East Meon, Hampshire

Geophysical Survey

19th - 20th September 2014

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(Liss Archaeology Group Ref: EM-914)

Introduction

The survey took place over the Friday and Saturday of September 19th and 20th in a field to the west of East Meon (SU 674 224) (Colchenna Farm). The weather was fair with intermittent sunny intervals. This location was chosen because a number of late Anglo-Saxon artefacts had recently been retrieved by metal detectorists and it was felt that it could be the site of a late Anglo-Saxon settlement. Its proximity to East Meon, which is mentioned in Late Saxon charters and is recorded in Domesday, indicated that it could provide important information about the use and development of the landscape around the village.

Both resistance and magnetometry methods were employed in order to increase the potential of detecting any sub-surface features and anomalies. A total of eight 20x20m grid squares were laid out allowing an area of 3200 m² to be surveyed (Fig. 1). Five grid squares were surveyed by the magnetometer equating to 8000 separate readings, while four grid squares were surveyed using the resistance meter totalling 6400 readings. Square A4 was surveyed by both resistance and magnetometry.

The Grid

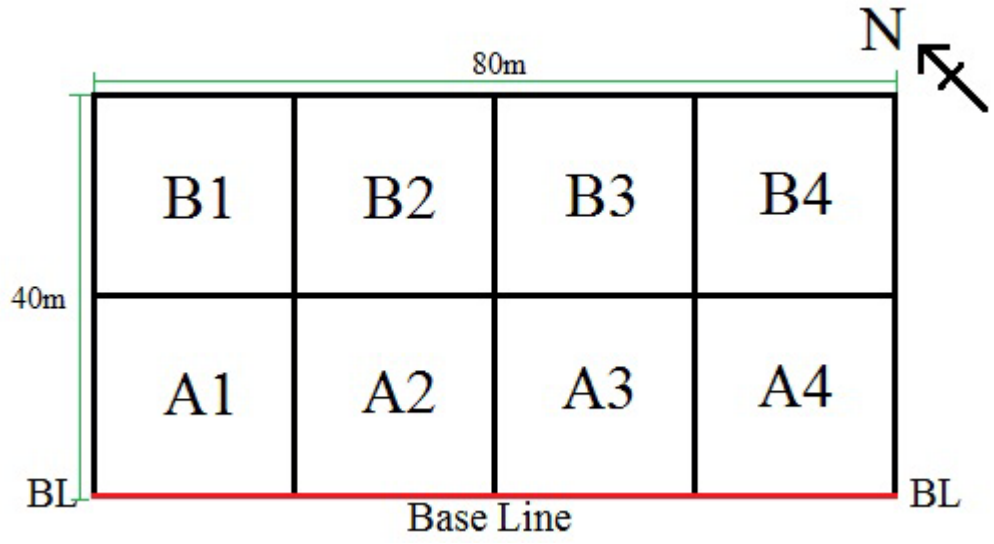

Fig. 1 The grid

Results

Magnetometry. A Geoscan Research FM36 magnetometer was used to survey grid squares A4 - B4 - B3 - A3 - B2 (Fig. 1). The processed and filtered results (Fig. 2) are displayed in linear plot format and appear to show some disturbance especially within grid squares B2 and A3 (Fig. 2).

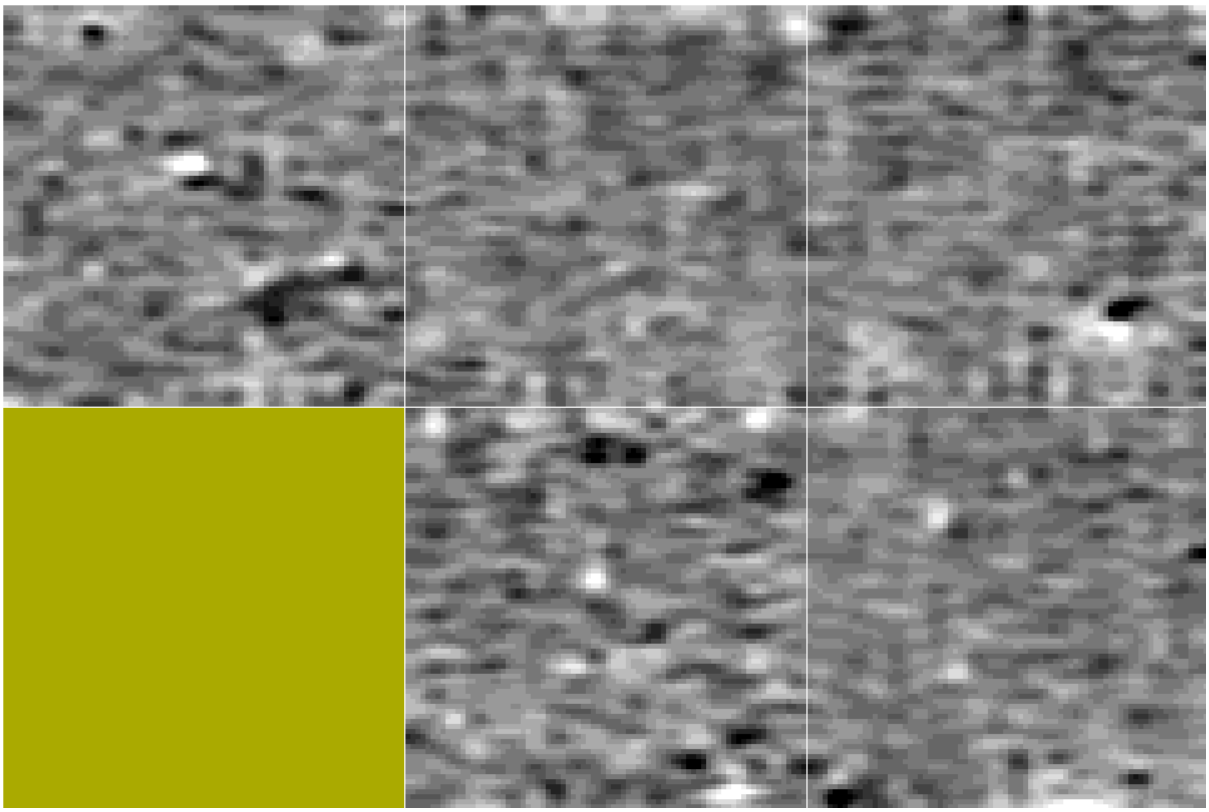

Fig. 2 The faint white lines indicate each 20m x 20m grid square; the green square (A2) was not surveyed with magnetometry

Resistivity

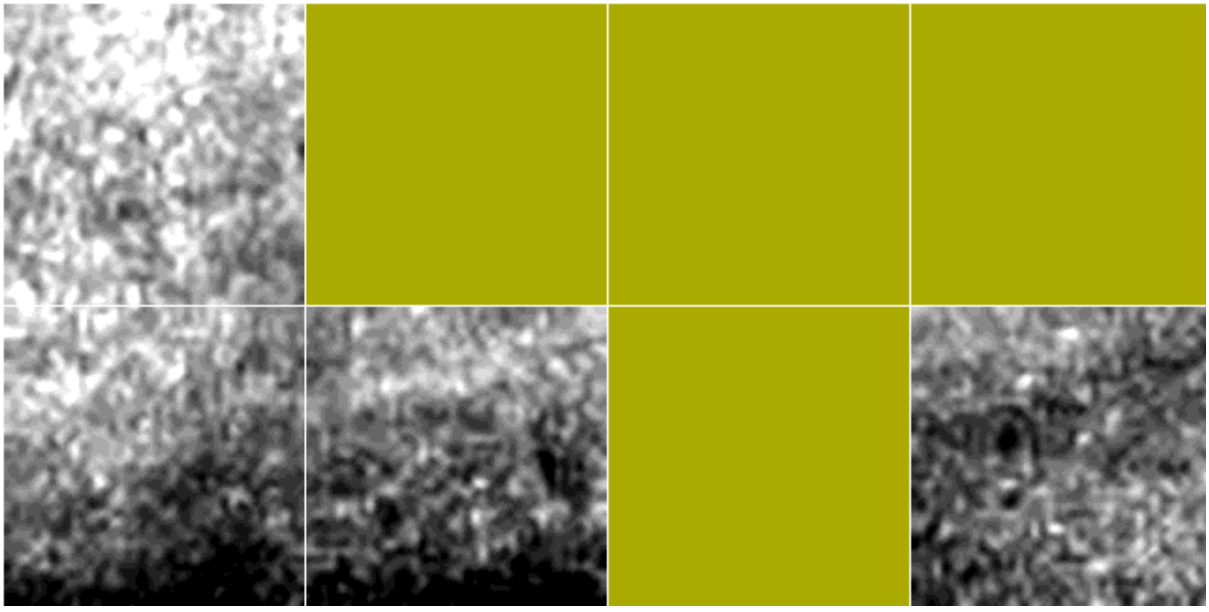

Fig. 3 The faint white lines indicate each 20m x 20m grid square; while the green squares (B2 - B3 - B4 - A3) were not surveyed with resistivity

Resistivity. The instrument was a Geoscan Research RM85 resistance meter and was used to survey squares A1 - B1 - A2 - A4. The processed and filtered results are displayed in linear plot format and appear to show some disturbance and anomalies especially within grid square A4 (Fig. 3).

Interpretation

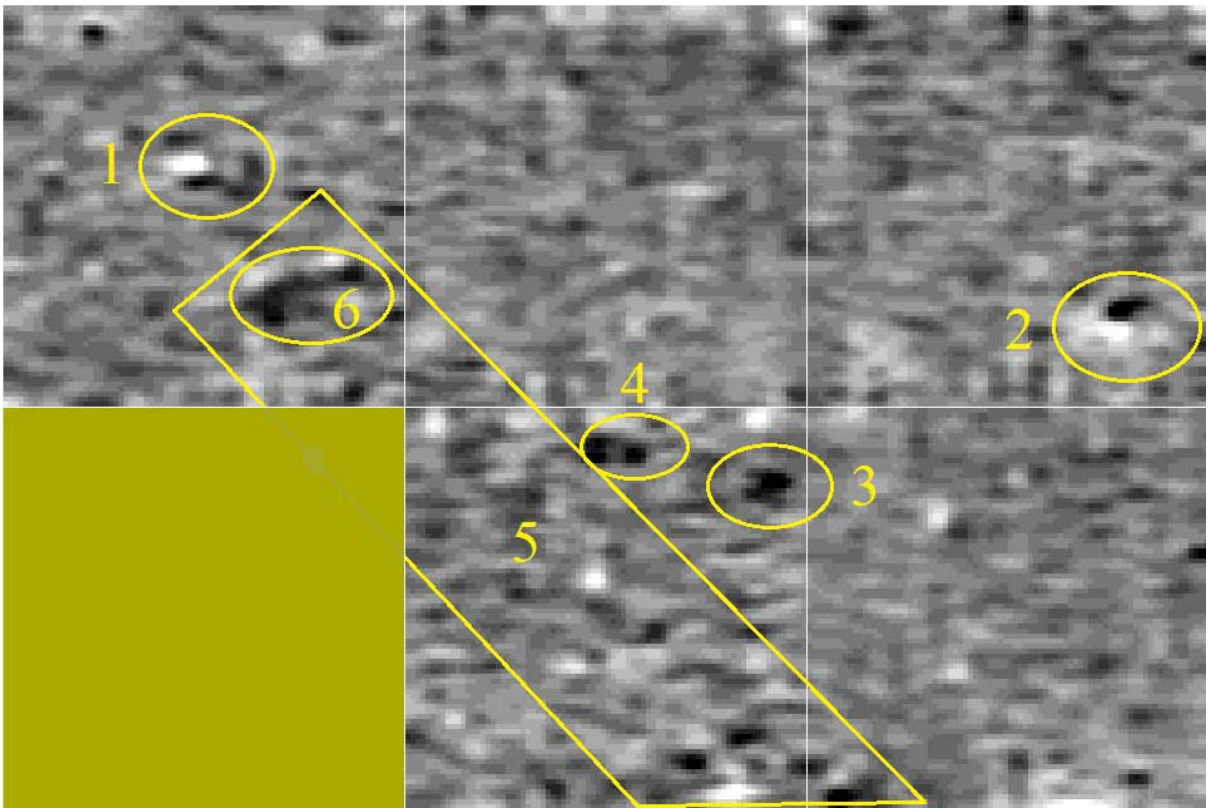

Fig. 4 Anomalies identified by magnetometry

The magnetometry results show a number of anomalies (Figs 4 & 6). The darker regions are showing a higher magnetic response, for instance the presence of ferrous metals or material with slight magnetic properties, while the white regions are showing negative magnetic responses.

Although it is difficult to say exactly what these anomalies represent, in all probability no's 1 and 2 are sizable pieces of ferrous metal, possibly horse shoes or similar sized objects lying close to the surface and giving off a strong magnetic response. This is seen by the polarisation effect of both the black and white blobs overlaying one another. Numbers 3 and 4 represent concentrations of material, either on or below the surface, that are giving off a positive magnetic response. It is difficult to say what caused this, however the anomalies are consistent with pits filled with low level magnetic debris, for example burnt or fired clay. Anomaly 5 is faint but appears to be a linear feature roughly on a north-south bearing; it is possible that it represents an ancient track way, field boundary or even a land drain. Number 6 appears to be a large spread of material, 6-7m in length and similar to no's 3 and 4, however it also has a polarised white halo similar to no's 1 and 2 so it probably contains some ferrous material.

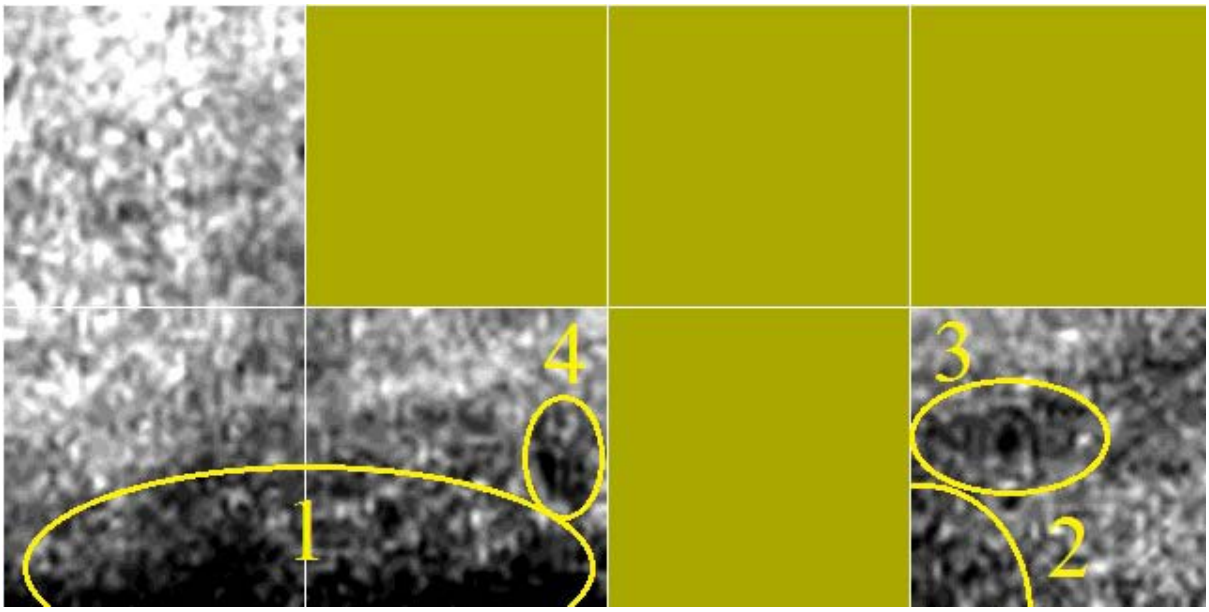

Fig. 5 Anomalies identified by resistivity

The results from the resistance survey are shown in Figs 5 & 7. The darker regions are showing less electrical resistance and are therefore damper; the whiter regions are showing greater electrical resistance and are therefore drier. The darkest areas of no's 1 and 2 lie along the grid's base line and are closest to the field boundary and the adjacent road. They show up as very dark due to the higher levels of moisture within the soil and is probably a result of rain water flowing down the slope and collecting in the lower ground at its base. Anomaly 3 appears to be a curvilinear feature roughly 4m across and surrounds a circular pit roughly 2m in diameter; it also gives a low resistance response resulting from the soil within it is holding more moisture than the surrounding earth. Number 4 is another area of lower resistance. It might have a spatial relationship to number 1, although it is hard to know for sure.

Conclusion

The survey revealed only slight evidence of sub surface features; of note are the probable pits and trackway that are consistent with the type of features associated with a rural settlement. The evidence is not sufficient to permit the site to be dated. However, the metal detecting survey that took place at the same time as the geophysics recovered a range of artefacts (n=54) that date from the Roman to modern period. Although the majority are copper alloy or lead fragments that cannot be dated, it is notable that the assemblage contains a number of Roman or probable Roman finds: eight coins, one fragment of a brooch and another possible part of a brooch. When the artefactual and geophysical data is taken together it suggests that there was some Roman activity on or close to the survey area. The Late Anglo-Saxon artefacts that were found previous to this survey suggest that the site may have witnessed some activity in the 9th-11th centuries. Overall, the evidence is very fragmentary and also frustrating and to get a clearer idea of both the date and nature of the activity a larger area will need to be surveyed.

Fig. 6 The magnetometry results overlaid onto an aerial view of the survey area

Fig. 7 The resistivity results overlaid onto an aerial view of the survey area