

SITE SUMMARY SHEET

2005/63 Hadstock, Essex

NGR: TL 5596 4472

Location, topography and geology

The village of Hadstock lies on the Essex/Cambridge border approximately 6km north of Saffron Walden and 16km southeast of Cambridge. The main survey area occupies a small undulating pasture field, that had been cut prior to survey, immediately southeast of the church; this field was subjected to both gradiometer and resistance surveys. The gradiometry was extended into an adjacent arable field that was under stubble. The soils are of the Hanslope association (411d), comprising calcareous clayey soils formed from a parent of chalky till (SSEW 1983).

Archaeology

The village of Hadstock has a cruciform late Saxon church, which is uncharacteristically large for the size of the parish which it serves; a parish which has been relatively impoverished for most of its history. Two theories have been postulated to explain the size of the church: (1) that it was the site of the monastery founded by St Botolph or (2) that it is the Minster built by Canute to celebrate his victory at the battle of Assunden. The main field under investigation contains several prominent earthworks which have been mapped by **Essex CC Field Archaeology Unit**. It remains unclear, however, whether these earthworks relate to early (Saxon or medieval) occupation or later disturbance such as quarrying.

Aims of Survey

Gradiometer and resistance surveys were carried out with the aim of identifying any anomalies of possible archaeological interest which could be targeted for subsequent excavation. The work forms part of an ongoing investigation, by **The Hadstock Society**, of Hadstock Church and its environs, with particular emphasis on explaining the unusual size of the church and assessing its significance in antiquity.

Summary of Results *

Gradiometer survey: Nearly all the anomalies in the pasture field (Area A) are ferrous in nature; some relate to surface features, others indicate concentrations of brick or other burnt/fired debris and the remainder are characteristic of stray pieces of iron; all are associated with more recent land use at the site. The stubble field (Area B) has produced several anomalies of archaeological interest. A well defined ditch type anomaly could form part of a trackway or a boundary and other responses have a rectilinear pattern that could suggest parts of enclosures.

Resistance survey (Area A only): Several discrete anomalies and areas of high resistance have been identified which could indicate structural remains or rubble. However many of these coincide with areas of ferrous noise, suggesting the presence of brick and other burnt material; if the two data sets are related they may represent features associated with later activity at the site.

Information provided by The Hadstock Society.

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

SURVEY RESULTS**2005/63 Hadstock, Essex****1. Survey Areas**

- 1.1 The main focus of investigation comprised a small pasture field containing earthworks; this was investigated by both gradiometer and resistance survey. The former was extended into the adjacent arable field, an area occupying a prominent position on the top of a hill. The location of the survey areas is shown in Figure 1 at a scale of 1:1000.
- 1.2 The survey grid was set out by *GSB Prospection* and tied in to existing field boundaries. A copy of the tie-in information has been lodged with the client.

2. Display

- 2.1 The gradiometer results are displayed as an XY trace plot and a greyscale image; the resistance data are presented as greyscale and colour images. Digitised interpretations have been produced for both data sets. All the above diagrams are produced at a scale of 1:500.
- 2.2 The display formats and the interpretation categories used are discussed in the *Technical Information* section at the end of the text and a complete list of figures precedes the diagrams. Numbers and letters in parentheses refer to specific magnetic and resistance anomalies, respectively, highlighted on the interpretations.

3. General Considerations - Complicating factors

- 3.1 The ground conditions presented no hindrances to data collection; the pasture field had been cut prior to survey and the arable field was under short stubble. A small strip at the northwestern end of the pasture field was inaccessible due to the presence of dense weeds and an electricity compound not shown on the existing maps.

4. Results of Gradiometer Survey**Area A**

- 4.1 The results from the pasture field are dominated by ferrous responses. The band of noise (1) has been produced in part by the nearby electricity compound; that along the southeastern edge (2) reflects the wire boundary fence and the footings for a telegraph pole. Anomaly (3) has a different form; it is primarily a negative 'shadow' which suggests ferrous material in the adjacent boundary hedge rather than debris within the survey area.
- 4.2 The ferrous responses at (4) and (5) are typical of concentrations of buried ferrous debris, brick rubble or other burnt/fired material. There have been several bonfires on the site in recent months and material from this may have contributed to the recorded anomalies. Both groups of responses coincide partially with high resistance anomalies (see paragraph 5.3 below).

- 4.3 The remaining ferrous anomalies are small scale 'iron spikes'. These are characteristic of small pieces of ferrous debris scattered in the topsoil and they are commonly assigned a modern origin, for example, small pieces of brick, steel drinks cans, horse shoe fragments. While iron objects of greater antiquity would produce comparable ferrous responses, any such objects are likely to be unstratified and therefore of limited archaeological relevance.
- 4.4 Several isolated pit type anomalies have been identified which may be of interest. However, they do not form any coherent patterns and this makes an archaeological interpretation inconclusive. Natural soil variations could equally account for these responses, or they may have been produced by small pieces of ferrous debris buried at greater depth (the deeper an object or feature, the weaker and broader the magnetic response detected at the surface).
- 4.5 A few faint trends are apparent in the data. Again, no clear patterns emerge and an archaeological origin seems unlikely.

Area B

- 4.6 The stubble field has yielded several anomalies of possible archaeological interest. The most definitive of these is the relatively strong, well defined linear anomaly (6), which could indicate part of a boundary ditch. Alternatively it could be associated with parallel weak responses (7) and therefore indicate a section of road or trackway.
- 4.7 If anomalies (6) and (7) are not connected, then two other interpretations are possible for responses (7). They could indicate the remains of a boundary feature that fell into disuse after only a short period of time. Alternatively they may be associated with similarly weak anomalies and trends (8), forming a rectilinear pattern, suggestive of enclosures, which cross the main ditch and may, therefore, indicate a different phase of activity.
- 4.8 A number of other weak pit type anomalies and trends have been highlighted on the interpretation. While these could be of archaeological interest, their indistinct nature makes it difficult to assess their significance. The pit type anomalies could have been produced by more deeply buried ferrous debris, while the trends could reflect recent agricultural activity.
- 4.9 Small scale ferrous spikes have also been recorded in this block. As with those in Area A, these are likely to indicate pieces of ferrous debris scattered in the topsoil. The narrow band of ferrous noise along the northwestern edge of the grid has been produced by the adjacent wire fence.

5. Results of Resistance Survey

- 5.1 A curving high resistance anomaly has been detected at (A); it is roughly 13m in diameter and corresponds in part to earthworks (see Figure 6). For the most part the responses are relatively well defined and could indicate partially disturbed foundations or rubble associated with a former structure. Anomaly (B) is a discrete linear high resistance anomaly that could indicate a former wall line, or possibly a drain.
- 5.2 The high resistance responses (C) show hints of rectilinearity and may, therefore, indicate structural remains. However, they are weaker and less well defined than those described above, making an archaeological interpretation cautious.
- 5.3 The positions of (A) and (B) and (C) partly coincide with ferrous magnetic anomalies (4) and (5) (see paragraph 4.2 above) and the two data sets may be reflecting the same features. If this is the case, then the remains are likely to comprise brick or burnt material and this could indicate a more recent (post-medieval) origin.

- 5.4 The area of high resistance anomalies at (D) have been highlighted as "archaeology" primarily due to the very distinct rectangular western edge. The responses could indicate a spread of rubble associated with a former structure or possibly an area of compacted ground forming a bank or platform. The area is partially overlapped by a ferrous anomaly (anomaly (3) paragraph 4.1) but it seems unlikely in this instance that the two data sets are related.
- 5.5 Responses (E) comprise a low resistance linear and several discrete high resistance anomalies with a well defined edge between them. They occur on higher ground that looks relatively undisturbed and could therefore be of archaeological interest. However, because they lie at the limits of the survey area, it is difficult to assess their significance. Moreover, a number of mature trees are present immediately adjacent to the grid and their roots could be responsible for the change in resistance values.
- 5.6 A broad band of high resistance has been recorded at (F). There is a distinct edge to the band and this could indicate the responses are significant. However a footpath/right of way crosses this part of the site and the ground was noticeably more compact, a factor which tends to increase resistance values. Furthermore, dense vegetation and trees were present immediately outside the area and these may also have affected the resistance. Finally, the gradiometer survey detected widespread ferrous noise along this part of the site, suggesting debris associated with the nearby electricity compound and boundary wall. On balance then, it seems more probable that modern factors are responsible for the resistance values, though an archaeological origin cannot be completely ruled out.
- 5.7 A few other high resistance anomalies have been identified by the survey. They are generally isolated and ill defined or located along the edges of the field and are therefore considered to be natural or modern in origin.

6. Conclusions

- 6.1 Gradiometer survey in the pasture field (Area A) provided virtually no archaeological information. Nearly all the anomalies detected were ferrous in nature; some could be related to surface features while the remainder are likely to indicate debris associated with more recent land use at the site. By contrast, the magnetic data for the stubble field (Area B) has produced evidence for at least one ditch, forming either part of a trackway or a boundary, and possibly several more ditch type anomalies forming a rectilinear pattern.
- 6.2 Resistance survey was carried out only in the pasture field. Several discrete anomalies and areas of high resistance have been identified which could indicate structural remains or rubble. However, many of these coincide with areas of ferrous noise, suggesting the presence of brick and burnt material (rather than stone) and the detected features might not, therefore, be associated with the early life of Hadstock Church and village but with later activity at the site.

Project Co-ordinator: C Stephens
Project Assistants: J Anderson & F Robertson

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References:

SSEW 1983. *Soils of England and Wales. Sheet 4, Eastern England.*
 Soil Survey of England and Wales.

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Categories used in the graphical interpretation of the data

Gradiometer Data

Archaeology

Anomalies whose form, nature and pattern clearly, or very probably, indicate an archaeological origin but where no supporting evidence exists.

?Archaeology

The interpretation of such anomalies is often tentative, with the anomalies exhibiting either weak signal strength or forming incomplete archaeological patterns.

Trend

Weak, ill defined curving or linear responses which are often barely visible above background levels. Interpretation of these is inconclusive; in some cases they may be archaeological, but could equally have natural or agricultural origins.

Ferrous:

This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes or above ground features such as fences or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.

Resistance Data

High Resistance - ?Archaeology

Anomalies or areas of higher resistance which could be of anthropogenic origin; they may indicate structural remains (foundations or rubble of either brick or stone) or compacted earthen features (e.g. banks or platforms). The responses are ill defined and/or form incomplete archaeological patterns making the interpretation tentative.

Low Resistance - ?Archaeology

Anomalies or areas of lower resistance which could be of anthropogenic origin; usually suggestive of ditches. The responses are ill defined and/or form incomplete archaeological patterns making the interpretation tentative.

High Resistance - ?Natural/Modern

These responses do not form archaeological patterns and are most probably due to localised variations in soil moisture or material associated with modern features, e.g. adjacent walls or trees.

Edge

A well defined boundary between areas of high and low resistance values.
