

A MAGNETIC AND RESISTANCE GEOPHYSICAL SURVEY AT NEWBURN FORD, NEWCASTLE UPON TYNE - AUGUST 2004



Summary

TimeScape Surveys were commissioned by Newburn Country Park to conduct magnetometry and resistivity geophysical survey at the suspected site of an English Civil War sconce, occupied during the battle of Newburn Ford on 28th August 1640. In addition it was intended that volunteers attached to the Country Park would gain experience of geophysical survey techniques. This report presents both the results of the survey and some conclusions derived from the geophysical anomalies identified by the survey. Recommendations for further archaeological works are also outlined. The survey area lies on the south bank of the river Tyne on Ryton Haugh (centred at NGR NZ 163 651) within an area defined as being of Archaeological Importance, which is listed upon the Battlefield Register of English Heritage and within which lie a number of sites noted on the SMR including one of direct relevance to the battle.

The exact form of the defensive systems, and indeed their locations, are so far uncertain. It is likely, given the short time available for their construction, that the sconces would have been ephemeral in nature, possibly being no more sophisticated than a frontal ditch, with an earthwork, possibly supplemented with gabions or posts. In the intervening time and considering the intensive subsequent land usage, remains, if any, are likely to be slight. The archaeological evaluation comprised an initial archaeological assessment and site visit, which was followed by geophysical survey.

The geophysical results indicate that it is possible that the land in the immediate area of the survey itself may have been extant at the time of the battle and remained relatively unaltered during the intervening time. If this is the case, the anomalies identified in the magnetic survey and co-located by corroborating evidence from the resistance survey, may indicate a defensive structure perhaps comprising a number of posts, possibly with an additional embankment. These features describe an arc set across a public footpath, which may have been an access route to a ford. If that were the case it would seem prudent to cover by fire this approach route and associated fording point.

As part of the overall project design additional fieldwork was to be completed after the geophysical survey had been conducted. Although the surveys were far from conclusive this additional fieldwork may provide additional supportive information. It is therefore recommended that intensive fieldwalking be conducted and trained metal detectorists survey the entire area of the field. Finds within this area should be accurately plotted using an EDM total station or GPS, and should be supervised by an experienced archaeologist. When the results are collated, it may be decided that excavation may be appropriate at any location identified by geophysical survey or artefact concentrations identified by fieldwalking and metal detecting.