

**Channel Tunnel Rail Link  
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Oxford Wessex Archaeology Joint Venture**

# **The radiocarbon dates from Thurnham Roman Villa, Kent**

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## 1 INTRODUCTION

Two items were selected by the excavators and submitted for radiocarbon dating during the assessment phase. The first was first was a coppiced hazel (*Corylus avellana*) stake from a stratigraphically late silt fill of well 11010. The second was a fragment of red deer metatarsal (34g) from the Middle Bronze Age waterhole 10288. These were selected to establish the date of the waterhole and metalwork recovered within it, and the use of the well to aid in interpretation a dated occupation sequence for the site's development.

The two radiocarbon results obtained are presented in Table 1 and Figure 1 and have been calibrated with the atmospheric data presented by Stuiver *et al.* (1998) and performed on OxCal ver 3.9 (Bronk Ramsey 1995; 2001) and are expressed at the 95% confidence level with the end points rounded outwards to 10 years following the form recommended by Mook (1986).

The red deer metatarsal from waterhole 10288 contained insufficient collagen for radiometric dating, and was submitted to the University of Arizona AMS facility for Accelerator Mass Spectrometer dating.

## 2 WELL 11010

The hazel rod from the upper fills (11986) was derived from the collapse of a sparse coppiced stake lining around the interior of the original stone shaft of the well inserted as apart of the successive sequence of stake 'tiers' as the well silted with organic detritus. The young wood produced a result of  $1640 \pm 50$  BP (cal AD 250-540) suggesting the that the well was silting up but still in use during the 4th century (late Roman), and that its use may have extended into the early post Roman period and have been one of the last features in use on the site.

## 3 WATERHOLE 10288

The red deer metatarsal was recovered from dumped backfill of sorted flint nodules (10294) within the waterhole that produced two Middle Bronze Age metal objects; a small knife or dagger blade and a large needle or pin which are dateable on stylistic appearance to the Acton Park or beginning of the Taunton (i.e. 1499-1400 cal BC). The metatarsal is assumed to be detritus contemporary with this accumulation in the waterhole, but the small isolated bone could be residual from earlier activities, or intrusive from later activity. A result of  $1010 \pm 40$  BP was obtained suggesting an early medieval date (cal AD 900-1160) for the bone. If the

date of the waterhole from artefactual assemblages as Middle Bronze Age is correct, then this bone must be intrusive and does not relate to activity associated with the waterhole. An early medieval ditch (10355) truncated on the southern edge of the waterhole is the most likely source of the bone, thus the original assumption that it was associated with the Bronze Age metalwork was incorrect.

#### 4 CONCLUDING COMMENT

The coppiced hazel stake clearly provides a date for organic silting and use of well 11010 in its later phases and from which secure artefactual dating evidence was absent. The red deer metatarsal from waterhole 10288 was clearly not directly associated with the Bronze Age metalwork and is intrusive from the early medieval ditch (10355) that cuts the infilled waterhole.

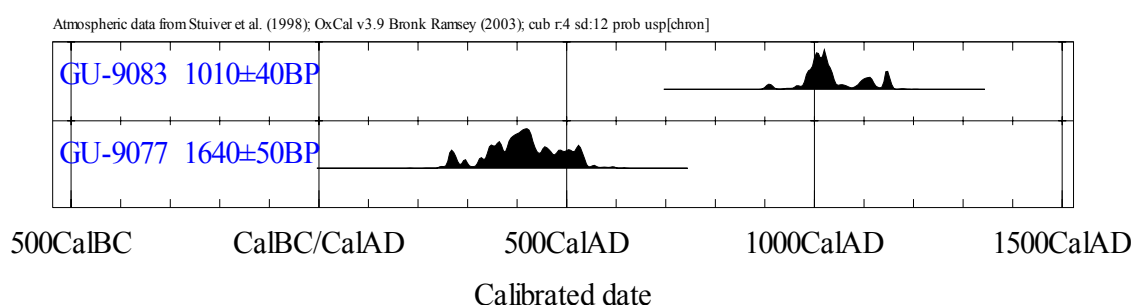


Figure 1. Radiocarbon distribution of the two submitted samples

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<i>Feature</i>	<i>context</i>	<i>sample</i>	<i>context details</i>	<i>material</i>	<i>result no.</i>	<i><math>\delta C^{13}</math></i>	<i>result BP</i>	<i>cal</i>
Waterhole 10288	10294		Middle Bronze Age waterhole	Red deer metatarsal.	AA-39808; GU-9083	-21.7	1010±40	AD 900-1160
well 11010	11986		stake lining in late silt fill of well.	Coppiced Hazel stake. avellana.	Corylus GU-9077	-27.9	1640±50	AD 250-540

*Table 1. Radiocarbon results from Thurnham*