

THE BURNT MOUNDS OF CHALFONT ST GILES: A SURVEY

SIMON SMITHSON

Identified as Roman ovens over sixty years ago, the burnt mounds at Chalfont St Giles are now reinterpreted as prehistoric cooking places.

In recent years a series of surveys and excavations have been carried out on a type of site common in the west of the British Isles, known as 'Burnt Mounds'. These mounds are of varying size, and are composed almost entirely of black soil and burnt stone. Recent work suggests they are mainly Bronze Age in date, although a few may be early Iron Age.

In 1918, the discovery of a 'Roman Oven' near Chalfont St Giles was announced in the *Daily Chronicle*. The Ordnance Survey recorded, in 1925, the presence of two 'hearths' in a meadow to the north of the town, one of which is presumed to have been 'the oven'.

The two 'hearths' could still be identified in the field, which was under plough during 1984. They consist of low mounds of black soil and burnt flint and appear to be similar to 'burnt mounds' recorded elsewhere, for example in Birmingham (Barfield and Hodder, 1980).

A survey was designed to compare these mounds with others previously recorded. The investigation took the form of a plan of the features themselves, coupled with a field-walking survey of the area immediately surrounding them.

Methods

An area of 100 × 175 m around the mounds, whose axis was aligned with the National Grid, was marked out (Fig. 1). This was then subdivided into 25 × 25 m squares, which were used as a base from which to plot the extent of the features.

The fieldwalking involved the collection of all finds from each square, in order to assess the distribution of artefacts. In addition, an area to the north of the grid was fieldwalked, the finds being collected but not plotted in any detail.

Initial Results

During the course of the survey, apart from the two main mounds, which were up to 40 m across, three further scatters of small burnt flint fragments unaccompanied by dark soil were discovered. Similar features seem to have been associated with mounds elsewhere, for example in a 'complex' of greater and lesser mounds at Sutton Park, Warwickshire, in 1926 (Bullows, 1927). There, two large mounds were recorded along with four smaller ones.

The Finds

Some 220 worked or struck flints were picked up over the field as a whole, and can be divided into the following categories: broken waste flakes, 109; unbroken waste flakes, 102; end scrapers, 3; coarse scrapers, 2; denticulate scraper, 1; notched point, 1; notched thermal flake, 1; keeled blade core, 1.

The flints on the whole are heavily patinated gravel pebbles; the industry largely consists of flakes struck at random using a hard hammer, from poor quality flint; flaws are common.

All of the struck flints were plotted by 25 m squares (Fig. 1), but their distribution shows no significant concentration, not even on the mounds themselves.

The Burnt Mound Survey

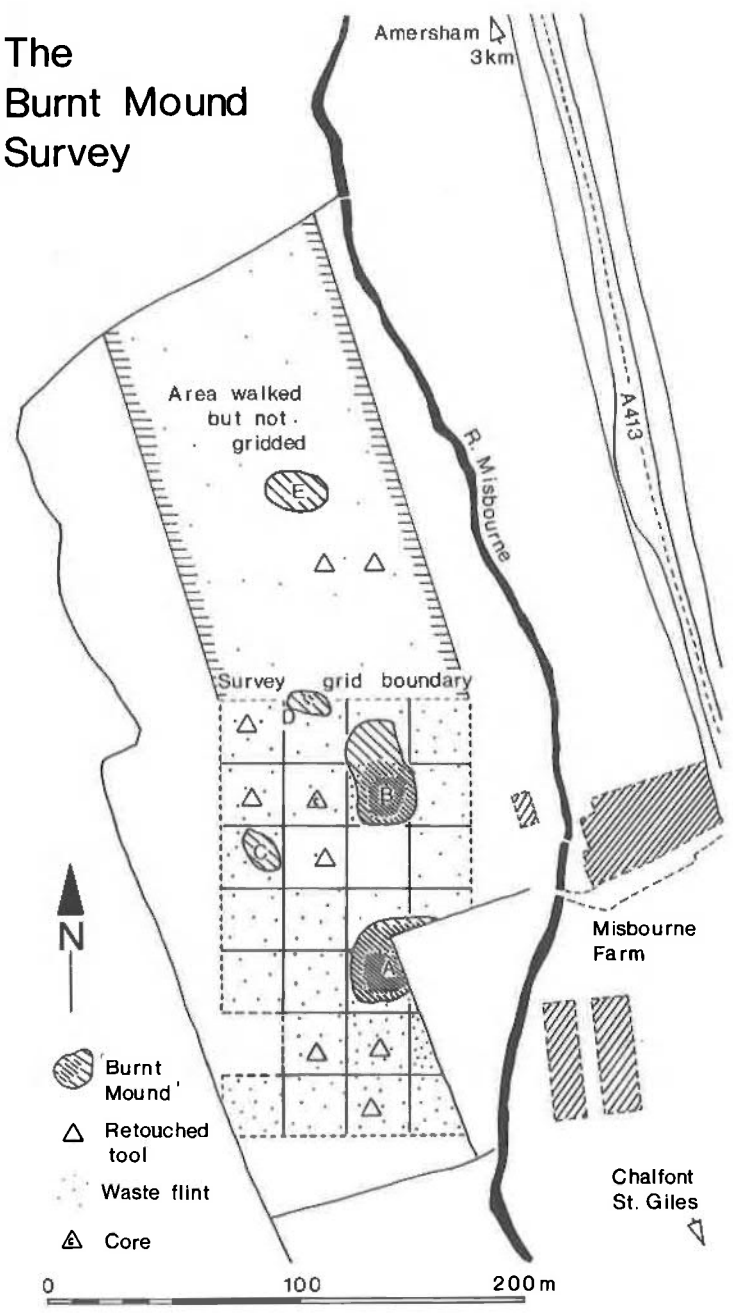


Fig. 1. The Burnt Mound Survey

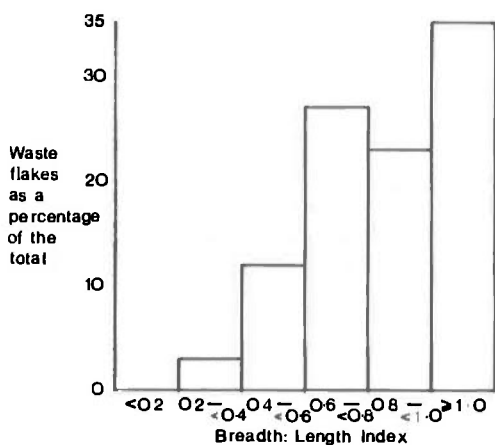


Fig. 2. Breadth:length Index, unbroken waste flakes.

Pitts (1978) has shown that if the breadth:length ratio of unbroken waste flakes is measured, the date of an assemblage can be roughly determined. His percentages for various periods, together with those for this site, are shown in the table below and in Fig. 2.

	Breadth:length Ratio					
	0.2	0.2-0.4	0.4-0.6	0.6-0.8	0.8-1.0	1.0
Early Mesolithic	2%	43%	27%	13%	6.5%	9%
Early Neolithic	-	11%	33%	27.5%	14.5%	13%
Bronze Age	-	3.5%	14.5%	23%	23%	35.5%
'Burnt Mounds'	-	3%	12%	27%	23%	35%

The closest parallel lies with the Bronze Age group, and an examination of the artefacts themselves does not contradict this view. Almost uniformly the flint is of poor quality; hard hammers have been used in striking the flints; and the artefacts are extremely coarse—all as one would expect with an industry of this period. The only exception is the keeled blade core, which is of good quality unpatinated flint, with parallel bladelet removals over its surface. It is so different to the rest that it is likely to be intrusive, probably a Mesolithic artefact.

An Interpretation of the Site

There are two theories concerning the purpose of burnt mounds. The first is that they are ritual saunas, such as are found amongst the North American Indians for example

(Barfield and Hodder, 1980). Throwing water on the heated stones to create steam would crack them. A proximity to water would be essential for this (as is certainly the case here), both to provide a water supply and also to act as a cold plunge bath afterwards.

The second, and perhaps more acceptable, theory is that they are the remains of cooking places (Hedges, 1975). The stones would be heated in a hearth, and then added one by one to water in a trough lined with wood or leather. The water would thus be raised to boiling point, and could be kept simmering for hours, cooking food placed in the trough. The feasibility of this method of cooking was shown by Professor O'Kelly (1954) who, after excavating several such sites in Ireland, recreated such a cooking trough, and managed to produce a cooked (and eatable!) joint of meat after three hours of simmering. Indeed, this method of cooking was still apparently being used in Ireland as late as the last century. An alternative method was suspension of a hide sack on a frame above the ground, which was then filled with water for cooking. It is quite possible that we see both practices at Chalfont St Giles, with the larger mounds arising from prolonged use of a permanent trough, and the lesser scatters occurring on the sites of temporary frameworks. The tools from Chalfont St Giles, although not numerous, certainly do not contradict an interpretation of the site as an area of food preparation, and of the making of hide sacks and trough linings.

Copies of the survey results, together with more detailed plans of the mounds and the finds, are stored at the Buckinghamshire County Museum, Aylesbury, Ref. CAS 1597.

Acknowledgements

I would like to thank all those members of the County Museum Archaeology Group, without whose valued assistance and advice this project would not have been possible; in particular Katherine Simcox, who helped set up the site grid and plan the mounds themselves.

BIBLIOGRAPHY

- Barfield, L. and Hodder, M. 1981. 'Birmingham's Bronze Age', *Current Archaeology* viii (1981) 198-200.
- Bullows, W. L. 1927. 'Notes on Prehistoric Cooking Site and Camping Ground in Sutton Park, Warwickshire', *Proc. Birmingham Archaeol. Soc.* **52** (1927) 291-300.
- Hedges, J. 1975. 'Excavation of Two Orcadian Burnt Mounds Liddle and Beaquoy', *Proc. Soc. of Scotland* **106** (1975) 39-98.
- O'Kelly, M. J. 1954. 'Excavations and Experiments in Ancient Irish Cooking Places', *J. Roy. Soc. Antiq. Ireland* **84** (1954) 105-55.
- Pitts, M. W. 1978. 'Towards an Understanding of Flint Industries in Post-Glacial England', *Bull. Inst. Archaeol., Univ. London* **15** (1978) 179-97.