

The Wimpole pebble-hammer

During recent fieldwalking on National Trust land near the A603 Cambridge Road at Wimpole, the star find was an unusual stone artefact, shown in Photo 1.



Photo 1. Photograph showing the Wimpole pebble-hammer (courtesy of Stephen Reed).

As can be seen from the photograph, it was part of a rounded natural pebble that had broken in approximately half at the point at which a hole had been drilled through it. Our research has indicated that it is most likely to be what is known as a pebble-hammer, possibly dating back as far as the Mesolithic Period (10,000 - 4,000 BC).

Why are they called pebble-hammers and not mace-heads? The definition comes from Roe (Roe, 1968, 170), who defined them as "simply pebbles, often of quartzite, modified only by a hole of hour-glass shape through the centre". She defined mace-heads as having worked surfaces and more cylindrical holes. There is a view that dates these cruder implements to the Mesolithic period (Rankine, 1949), although many are found in Neolithic/Early Bronze Age contexts.

The pebble is composed of a reddish-brown quartzite material and was probably selected for its suitable shape. Numbers of such pebbles can still be found on the field today and they probably come from the boulder clay deposits left behind in West Cambridgeshire after the last Ice Age, hence their well-rounded shape. It is thought that they originated in Scotland. They occur here in Cambridgeshire in sufficient numbers, along with other glacial erratics, to be used as part of a common building material used on church walls when set in mortar (as shown in the photograph 2).



Photo 2. Photograph showing mixed cobbles of red quartzite, together with sandstone, flint, oolitic limestone, granite and gneiss ones, in the entrance wall to Little St Mary's Church, Cambridge (author's photograph but facts from Sedgwick Museum Walks booklet),

The main dimensions of the artefact and its weight are shown in Figure 1.

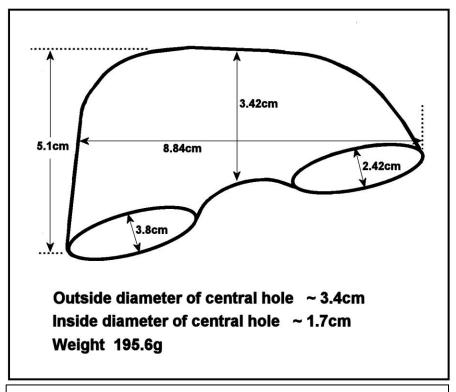


Figure 1. Main dimensions and weight of the artefact.

It is thought that the hole was produced by first using a harder material pebble to peck indentations on the outside of the pebble and opposite each other. Then coarse sand was used with a rotating tool (wood or bone) to gradually grind out the hole from first one side and then the other, hence its hourglass shape (as shown in Figure 2).

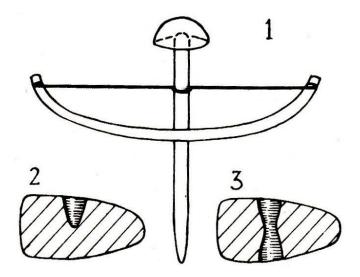


Figure 2. Drilling the hole in a pebble (adapted from Hodges, 1976).

Our pebble-hammer shows some signs of external damage but it is not enough to suggest the hammer had seen much use. It may be that the small amount of external damage is plough-related and that the breakage actually occurred in ancient times.

There have been a few recent publications of local finds (Nina Crummy in Murray, 2004, Tingle in Woolhouse, 2012) but Reynolds (Reynolds in Kirby and Oosthuizen, 2000) notes finds of perforated maceheads at Chatteris, Kingston, Litlington, Littleport, Reach and Swaffham Prior. A good resource is the regional appendix in Clough and Green (1972).

Bibliography

Clough, T H McK and Green, B 1979, "The petrological identification of stone implements from East Anglia", *Proceedings of the Prehistoric Society* 38, p108 – 55.

Crummy, N 2004, "Pebble-hammer" in Murray, J, "Prehistoric lithics from Station Road, Gamlingay, Cambridgeshire", *PCAS 93.*, p12.

Hodges, H. (1976) *Artifacts: an introduction to early materials and technology*, Slough, John Baker, p107.

Rankine, W F. (1949) "Some maceheads with Mesolithic associations from South-Eastern England", *Proceedings of the Prehistoric Society* 7, p70 - 6

Reynolds, T (2000) "The Mesolithic" in Kirby, T and Oosthuizen, S (ed), *An atlas of Cambridgeshire and Huntingdonshire History,* Centre for Regional Studies, Cambridge, p6.

Roe, F E S. (1968) "Stone Mace-Heads and the latest Neolithic Culture of the British Isles", in Coles, J M and Simpson, D D A (eds), *Studies in Ancient Europe* (Leicester), p170.

Tingle, M. 2012, "The quartzite pebble hammer" in Woolhouse, T, "Late Bronze Age and Iron Age activity on the Littleport Fen Edge", *PCAS 101.*, p27

Version 0.1

TCD