

# Bailbrook Farm Geophysics

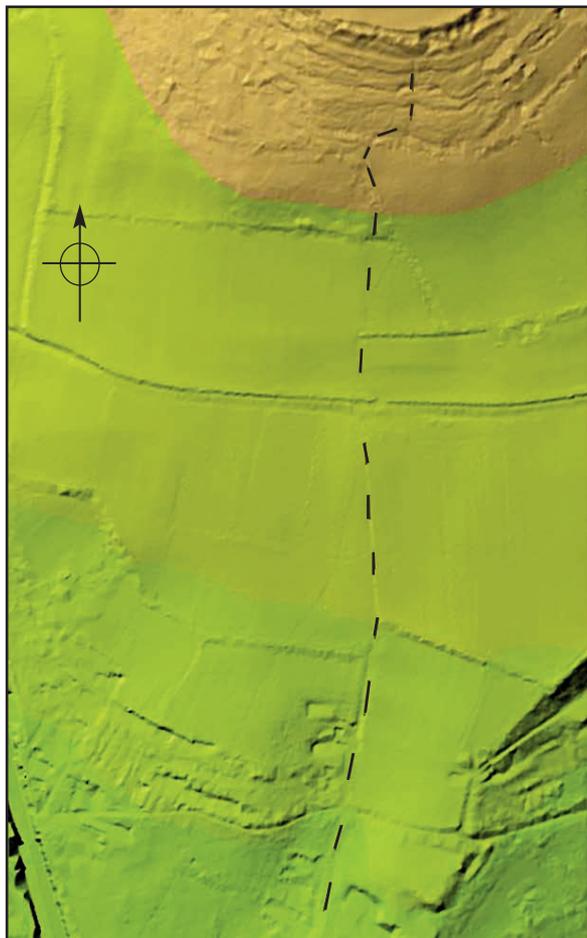
## The Solsbury Hill Environs Project

Rick Buettner

Shortly after I finished the geophysical survey project report on Little Solsbury Hill Camp, Tavis Walker, the former BACAS Education Officer, contacted me and offered his property on Bailbrook Lane, on the southern slope of Solsbury Hill, for more geophysics. John Oswin and I wanted to extend the survey outside the hillfort, so we were happy to start work at Tavis's Bailbrook Farm. Tavis also mentioned the possibility that the adjoining properties might be available for surveying, which would give us a wide area to study on the flanks of the hill.

The current general thinking about Iron Age hillforts supposes a lot of activity outside the actual enclosures. This seems quite likely on Solsbury Hill because of the apparent density of population and the large number of round houses evident in the geophysics inside the rampart (*see Camertonia 51*), which would have precluded large-scale agricultural activity within the ramparts. I was also interested in finding evidence of earlier occupation in the area. In the 1970s a Bronze Age burial (SMR number MBN1719 BANES HER) was discovered at Bailbrook Farm during the building of a garage, which added to the attraction.

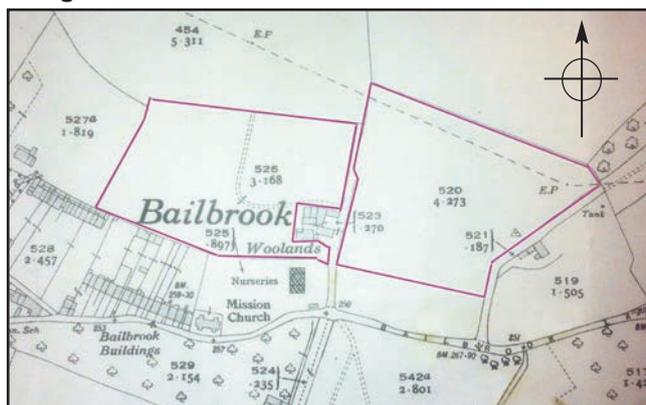
The area of the property is approximately 2.4 hectares in an irregular rectangular shape, and it slopes toward the south and the River Avon about 500 metres away (*see Figure 1*). Dividing the property into two parts, an ancient hollow way track ran through on a straight line leading from the top of Solsbury Hill down toward the river. The line of this track is clearly visible on historic maps of the area and also on Google Earth and LIDAR (*see Figure 2*). It continues most of the way to the current riverbank if you follow the track way and field boundaries from the southernmost point of the hillfort to Bailbrook Farm. The Bronze Age burial was close to the track, and there is also a spring nearby. There are excellent views of Bath and the surrounding hills.



We started work in early December 2013. After gridding out the larger section lying to the west of the track way, we made a full magnetometry survey, followed by a resistance survey. We then transferred the grid across the track way to the other section and continued with both magnetometry and resistance. The track way itself was in use as a paved driveway at the lower end and overgrown at the upper end, so this was not surveyed.

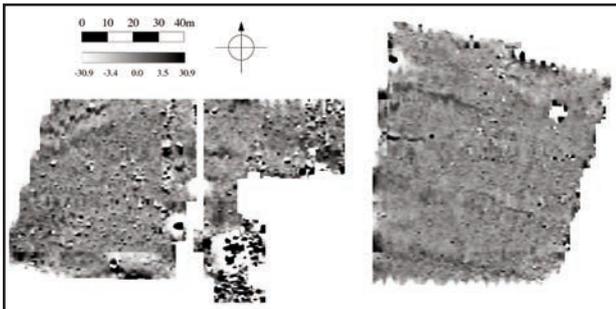
**Figure 1 below**  
1932 Ordnance Survey map with Bailbrook Farm survey area marked in magenta.

**Figure 2 left**  
Lidar with Bailbrook Farm centre bottom and the southern end of Little Solsbury Hill Camp at the top showing the track from the hilltop through Bailbrook Farm © Environment Agency copyright 2013. All rights reserved.

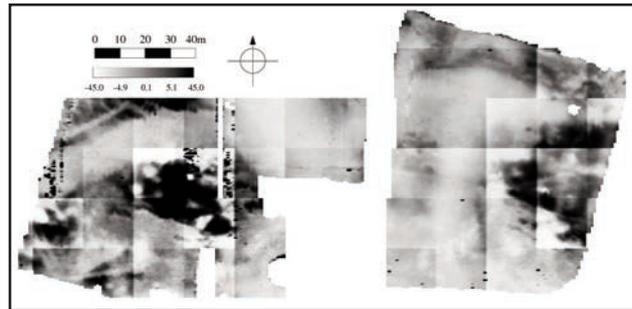


Magnetic Susceptibility (Mag Sus) was measured on the entire site and an EDM survey was started on the first section. In all, sixteen BACAS members worked over several days. Work ended on 8 January, and we planned to return when further permissions on the adjoining properties were given. This has yet to occur, so those plans are deferred indefinitely.

The magnetometry produced by the Bartington gradiometer shows a lot of activity and disturbance as would be expected on land farmed for millennia (see Figure 3). There are numerous possible pits and some drains are also visible. There does seem to be a ditch across the northwest corner which bears further investigation for dating evidence. There is also the hint of a roundhouse in a busy area near the track not far from the burial site.



**Figure 3**  
Magnetometry results showing the ditch in the NW corner, an interesting area of disturbance just west of the trackway, and signs of ploughing along the eastern side.

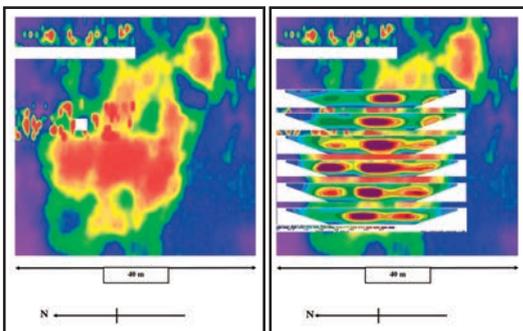


**Figure 4**  
Resistance results with the possible building foundations in the left centre.

The resistance survey using both the TR/CIA and the Geoscan RM15D produced the main feature of interest (see Figure 4). In the centre of the western section there is a large area of high resistance, which has no visible features at ground level. We decided it was worth profiling. The topsoil on this land is quite thin in places, so the resistance results seem mainly to be dominated by natural features.

The profiling results (see Figures 5 & 6) would appear to represent the foundations of a large building approximately 20m long and 8m wide oriented to face Bath, which is visible in the distance. There is no building showing in that location on any historic maps of the area. A small investigative excavation could quickly produce evidence of the nature of this feature.

The Mag Sus results (see Figure 7) shows generally low levels of disturbance on the western side of the property and high levels of disturbance on the eastern side. This could be a result of either the sampling procedure, which depends on the number of points measured; or the natural geology of the eastern side, which has a very thin layer of topsoil; or some sort of agricultural activity.



Bailbrook Farm is an interesting site, and warrants further archaeological investigation. An extension of the geophysics survey in the adjoining properties would give a broader interpretation of this site and a few small excavations could contribute useful information. The probable building could be of some significance if it is of medieval or earlier origin. We would like to thank the members of BACAS who assisted in this mid-Winter survey and Tavis Walker for providing access and tea in a lovely warm kitchen during that cold month.

**Figure 5 above left**  
Profiling area which covers the large area of high resistance shown in the western field.

**Figure 6 above right**  
Profiling results which seem to show foundations of a large building

**Figure 7 right**  
The Magnetic Susceptibility results.

