A FURTHER ANDESITE HANDAXE FROM WAVERLEY WOOD QUARRY, WARWICKSHIRE

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INTRODUCTION

Lower Palaeolithic artefacts are comparatively rare in the West Midlands compared to south and east England. However, there has been a slow but steady growth in numbers found across the region since the first handaxe was recovered from Saltley, Birmingham in 1890 (Evans 1897). A prolific area for Lower Palaeolithic artefacts in Midlands terms has been the area south of Coventry, where a number of handaxes has been recorded since the 1930s (Shotton 1930, 1934; Fennell & Shotton 1977; Shotton & Wymer 1989). The most important site for these finds has been Smiths Aggregates quarry complex at Waverley Wood Farm, south-east of the village of Bubbenhall (NGR SP 363713). In the late 1980s three bifaces and associated flakes were recovered from the pit floor and reject heap by plant workers and R.J. MacRae (Shotton & Wymer 1989). Only one artefact, a quartzite flake, was recovered in situ, in a sand-filled channel below the Baginton Formation (Shotton & Wymer 1989). However, since 1990 aggregate extraction has moved away from the channels which seem to have been the source of the palaeontological and archaeological material (Shotton et al. 1993) and no recent finds have been made. Monitoring of new faces opened at Wood Farm (SP 372718) around 1km north-east of the original 1980s extraction area, but still in the Baginton Formation, undertaken as part of the Birmingham University ‘Shotton Project’, has produced a further andesite handaxe. This 2004 artefact was recovered in situ by Mr John Green, the quarry manager at Waverley Wood, who called representatives of Warwickshire Museum and the Shotton Project to the site to verify it as a handaxe.

GEOLOGICAL CONTEXT

The aggregates being worked at Waverley Wood are the fluvial sands and gravels of the Baginton Formation. These are capped by the Thrussington Till of early Anglian age, usually dated to Marine Oxygen Isotope Stage (MIS) 12 (Keen 1999), and thus giving the Baginton Formation a terminus ante quem of early MIS 12. However, these deposits are more likely to relate to the preceding interglacial in MIS 13 (Maddy 1999), when hominid occupation has been identified at a number of English sites (see Roberts et al. 1995 for discussion). The recent find was recovered from gravel overlying the contact between the top of a sand-filled channel, lying below the Baginton Gravels and above the Mercia Mudstone bedrock. This deposit of muddy sand passed down into fine gravel which rested directly on the Mercia Mudstone. The sands had a maximum thickness of 1.25m, and were similar in sedimentology and appearance to the fill of the lowest of the original channels (Channel 1) described in Shotton et al. (1993).

The geomorphology of the findspot where the handaxe was recovered suggests that it came to rest, or was lost, where the cohesive muddy sand of the channel fill caused a separation of flow around this obstacle and allowed coarse gravel to be deposited, forming the foundation of a channel bar. Other material stranded on this bar and found in the current investigation

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were bones and teeth of *Palaeoloxodon antiquus* (straight-tusked elephant) which was also the most abundant vertebrate type in the 1980s excavations (Shotton *et al.* 1993).

In a regional context, the fluvial deposits of the Baginton Formation were deposited by the Bytham River (Rose 1994; Keen 1999) which in Middle Pleistocene times was the major drainage line of the Midlands, extending from the Cotswold escarpment south of Stratford-upon-Avon, via Coventry, Leicester and south Lincolnshire and into East Anglia where other, more prolific sites also seem to relate to this ancient river system (Ashton *et al.* 1992; Roberts *et al.* 1995).

**THE HANDAXE**

No detailed work has yet been done on the petrology of the handaxe, but to the eye it can be seen to be made of a dark green finely porphyritic andesite. Four other Lower Palaeolithic bifaces of andesitic ash have been recovered from this area, three from Waverley Wood itself (Shotton & Wymer 1989) and another from Brandon, 4km north-north-east of Waverley Wood (Fennell & Shotton 1977). Petrological analysis of two of these artefacts by Shotton found them to be best matched by lithologies in the Ordovician Borrowdale Volcanic Series of the central Lake District. The 2004 find, although petrologically slightly different to the earlier ones in being a porphyritic andesite, could only have come from a similar source.

The find can be described as a typical Lower Palaeolithic Acheulean (or mode 2) handaxe, bifacially worked with a narrow tip and worked butt and is remarkably fresh. It is of triangular shape and would fit as a ‘pointed type’ (after Roe 1968; White 1998) if typology is to be used (Figure 1). There is a possible remnant of cortex, although this covers less than 5% of one side and could be some form of iron staining, as also recorded on two of the other handaxes from Waverley Wood. It is of fairly large size and measurements taken with an osteometric board (independently checked) are (L x B x T) 195 x 85 x 45.5mm. It weighs 720g. It will go on display at Warwickshire County Museum (entry no 35/2004) with the other Waverley Wood finds.

The handaxe itself is refined in its working. It is quite apparent that whoever made it took time in trying to thin one edge and also create basic planform symmetry. The material is slightly more intractable than flint and therefore a hard hammer seems to have been used for the majority of removals. However, there are signs of soft hammer use for secondary flaking as well as examples of long shallow flakes that are perhaps more indicative of soft hammer percussion. There is also a failed effort to thin one edge, resulting in one large conchoidal scar and numerous hinge and step fractures (perhaps as many as 31 over the whole artefact) where numerous attempts have failed, perhaps due to the raw material structure. The intractability of one edge was compensated by the other, which had fewer removals suggesting that very little work was needed to produce an effective cutting edge from butt to tip.

**DISCUSSION**

This recent find is the ninth handaxe of andesite found in the Midlands (Shotton & Wymer 1989; Graf 2002). Almost all are associated, like the Waverley Wood group, with the deposits of the Bytham River (Rose 1994), in an arc from Warwickshire to Leicestershire and south Lincolnshire, although Whitehead (1988) notes an example from post-Anglian deposits in south Worcestershire, Posnansky (1963) from the Trent Valley in Derbyshire, and MacRae (1988) mentions one from Berinsfield, Oxfordshire.
The means of transport of the andesite so far from its outcrop in north-west England is open to debate. Shotton and Wymer (1989) suggest that the source of the andesite is from glacial erratics which are found in the local tills. This, however, is not a possible source of the raw material because the Baginton Formation has no known glacial content, and the Thrussington Till is the first undoubted glacial deposit in the area. Thus the handaxes were made long before ice advanced into the West Midlands.

Evidence for a pre-Anglian glaciation in the area is very sparse. The suggestion of such a glaciation in MIS 16 by Lee et al. (2004) is just possible as a source of erratics from the north-west, although no deposits of this ice advance have so far been recognised in the Midlands, and the ice limits reconstructed by these authors place them north of the catchment of the Bytham River in the Pennines and south Lancashire.

An alternative explanation of the distribution of these andesite handaxes is that they were transported from the north-west (contra Shotton & Wymer 1989) by humans, although whether this was from an outcrop in the Lakes or from an area rich in andesite erratics to the north of the Bytham catchment is open to speculation (see also Lang & Keen in prep.).
distribution of andesite bifaces from Warwickshire into Leicestershire and south Lincolnshire (Graf 2002) is not along the line of any suggested pattern of ice movement, but the Bytham valley would provide a routeway for Palaeolithic people into and out of the centre of England, and thus explain the distribution of handaxe finds (see Rose 1994). Certainly it would suggest evidence of considerable forethought by the Lower Palaeolithic hominids to have brought it (and the others of andesite) from some northern site into the West Midlands where the only locally available material for stone tools are the rather intractable quartzites derived widely from the Triassic Kidderminster Conglomerate (“Bunter Pebble Beds”).

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BIBLIOGRAPHY

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