

A landscape investigation of the multi-period hilltop site at Breedon-on-the-Hill, Leicestershire

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Introduction

The hilltop of Breedon-on-the-Hill, Leicestershire has seen near continuous human activity over the past two thousand years. It is the focus of an Iron Age hillfort, an 8th century minster and a 12th century Augustinian priory, which forms the basis of the church still active to this day.

Today, two-thirds of the Iron Age hillfort structure - along with the hillside - has been quarried out. What remains has been protected by legal status.

New investigative methods, such as Airborne Laser Scanning (LiDAR), could cast new light on this nationally important archaeological site.

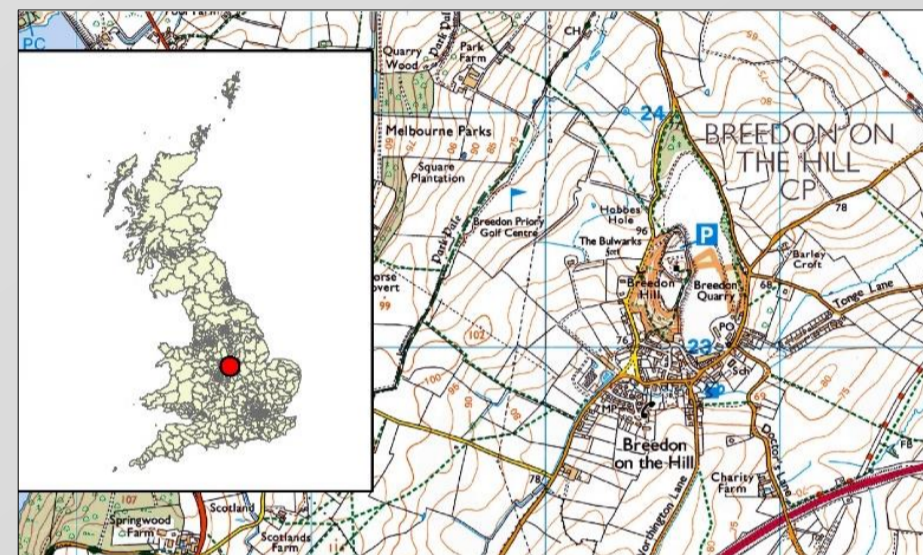


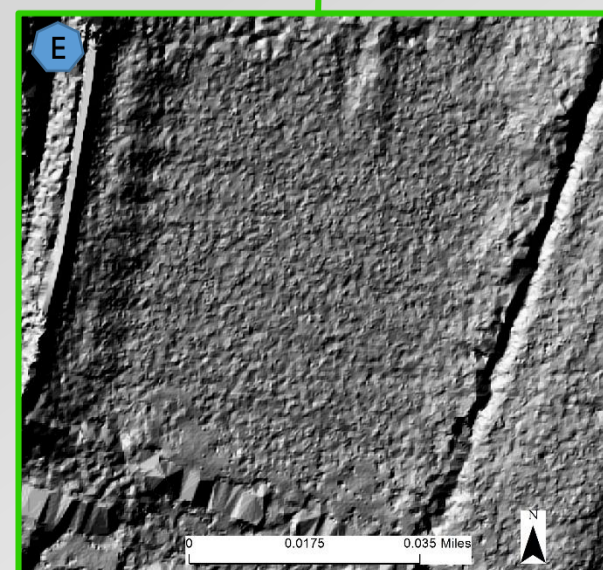
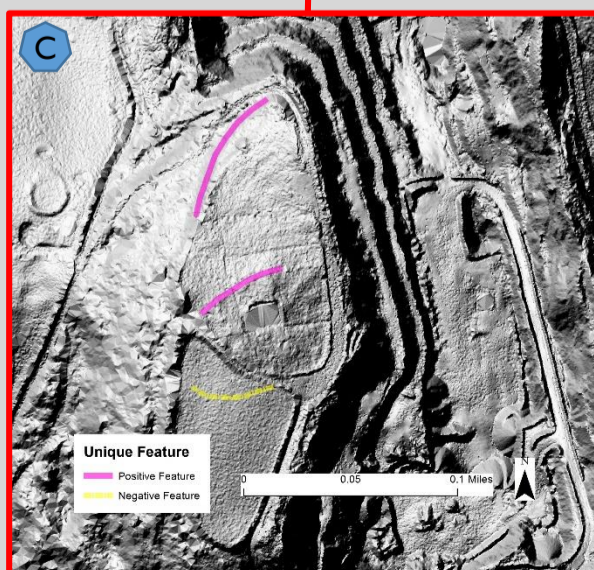
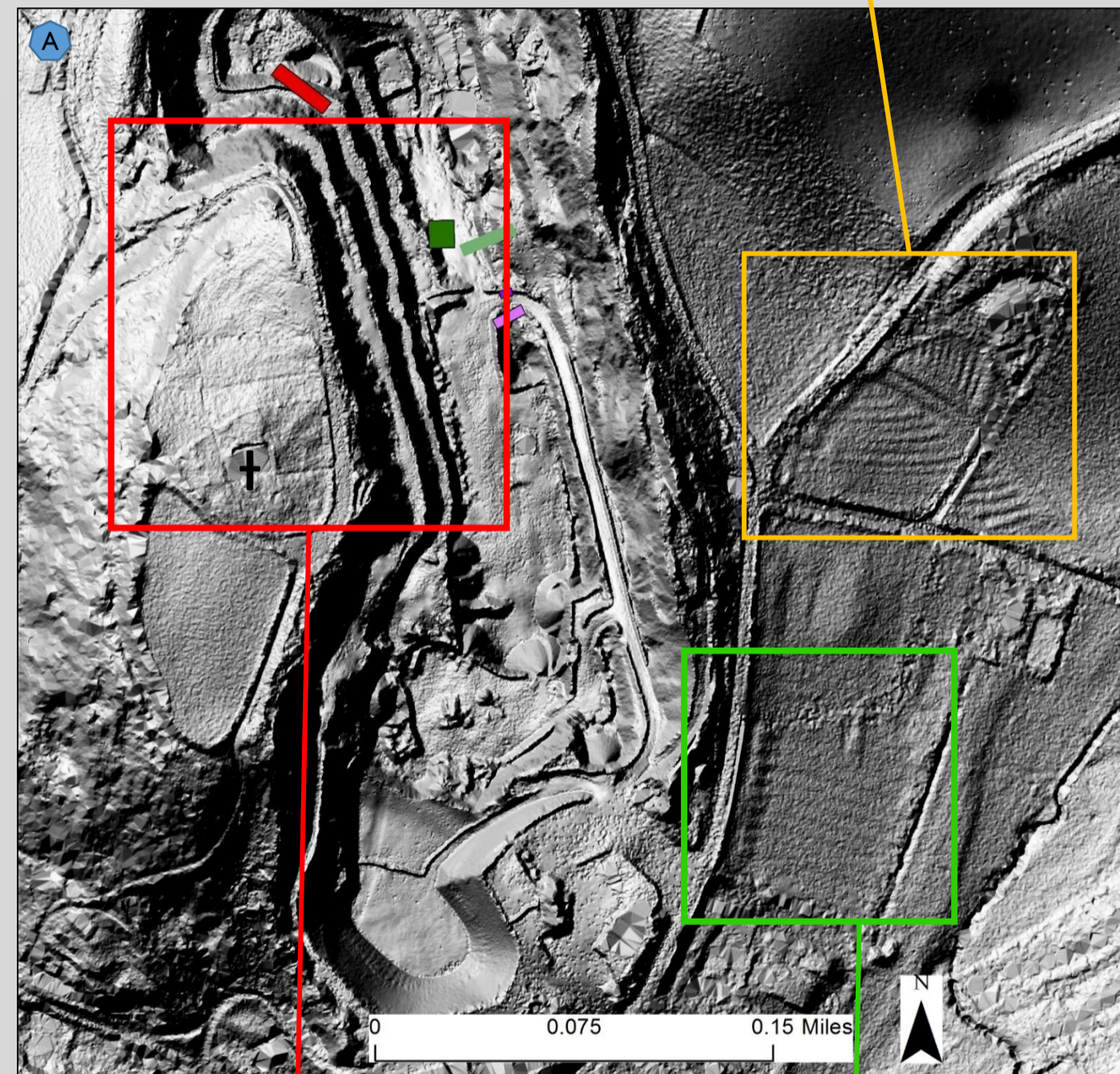
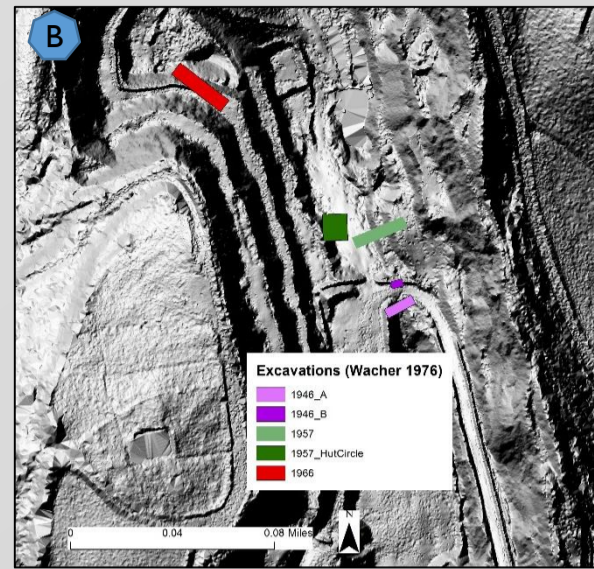
Figure 1. A contemporary map showing site at Breedon-on-the-Hill, Leicestershire, inset within the UK.

Aims

- To better understand the different periods of occupation by identifying unique landscape features, through maps, aerial photographs and new LiDAR data, within a Geographic Information System (GIS)
- To consider the impact of contemporary landscape change (quarrying) on the historic environment
- To draw together written information with spatial data to re-examine the site's past

Methods

- LiDAR is a laser scan of the earth's surface: it shows up even the smallest lumps and bumps. It is a new method to archaeology, so the raw data (from the Environment Agency) has yet to be used on many important archaeological sites
- I used laser scans (Digital Terrain Models) alongside 18th century maps and aerial photographs from the 1940s to identify historic landscape features
- Within my GIS, I gave each of these layers coordinates to overlay one another and match them against contemporary Ordnance Survey, satellite imagery and Topography gauges
- Digitising two excavation plans into my GIS helped assess the modern impact on the historic environment. I then overlaid the excavation data with satellite imagery to consider whether quarrying had damaged the archaeological areas
- Scrutinising primary and secondary historical documents and place-name evidence



Results

A - The manipulated Lidar data illuminates several unique landscape features:

B - applying the excavation report plans (Kenyon 1950; Wacher 1976) to the GIS has illustrated that **86% of the area excavated at the hilltop has since been destroyed by quarrying** (Fig. 3). This includes several **prehistoric monuments** and a large **early medieval cemetery** have undoubtedly been irretrievably lost.

C - highlights two outlying (positive) features, the remains of the **Iron Age ditch system** (in pink), whilst the bottom could be part of the **early medieval monastic enclosure** (yellow). The form of the negative feature suggests it could also relate to this feature.

D and E - illustrate **medieval field systems** previously unknown to the archaeological record.

Place-name interpretation suggests that the *-dun* suffix is a topographic identifier, present at other sites which display early medieval minster churches within prehistoric enclosures, such as Bredon Hill, Worcestershire.



Figure 2. A contemporary aerial photograph of the hilltop, illustrating the scale of quarrying at the site.

Conclusions

1. Examining the new Lidar data has revealed several unique historic landscape features, two of which were previously unknown to the record.
2. Applying excavation plans to satellite imagery has shown that several archaeologically important features have been lost to quarrying.

References

- Hooke, D. (1998) *The Landscape of Anglo-Saxon England*, London: Leicester University Press.
- Kenyon, K. (1950) 'Excavations at Breedon on the Hill 1946', in *Transactions of the Leicestershire Archaeological and Historical Society* 26: Leicester.
- Wacher, J.S. (1976) 'Excavations at Breedon on the Hill' in *Transactions of the Leicestershire Archaeological and Historical Society* 52: Leicester.
- Photographic credits: Fig.1: OS 2015, Fig.2: English Heritage 2006.