

Submitted by David Hall to the University of Exeter
as a thesis for the degree of
Doctor of Philosophy by
Publication in
Archaeology
In December 2014

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The context of *The Open Fields of England*

David Hall

Introduction

The Open Fields of England (Hall 2014) explores the system of agriculture that operated before enclosure. It contains both historical and archaeological evidence and was therefore an appropriate contribution to the Oxford University Press *Medieval History and Archaeology* series. Academic books do not contain all the information that examiners need to have available in a PhD thesis and this paper therefore explains the background and genesis of the volume which makes it suitable to offer for a PhD by Publication. It includes a summary of the preparation process, the main findings with further discussion of some items, and an outline of where future research might usefully proceed.

Archaeological fieldwork

The Open Fields of England is underpinned by many decades of field- and document-based research. My first degree in natural science (Oxford 1962) was an excellent basis for archaeological and historical research, emphasising the importance of collecting and presenting suitable accurate data from which to draw conclusions, and which allow others to verify them or make different interpretations. On the one hand it was stressed not to accept published statements as correct unless they are supported by good evidence; on the other, not to underestimate the amount of information available in the literature.

Systematic archaeological fieldwork, begun initially as a hobby, operated at two levels. One was to identify sites older than about 850 AD lying in arable land. The technique used was to walk in lines 30 metres apart, field by field when in suitable weathered condition, to identify relevant artefact scatters. Many new sites were discovered and the results for a group of parishes were published (Hall and Nickerson 1966; Hall and Hutchings 1972). Expertise was developed

to identify early-medieval potsherds (dating c.400-850 AD, hereafter called “Saxon”). These are difficult to find and have been overlooked in the past.

The other initial fieldwork technique was to map medieval deserted and shrunken village earthworks, for example Newton Bromswold (surveyed 1972, reproduced by Hunt 2002, 28). These plans are essential to interpret the development of medieval settlements which were often larger and more complex than those recorded on later maps. Village earthworks are not further considered here since settlement structure was not a theme pursued in the *Open Fields* book. In addition to some documentary work I also undertook limited excavations. An example (in 1965) was a mound at Strixton, Northamptonshire, marked on a map of 1595 lying in a close called *Mill Close*. The mound was shown to be that of a post-mill operating from the 13th to the 15th century (Hall 1973).

Interest in open fields in the form of ridge and furrow also began in the early 1960s. It was intensified by the discovery, in 1962, of a previously unknown detailed map of the open fields in Strixton dated 1595, the shrunken village where the first excavations took place. It had already been observed (in 1961) that boundaries¹ between furlongs in earthwork ridge and furrow fields continued into adjacent arable fields, visible as low linear boundaries. Mapping of these allowed the reconstruction of complete township open-field maps (Hall 1972). Figure 1 shows such a linear boundary at Strixton; it corresponds to a furlong boundary marked on the 1595 map. In view of the subsequent discovery that such boundaries survive in most parts of lowland England, earthworks of this type are perhaps the most important single monument type for furthering research into medieval fields. The formation of soil boundaries depends only on the plough turning in the same place for a few centuries – it is not dependent upon lands being ridged. So where there were once arable strips in earlier centuries, even if ploughed flat, banks will survive. The existence of the banks does not imply or prove there was ever any extensive field system like those of the East Midlands.

¹ There were two types of physical boundary, called headlands (for furlongs with lands lying at right angles) and joints (where lands in adjacent furlongs were aligned). Both leave earthworks because of soil accumulation. The term “furlong boundary” is used here to include both. Joints have twice the amount of soil compared to headlands (diagram in Hall 1982, fig. 3).



Figure 1. An earthwork linear furlong boundary ('joint') at Strixton, Northants

Over time, interest in open fields superseded research excavations, firstly because it was realized that environmental input (not then available) was an essential part of a final synthesis of site archaeology, and secondly field boundaries needed recording as soon as possible because of erosion by arable agriculture. The initial study region was the Higham Ferrers Hundred of Northamptonshire, an area of about 30,000 acres, which at the time was larger than any area hitherto field-walked in detail. The aim was to identify systematically pre-850 'sites', as explained, as well as open field systems. The survey area was widened to other parishes and in particular to make a record of landscapes about to be destroyed by urban expansion around Northampton, Peterborough and between Newport Pagnell and Bletchley in what has become Milton Keynes (New Town). Sample parishes were studied in neighbouring counties, for example Bedfordshire (Hall 1991, surveyed 1977-8), as well as the completely different landscape of the Yorkshire Wolds (Hall 2012, surveyed 1976-82).

An introduction to Midland-type fields was published in the Shire Archaeology series (Hall 1982 reprinted 2010), and in 1995 a volume was published by the Northamptonshire Record Society for the whole county, using primarily an historical approach. Another publication resulted from an English Heritage project to assess for scheduling the extensive areas of surviving ridge and furrow in lowland England, preferentially selecting those which were accompanied by detailed historical records (Hall 2001).

The Northamptonshire fieldwork survey continued with completion of the furlong mapping for the whole county which has been published at the 1:25000 scale, taking advantage of GIS mapping techniques, in the *Rockingham Forest Atlas* (Foard *et al.* 2009) and *An Atlas of Northamptonshire* (Partida *et al.* 2013). As part of my preparations for *The Open Fields of England*, sample contrasting parishes were also studied in the counties of Berkshire, Dorset, Norfolk, Sussex, and Suffolk. This demonstrated that field boundaries survived and could be mapped outside of the East Midlands where so much of the initial work was based (see Hall 2014, figs 5.3; 5.4; App. 2-4).

Historical Research

My interest in local history began with a study of the Wollaston Parliamentary inclosure map of 1789, which I was asked to copy by a village historian in 1953. After the first Strixton excavations documentary evidence was sought to explain some of the findings. This pursuit involved visiting Althorpe House to see maps held in the Spencer archive (the Spencer family had owned Strixton) and to the County Record Offices of Northampton and Leicester. At Leicester there were medieval court rolls which showed the urgent requirement to 'upgrade' my existing O-Level Latin to medieval Latin, and in particular to master the calligraphy of medieval documents.

In 1961, I joined the Northamptonshire Record Society (founded 1920) and at the same time began regularly visiting the Northamptonshire Record Office to study documents relating to the open fields of whichever parishes were at the time being surveyed. These studies helped to develop expertise in handling a wide range of documents and led to a realisation of the importance of field-

books (detailed open field surveys; Figure 2), which proved to be more numerous than record office indexes had indicated. In particular, with the help of the surveyed furlong maps, it was possible to reconstruct open-fields and study field structure. Salter had done such a map for Oxford's fields of the fourteenth century, using a nineteenth-century map as a base (Stevenson and Salter, 1939, 502). Many parishes have field-books but no map, so the survey technique to produce a map based on the surviving earthworks of open field boundaries opened up potential for analysis of a variety of township structures.

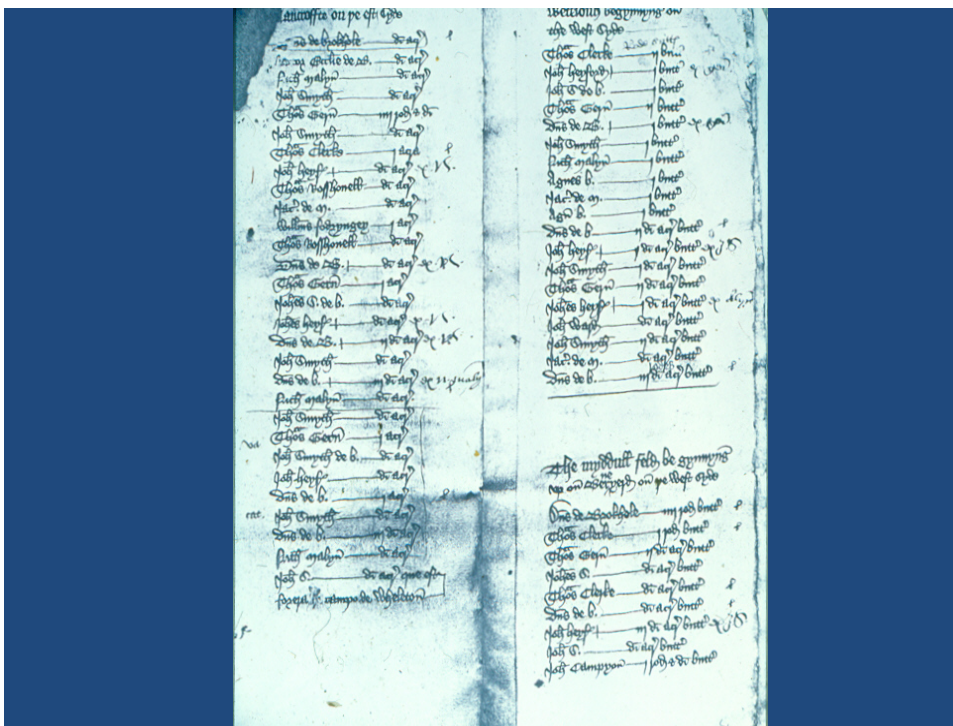


Figure 2. An extract of a field-book of 1433, Muscott, Northamptonshire

In 1995, I became editor of the Record Society's annual journal, *Northamptonshire Past and Present*, and in 2008 was appointed general editor, being responsible for the main series of scholarly texts and essays produced by the Society.

Methodology for The Open Fields book

By about 2000, the information gathered, both historical and archaeological, provided the basis for taking a wider view. The Northamptonshire work brought together the characteristics of the East Midland type of field structure with much more detail than had previously been available for any county (Hall 1995). The Shire Archaeology booklet (Hall 1982) needed updating, so it was appropriate to make a countrywide study to include the large areas of England outside of the central region (mapped in Hall 2014, Fig. 0.1), which have received much less attention until recently (e.g. Rippon 2008 for the West Country). It was essential to study each county to gather detailed information relevant to open fields before it was possible to write informed chapters on specific themes.

Sources provided by standard works on field and settlement studies were first studied. The technique for each county was to then search its archaeological and historical journals, record society publications, and to look at publications of medieval documents such as cartularies, *Inquisitions Post Mortem*, court rolls, and glebe terriers. The general county literature was browsed: although many items are popular accounts, some had useful photographs or maps, and a few provided fully referenced sources. Counties were very variable as to what had been published. It was also necessary to study those Anglo-Saxon charters which provide information about the arable landscape.

Several types of archaeological evidence have relevance to the origin and development of fields. The mapping of furlong boundaries in Northamptonshire and adjacent counties has been discussed. Identification of Saxon settlement sites by ground survey is equally important. This was undertaken in the long-running Northamptonshire county field survey and is further discussed below.

The large amount of data collected needed marshalling so that it did not clog the flow of the text. This was done firstly by putting most of the detailed information into a working gazetteer arranged by historic county, and secondly by arranging the text chapters into major themes, which would provide the key points for the final chapter (6). This chapter discusses the genesis and development of open fields and, in particular, it attempts to explain the great

differences found between the central region and the large areas of the country lying to the west and east of it.

One of the many interesting aspects of collecting together data from all parts of the country was the realization that quite important information relating to the structure and origins of open fields had previously been identified for some time but had been overlooked in terms of its relevance. For instance, the location of demesnes was said to be uncertain, whether dispersed or lying in a block, when discussed by Titow (1965, 97). Yet as long ago as 1897 Corbett had recognised that both types – compact and dispersed – could be found in Norfolk and that there was no single uniform type (Corbett 1897, 75). Furlong boundaries had been recognized by aerial photography and linked to map evidence at Litlington, Cambs (Crawford 1937). Beresford (1948, 40 f.n. 1) referred to this paper, but Crawford's observation never seems to have been followed up by historians and historical geographers to be used as a fieldwork technique for mapping medieval fields in England.

Terriers of scattered strips which had the same neighbours in possession of strips on each side, have had much discussion, with various explanations offered, usually of the type that it was a rare event caused by holding splitting, or a late re-organization by a lord. However, Homans (1941, 92) referred to a Yorkshire field-book of the early 15th century that had a regular tenurial order. Such an arrangement explains the occurrence of regular neighbours for any particular scattered holding, and further implies that field systems exhibiting such structure must have been planned on a large scale at an early date – certainly not early-modern.

Saxon cemeteries have long provided an indirect general start-date for open fields. Few cemeteries are later than the seventh century and most of those found in the central region of the country lie underneath strip fields which must therefore post-date them. By way of example, both cemeteries and settlements have been mapped in relation to medieval fields at the 1:25000 scale (Hall 2013, maps 1M–86M). The significance of this observation is further discussed below with that of the dating provided by the Saxon-period settlements.

Data was therefore collected with these themes in mind for all English counties and arranged in chapters ready for a final synthesis. The working county gazetteer was reduced in size and put at the end of the book providing a summary account of field systems organized by the historic counties in a standard format. Each entry touches upon the demesne, yardland size, work-service, assarts, and the physical remains of ridge and furrow. The Gazetteer gives much of the detailed evidence used in the main text and serves as a hand-list for further local studies, as well as providing a referenced data-base for the text. In order to prevent the volume from becoming over-lengthy, there is little repetition in the Gazetteer of material used in the text.

Results

The book presents a detailed study which draws upon a wide range of primary data with new research based upon open-field remains and their related documents. The whole of England is examined, describing different kinds of field-systems and their associated land-use and settlement.

First, the land-use found in examples of townships in different geographical locations across the country is examined (Chapter 1). The contrasting differences between the regions has not been adequately stressed hitherto. After examination of the main types of regional and sub-regional field systems (Chapter 2), their detailed structure in terms of manorial demesne, tenurial arrangements, and management are examined (Chapters 3 and 4). Early evidence for settlements and fields was then brought together using archaeological and historical sources (Chapter 5). Chapter 6 discusses processes that may account for differing field-system types and their origins using the data presented. Previous explanations of open-field origins and possible antecedents to medieval fields are discussed. Various types of archaeological and historical evidence relevant to Saxon-period settlements and fields are presented, followed by the development of a new theory that may explain the lay-out and planned nature of many field systems found in the central region of England. A summary and suggestions for future research was described, which are further discussed below.

Items enlarging discussions in the volume

a) Saxon settlement distribution

The discovery, in the 1960s and later, of surface pottery-herd scatters representing Saxon-period sites located in arable land away from modern villages, was a significant archaeological breakthrough. It helped fill in the long gap between Romano-British period and tenth century, the earlier part of which had hitherto been represented by little evidence other than cemeteries, with the contemporary settlements undiscovered archaeologically. During the Northamptonshire field survey many new sites were discovered, the major ones being plotted on Plate 9 of *Open fields* which illustrates the site numbers and general location in terms of soil type.

Part only of this information has been used by Foard (in Partida et al 2013) and by Williamson (in Williamson et al 2013) and analysed in conjunction with other information. Both authors needed data for their discussions of village origins (although archaeological 'sites' were not part of the project design) but there was not time to present all of it. Incomplete results only were therefore available, and so it is not at all appropriate to treat the Northamptonshire Saxon site distribution as though it is complete. Some further discussion is therefore provided here.

The field survey - especially from 1990 onwards - was primarily aimed at mapping all of the county's medieval fields. *Open Fields* Plate 9 and Figures 3 and 4 (below) mark which townships had no fieldwork of sufficient intensity to discover sites represented as surface sherd scatters. Even for those which did receive some detailed fieldwork, it was only in exceptional cases that all the arable was searched. There were several reasons why it was not possible to study a whole parish intensively. During the early stages of the survey many of them had a high percentage of grass which obviously yielded no artefacts. Even in townships that were under mainly arable cultivation, conditions had to be suitable - well weathered and viewed in subdued light. The problems are epitomised by one of the visits to Wilby in 1982 where an entry in my notes says:

December 18. Fine sunny day, hardish frost & a snow flurry which settled and did not thaw properly, so no flint or pottery [was found], only furlong boundaries.

Hence, although the parish of 1,132 acres was almost entirely arable and had good limestone and ironstone loams on which Saxon and other settlement is often found, very little archaeological material was recovered.

It would be possible to make an estimate of the percentage of arable land in suitable condition for each parish at the time of survey from the original fieldwork record, but this was not considered worth doing for the present book and would be time consuming. And even if the calculation were made, a single multiplying factor to arrive at an estimate of the total number of sites would not be sound. Archaeological site distribution is not something that can be treated in a simple manner statistically, depending for example on many factors such as soil type and the proximity of a reliable water supply. It may be useful for future workers wishing to fill in the many gaps to know what has been done, but then it is likely they would survey whole townships again using a strict survey technique based on the national grid and use GPS recording for each sherd discovered. It is therefore more useful to take the results at face value and see what valid conclusions can be drawn, rather than make dubious estimates of likely total numbers.

In terms of site numbers, (p.136) in the 239 townships which had some detailed field-walking, 129 Saxon-period sites were identified. Most of them lay on light soils of river gravel, limestone, or Northampton Sand and Ironstone. In terms of townships, seventy-eight yielded Saxon material, of which twenty-five had more than one Saxon-period site out in the fields. Fifty-three townships have only one known site. These were plotted as Plate 9 of *Open fields*.

Additionally, not before published, Figure 3 of this paper shows 102 find spots with 1–4 Saxon sherds. Like the larger sites they lay predominantly on well-drained soils and avoid heavy clay. The smaller Saxon sites are in most cases likely to be re-classified as 'normal' sites when further investigated.

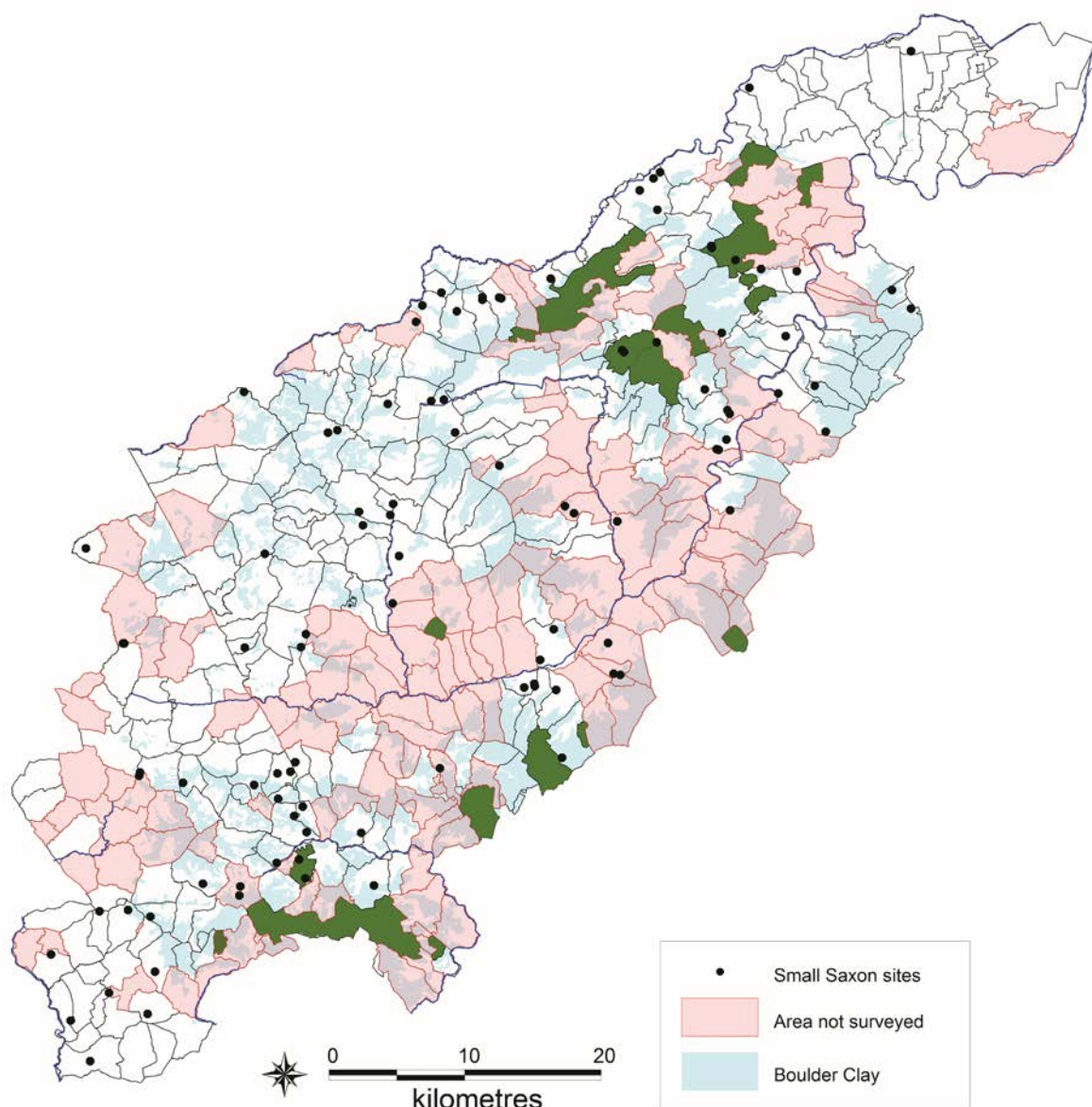


Figure 3. The distribution of small Saxon sites in Northamptonshire ‘Area not surveyed’ in the legend indicates where there was insufficient fieldwork to identify Saxon-period sites.

It is clear, therefore, that there is a considerable body of evidence to add to that of Brixworth (Hall and Martin 1979) to show that there was desertion of Early to Middle Saxon period Saxon sites in many townships when presumably the inhabitants moved to the present-day villages. Whether the sites were all abandoned in a given township at the same time with the intention of forming a ‘nucleated’ settlement and then to lay out extensive planned strip fields cannot be proved. Nor can it be proved that such a process did *not* occur. We are left

to observe the result – deserted Early to Middle Saxon sites lying underneath medieval strip fields – whatever the interpretation of the mechanism.

A date range for open field formation in Eastern England is also given by pagan cemeteries, which are not later than the seventh century and pre-date the fields giving a *terminus post quem*. The open fields also overlie the deserted Early-Middle Saxon settlements. None of these sites has yielded wheel-made Late Anglo-Saxon pottery types, which date from the mid-ninth century onwards. These settlements therefore provide an indirect *terminus ante quem*. This is based on negative evidence, but there are very many sites providing the same information. In Northamptonshire alone there are 231 such find spots. It seems, therefore, that many field systems were created during say 650 to 850.

The Saxon-period sites found during the Northamptonshire survey formed an essential data-base for establishing the chronology of planned strip fields. The potential was first realised from the results at Brixworth in 1974 (Hall and Martin 1979; Hall 1979) where many settlement sites were found. The amount of Saxon surface material found there is so far without parallel. Of the two larger sites, one lies partially overlying a Romano-British villa and the other developed into a manorial site called Wolfage, detached from the medieval village. Whilst not claiming urban status for Brixworth, there must have been a good reason for the establishment of a major Romanesque church there in c. 800 AD (Parsons and Sutherland 2013). The Brixworth intensive study should not overshadow the sites discovered in the remainder of the county. Nowhere else received the same amount of study that was carried out at Brixworth, but there were many places where the normal single-visit surveys were made that revealed more than one site, as has been shown.

b) Saxon activity on Romano-British sites

Saxon-period pottery was identified on many of the larger Romano-British sites at an early stage. In all 29 Roman sites in Northamptonshire had significant amounts of Saxon-period pottery, sufficient to be called a site, and are plotted on Plate 9 of *Open Fields*. What was not apparent until the finds were re-examined in detail more recently, was that many more Romano-British sites yielded just a few Saxon sherds. In all there are 104 Roman sites yielding 1–4

Saxon sherds, which are shown on Figure 4, marked as black spots. Many of them lie on clay-based soils. Figure 4 also shows the distribution of Romano-British sites (red) which have no known Saxon activity (449 sites). Saxon-period sites produce so few sherds that some of these Roman sites may have had fifth to seventh century occupation that is not picked up through field survey, so adding to the total. The Romano-British sites are those visited during the survey, most of which were new discoveries and does not include sites examined by commercial excavations made during the last 20 years, which can be found in HER sources.

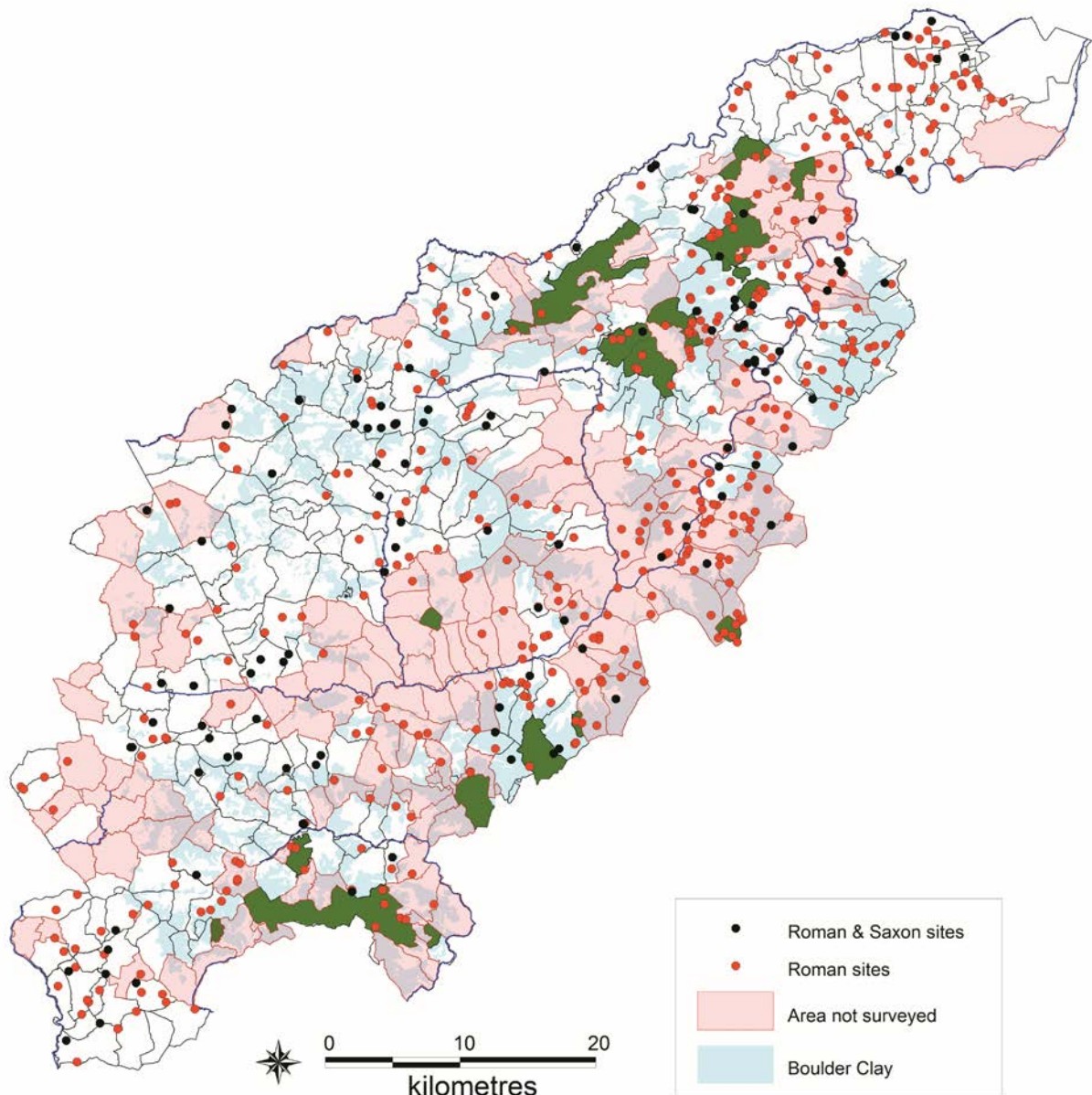


Figure 4. The distribution of Roman sites in Northamptonshire, distinguishing those yielding Saxon sherds (black)

This finding throws new light on the state of the countryside of the central region in the centuries immediately following the Anglo-Saxon settlement. It would seem that all existing Romano-British sites were visited, if not actively used. Hence the countryside was largely open and free from woodland regeneration, with Romano-British sites visible. This is supported by recent environmental work (Rippon *et al.* 2012, 58-9). Never-the less, most larger Saxon sites and most substantial medieval villages developed on good quality soils. Any re-growth of woodland on the boulder clay uplands must have been short lived, and it was rapidly being assarted by the ninth century, as shown by charter evidence of that date.

c) The extent of arable in 1086

Another theme discussed in *Open Fields* was an assessment of the Domesday Survey in relation to the extent of arable land. Often the values recorded, such as hides, if taken to be 120 acres (for which there is ample pre-Conquest evidence in some historical sources), would indicate that a very small percentage of a township was arable. In apparent concordance with that interpretation, it is often found that recorded populations are low.

However, simple numeric relationship between some of the Domesday fiscal records and the oxgang and yardland assessments of the thirteenth century and later have been noticed from time to time in several counties (p. 199). They seem to imply that the landscape of the central region was largely opened up to the plough in 1086, yet often the statistic usually interpreted as 'ploughs' or 'ploughlands' in Domesday is too low to be consistent with large areas of arable. The volume therefore contains discussion (pp. 196-203) presenting the case that the Domesday assessments are primarily fiscal and should not often be taken literally, and that the landscape was indeed largely opened up. The work of Rippon *et al.* (2012, 58–9) has shown from the environmental evidence for tree and shrub pollen, that the central region and East Anglia were very open in both the Roman period and the early Middle Ages. Roberts and Wrathmell (2000, 28-31) have collected together historical evidence to show where woodland was absent or rare in the period c.730–1086. In the central

region in particular it was very low. If the land was open it must have been grazed or ploughed or it would have reverted to woodland rapidly.

The suggestion that most Domesday assessments are primarily fiscal and need be used cautiously as quantitative information, may seem something of a heresy. But the record of 'half a villein' in Shropshire should caution against too hasty an interpretation of population (Williams and Martin 2003, 715). In this case it is likely to mean that a holding normally occupied by one villein had been split between two owners. The entry is telling about the fiscal nature of a holding, not about population.

Future developments

Although much has been written about open fields there remains much to be done. Fields have copious records, some very detailed, that lend themselves to analysis of their structure. This is fairly evident in the central region where open fields survived into the early-modern period creating readily accessible records, but is less obvious in other regions. However, monastic and other medieval documents reveal the nature and working of open fields before they disappeared when enclosed at an early date and it is clear that there are many suitable documents. One problem is a dearth of readers able to cope with records written in medieval Latin and they therefore receive little study.

An approach would be to design programmes for studying sub-regions in several parts of the country outside the East Midlands to encompass a range of landscape types. Choice of sample would be influenced by first establishing that there was adequate documentation. In order to achieve substantive results, it is necessary to incorporate historical evidence with the physical record of the medieval landscape using fieldwork evidence. Although potentially a time-consuming technique, it can be speeded up by adequate preparation, such as having available the field boundaries recorded by the First Edition Six Inch maps (scale 1:10,560) produced by the Ordnance Survey, mostly in the 1880s, which mapped boundaries of which some are likely to relate to an earlier unenclosed landscape. Other useful information is to be found in LiDAR surveys that reveal very slight earthworks. In most eastern regions, the modern landscape has been eroded by hedge removal. LiDAR will assist the

fieldworker, first to identify faint linear earthworks that underlay former hedges which can then be assessed as to whether they were formed by ploughing within enclosed fields or whether they are older features used as a ready-made bank suitable for a hedge. Linear earthworks which were always 'free-standing' should be readily visible on the ground and can be positioned accurately by GPS measurement.

Once complete maps of a block of several townships have been prepared, it will be relatively simple to identify medieval fields from the early descriptions, assisted by field-names that still survive on tithe maps or other sources. The survey technique is widely applicable and has been used successfully outside of the central region to produce furlong plans of townships in Norfolk, Suffolk, Essex and Sussex (Hall 2014, 291, 162, 195, 328).

Open Fields tends to adopt the view that there is little interaction between Roman-British fields and those of the late Saxon period in the central region. A very different situation is likely to be found in the regions to the west and east. Studies of the nature proposed could be related to several pieces of work that are being made specifically to examine the survival of pre-medieval field-elements in the landscape, such as the 'Fields of Britannia Project' (Rippon *et al.* 2012; forthcoming), and the results of a study led by the University of Reading and Cotswold Archaeology on Roman Rural Settlement. Another study currently under way titled 'Planning in the Early Medieval Landscape' is also likely to reveal evidence of planned elements in the Saxon landscape which can be related to both the Romano-British countryside and the later medieval strip fields (Blair and Rippon, forthcoming). As explained (p. 185) farms and small settlements named 'hyde or 'worthy' may be the successors of early settlements, some possibly of Roman origin. Such places should be incorporated into the sample regions.

Overall, the conclusions are that the central region shows much evidence of having a system of planned fields laid out in the late Saxon period, before the eleventh century. Much more work is required in the regions outside of this area, comprising both historical and fieldwork studies. It will then be possible to

build up a sound data-base to obtain a national view of the details of field-system development in the first millennium AD.

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