

**Preliminary report on geophysical investigations at Forteviot village,
Perthshire, 2006 – 07**



By the Department of Archaeology, University of Glasgow

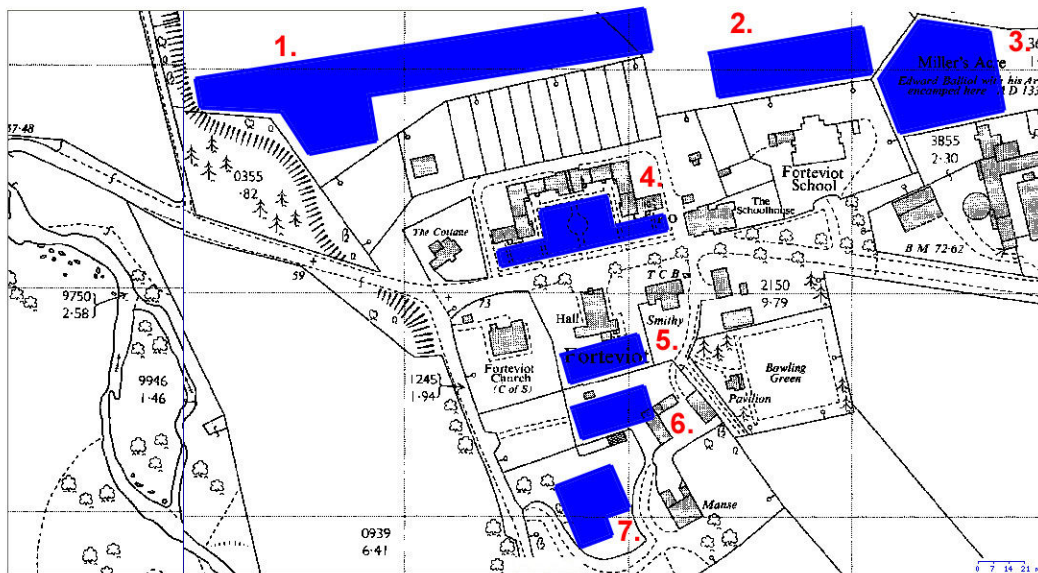


Fig. 1 Survey areas in Forteviot village, 2006-7 (base map, 1976 edition 1:2500 OS map)

Introduction

The Department of Archaeology of the University of Glasgow has now conducted two seasons of geophysical investigations in the environs of Forteviot village. This report will focus on those surveys conducted within the confines of the village, and the large-scale surveys to the south of the village will be reported on the SERF website (<http://www.gla.ac.uk/archaeology/projects/serf/index.html>). The importance of geophysical survey is that it can tell us where buried archaeology might be, without having to dig large trenches merely to find if there is anything there. It is best employed where small targeted trenches can be dug to ascertain the date and nature of the underlying archaeology. The key techniques employed were resistivity and magnetometry, which can give us a picture of archaeological features buried up to 0.6m below the ground surface – the first measures the electrical resistance of buried features and is particularly good at detecting buried masonry or ditches, and the second technique

measures changed magnetic fields created by hearths, pits, ferrous (iron) objects and ditches. Neither technique will work over hard surfaces such as concrete, gravel or tarmac, but work particularly well over grassy areas. Most of the results shown below are of the resistivity surveys, which worked better on the soils around the village. The areas selected for our surveys are shown on fig.1 above. Areas 1 (Haly Hill) and 7 (the manse garden) were part of our exploratory season in 2006, while the remainder were surveyed this year.

Area 1 – Haly Hill

This large area was explored because it lies immediately to the east of Haly Hill, which appears to have been the core of the Pictish and Scottish palace. Our work here included magnetometry and resistivity survey, and the results showed that there are no obvious remains of the palace in the field. Modern set-aside lines on the fringes of the crops showed up particularly well, as well as some old field boundaries. Further work here with other techniques may reveal more useful information.

Area 2 – Primary school football field (figure 2, below)

The most obvious results from the resistivity survey here are the white (low resistance) lines running at right angles to each other – yes, it's the yard lines of the football pitch! More interestingly, there is a right-angled dark (high resistance) feature close to the centre of the football pitch, outlined in yellow on figure 2. The dark shading suggests that it is a masonry structure – at 20 metres by 25 metres, it is too large to be a house, and is likely to be an enclosed yard. Significantly, it lies in an area where we had no prior evidence of buildings.

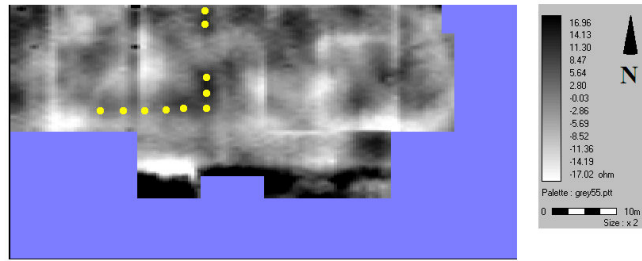


Fig. 2 Resistivity survey, primary school football pitch

Area 3 – Miller’s Acre (fig. 3, below)

In 1332, Edward Balliol was given an army by Edward III of England and sent north to take the Scottish crown. One chronicler of the fifteenth century claimed that Balliol camped at Miller’s Acre on the night before he beat a Scottish army at Dupplin Moor. Our surveys at Miller’s Acre showed a modern drain, but also revealed a ditch (marked ‘A’ on Fig. 3) running at an angle to the southern field fence. The resistivity survey revealed the ditch (which was wet, and thus showed up in white and light grey on the plot), while the magnetometry results suggests that it silted up over a long period of time (it shows up as a dark line on the plot). One of the test pits we dug in the garden of no.8 appears to have encountered the ditch, which was more than 1 metre deep. The resistivity survey also showed a roughly square area, which is probably a hard-packed gravel or sand surface. This may represent the floor of a building or of a yard. The feature labelled ‘B’ on the magnetometry survey plot is a modern drain.

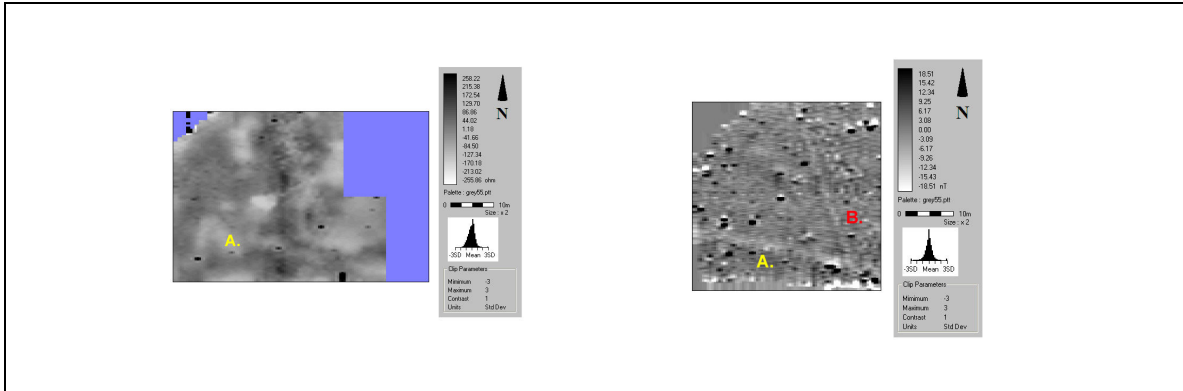


Fig. 3 Miller's Acre, resistivity survey (L) and magnetometry survey (R)

Area 4 – The village green (fig. 4, below)

We know that before the modern houses at nos.1-9 were built in 1924, there was a line of houses placed right on the edge of the main road, which were demolished before the new houses could be built. Our survey here picked up the back walls of these houses, as well as a few drains from the new houses. Interestingly, we also picked up a medium-resistance anomaly (mid-grey on the plan, labelled 'A') which forms a right angle. This feature is not aligned with anything else in the vicinity, and may represent an older settlement in the village.

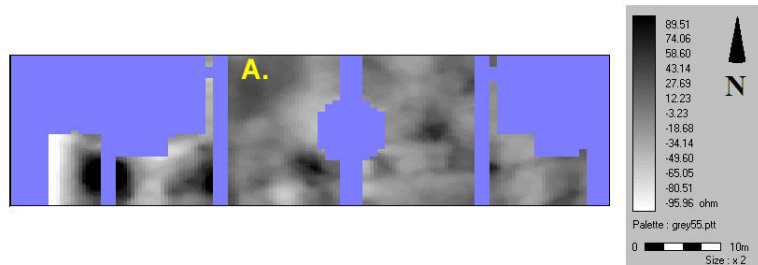


Fig. 4 Village green, resistivity survey

Area 5 – The village hall (fig.5, below)

Like the ‘new’ houses on the village green, the village hall was built in 1924, after the demolition of the old houses that lined the main road. We surveyed an area in the back garden of the hall, which probably lay in the back yards of the old village. The surprise here was that we discovered a masonry structure (outlined in yellow on the plot), which doesn’t appear to be aligned with anything else in the village. This seems to rule out the possibility that it is a modern shed or outhouse, and suggests that it is somewhat older.

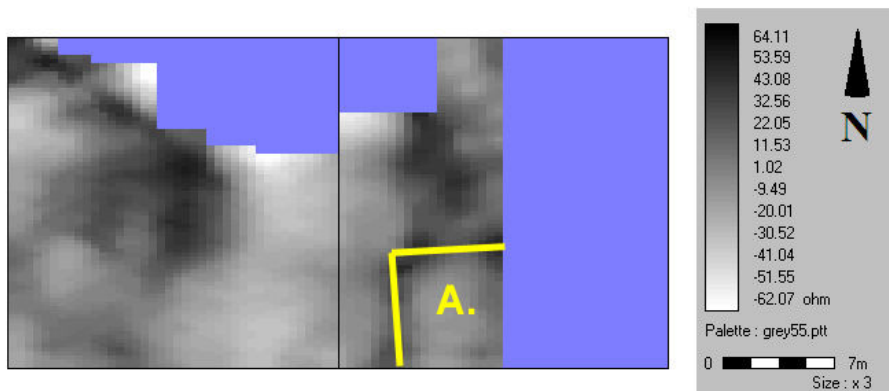


Fig. 5 Village hall back garden, resistivity survey

Area 6 – The manse paddock (fig. 6, below)

The manse paddock has been partly extended out into the old driveway down to the manse, because some old outbuildings were demolished and grassed over in the 1970s. Our resistivity survey picked up the north wall of these

buildings (called 'A' in figure 6), as well as some utility trenches. Oddly, the west wall of the buildings should have been visible in our results, and our failure to find it suggests either that its foundations were not very deep, and that they were completely removed in the demolition.

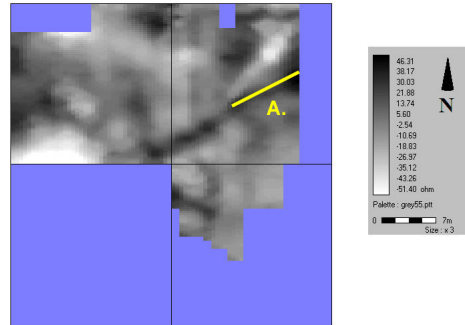


Fig. 6 Manse paddock, resistivity survey

Area 7 – The manse garden (fig. 7, below)

Our resistivity survey here in 2006 revealed two masonry structures located beside each other (plotted in red on fig.6). One appears to represent the stone walls of a building, while the other may represent a cobbled yard alongside. This structure is not indicated on any of the Ordnance Survey maps, and is not a modern outbuilding of the manse. Its alignment is roughly NW-SE, which is quite different from that of the other features discovered in the village this year.

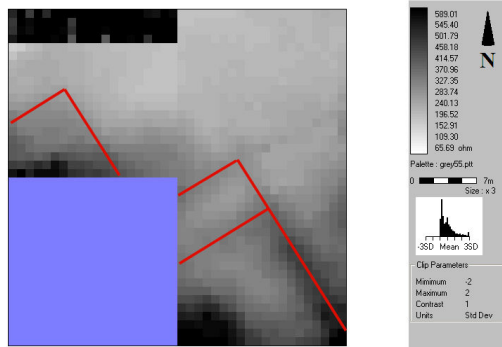


Fig. 7 Manse back garden, resistivity survey

Conclusions

The importance of the geophysical surveys in the village lies in the discovery of features well away from the core of modern Forteviot. This means that at some point in the past, Forteviot was more extensive than it is now. We should not be surprised by this – as a Scottish royal residence of the ninth to thirteenth centuries, it is very likely that a large complex would have developed around the royal church and accommodation. Typically, we would expect to have guest houses, dining halls, stables, workshops and numerous other structures at such a centre of power. The rather significant question that still needs to be addressed is the actual date and function of some of the structures that have been discovered. Some selective trial trenches located over some of the better-defined results here would be highly illuminating.