SURVEY RESULTS

2002 / 56 Carsington Pasture, Derbyshire

1. Survey Area

1.1 The survey grid was set out by ***GSB Prospection*** and tied in to the basemap by Dr Henry Chapman using a Trimble GPS system.

1.2 Two small areas (labelled Areas A and B) of gradiometer survey were undertaken close to the cave site. At the barrow (Area C) both gradiometer and resistance survey were conducted. The location of the survey areas is shown in Figure 1 at the scale of 1:2500**??.**

2. Display

2.1 Figures 2 to 10 present the magnetic data as XY traces, dot density plots and greyscale images, with accompanying interpretation diagrams, at the scale of 1:500. The resistance data (Figures 11 to 13) is displayed as greyscale images in a range of statistical formats; these are accompanied by an interpretation (Figure 14). These are also at the scale of 1:500, with the exception of Figure 13 which is a detailed view of the barrow at 1:250.

2.2 Figures 15 and 16 present the magnetic and resistance results in summary format at the scale of 1:1250.

2.3 Numbers in parentheses in the text refer to specific anomalies noted on the interpretation diagrams.

2.4 These display formats and the interpretation categories used are discussed in the *Technical Information* section at the end of the text.

3. General Considerations - Complicating factors

3.1 Conditions for survey were good with much of the area being under pasture. Steep slopes locally presented minor problems but these have not significantly impinged on the quality of the data.

3.2 Owing to the limited area available for survey at the cave site, the interpretation of the data for Areas A and B is more cautious. This is because there is less context in which to view any anomalies and any distributional pattern they may form.

3.3 Isolated ferrous anomalies can be found in all the datasets. These are presumed to represent modern ferrous debris within the soil and are not mentioned specifically in the report unless considered to be relevant. In the present context, however, it is possible that some reflect objects of greater antiquity.

4. Results of Gradiometer Survey

Area A

This area lies about 60m to the north of the cave mouth and was positioned to investigate the ground prior to the installation of a marquee

4.1 Numerous trends can be discerned which may be archaeological but this is unlikely. Their lack of signal strength and the limited extent of the area preclude a more detailed interpretation.

Area B

This area was positioned to locate possible anomalies of interest adjacent to the mouth of the cave.

4.2 No archaeological anomalies have been noted but a linear trend may be of interest. This, however, is speculative as the response is close to the limits of detectability. Two amorphous responses are thought to be natural in origin, although, an archaeological explanation cannot be wholly excluded.

Area C

This area covered the barrow and its immediate surrounds.

4.3 A group of amorphous responses coincide with the barrow but cover a smaller area than the anomalies recorded during the resistance survey over the barrow (see paragraph 5.1). The magnetic anomalies may indicate either the form of the original barrow or some component of its structure, such as a turf core.

4.4 Several linear, short ditch-type and pit-type anomalies have also been recorded which are of archaeological potential. However, along with numerous trends and a band of magnetic disturbance, these anomalies have a marked NW-SE orientation and it is possible that they relate to non-archaeological causes such as agricultural practice or paths.

4.5 The data contain a number of trends for which an archaeological explanation cannot be discounted. However, those conforming to the NW-SE orientation may, again, relate to past agriculture.

4.6 Although anomaly (2) appears to be of interest, it is in fact the result of a large ferrous rod used for an electric fence.

4.7 The narrow band of magnetic disturbance is believed to be modern and probably reflects the magnetic trench backfill for a non-ferrous pipe/service.

5. Results of Resistance Survey

5.1 A sub-circular group of high-resistance readings corresponds with the barrow. Within this, just off-centre, an area of low resistance (3) indicates a robber trench. At the time of the survey it was believed that the results indicated the presence of a ring cairn, however, excavation failed to identify such a feature. It seems likely therefore that the ring is an artificial effect caused by the old robber trench but it may also reflect a ring of turfs used in construction of the barrow.

5.2 The data also contain several low resistance linears / trends orientated approximately NW-SE. As with their counterparts in the magnetic data, these may be archaeological but a modern, natural or agricultural explanation is equally credible. The most distinct (4) of these linears coincides with the band of magnetic disturbance noted in the magnetic data (paragraph 4.7) and is attributed to a modern pipe / service trench.

6. Conclusions

6.1 Gradiometer survey close to the cave site has found no anomalies of clear archaeological potential. A number of trends may be archaeological but this remains debatable. On and around the barrow, numerous anomalies of archaeological potential have been detected, however, the possibility that some of these are modern or reflect agricultural practice cannot be dismissed. Survey in this area has also recorded a band of magnetic disturbance associated with pipe.

6.2 Resistance survey over and around the barrow recorded a roughly-circular area of high resistance readings corresponding with the coarse / well-drained materials used in the barrow's construction. However, an area of low resistance cuts into this and corresponds with a robber trench.

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References:

SSEW 1983. *Soils of England and Wales. Sheet 3, Central England*. Soil Survey of England and Wales.

SITE SUMMARY SHEET

2002 / 56 Carsington Pasture, Derbyshire

NGR: SK 2415 5368

Location, topography and geology

Carsington Pasture is situated between the villages of Carsington and Brassington, some 11km north-east of Ashbourne in Derbyshire. The sites of interest are: an area in front of a cave and a barrow *c.*500m to the north-east of the cave. At the cave site, the topography slopes southwards and the barrow occupies a promontory. At the time of survey, both areas were under pasture. The geology consists of Carboniferous limestone, however, there are numerous igneous intrusions in the locality. These gave rise to the lead deposits which were worked until recently. The site soils are typical brown earths comprising well drained silts over limestone

Archaeology

The cave, which comprises several chambers, has been found to contain a wealth of human bones. These constitute at least 20 individuals, some children, and cover the period from the late Neolithic / early Bronze Age to the Iron Age. Artefacts dating to the Roman-British period have also been found. The barrow is also Bronze Age in date. Several lead mines, now disused, are also to be found in the immediate vicinity of the study area.

Aims of Survey

The objective was to locate any detectable remains associated with the cave and the barrow so as to enhance the level of information for the site. This survey formed part of a wider investigation as part of the **Time Team** series for **Channel 4** Television.

Summary of Results *

Gradiometer survey close to the cave found no anomalies of archaeological potential. A number of trends can be discerned in the data which may be of interest but any interpretation would be speculative. Over and around the barrow, numerous anomalies of clear or potential archaeological interest have been recorded. Trends evident in the data may also have an archaeological origin but this is conjectural. A band of magnetic disturbance and several of the above anomalies display a marked NW-SE orientation. It is possible, therefore, that some reflect more recent land use and agricultural practice.

Resistance survey was conducted over and around the barrow and recorded a circular mass of high-resistance readings corresponding with the coarse material used in its construction. An area of low resistance readings intrudes into this and relates to a robber trench. The data also contains several low-resistance linear anomalies and trends which are orientated approximately NW-SE. Whilst these may be archaeological, an alternative explanation, such as agriculture, is equally credible.

*** It is essential that this summary is read in conjunction with the detailed results of the survey.**

List of Figures