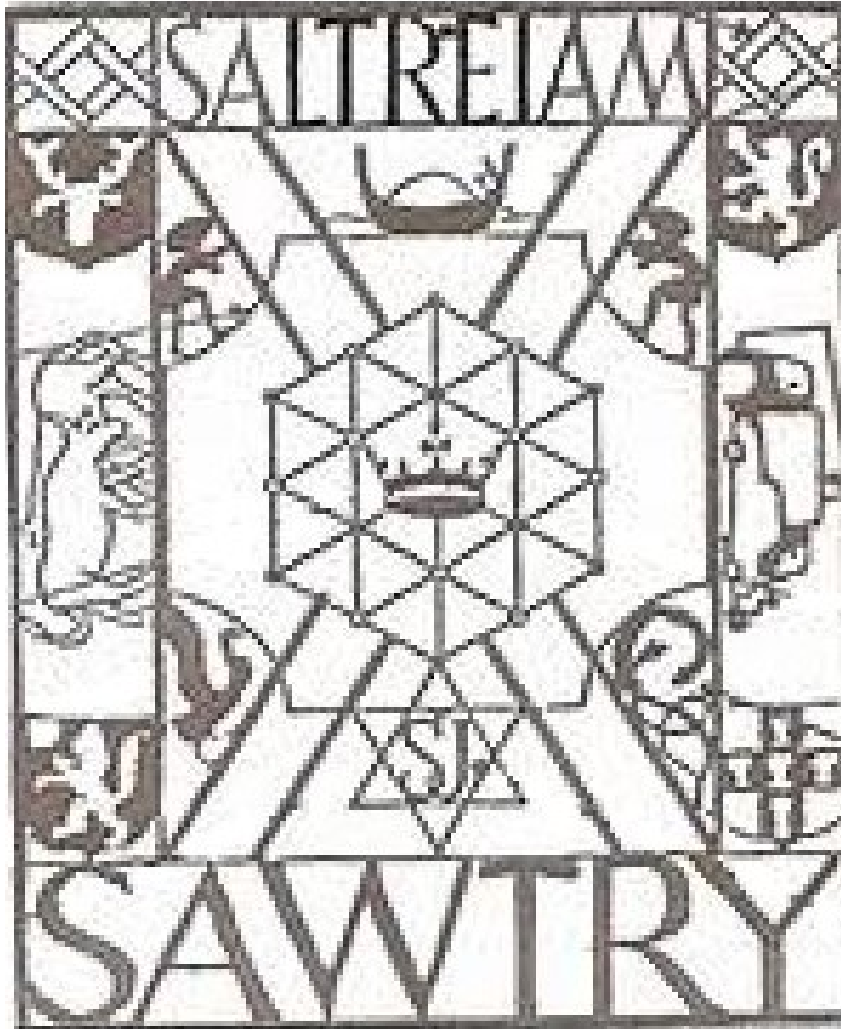


# SAWTRY HISTORY SOCIETY



**ARCHAEOLOGICAL GEOPHYSICAL SURVEY INTERIM REPORT  
SHS17-1\_IR-3**

**GEOPHYSICAL MAGNETOMETRY SURVEY (24 FEB 17)  
- HILL TOP, ALCONBURY WESTON**

**17 July 2021**

*by*

***Kevin Redgate MA  
& Phil Hill BA(Hons)***

## **DISCLAIMER**

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	Geophysicist - Magnetometry

## OASIS REPORT FORM

<b>PROJECT DETAILS</b>		<b>OASIS No:</b>	
Project name	Geophysical magnetometry survey of Hill Top field in Alconbury Weston		
Short description	A magnetometry survey was undertaken in the central area of the site where the coins and metal artefacts finds plot suggest a concentration of activity spanning several centuries.		
Project type	Geophysical survey		
Site status	N/A		
Previous work	1. Desk-top research into previous archaeological investigations undertaken by local and commercial archaeologists prior to 2009. 2. Desk-top analysis of the results of metal detecting undertaken by the Landowners Historical Research Group (LHRG) from 2009 to 2018.		
Current land use	Arable farming		
Future work	Geophysical survey, fieldwalking survey and excavation		
Monument type/ period	Iron-Age/Romano-British, <i>circa</i> 100 BC to AD 410		
Significant finds	N/A		
<b>PROJECT LOCATION</b>			
County	Cambridgeshire		
Site address	Hill Top, Alconbury Weston		
Study area	8,400m <sup>2</sup> (0.84ha)		
OS grid reference	TL18374 77628		
Height OD	48m		
<b>PROJECT CREATORS</b>			
Organisation	Sawtry History Society		
Project brief originator	Sawtry History Society		
Project design originator	N/A		
Director/Supervisor	Phil Hill		
Project Manager	Kevin Redgate		
Sponsor or funding body	Sawtry History Society		
<b>PROJECT DATE</b>			
Start date	24 Feb 17		
End date	24 Feb 17		
ARCHIVES	Location	Content	
Physical			
Paper			
Digital	SHS Archaeological Digital Archive	SHS Archaeological Digital Records and Media	
<b>BIBLIOGRAPHY</b>			
Title	Geophysical Magnetometry Survey (24 Feb 17) - Hill Top, Alconbury Weston		
Serial title & volume	N/A		
Author(s)	Kevin Redgate & Phil Hill		
Page numbers	009, plus 2 Annexes and 1 Enclosure		
Date	17 July 2021		

## 1. Introduction.

1.1. Hill Top has provided tantalizing evidence of a potentially significant Romano-British settlement through the antiquarian investigations of Dr J R Garrood MD in the 1932, and the developer led commercial archaeological evaluations of the both the Archaeology Section of Cambridgeshire County Council (CCCAFU) and Birmingham University Field Archaeology Unit (BUFAU) 1990s. This evidence has been significantly reinforced, not just by the quantity of coins and metal artefacts detected during the period 2009 to 2018, but by the presence of numerous artefacts of high status and significance within the metal finds assemblage.

1.2. This magnetometry survey is the first direct archaeological investigation on Hill Top with the purpose of identifying evidence of structures and settlement activity.

## 2. Site Details.

### 2.1. Event Number.

2.2. **Location.** The site consists of Hill Top field and Long Nines field to the south-east. It is located west of the A1 and east of Vinegar Hill in the centre of Alconbury Weston Civil Parish (Figure 2.1), and centrally in the northern half of National Grid Reference (NGR) square TL1877 (Figures 2.2 and 2.3).



Figure 2.1: Site relative to Alconbury Weston (Google Earth, 2016)

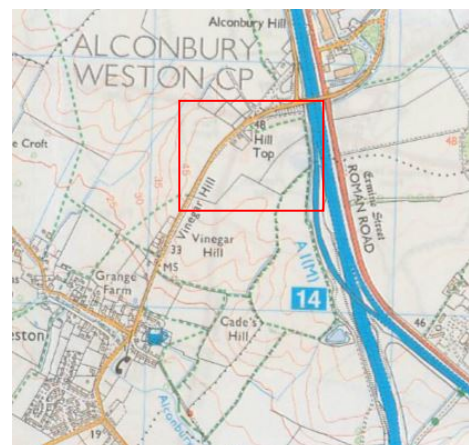


Figure 2.2: Site relative to Alconbury Weston (Ordnance Survey, 2006)

2.3. **Site Benchmark (SBM).** This has been set on the edge of the tree line adjacent to the south corner of the residential gardens at NGR TL 18374 77628, as shown by the red dot (Figure 2.3).

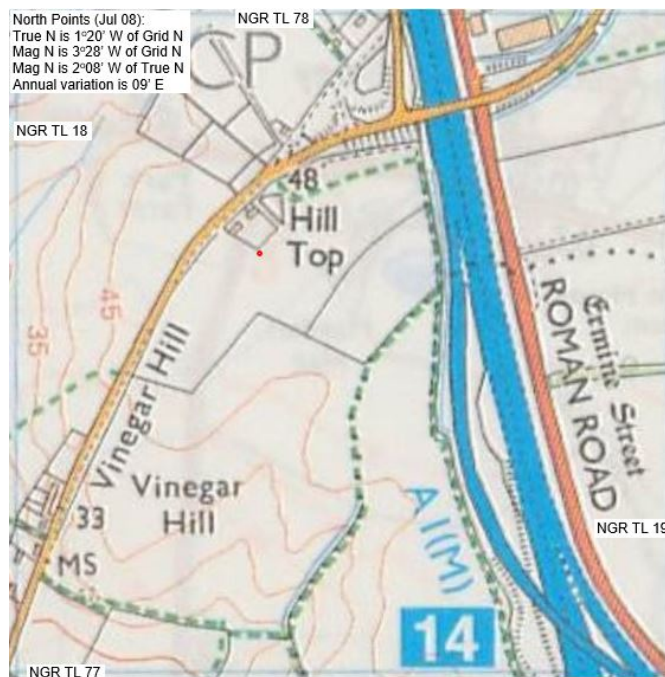


Figure 2.3: Hill Top site with SBM in red (Ordnance Survey, 2006)

2.4. **Site Grid.** The site grid can be found at Annex A.

2.5. **Geology.** The site sits on the west edge of a plateau on the 45m contour that overlooks the broad Alconbury Brook valley. The bedrock is Oxford Clay Formation-Mudstone with Oadby Member-Diamicton superficial deposits, above which is an unknown depth of plough-soil (Figure 2.4).

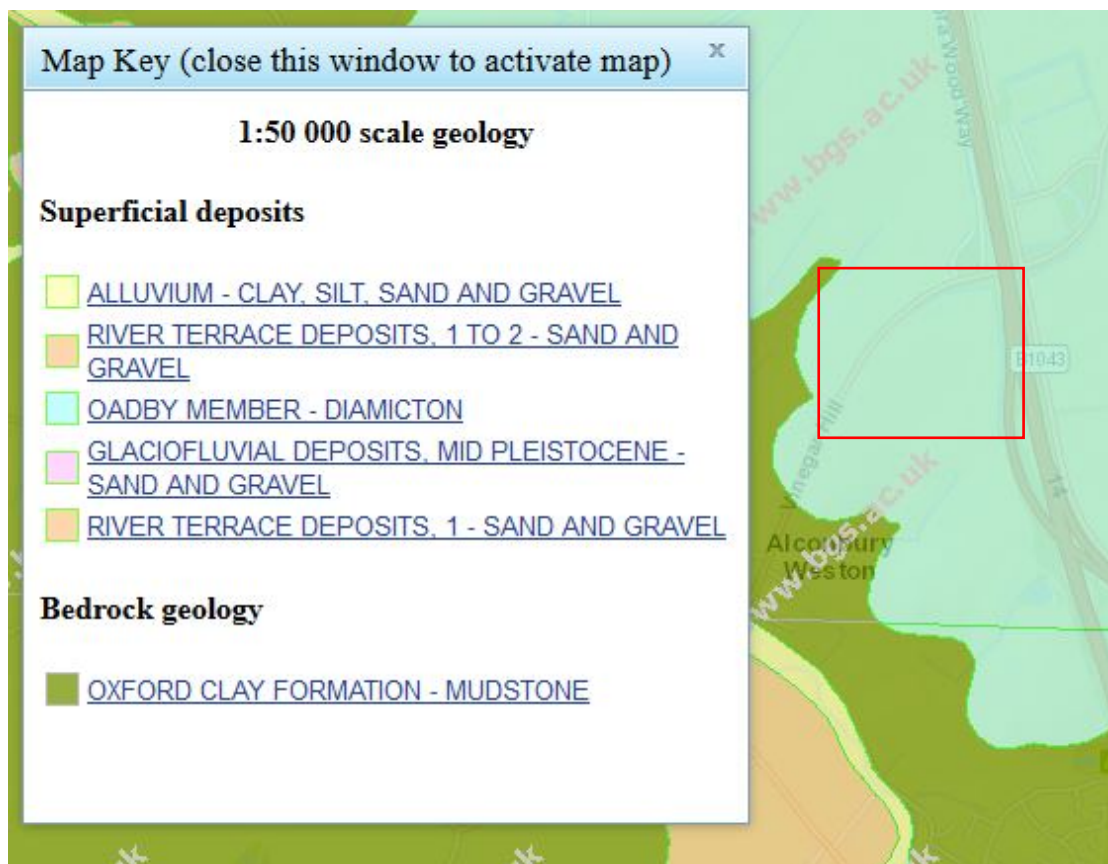


Figure 2.4: Site geology (British Geological Survey, 2017)

2.6. **Protection.** The site is not protected or within a conservation area.



2.7. **Land Use.** The two fields that comprise the site were used for arable farming and, as such, subjected to modern farming methods including ploughing and harrowing for crops, and deeper mole ploughing for drainage. From early 2018, Hill Top was held as grassland for hay and silage.

2.8. **Utilities.** An active branch of the ex-government fuel oil pipeline (now under private ownership) runs through the west end of the site, whilst a medium pressure gas pipeline runs through the site on a north/south alignment west of the Hill Top cottages. There is also a short low voltage (230V/480V) supply line serving the new barn in the berm enclosure and a low voltage supply line to the north of Hill Top Cottages that serves a sewage kiosk; suggesting that there is an underground sewage tank at the northeast of Hill Top Cottages (see Figure 2.5).



Figure 2.5: Utilities (Google Earth, 2016)

2.9. **Historical Background.** In 1932 Dr J R Garood MD, a local antiquarian of the Cambridgeshire & Huntingdonshire Archaeological Society (CHAS), began investigating the fields of Blacklands and Barn Ground (the previous field names of the field now known as Hill Top) as part of a wider investigation of Iron Age and Roman-British settlement sites on Alconbury Hill. Further archaeological investigations were undertaken by the Archaeology Field Unit of Cambridgeshire County Council (CCCAFU) in 1991, 1992 and 1995 in advance of A1 widening. Archaeological investigations were also carried out by Birmingham University Field Archaeology Unit (BUFAU) in 1996 also in advance of A1 widening. Since 2009 the two fields of the site have undergone methodical metal detecting which has produced a considerable volume of Roman artefacts ranging from coins to high status jewellery spanning four centuries of Roman occupation. Incidental to the metal finds was a

wealth of ceramic artefacts including pot sherds, CBM and tesserae. Sawtry Archaeology, under the auspice of Sawtry History Society, has undertaken periodic, and ongoing, archaeological investigations since 2017.

### 3. Methods.

3.1. **Survey Area.** The survey area consisting of five 40m x 40m squares and one 20m x 20m square was established from the site grid as shown at Figure 3.1.



Figure 3.1: Site grid with survey area highlighted (Google Earth, 2016)

3.2 **Magnetometry Survey.** This survey was carried out using the Bartington Fluxgate Gradiometer Grad601. Each 40m x 40m survey square consisted of 40 traverses, with 160 samples along each traverse. The 20m x 20m survey square consisted of 20 traverses, with 80 samples along each traverse. The Survey Record Sheet is at Annex B.



4. **Results.** Survey data was processed using TerraSurveyor version 3.0.29.3, with final results are as shown in Figure 4.1:

red = highest magnetic response  
black = strong magnetic response  
dark greys = weaker magnetic responses  
white = weak magnetic response  
green = weakest magnetic response

5. **Analysis.** The results contain a number of magnetic responses that have a strong probability of being archaeological, whilst there are a few that appear to be geological in nature. References to survey squares are as indicated in Figure 4.1.

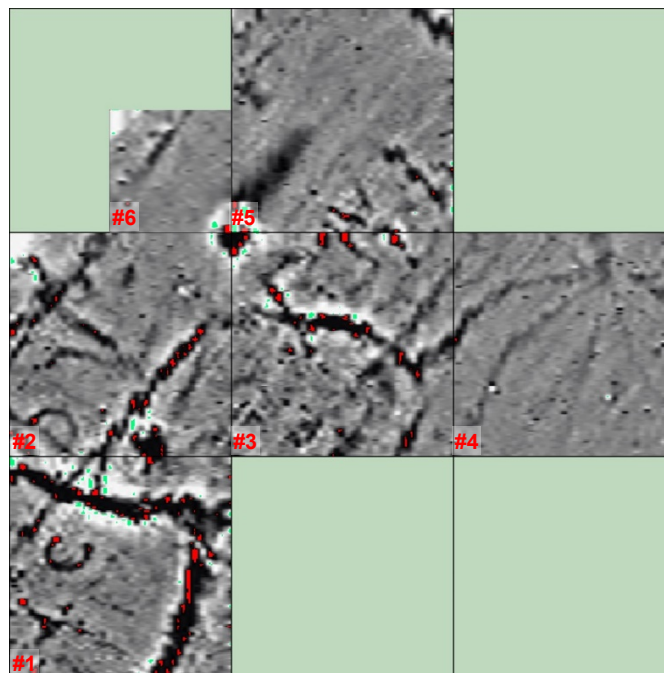


Figure 4.1: Survey Results (Wood, 2017)

5.1. The strong broad response in square #1 that forms a right(ish) angle in the northeast corner aligns with the eastern of the two crop marks visible in the Google Earth 2016 image is assessed in the first Hill Top interim report (Redgate & Hill, 2020) as being an Iron Age enclosure ditch. Within this anomaly is a 'C' shaped response that may well be the truncated foundation of a roundhouse.

5.2. A pair of parallel strong linear responses on a northeast/southwest alignment in square #2 are suggestive walls that may represent the northwest and southeast walls of a building. The southeast of this pair extends into square #1 and appears to truncate the possible Iron Age enclosure ditch. The alignment of the strong short linear response at right-angle to the northwest of this pair suggests a possible association that may well be a returning or dividing wall.

5.3. The strong circular response on the south edge of square #2 could either be a pit or well, or the site of intense burning over a long period of time (such as a kiln, furnace or similar fire chamber).

5.4. The 'D' shaped response in the southwest corner of square #2 may well be the truncated foundation of another roundhouse, or possible an apsidal extension or abutment to a building.

5.5. The strong circular response on the juncture of squares #2, #3, #5 and #6 could also be another pit or well, or the site of intense burning over a long period of time (such as a kiln, furnace or similar fire chamber). An association with this circular anomaly and the strong broad response that appears to spread northeast from it, in square #5, cannot be dismissed.

5.6. A series of four weak linear responses on a northeast/southwest alignment with approximately five metres separation between each of them, in squares #3 and #4, may well be indicative of mole-ploughing that is known to have occurred on at least one occasion within last couple of decades.

5.7. The set of weak 'spidery' responses appear to be geological and may be indicative of a water source or water catchment, with streamlets either dispersing water from or channelling water to the centre point.

5.8. The strong broad linear response in the northeast corner of square #5 has the same characteristics of the response in square #1 and suggestive of the presence of another enclosure ditch.

6. **Summary.** Although the results are inconclusive in that there is no clear indication of any buildings or other structures, they do contain responses that are highly suggestive of being archaeological and, therefore, provide the first direct, albeit undated, evidence of settlement activity on Hill Top.

## **ANNEXES**

- A. Site Grid.
- B. Survey Record Sheets.

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