

SURVEY RESULTS

2001 / 103 Yaverland Manor Farm, Isle of Wight

1. Survey Area

- 1.1 Just less than 1 ha of detailed gradiometer survey was undertaken in two areas, together with a small area of resistance survey. The location of the survey areas is shown in Figure 1 at a scale of 1:2500.
- 1.2 The survey grid was set out by **GSB Prospection** and tied-in by **Time Team**.

2. Display

- 2.1 Figures 2 - 4 are summary greyscale images of the gradiometer and the resistance data produced at a scale of 1:1250, with accompanying interpretation diagrams at the same scale
- 2.2 Figures 5 – 10 and 14 are XY traces, dot density plots and interpretation diagrams of the gradiometer data, produced at a scale of 1:500. For ease of display at this scale, Area A has been sub-divided. Figures 11 – 13 are greyscale images and an interpretation of the resistance data.
- 2.3 Numbers in parenthesis refer to specific anomalies highlighted on the interpretation diagram.
- 2.4 The display formats are discussed in the *Technical Information* section at the end of the text.

3. General Considerations - Complicating factors

Soils

- 3.1 The survey area overlies at least three parent geologies: Cretaceous chalks; Eocene/Oligocene sands, clays and loams; marine and river alluvium.
- 3.2 The majority of the survey area lies on the chalks. The soils are grey rendzinas consisting of shallow well drained silts over chalk, although deeper pockets may be found in coombes and dry valleys (342a).
- 3.3 To the northwest, the ground drops and the parent material grades into marine and river alluvium. The soils, pelo-alluvial gleys, comprise deep clays with some surface peats; the soils are affected by a high groundwater table (813f).
- 3.4 To the north-east of the chalks, the geology changes to Eocene sands, loams and clays. The soils are stagnogleyic argillic brown earths which comprise deep loams over poorly drained clay subsoils (572j).

Implications for Gradiometry

- 3.5 The soils on the chalk geology will tend to produce favourable conditions for geophysics. The stagnogleyic argillic brown earths formed from Eocene deposits tend to produce 'quiet' gradiometer datasets with any anomalies being rather 'bitty'.
- 3.6 Soils formed in marine and recent alluvium with a high groundwater table are unfavourable for geophysics. However, as these are probably recently reclaimed soils, historic settlement is unlikely. Gross landscape features, such as palaeochannels, are more likely to be detected.

4. Results of Detailed Survey

Area A

- 4.1 The gradiometer data from this area are relatively noisy with the south-eastern portion being dominated by a strong ferrous response from a ferrous pipe that pre-dated the plastic one. The zone of disturbance around this will have masked any weaker responses of possible archaeological interest.
- 4.2 Several broad ditch type anomalies have been identified within the data. The most prominent of these is a curving response (1) in the eastern half of the survey block. The response is not particularly coherent and there is some suggestion of plough damage. However, one well-defined break (2) may indicate an entrance. There is no clear continuation of this anomaly north of the field boundary, although it is possible that it turns westwards and runs along the fence and anomaly (3) is a continuation of the same feature.
- 4.3 Just to the east of (1) there are two ditch type anomalies (4) which are likely to be of archaeological interest, and may be associated with the former. Similarly the ditch type anomaly (5) to the west of (1) may be part of the same complex.
- 4.4 Elsewhere isolated pit type anomalies and trends have been identified but it is difficult to formulate a precise interpretation. Some may have a natural or agricultural origin. The broad response (6) in the north of the survey area is likely to reflect a ploughed out lynchet.
- 4.5 Limited resistance survey proved disappointing. Although well-defined areas of high resistance were located, excavation revealed them to correspond with naturally occurring chalk. Broad areas of slightly lower resistance are visible over the ditches identified by the gradiometer survey.

Area B

- 4.6 By contrast to Area A this data set is very quiet magnetically. However, a relatively well-defined ring ditch anomaly is visible in the eastern half of the survey block. The isolated nature of this anomaly, together with its location on a topographic high, suggested it was a possible Bronze Age barrow. This was confirmed by excavation.
- 4.7 A few tentative pit type responses have also been noted but it is likely that these are of natural origin. A few weak trends are apparent within the data, although their lack of a coherent form makes an archaeological interpretation tentative.

5. Conclusions

- 5.1 Although the gradiometer survey has identified lengths of ditch, there is no clear pattern or form to the responses and as such it was not possible to define the limits of the site within the time available. In the main survey area the results were severely affected by a buried metal pipe, running alongside the plastic water pipe. It is possible, therefore, that the relatively high level of magnetic noise may have masked any weaker responses of archaeological interest. It should also be noted that many of the features (post holes, small scoops and burials) are not particularly conducive to being detected by geophysical survey.
- 5.2 Resistance survey identified discrete areas of high resistance indicating possible structural remains. However, excavation revealed these to be naturally occurring chalk. Similarly excavation failed to find any substantial walls or foundations that were surviving *in situ* but merely shadows of such features. Again, there was nothing surviving that could be detected geophysically.
- 5.3 A small survey to the northwest of the main area of investigation located a ring ditch that proved on excavation to be prehistoric in date.

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References:

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

SITE SUMMARY SHEET

2001 / 103 Yaverland Manor Farm, Isle of Wight

NGR: SZ 862 615 (Approximate centre)

Location, topography and geology

The area of interest is located some 4km northeast of Sandown town centre, Isle of Wight and due east of Brading. The site occupies an arable field, which had been harvested, and a pasture field immediately to the north. The fields were undulating with steep slopes in some areas. The survey area overlies at least three parent geologies: Cretaceous chalks; Eocene/Oligocene sands, clays and loams; marine and river alluvium (SSEW, 1983).

Archaeology

Excavation during the construction of a plastic water pipe revealed a wealth of buried archaeological deposits including Iron Age features, suggestions of a high status Roman building and post holes indicating an Anglo Saxon structure (K Trott *pers comm.*).

Aims of Survey

Gradiometer and limited resistance survey was undertaken to determine the nature and extent of buried archaeological deposits discovered during pipeline operations. This work forms part of a wider archaeological investigation being undertaken as part of the **Time Team** series for **Channel 4** television.

Summary of Results *

The gradiometer survey has produce mixed results. In the main survey area data were severely affected by a pre-existing buried metal pipe, running alongside the plastic water pipe. However, several broad ditch type anomalies were noted though no particular pattern could be established. Resistance survey identified anomalies suggestive of possible structural remains, but excavation revealed these to be naturally occurring chalk outcrops.

A small survey to the northwest of the main area of investigation produced a very weak, sub-circular, magnetic anomaly that proved on excavation to be prehistoric in date.

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

List of Figures

Figure 1	Location of survey areas	1:2500
Figure 2	Summary Greyscale: Gradiometer Data	1:1250
Figure 3	Summary Greyscale: Resistance Data	1:1250
Figure 4	Summary Interpretation: Gradiometer and Resistance Data	1:1250
Figure 5	Area A1 – Gradiometer data: XY trace	1:500
Figure 6	Area A1 – Gradiometer data: Dot density plot	1:500
Figure 7	Area A1 – Gradiometer data: Interpretation diagram	1:500
Figure 8	Area A2 – Gradiometer data: XY trace	1:500
Figure 9	Area A2 – Gradiometer data: Dot density plot	1:500
Figure 10	Area A2 – Gradiometer data: Interpretation diagram	1:500
Figure 11	Area A – Resistance Data: Greyscale Image	1:500
Figure 12	Area A – Resistance Data: Greyscales Images	1:1000
Figure 13	Area A – Resistance Data: Interpretation	1:500
Figure 14	Area B – Gradiometer Data: XY trace, dot density plot & Interpretation	1:500