



The Roman villa in Wanstead Park

John Shepherd and Ralph Potter

rediscover a lost Roman villa in East London

*"The occasion of this discovery was the digging holes for an avenue of trees from the gardens. Mr. Adam Holt, the gardiner, perceiving severall of the tesserae thrown up, soon conjectured what he was upon, and earnestly endeavoured, though in vain, to obtain leave to lay it quite open. However, he examined it so farr as to find that its extent from north to south was about 20 feet, and from east to west about 16; that it was composed of small square brick tesserae of different sizes and colours, as black, white, red, &c., of all which I have specimens; that there was a boarder about a foot broad went, round it, composed of red dice, about 3/4 of an inch square, within which were severall ornaments, and in the middle the figure of a man riding upon some beast and holding something in his hands; but, as he opened it onely in a hurry, and in different places, he was able to give no better account of it."*¹

Smart Lethieullier's tantalising description of an early-18th-century rescue excavation and watching brief of a large and elaborate Roman mosaic in the grounds of Sir Richard Child's Wanstead House has been the lure for a number of research projects over the last fifty years. It is generally accepted that this mosaic must come from a larger building, probably a villa, but the precise location has never been accurately established.

The first to search for the building was Jack Elsdon Tuffs in 1947.² Using information from Lethieullier's 1735 letter, and another letter sent to Charles Lyttleton in 1746,³ Tuffs deduced that the probable location for the 1715 discovery was in the area on the north-west bank of the Perch Pond, in the southern part of Wanstead Park (Fig. 1). Tuff's exploratory trenches revealed traces of Roman occupation but nothing substantial. He recognised, however, that the building

Fig. 1: Wanstead Park seen from the east. The plain is the parched grass area with the Perch Pond on the left (Photo: Stuart Monro, WPCP)

‘must lie close at hand’.

His work was followed by that of Frank Clark⁴ who in 1978, together with members of the West Essex Archaeological Group (WEAG), set about exploring the same area but with a view to reconstructing the levels of Roman occupation across the site. Clark also failed to locate a structure, but his work did reveal large quantities of building material such as brick, tile and wall plaster, much of it in a pristine condition, confirming that a building was nearby. He observed that although the Roman finds appeared at a constant depth in his exploratory trenches, it was covered by an overburden of at least 0.75 m of re-deposited material, derived from the excavation of the ponds in the middle of the 18th century. Clark concluded that any building would have either been destroyed during the excavation of the ponds or would be located further to the north, beneath much 18th-century landscaping.

Survey work was conducted in 1990 by the Debois Landscape Survey Group,⁵ with the aim of plotting all the evidence of landscaping in the park, including the neighbouring golf course, not only as a record and an aid to understanding its history, but also as a means to identify what is worth protecting in the Park today. Also, on behalf of Thames Water, GSB Prospecting carried out magnetometry, earth resistance, and Ground Penetrating Radar (GPR) surveys across the Plain.⁶ Some results (see below) were produced but, at the time, it was not possible to discern their real meaning or significance.

In 2005 the Wanstead Parklands Community Project (WPCP) was formed to raise awareness of historic Wanstead Park and its rapidly declining condition. Documentary evidence and chance finds of

flint tools and arrowheads suggest the Park has seen periodic occupation from as early as the mesolithic period, through the Roman era, to the present day.⁷ Given this history, its proximity to London and relatively easy access, surprisingly little interest has been shown in the archaeology of the site other than those brief campaigns described above. The WPCP felt that recent popular reawakening of interest in archaeology should be exploited to highlight the importance of the site, thus strengthening the case for desperately needed funding to protect the heritage of Wanstead Park for future generations. The WPCP entered into a collaboration with WEAG to undertake what would initially be a non-invasive geophysical survey. The WPCP successfully applied for a Local Heritage Initiative grant to partially fund the work and the project was approved and licensed by the owners of the Park, the Corporation of London.

The specific archaeological aims and objectives for this co-operative community project are:

1. to gather information, without excavation (a licence condition), to reconstruct the surfaces of natural geology and the early-18th-century landscape and to take regard of the 18th-century landscaped features.
2. to identify archaeological features earlier than the early 18th century.
3. to learn more about the location and nature of Roman archaeology on the site and compare and contrast it with previous discoveries in the Park.
4. to present the archaeology of the park in a series of public access initiatives.
5. to propose a new programme of archaeological and landscape recording fieldwork in the Park.

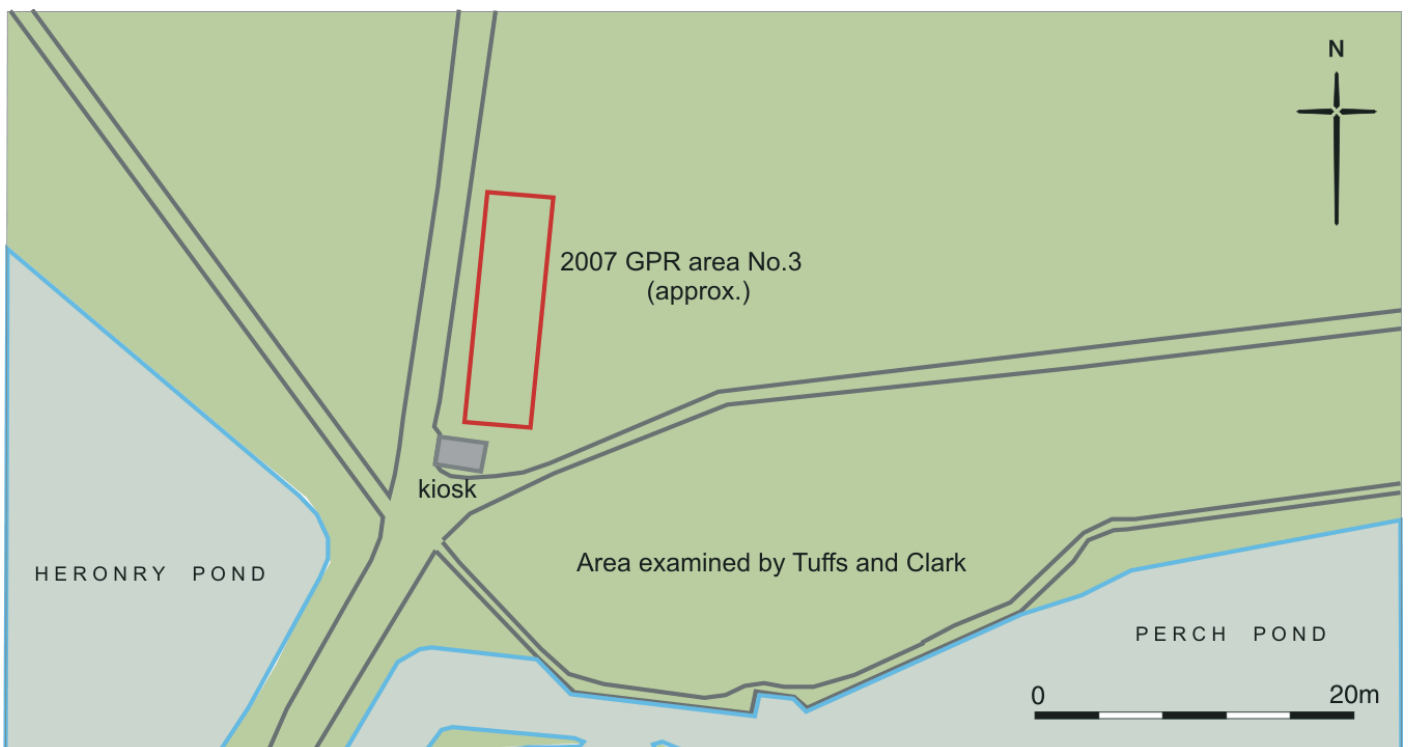


Fig. 2: plan showing location of trial GPR survey to the north-east of the area examined by Tuffs and Clark (S. Rowntree/MoLAS)

Wanstead Park is remarkable for the remains of its historic 18th-century landscape (Fig. 1), much of which is now hidden by dense woodlands. These areas are virtually inaccessible to any geophysical technique, as are the surviving lakes that surrounded the former estate. The largest area of relatively open ground is to the north of the Heronry and Perch Ponds and is known locally as the Plain. The Plain was, until 1935, almost entirely laid out with lawn tennis courts but has over recent decades been invaded by scrub. Worse still, an infestation of ants has thrown up ant-hills to a height that makes walking across large areas of the terrain a potentially ankle-twisting experience! Not all the Plain, therefore, is easily accessible. Fortunately, some of the more accessible areas are in the vicinity of the area described by Elsdon Tuffs and Clark as being the possible location of the Roman Villa.

As mentioned above, in October 2006 a limited geophysical survey undertaken by GSB Prospection for Thames Water showed that, although the terrain was not terribly conducive to standard geophysical techniques, some surprisingly good results could be achieved. Magnetometry revealed many features of archaeological interest, in particular two large circular features on the central, southern part of the Plain, that might predate the Roman period. However, magnetometry failed to show anything clearly indicating a Roman structure, or at least not in the immediate vicinity described by Elsdon Tuffs and Clark. This is most probably due to the thick overburden of 18th-century landscaping material in this particular vicinity. If the two circular features are indeed pre-Roman, recorded at a high level by magnetometry, their location might give an indication of the contours of the pre-landscaping surface of the Plain and that the up-cast from the digging of the lakes was used to level off a slope in this area.

GSB Prospecting used GPR over a very limited area, but possibly due to prolonged and torrential rain at the time of the survey, this failed to reveal any significant archaeological remains.

However, given the possibility that any Roman remains could have been capped by as much as two metres of overburden during the construction of the lakes and extensive landscaping between 1735 and 1745, it still seemed likely that GPR held the most potential to locate any structure – if it was to be found at all.

In February 2007 the use of a new MALA RAMAC X3M GPR system, equipped with a 500 MHz antenna, was made available on loan from the University of East London. It has to be admitted that at the start the project team had little experience in survey methods, operation, data collection and most importantly analysis and presentation, so a rapid self-learning exercise was embarked upon and we would like to record our thanks to Dr Tim Dennis, University of Essex, for his patient supervision of our early efforts.

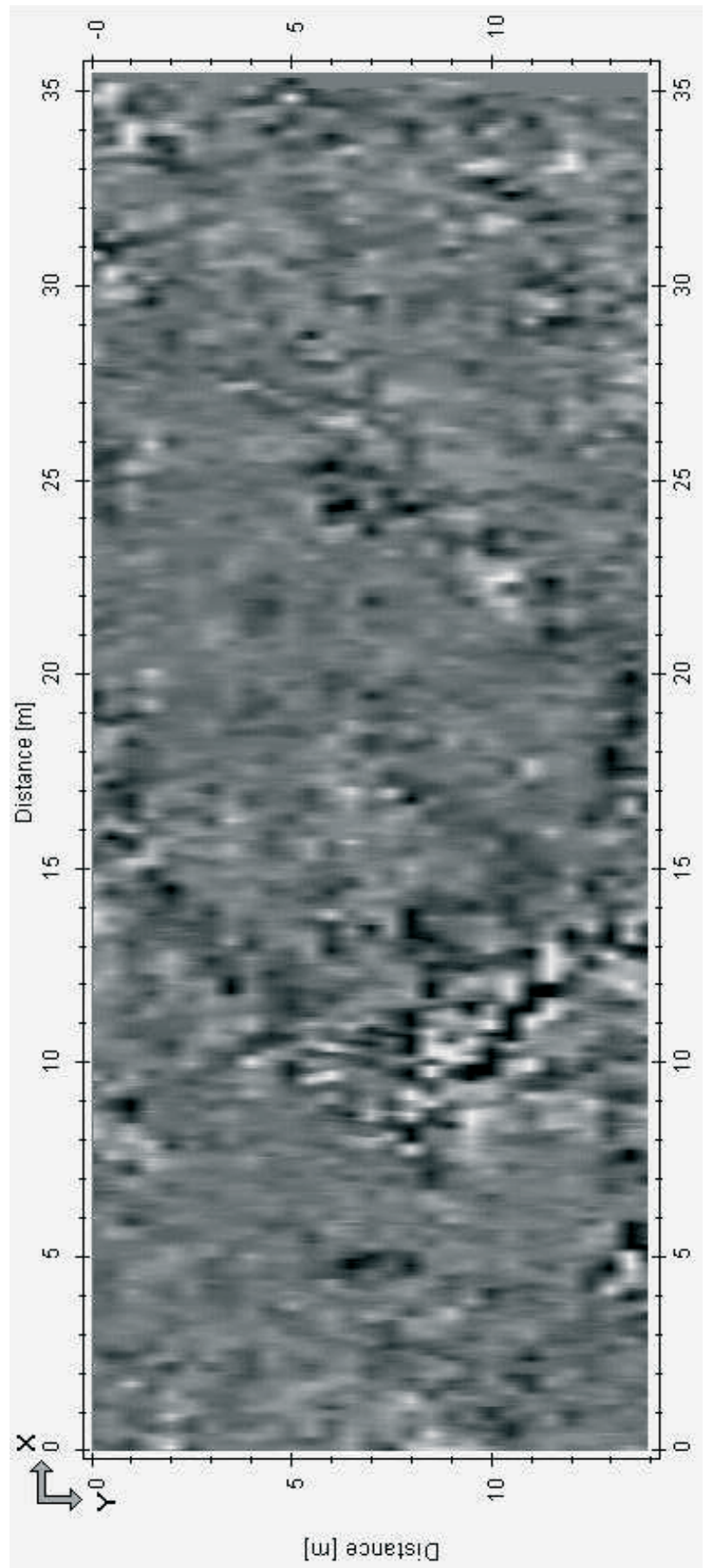


Fig. 3: radar slice, 14 m by 35m, approximately 2m down showing probable walls. North at top.

The first outing with the GPR in Wanstead Park highlighted many of the practical difficulties, in particular the need to avoid being over ambitious with the survey area, quality of data being more important than quantity, and the need to gather data in a way that can be best handled by the analysis software.

At the third attempt a smaller area of relatively flat ground was chosen with the aim of gathering good quality radargram data and to assess the repeatability of the system by surveying part of the same area at 90 degrees. The area was chosen largely for its convenience, but it was located just north of the supposed location of the villa. GSB's magnetometry survey had shown the area to be devoid of any significant archaeological interest; however they had not surveyed this area with GPR.

The survey area was approximately 35 m N-S by 14 m W-E, constrained by a row of trees to the west and areas of scrub to the north, south and east. It was located immediately north-east of the refreshment kiosk (Fig. 2). During the survey it was evident from the real-time radargram display that there was a great deal of "activity" in the data. This was not considered surprising at the time, given the extent of the early-18th-century landscaping. However, when the data were processed, using MALA's Easy3D visualisation software, it came as something of a shock to find there was clearly an unnatural man-made structure to be seen (Fig. 3). Running diagonally across the main axis of the area surveyed, it is possible to identify solid features running parallel and perpendicular to each other. They are likely to be walls. It was even more pleasing to see the same structure was also clearly evident on the second survey. The processing involved applying various filters to enhance the output and a three-dimensional visualization was generated that allowed animated horizontal slices to be viewed.

The depth of the feature indicated by the software was approximately 2.2 m, which would place the structure at the depth Clark speculated that any Roman remains might be if they existed north of the Perch Pond.

The actual depth of the structure is uncertain, as the velocity of the radio waves travelling through different soil types with different moisture content can vary considerably and the velocity assumed by the software was a preset default value. There is no

known non-invasive method of determining the real depth which might in fact be anywhere between 1.5 and 3 m.

The admitted lack of experience of the survey team made it essential that the findings were validated by independent experts. Dr Tim Dennis from Essex University and Dr Dean Goodman from the Geophysical Archaeometry Laboratory in California kindly agreed to undertake a blind analysis of the raw GPR data. Both experts agreed the quality of the raw data, processing and presentation was good and were able to show the same features of interest using their own processing software. The independent reproduction of the findings provided reassurance that the observed structure was real – however the geophysicists perhaps wisely left any interpretation to the archaeologists.

It would appear, therefore, that Clark's original observation that the villa buildings were likely to be located under 2 m of overburden to the north is correct. The real extent of this building will be the subject of further GPR and magnetometry work throughout 2007 and early 2008. Coupled with this, WEAG is conducting a full audit of the archaeological archives of sites excavated within its area of interest (West Essex, including the metropolitan Essex boroughs). This project, the WEAG Archaeological Archive Audit (Triple A project), seeks to identify the whereabouts and condition of all this material. Amongst this is the earlier discoveries of material from Wanstead Park. It is intended, with a generous grant from WPCP, to reassess this material and, hopefully, add some new detail to the history and significance of the Roman Villa at Wanstead Park.

Acknowledgements

We would like to thank The Corporation of London, in particular James Clare and Mat Roberts, the HLF Local Heritage Initiative, and the Nationwide Building Society Community Awards for their support of this project. Also, from the University of East London, we would like to thank Dr Richard Lindsey and Jamie Freeman for the loan of the GPR and Jim Dudley and Graham Brown for assisting with GPR survey. Finally, Jane Sidell, English Heritage, Tricia Moxie, WPCP and Nick Bateson and Paul Derwent, WEAG, have given this project much valuable support and assistance.

1. 'Smart Lethieullier, Esq., giving an account of the Roman pavement at Wanstead Park, in Essex, to Roger Gale', *Surtees Soc* **76**, *Stukeley's letters and Extracts From Diaries Vol. II*, 154–6.

2. J. Elsdon Tuffs *A first report on the re-discovery of the Roman site in Wanstead Park, Wanstead, Essex (1964)* Privately published.

3. 'Part of a Letter from Smart Lethieullier, to Dr. Charles Lyttleton, relating to some Antiquities found in the County of Essex – read at the Society of Antiquaries, November 27, 174' *Account of Antiquities in Essex, Vol I*, 73–5.

4. F.R. Clark 'The lost Roman villa in Wanstead Park' *Exploration and discovery in south-west Essex (1988)* West Essex Archaeological Group.

5. RCHM survey, unpublished, conducted in 1990.

6. GSB Prospection Ltd *Wanstead Park: geophysical survey: Survey Results, 2005/72 Wanstead Park, North-East London (2005)*.

7. At the official opening of the re-lined Heronry Pond in 1906, the Lady Mayoress was presented with flint arrowheads said to have come from beneath the pond itself.