Rural Settlement in Roman Britain Project

Agriculture and pastoralism in the Roman West Midlands: a preliminary analysis of the dataset

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‘The archaeology of the north and west of the region ... looks little different from that for centuries before ... a rural landscape operating at local levels with little evidence for economic or social complexity or innovation.’
(Esmond-Cleary 2011, 144)

‘... Wroxeter stands apart ... as a “monstrous” Roman object, isolated within an unchanging and often indistinguishable native landscape which seems to show qualitative contrast with it.’
(Gaffney, White and Goodchild 2007, 53)

**Research questions**

Considering the material biases inherent across the region, how far can we use faunal and botanical assemblages from the West Midlands to understand agricultural practice?

Can the integration of coarse-level environmental data, artefacts, and settlement evidence overcome the biases which affect each type of material remains?

Can we identify ‘real’ patterns in agricultural practice which parallel differing topographies and environments?

How far can we identify the impact of towns and military sites on ‘local’ and ‘regional’ agricultural practice?
Geographic distribution of faunal assemblages

[Map showing geographic distribution of faunal assemblages with symbols indicating all sites and sites with 100+ cow, sheep, and pig bones.]

Legend:
- **All sites**
- **Animal bone present**

[Scale and compass rose indicate 10 kilometers.]
Frequency of topographic locations of West Midlands sites

- All West Midlands sites: no. sites = 231
  - River valley
  - Plateau
  - Hill

- Sites with animal bone: no. sites = 100
  - River valley
  - Plateau
  - Hill

- Sites with 100+ cattle, sheep/goat and pig: no. sites = 17
  - River valley
  - Plateau
  - Hill
Relative frequencies of major livestock species through time

late Iron Age-early Roman assemblages (1stC BC-2ndC AD)

eyearly-mid Roman assemblages (1st-3rdC AD)

mid-late Roman assemblages (2nd-4thC AD)
Old Bowling Green site at Droitwich

Late Iron Age and early Roman assemblages dominated by sheep bones

Late Roman assemblage dominated by cattle

<table>
<thead>
<tr>
<th>Time Period</th>
<th>% Sheep/Goat</th>
<th>% Cattle</th>
<th>% Pig</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIA (1st C BC-mid 1st C AD)</td>
<td>60</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>ER (1st-2nd C AD)</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>MR (2nd-3rd C AD)</td>
<td>40</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>LR (3rd-4th C AD)</td>
<td>30</td>
<td>70</td>
<td>10</td>
</tr>
</tbody>
</table>
Cull profiles of cattle and sheep/goats from farms and nucleated settlement

- Cattle generally kept to adult ages
- Use for traction indicated
- Little variation between farm/villa and nucleated settlements

- Sheep/goats generally culled between juvenile and young adult
- High kill-off of young animals (surplus stock?) – meat and dairying
- Greater variation between farm/villa and nucleated settlements
Evidence for temporary (seasonal?) use of middle Iron Age hillfort in Roman period

High proportion of sheep bones

Possible re-use of masonry structures

Shepherding? Or, evidence for a shrine?
Livestock enclosures

Longdales Road, King's Norton (2\textsuperscript{nd}-3\textsuperscript{rd} C AD)

- Series of plots and adjoining metalled tracks adjoining roadside frontage (Ryknild Street Roman road)
- Compound contained elaborate 'funnel-like' entrance arrangements, suggestive of use by livestock
- Interiors sub-divided, creating a series of pens

North of Langley Mill (LIA-m.2\textsuperscript{nd} C AD)
Geographic distribution and chronology of field-systems

Start and end date of settlements with identified field-systems
Co-axial field-systems

Salford Priors C1, C2, C3

Salford Priors, Areas 2 and 4 and C5
Geographic distribution of cereal assemblages and frequency of taxa

- **Map:**
  - Red dots: cereal assemblages present
  - White dots: all sites

- **Bar Chart:**
  - spelt: 100%
  - emmer: 20%
  - free-threshing wheat: 10%
  - barley: 40%
  - oats: 30%
  - rye: 20%
  - pulses: 10%
  - fruits: 5%
  - flax: 0%

- **Legend:**
  - Scale: 0 to 100% presence

- **Legend Scale:**
  - 20 Kilometers

- **Legend Orientation:**
  - North, South, East, West
Variation in intra-site abundance of cereal taxa

Spelt wheat (n=55)
- Present: 70%
- Moderate abundance: 25%
- Highly abundant: 5%

Barley (n=44)
- Present: 100%
- Moderate abundance: 0%
- Highly abundant: 0%

Emmer wheat (n=16)
- Present: 68.8%
- Moderate abundance: 25%
- Highly abundant: 6.2%

Rye (n=13)
- Present: 100%
- Moderate abundance: 0%
- Highly abundant: 0%
Geographic distribution of minor crops: rye & free-threshing wheat
Distribution and frequency of sites with agricultural tools

Romano-British sickle: surface find
http://finds.org.uk/database/artefacts/record/id/146306

% sites with agricultural tools

- villa (n=18)
- nucleated settlement (n=39)
- farm (n=113)
- religious (n=14)
Distribution and frequency of sites with corn-dryers

Bays Meadow Villa, Droitwich: Late 2nd century phase

% sites with corn-driers

- villa (n=18)
- nucleated settlement (n=39)
- farm (n=113)
Sites with possible evidence for malting

Hanbury Street, Droitwich, and Wellington Quarry, Moreton-on-Lugg
– large quantities of sprouted grain

Huntsham
– no plant remains; aisled building with double T-shaped corn dryer, two lined water tanks and a drain

Bays Meadow Villa, Wasperton, and Tiddington (Reading Trust Site)
– smaller quantities of sprouted grain and corn driers

Longdales Road, King’s Norton
– Charred pant remains present in low numbers from livestock herding structures; some sprouted barley and spelt grain = foddering?

http://www.harparchaeology.co.uk
Distribution and frequency of sites with quernstones

Romano-British quernstone
http://finds.org.uk/database/search/results/objecttype/quern/broadperiod/ROMAN
Distribution of sites with evidence for mills and millstones

<table>
<thead>
<tr>
<th>site</th>
<th>site type</th>
<th>no. millstones</th>
<th>structural evidence</th>
<th>date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bays Meadow Villa, Droitwich</td>
<td>villa</td>
<td>1</td>
<td></td>
<td>c. 2\textsuperscript{nd}-4\textsuperscript{th} C AD</td>
</tr>
<tr>
<td>Magna Castra Farm</td>
<td>villa</td>
<td>7</td>
<td>Yes</td>
<td>c. 2\textsuperscript{nd}-4\textsuperscript{th} C AD</td>
</tr>
<tr>
<td>Huntsham</td>
<td>villa</td>
<td>3</td>
<td>Yes</td>
<td>‘Roman’</td>
</tr>
<tr>
<td>Billesley Manor Farm</td>
<td>farm</td>
<td>1</td>
<td></td>
<td>Late 3\textsuperscript{rd}-mid 4\textsuperscript{th} C AD</td>
</tr>
<tr>
<td>Weston Under Penyard (Ariconium)</td>
<td>'small town'</td>
<td>1</td>
<td>Yes</td>
<td>AD100-300</td>
</tr>
<tr>
<td>Hanbury Street, Droitwich</td>
<td>'small town'</td>
<td>1</td>
<td></td>
<td>Probably 2\textsuperscript{nd} C AD</td>
</tr>
<tr>
<td>Tiddington</td>
<td>‘small town’</td>
<td>11</td>
<td></td>
<td>‘Roman’</td>
</tr>
</tbody>
</table>
Sites with equine/transport items

Map showing distribution of transport items:
- Red circles: transport items
- White circles: all sites

% sites with transport/equine items

Bar chart:
- Villa (n=18)
- Nucleated settlement (n=39)
- Religious (n=14)
- Farm (n=113)

Hipposandal from Romano-British rural settlement
Photo by author
Distribution and frequency of horse remains

- Farms
- Villas
- Small towns
Types of equine/transport items

Romano-British prick-spur: surface find
http://finds.org.uk/database/artefacts/record/id/525144

Hipposandal from Romano-British rural settlement
Photo by author
Horses and status

A phalera from Salford Priors (C1, C2, C3), Warwickshire, recovered in association with other horse-riding gear

Cavalry horse with phalera adornments (Mainz, Germany)

Romano-British harness mount: surface find
http://finds.org.uk/database/artefacts/record/id/211717
Geographic distribution of sites with juvenile horse bones

Juvenile horse metapodia
Photo by author
Evidence for horse breeding

Late Iron Age/Roman-British ‘village’ settlement at Beckford, Worcestershire

- High proportion of horse remains
- Associated bone groups
- Juvenile equid bones
- Horse breeding site?

%NISP (n=432)

- cattle
- sheep/goat
- pig
- horse
Settlement development and mixed land-use

- Salford Priors C1, C2, C3, Warwickshire – ‘villa landscape’
- Complex arrangement of settlement space
- Different areas relate to domestic dwelling, religious practice, storage, livestock enclosures, trackways, and arable field-systems
- Site makes use of varying topography, leading from the riverside floodplain pasture, up to the well-drained gravel terraces
Agriculture and pastoralism in the Roman West Midlands

- Environmental assemblages generally restricted in the southern part of the West Midlands, but complementary finds and settlement evidence enhances our wider knowledge of agriculture and pastoralism

- Good evidence for an organised pastoral system, e.g. livestock enclosure, droving of animals, and foddering; also possible evidence for sheep transhumance

- Increasing number of sites in river valley region with high proportions of cattle into Roman period

- Survival of adult cattle suggests importance of traction/plough animals

- Agricultural tools, corndriers, and evidence for milling and malting largely focussed on/around Severn/Avon valleys (contrasts with other finds)

- More intensive agriculture in the southern valleys, though arable farming clearly important in the town hinterlands to the north