### SURVEY RESULTS

# 2005 / 38 Blackpatch Hill West Sussex

# 1. Survey Area

- 1.1 Two sites were subjected to gradiometer survey on the south facing slopes of Blackpatch Hill. Some 2.20ha of survey were carried out at Long Furlong Farm and 0.64ha at Myrtlegrove Farm. Figure 1 shows the location of the survey areas at a scale of 1:2500.
- 1.2 The survey grid was set out by **Dr Henry Chapman** and tied in to the Ordnance Survey grid using a Trimble real time differential GPS system.

# 2. Display

- 2.1 The results are displayed as XY trace plots and greyscale images. These display formats are discussed in the *Technical Information* section, at the end of the text. Long Furlong Farm has been sub-divided for ease of display but will be discussed as a whole within the text.
- 2.2 Figures 2 to 5 are summary greyscale images and interpretations of the survey results from each site produced at a scale of 1:1250. Figures 6 to 17 are data plots and interpretations of the data produced at a scale of 1:500 and saved as an archive on a CD attached to the front cover of the report. For the purpose of display the results from Long Furlong Farm have been divided into two parts, Areas A and B, though the data are discussed as a whole in the report section.
- 2.3 Letters in parentheses in the text of the report refer to anomalies highlighted in the relevant interpretation diagram.

# 3. General Considerations - Complicating Factors

- 3.1 The soils are of a type that would be expected to provide a good magnetic contrast, particularly where remains associated with settlement activity and/or industrial processes have occurred. In addition, features relating to activities that are more remote from occupation areas, such as field systems might also be recorded.
- 3.2 It is known that both sites have undergone landscaping by bulldozers during the war and post-war periods. Obviously, this will have truncated or removed archaeological deposits that were in the path of the bulldozers and, therefore, reduced the potential of their detection by geophysical means.
- 3.3 The data collected at Long Furlong Farm are punctuated by numerous small-scale ferrous anomalies. Their presence has led to a magnetically 'noisy' dataset in which it is possible that the more subtle responses, including those produced by archaeological features are hidden.

# 4. Results of Survey

### **Long Furlong Farm**

- 4.1 As has been stated in paragraph 3.3, the most noticeable feature of the dataset is that there are substantial numbers of ferrous objects in the ploughsoil, as indicated by their characteristic 'spikes', best seen on the XY Trace plots. Such anomalies are common to magnetic surveys but the density recorded at Long Furlong is considered to be unusually high. The results suggest that their presence reflects some activity that has occurred in the recent past rather than resulting from a more typical accumulation of such debris. There is some evidence to suggest that the military had been in the neighbourhood of the site during WWII. The uncovering of a mortar round and spent bullets during the excavation supports their presence in the area.
- 4.2 In the southern part of the survey area ferrous anomalies appear to accumulate in two broad bands that probably indicate the remains of old field boundaries and paddocks.
- 4.3 In the north, a ring ditch (A) measuring 10 to 12m in diameter has been detected that coincides with a known barrow recorded on maps and aerial photographs and referred to as B9 in John Pull's excavations. Except for a magnetically weak trend running east-west that might have resulted from plough damage, no internal features have been detected. It is possible that landscaping and ploughing disturbance has removed any features that might once have been present. Gaps in the magnetic anomaly are due to disturbance caused by ferrous 'spikes' that are coincident with the ring ditch and do not represent gaps in the ditch itself; on excavation the ditch was found to be continuous. The identification of the ring ditch confirmed that features surviving the landscaping disturbance would be detectable by gradiometry.
- 4.4 It was hoped that the location of the ring ditch would lead to the discovery of possible Neolithic pit dwellings that had previously been observed, as hollows in the ground, clustering to the east of the barrow. No obvious targets were visible in the data that might suggest pit dwellings but anomaly (D) was investigated as a possible site of past excavation disturbance by Pull. However, no feature was found and it would appear that anomaly (D) was produced by ferrous debris in the ploughsoil.
- 4.5 Elsewhere, a number of magnetically weak trends were recorded and these are indicated on the interpretation diagram. Of these, a group of such responses and a minor pit type anomaly (E) appear to be the most promising from an archaeological point of view. However, the anomalies are very poorly defined and are more likely to relate to modern cultivation disturbance and/or bulldozing.
- 4.6 Ferrous disturbance along the western edge of the survey area is due to the presence of an adjacent fence.

# Myrtlegrove Farm

- 4.7 The survey area was positioned to detect a possible ring ditch associated with a barrow identified from aerial photographs. The sample also extended across the course of an ancient trackway in the east and investigated visible hollows in the ground thought to be the sites of former pit dwellings or flint quarrying sites. Again, it is known that the field has been subject to landscaping disturbance.
- 4.8 The barrow thought to be present in the southern part of the survey area has not been detected; it is possible that landscaping has totally removed this feature.

- 49 A number of small, magnetically weak pit anomalies and trends are highlighted on the interpretation diagram. For the most part their signals are barely above background 'noise' levels. However, the magnetically quiet nature of the results when compared to the data from Long Furlong has helped in the recognition of these responses. There are hints of enclosures (F) in the south but the anomalies are intermittent in nature and no definitive pattern has been obtained that would support this tentative interpretation.
- A pit type anomaly (G) was targeted for excavation as it was seen to coincide with a hollow thought to indicate a pit dwelling or possible flint mine shaft. The few finds recovered during subsequent excavation of the feature went some way to confirm the former
- Minor trends have been recorded in the eastern part of the survey area where a trackway was 4 11 visible on aerial photographs. Again, the anomalies are insubstantial and could relate to past episodes of cultivation disturbance.

#### 5. **Conclusions**

- 5.1 Gradiometer survey at Long Furlong Farm successfully detected the ring ditch at the heart of Pull's area of investigations in this field in the early part of the 20th century. Survey in the vicinity of the dwelling sites did not detect any anomalies that could be thought to relate to occupation. Excavation trenches subsequently determined that some of the depressions observed by Pull were due to tree throws and bulldozing of the site might have accounted for others still visible today. It is possible that prehistoric dwelling sites are still surviving despite the disturbance but any magnetic responses produced by them lie outside the limits of detectability.
- 5.2 A magnetic anomaly was seen to coincide with a visible hollow at Myrtlegrove Farm. The few finds recovered on excavation suggested possible prehistoric occupation. The survey was unable to detect a ring ditch targeted in the same area.
- 5.3 The results suggest that despite the agriculture practises of the last fifty years archaeological features may still survive to be detected.

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10<sup>th</sup> to 12<sup>th</sup> June 2005 **Date of Survey:** 16<sup>th</sup> June 2005 **Date of Report:** 

### **References:**

SSEW 1983. Soils of England and Wales. Sheet 6, South East England. Soil Survey of England and Wales.

Woodhead, R 2005. Proposed archaeological evaluation at Blackpatch Hill, West Sussex. Project

Design June 2005, unpublished.

### SITE SUMMARY SHEET

# 2005 / 38 Blackpatch Hill West Sussex

NGR: Long Furlong Farm: TQ 095088

Myrtlegrove Farm: TQ 087087

### Location, topography and geology

Blackpatch Hill lies to the north of the A280 road approximately 2.5km north of the village of Clapham and 2km northwest of Findon, West Sussex. Long Furlong Farm and Myrtlegrove Farm lie around 1km to the south and southwest respectively of Blackpatch Hill and both sites under investigation occupy gently undulating grassland to the north of the farms. The shallow well-drained calcareous soils overlie chalk and are characteristic of the Andover 1(343h) soil association (SSEW 1983).

### Archaeology

The downland hills of the south coast of England have been the focus of occupation since prehistoric times. Despite the intensification of agriculture in the past century many ancient monuments survive within the landscape. The remains of prehistoric flint mines, barrows and settlement sites are present in the immediate vicinity of the area under investigation. They were the focus of study by John Pull who carried out survey and excavations during the 1920's and 1950's. Since that time extensive landscaping has all but obliterated the visible remains of the sites Pull investigated (Woodhead 2005).

# Aims of Survey

The aims of the survey were to locate the remains of possible prehistoric occupation associated with the flint mines and barrow cemeteries of Blackpatch Hill. The work forms part of an archaeological investigation undertaken by Channel 4's **Time Team**.

### **Summary of Results \***

Survey at Long Furlong Farm detected a ring ditch originally excavated by John Pull (B9). This helped to position trenches in the area thought to contain possible Neolithic dwelling sites. Survey over these features, once surviving as visible hollows in the ground, failed to identify any clear anomalies of archaeological potential. The results of the subsequent excavations suggested that at least some of the features were natural in origin and others caused by fallen trees. It is likely that landscaping disturbance has destroyed settlement features that may originally have been insubstantial.

A magnetic anomaly was seen to coincide with a visible hollow at Myrtlegrove Farm and the excavation that followed uncovered evidence of prehistoric occupation. A possible ring ditch visible on aerial photographs was also targeted but not detected; it may have been totally removed by ploughing. The results demonstrate that despite the destructive agriculture practises of the last fifty years archaeological features may still survive.

<sup>\*</sup> 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	Long Furlong Farm: Summary Greyscale Image	1:1250
Figure 3	Long Furlong Farm: Summary Interpretation Diagram	1:1250
Figure 4	Myrtlegrove Farm: Summary Greyscale Image	1:1250
Figure 5	Myrtlegrove Farm: Summary Interpretation Diagram	1:1250
Figure 6	Long Furlong Farm: Area A - XY Trace Plot	1:500
Figure 7	Long Furlong Farm: Area A - Dot Density Plot	1:500
Figure 8	Long Furlong Farm: Area A - Greyscale Image	1:500
Figure 9	Long Furlong Farm: Area A - Interpretation	1:500
Figure 10	Long Furlong Farm: Area B - XY Trace Plot	1:500
Figure 11	Long Furlong Farm: Area B - Dot Density Plot	1:500
Figure 12	Long Furlong Farm: Area B - Greyscale Image	1:500
Figure 13	Long Furlong Farm: Area B - Interpretation	1:500
Figure 14	Myrtlegrove Farm: XY Trace Plot	1:500
Figure 15	Myrtlegrove Farm: Dot Density Plot	1:500
Figure 16	Myrtlegrove Farm: Greyscale Image	1:500
Figure 17	Myrtlegrove Farm: Interpretation	1:500