

## Charcoal from Coton Lane, Tamworth

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### Introduction

Following on from assessment of the thirteen charred flots recovered from Coton Lane (Cook, *infra*), the identification of charcoal was undertaken for three samples – 2001, 2006 and 2008 – from mid-late Roman deposits in order to characterise the range and relative proportions of wood taxa present. All were from secondary contexts, and consequently the source of the burning event is unknown although this analysis indicates that all are likely to derive from domestic hearths (see below).

### Methodology

For each of the three selected samples, species identification was undertaken on up to 100 pieces of charcoal, depending on availability and preservation. Each piece was fragmented along the transverse, radial and tangential planes as required and the exposed sections examined at up to x400 magnification using a Brunel Metallurgical SP-400BD microscope. Species identification was carried out on the basis of diagnostic anatomical characteristics and following the keys in Hather (2016) and Schweingruber (1990). Species nomenclature follows Stace (2010).

### Results

Table 1 shows the wood species identifications for each of the three samples, and Figure 1 shows the relative proportions of each taxa. In sample 2008 there was only a small quantity of charcoal, and this was frequently of small size. Where pieces were large enough to attempt identification, a high proportion could only be classed as indeterminate. Similarly, the charcoal in sample 2006 was often poorly preserved, being often friable and mineral encrusted, so that again many pieces could only be classed as indeterminate, or at best as diffuse porous or ring porous. For these reasons, identification of 50 pieces only was attempted for samples 2006 and 2008. For sample 2001, charcoal was more abundant and generally well preserved, and so a full 100 pieces were identified.

### Discussion

Samples 2001 and 2006 were both recovered from ditch fills, from, respectively, feature [2008] which runs along the western side of the Roman enclosure, and feature [2468], which joins ditch [2008] at its most northerly point and runs in an east-west direction. Both samples are mixed but contain a similar range of wood taxa, with hazel (*Corylus avellana*) and oak (*Quercus* sp.) being the most common species in both. Although more than half of the fragments from sample 2006 could not be identified to species, the majority of these could be seen to be diffuse porous, and at least some of these are, presumably, also hazel. Ash (*Fraxinus excelsior*) and *Prunus* type wood was also present in lower quantity in both samples, with the *Prunus* in sample 2001 particularly common and sufficiently well preserved to be identified as blackthorn (*Prunus spinosa*). A single twig of leguminous wood in sample 2001 is most likely to be broom (*Cytisus scoparius*) or gorse (*Ulex europaeus*), suggesting the presence of heathland nearby. The mixed character of both assemblages, which include a similar range of wood taxa and some clear examples of roundwood in sample 2001, indicates that they are most likely to be dumped rakings from domestic hearths, with the types of wood used as fuel chosen from resources available locally with little sign of discriminate selection.

Sample 2008 was recovered from a charcoal-rich beamslot [2468], one of three located slightly north of Building 1. Identification of this charcoal shows that the burnt remains do not represent the remains of the original structural timber that lay in the slot, as they comprise a mixture of three

main taxa - oak, hazel and blackthorn/cherry - and cannot therefore all derive from the same wooden beam. The similarity of this assemblage with those from the other two samples suggests that, rather than being structural, the charcoal in the beamslot represents a mixed fuel deposit deriving from similar sources to the two deposits dumped into the ditches.

Table 1: Charcoal from Coton Lane, Tamworth. r= roundwood.

	Sample No.	2001	2006	2008
	Context No.	2010	2411	2469
	Feature No.	2008	2409	2468
	Feature type	Ditch fill	Ditch fill	Beamslot
	Date	Mid-Late Roman	Mid-Late Roman	Mid-Late Roman
	Processed sample vol.	35L	40L	40L
<b>Rosaceae</b>				
<i>Prunus spinosa</i> L.	blackthorn	5		
<i>Prunus cf spinosa</i> L.	cf blackthorn	3		
<i>Prunus</i> spp.	blackthorn/cherry	1	2	10
cf <i>Prunus</i>	cf blackthorn/cherry	1		
Maloideae	hawthorn type	1 r		
<b>Fagaceae</b>				
<i>Quercus</i> spp.	oak	13	7	18
cf <i>Quercus</i>	cf oak	6	6	3
<b>Betulaceae</b>				
<i>Corylus avellana</i> L.	hazel	21 (r)	1	6
cf <i>Corylus avellana</i> L.	cf hazel	7 (r)	1	1
<i>Corylus/Alnus</i>	hazel/alder	6		2
cf <i>Corylus/Alnus</i>	cf hazel/alder	2	3	
<b>Salicaceae</b>				
<i>Salix/Populus</i> sp.	willow/poplar	2		
cf <i>Salix/Populus</i>	cf willow/poplar	4		
<b>Sapindaceae</b>				
cf <i>Acer campestre</i> L.	cf field maple	1		
<b>Oleaceae</b>				
<i>Fraxinus excelsior</i> L.	ash	20 (r)	3	1
cf <i>Fraxinus excelsior</i> L.	cf ash		1	
<b>Fabaceae</b>				
	legume wood	1 r		
	indet diffuse porous		14	
	indet ring porous		2	
	Indet	6	7	9 (r)
	Bark		3	
	<b>Total</b>	<b>100</b>	<b>50</b>	<b>50</b>

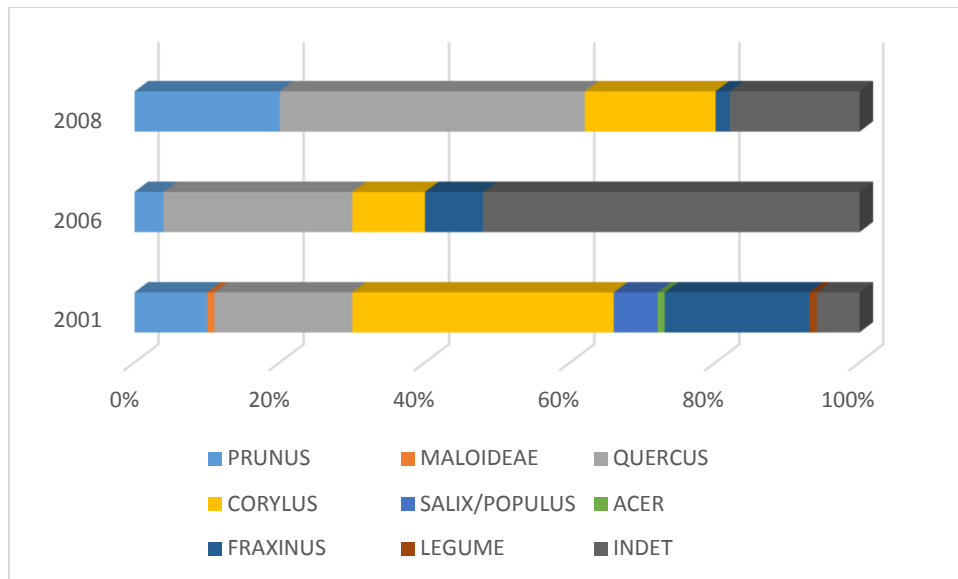


Figure 1: Chart showing relative proportions of wood taxa in samples 2001, 2006 and 2008.

## References

- Hather JG, 2016. *The Identification of the Northern European Woods*. Abingdon: Routledge.
- Schweingruber F, 1990 (3<sup>rd</sup> edition). *Microscopic Wood Anatomy*. Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research.
- Stace C, 2010. (third edition). *New Flora of the British Isles*. Cambridge: Cambridge University Press.