

## APPENDIX 1 - WORKED WOOD

### 1.1 Assessment of the Waterlogged Wood

*by Nick Mitchell*

#### *Introduction*

- 1.1.1 An assemblage of 91 pieces of waterlogged wood, all from the well 11010, was recovered during excavation works at Thurnham Roman Villa (ARC THM 98).
- 1.1.2 Since a wood specialist was not available on site all the worked or structural wood which could be safely retrieved was taken for post-excavation assessment. To supplement this a sample of the unworked and randomly occurring wood from the well fills was retrieved to place the structural wood in the context of the species of the nearby treescape.
- 1.1.3 The recovery and study of the wood was undertaken in accordance with the Fieldwork Event Aims for the site, which are set out in section 2 of the main report, above. In particular, it was hoped to obtain evidence to contribute to a dated occupation sequence for the villa, with particular reference to the period of its decline. Evidence suggested that the well had been one of the last features in use on the site in the later 4th century. Evidence was also sought for the contemporary local environment of the villa.

#### *Methodology*

- 1.1.4 The wood was examined and a brief catalogue compiled quantifying the assemblage and breaking it down into the forms and types of evidence available.
- 1.1.5 The material from well fills 11982 and 12227 was not considered on site to be a structural or coherent group. All these pieces required cleaning to enable an assessment of further work.
- 1.1.6 Other material comprises wood which was understood on site to form structures within the well and this has enabled a representative sample to be cleaned and assessed for the further potential of these structural groups.

#### *Quantification*

- 1.1.7 A total of 91 pieces of wood were collected for post-excavation assessment, and this is considered a good and even representation of both structural and incidental types of material which were encountered on site. Table 7.1 quantifies and summarises all the wood present and suggests the proportion which could be identified to species.
- 1.1.8 There are four very large and jointed *in situ* planks which represent the top layer of a box-frame revetment. The assemblage also includes 35 stakes, many of which were recorded *in situ*, from three separate tiers of stakes that were placed around the sides of the well. Other stakes are casual finds from within the fills and their forms and sizes clearly do not fit those of the outer stake groups.
- 1.1.9 There are also 17 slender rods, about 16mm in diameter, and these are consistent with wattle rods. In addition there are two wood working chips, 12 pieces of probable branch and four substantial burnt pieces which may be firewood.

### *Provenance*

- 1.1.10 All the wood comes from the well, 11010. It can be divided into three types of material: the main oak structural pieces towards the base of the well (12208, 12209, 12211 and 12212), the upright stakes in three separate tiers (12140, 12160 and 12170), and the randomly occurring material from the fills (11982, 11984-6 and 12227). These groups will provide different types of evidence as specified below.
- 1.1.11 The sample provided for post-excavation assessment is a good selection with each of the groups fairly well represented. Most of the wood is in a good state of preservation and all the material assessed for species analysis would provide usable samples. The difficult excavation conditions mean that the stakes of groups 12140, 12160 and 12170 do not all have their worked ends and comparison of the styles of working between the different tiers of stakes may not be well replicated.

### *Conservation*

- 1.1.12 If the wood was to be stored for longer than six months some of the pieces should be re-assessed for preservation and re-packaged if necessary. The material is well packaged and it is unlikely that evidence will be lost due to evaporation within this period. There are currently no grounds for full conservation of any of these pieces providing that a full record, with photographs, is to be made within 6 months.

### *Comparative material*

- 1.1.13 No comparable assemblages of waterlogged structural timbers from Roman wells are known from other CTRL sites.
- 1.1.14 Large lapped-plank constructions of the type seen at the base of this well are one of several forms of well-lining known from Roman Britain. Several variations of such structures are known from Queen Street in London (Wilmott 1982, 1-31) and the example from Thurnham provides further variation to the suggested typology.
- 1.1.15 Other examples of wells should be researched to investigate any parallel, as yet unknown to the author, for stakes being inserted in successive tiers and a possible function for such an arrangement. This may crucially be found in association with the moss and vegetation lining seen here as 11985. The best parallel is likely to be provided by wattle linings which are common in wells and which can be self-supporting. They are likely to prove less common in high status Roman wells and this phase of construction could be consistent with the perceived down-grading of the site at the end of the Roman period.

### *Potential for further work*

#### CTRL Landscape Zone Priorities and Fieldwork Event Aims

- 1.1.16 The following section discusses potential for further work in the light of the Landscape Zone Priorities and Fieldwork Event Aims.
- 1.1.17 A radiocarbon date obtained from one of the wooden stakes confirms that the well was indeed one of the last structures to remain in use on the site (dated cal AD 259-539 at 95% confidence level). As such, it is of considerable importance for the study of the villa's decline, and for the nature and status of occupation on the site at this time. Further analysis of the structural elements from the well lining, and comparison with similar structures at other sites, should help to characterise the well as associated with high- or low-status occupation. This may be seen to change over the well's lifetime.

- 1.1.18 Some of the randomly occurring wood has been worked, and these contexts should therefore reflect incidental activity in the area that is not normally recovered. This, for example, includes a couple of wood-chips and several pieces of burnt wood which are likely to be firewood. Again, the late date of this material suggests that it will provide rare evidence for activity at the villa during the last stages of its decline.
- 1.1.19 The randomly occurring wood within the fills will provide background information on the treescape in the immediate area around the well, and contribute to the study of the villa's local environment at this time.
- 1.1.20 In order to achieve these aims, the structural material should be fully recorded with close attention being given to the three tiers of stakes, which may provide evidence for one or more attempts to prolong the well's active life.

*Bibliography*

Wilmott, T, 1982 Excavations at Queen Street, City of London, 1953 and 1960, and Roman Timber-lined Wells in London, *Transactions of London and Middlesex Archaeol. Soc.* 33, 1-39

*Table 7.1: Thurnham Roman Villa ARC THM 98: Worked and Waterlogged wood, Contexts and Descriptions*

<b>Context</b>	<b>Count</b>	<b>Type</b>	<b>Period</b>	<b>To species ID</b>	<b>Comments</b>
11982	13	unworked		4	5 stake type, 8 are branches
	5	stake		5	diameters range from 30-45mm
	1	rod		1	of wattle type and shape
12227	29	unworked		15	4 branches, 11 stake type, 14 rods
	4	stake		4	various styles and sizes
	2	rods		2	wattle sized with chopped ends
	1	?peg		1	a worked Y-shaped stick
	2	wood chip		2	
	4	burnt		4	perhaps firewood: only one is worked
12170	6	stake		6	2 examined for assessment
12140	5	stake		5	2 examined for assessment
12160	2	stake		2	1 examined for assessment
11984	4	stake		4	stakes
11985	1	stake		1	stakes
11986	8	stake		8	stakes
12208-12	4	plank		0	each with two half-lap joints
<b>Total</b>	<b>91</b>			<b>61</b>	