

### Archaeology at Barby Hill – part 3

It seems a long time since my last report from Barby Hill, though I see that it was only four months ago ... however, a lot has happened in that time.

When I last reported, we had just finished doing field-walking and metal-detection exercises over about 35 acres of arable land, on the hilltop and down the western slope (to Barby Wood Corner). Since then we have cleaned and analysed all the finds, and this has done a lot to clarify our understanding of how the land was used in the period 1600-1800AD.

Barby Hill was covered in dense oak woodland for most of the medieval period, which was probably deliberately planted at some period – perhaps in the early years after the Norman conquest, but we shall never know for sure. Barby Great Wood was still there in the mid-1500s – woodsmen were employed there to manage and cultivate the woodland, and I found a fleeting reference to one of them in a late-16<sup>th</sup> century Barby will. During the late 1500s part of the woodland on the hilltop was cut down, as part of the development of Onley as a sheep-pasture centre (which finally led to the desertion of the hamlet of Onley in about 1600). The evidence from the new finds turned up by our field-walking and metal-detection suggests that the newly created open land on the hilltop was worked partly as ploughland and partly as sheep pasture, alternating ploughland with pasture at intervals of perhaps 10-15 years to maintain the nutrient levels in the soil (a medieval technique known as "up and down cultivation"). This system was probably used on the hilltop between about 1600 and 1778 (when Barby's open fields were enclosed by an act of Parliament); by the time of Enclosure in 1778, most of the remainder of Barby Great Wood had been felled, all except for a few acres at Barby Wood Corner, which were not finally grubbed out until the mid-1900s, well within living memory.

Our finds in the arable fields were mostly fragments of late-medieval and early-modern pottery, which had been thrown on to the farmyard manure-pile and subsequently carried up and spread randomly around the hilltop during annual muck-spreading. Also among the finds were various lost small-value copper alloy coins; these were mostly of the Georgian period, but there were a few older items, including a

tiny silver half-groat of Elizabeth I, dated 1577 – and we were

particularly delighted to find four coins that are probably of late-Roman date (about 200-400AD), and a fragment of what is probably a Roman finger-ring (see Figure 1). These Romano-British items were all found quite close to where a previous archaeological survey had discovered a small collection of late-Roman coins and a Romano-British brooch – so it seems quite possible that there may have been a Roman period dwelling of some kind on or near that part of the hilltop.



Fig.1: Some of the coins found on the hill

All this is very interesting, and very useful ... however, in my last report I promised to say something about the geophysics that we have been carrying out through the winter months, so I will devote the rest of this article to that.

I'd better start by explaining what "geophysics" is – though I expect most of you will have seen it being done on programmes such as "Time Team". In principle, when people in previous centuries dug ditches or built fences or houses or other structures, or dug a hole for a well or a pit in which to store grain or other goods, it left a hole in the soil – and the hole filled up afterwards with topsoil, which generally had a higher nutrient content than the original undisturbed soil. The whole lot then got buried over with the gradual deposition of new soil that is blown by wind and rain over the whole of our land (for example, the Iron Age level is now buried under about 12-18 inches of material that has literally fallen out of the sky over the ensuing 2000 years). If we now come along with a sensitive piece of modern technology that can measure very tiny differences in soil quality, these buried traces show up clearly and can be mapped.

The particular device that we have been using is a magnetometer – see Figure 2. It measures tiny differences in the magnetic potential of the soil, to a depth of up to about a metre below ground. The equipment is expensive – it costs over £10,000 to buy, so we hire ours (for £160 a day) – and of course, we had to start by getting members of our team trained in how to use it, and in how to download the resulting data from it and interpret the results using computer software. In addition, we had to train ourselves in surveying techniques, to mark out 20m squares across the fields with sufficient accuracy that we can re-establish them later on to within a few inches.

All this took a good deal of time, and involved us in using a lot of new tools and equipment. However, we made steady progress, and by the time we stopped work for the season at the end of March, we had surveyed a total of one hundred and eleven 20m squares, or 44,400 square metres of the hilltop.

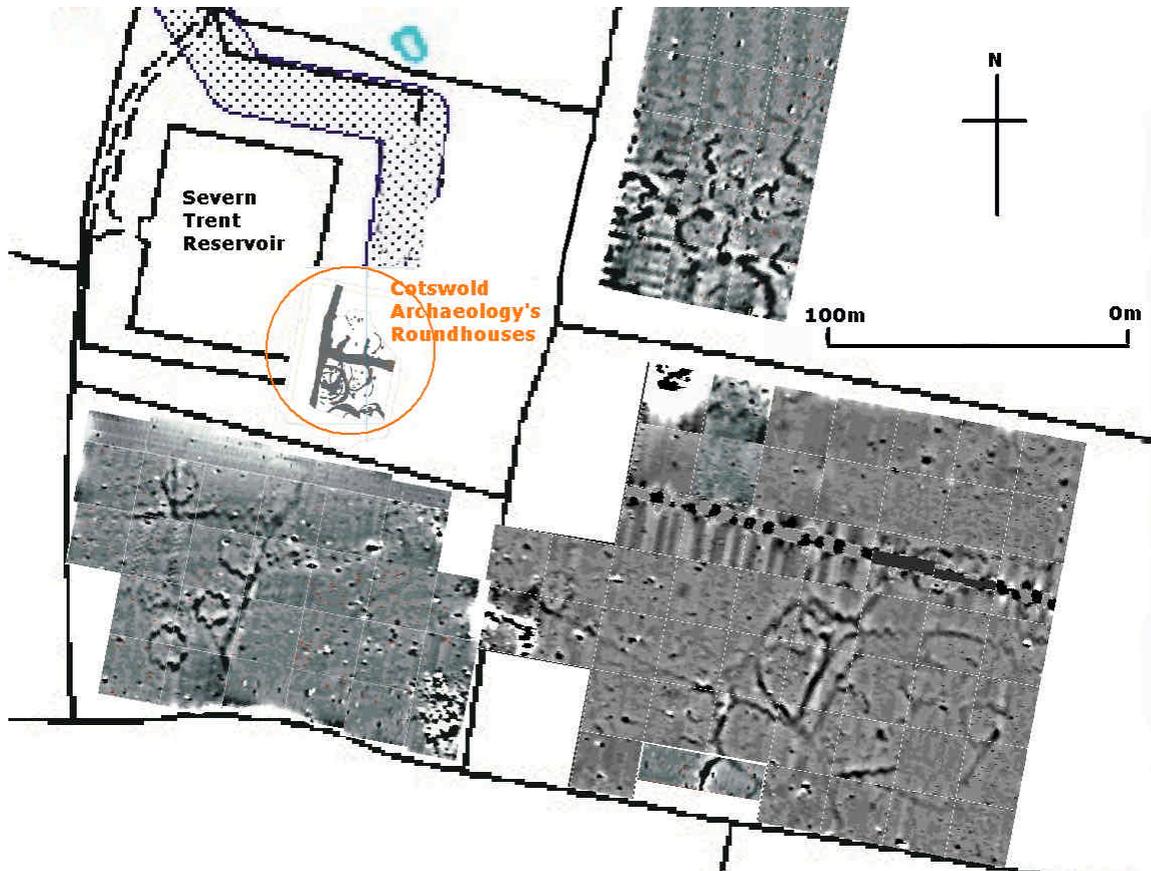


*Figure 2: One of our magnetometer operators*

I had also managed to obtain a copy of the results gathered by Cotswold Archaeology when they were involved in excavating the area within the new Severn Trent water reservoir in the fields directly adjacent to where we have been working. You can see our results and the Cotswold Archaeology results plotted side by side in Figure 3.

The results are very exciting – they show several clusters of Late Iron Age roundhouses (dating from typically 100BC-100AD), each measuring about 10m in diameter and with doorways facing eastward to the rising sun. Our results line up perfectly with the results obtained by Cotswold Archaeology, and it is clear that this part of the hilltop was home to a sizeable community about 2000 years ago.

The other prominent feature revealed by the magnetometer is a series of linear features and enclosures; this may perhaps represent a network of fields and stock-management pens (with several modifications and re-arrangements over the course of a century or two), and seems likely to have followed on soon after the roundhouse period – perhaps in the 1<sup>st</sup>-3<sup>rd</sup> centuries AD?



*Figure 3: Our magnetometer plots, showing roundhouses and linear features. The roundhouses and linear features found by Cotswold Archaeology are also shown, and you can see how the two sets of results line up precisely.*

All these findings are very similar to what has been found at several other Iron Age sites in this area, hence I am able to make some rough guesses about the relative periods of each of the different types of features. However, they are only guesses at present – it will be necessary to excavate some trial trenches and look for what archaeologists refer to as “dating evidence” – for instance, fragments of Iron Age or Roman period pottery that can be dated accurately by reference to known series of pottery.

Our team is very excited about these finds, which clearly demonstrate that Barby Hill has been occupied for at least 2000 years. Moreover, these finds are adding valuable data to what is known about the Iron Age and Romano-British history of this whole region, and archaeologists from all over the Midlands are beginning to take notice of the work that we are doing.

Our top priority at the moment is to seek further funding to allow us to continue with the work. We also have a lot of detailed planning to do, and there are some pottery finds to identify and catalogue ... so we will not be idle through the summer months!

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