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**Great Witcombe Roman Villa, Gloucestershire: field surveys of its
fabric and environs, 1999-2000**

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Great Witcombe Roman Villa, Gloucestershire: field surveys of its fabric and environs, 1999–2000

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INTRODUCTION

The Site and its History of Archaeological Exploration

Great Witcombe Roman villa, Gloucestershire, is a scheduled ancient monument (no. SM 28521) in the Guardianship of English Heritage. It occupies a fine location (O.S. Nat. Grid SO 89951425) on the side of a broad north-facing valley defined to the west by Cooper's Hill and High Brotheridge, to the south by rising ground towards Cranham, and to the east by the main Cotswold escarpment. There are splendid views from the site (*c.* 140 m above O.D.) north-eastwards towards Crickley Hill and the Severn Vale. The site lies some 5 miles south-east of Gloucester and 10 miles from Cirencester. Ermin Street, the road between these Roman towns, passed within a mile of the villa to the north-east (Fig. 1). Springs rise in the vicinity of the remains which, combined with the views, may have dictated its location.

The villa was discovered and largely uncovered in 1818 by Samuel Lysons and the then owner of the site Sir William Hicks (Lysons 1819, 178). Workmen removing an old ash tree uncovered the first remains, and excavations were carried out over an area which is roughly equivalent to that of the remains now visible. At the time of this first excavation walls were uncovered standing up to 6 ft (2 m) high, covered in some cases with wall plaster (although Lysons noted the rapid deterioration of these almost immediately after excavation). After Lysons's death in 1819 it would appear that Hicks continued to excavate, both on the main site and on a second building to the south-east beside a stream. No account of this later work was published and the records of it are scanty.

At some point between 1818 and 1884 cover buildings were constructed to protect the mosaics in the bath suite in the south-west range, but it is not known to what extent the remainder of the site was re-buried or otherwise protected. In 1906 the owner W. Hicks-Beach took steps to protect the mosaics, and this was followed in 1908 by replacement of the collapsed roofs of the cover buildings under the auspices of the Bristol and Gloucestershire Archaeological Society. The Society also raised subscriptions for further works in 1912 but there is no record of any being carried out (Clifford 1954, 15). The villa was taken into State Guardianship as an Ancient Monument in 1919, and parts of the site were re-excavated by Elsie Clifford in 1938–9, these works being curtailed by the outbreak of war. A return to the site after the war was proposed but never took place.

The most recent campaign of excavation was carried out between 1960 and 1973 by Ernest Greenfield, although he was not able to bring this to publication before his death. In 1986

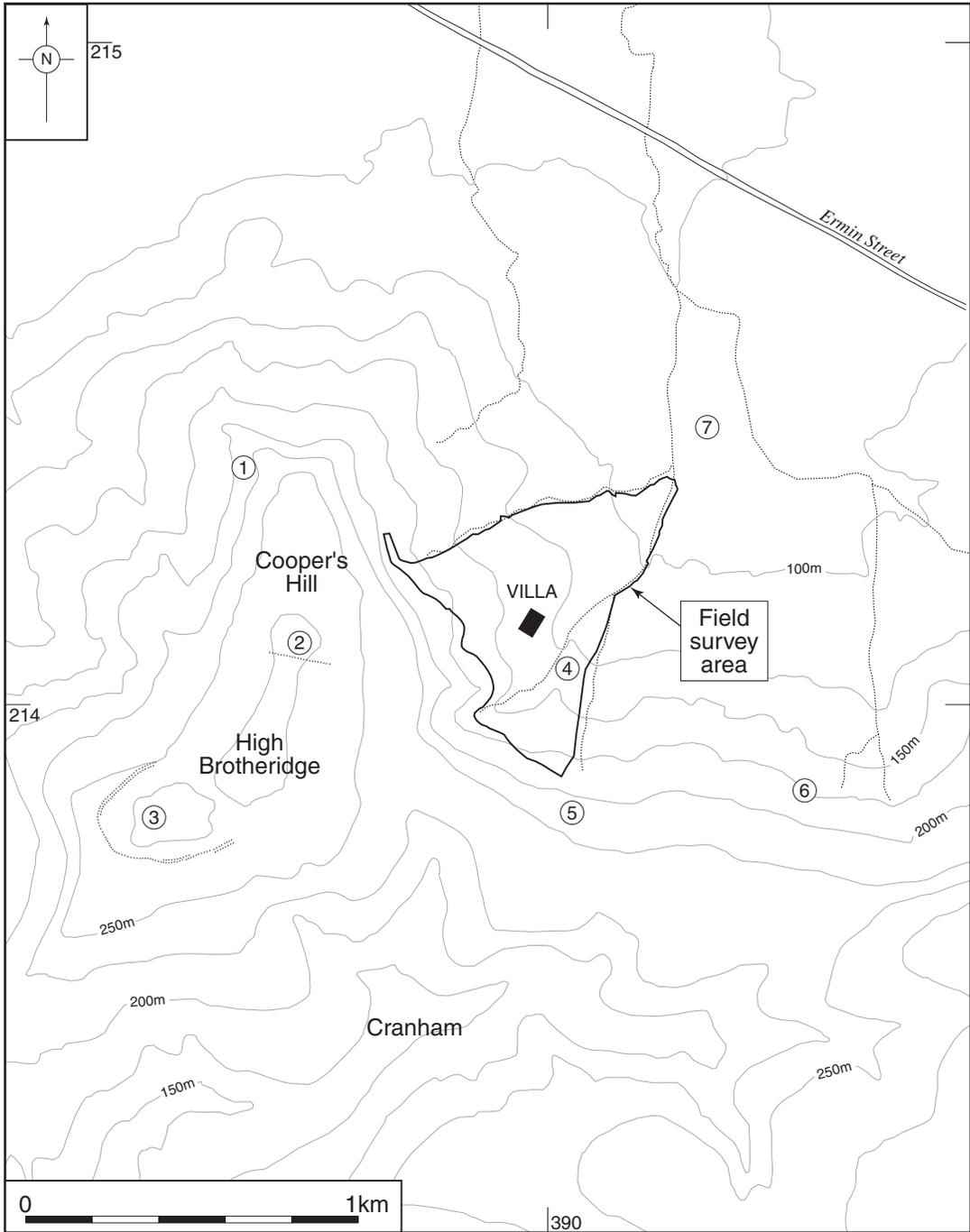


Fig. 1. Iron-Age and Roman remains in the vicinity of Great Witcombe villa.

English Heritage commissioned Birmingham University Field Archaeology Unit to compile a report on Greenfield's excavations, and this has been recently published (Leach 1998).

Background to the Surveys

In recent years both English Heritage and Gloucestershire County Council have become increasingly concerned about the deterioration of those parts of the villa on public display. In September 1998 the Ancient Monuments Advisory Committee of English Heritage visited the site and requested that a management strategy be devised to address the evident conservation issues. This strategy was to cover not just the excavated remains within the Guardianship area (which is defined by the fence surrounding the monument), but was also to consider the full extent of the Roman remains and their landscape setting. It is English Heritage policy that management strategies should be developed from a high-quality research base, and as a first stage it was considered necessary to obtain further information concerning a number of aspects of the monument. Accordingly in December 1999 Cotswold Archaeological Trust (CAT; now Cotswold Archaeology) was commissioned by English Heritage to co-ordinate a programme of field survey and recording at the villa, which was completed in April 2000.

Contents of the Surveys

The project consisted of the following elements.

Studies within the Guardianship Area

Fabric Recording. An accurate plan of the visible remains of the villa was prepared, and a complete photographic record made of all wall elevations. The latter was used as a photogrammetric base for the production of scale drawings.

Fabric Analysis. Analysis of all exposed masonry sought to determine the extent to which portions of original Roman work survive, as opposed to areas of post-1818 reconstruction, and the state of decay of each phase of construction/re-construction.

Archaeological Analysis. Areas within the Guardianship site which have the potential to contain intact archaeological deposits were identified.

Hydrological Analysis. A study identified the action of both surface and subterranean water and considered the effectiveness of current drainage arrangements.

Studies within the Villa Environs

Desk-Based Study. Study of existing archaeological information for an area of some 900 ha centred on the villa set the complex within its local late Iron-Age and Romano-British context. It also examined the later landscape history of the area.

Field Survey. A detailed examination was made of 40 ha of landscape surrounding the villa, topographical survey drawings being produced at various scales and levels of detail (Figs. 1 and 2). This survey was able to identify not only previously unexplored Roman features but also landscape features of other periods.

Geophysical Survey. A magnetometer survey of *c.* 18 ha surrounding the main villa building was commissioned, followed by resistivity surveys of blocks of particular interest (a total of *c.* 3 ha) (Fig. 2). The latter were defined both by the results of the field survey and by anomalies identified in the magnetometer survey which were deemed to be worthy of further investigation.

A full report on the survey was produced in April 2000, copies of which are available in the Gloucestershire County Council Sites and Monuments Record and the National Monuments

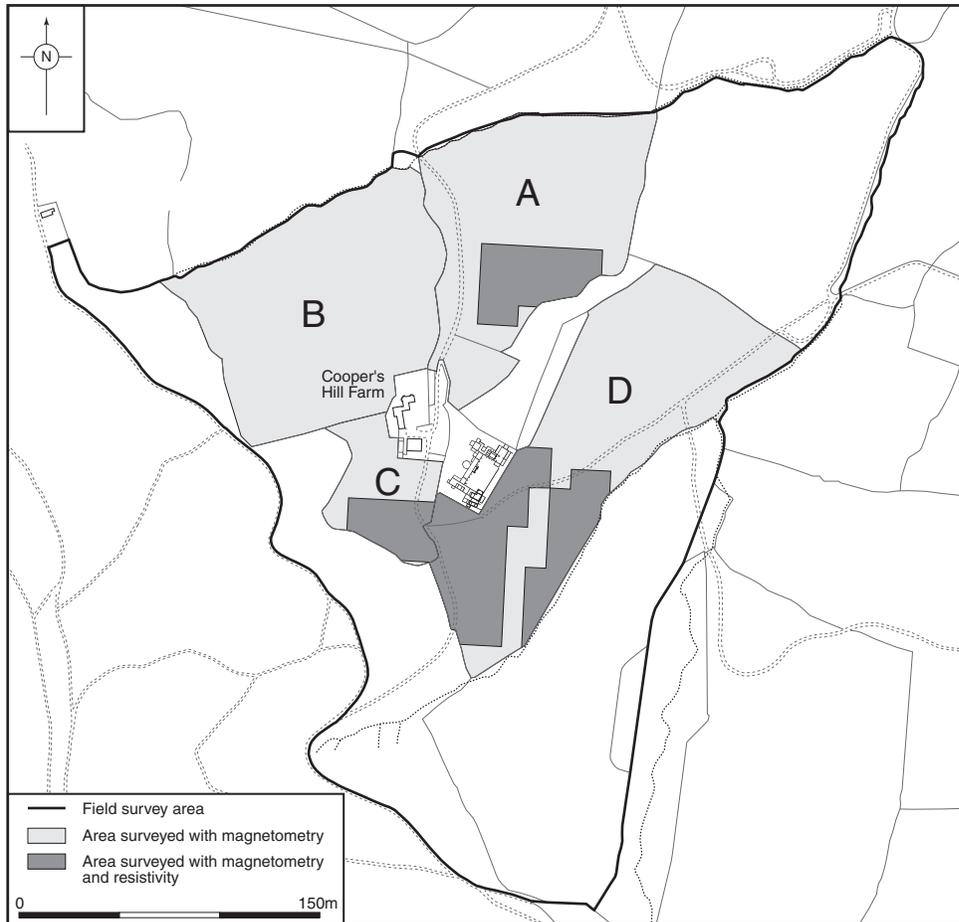


Fig. 2. Areas subjected to field and geophysical survey.

Record Centre, Swindon (CAT 2000). This report provides a summary of the principal findings of the fabric, topographical, and geophysical surveys.

The Great Witcombe Area in the Late Iron-Age and Roman Periods

N.B. Numbers in bold in the following section refer to those marked on Fig. 1.

Iron-Age activity has been identified on the villa site itself, a single ditch containing Iron-Age pottery being found near the north-east range of the building. Leach (1998, 123) suggested that this might be associated with a settlement on the shoulder of the ridge to the north-west of the building, in the area of Cooper's Hill Farm, although there is no supporting evidence for this hypothesis. Further evidence of Iron-Age activity has been found on the high ground to the west. A defended 'Camp' was recorded on the northern tip of Cooper's Hill on later 19th-century O.S. maps (**1**) but has since been quarried away (RCHME 1976, 21). Two other sections of earthwork

survive further to the south at High Brotheridge. A 200-m long cross-ridge dyke runs across the narrowest part of the crest, cutting off Cooper's Hill from the high ground to the south (2), while a 'U'-shaped loop of earthworks lines the crest of the hill to the south-west (3) (RCHME 1976, 41). Interpretation of the High Brotheridge complex is problematic. Clifford (1961, 157) first drew attention to the possibility that it could be a late Iron-Age dyke system comparable with Bagendon and Minchinhampton, and subsequent fieldwork by Harding (1977) has located further earthworks on either side of the cross dyke. Darvill (1987, 194, note 40) keeps an open mind on the attribution, but if correct there is no reason why the earthworks could not be discontinuous as the field evidence seems to suggest.

A full assessment of the structural history of the excavated portions of the villa has recently been published by Leach (1998), which can be briefly summarised thus. The first (Period 2) villa house was built to a 'H'-shaped plan on the hillside, the eastern and western ranges linked by a corridor or gallery with a tessellated floor, heavily buttressed on its downslope side (Fig. 3). The building must have been at least partially two-storeyed. Halfway along the gallery was an apsed room (15), later converted to an octagon, which may have served as a dining room. It too was conceivably of more than one storey; upper floors would have provided commanding views over the valley. There was a small detached bath-house (Rooms 9, 10 and 11) close to the south-west range. The villa was enlarged in the late 3rd or 4th century (Period 3), with the bath-house being incorporated into the western range which now contained two bath suites. The lower possessed painted plaster and mosaics with geometrical and aquatic designs. The eastern range seems to have contained kitchens and stores. Residential quarters presumably occupied an upper floor.

There is still some ambiguity over the date of the Period 2 house. Stratified dating evidence is sparse, and Leach (1998, 123) based his determination on an overall assessment of the finds assemblage. On balance he favoured a date 'during the first half of the third century, possibly closer to AD 200 than later'. This analysis takes no consideration, however, of the mosaics in the lower bath-house (Rooms 5, 6 and 10). On the current phasing those in Rooms 5 and 6 should date to the Period 3 modifications, while that in Room 10 could be either Period 2 or 3. The mosaic in Room 5 has been discussed by Smith (1975, 283), who ascribes to it a mid 2nd- to early 3rd-century date. He thought that the mosaic in Room 6 could be contemporary with it. Mr. S. Cosh (pers. comm.) would not date any of the mosaics at Great Witcombe later than *c.* A.D. 200. If this chronology is correct it implies that the building may be slightly earlier than Leach proposed, and also that the Period 3 alterations to the lower bath-house occurred earlier than those in other parts of the villa. Additions and modifications to the house continued into the last decades of the 4th century, and occupation probably into the early 5th century.

A second building had been excavated by Hicks in 1820 below the villa near the stream (4) (Clifford 1954, 13–15; RCHME 1976, 61) The precise location of this structure was uncertain until it was rediscovered in the surveys described below. Greenfield also conducted excavations at two other locations in the woods to the south and south-east of the villa. A series of rubble mounds containing Roman pottery was found at one (5), while further to the east a scatter of tile waste and pottery proved on excavation to be a possible Roman lime kiln site (6). Details on both sites are scanty (Harding 1962, 214). To the north of the villa, between it and Ermin Street, a bronze statuette of the goddess Flora was recovered during the building of the Witcombe reservoirs in the late 1850s and early 1860s (7) (Clifford 1954, 58).

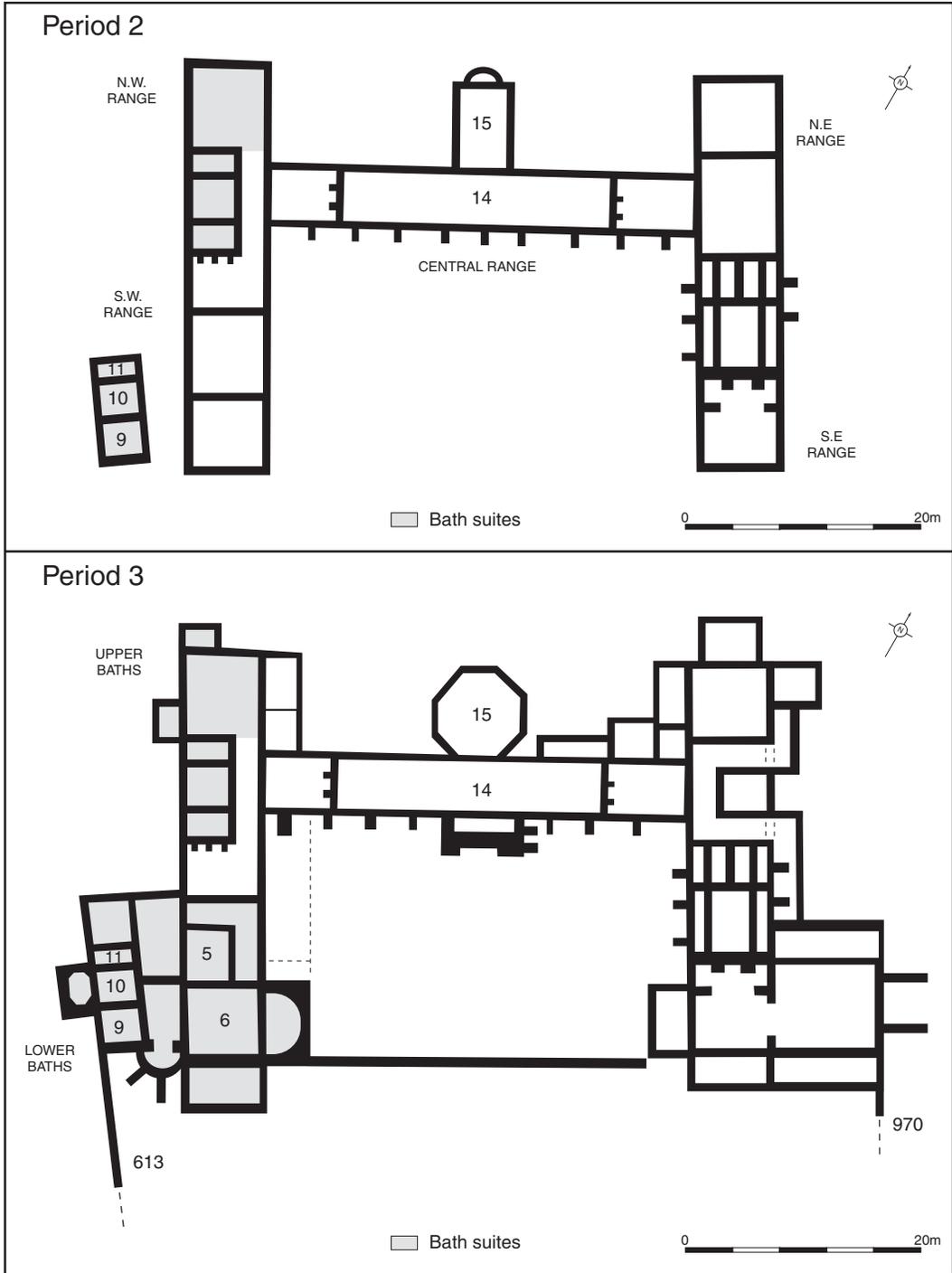


Fig. 3. Development of the villa (after Leach).

THE SURVEYS

The Fabric Surveys and Analysis of the Exposed Remains

The fabric recording comprised a plan and elevations of all visible masonry within the Guardianship area. A topographic survey plan at a scale of 1:200 was prepared by Mark Corney and all wall elevations were photographed on monochrome film. Digital photogrammetric drawings of each wall elevation were constructed from the photographic archive. After the fabric recording had been completed, further fieldwork was carried out on the basis of the drawn elevations. The aims of this work were two-fold. First, they were to determine the extent to which the visible fabric had been restored, either with re-used Roman stone from the site or with modern imports, and to what extent original *in-situ* Roman structure could be seen. Second, where Roman stonework could be identified, it was examined (by S.P. Bagshaw) for evidence of stone sources, construction methods, and other archaeological information. Consideration was also given to the condition and state of decay of both the original sections of the structure and of the modern rebuild. Fuller details of the survey methodology are contained within the main report (CAT 2000).

The study concluded that the vast majority of masonry now visible is the product of reconstruction during consolidation following previous excavations. The degree to which the visible structure of the villa consists of modern rebuilding can be broken down into three areas, which broadly correspond with the major campaigns of excavation that have occurred. The lower bath suite in the south-west range uncovered by Lysons and Hicks was substantially altered and rebuilt in the 19th century when the cover buildings were constructed (Fig. 3). The rooms in the area of Clifford's excavations in the north-west range are probably closest to their excavated form, although some parts are known to have been removed and replaced, and the whole has been heavily re-pointed and consolidated with modern cement. The surviving structures within the main area of Greenfield's excavations, in the central and eastern ranges, have by contrast been almost entirely obscured and replaced by modern reconstruction. Areas of intact Roman masonry, albeit with modern re-pointing, are therefore very limited within the Guardianship area. It was also demonstrated that deposits associated with the occupation and demolition of the villa have been almost entirely removed within, and immediately adjacent to, the visible structures. There is more potential for the survival of pre-building and villa construction deposits within these areas, although without doubt the best preservation of Roman deposits occurs on the hillside below the Guardianship site.

FIELD SURVEY by Mark Corney

Introduction and Survey Methodology

The survey of the villa and its environs was undertaken in January and February 2000. An area of c. 40 ha was examined (Figs. 1 and 2) and plans produced at a scale of 1:2,500 (a rapid survey of 40 ha) and 1:1,000 (a detailed survey of 4 ha to the east and south of the exposed remains and the subject of this report). Further detailed surveys within the Guardianship area included a contour survey at 1:500 and a plan of the exposed remains at 1:200.

All control points and levels for recording at scales of 1:1,000 and above were established with a Topcon GTS 212 Total Station Survey System, with detail measurements being made either with the Total Station or by taped offsets. Depiction of all archaeological features has been undertaken in accordance with the standard survey guidelines produced by RCHME (1999). Weather and ground conditions during the survey period were generally very good. During

January, the lighting was particularly conducive to detailed earthwork recording with a great deal of strong, low sunlight that helped to illuminate many of the areas where subtle features survive.

The field survey was undertaken by Mark Corney assisted by Mrs. G. Swanton. Mark Corney prepared the text and accompanying survey illustrations.

Detailed Field Survey of the Villa Environs

Detailed survey of an area covering *c.* 4 ha was undertaken in two areas (identified here as Fields D and C) at a scale of 1:1,000 (for the full environs survey the reader is referred to the full report: CAT 2000) (Figs. 2, 4 and 6). The area incorporates all of the ground in the immediate southern and eastern environs of the villa that displays significant surface evidence of Romano-British activity. This aspect of the survey has demonstrated the high archaeological potential of the villa environs and the exceptional preservation and quality of the field remains. Much of the area examined has clearly not suffered from prolonged post-Roman agricultural use. Numbers in bold in the text refer to those on Fig. 4.

Features Immediately to the East of the Villa

To the east of the Guardianship area, the ground falls towards the valley of a stream. This slope and the level ground on the west bank of the stream contain a dense and complex series of earthworks (**1–8**). Detailed survey has revealed a number of features of archaeological significance that add considerably to our knowledge of the villa complex.

Greenfield's excavations (Leach 1998) recorded a number of features that ran beyond the eastern limits of his investigations. At the north-eastern corner of the villa's south-east range a short length of wall, 970, was traced as far as the boundary of the Guardianship area (Fig. 3). A very clear and well-defined scarp, up to 1 m high, continues the line of this wall for a distance of 12 m before making two 90° turns to form a substantial platform, cut into the hillside, that delineates a surface scatter of Romano-British material (**1**). Within this platform, further slight scarps, set at 90° to the main earthwork alignment, may represent further subdivisions. Probing with survey arrows suggests the presence of rubble, possibly walling, along all of these scarps. The surface evidence would suggest the possibility of another suite of rooms in this area continuing for a distance of at least 40 m beyond the Guardianship boundary. Immediately to the north of this complex, the remains of ridge-and-furrow may mask further detail.

Another wall, 613, located by Greenfield running from the outer corner of Room 9 in the south-western range of the villa (Fig. 3), can also be traced as an earthwork beyond the Guardianship area. Although somewhat mutilated by the wear from a modern bridleway, this feature can be followed to a further complex of regular scarps defining a substantial platform measuring 25 × 15 m (**2**). This appears to be symmetrically placed in relation to feature **1**, described above. Slighter scarps again hint at the presence of subdivisions and at a number of points stonework is visible protruding through the turf. This is especially so on the south-eastern extremity of **2** where a substantial retaining wall may be present. Immediately to the south-east of this are a further two rectangular platforms measuring 8 × 4 m and 12 × 6 m.

Locations **1** and **2** appear to mark continuations of the south-west and south-east wings of the villa. This observation is discussed further below. Between these two components a substantial scarp, partly overlain by Lysons's spoil-heap (**12**), may represent an artificial enhancement of a natural terrace as a garden feature associated with the villa.

Some 8 m below (south-east of) **2** another scarp, up to 1.5 m high and parallel to the main axis of the villa, can be traced as far as the spring (**3**). Although somewhat disturbed by landslips, much

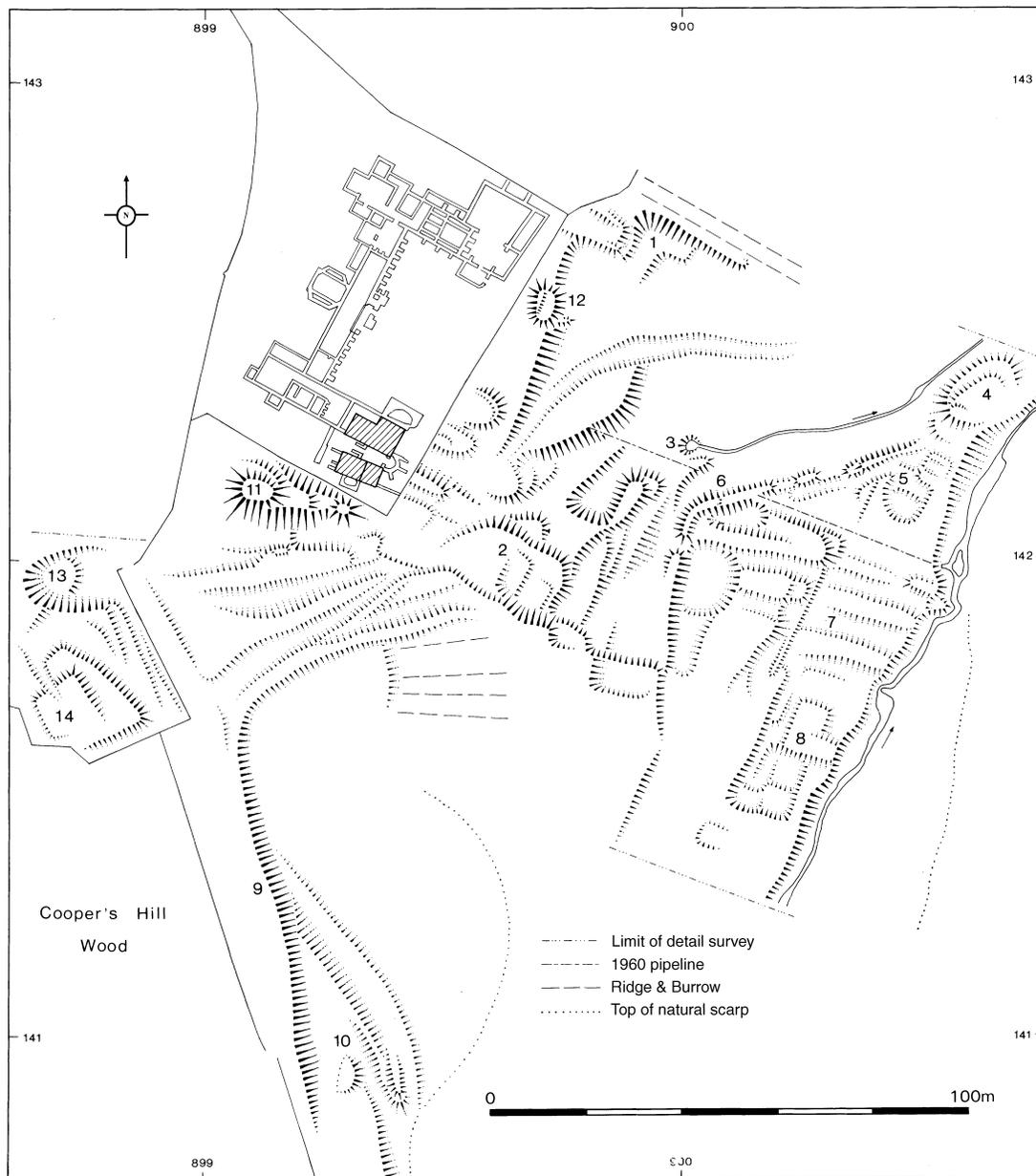


Fig. 4. Detailed field survey of the villa complex and its immediate environs (original scale of survey 1:1,000).

of the line of this feature is marked by numerous surface outcrops of stone blocks, some of which display signs of rough tooling or dressing.

Features Adjacent to the Stream

A number of substantial features occupy the level ground to the west of the stream and the foot of the scarp into which the villa complex was built. This area is defined on the north and west by a substantial boundary marked by a broad bank standing up to 1.5 m high (6). This runs parallel to the outflow from the spring (3) until it reaches the foot of the natural scarp. At this point it turns through approximately 30° and continues for some 50 m before fading out. For most of its course the bank can be seen to comprise stone blocks and would appear to be a collapsed wall. Where best preserved, bank 6 is up to 1.5 m high and 5 m wide. A 3 m-wide break 5 m south of the change of alignment may be an original feature.

At the north-east limit of the detailed survey, between the stream and the outflow from the spring (3), an oval mound, measuring 22 × 11 m and up to 2 m high with a flat top (4) has slight traces of a possible rectangular structure on its summit. The structure measures c. 12 × 5 m and appears to be stone built. To the east of this mound the stream narrows considerably and appears to be flowing through a channel cut into the underlying bedrock.

Immediately to the south of 4 a further probable structure (5) was recorded. Slight but well-defined earthworks suggest the presence of a rectangular building measuring c. 16 × 10 m with its long axis parallel to the stream. The structure would appear to be subdivided into at least three units although the southern limit was difficult to define and may have been disturbed by the construction of a drain in 1960 (Leach 1998, 1).

South of 5 and the 1960 drain, a series of low, parallel banks (7) extend in a westerly direction from the stream edge. The origins and purpose of these features is uncertain. Superficially, they resemble ridge-and-furrow, but this seems unlikely given the spacing between each feature and the low-lying nature of the ground. A drainage or related function would appear to be more

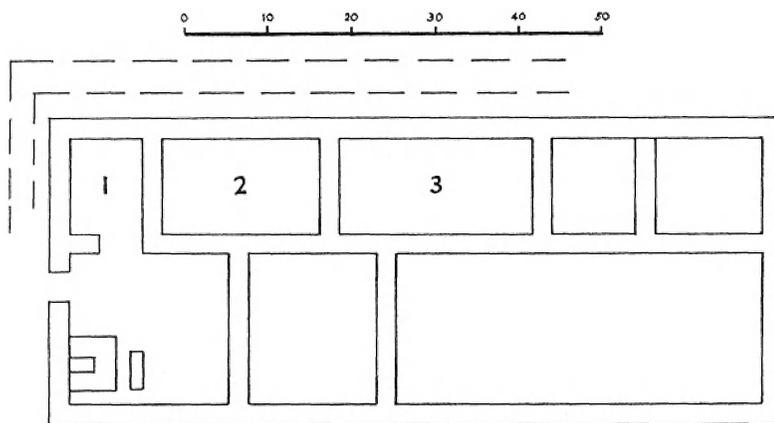


Fig. 5. Plan of the building discovered by Hicks c. 1820 (reproduced from E.M. Clifford, 'The Roman Villa, Witcombe, Gloucestershire', *Trans. B.G.A.S.* 73 (1954), fig. 3). There was no scale on the original drawing; that reproduced here was added by Clifford and is in ft and approximate. Comparison with Fig. 9 (below) suggests that these rooms are c. 27 m (88 ft) long and oriented NE-SW.

likely. The ridges appear to be overlain by a slight bank or scarp that shares the alignments of structures **5** and **8**. If this were so, then a Roman origin would seem plausible for these features.

Immediately to the south of **7** a very regular and symmetrical group of earthworks (**8**) marks the location of a substantial structure measuring *c.* 35 × 17 m. At least seven rooms can be discerned from the earthwork evidence, including a corridor-like feature that runs the full length of the western side. A further smaller, square structure is also visible some 4 m to the south of the main remains. The surface plan and the overall dimensions of this structure leave little doubt that this is the site of the Roman building discovered and planned by Sir William Hicks in 1820 (see above; Fig. 5).

The banks of the stream between **4** and **8** contain abundant quantities of Roman building debris, including dressed stone blocks, White Lias roof tiles, Pennant Sandstone roof tiles and ceramic brick and tile fragments. The presence of a number of substantial structures along a 100 m stretch of the stream is certain.

Features on the Plateau to the South of the Guardianship Area

Immediately beyond the southern boundary of the Guardianship area lies a substantial if irregular mound (**11**). This feature, along with **12** on the eastern side of the Guardianship area, is most likely the spoil-heap from the excavations by Lysons and Hicks. It covers a large area immediately adjacent to the main villa building and it must be considered highly likely that it seals undisturbed Roman stratigraphy.

To the south of **11** a number of roughly E–W linear hollows are probably the result of successive routes of the modern bridleway that crosses the slope below the villa. On the west they turn and merge with a substantial terrace-way (**9**) that carries a track along the eastern edge of the woodland occupying the western slopes overlooking the villa complex.

To the south of platform complex **2**, five low E–W aligned ridges were recorded for a distance of 25 m. They terminate against a slight N–S scarp and are probably the remains of ridge-and-furrow and an associated low headland. These are the only traces of post-Roman agriculture recorded to the south of the main villa building complex. Between platforms **1** and **2** there are no other traces of post-Roman cultivation. This may be significant and suggests that the remains of substantial Roman structures prevented exploitation of this area for arable during the medieval period.

Much of the plateau south of the villa is relatively devoid of surface features. Only at its southernmost extremity were further features of archaeological potential recorded. At **10** a semicircular platform, a stoney, linear bank (possibly a short length of wall) and a length of terrace-way were recorded. Between the platform (**10**) and the possible wall, animal disturbance has brought much burnt material and fragments of Roman ceramic building material to the surface. The terrace-way appears to be running up-slope from a ford across the stream (beyond the southern limit of the plan) and making for the probable Roman structure at **14**. However after a distance of *c.* 60 m from **10**, the feature fades and appears to be overlain by terrace-way **9**.

Features in Field C, South-West of the Main Villa Building

During the 1:2,500 rapid survey a number of potentially important features were noted in the southern corner of Field C. Detailed survey at 1:1,000 defined a substantial platform (**14**) that has been partly cut back into the natural slope on the south-west. The earthworks define a roughly square structure measuring 13 × 12 m. This is set on a larger platform of trapezoidal form. The latter feature may also have originally been square in form, but the eastern side has been modified by wear from a track associated with terrace-way **9**. Within **14** disturbance by rabbits has produced Roman building material and white limestone tesserae.

To the north of **14** a large semicircular hollow (**13**) is marked on the Ordnance Survey plans as a spring. At the time of survey the feature was dry and displayed no evidence of hydrological activity. Heavily disturbed by rabbits, the hollow contains a great deal of burnt material including Roman brick and tile.

GEOPHYSICAL SURVEY by P.P. Barker and E.J.F. Mercer

Survey Objectives and Methodology

Stratsacan undertook a geophysical survey which sought to locate any features that may relate to the villa complex. Magnetometry was used over an area of *c.* 18 ha around the villa, with a resistivity survey, totalling *c.* 3 ha, carried out in areas where building remains were thought to be present (Fig. 2). These were defined by the desk study, field survey and magnetometer results. The following report presents a summary of the full geophysical survey report which is contained in the main report (CAT 2000). That report should be consulted for further details of the location of the survey grid, a description of the techniques used and equipment configurations, sampling intervals and data capture, and processing techniques.

The magnetometer survey was carried out using a Geoscan FM36 Fluxgate Gradiometer, with readings taken at 0.5-m centres along traverses 1 m apart. This equates to 800 sampling points in a full 20 × 20 m grid. All traverses were surveyed in a ‘parallel’ rather than ‘zigzag’ mode to avoid heading error. The FM36 has a typical depth of penetration of 0.5 m to 1.0 m. This would be increased if strongly magnetic objects have been buried. The resistance meter used was a Geoscan RM15 with an automatic data logger. Readings were taken at 1.0-m centres along traverses 1.0 m apart. This equates to 400 sampling points in a full 20 × 20 m grid. All traverses were surveyed in a ‘zigzag’ mode. The 0.5-m probe spacing of a twin probe array has a typical depth of penetration of 0.5 m to 1.0 m. The collection of both magnetometry and resistivity data at the centres indicated above provides an appropriate methodology balancing cost and time with resolution. Processing of the magnetometer and resistivity data was performed using specialist software known as Geoplot 3. The data from the magnetometer survey was presented as print-outs of the raw data (both as grey scale and trace plots) together with grey scale plots of the processed data. Magnetic anomalies were identified and plotted onto ‘Abstraction of Anomalies’ drawings (Fig. 6). The data from the resistivity survey was presented as grey scale plots of the raw and processed data (Fig. 7), with identified anomalies plotted onto the ‘Abstraction of Anomalies’ drawings (Fig. 8).

Results

The magnetometer survey located a number of areas of potential interest. The majority of interesting anomalies were located in an area where there is a complex concentration of earthworks to the south, east, and south-west of the Guardianship site (see above). In the northern half of the survey area the majority of the anomalies were associated with ridge-and-furrow, although in Field A features possibly relating to industrial activity were also located. Compared to the magnetometer survey, the resistivity survey was more productive. The areas chosen for resistivity were targeted on potential buildings and resulted in the location of a number of interesting features. The resistivity responded better to buried features than magnetometry and found high contrast discrete anomalies.

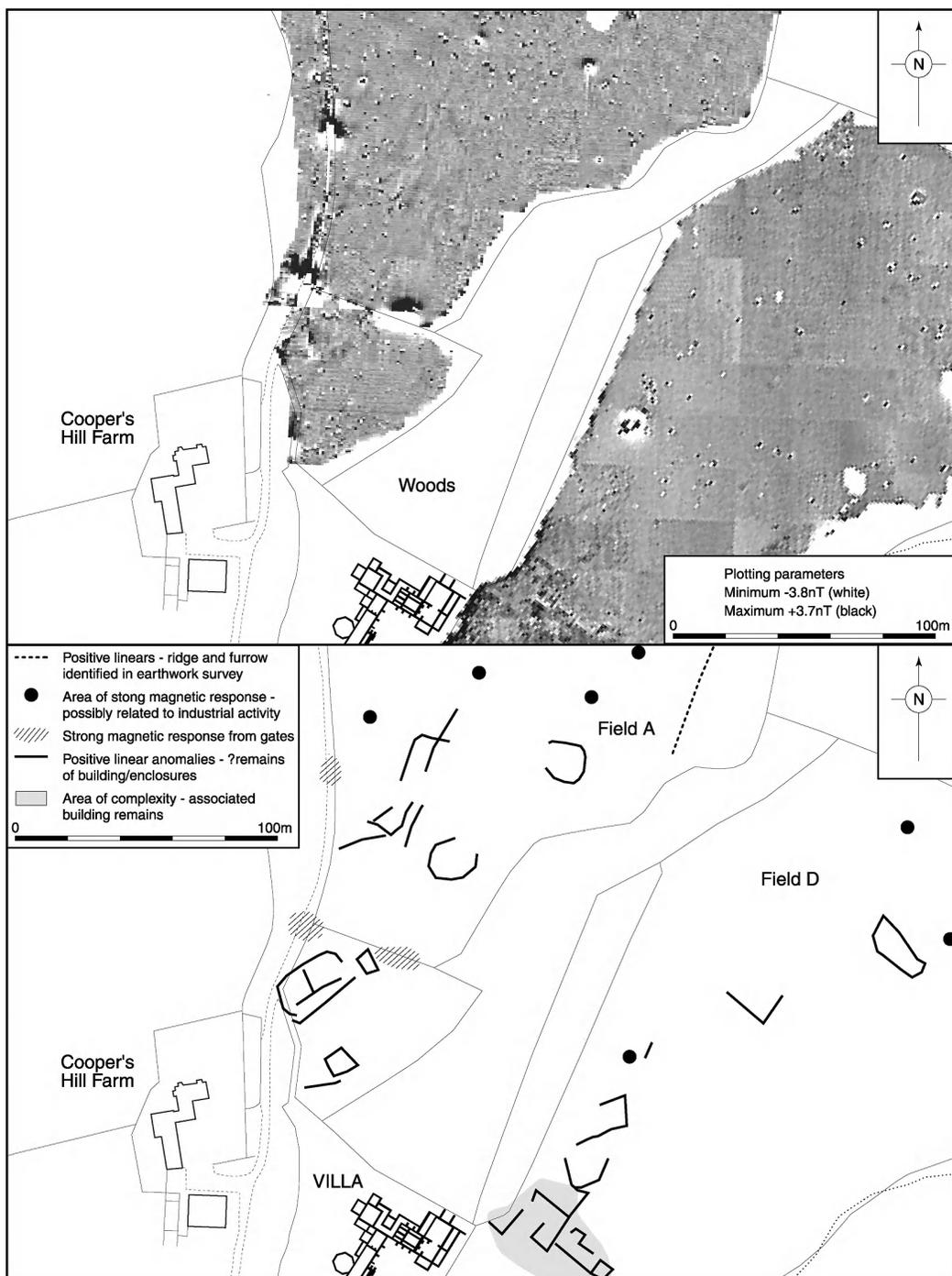


Fig. 6. Plot of processed magnetometer data for the southern part of Field A and northern part of Field D (top) and abstraction of magnetometer anomalies (bottom).

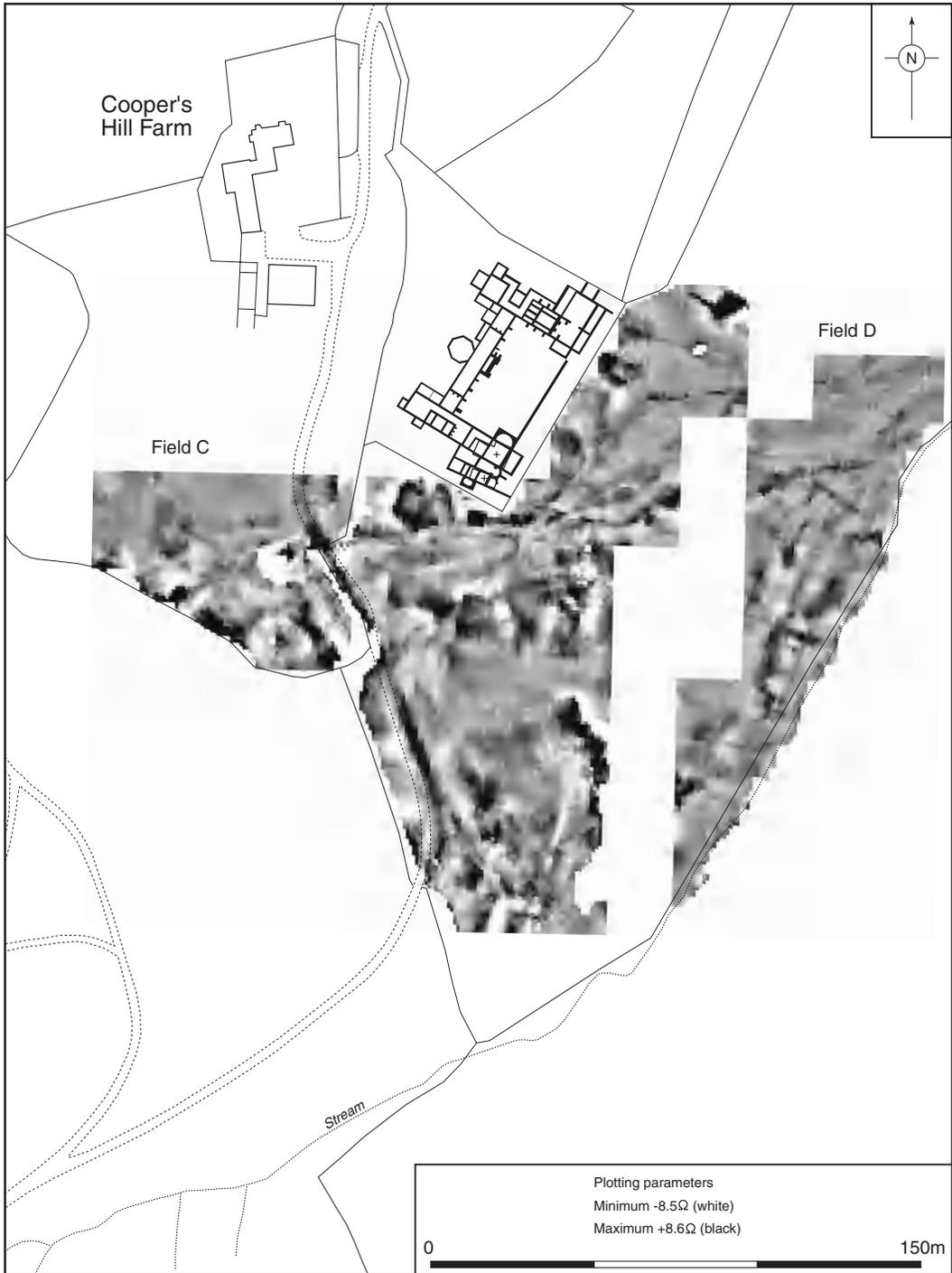


Fig. 7. Plot of processed resistivity data for Fields C and D.

Field D

Field D was the largest area of magnetometry, with the southern part of the field also being targeted with resistivity. As with other areas the magnetometry results are markedly lower in contrast than the resistivity results. There are a number of positive linear anomalies which are mainly concentrated in the south and may relate to the remains of structures. However, these anomalies are very subtle. To the north-east of the Guardianship site an area of complexity containing some linear anomalies very similar to those seen in Field C is suggestive of rubble and the remains of a building (Fig. 6). The magnetometer survey appears to have located very little of the structural complex detected through earthwork survey along the west bank of the stream.

During the earthwork survey evidence was located to suggest that in the south of Field D there had been industrial activity in the form of tile/pottery kilns (Fig. 4, 10). The magnetometer survey also located evidence to support this. Figure 8 shows areas of magnetic debris with strong magnetic responses reminiscent of kilns. Other areas of magnetic debris were also located in the northern part of Field D, although further investigation is required to confirm their nature.

The resistivity survey carried out in Field D (Figs. 7 and 8) shows numerous high and low resistance anomalies of a complexity not seen in the magnetometer data. There are a number of high resistance anomalies close to the Guardianship site that may relate to the villa complex. One particular high resistance anomaly visible near the most northern edge of the resistivity survey coincides with the building seen in the magnetometer survey (Fig. 6). Similar anomalies that are likely to be related to buildings can be seen in the area of complex earthworks on the west bank of the stream. A line of high resistance follows the track on the west side of Field D. This is more likely to have been caused by the terrace-way recorded in the earthwork survey than by the track itself which actually follows the terrace contours.

Field C

The majority of anomalies on the magnetometer survey were detected in the south of Field C. A few very faint positive linear anomalies of possible significance were recognised in the north although their origin is difficult to interpret. There was also an area of strong magnetic response along the eastern edge of the survey area which is likely to be modern debris. The significant anomalies in the southern part of the field coincide with the earthwork platforms thought to have supported Roman buildings (Fig. 4, 14). This is reflected in the data with four main discrete areas of complexity within which identified linear anomalies are quite probably related to structures.

The area containing the earthwork platforms was targeted with resistivity in an attempt to locate structures. The anomalies can be seen more clearly in the processed data (Fig. 7) from which the abstractions have been made (Fig. 8). It is clearly a complex area containing many high resistance anomalies that are probably walls or other structures with areas of low resistance. One particular area of low resistance coincides with platform 14, with a small discrete high resistance feature in the middle.

Field A

The whole of Field A, which also includes a small triangular field to the north-west of the villa, was surveyed with magnetometry and a small area abutting the south-east boundary with resistivity. Only the magnetometer plots for the southern half of Field A are illustrated (Fig. 6). Excluding linear anomalies which appear to relate to ridge-and-furrow agriculture and possible field boundaries, the following features of potential significance were identified. The plots show a certain amount of magnetic debris distributed over the whole field. In addition, there are some anomalies which consist of a number of quite strong responses. Such anomalies are reminiscent of furnaces or kilns, and the possibility of industrial activity in this area is further strengthened by

the scatter of magnetic debris which could possibly be associated with the villa. Much more subtle anomalies which have been abstracted in Fig. 6 comprise the numerous positive linears. They are complex in arrangement and are not easily interpreted. Indeed, they could be the remains of buildings which may or may not be associated with the villa. However, there is also a possibility that they relate to cut features such as enclosures. Initially, the resistivity targeted an enhanced linear scarp with the possibility that it may be a building platform. This area was extended westwards on the basis of the magnetometer results which showed a number of very subtle positive linear anomalies. Excluding anomalies associated with ridge-and-furrow, there are no obvious anomalies indicative of any structures although there are some further low resistance anomalies that could be archaeologically significant.

Field B

This area was surveyed by magnetometry only. Most anomalies relate to ridge-and-furrow, relict field boundaries, a hollow way detected in the topographical survey, and modern debris abutting the boundary around the farmhouse. Some discrete yet subtle linears are similar in their characteristics to those abstracted from Field A. Again they might possibly be remains of structures or enclosures, but further investigation is required to confirm this.

DISCUSSION

DISCUSSION AND INTERPRETATION OF THE 1:1,000 SURVEY by Mark Corney

The 1:1,000 survey has produced many new points of detail pertaining to Great Witcombe villa and its environs (Fig. 9). It is now clear that many further structures exist in proximity to the main villa building and, based on the survey plan and surface finds, a tentative reconstruction and interpretation of the immediate landscape is possible.

The villa at Great Witcombe occupies one of the most striking and dramatic locations amongst the Roman villas on the Cotswold Hills. Neal (1977) has eloquently demonstrated the care and complexity of the planning and levelling of the site of the main villa building in relation to the local topography. The current survey results strongly suggest that the south-western and south-eastern ranges of the villa extend further downslope than was previously thought (*contra* Smith 1997, 166). Platforms **1** and **2** are here interpreted as further substantial ranges flanking an outer courtyard that may have incorporated a formal landscaped garden. The eastern limit of this court is probably marked by the scarp running from below **2** towards the spring at **3**. The overall dimensions of this outer court are in the region of 85 × 35 m. Outer courts are well known on several of the larger villas in the Cotswolds region, Woodchester and Chedworth for example (RCHME 1976, fig. opposite p. xl). The steepness of the slope at Great Witcombe, although quite acute, clearly did not present a serious problem for the Roman architect responsible for the villa design (Neal 1977). Indeed the creation of an outer court will have greatly enhanced the visual impact of the view towards the site from the east and south-east, framing the *porticus*, Room 14, and the octagonal Room 15. If this interpretation of the earthwork evidence is correct, it is highly likely that any structures in the outer court area will be very well preserved, having been deeply terraced into the hillside. The condition of the lower bath suite in the south-west range of the excavated villa demonstrates the potential for high-quality structural and stratigraphic preservation.

Concentrations of rubble and Roman brick and tile around the spring (**3**) may indicate a springhead structure. Such a building would have been very close to the central E–W axis of the

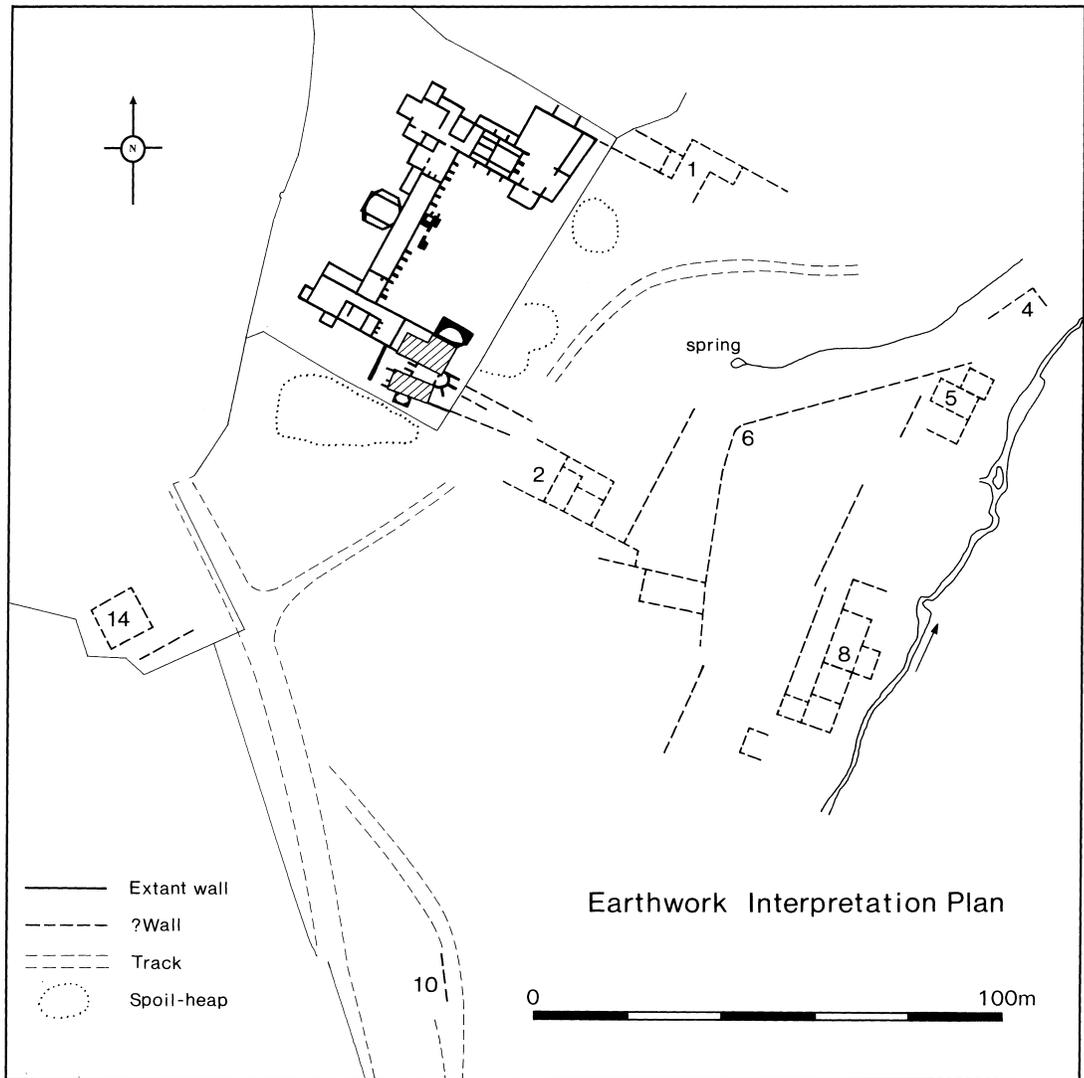


Fig. 9. Interpretative plan of the field survey.

proposed outer court, and would be in keeping with the symmetry of the existing, and proposed larger, layout. Although set to one side of the main building complex, the so called '*nymphaeum*' at the Chedworth villa demonstrates the architectural enhancement that can be accorded to springs in such locations.

The complex of structures adjacent to the stream presents an especially fascinating and important new aspect of the site. Here, an area of at least 0.7 ha (1.7 acres) appears to be defined by a major boundary feature, possibly a wall, 6. Within this area, defined on the east by the stream, at least three potential structures have been identified. At 4, an oval mound associated with a possible structure is adjacent to a point where the stream narrows and appears to have been artificially

channelled. Although in its present form the stream does not appear to carry an especially fast race of water, the possibility of a mill should not be discounted. A further building, **5**, is strongly suggested by the earthwork evidence and may be associated with **4**.

A particularly satisfying result of the earthwork survey has been the rediscovery of the building examined by Hicks in 1820 (**8**). The plan as published by Mrs. Clifford (Fig. 5) can be closely matched with the surface remains recorded during the earthwork survey and would appear to contradict contemporary accounts of its subsequent destruction (Clifford 1954, 14). Additionally, the earthwork evidence suggests the presence of a further room not recorded by Hicks. This projects towards the stream from the centre of the eastern side of the building. The symmetry of this building and the projecting room invite comparison with villa buildings of 'simple' plan.

Features **4–8** also present a set of alignments that could support the early villa sequence proposed by Leach (1998, 132–3). He suggests that the building located by Hicks (our **8**) could have been an earlier house associated with the detached bath suite represented by Rooms 9–11 of the excavated villa (Fig. 3). The axis of building **8** is at exactly 90° to the long axis of the putative detached bath suite in the south-west range of the villa complex. Leach further notes the similarity in plan of **8** to other 'early' villas in Britain — a range of rooms laid out along a simple corridor or *porticus*. If the additional room located on the east side of the structure is proven, it would reinforce this argument and could be interpreted as the *triclinium*. The dimensions and plan of **8** are not dissimilar to the villa at Clearcupboard, Farmington, 10 miles north-east of Cirencester (RCHME 1976, 55–6).

The discovery of tile wasters in the stream bed during survey to the south of **8** suggests that a wide range of activities additional to those of domestic nature may have been undertaken in this lower area. It should also be noted that Greenfield recovered tile wasters during the re-excavation of the villa (Bevan 1998, 101).

On the plateau to the south of the villa the earthwork evidence is concentrated around the area of heavily burnt material associated with a platform, possible wall, and the terrace-way at **10**. This may indicate an area of industrial activity. It should also be noted that this area is immediately above the findspots of tile-wasters in the stream bed. If this is an area of industrial activity and was contemporary with the excavated villa, it is far enough away from the latter not to have inconvenienced the villa occupants seriously. This complex is also associated with a terrace-way that clearly pre-dates part of the modern bridle-path along the western edge of Field D and may indicate another possible approach to the villa site.

The square structure recorded at **14** is of particular interest given its shape and location. The building is at a higher level than the excavated villa complex and is discretely placed to the south-west and slightly to the rear of it. Construction of the building necessitated the cutting of a substantial platform into the foot of the hill overlooking the villa and was clearly an undertaking requiring considerable effort. A Roman date appears very strong based on surface finds of Roman brick and tile and tesserae. The shape of the building immediately invites comparison with temple or mausoleum structures known to be associated with other Romano-British villa sites, notably Chedworth (RCHME 1976, 28 — 'The Capitol'), Lullingstone, Kent (Meates 1979), and Bancroft, Buckinghamshire, where a temple/mausoleum was located on a low hill overlooking the main villa complex (Williams and Zeepvat 1994). Such a structure would not be out of place in a villa on the scale of Great Witcombe.

The survey of the immediate environs of Great Witcombe villa has revealed much new information about the layout of the villa and its immediate environs. The excavated villa house clearly did not stand in isolation. Most of the new features located appear to be in relatively good condition with no evidence of serious post-Roman agricultural damage and will represent a potentially important surviving stratigraphic and structural record for the whole complex. This

must be viewed as of great importance given the poor records of the stratigraphic sequence in the excavated villa house (although undisturbed stratigraphy may survive beneath the 19th-century spoil-heaps, **11** and **12**). The identification of an outer court with associated landscaping is especially important and exciting as such features rarely survive as earthworks in Roman Britain. Structural remains and evidence of industrial activity in the vicinity of the stream will also be of great value in understanding the status, economy and function of the whole Great Witcombe complex. Although far from certain, the observation that the buildings at **4** and **5** could be associated with the artificial channelling of the stream raises the possibility for a Romano-British mill-site or industrial activity.

The survey described here has clearly demonstrated the potential for further research. It is also clear that the results from Great Witcombe should not be held as unique within the region. A number of other Cotswold villas also have strong potential for detailed analytical earthwork survey. Notable examples include the environs of Spoonley Wood, Sudeley; Bibury Mill; and the Lilyhorn villa, Bisley with Lypiatt (RCHME 1976, 113–15, 14, 14–16).

General Remarks

The surveys of the environs of the villa have yielded significant new information that advances our understanding of this important monument in a number of respects. Corney has fully analysed the results of his survey above, and so discussion here will be limited to three themes deserving of a little more comment. First, it is worth considering whether the siting of the villa was influenced by the Iron-Age occupation at High Brotheridge/Cooper's Hill (and indeed the slight hints of Iron-Age activity on this site itself)? The character of the High Brotheridge complex is poorly understood, but if the interpretation mooted above of a late Iron-Age dyke complex is correct, could it have been a factor in the choice of this site for a villa? For this hypothesis to be substantiated it requires the building excavated by Hicks in 1820 near the stream to be a precursor to the main villa house. Leach (1998, 132–3) first proposed such an interpretation, and wondered whether this might provide a context for the detached bath-house later incorporated into the main villa house as Rooms 9–11. Corney further observes above that Hicks's building is on the same alignment as the bath-house (and slightly off that for the main house). If the interpretation of an 'early' villa could be substantiated the juxtaposition with High Brotheridge might be significant, for 1st- or early 2nd-century villas are known in proximity to late Iron-Age dyke systems at the Ditches, near Bagendon, and at Shakenoak and Ditchley in the vicinity of the North Oxfordshire Grim's Ditch. Millett (1990, 92) believes that these sites demonstrate continuity of land holding from the late Iron Age into the Roman period, the native aristocracy readily adopting a Roman form of wealth display. Only further excavation will demonstrate whether this hypothesis can also be applied to Great Witcombe.

Field survey has demonstrated that the villa possessed a second, lower, courtyard that lies beyond the bounds of the Guardianship area. This now places Great Witcombe into the well-attested tradition of double-courtyard villas in the Cotswolds and indeed reinforces the interpretation of the remains as a villa. Webster (1983, 15) considered Great Witcombe to be a 'villa of doubtful function', favouring a more religious role. The case for the traditional interpretation is more compelling now, although a simple bipartite classification of secular and religious obscures what is likely to have been a more blurred reality in which the two functions were not mutually exclusive, a point amply demonstrated by the possible shrine to the south-west of the main building.

The villa can now be shown to have been set within a landscape of subsidiary buildings and probably minor industrial activity. Tile wasters have been found in the stream-bed, and the mag-

netometer survey has detected areas of debris with strong magnetic responses reminiscent of kilns and hearths to the south and north-east of the villa. Slight evidence for the working of copper alloy and lead has been recorded during excavation of the villa (Leach 1998, 120), and the discovery during Lysons's excavations of a stone mould strongly suggests that pewter vessels were manufactured at Great Witcombe (Beagrie 1989, 186). It is quite likely that such industrial and craft activity occurred away from the main residential complex.

One only has to refer back to Leach's (1998, 129–35) discussion of the context of the villa to see how much new information has been generated by the recent surveys. It must be remembered, however, that the conclusions of the field and geophysical surveys are to lesser and greater degrees interpretations of not always clear-cut data. Targeted excavation to test the hypotheses proposed here would be extremely valuable and should answer a number of the still unresolved research questions about this important villa and its landscape.

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