place: assessing regional historic environment components (11111.170); Realising the research dividend from past unpublished historic environment excavations (11113.110)

#### Other research frameworks:

Burnham, B., Collis, J., Dobinson, C., Haselgrove, C.C. and Jones, M. 2001 Themes for urban research, in James, S. and Millett, M. (eds) 2001. *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125, 67-76

Millett, M. 1995. Strategies for Roman small towns, in Brown, A.E. (ed) *Roman Small Towns in the East of England and Beyond*, Oxford: Oxbow Monograph 5, 29-38

Millett, M. 2001 Approaches to urban societies, in James and Millett (eds) 60-66  
Perring, D. (ed.) 2002. *Town and Country in England: Frameworks for Archaeological Research*, London: CBA Research Report 134

#### References:

<sup>1</sup> Burnham, B.C. and Wachter, J. 1990 *The 'Small Towns' of Roman Britain*, London: Batsford

<sup>2</sup> Brown, A.E. (ed) *Roman Small Towns in the East of England and Beyond*, Oxford: Oxbow Monograph 52

<sup>3</sup> Taylor, J. 2007, Atlas of Roman Rural settlement in Britain, York: CBA Research Report 151

<sup>4</sup> Foard, G., Ballinger, J. and Taylor, J. 2002 *The Northamptonshire Extensive Urban Survey*, London: English Heritage and Northamptonshire County Council

<sup>5-6</sup> Burnham and Wachter 1990, 235-240 and 279-81

<sup>7</sup> Greenfield, E. Thistleton, *Journal Roman Studies* 52, 173-175; Taylor, J. 2006 The Roman period, in Cooper, N. J. (ed.) *The Archaeology of the East Midlands*, 149

<sup>8</sup> Jones, H. 2002 Brough, Glebe Farm, *Transactions Thoroton Society* 106, 147-148

<sup>9</sup> For other key unpublished sites see Taylor 2006, 149 and 153

<sup>10</sup> May, J. 1996. *Dragonby: Report on Excavations at an Iron Age and Romano-British Settlement in North Lincolnshire*, Oxford: Oxbow Monograph 61

<sup>11</sup> Elsdon, S.M. 1997. *Old Sleaford Revealed*, Oxford: Oxbow Monograph 78

<sup>12</sup> Taylor, J. 2006 The Roman period, in Cooper, N. J. (ed.) *The Archaeology of the East Midlands*, 149, 155-157

## Research Objective 5H

### Investigate the landscape context of rural settlements

#### Summary:

Further synthetic studies are required to develop further our understanding of the Roman agrarian landscape, and in particular to investigate how landscapes and rural settlements had varied between the upland and lowland zones<sup>1</sup>. Where detail is available, as at Long Bennington<sup>2</sup> and Stanwick<sup>3</sup>, there are suggestions that in some areas villas or Romanised farms had developed from Iron Age settlements with no significant reorganisation of the surrounding countryside. In other areas, by contrast, there are indications of major landscape reorganisation linked to agricultural expansion; this is exemplified by the integration of settlements and boundaries in the 'brickwork-plan' field systems of the Sherwood Sandstones<sup>4,5</sup> and the coaxial field patterns of the Trent Valley downstream of Newark<sup>6,7</sup>, both of which systems appear to have developed principally in the Roman period. Fieldwalking, metal detecting, cropmark plotting, geophysical survey, lidar and targeted excavation all have important parts to play in mapping and interpreting these landscapes. Appropriate survey programmes, building upon and enhancing earlier investigations<sup>8</sup>, should be developed alongside the dissemination of key unpublished datasets and synthetic studies aimed at contextualising current data<sup>9</sup>. In addition, appropriate environmental sampling strategies need to be encouraged to accumulate botanical and faunal data that will provide a secure foundation for studies of changing landscape context and site location strategies (Objective 5E).

**Agenda topics addressed:** 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.5.1, 5.5.2, 5.5.3

**East Midlands Resource Assessment and Research Agenda:** 157-158

**SHAPE 2008 sub-programmes:** Understanding ancient environments and ecologies (11111.420); Realising the research dividend from past unpublished historic environment excavations (11113.110); Tapping the motherlode: supporting synthesis of key commercial project research (11113.410)

#### Other research frameworks:

Taylor, J. 2001 Rural society in Roman Britain, in James, S. and Millett, M. (eds) 2001. *Britons and Romans: Advancing an Archaeological Agenda*. London: CBA Research Report 125,46-59

#### References:

- <sup>1</sup> See recent general synthesis in Taylor, J. 2007, Atlas of Roman Rural settlement in Britain, York: CBA Research Report 151; also Bewley, R.H. (ed) 1988 *Lincolnshire's Archaeology from the Air*, Occasional Papers in Lincolnshire History and Archaeology 11, Society for Lincolnshire History and Archaeology
- <sup>2</sup> Leary, R. 1994 *Excavations at the Romano-British Settlement at Pasture Lodge Farm, Long Bennington, Lincolnshire, 1975-77 by H.M. Wheeler*, Lincs History & Arch. Occasional Paper 10
- <sup>3</sup> Neal, D.S. 1989 The Stanwick villa, Northants: an interim report on the excavations of 1984-88, *Britannia* 20, 149-168
- <sup>4</sup> Garton, D. 2008 The Romano-British landscape of the Sherwood Sandstone of Nottinghamshire: fieldwalking the brickwork-plan field-systems, *Transactions Thorton Society* 112, 15-110; see also [http://archaeologydataservice.ac.uk/archives/view/brickworkplan\\_eh\\_2009/](http://archaeologydataservice.ac.uk/archives/view/brickworkplan_eh_2009/)
- <sup>5</sup> Riley, D.N. 1980 *Early Landscape from the Air: Studies of Cropmarks in South Yorkshire and North Nottinghamshire*, Dept Prehistory and Archaeology, University of Sheffield
- <sup>6</sup> Garton, D. 2002 Walking fields in South Muskham and its implications for Romano-British cropmark-landscapes in Nottinghamshire, *Transactions Thorton Society* 106, 17-39.
- <sup>7</sup> Whimster, R.P. 1989 *The Emerging Past. Air Photography and the Buried Landscape*, London: RCHME.
- <sup>8</sup> e.g. Fenland LiDAR study (<http://www.apsarchaeology.co.uk/lidar/index.html>) and desk-based/field surveys of Peak District rural settlements (Makepeace, G.A. 1998. Romano-British rural settlement in the Peak District, *Derbyshire Archaeological Journal* 118, 95-138; Bevan, B. 2005 Peaks Romana: the Peak District Romano-British rural upland settlement survey, *Derbyshire Archaeological Journal* 118, 26-58).
- <sup>9</sup> Taylor, J. 2006 The Roman period, in Cooper, N.J. (ed.) *The Archaeology of the East Midlands* 137-140, 143-145, 149-150, 157-158

## Research Objective 5I

### Support research and publication of landscape syntheses

#### Summary:

A variety of landscapes within the region, including the major river valleys of the Nene<sup>1</sup>, Welland<sup>2</sup>, Witham<sup>3</sup> and Trent<sup>4</sup>, have been the subject of long-term and extensive investigations in advance of quarrying and other developments and of landscape-based research targeted upon the Roman period. Additional synthetic studies of the major river valleys would be particularly welcome, and could provide useful comparisons with studies of upland areas such as the Peak<sup>5</sup>, Lincolnshire Wolds<sup>6</sup> and Northamptonshire Uplands<sup>7</sup>. Key research themes include the use of rivers and associated artificial waterways<sup>8</sup> for the transport across and beyond the region of commodities such as lead and pottery<sup>9</sup>, the role of rivers as foci for industrial production<sup>10</sup> and, more generally, the significance of riverine communication networks as drivers of landscape change<sup>11</sup>. Opportunities should also be taken to collate the comparatively neglected evidence for riverside installations such as mills, bridges and fords<sup>12</sup>. Such studies could usefully be combined with palaeochannel surveys comparable to that conducted in the Trent Valley<sup>13</sup>, which may assist in locating Roman river courses and hence areas of potential interest for the preservation of riverside installations.

**Agenda topics addressed:** 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.5.3, 5.6.1, 5.6.2, 5.6.3, 5.7.2, 5.7.3, 5.7.4

**East Midlands Resource Assessment and Research Agenda:** 153, 157

**SHAPE 2008 sub-programmes:** Understanding place: assessing historic areas (11111.150); Understanding place: researching regional diversity (11111.310); Understanding ancient environments and ecologies (11111.420)

#### Other research frameworks:

Taylor, J. 2001 Rural society in Roman Britain, in James, S. and Millett, M. (eds) *Britons and Romans: Advancing an Archaeological Agenda*, London: CBA Research Report 125,46-59

#### References:

<sup>1</sup> Tingle, M. 2004 *The Archaeology of Northamptonshire*, Kings Stanley: Northamptonshire Archaeological Society

<sup>2</sup> Pryor, F.M.M and French, C.A.I. 1985 *Archaeology and Environment in the Lower Welland Valley*, Vols 1 & 2, East Anglian Archaeology 27

<sup>3</sup> Catney, S. and Start, D. (eds) 2003 *Time and Tide: the Archaeology of the Witham Valley*, Heckington: Witham Valley Archaeological Research Committee; Rackham, J. and Williams, J. eds forthcoming

<sup>4</sup> Knight, D., Howard, A. and Leary, R. 2004 The Romano-British landscape, in Knight, D. and Howard, A. *Trent Valley Landscapes*, Kings Lynn: Heritage Marketing and Publications, 115-151

<sup>5</sup> Bevan, B.2005 Peaks Romana: the Peak District Romano-British rural upland settlement survey, 1998-2000, *Derbyshire Archaeological Journal* 125, 26-58

<sup>6</sup> Jones, D. 1998 Romano-British settlements on the Lincolnshire Wolds, in Bewley, R.H. (ed) *Lincolnshire's Archaeology from the Air*, Occasional Papers in Lincolnshire History and Archaeology 11, Society for Lincolnshire History and Archaeology. 69-80

<sup>7</sup> Mudd, A. 2008. *Iron Age and Roman settlement on the Northamptonshire Uplands*. Northants Archaeology Monograph 1

<sup>8</sup> Taylor, J. 2006 The Roman period, in Cooper, N.J. (ed.) *The Archaeology of the East Midlands*, 157

<sup>9</sup> e.g. Wallis, H. 2002 *Roman Routeways across the Fens*, East Anglian Archaeology Occasional Paper 10

<sup>10</sup> Knight, Howard and Leary 2004, 121-122: Lower Trent kilns at Torksey, Knaith, Lea, Newton-on-Trent and Little London

<sup>11-12</sup> Taylor 2006, 157 and 153 respectively

<sup>12</sup> Baker, S. 2006 Cultural heritage management and the palaeo-environmental resource: surveying the surface-visible palaeochannel record in the Trent Valley, UK, <http://ads.ahds.ac.uk/catalogue/search/fr.cfm?RCN=TVPALAE0-1>

## **Research Objective 5J**

### **Instigate regional scale characterisation study of industry.**

#### **Summary:**

The East Midlands preserves nationally important evidence not only for pottery production (Objective 5A) but also for ironworking, centred upon Northamptonshire, Leicestershire and Rutland<sup>1</sup>, lead mining and processing in Derbyshire<sup>2</sup>, and salt manufacture throughout the coastal areas of Lincolnshire<sup>3</sup>. Other noteworthy industries include quarrying for querns<sup>4</sup>, other stone artefacts and building materials, ceramic tile production, copper alloy smelting, and craft industries utilising wood and secondary agricultural products such as bone, antler, leather and textiles<sup>5</sup>. Understanding of some of these industries, notably salt and pottery production, has greatly improved in recent years, but many questions remain to be answered on the chronology, technology, infrastructure and socio-economic contexts of these and other industries<sup>6</sup>. A regional-scale assessment of the current evidence for Roman industrial activities is recommended as a springboard for further studies of specific industries (see also Objectives 5A and 5B).

**Agenda topics addressed:** 5.1.1, 5.3.3, 5.3.4, 5.4.3, 5.6.1, 5.6.2, 5.6.3, 5.7.2, 5.7.4

**East Midlands Resource Assessment and Research Agenda:** 158

**SHAPE 2008 sub-programmes:** Understanding artefacts and material culture (11111.510); Realising the research dividend from past unpublished historic environment excavations (11113.110); Tapping the motherlode: supporting synthesis of key commercial project research (11113.410)

#### **References:**

<sup>1</sup> Schrufer-Kolb, I. 1999 Roman iron production in the East Midlands, England, in Young, S.M.M, Pollard, A.M., Budd, P. and Ixer, R.A. (eds) *Metals in Antiquity*, Oxford: BAR International Series 792, 227-233; also Schrufer-Kolb I. 2004. Roman Iron Production in Britain: Technological and Socio-Economic Developments along the Jurassic Ridge, BAR British Series 380, Oxford: Archaeopress

<sup>2</sup> Taylor 2006, Cooper, N.J. (ed.) *The Archaeology of the East Midlands*, 152; e.g. Dearne, M.J. (ed) 1993 *Navio – the Fort and Vicus at Brough-on-Noe, Derbyshire*, Oxford: BAR British Series 234, 128, fig.6.14)

<sup>3</sup> Morris, E.L. 2007 Making magic: later prehistoric and early Roman salt production in the Lincolnshire fenland, in Haselgrove, C. and Moore, T. (eds) *The Later Iron Age in Britain and Beyond*, Oxford: Oxbow Books, 431-443

<sup>4</sup> e.g. Heslop, D.H. 2008 *Patterns of Quern Production, Acquisition and Deposition: a Corpus of Beehive Querns from Northern Yorkshire and Southern Durham*, Yorkshire Archaeological Society Occasional Paper 5, Leeds; Palfreyman, A. and Ebbins, S. 2007 a Romano-British quern-manufacturing site at Blackbrook, Derbyshire, *Derbyshire Archaeological Journal* 127, 33-48.

<sup>5-6</sup> Taylor 2006, 152-153