

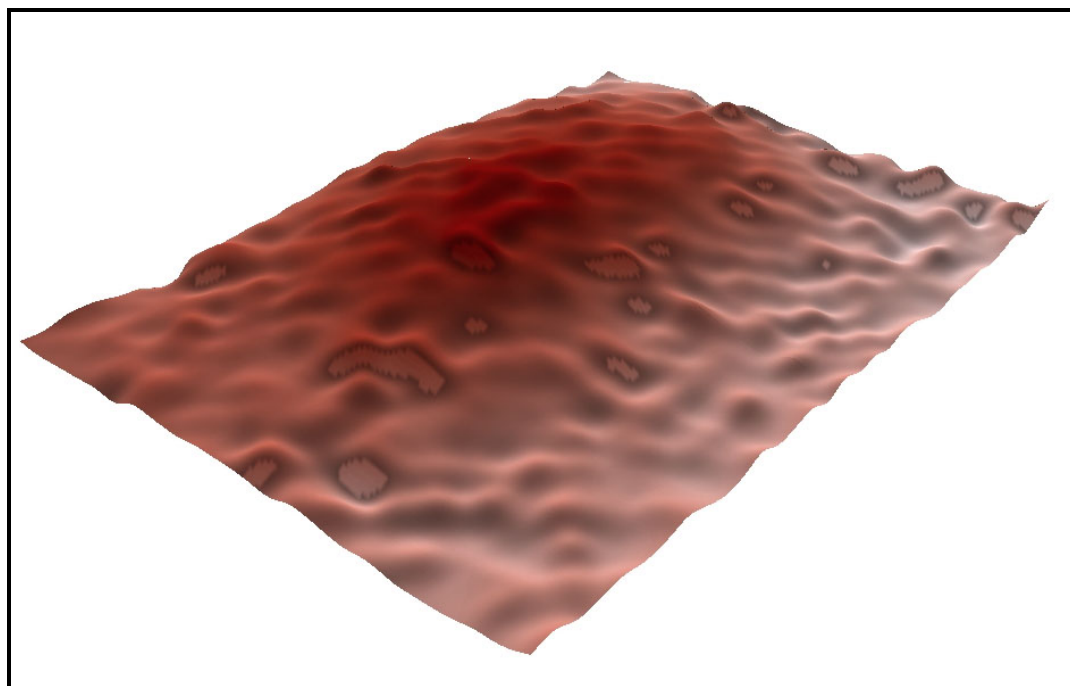
birmingham archaeology

NEWHALL VALLEY BURNT
MOUND SURVEY 2007



Project No. 1641

Newhall Valley Burnt Mound Survey 2007



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SUMMARY

A contour survey was undertaken on the Newhall Burnt Mound (SMR 20795, centred on NGR SP 1328 9463) on 30th June 2007 as part of the voluntary Helping Hands Project run by members of the congregation of the Church of the Latter Day Saints. The project was commissioned by Birmingham City Council. The survey revealed that the mound was very well preserved (measuring 12.5m X 9.5m) and survived to a height of 0.56m above the surrounding floodplain of the Plants Brook.

The waterlogged nature of the site means that there is great potential for the survival of important environmental remains and ecological indicators such as pollen, charred plant, beetles and charcoal to survive on or in the vicinity of the site. Its location on the floodplain has meant that there has been little plough activity on the site and there is therefore also good potential for the survival of associated features around the monument.

Due to the fragility of the remains, as well as their importance to the overall understanding of man's effects on the environment of Newhall Valley, it has been recommended that the site be kept in its current waterlogged condition and that tree planting and vehicle access be prohibited in the area in order to maintain the monuments good condition.

NEWHALL VALLEY BURNT MOUND SURVEY 2007

(SMR 20795)

1 INTRODUCTION

1.1 Background to the project

Birmingham Archaeology was commissioned by Birmingham City Council to undertake a survey of a Bronze Age Burnt Mound (SMR 20795, hereinafter referred to as the site) in Newhall Valley Park, Sutton Coldfield.

This report outlines the results of a contour survey which was carried out on Saturday 30th June 2007, and has been prepared in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Evaluations (IFA 2001).

1.2 Location and geology

The site is located in Newhall Valley, and is centred on NGR SP 1328 9463 (Fig. 1).

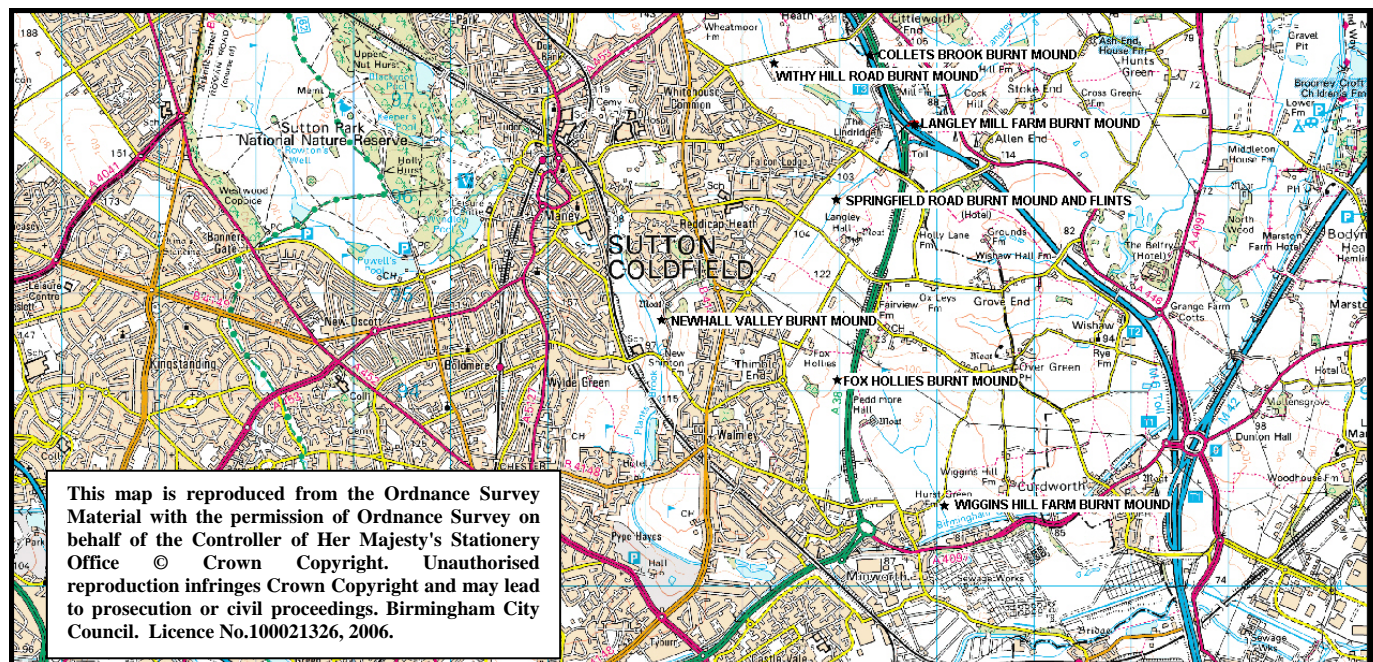


Fig.1 Site Location

The underlying geology of the Valley consists of sandstone from the Bromsgrove Formation and Mercia Mudstone. The overlying drift is primarily glaciofluvial deposits of the Devensian period. The present character of the site is marsh in the base of the valley.

2 ARCHAEOLOGICAL BACKGROUND

Burnt mounds are usually composed of heat shattered stones and charcoal, adjacent to hearths, and radiocarbon dates have shown that the majority of them are Bronze Age in date. Experiments have shown that the stones crack from being heated in fire, and then

fragment as a result of being lifted out of the fire. They are generally found adjacent to water courses, and there can be several along the same stream, often being found in pairs or clusters. Troughs and/or pits are also commonly found associated with burnt mounds these features have been variously interpreted as water sumps, hearths and pits in which to place containers used to carry hot stones (Hodder 2004, 28-42).

The site in Newhall Valley is visible as a low mound on the western side of the original course of the Ebrook or Plants Brook, and was first identified on 18th February 2007. It is oval, measuring c.12.5m north-south and 9.5m west-east, and is highest, up to 0.5m high, along the southern and eastern sides. Removal of a small piece of turf on the mound on 22nd February 2007 revealed that it was composed of heat-shattered stones. The site lies below the river terrace, on land that is likely to have been subject to flooding and was therefore never cultivated. This has resulted in it remaining very well preserved.

The site has remained marshy, and there is a high possibility for the survival of waterlogged remains associated with the monument. Further to this, peat deposits were observed in Newhall Valley during the installation of electricity pylons in 1980. These deposits are likely to contain pollen which would provide information on changing environmental conditions and land use in the vicinity throughout the prehistoric period (Hodder pers. comm.).

3 AIMS AND OBJECTIVES

The principle aim of the project was to survey the upstanding remains of the mound in order to determine its character, extent and state of preservation.

More specific aims were to:

- Train members of the congregation of the Church of the Latter Day Saints, through their Helping Hands outreach programme, in archaeological survey techniques.
- Inform future management of the site.



Plate 1 Helping Hands volunteers preparing for the survey

4 METHODOLOGY

A grid was laid out over the burnt mound, and spot height readings were taken using a dumpy level every 50cm across the grid (Plates 2 and 3). The data was then transferred into the Esri Arc GIS package for 3D modelling purposes (Plate 4).

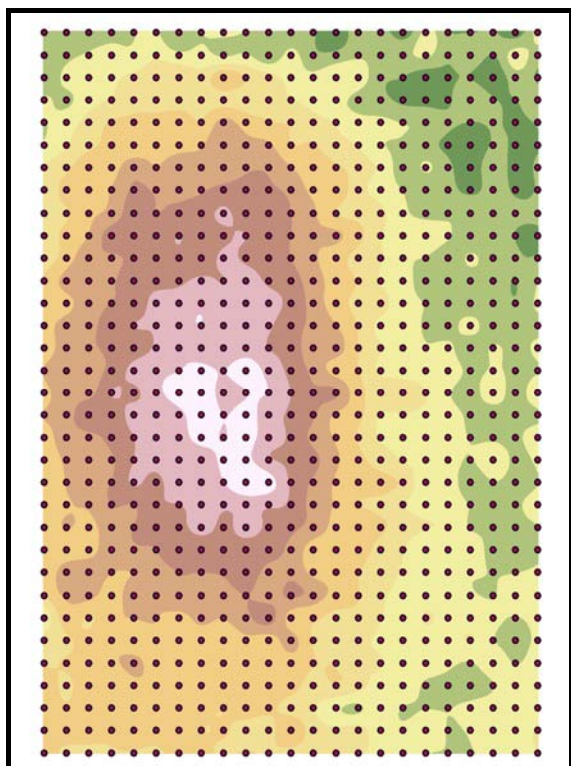


Plate 2 (left) Survey data overlain by the site grid

Plate 3 (above) Survey of the mound

5 RESULTS

The survey revealed that there was a 0.56m difference between the highest and lowest points of the mound (Plate 5).

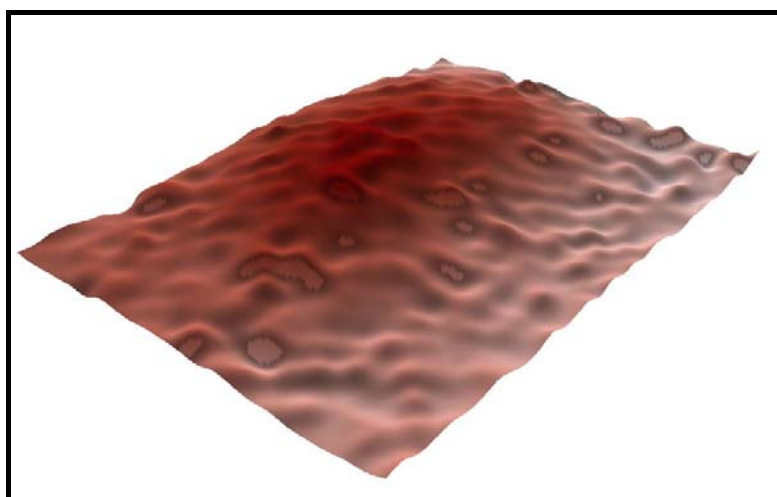


Plate 4 (above) 3D representation of the mound looking northeast across the site

Plate 5 (right) The mound from the same angle



The 3D terrain model (Plate 4), as well as showing the mound itself, has also picked out individual grass tussocks which are evidence of the grassy marsh conditions on site today.

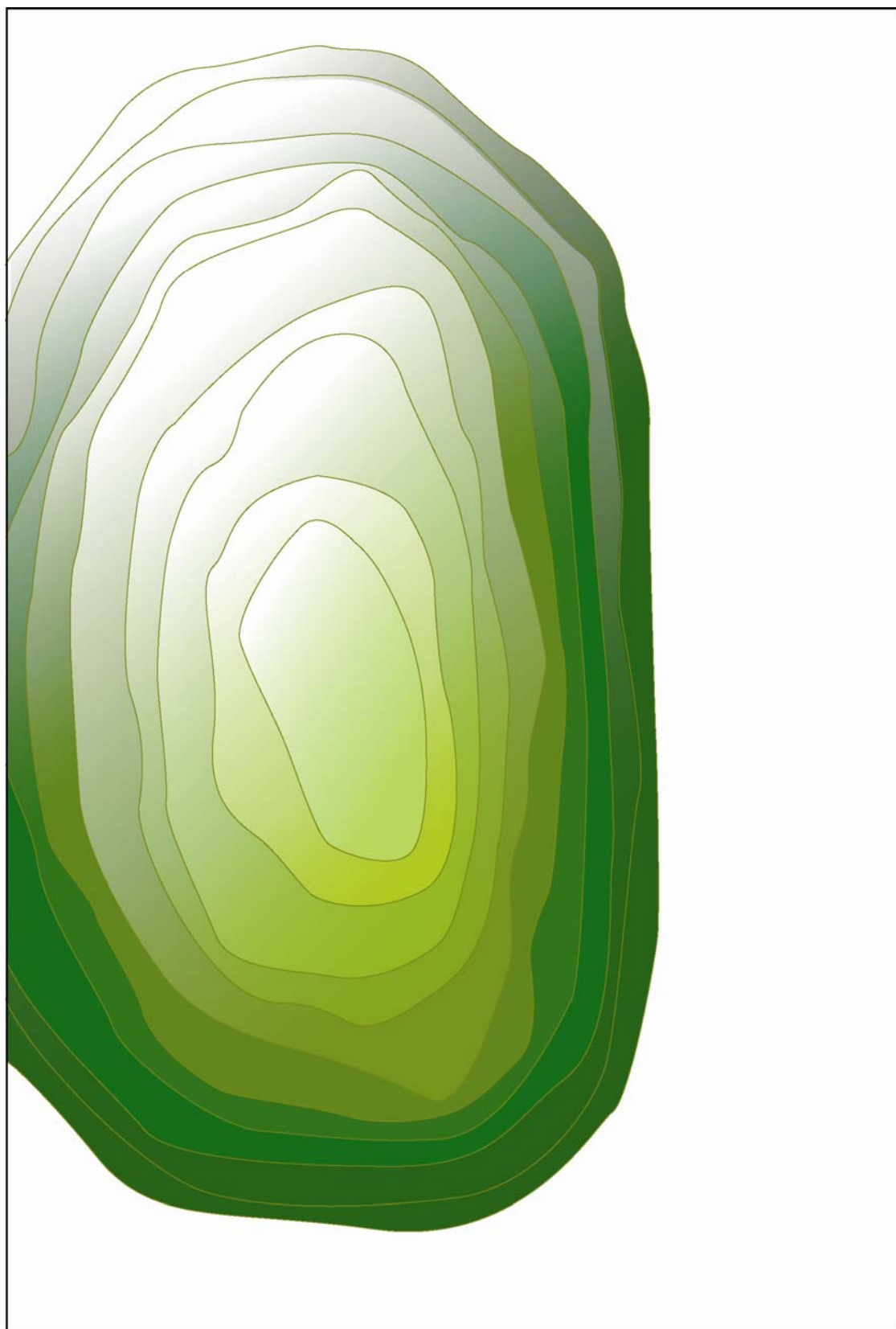


Fig. 2 Contour plan of mound

6 DISCUSSION

Over 40 burnt mounds have so far been found in Birmingham, including several in the Sutton Coldfield area (Fig. 1). They are composed of heat-shattered stones and charcoal and are invariably in wet locations near streams. Radiocarbon dates so far obtained for burnt mounds in Birmingham and the surrounding area are consistently Bronze Age, between about 1700 and 1000 BC (Hodder 2004, 33).

Excavation of one particular example in a stream bank at Cob Lane in Bournville (1980-1) showed that it had originally been situated in a meander of the Bourne Brook. Beneath the burnt mound, a burnt hollow, and timber and clay-lined pit were unearthed. There were also many holes that appeared to be the result of pointed branches being pushed into the ground. Environmental evidence from the former stream bed included the remains of hazelnut shells and two large oak tree trunks, as well as beetles (including species associated with grazing animals), which provided ecological indicators for what the environment was like in the vicinity some 3000 years ago. The silty clay that had accumulated over the mound is likely to have been soil loosened by ploughing on the slopes above the site, providing further evidence for prehistoric farming in the immediate area (Hodder 2004, 33-36).

Burnt mounds were originally interpreted as the debris from cooking using heated stones. However, the lack of other artefactual evidence that we find elsewhere around Bronze Age hearths such as animal bones and ceramic cooking pot fragments suggests that this was not the type of activity being carried out around burnt mounds. The alternative explanation is that the stones were used to produce steam for sweat or sauna-type bathing similar to those used by North American Indians (Hodder 2004, 38). Steam is created for bathing by pouring water over heated stones inside a tent or hut. Reconstructions based on the excavated evidence from the Cob Lane site and the structures used by North American Indians have shown that burnt mounds could well have been saunas (Hodder 2004, 39).

Bronze Age burnt mounds have long been a feature of Birmingham's archaeology, where they are concentrated along many of the smaller streams. Their full distribution however, will be not understood until a systematic survey of Birmingham's rivers and streams has been completed (Barfield 2003).

The New Hall Valley burnt mound is a particularly well-preserved example of its type, as many others across Birmingham are visible only in section in stream banks rather than as whole upstanding mounds. Its valley location, composition, form and size are all consistent with other burnt mounds known across the region. However, this particular mound also complements other historic environment features in and around Newhall Valley itself, thus adding another chapter to our knowledge of past human management of the Valley. It also demonstrates the potential survival of other archaeological remains lying as yet undiscovered within the Valley landscape (Hodder pers. comm.).

7 FUTURE MANAGEMENT

The Newhall Valley burnt mound is well-preserved but is vulnerable to damage through activities on and around it. In order to best protect it, it is therefore recommended that attention should **not** be drawn to it through signage as this may cause erosion by visitors to the site and would also have an ecological impact on the area.

Excavation of the mound would be destructive and is unlikely to result in significant new information, but non-intrusive geophysical survey around it may indicate associated features. A Resistivity Survey of a mound on the Westley Brook, Fox Hollies Park revealed that features believed to be associated with the mound extended up to 60m

away from the mound proper (Hodder 2004, 37). Excavation on other sites has confirmed the presence of other associated features such as pits, troughs and hearths, so it is essential that no activities involving ground disturbance, including tree-planting and vehicle movement, take place on or near the mound. Given the waterlogged nature of the site and the potential importance of any surviving environmental remains and ecological indicators such as pollen, charred plant, beetles and charcoal the excavation of drainage ditches which may alter the water levels on the site should also be prohibited.

8 ACKNOWLEDGEMENTS

The survey was commissioned by John Porter on behalf of Birmingham City Council. Thanks are due to Mike Hodder for monitoring the project and giving on-site guidance and specialist advice. The project was supervised by Kirsty Nichol, and the survey was undertaken by The Church of the Latter Day Saints Helping Hands Forum. The illustrations were prepared by Nigel Dodds, Mike Hodder, Kirsty Nichol and Eleanor Ramsey, with text by Kirsty Nichol who managed the project for Birmingham Archaeology.

9 REFERENCES

Barfield, L. 2003 Report for The Burnt Mound Field Survey Group, BWAS

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