

# Charcoal & Wood Work Group meeting

16 March 2013

## Worcestershire Archaeology, The Hive, Worcester

### Attendees:

Gill Campbell (EH), Dana Challinor (Uni of Oxford), Nick Daffern (Worcestershire Archaeology), Zoe Hazell (EH), Andrew Hoan (Uni of Worcester), Derek Hurst (Worcestershire Archaeology), Sophie Jones (Uni of Worcester), Julia Meen (Oxford Archaeology), Liz Pearson (Worcestershire Archaeology), Ruth Pelling (EH), John Summers (Archaeological Solutions)

The meeting began at 10am.

Liz Pearson welcomed everyone to the second CWWG meeting.

Gill Campbell presented recently published research on a burnt Saxon grubenhaus at West Stow, Suffolk (Campbell and Kenward 2012), followed by Liz Pearson who presented results from preliminary survey of a burnt Saxon hall at Bishops Wood Environmental Centre, Worcestershire (Elgy and Hurst 2012).

A discussion followed (see notes below) of how the two sites compared, how the data obtained to date from both sites could be used to further research into the taphonomy of Saxon houses (or those of similar construction), and what further research could be carried out. Initially, the expectation was that the incidences of fire and the resulting burnt remains would be similar at both sites, but it became apparent following the presentations and discussion, that there were significant differences which emphasised the opportunity that these sites pose for further research.

There are no standing structural remains at West Stow, although unexcavated soil deposits within the house cellar remain buried and selected timbers were buried for future research. At Bishops Wood there are substantial above ground burnt timbers and other fire destruction deposits.

The late morning microscope session was omitted as there was a preference for continued discussion. A visit was made in the afternoon to the Bishops Wood site to inspect the site of the burnt Saxon hall and compare with a similar newly built house.

The meeting concluded back at The Hive. Eleni Asouti has offered to host the third meeting next spring, possibly in April (date to be arranged nearer the time). See below for discussion summary.

Campbell, G, and Kenward, H, 2012 Insect and plant remains, in J Tipper, *Experimental archaeology and fire: the investigation of a burnt reconstruction at West Stow, Anglo-Saxon Village*, Suffolk County Council Archaeological Service 90 – 114

Elgy, C, and Hurst, D, 2012 Bishops Wood reconstructed Anglo-Saxon hall: a study in destruction by fire, *Transactions of the Worcestershire Archaeological Society*, **23** (2012).

## **Burnt Saxon houses at West Stow and Bishops Wood: Comparison and research questions**

<b>Characteristics of site &amp; fire</b>	<b>West Stow, Suffolk</b>	<b>Bishops Wood, Worcestershire</b>
Type of house	Saxon grubenhaus	Saxon hall
Type of site	Saxon village developed on excavated Saxon site	Saxon house at County Council environmental education centre
Type of wood used in main construction	Seasoned oak	Green oak
Composition of thatch	Bread wheat straw	Bread wheat straw
Insect infestation	Extensive before fire, evident archaeologically	Unknown
Lifespan of site prior to fire	13 years	7 years
Extent of fire damage	Extensive, only a few timbers left, some deposits surviving in cellar (now buried)	Less intense than W Stow. Many timbers left standing, deposits recognisable on ground surface
Reason for fire	Unknown, thought to have ignited after intruders broke in during the night	Crack in fire pit lining. Rabbit burrow beneath building may have allowed ventilation
Duration before intervention by fire brigade	Burnt out before fire brigade arrived	Fire brigade arrival quick, extinguished with some timbers standing
Quenching by water by fire brigade	No	Yes
Soil substrate	Sandy soils	Silty clays

Approaches for some initial recording of the Bishops Wood site were discussed. Funding has yet to be sought, but initial work is likely to be at a basic level. It's value as an educational resource were broached, along with the possibility of carrying out some basic recording and sampling with university students and/or Young Archaeologists Club (YAC) under the supervision of a specialist in archaeological timber recording and an Environmental Archaeologist. The type of work suggested included: detailed photographs of timbers and fire destruction deposits; notes on condition of timbers and measurements of joints and pegs etc; soil sampling of fire destruction deposits, and in particular locating the hearth.

### **Aspects to consider relating to the cause and effects of the fire at both sites:**

- How much does the age and condition of the building affect burning? (ie at West Stow – extensive insect infestation and possibly some structural weakening)?
- Could the presence or absence of a cellar at West Stow have affected the rate of burning?
- To what extent did weather conditions affect the intensity of fire at both sites?
- To what extent would the quenching of the fire with water at Bishops Wood have affected the result of the fire?
- Completeness of charring across the site. At Bishops wood, how this may relate to the areas of different construction (horizontal planks, tongue & groove, wattle and daub). Comparison possible to small degree with West Stow

### **General aspects to compare:**

- Evidence for extent of insect infestation (compare both sites)
- Compare information on growing conditions of the oak used in main construction at both sites and whether this is evident in the microstructure of the charcoal
- Survival of wood working (joints, pegs etc)
- Condition of buried timber: compare between sites at regular intervals, and at Bishops wood compare rate of decay with standing timbers
- At Bishops Wood compare rate and pattern of decay of fallen timbers (showing moss growth in March 2013) and standing timbers
- Is there any evidence for use of charcoal on the hearths in either building? Would levels of vitrification may be a useful clue?

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