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MINERAL PRESERVED ORGANIC MATERIAL ASSOCIATED WITH METALWORK FROM GRAVELLY GUY, STANTON HARCOURT, OXON 2058

J Watson

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Summary

Identification report of organic material associated with mainly Bronze-Age material. Includes the reconstruction of a composite dagger hilt with accompanying photographs.

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Mineral preserved organic material associated with metalwork from Gravelly Guy, Stanton Harcourt, Oxon.

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The material from this site was conserved by Jonathon Wallis while at the Ashmolean Museum, and the four objects with possible mineral preserved organic material were brought to my attention by Vanessa Fell. The three copper alloy objects are of a Bronze Age date, including a dagger, and an iron spearhead. The dagger is a particularily fine example and it has been possible to put forward a reconstruction of the hilt. Wood, horn and antler have been found with this group of objects, but the horn and wood is only preserved in the metal corrosion products. The objects were examined using a low-powered binocular microscope and it was possible to distinguish between the different materials (Watson, 1988).

SHGG 82 3

Iron spearhead with mineral preserved wood in socket, *Fraxinus* sp. (ash) from mature timber. Across the blade fragments of unidentifiable plant material are also preserved.

SHGG 86 4013/9 856

A fragment of a copper alloy pin with no remaining organic material.

SHGG 86 4013/12 861

A fragment of a copper alloy pin with no remaining organic material.

SHGG 875, 876, 865, 874

Copper alloy dagger (875) with traces of horn hilt on both sides, with the original position remaining as an impression in the copper corrosion. The grain of the horn is aligned at approximately 45° to the vertical axis (fig.1) of the dagger and pointing outwards on one side, on the other it is parallel with the axis of the dagger. This probably indicates that the shaft was originally made from two flat pieces of horn held together by the six rivets. If the shaft had been fashioned from a single piece of horn the grain should be either parallel with the vertical axis of the dagger, or angled









inwards to form an inverted V. The 3 copper alloy rivets indicate that it was originally 10mm thick at this point. No traces of the scabbard remain on the blade.

Antler pommel with copper alloy rivet (876) used to attach the tenon to the horn shaft (fig.2). This has been made from a single piece of antler, with the visible top carved out of the compact tissue so that the tenon was made of the more porous cancellous tissue and was hidden inside the horn shaft. Green staining on the inside of the pommel probably indicates the close proximity of the two separate copper alloy rivets, and they appear to have been in a line with the central rivet. All three rivets have the same thickness, 10-11mm, and suggest that the horn shaft had a barely perceptible taper at this point (fig.3).



Figure 3. Reconstruction of the dagger based on the Ashgrove dagger in Clarke et al. (1985).

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The hilt is almost identical in construction to the dagger from Ashgrove in Fife (Clarke *et al*, 1985), except that this has an antler pommel rather than sperm whale tooth. The rivet attaching the tenon to the shaft and the "decorative" rivets on either side are much larger than the rivets securing the Ashgrove pommel. On this dagger there is no indication of a wooden core to the shaft, but one cannot guarantee that it never existed as no organic material is preserved in this area. Figure 3 is a reconstruction of the dagger based on the example from Ashgrove, the hilt has been slightly elongated to take account of the larger blade.

This dagger hilt also bears a slight resemblance to the one on a small dagger from grave 51 Milston, Wessex (Annable and Simpson, 1964), which has a possible wooden shaft with a bone pommel decorated with rivets. From Barrow Hills another small dagger (M8) has an antler shaft with possible contrasting pommel of horn (Watson, forth). These four daggers seem to indicate that there was a tradition of using contrasting materials for hilts, which may have been more widespread but has not necessarily been recognised because of the poor preservation of some organic materials.

In a separate bag (865) are some remains of the scabbard, they are probably wood with possible fragments of leather, but they are too degraded to identify further or suggest their form.

References

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