

Surrey Archaeological Research Framework 2006

Providing the foundations for future archaeological work in Surrey

David Bird

Surrey County Council
County Hall
Kingston upon Thames
Surrey KT1 2DN

www.surreycc.gov.uk

Surrey Archaeological Society
Castle Arch
Guildford
Surrey GU1 3SX

www.surreyarchaeology.org.uk

INTRODUCTION

What is this document?

This document aims to provide a guide to the questions we should be asking about the archaeology of Surrey (in its broadest sense) and ways in which we might be able to find the answers. Of course, we know that we will not be able to find them all, and that indeed it is in the nature of archaeology that as we seek the answers we often find that we have ended up posing new questions. Although the document is concerned primarily with archaeology, for the later periods in particular it seeks to recognise the value of a combined approach with historical research, and in general aims to encourage closer cooperation between archaeologists and local historians.

This is not an archaeology of Surrey. For that, see the works cited below. It was originally intended that the document would be an archaeological research framework using the model established by English Heritage some years ago and followed, more or less, in a number of regions. Work has begun on the production of such a document for the South-East as a whole. In the knowledge that there would be an overall South-East Framework and as a result of comments received, particularly during the initial consultation process, the approach for Surrey was modified, as explained below.

In places this will read as an unfinished document. That is because there was not enough time for additional research to fill gaps, and some sections in particular need further specialist input. This should serve as a reminder that the document as a whole should always be regarded as work in progress. In many ways it will be a measure of its success that it is soon out of date.

Why do it? Who is it for?

It is important to understand archaeology at the local level as the foundation for a proper understanding at regional and national level. Indeed this is the only way to establish a meaningful national picture; much of what is currently taught is generalised from a few better understood areas, which we are coming to realise are by no means typical. Surrey in particular has a lot to offer as a kind of frontier region or buffer zone between Wessex and Kent, or between areas to south and north of the Thames. Also, from the Roman period onwards, the county has been a substantial part of the immediate hinterland of London, England's most important city and later one of the world's greatest cities. Better understanding of the past adds to a local community's pride of place and sense of belonging, ever more important in an increasingly homogenised world. It also provides a stronger basis for decisions about the conservation of an ever-dwindling resource.

There has been a great deal of archaeological work carried out in advance of development over the last three decades and there is a huge amount of new information which has yet to be properly digested. At the same time many of the old ideas are being challenged by new thinking. So we need to come to grips with what we already know and decide what we would like to know and the best way to achieve that. Even development-led rescue work will be more useful when carried out against

such a background: it points to the right questions to ask, and may help with the difficult decisions that sometimes have to be made on site as to where to concentrate resources. Similarly we can hope to attract more funding and general support if proposed work of any kind is carried out as part of a recognised programme.

This framework aims to

- identify the main gaps in our current understanding about Surrey's past
- set out topics for future research
- strengthen coordination of effort on research into Surrey's historic environment
- provide the basis for decisions about the targeting of academic research/endeavour
- provide the basis for decisions about the effective management of the archaeological resource

It is intended for use by

- the people of historic and administrative Surrey
- anyone interested in the archaeology and history of Surrey in its widest sense
- landowners, land managers, conservationists, planners, curators and archivists
- developers and archaeological contractors

As one result of the initial seminar process, a further aim has been to identify key projects that can be undertaken by archaeological bodies in Surrey over the next few years. In particular, action is needed to tackle some of the major gaps in our understanding. It is most encouraging that work undertaken towards the preparation of this Framework is already having an effect: Surrey archaeologists are actively discussing what should be done and how work should proceed in the future.

Area covered

Modern administrative Surrey has been created by constant tinkering with boundaries. The huge outgrowth of London was recognised by the creation of the London County Council and then the Greater London Council, now individual London Boroughs taking up the north-east of the historic county. When the GLC was created it took over most of Middlesex, but the extreme south-west of that county was left out and given to the new administrative Surrey; it is now the Borough of Spelthorne. Smaller changes have included the deliberate removal of any part of the two main London airports at Heathrow and Gatwick for political reasons and the addition of a small area south of the Thames at Runnymede Bridge (an archaeological site of international importance).

The archaeology of modern Surrey cannot be understood without consideration of adjoining areas especially in the South-East (Kent, Sussex and Hampshire) and the Thames valley (especially important for Spelthorne). In particular those London boroughs formerly part of the historic county are crucial to any study. After all, the creation of London in the Roman period has had a lasting effect on the county, it is quite likely that the county's very name reflects the location of the earliest Saxon

settlements in the area around Croydon, and Southwark's first name, *Suthringageweorche*, meant 'the defensive work of the men of Surrey'. The Thames has always been of great importance to the county area both as a resource and as a highway for goods and ideas from Europe and from within the British Isles. The historic county is a logical part of a block of land that makes up the Weald and its surroundings, south of the Thames.

The Surrey Archaeological Society has continued to work in and study the area of the historic county and the reviews of Surrey's archaeology in *The Archaeology of Surrey to 1540* (Bird & Bird 1987) and *Aspects of Archaeology and History in Surrey* (Cotton et al 2004) have covered both the whole of the historic county and Spelthorne. It would be logical for this research framework to cover the same area, while recognising that the Greater London part of the area has recently received attention (Museum of London 2002).

Background

Late in 1987 the Surrey Archaeological Society published *The Archaeology of Surrey to 1540* which aimed to provide a comprehensive overview of the state of our knowledge of the archaeology of the county. This deliberate attempt to provide a 'resource assessment' (to use modern jargon) was in advance of most of the rest of the country, as similarly titled books elsewhere tended to be a round up of current work, not of current knowledge. It was intended to act as a stimulus for future research but no explicit attempt was made to set research priorities. Such priorities were set out on a national basis by English Heritage in 1991 (*Exploring Our Past. Strategies for the archaeology of England*). Subsequently English Heritage carried out a survey of existing research frameworks in England and general attitudes towards the need to re-establish a research base for archaeology. The results were published as *Frameworks for our Past. A review of research frameworks, strategies and perceptions* (Adrian Olivier, English Heritage 1996). The report proposed revised definitions whereby there would be two kinds of framework:

- a research framework, 'mainly concerned with the academic advancement of archaeology, ... rooted in research issues' and
- a management framework, 'concerned with practical issues of conservation, preservation and resource management'. (Documents combining both types might be termed universal frameworks).

Both of these frameworks would be made up of three elements:

- a resource assessment - a 'statement of the current state of knowledge and a description of the archaeological resource';
- an agenda – 'a list of gaps in knowledge, of work which could be done, and of the potential for the resource to answer questions';
- a strategy – 'a statement setting out priorities and method'.

The report concluded that there was a need for regional research frameworks, but recognised that the way to achieve this was for there to be a county-based approach. The arguments about using artificial administrative boundaries were rehearsed but it was accepted that this was the most practical way to proceed. County frameworks could then be combined into regional ones to obtain a multi-period, thematic perspective. It was recognised that the frameworks would need to be regularly reviewed; indeed that they would probably always be an ongoing process. The process could be as important as the framework itself: it was suggested that making people think about the problems would create a 'research culture' and would serve to bring back together the different strands of British archaeology: amateur archaeologists; museums; planning archaeologists; professional units; specialists; universities. Subsequently, English Heritage has concentrated on encouraging the development of regional frameworks rather than pursuing the county framework idea.

The Government has indicated support for properly developed research programmes (*The Historic Environment: a Force for Our Future*, DCMS, December 2001, 1.12) and a number of regional research frameworks have been prepared. Unfortunately, the Government-defined South-East Region has no meaning in archaeological (or indeed any other) terms and this has created difficulties. As a result, the four County Archaeologists for Kent, East and West Sussex and Surrey have developed a project design for a research framework for the Wealden counties (what one might call the true South-East), and this has been submitted to English Heritage who have accepted that a sub-(Government) regional framework is acceptable in this case. A Project Design has been prepared and it is anticipated that work on this wider framework will begin later in 2006. Preparation of a framework for the Thames-Solent part of the Government South-East Region (Oxfordshire, Berkshire, Hampshire and the Isle of Wight) is already in hand. A research framework for Greater London's archaeology has recently been completed (Museum of London 2002) which includes consideration of the north-eastern part of historic Surrey.

The need for a research framework in Surrey was one of the recommendations of the report *Archaeology in Surrey Museums* (Hedley Swain, MoLAS/SMCC 1995). It called for 'the production and dissemination of an archaeological research framework for the county. This should use as a basis the English Heritage document *Exploring Our Past* and be a considered statement of research priorities for the county'. The recommendation was adopted for the Surrey Heritage Strategy Action Plan 1996/97 (published by Surrey County Council), and is repeated in *Surrey's Heritage Strategy*, 2001, Action AR1.1. The process was pursued through conferences and publications (in particular *Aspects of Archaeology and History in Surrey* (Cotton et al 2004) and for the London area, *London under ground. The archaeology of the city* (Haynes et al 2000), and *The archaeology of Greater London. An assessment of archaeological evidence for human presence in the area now covered by Greater London* (MoLAS 2000)) but until recently it has not been possible to find the resources to prepare the Surrey framework itself. This county-specific framework has two broad aims: to serve as a research framework for archaeology in Surrey at least until the creation of a wider framework for the South-East as a whole, and to provide the basis for input into the creation of that wider framework. If the Surrey framework is then thought to have independent value, it could be revised in the light of the work undertaken to create the SE framework.

The preparation of the Framework

Work specifically devoted to preparation of this Framework began with a conference in October 2005, arranged by the Surrey Archaeological Society. It was intended at that time that the Framework would be prepared by creating initial drafts with the aid of relevant specialists and circulating them widely for comments and further contributions. In the event, responses to an original circulation proved disappointing, no doubt because time was limited and inevitably specialists are under pressure. It was, however, still possible to generate sufficient material for discussion at a series of seven seminars held between late January and March 2006. In particular a number of speakers devoted considerable time and effort to presenting their thoughts and opinions as a way of provoking discussion. Papers were circulated beforehand and notes were then sent out afterwards (and placed on the County Council website), thanks especially to the efficiency of Richard Savage (with assistance from Ann Clark). Each seminar was devoted to one or more archaeological periods, except for the last, which attempted to consider overarching topics and themes. Three of the seminars were given over to the period after 1500, divided roughly by topics, in an attempt to encourage discussion about this period, as its archaeology is often ignored in the county. This led to interesting discussions about the links between industrial archaeology and the wider archaeology of the period from 1500 and especially after 1750. The later seminars also considered the ways in which archaeologists and local historians can and should work together. More than 75 people took part in the seminars, several attending most of them. Comments received in other ways took the total of people involved in the initial preparation stage of the Framework to over 100.

Following the seminars, an initial draft Framework was prepared and widely circulated. Comments received were taken into account as much as possible and a second draft was prepared and again widely circulated. A final document was then produced and circulated by email and as a 'hard copy' version; it has also been placed on the Surrey County Council and the Surrey Archaeological Society websites. The process was completed by a conference held more or less exactly one year after the 2005 launch. Rather than marking an end, this conference was the beginning of a new phase, in which the Framework will be put to use, and modified as necessary on a regular basis, if still required following completion of the South-East Research Framework.

The seminar process made abundantly clear that most people who have any connection with Surrey's archaeological community are not interested in strategies as such but wish to concentrate on and participate in projects with a practical outcome. They accept that such projects should have adequate academic justification and be carried out to high standards but prioritise projects according to their personal or institutional interests. It was also recognised that in practice most framework-type documents are worded in such a way that almost any project can be justified. This is an inevitable result of our low level of knowledge about almost any archaeological period.

It was also established early on that the Olivier model is useful as a guide to the way in which thinking should proceed, but that in real life the process is a continuous loop or spiral: knowledge begets questions that beget projects that provide more knowledge that begets more questions, etc, etc, sometimes in the same afternoon on a

single excavation. As a great deal of stress is now laid, rightly, on the need to involve all those interested in the historic environment in the development of archaeological research frameworks, it has seemed appropriate to try to recognise the results of the widespread involvement in our seminar process and not stick blindly to the model. There was also a strong concern that the Framework should not be prescriptive. It is to be hoped, however, that individual researchers will be able to find ways in which the pursuit of their own interests can be tailored towards the advancement of our understanding of key questions. Often this is simply a matter of making sure that others know about work in progress and that it receives some form of publication in due course.

Preparatory work for this document as such revealed that the Olivier model is useful as a guide to the layout, but in practice it is difficult to separate the strands (and they tend to loop back upon themselves) and therefore it can lead to a lot of repetition in writing the Framework. For example consideration of what we know of Roman settlement (the 'resource assessment') automatically includes reference to where there ought to be something but we can't yet find it, which is the agenda, and it probably also leads straight in to a statement about how we might find it (the strategy).

In consequence, in what follows, the main section of the report is devoted to an attempt to identify the key questions and consider how they might be answered. This is done initially by using the standard archaeological periods, while recognising that it is now understood that major changes often came within the time frame of periods rather than at the beginning or end. The period names are widely recognised and make possible reference back to earlier work (with care); they also still usually define general areas of interest for researchers. The periods are, where possible, considered using common themes, and these and other more general themes are brought together at the end. Key issues and suggestions for research projects are presented, the latter tempered by considerations of practicality. The first may be especially of value to professional units constrained by rescue circumstances and to individual researchers; the second will hopefully be used as the basis for the selection of future projects by the county's main archaeological bodies and perhaps by those seeking topics for university research.

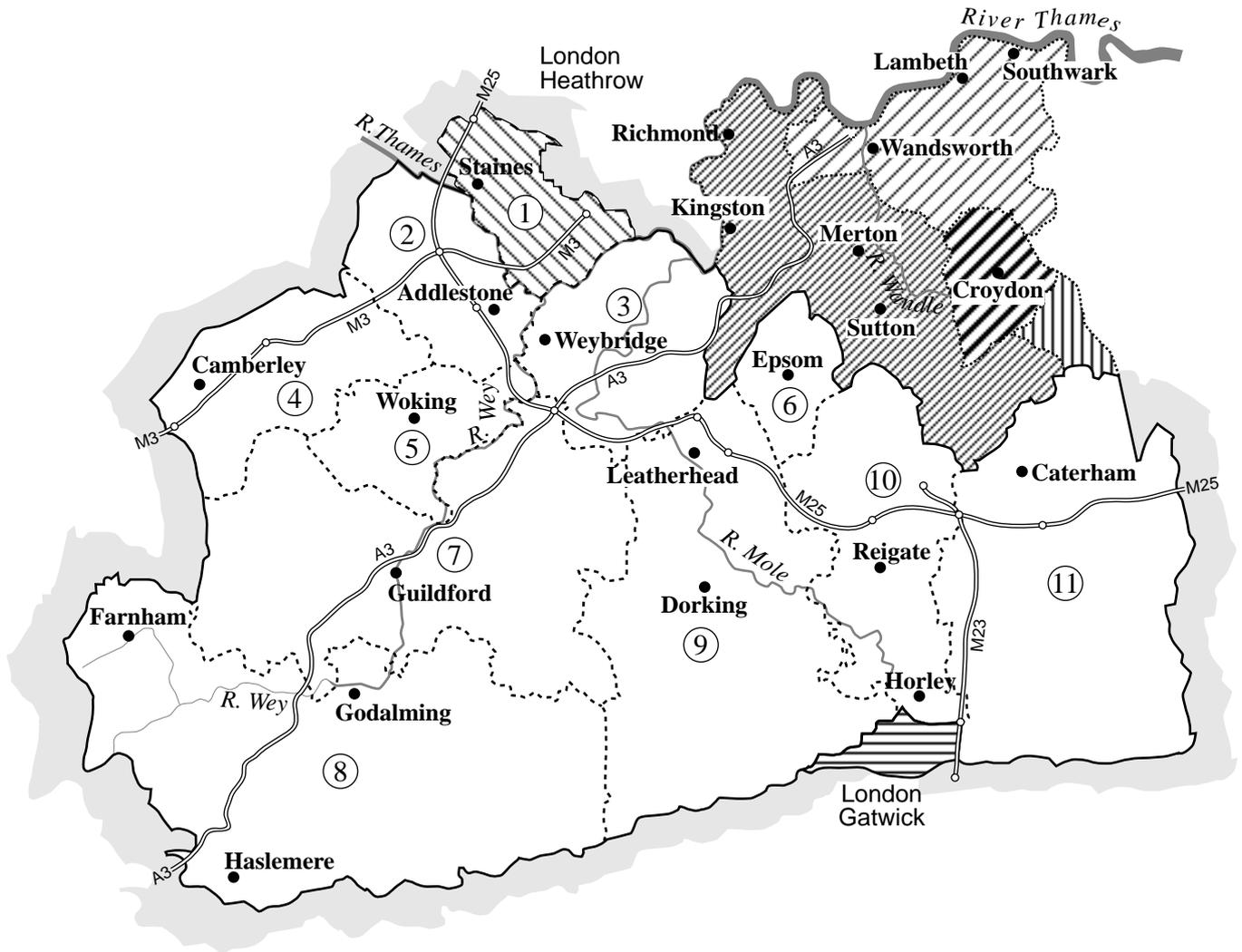
A final section considers the implementation of the Framework and the methods that might be used. Particular attention is paid to the need for training.

Acknowledgements

Preparation of the Framework involved every aspect of Surrey's archaeological community: groups and committees of the Surrey Archaeological Society, other more local archaeological and historical societies, local metal detectorists, museums, university departments, English Heritage, the Surrey County Archaeological Unit and other units active in the county, independent researchers. The process was overseen by a sub-group of the Historic Environment Group of Surrey's Heritage Strategy, chaired by Jon Cotton, who is also the Surrey Archaeological Society representative to the Steering Group for the SE Research Framework. The work was facilitated by the Countryside Division of the Environment & Regulatory Services of Surrey County Council, acting in close collaboration with the Surrey Archaeological Society.

Thanks are especially due to the members of the Steering Group: Jon Cotton, Audrey Monk, Richard Savage, Peter Youngs and Peter Harp; to those who chaired (Jon Cotton and Peter Youngs), took notes (Richard Savage, with help from Ann Clark), and spoke at the seminars (Richard Bradley, JD Hill, Mary Alexander, Rod Wild, Alan Crocker, Peter Tarplee and John Schofield), and to others who contributed in various ways, in particular (excluding those already named) Nicola Bannister, Roger Ellaby, Judie English, David Field, Geoffrey Gower-Kerslake, John Hampton, Rosamond Hanworth, Martin Higgins, John Hines, Jeremy Hodgkinson, Tony Howe, Dominique de Moulins, Rob Poulton, Derek Renn, David Rudling, Danielle Schreve, Dale Serjeantson, Paul Sowen, Mark Stevenson, Dennis Turner, Edward Walker, Robert Whytehead, Tim Wilcock, Richard Williams and everyone else who attended the seminars or made comments in other ways. Mike Dawson and Surrey County Council provided welcome support, and made the project possible through the secondment of the coordinator.

The Administrative Boundaries of Surrey

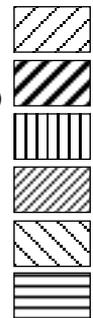


Surrey Boroughs & District Councils

- Spelthorne Borough..... ①
- Runnymede Borough..... ②
- Elmbridge Borough..... ③
- Surrey Heath Borough..... ④
- Woking Borough..... ⑤
- Epsom & Ewell Borough..... ⑥
- Guildford Borough..... ⑦
- Waverley Borough..... ⑧
- Mole Valley District..... ⑨
- Reigate & Banstead Borough..... ⑩
- Tandridge District..... ⑪

Major Boundary Changes

- Lost to County of London 1889
- Lost to Croydon County Borough 1880
- Addington, lost to Croydon 1928
- Lost to Greater London 1965
- Gained from Middlesex 1965
- Lost to West Sussex 1974



THE CURRENT STATE OF KNOWLEDGE AND THE RESOURCES AVAILABLE

What we know

This is not a full resource assessment, partly because there has not been enough time to produce one, but also because a resource assessment for most of the archaeology of Surrey already exists. It can be found in *The Archaeology of Surrey to 1540* (Bird & Bird 1987), with some updating in *Aspects of Archaeology and History in Surrey* (Cotton et al 2004) and for the London area, *London under ground. The archaeology of the city* (Haynes et al 2000), and *The archaeology of Greater London. An assessment of archaeological evidence for human presence in the area now covered by Greater London* (MoLAS 2000). Surrey Industrial History Group surveys exist for all the administrative Surrey districts and are in the course of being extended to cover the relevant London Boroughs. A survey and analysis of medieval buildings in the administrative county has been recently published (Gray 2002) and the Domestic Buildings Research Group has built up a body of records for many thousands of Surrey's historic buildings. The early 20th century *Victoria County History* is still a valuable resource. The background for the South-East as a whole may be found in *The South East to AD 1000* (Drewett, Rudling & Gardiner 1988) and *The South East from AD 1000* (Brandon & Short 1990). The main gaps in our current understanding are fully up to date surveys of the Saxon and medieval periods and for the non-industrial history of the period after 1540.

Surrey's archaeology is frequently under-rated, even by those resident in the county, but there are sites of national or international importance for probably all of the archaeological periods. What follows is a brief summary that aims to highlight some of those sites.

The Wey terraces around Farnham retain importance for Palaeolithic studies, though unfortunately much has been lost in early gravel extraction. There are also significant groups of finds from the Kingswood and the Limpsfield areas: those from the Downs raise important research questions.

Two recently discovered sites mark the arrival of anatomically modern humans in the Upper Palaeolithic: one was probably a temporary summer camp, at Church Lammas near Staines, perhaps linked in some way to another site at Uxbridge a little further to the north. The second was presumably another camp, recently found at Wey Manor Farm, south of Weybridge. Such discoveries are uncommon in Britain. The county has produced many finds of Mesolithic material, usually worked flints, especially on the Greensand. Surrey workers such as Hooper and Rankine played an important part in the recognition of the Mesolithic as such. Shelley's collection of microliths from Redhill station in 1857 must be among the earliest of preserved collections. There was even excavation by Leakey, of African fame, at Abinger, although his interpretation of a so-called pit-dwelling is no longer accepted. Work is currently in progress on a very important site at North Park Farm, near Bletchingley, where evidence for hearths has survived and finds indicate use of the location throughout the entire Mesolithic period. Another important site was excavated recently at Woodbridge Road in Guildford.

The Neolithic cursus at Stanwell is at least 3.5km long, making it the second longest in the country (but it has been suggested that it should be more properly regarded as a bank barrow). Other structures in this area include hengiform monuments near Ashford and at Staines Road Farm near Shepperton. The long (perhaps oval) barrow at Badshot Lea is the only known example between Wessex and Kent, and the causewayed camp near Staines was the first to be recognised on low-lying gravel terraces. Mortlake Ware is named from a Surrey site. A recent discovery at Betchworth includes pits packed with Grooved Ware pottery, supposedly more than previously found in the whole of the south-east. There were also important sites at Kingston (Eden Street) and Runnymede Bridge near Egham, both providing good palaeoenvironmental material.

Surrey has a good number of round barrows although they are often difficult to appreciate properly because of their current settings. Known examples were often on the county's extensive heathland (frequently now tree-covered) and there is a working hypothesis that much of this was created in the Bronze Age by the expansion of farming onto unsuitable soils, followed by grazing. If this is correct, it follows that there are likely to be relict Bronze Age landscapes yet to be recognised. There are many important Late Bronze Age sites in Surrey. In this period the site at Runnymede Bridge was occupied again when it was an island in the Thames. It seems to have functioned as a regional centre and trading place. A large amount of pottery and other finds have been discovered, the latter including metalwork and antler cheek pieces with evidence for their manufacture on site. Nearby at Petters Sports Field a large Late Bronze Age hoard in two groups was properly excavated in a stratified context near the terminal of a large ditch. Another recent find came from Little Woodcote near Sutton, and together these hoards may be seen as representing the many such finds from north Surrey. The Queen Mary Hospital site at Carshalton was probably a centre to match Runnymede and seems to have been at the heart of an extensive area of organised landscape in the upper Wandle valley. Similar landscape evidence has been and is currently being recorded along the Wey and in the Staines area in advance of gravel working, and forms part of wider evidence for the emergence of an organised landscape in the Thames Valley in the mid to late Bronze Age.

Given the assumed low population there is a surprisingly high number of Iron Age hillforts in the county – probably over ten. One, at Felday, was only discovered recently, and together with the Bronze Age enclosure at Nore Hill near Chelsham shows that it is still possible to find standing prehistoric earthworks in Surrey. It is noticeable that only one of the hillforts is on the Chalk (contrast Sussex). Important recent Iron Age discoveries include occupation sites near Staines, Thorpe, Runfold and Tongham. At the latter there were several groups of round houses with associated enclosures, and a uniquely preserved log ladder. Important metalwork finds, mostly associated with deposition in watery environments (especially the Thames) include the Battersea Shield, the Waterloo helmet, the Chertsey shield and the so-called Weybridge bucket, unique in this country.

Surrey has no major Roman town (except Southwark), probably because of the foundation of London in about AD50. This will have affected the way in which the county functioned from then on and it is still difficult to remove the effects from one's mind when considering the prehistoric periods. Staines (*Pontibus*: 'at the bridges') was probably a small town; a large amount of archaeological work there awaits

publication and should provide us with a much greater understanding of the settlement's history. Ewell was also a larger settlement but may have been an important ritual centre like Springhead in Kent, and again there is a need for more publication. Recent work has included a fresh look at an area where several ritual shafts were recorded in the 19th century. The best excavated villa remains the one at Rapsley, while work at Beddington and Barnwood School near Guildford has added important knowledge of each villa's surroundings.

In general Surrey's villas do not fit the national pattern very well and Ashted in particular is extraordinary in various ways. This last was the centre of a tile industry whose products included decorated box tiles. A well-preserved tile kiln at Reigate has recently been lifted for display by the Surrey Archaeological Society. Temples are known at Titsey, Farley Heath and Wanborough, where a second (circular) temple has been found recently, adding further important details to this nationally important site, which has produced unique items of Roman priestly regalia and vast numbers (10,000+) of coins, probably deposited in the Roman period but mostly Iron Age silver units. There is a small Roman period enclosure at Betchworth probably having a ritual purpose; its proximity to the presumed Neolithic ritual site already noted, together with some other later prehistoric evidence, suggests a very long-lasting use of this location. The Alice Holt/Farnham area was the seat of a major pottery industry, delivering particularly to London, where in the later Roman period it satisfied a large part of the coarse pottery market.

A number of pagan Saxon cemetery sites are known, of which the most recently excavated were at the Esso headquarters site near Leatherhead and parts of the major, long-known but little understood Croydon cemetery. The county has important evidence for understanding the transition from Roman Britain to Saxon England because of its proximity to London, a relatively high number of significant place-names and many more cemeteries than most of the so-named 'Saxon' counties. There are also several later execution cemeteries, currently an exceptional number nationally. The probable site of a Burghal Hidage fort is known at Eashing, and another is postulated at Southwark. It remains unclear why Kingston was a place of coronation in the late Saxon period.

The monastic or minster site at Chertsey was founded in the 7th century, on a site whose name implies a sub-Roman connection, but nothing of this date has been located as yet. The later Abbey produced floor tiles that can be regarded as the finest from medieval England. Photographs taken of excavations in 1855 and 1861 are probably the earliest of an archaeological dig in this country. Merton Priory was the site of royal council meetings and Waverley Abbey was the first Cistercian house in England (AD 1128). A group of medieval bridges probably associated with the Abbey survives between Farnham and Guildford. In the latter town excavation has given us the nearly complete plan of the Dominican Friary. Churches suffered badly from Victorian restoration or replacement and there have been no major modern excavations except at Barnes. Compton has a nearly unique 12th century double chancel with a surviving contemporary wooden screen.

Surrey's medieval towns were small, presumably reflecting the generally low population, but they have a potential and largely unexplored interest as part of London's hinterland. Rural settlement was probably mostly dispersed, at least in the

south, and villages as such may have been confined largely to the north of the county in the medieval period. Surrey has a large number and wide variety of moated sites especially in the south; some like Lagham Manor are very large. An extensive dendrochronology project is now giving us very important new evidence for domestic buildings, some dating back even to the 13th century.

Brian Hope-Taylor's excavation of the motte at Abinger was the first in this country to strip the top of the mound completely, thereby revealing the post holes of a tower and palisade. There has been important recent work at Guildford Castle, particularly on the area of the royal palace. Proximity to London has led to a strong royal connection and it may be noted that Magna Carta was signed in Surrey, at Runnymede, whose name indicates that it was already a significant meeting place. Nonsuch was the most spectacular Tudor palace in England. There were other palaces at Richmond, Oatlands, and Place Farm, Bletchingley. Excavation near the latter at the sub-manorial site of Hextalls has provided excellent evidence for Tudor-period feasting.

The growing importance of leisure may be illustrated by the Southwark theatres, the spa town at Epsom, and the establishment of the world's most famous horse race, the Derby. Guildford apparently has the first recorded reference to cricket, and in the same place the first recorded women's cricket match in 1745. Surrey's historic parks and gardens are of national significance: for example Albury, Wotton (noted for John Evelyn), Deepdene, Painshill, Claremont, Woburn Farm. Nurseries in the wider Woking area had international importance in the 18th and 19th centuries. South-west Surrey was the key area for the partnership between Gertrude Jekyll and Edwin Lutyens. The latter, together with a number of others played a key role in domestic architecture at the beginning of the 20th century: 'for a few years, around 1896-1900, Britain was leading the world in finding a way out of the impasse of style revivals, and Surrey was leading Britain' (I Nairn and N Pevsner, *The Buildings of England. Surrey*, 1971, 71). Dating to about the same time is the country's first mosque, at Woking, and nearby is the country's first example of a necropolis served by rail, and the earliest crematorium (St Johns).

Surrey has played its part in national defence, for example having 8 out of the 13 late 19th century 'mobilisation centres' or forts placed in a ring round the south side of London (a curious echo of the early pagan Saxon cemeteries that form a similar ring). The Second World War defended centres and lines of pill boxes are now much better studied and understood thanks to recent surveys. Surrey sites form a significant proportion of the national database. A stretch of 'Atlantic Wall' constructed for training purposes survives on Hankley Common, a lasting reminder of the way the county was filled with troops in the build up to D-Day. The western Surrey commons have had a great deal of military use since the mid 19th century.

Contrary to its popular image, Surrey has a significant industrial history, with nationally important sites. The Surrey border pottery industry tradition continued with Surrey white wares and other products, together with production at other centres in the county. Well-preserved 13th century tile kilns at Farnham and Guildford have been excavated recently. Chiddingfold was the centre of a major medieval and early modern glass industry. Ponds constructed to provide water power, for example to drive iron hammers, are a regular feature of the south of the county. Water power also

drove the nationally important Chilworth gunpowder works (there were several others in Surrey). The water came from the Tillingbourne, hardly a major river, but one that drove a great many mills used for ever-changing purposes; the Wandle, nearer London, was probably the most exploited watercourse for industry in Britain in its day. Major chalk quarries supplied lime to London. That at Brockham also shows the exploitation of five different geological types within about a mile north-south. Surrey has one of the few Domesday Book entries noting quarries, and the Upper Greensand stone industry was significant both in the medieval period (for old St Paul's for example) and more recently; extensive underground stone quarries have been surveyed but close dating is not yet possible.

There is also a significant transport history. The 17th century Wey Navigation was one of the earliest canals and the Surrey Iron Railway to Croydon may have been the world's first public railway (horse-drawn). The road tunnel in Reigate was Britain's first. In an extraordinary small area north of Merstham there are, across the period from about 1800, three different routes for the main north-south road; three different north-south railway lines and all are crossed at right angles by the M25, not far from the spaghetti junction that joins it to the M23. There are nationally important sites for the motoring and aerospace industries, such as Brooklands (the world's first purpose-built motor-racing track; scene of many land and air world records and development site for the Sopwith Camel and the Hawker Hurricane among others) and Croydon Aerodrome. Rodborough Buildings (Guildford) may have been the world's first purpose-built motor car factory and is the oldest such surviving – in spite of recent attempts to have it demolished, ironically in advance of road 'improvements'.

What resources we possess

Archaeological potential: assessment of what we have lost /what might survive

Surrey has lost a great deal of archaeological evidence because of the pressure caused by the expansion of London; not just the suburban sprawl across the north-east of the historic county - clearly an area of major archaeological importance - but also the effect on the rest of the county: the huge expansion of the historic towns and villages, the pressure on transport systems of all kinds and the demand for materials. As a result much of the archaeological evidence for the immediate surroundings of historic towns has been lost without record and often large parts of the originally small historic centres as well (exemplified by Croydon having an early 19th century town hall replaced later in the same century and again in the 20th). In a similar fashion many surviving historic churches were Victorianised (Dorking had two replacement churches in the 19th century!) with a consequent loss of much archaeological evidence, both standing and buried. Information was also lost as a result of early archaeological excavation techniques, particularly on Roman villas and medieval religious sites, although in most such cases it is likely that significant information survives.

Areas of river gravels are of known importance for archaeology but in Surrey much evidence was lost before the modern planning system provided some means of ensuring that there was recording before destruction. This affected particularly the

Blackwater valley and earlier still the area around Farnham. The Surrey Archaeological Society publication *A survey of the Prehistory of the Farnham District* (Oakley et al 1939) was a significant early attempt to provide some record of the information being lost to large scale destruction, long before the modern 'Rescue' era. The construction of modern motorways across the county should have provided much useful information but unfortunately most of the work was either too early for, or coincided with a failure of, the national archaeological system with regard to road construction and only a few areas (including Runnymede Bridge) received adequate attention, mostly thanks to the initiative of the Surrey Archaeological Society.

Major threats to archaeology continue, especially from changes in land use because of the decline in agriculture (new golf courses, other leisure activities, etc), and continuing mineral extraction, construction of new houses, redevelopment in town centres and the necessary infrastructure. More development also provides hidden threats: too many houses and golf courses lead to lowering of the water table and therefore buried waterlogged deposits dry out: these are deposits that may contain some of the best evidence for the ancient environment and preserve ancient organic objects that rarely survive.

Although much has been lost, major finds are still being made, such as the Mesolithic site at North Park Farm, Bletchingley, or the Iron Age settlements in the Tongham and Runfold areas, or the Wanborough Roman temples. Even in more heavily built up areas there is still considerable potential for answering questions, for instance the recent finds from the Croydon Saxon cemetery or the probable villa at Carshalton, or the many finds in Southwark. Although commonly thought of as suburban, much of Surrey is in fact still open countryside (some of the best in southern England), and the administrative county has the highest percentage of woodland of any in the country and few areas of intensive agriculture. It is therefore likely that there is good surviving archaeological evidence for rural sites and field systems away from the gravel areas where they are more often – because much more easily – found. The discovery of upstanding earthworks of Bronze Age and Iron Age date in recent years (Nore Hill and Felday) indicates the potential. The broad brush survey of the historic landscape of the administrative county (the Surrey Historic Landscape Characterisation Project: Bannister 2004) provides a record for a point in time and a firm basis for future work.

As a great deal of evidence has been lost it is clear that what is left is doubly precious and it is essential that it is managed well. It is therefore important to ensure that there is active consideration of the effect on historic sites and landscapes of proposed development of all kinds in planning and land management.

Sources of information

The key sources for information about archaeology are the Sites & Monuments Records for Surrey and Greater London. Both are being developed into Historic Environment Records so that they can cover all aspects of the physical evidence for the human past. These records are an essential basis for any attempts to conserve the evidence for our past and a crucial element in strategic planning policies and development control. They are also a very important basis for archaeological research.

For both reasons it is essential that all available information is provided to, gathered by and entered on the relevant SMR so that it can be taken into account by those considering the archaeological implications of development and by those undertaking archaeological research, whether in Surrey or on a wider scale.

The Surrey Archaeological Society has an extensive collection of research material relating to the archaeology and history of the county, built up over 150 years. The London & Middlesex Archaeological Society has material relevant to Spelthorne. More local societies have also built up collections. The Surrey History Centre has extensive holdings of relevant research material and the London Metropolitan Archives Library, the Lambeth (formerly Minet) Library and other local libraries also hold important material. Much recent fieldwork by professional units is recorded only in 'grey literature', especially when results were more or less negative (sometimes an important fact in its own right). This material is available through the SMRs (and often also the Surrey Archaeological Society) and is effectively indexed year by year in the round-ups of archaeological work produced for the *Surrey Archaeological Collections* and *The London Archaeologist*. These publications are an important way for researchers to keep up to date.

Surrey is not particularly good territory for archaeological aerial photography, because of unsuitable crops and ground cover (trees and houses) and because the area most likely to be productive has a major airport (Heathrow) at its centre. Nevertheless there are large numbers of aerial photographs available, including several full surveys carried out for Surrey County Council. The 1988 survey is particularly of value as it shows shallow earthworks. Detailed survey of all available aerial photographic cover is needed, to professional standards (interpretation is notoriously difficult). There is also a case to be made for encouraging the taking of new photographs, particularly as we are in another drought year, and it is anticipated that such events will become more frequent.

The London Archaeological Archive and Research Centre (LAARC), of the Museum of London, and some of the several mostly small museums in historic and administrative Surrey have extensive holdings of archaeological finds. Guildford Museum currently houses the collections of the Surrey Archaeological Society and is therefore the nearest equivalent to a county museum for archaeology. There are important collections in several of the other museums, and in some out of county places such as the British Museum; there is also material from excavations currently held by the Surrey County Archaeological Unit and other units awaiting permanent homes. The Museum of London collections for the city itself are also important for material that was sent to London from Surrey, for example from the Farnham/Alice Holt potteries and later production in this area. An increasingly useful source of information is the recording of finds made outside normal archaeological work through the Portable Antiquities Scheme. Finds Liaison Officers are based with Surrey County Council and the Museum of London.

Most of the museum collections would repay further study, as would the Surrey Archaeological Society research material holdings for old excavations. Several major excavations, both professional and amateur, remain unpublished and are therefore currently only of limited value for research.

Key issues:

- Continued maintenance of the SMRs and their expansion into HERs is essential, and must be the first priority.
- Researchers, museums and the Portable Antiquities Scheme should maintain a steady flow of information to the SMRs.
- Continued support for the annual round-ups of archaeological work in Surrey and the London Boroughs is also essential.
- A continuing theme throughout this Framework will be that reassessment of material held in museums will provide important new information.
- Efforts should be made to ensure that all unpublished excavations receive proper study and archiving with appropriate publication as soon as possible. An attempt is made in this document to note key sites in the appropriate sections.

Possible project:

- ❖ Develop a project to ensure that all available aerial photographs are examined to professional standards and the results entered on the SMRs.

Organisations/people

There are several archaeological societies covering all or part of the area of interest. The Surrey Archaeological Society was founded in 1854 and still covers the historic county. Its library is one of the best archaeological libraries in the South-East. It remains the key Society for county-wide archaeological work and its publications are an essential resource for anyone interested in the county's past. These are the *Surrey Archaeological Collections*, currently published more or less annually, which carries most of the reports of archaeological excavations and related work in the historic county, and the *Bulletin*, published about eight times a year, which is an essential tool for networking, drawing more or less immediate attention to new discoveries and allowing for 'kite flying'. The Society has also recently taken on responsibility for *Surrey History*, an important vehicle for local history papers. The *London Archaeologist* is a long-established quarterly that frequently carries archaeological and historical papers of interest, particularly for the London boroughs formerly in Surrey. The London & Middlesex Archaeological Society retains an interest in Spelthorne and publishes papers in the *Transactions of the London and Middlesex Society*.

There are a number of more local societies of varying importance for archaeological and local history work; their key members also usually play a role within the county Society. The local societies are more variable depending on current membership, but some are long established, in particular the Croydon Natural History and Scientific Society, the Bourne Society, the Leatherhead and District Local History Society and the Epsom and Ewell History and Archaeology Society (formerly the Nonsuch Antiquarian Society), each of which produces publications. The Surrey Domestic Buildings Research Group has carried out an important programme of recording throughout the county and continuing research is concentrating on relevant documentation. The Surrey Gardens Trust has been working closely with Surrey

County Council to establish records for historic parks and gardens in the administrative county, while the London Parks and Gardens Trust has been doing similar work in the London Boroughs.

The Surrey Archaeological Society has several specialist groups and committees including the Surrey Industrial History Group whose presence within the Society ensures that there are better links than might otherwise be the case. There are Historic Buildings Conservation and Surrey Local History committees as well as others more concerned with the Society's business. A comparatively recent development has been the establishment of groups for the traditional archaeological periods, for Prehistory and the Roman period. A Medieval Group is now planned, building on research work already being undertaken in a number of villages. These Groups have been playing an important part in the development of this Research Framework, and will need to play a key role in its implementation. It will be important for them to maintain the links already established with Universities and researchers outside the county to provide access to a wide range of knowledge and experience. Another important recent development has been the establishment of an Artefacts and Archives Research Group within the Society which is devoting itself to tackling some of the post-excavation backlog.

Since its establishment the Surrey County Archaeological Unit has carried out much of the professional archaeological work in administrative Surrey, but several professional archaeological units have now carried out work there and in the wider county area, including the Museum of London Archaeology Service, Wessex Archaeology, Pre-Construct Archaeology, Archaeology South-East and Thames Valley Archaeological Services. This proliferation of different bodies makes it more difficult to maintain knowledge of all new discoveries and is a further reminder of the importance of the annual round-ups mentioned above. It also emphasises the importance of prompt publication, not always achieved by all units. The system makes adequate control of unit standards difficult, but clearly no unit should be allowed to work in the Surrey area if it has a publication backlog (and no clearly demonstrated arrangements in place to deal with it). The large number of units also raises problems of coordination with professional and amateur archaeologists alike.

There is no archaeology department at a university in the county, but Royal Holloway College (University of London) is building up relevant undergraduate courses and also currently hosts a PhD student studying aspects of the county's past environment. The University of Surrey has recently provided adult education archaeology classes but this is no longer the case. Birkbeck College (University of London) has a long established range of archaeology classes at all levels. The University of Sussex also provides courses with experienced research staff and has recently appointed a professor of archaeology.

As noted above, there are several small museums in the administrative county while the Museum of London provides cover for most of the London Boroughs (there are a number of small museums here also but only Kingston accepts archaeological archives). The Surrey Archaeological Society's finds collection together with its extensive specialist lending library and research material, currently placed at Guildford Museum, includes material from all over the historic county. The Society has for many years suffered from shortage of space at its Guildford headquarters and

the situation is now acute. This fact, together with uncertainties engendered by Guildford Borough Council's issue of notice to determine the Society's present agreement in 2008, prompted the Society to commission a feasibility study to explore the possibility of establishing an Archaeological Archive and Environmental Research Centre, similar to, but smaller than the London version (LAARC).

This study explored the possibility of bringing together the Countryside and Heritage Division of Surrey County Council, elements of the Surrey Wildlife Trust and the Society under one roof. It would also have made provision for the growing problem of housing archaeological finds, as more and more is recovered in advance of development. In the event, nothing came of this proposal, but there can be no doubt that the county would still benefit from the establishment of a centre similar to the LAARC. The provision of adequate accommodation for the Surrey Archaeological Society at Guildford Museum is dependent upon the successful outcome of Guildford Borough Council's current plans for redevelopment of the Museum. In the light of this uncertainty the Society is actively investigating alternative options.

Surrey County Council has very recently established a Heritage Group to be based at the Surrey History Centre. It combines the staff of the History Centre, the Surrey Museums Consultative Committee, the Surrey County Archaeological Unit and the heritage conservation team formerly part of Countryside and Heritage (in the former Sustainable Development group of services). This new Group seeks to build on previous work by these teams and create a new more integrated heritage service.

For archaeological conservation a key role is played by the archaeological advisers for the local planning departments, based at Surrey County Council and in the Greater London Archaeology Advisory Service. Both have been recently reorganised, the first being divorced from others offering conservation planning advice and the second being split apart. Southwark also has a local authority archaeology adviser. Adequate planning policies are fundamental for the protection of the historic environment in the absence of any properly established national policy and recent Government changes to the planning system are not encouraging (partly built on the myth that conservation requirements delay development). It is difficult to make provision for Lower and Middle Palaeolithic remains through the well-established procedures based on PPG16, particularly in the course of mineral extraction, because relevant information may be buried several metres down and can therefore be difficult to predict. The establishment of the National Ice Age Network with one of its homes at Royal Holloway College should make it easier to manage these circumstances. There is also a need for the establishment of an agreed methodology for use on Mesolithic (and some later) sites located in development evaluations so that there is consistency of approach where the evidence is mostly flint scatters.

The archaeological planning advisers are best placed to play a coordinating role for all archaeological work in the county area. With so many different organisations involved there is a great need for such coordination. It still happens that people carry out archaeological work without informing others in advance or providing much information about what has happened. These are usually the same people who make no attempt to prepare an adequate Project Design or think the project through properly in advance and it is not surprising that they often have a poor publication record.

Historic buildings have their own system of planning control and advice that should include a requirement for archaeological recording where historic fabric may be affected by redevelopment or alterations. The London Boroughs are advised by English Heritage teams, while in the administrative county advice is given by the County Council and the individual districts, not all of which have sufficient access to suitably qualified advice. Historic landscape work has had little attention in the London Boroughs but until recently was well served by Surrey County Council. It is not yet clear how adequate future arrangements will be. Church archaeology is provided for by advisers appointed to the Diocesan Advisory Committees, for the dioceses of London, Southwark and Guildford, and by the archaeological planning advisers.

Key issues:

- Establishment of a secure future home for Surrey Archaeological Society, its library and collections.
- It is essential to ensure that appropriate planning policies for the historic environment are in place and that archaeological planning advisers have strong links to planning departments.
- Diocesan Advisory Committees should have strong archaeology policies.
- Publication by professional units of Surrey Archaeological Society *Bulletin* notes soon after completion of fieldwork and full publication within an acceptable timescale.

Possible projects:

- ❖ Establish clear policies for the involvement of the National Ice Age Network in monitoring and recording finds made during mineral extraction. Develop a realistic methodology for evaluating and if necessary investigating potentially large areas of Palaeolithic deposits on Clay-with-Flints as part of the planning process.
- ❖ Establish an agreed methodology for use on flint scatter sites located on development sites.
- ❖ Establish a mechanism for the issue and coordination of archaeological site codes in the administrative county.
- ❖ The Surrey Archaeological Society should seek to coordinate all amateur archaeological work in Surrey.

AGENDA

Introduction

This section aims to consider, against the background of what we know, the major questions and ways in which they might be answered. In order to make this manageable, references are kept to a minimum. Wherever possible 'key sources' are identified that provide overviews of chronological periods or other aspects of the archaeology of Surrey as a whole. References to more detailed work can be found in these sources. Sections are uneven because there was better input for some of them than others. Some of the prehistoric sections and parts of the modern section (after 1540) are particularly weak and this suggests that future projects should include giving more attention to the development of questions and projects for these areas. On the other hand, in some sections comparatively more projects are suggested because at present there seems to be a greater prospect of work being undertaken. It will be obvious that it would be impossible for all the projects listed to be undertaken at once; they should be seen as providing the basis for careful choice as well as for seizing opportunities when they arise.

Archaeology is about people, and a long term aim is to know much more about our predecessors, the people who lived in the county area before us. But we need much more evidence for most of the human past before we can expect to achieve a reasonably full understanding. There are in fact many gaps in our knowledge. There could be infinite questions and for later periods many very detailed ones. If this document followed the logic of some suggestions for inclusion in the Framework, there would be so many questions that it would be several hundred pages long. Some other suggestions sought answers to wide-ranging questions that we cannot hope to answer as yet, if ever. In what follows the questions have been pared down as much as possible to take account of what might be practicable. As knowledge increases, future versions of the Framework can add new questions as appropriate, but the emphasis on practicality should remain.

People, even at university higher research level, when asked to provide questions for this Framework, frequently came up with projects. Although these projects could be said to contain implied questions, they were frequently of the variety 'how can we learn a lot more about x?' The reason is simple: often there is not enough evidence available to do more than pose vague questions, and our knowledge of the nature of the resource is such that we cannot target sites to provide answers even when we have specific questions. Sometimes we can do little more than say 'take every opportunity to learn more about x'. Therefore in what follows discussion of questions and actions is combined with some explanation of the reasoning behind them. It is also often the case that a single project or recommended course of action can potentially provide information that will go towards answering many questions. And of course this can also extend across several periods, and work undertaken with one aim may well produce information relevant to quite another (Neolithic pottery found recently while searching for a Roman road in Ewell for instance).

The aim here is to establish questions and suggest projects that might be undertaken. But it will be understood that professional units should always take opportunities to

answer the questions when they arise. Many questions cannot be answered by the spade alone (and especially by the inevitably rather randomly located activities of the units). There is a need for a much wider, more considered approach that at present can usually only be undertaken by universities or local societies because of the way that most professional archaeologists are tied to rescue archaeology projects as the main source of funding. The difficulty of involving these professionals with non-rescue work is a major concern. The archaeological resource is limited and irreplaceable and poor quality work may give misleading information so there is a clear (and generally accepted) need for adequate skills and experience. Training is vital, and will be discussed in more depth in the *Implementation* section, at the end of this document.

Researchers tend to be interested in one or two of the standard archaeological periods; the exceptions also tend to specialise in some way: a particular industry for instance. Those who seek to understand the development of the landscape through time inevitably have less detailed understanding of individual periods. On the other hand some aspects are best studied across several periods. The approach chosen here is therefore first to consider questions and projects chronologically, and then to attempt further consideration in an overarching section on a thematic basis. In this section consideration is also given to geology, regionality and identity and other matters not considered in the chronological sections. It is acknowledged that the conventional periods are rather outmoded and that their names may be misleading but it seems best to use them as they are so well established and can be related back to earlier work. In fact a good case can be made for major change roughly in the middle of most of the conventional periods.

Where possible the periods are tackled by the following themes:

- Political and administrative geography
- Communications
- Settlement evidence
- Land use and environment
- Material culture and the economy
- Belief and burial
- Changes through time

This has the advantage that it aids overall consideration of the themes through time and it also encourages thinking about blanks in our knowledge that we often ignore. It may impose some difficulties such as deciding where categories like leisure belong, but the final overarching section allows for further discussion where necessary.

Lower and Middle Palaeolithic

Introduction:

Key sources: Wymer 1987; 1999; Wessex Archaeology 1993; Lewis 2000a; Cotton 2004.

Clearly the thematic approach suggested for the chronological periods cannot be applied to the Lower and Middle Palaeolithic and 'Surrey' is not particularly relevant – even the Thames was further away. But it is still appropriate to consider questions and actions appropriate to sites within the area covered by this Framework.

Peter Harp has asked that his contribution to this section is acknowledged because some of the following material forms the basis of his proposals for a research degree; there is also a significant contribution from Danielle Schreve.

Discussion:

- Chronology

It would be of interest to establish the earliest evidence for human occupation in Surrey in the light of the evidence at Boxgrove and more recent discoveries. Further study of the Farnham terrace sequence and correlation with the detailed sequence from the Lower Thames valley would be of great value. We need to attribute sites to individual interglacials/isotope stages or even substages. There is also a need to date the earliest appearance of the Middle Palaeolithic in Surrey, with particular reference to identifying Levallois technology artefacts.

Key issues:

- What is missing? Surrey is relatively poorly known for the earlier Palaeolithic in comparison with Sussex and the Thames valley. Is this caused by differential preservation or something else?
- Why is there so little high-level Levallois in Surrey compared to neighbouring counties?

Possible projects:

- ❖ Reappraisal of high-level eolith collections for artefacts.
- ❖ Identification and dating of sites on Clay-with-Flints suggested as having "Clactonian-type" artefacts.
- ❖ Use of mammalian and other assemblages to derive relative biostratigraphical ages for sites lacking absolute age estimates.
- ❖ The use of artefact condition to suggest environmental influences on artefacts, to help with either site integrity or dating, especially the presence of abraded, ochreous artefacts on Clay-with-Flints.
- ❖ Dating and investigation of stratigraphical integrity of St. George's Hill, Weybridge deposits.

- Resource utilisation

There have been finds of mammoth bones from Surrey gravel pits, for example in the Weybridge area and recently near Runfold. Proper study of such finds in context is needed .

It is possible that the earliest inhabitants of Surrey used an identifiably different form of flint, as suggested by the yellow, cherty artefacts from Farnham Terrace A, although this may merely reflect later weathering. This should be tested when opportunities arise.

Possible project:

- ❖ Integration of all available palaeoenvironmental evidence to assess hominid responses to changing climates and environments and the impacts of these on subsistence strategies.

- Landscape and movement

The Surrey area may have had a key role to play in human migration between the Thames corridor and the Sussex coastal plain, and the North Downs sites may be related to migration to and from Europe across the land-bridge. We need to relate river valley sites to high level Clay-with-Flints findspots. Furthermore, the Clay-with-Flints deposit within the county offers a research study of its own. The possible association of early activity with solution hollows (dolines) could be especially rewarding, but requires confirmation. Can the high level Kingswood Clay-with-Flints sites provide information about dating & behavioural aspects (raw material procurement, technology, curation & butchery etc)?

The Limpsfield material also requires further elucidation, in particular its topographic setting. How much of this is relatable to the Darent/Medway gravel terraces, and how far (if at all) can these latter be correlated with the Thames sequence? Material from sites on specific geologies not traditionally associated with Palaeolithic remains requires reappraisal.

Possible projects:

- ❖ Mapping and development of a GIS-based predictive model to assist with future research, conservation or planning issues to include (i) spatial distribution of all known Lower and Middle Palaeolithic sites in the landscape with relation to underlying geology, river valleys, biological and other resources, and (ii) identification of areas/deposits likely to contain Palaeolithic artefacts/biofacts, eg surviving remnants of Farnham terrace gravels not extracted by being preserved under roads; pockets of Head deposits in the Limpsfield area.
- ❖ Investigation of the Limpsfield area deposits as sites within a Palaeolithic landscape - involving test-pit excavations to inter-relate sites and understand landscape formation.

- ❖ Material from the Farnham Terraces should be re-examined and if possible small undisturbed Terrace deposits located for future excavation.
- ❖ Investigate the possibility that large sections of the Palaeolithic record on the Clay-with-Flints have been lost through slope processes, leaving an unrepresentative sample of high-level hominin occupation.
- ❖ Elucidation of the site(s) claimed in Wandsworth by G F Lawrence.
- ❖ Identification & elucidation of the Wealden sites hinted at by fieldwork in the Outwood area.

Conclusions:

As for all periods, reassessment is needed of what we already have in the light of modern techniques and knowledge. Some material in museums, found many years ago, is likely to be misidentified as Palaeolithic (or not identified as Palaeolithic when it should have been). There is also a clear need for much more evidence. It is possible to carry out some carefully targeted projects, as the Surrey Archaeological Society Prehistoric Group and Plateau Group have already demonstrated, working with Oxford University. The possibility of greater involvement from the National Ice Age Network regional centre at Royal Holloway College is to be welcomed. The project is giving talks to local groups and producing artefact recognition sheets, which will help to encourage the recognition in the field of Palaeolithic struck flint, which even experienced archaeologists can find difficult.

Upper Palaeolithic and Mesolithic

Introduction:

Key sources Ellaby 1987; Drewett 1988a; Lewis 2000b; Cotton 2004.

The very important recent discoveries of Upper Palaeolithic sites at Church Lammas, Staines and at Wey Manor Farm indicate the potential for this period and may provide pointers to help locate future discoveries. Surrey also has high potential for Mesolithic studies, illustrated most recently by the valley-head depression site at North Park Farm, Bletchingley, and the long-term project at Charlwood.

What follows is based substantially on material submitted by Roger Ellaby. The Upper Palaeolithic is treated separately first and followed by the main section on the Mesolithic. For the latter some attempt is made to follow the common themes noted above, although it is recognised that they are often not very relevant.

[Upper Palaeolithic]

Evidence for the Upper Palaeolithic is very limited and its discovery is largely a matter of chance. Special attention is therefore required to objects found in fieldwork of all kinds, whether professional or amateur, especially on the floodplains and adjacent terraces of the county's principal rivers and especially the higher ground bordering the flood plain terrace of the Thames particularly around Heathrow. Given that Lower Palaeolithic material can be found on the plateaux this area should also receive such attention. Discovery of later Upper Palaeolithic sites along the Colne and the Wey suggests that it should be possible to target fieldwork to locate surface-intact sites. A good case can be made for establishing a Surrey/Greater London/Buckinghamshire study area in view of recent discoveries across this region.

Key issues:

- What was the environment like in Surrey during the Upper Palaeolithic and how did this affect patterns of exploitation?
- Does the pattern of exploitation differ between that of the Earlier and Later Upper Palaeolithic?

Possible projects:

- ❖ Close cooperation between archaeologists and palaeoenvironmentalists should be established and sites recommended for study by core sampling from wetlands and floodplains.
- ❖ Achieve archive order and publication of Upper Palaeolithic material recovered from a Goldsworth Park site in the 1930s.
- ❖ Achieve archive order and publication of the Church Lammas, Staines, excavation.

[Mesolithic]

- Political and administrative geography

This is not really a relevant concept but it is interesting to speculate that the Surrey area was peopled by family groups with 'territories' making use of the many different environments available within the county because of the different subsoils from the Thames to the Weald. It is difficult, however, to see how this could be tested.

- Communications

Similarly, we do not have the evidence for movement of hunter-gatherers from one point to another especially as we cannot tell with any accuracy that any two sites, say, are contemporary. Even this early, however, there would be a logic in north-south routes to allow for the exploitation of all the county's differing subsoils. Perhaps this is one of the implications of the intermittent reuse of the North Park Farm site. If it was possible to locate distinctive flint sources and plot their products then it might be possible to demonstrate directions of travel, but this probably cannot be done.

Key issues:

- What evidence could there be for communication via watercourses, trackways etc?
- What evidence is there for seasonal (summer) exploitation of the Weald from extra-Wealden bases, a scenario apparently repeated in later periods?
- Settlement evidence

The Abinger 'house pit' and similar suggestions for discoveries at Bourne Mill near Farnham must be discounted, and it is therefore only possible at present to consider 'camps' marked by accumulations of tools and flint-working debris (and sometimes hearths) of which there are many in the county. It may be possible to use different types of assemblage to argue for different functions for these sites, for example the apparent absence of some types such as axes and burins at St Catherine's Hill near Guildford, but too often we cannot be sure that the archaeological collecting policy was not selective. It would be of major importance to discover Mesolithic habitation sites buried by alluvium in the lower river valleys, but this may be impossible to predict.

Key issues:

- If the North Park Farm site, and a few others, were used intermittently throughout the Mesolithic, why is this not true for the majority of sites? What was special about the topography and environment of these long-term sites? [See also 'belief and burial'].
- Are the apparently 'one-off' sites casual stopping places for a brief stay? Can the artefacts found on these sites tell us something about the brevity of the stay eg a kill site, maintenance of hunting equipment etc?
- Do Mesolithic sites, that is to say at a single occupation, differ in size and if they do is that difference due to site population (eg a few hunters, a family group or a number of families)?
- It now seems that it is not possible to assess the true size of a Mesolithic habitation site either by measurement of a flint scatter on the surface or by measurement on excavation. Is the concentration of artefacts found representative of the whole site or just the activity or midden area? Is there evidence of say, shelters, outside this area? Future excavations should extend beyond the flint concentration in the hope of finding evidence for structures or other activity areas.

Possible project:

- ❖ All sites should be studied very carefully as regards their topographical settings and a more rigorous examination made of the artefacts to determine differences between sites.
- Land use and environment

The natural environment changed dramatically during the Mesolithic period as temperatures rose and forest cover spread. Presumably therefore lifestyles changed

and it may be possible to find evidence to indicate how. It has been suggested that people may have begun to seek to control their environment, for example by burning clearings (to make it easier to attract and hunt animals, or to encourage growth of particular types of food-bearing plants). Some Surrey Bronze Age barrows overlie Mesolithic flint sites which may imply the existence of long-standing clearings with heathland.

In general the distribution of finds is very biased towards the Lower Greensand, perhaps because flints are easier to see and collect there. Finds are, however, much less common on the Chalk although there may be some link to the Clay-with-Flints (as a source of flint?). Sites on the gravels are also less common but may be covered by later deposits, although this needs to be established (if true, such sites would have very high potential), and flints have been found even on the Wealden Clays. This implies a wide-ranging use of different environments which may give rise to different types of site. There is a great need for environmental evidence.

Key issues:

- What animals, birds, fish etc were being exploited during the Surrey Mesolithic?
- What secondary uses were there of animals, eg hides, feathers, bones, and antlers?
- What plants were being used eg for food, poisons, medicine, shelters, containers, bows, arrows.
- Are the Surrey heathlands wholly or partially the result of the loss of tree cover in the Mesolithic?
- Why are there plentiful axes found on the Downs while they are extremely rare in the Weald? If this is a function of the presence of suitable nodules on the Downs then why were they used in quantity only on the Downs? At the same time are all these axes/adzes/picks on the Downs actually Mesolithic?

Possible projects:

- ❖ A programme of research should be instigated for the examination of waterlogged deposits adjacent to known Mesolithic sites, in order to locate surviving organic material. Palynology and scientific dating will be fundamental to such work.
- ❖ A programme of research should be instigated for the examination of use wear on artefacts.
- ❖ Statistical examination of axes/adzes/picks on the Downs and comparison with examples from sealed Mesolithic *and* Neolithic sites.

- Material culture

Almost all the available evidence is flint, and the tools show clear evidence for changes through time. Items of wood and bone or antler must have been in common use and any opportunity to recover them is clearly of outstanding importance.

We have large collections of Mesolithic flints but these were often poorly recorded and much remains unpublished. One question for all flint 'collections' but especially

for the Mesolithic is what should be done about large unstratified collections? How can they be made to provide useful information?

Key issues:

- How and why does the material culture (based on flint artefacts) change with time?
- Why do artefact ratios differ from site to site? Does this difference relate to seasonality or site activity for example?

Possible project:

- ❖ Locate and excavate sealed single-period sites for cross-dating. Statistical examination of differences in artefact ratios/presence/ absence on individual sites: useful for determining specialised activities.
- Belief and burial

Discussion of these topics is largely bedevilled by lack of evidence, but questions may be asked. For example, could there be a 'religious' or 'ritual' aspect to explain why some sites were visited throughout the Mesolithic? Close consideration might be given to groups of finds at sites that may have had springs in this period, and to any evidence for the placing of finds. There should be close monitoring of excavated sites for evidence of ritual and/or disposal of human remains.

- Changes through time

The major environmental changes that took place during the Mesolithic must have led to changes in lifestyle. We can detect changes in flint working through time but need better dating evidence to understand them properly. Surrey as yet has few radiocarbon dates for any of the different technologies. North Park Farm will be important in this respect.

A major area in need of answers is the transition to the Neolithic period: did this involve new people or just new ideas? As leaf-shaped arrowheads do not appear on the continent they are possibly a 'native' (Mesolithic) development and imply the invention of the long bow. Such a development would have reduced or displaced the use of microliths and thus the characteristic item for the recognition of the Mesolithic as such would be lost. But the hunter-gatherer style of life may have continued for a long time into the Neolithic period.

Key issues:

- Precisely when did a 'Mesolithic' technology appear in Britain and especially Surrey?
- How does this technology relate to the latest Upper Palaeolithic technologies in the county?
- What evidence is there in Surrey for contemporaneous groups using Early and Horsham technologies around 9000BP and again at c8500BP for contemporaneous groups using Horsham and Later Mesolithic technologies?

- The successive technologies above all retained elements of the previous one especially in their early stages. What evidence is there in Surrey that this phenomenon might indicate the merging of two ‘cultures’?
- Timescale of the transition to the Neolithic period?

Possible project:

- ❖ Target sealed deposits of later Upper Palaeolithic, Early, Horsham and Later Mesolithic type for organic materials for radiocarbon dating.

Conclusions:

There is a general need for more evidence before we can pose or expect to answer many questions, particularly for the Upper Palaeolithic (where recent finds indicate that there is high potential for further discoveries in the county). Above all there is a need for more environmental material both for itself and for the opportunity it can provide to obtain radiocarbon dates. The location of surface-intact sites (especially in valley floors) to allow maximisation of data-recovery is obviously a key aim. Again, development of a GIS-based predictive model may be the best way forward.

Mesolithic sites are currently rather neglected and are at risk from many threats such as erosion and ploughing. We need to find a way to encourage more research, perhaps for example by involving a university and/or developing a special local group.

Neolithic

Introduction:

Key sources: Field & Cotton 1987; Drewett 1988b; 1988c; Lewis 2000c; Cotton 2000; 2004; Cotton and Field 2004; Serjeantson & Field 2006 (Surrey aspects).

There have been several relatively recent important discoveries dating to the Neolithic on the gravels around Staines and Egham and this area was presumably a centre of some sort throughout the period. But was Surrey otherwise a conservative backwater away from the gravels or is this just a reflection of the state of the evidence – or of differing land uses all connected to ‘territories’ running from Thames to Weald? Surrey only has one long (or oval) barrow (although as that had nearly vanished without trace clearly others may have been lost without record) but as Wessex and Kent have different traditions it is not clear what we should expect in Surrey, and only local studies can provide the answers.

Discussion:

- Political and administrative geography

The major monuments in the north-west of the county imply a centre of power of some sort, and perhaps the Badshot Lea barrow implies another but there is little else to suggest how the area was divided between different groups, if at all. Clearly the ability to construct monuments like the Stanwell cursus indicates some sort of control of land and people and there may therefore have been earthwork boundaries, some of which could in theory survive (having continued in use).

- Communications

The Thames was presumably a corridor for trade and ideas. Finds might suggest links with other areas, with implied routes, but it must be unlikely that anything can be recognised other than general directions of movement. Implied links into or even across the Weald would be of considerable interest.

- Settlement evidence

Apart from 'driftwood' structures at Runnymede Bridge and in Kingston we lack evidence for structures and especially dwellings of any kind. Clearly the discovery of any such evidence is a priority. It may be possible to target likely sites for example by studying the definition & distribution of lithic scatters.

Key issue:

- Identification of dwellings.

- Land use and environment

The period should mark the adoption of agriculture, and there should be some evidence for tree clearance, but there is little from Surrey at present. As woodland survived in the area of the Yeoveney causewayed camp and near Runnymede Bridge much of the rest of the county may have remained comparatively well wooded. On the other hand the evidence for flooding from Runnymede Bridge and Sheep Walk, Shepperton may suggest the results of tree clearance, and the Stanwell cursus implies that the gravels there were mostly open. The availability of manpower to build monuments perhaps also illustrates a population increasing as a result of the development of agriculture. Much more environmental evidence is needed.

In general the Thames gravels show evidence for occupation and the pottery distribution may imply greater emphasis on Thames-side areas of the county earlier in the period. Later finds indicate more activity to the south while axes and arrowheads show a Thames and Lower Greensand distribution. This may mark a collection (and to some extent a modern development location) bias, although these areas might logically be expected to show greater activity. It would be of great interest to be able to establish if the areas of most settlement are the centres from which people travelled to make use of much of the rest of the area for continuing hunter-gatherer activities. This may be more likely than the idea that the Thames-side region was more

‘advanced’ while further south there was a different group of people with a less-developed culture. As a general rule, any evidence away from the gravels would be of considerable interest. It is probably time for a detailed reassessment of all available evidence (including of material not previously recognised as Neolithic).

Key issues:

- More environmental evidence.
- Can study of finds demonstrate any different groups or areas of different activities in the county?
- Reassessment of all available evidence.

Possible projects:

- ❖ Establish a project to study use wear on lithics and carry out lipid analysis.
- ❖ Establish a project of fieldwalking for likely sites away from the gravels, working from existing information.

- Material culture

Stone axes must mean external contact of some sort with links stretching back to places like Cornwall and the Lake District; even northern Italy (a jadeite axe from Stanwell). There is no good evidence for flint mines; what conclusions can be drawn? The use of the Clay-with-Flints as a resource for flint is postulated. How does this square with the idea that flint and stone axes from certain sources outside the county had a special value because of their origins?

- Belief and burial

A number of monuments are assumed to have had a ritual purpose, such as the Stanwell cursus (or bank barrow) and the Staines Road Farm, Shepperton, hengiform monument (and possible neighbours at Ashford and at Mayfield Farm, Bedfont). The Shepperton site had animal and human remains placed in its ditch and there were also human remains forming part of the differential distribution of pottery and other finds in the ditches of the Yeoveney causewayed camp. These carefully placed deposits and others such as the group of three flint axes from Peaslake emphasise the importance of careful recording of the contexts of deposition. Pits packed with Grooved Ware at Betchworth were also clearly connected with ritual. There is no sign of a related monument at this site and it may suggest that it would be wrong to expect certain types of monument in all areas. Clearly it would be difficult to predict the location of other Betchworth-type ritual pits. It has also been suggested that there may have been a special ritual significance to Mortlake Ware. How might this be tested?

There is some indication of ritual linked to the Thames, involving deposition of axes (often of types such as jadeites with their own ritual significance) and possibly some human heads (and no doubt other things less likely to be preserved). Perhaps similar finds might be expected along other rivers and at springs.

Key issue:

- Can we identify likely locations for special ritual sites away from the gravels?

Possible projects:

- ❖ Achieve archive order and publication of the Betchworth excavation.
 - ❖ Achieve archive order and publication of the Staines Road Farm, Shepperton excavation.
 - ❖ Re-analyse the evidence we have for possible placed ritual deposits.
- Changes through time

The main questions involve the usual debate about new people or new ideas, both with the change from the Mesolithic and the introduction of the use of metals. New techniques which would make it possible to identify probable incomers now exist but would require more human remains for study. We also need better dated deposits to be able to assess how long it took for new ideas to spread from the places where they were first introduced.

Conclusions:

We need some new work on existing material evidence and the location of new sites and recovery of much more environmental evidence. As a result of work related mostly to mineral extraction we have quite good evidence for the Thames valley but how does the picture vary off the gravels? It is a key requirement to establish if there are different communities on the gravels and further south or if these areas are linked within 'territories' spreading out over other geologies.

Key issue:

- There is clearly a need for more work on questions and projects for this period.

Bronze Age

Introduction:

Key sources: Needham 1987; Drewett 1988d; Brown & Cotton 2000; Cotton 2000; 2004; Merriman 2000.

There is good evidence for the Bronze Age in Surrey, especially when compared to the Neolithic or the Iron Age. The preponderance of heathland barrows is unusual in

the South of England (and may be compared to the distribution of hillforts, which also largely avoid the Chalk). The county is rich in evidence for the Late Bronze Age, particularly across the north of county, where there are important centres like Runnymede Bridge and the Queen Mary's Hospital site near Carshalton, and evidence for the landscape across the gravels and river valleys.

- Political and administrative geography

There is some difference between evidence from north and south, both early and late, that might suggest different groups or just different land use. Presumably late 'centres' like Runnymede Bridge, Queen Mary's Hospital and Nore Hill near Chelsham represent different groups, but if so, is there a centre for the south-west, where there is plenty of evidence for occupation in general? We also need more evidence for lesser settlements, especially away from the gravels, in order to understand settlement hierarchy. If the centres controlled territories and extensive areas of fields as is suggested in some cases, then boundary earthworks may survive in part.

- Communications

The Thames was probably a major highway for ideas and early on for incoming metalwork itself. It may be possible to establish other routes from the distribution of finds. New evidence for Bronze Age activity in the Horley area suggests that the Mole might have acted as a corridor for penetration into the Weald; the prospect of links across the Weald should be explored.

Key issue:

- Is it possible to demonstrate cross-Weald links from the material evidence?

- Settlement evidence

Little evidence for buildings has been found, with some exceptions on the gravels. It is probable that structures did not penetrate far beneath the surface and would therefore be difficult to find archaeologically. It is in general difficult to find surviving evidence for open settlements in Surrey, except, as usual, on the gravels. The possibility exists that settlement sites might survive buried under colluvium particularly in some of the Greensand valleys and this needs to be tested.

The later centres have surrounding earthworks that could have had some defensive function (Runnymede Bridge was presumably defended by its island site). Occasional finds from some of the later hillforts have been taken to suggest that they had Bronze Age fore-runners, but this needs more evidence to be accepted.

Key issue:

- Can we locate settlements buried by colluvium in Greensand valleys?

- Land use and environment

Surrey has an unusual preponderance of heathland barrows in the South of England. Can these be integrated with circular Bronze Age ring-ditches and/or the less regular 'ring-works' (some of which have been shown to have Bronze Age origins)? The county has the potential to try to link ring-works, field systems and settlements. How local are these distributions?

For the Late Bronze Age, Runnymede Bridge provides good environmental evidence: a local landscape largely treeless; evidence for spelt wheat among the earliest in Britain; horses and cattle. But much more evidence is needed, throughout the county. There is very good evidence for the landscape at sites like Thorpe Lea Nurseries, Hengrove Farm near Staines, Stanwell and Wey Manor Farm, but as usual it comes from the gravels and we need to know much more about non-gravel areas. Fields known from aerial photographs either side of the Mole Gap on the Chalk may be Bronze Age, but are perhaps later. Some boundaries on heathland as on Whitmoor Common north of Guildford have been claimed as Bronze Age. Other finds indicate a use of the Weald Clay that needs clarification.

Key issues:

- Can we identify Bronze Age field systems off the river gravels? Might some systems survive in secondary woodland?
- Can we link settlement evidence to the heathland barrows?
- Was Surrey heathland mostly in origin a creation of the extension of agriculture in the Bronze Age?

- Material culture

Bronze Age hoards provide a great deal of information about metalwork in use in the county and illustrate the impact of ideas and imports from the Continent. Places like Runnymede Bridge (and no doubt similar sites at places such as Kingston, where the Thames and the Hogsmill would have provided another convenient Thames island) seem to have acted as trading centres and also manufacturing sites for metalwork and worked antler objects. Can the purpose of perforated clay slabs be established? We need more understanding of the use of lithics and better dating for ceramic changes through time.

Key issue:

- There is a need to establish better understanding of the continued use of lithics, and to provide radiocarbon dates for ceramic change through the period.

Possible project:

- ❖ Publication of the unique hafted socketed axe from Shepperton Ranges.

- Belief and burial

A ritual aspect of metalwork hoard deposition (both large and small) is now well accepted and it might be appropriate to revisit evidence for earlier finds to examine their likely significance. Recent finds from Norbury Park hint at ritual associated with land clearance for instance. Earlier deposits of battle axes and flint daggers, and perhaps barbed and tanged arrowheads, may be similar. A ritual horse burial in a pit at Runnymede Bridge marks the growing importance of the horse. A possible Bronze Age element to the apparently long-lasting Betchworth ritual site needs further consideration, and some of the field systems have water holes with apparently placed deposits. A strong link between watery places and ritual offerings of metalwork has long been recognised, particularly along the Thames. Specially placed finds are also often associated with ditch terminals.

Although many round barrows are known there is relatively little evidence for burials. This may be partly a factor of the acid soils on which the barrows are often placed. Recent work at sites like Hurst Park near Weybridge indicates that at least some of the ring ditches on the Thames gravels are ploughed out barrows and supports the speculation that there could be some examples surviving buried by alluvium in special circumstances. These would obviously have very high potential if they could be located – increasingly possible as water supplies fail. There has been no modern fieldwork on urnfields and old records should be explored to see if it is possible to locate surviving material.

Key issue:

- Is there any evidence for Bronze Age deposition at the source of the Hogsmill or the Wandle?

- Changes through time

It is probably reasonable to assume that the new ideas about metalwork were introduced originally by immigrants bringing new ideas and expertise (as demonstrated recently in Wessex), thus perhaps the Arretton complex. The apparent landscape changes at the end of the Bronze Age (more or less) need explanation and this will need careful work particularly on Late Bronze Age sites.

Key issue:

- Why and how were Late Bronze Age sites abandoned?

Conclusions:

As usual, there is a clear need for much more environmental evidence, and re-examination of the material evidence we already have would pay dividends in various ways. Understanding of the Late Bronze Age landscape may have increased to the point where predictive modelling could be employed to locate new sites. We need much more evidence of all kinds from non-gravel areas. The known centres are in the

north; were there southern (and particularly south-western) centres and if not, why not?

Key issue:

- There is clearly a need for more work on questions and projects for this period.

Iron Age

Introduction:

Key sources: Hanworth 1987; Rudling 1988a; Merriman 2000; Wait & Cotton 2000; Haslegrove et al 2001; Cotton 2004; Poulton 2004.

Recent work on a number of sites in Surrey has gone some way to starting to fill a large gap in our knowledge. A number of settlement sites have been located and in particular those at Tongham and Runfold have provided much-needed evidence of dwellings. Evidence for landscape has been found, for example at Thorpe Lea Nurseries, where there is also new evidence for ironworking.

It is noticeable that the county has a comparatively large number of hillforts especially given the probable low level of the population. The number is comparable to those in the much larger county of Kent, where perhaps significantly most are at the western, Surrey, end.

Discussion:

- Political and administrative geography

The idea that hillforts control areas in some way does not work very well for Surrey: they presumably link in some way to local groupings but at present neither their purpose nor their relative chronology is very clear. Towards the end of the period large scale divisions are usually suggested, based on interpretation of the coinage, although this is under review. As usual, Surrey was probably between power blocks, in this case to the north and east ('Catuvellaunian') and to the south ('Atrebatian'), although the preponderance of Atrebatian coins at Wanborough perhaps suggests stronger links with the southern 'kingdom' as might be expected. The distribution of potin coins and some other evidence has been used to suggest that there ought to be a late oppidum-like centre to the west of London. The area of the Wey valley west of St George's Hill might be a reasonable candidate, but much more evidence would be needed to make a strong case.

Later Iron Age finds indicate an east-west split in terms of pottery supply and other affiliations perhaps along a line between the Mole and the Eden. Further work, including on existing museum collections, may suggest more such divisions.

Key issue:

➤ Can study of the material evidence indicate different groupings of people?

- Communications

It is reasonable to suppose that there will have been some routes running through the county as part of the link between the predecessors of major centres like Chichester, Silchester, Verulamium and Colchester, and provide for the exchange of goods. Some links to Sussex and Hampshire are suggested by coins and querns, and to Kent by pottery and potin coins. Larger rivers may have had some use for transport but we need to beware of the evidence following river valleys for other reasons (eg settlement on better soils). It may be noted that if the hillforts are connected to transhumance then it might be possible to find evidence for routes to them from further north; indeed whatever their purpose they must have had access routes. Also north-south routes would give access to different geological types.

Possible project:

- ❖ A programme of fieldwork to identify holloways associated with the hillforts and consider their further extension using all available evidence for old routes. Evidence from finds for links between sites should also be used where possible (eg provision of querns from Sussex production sites).

- Settlement evidence

We now have good evidence for round houses at a number of sites, but mostly on sands or gravels. It is clear that the evidence is very shallow and easily lost to later disturbance. The absence of settlement evidence south of the Downs is noticeable; it is possible that settlements in valleys have been buried by hillwash and this should be tested. There is little to suggest the existence of a so-called *oppidum* type settlement; if one existed the most likely area is probably along the Wey in the St George's Hill area.

Some of the settlement sites have ditched enclosures presumably intended as protection against animals. There are several hillforts: some to the north of the Downs and others further south mostly on the Greensand overlooking the Weald. It is noticeable that only War Coppice near Caterham is on the Chalk. They should not all be seen as contemporary; Felday is certainly late. The function of the hillforts is not well understood at present. There is very little evidence for occupation on any of the northern sites in this period (except at St Ann's Hill); the Greensand group in general has rather more and although there is nothing to indicate structures, later tree planting and in some cases heather turf digging and quarrying may have removed quite a lot of evidence – we should remember how difficult it has been to identify hut sites anywhere.

In general the lack of evidence for much settlement in the hillforts suggests that they were not used as power bases. Were they refuges for groups tending flocks or herds on the Greensand or refuges for the population in times of major trouble? Clearly they should not be interpreted as if they were the same as the classic Wessex hillforts, another reminder of the need to use local evidence locally.

Key issues:

- Can a late centre or centres be found in Surrey?
- Can settlements be located south of the Downs, particularly in the east?
- Can Greensand valley colluvium be tested?
- Are Runfold and Tongham typical settlements or specific to that area or to sands and gravels?
- What are the parallels for Felday?
- Are there really no hillforts on the Chalk except War Coppice, and if not, why not?
- If Surrey's population was comparatively low, why are there so many hillforts? Does this help to understand their role?
- Is Hillbury really Iron Age?
- Is there a hillfort missing in the Mole area gap in the middle (eg at Castle Hill, Betchworth)? If not, what does this tell us?

Possible projects:

- ❖ Re-analysis of museum holdings and records for settlement evidence, then exploratory fieldwork.
 - ❖ Achieve archive order and publication of the Brooklands excavations, and the excavations at Tongham.
 - ❖ Reconsider hillfort evidence: compare material recovered from Greensand forts to others with actual settlement evidence.
 - ❖ Achieve archive order and publication of the excavation at St Ann's Hill, Chertsey.
 - ❖ Study and compare the setting of Surrey's hillforts in the landscape.
- Land use and environment

Some scholars detect a strong contrast between the evidence for the Late Bronze Age and that for the Iron Age, suggesting a major change in land use. There may have been population decline or movement. How does this relate to the hillforts? We need better dating evidence to be able to understand the changing patterns.

Other hints at changing land use include apparently greater use of the Chalk with a number of settlements, some with classic storage pits, and two banjo enclosures. As usual the best settlement evidence is on the gravels while there is in general not much evidence from the Greensand or the Clays, although there is some indication that the London Clay was used by sites along the Hogsmill. The gravels have also produced some evidence for enclosures as at Thorpe Lea or Beddington, but otherwise landscape evidence is mostly lacking. It has been suggested that there was transhumance into the Weald, perhaps linked to the hillforts.

There is a small amount of evidence for animals and crops but as usual far more is needed.

Key issues:

- Is sheep farming part of the change in land use and related to greater use of the Chalk?
- Does over-use of the Greensand in the Bronze Age lead to heathland and therefore changes in land use?
- Can we locate and study more banjo enclosures?

Possible projects:

- ❖ Target sites for the recovery of palaeoenvironmental evidence in conjunction with appropriate specialists; use the evidence to tie in agriculture with settlement research.
- ❖ Consider the value of a comprehensive study of all museum holdings of animal bones from Iron Age sites.
- ❖ Develop a project to study the landscape around the hillforts using fieldwalking, magnetometry and test pits.

- Material culture

The general impression is that the area is not rich. The Portable Antiquities scheme is apparently not producing much Iron Age metalwork. Special finds from or near watercourses therefore lack a context – did they come from much further afield? Different burial customs from areas north of the Thames may mean that less was placed in the ground to be found eventually by archaeologists; some of the river finds might be linked to burial rituals rather than be simply offerings. The huge collection of Iron Age coins at Wanborough also raises questions about their origins.

Surrey has some evidence for ironworking, including Brooklands (early), Thorpe Lea Nurseries and Windlesham (later). They all seem to differ. Re-examination of the Purberry Shot material has identified a number of possible furnace or hearth bottoms, which indicates the need for further work on museum collections and specialist identification.

Key issues:

- There is a need for a reassessment of pottery found in the county.
- And further study of the origins of querns (mostly Sussex?)
- Improve knowledge of iron production in Surrey, and possible sources of ore.

Possible project:

- ❖ A programme of work to reassess material held in museums.

- Belief and burial

The large amount of metalwork deposited in the Thames must have a ritual significance but further work is needed to establish what is involved and if practices change over time, especially given the changes in settlement patterns suggested for the later part of the period. The same applies to the earlier part: if there is great change in land use around the end of the Bronze Age, are there related changes in deposition of metalwork?

There are hints at earlier activity at the later Romano-British temple sites, but rarely strong enough to prove earlier ritual use, particularly as it is well established that early material such as Neolithic axes and Bronze Age metalwork can figure as Roman-period offerings. The enclosure site at Westcott has recently produced clear evidence for ritual deposits in its ditches; most of this came from near the entrance and it is now established that this area of sites should be fully excavated in rescue circumstances.

There is almost no burial evidence. Perhaps this can be explained by the increasing evidence for shallow cremation scoops in the early Roman period, continuing an earlier tradition.

Key issues:

- Are rich burials lacking because the Thames was used in some way?
- Bring together and assess evidence for metalwork deposition related to other rivers, particularly the Wey, Mole, Wandle and Eden.

Possible project:

- ❖ Achieve archive order and publication of the Westcott excavation.

- Changes through time

Surrey is very rich in Late Bronze Age pottery, with settlement sites from the hills above Carshalton to the river terraces of the Thames. Evidence is much more limited in the earlier Iron Age, when there is something of a gap. Later in the period there seems to be a radical change in the landscape, with the emergence of many roundhouses associated with paddocks and trackways. The later changes may be associated with much more use of iron and the introduction of coinage (with recent evidence suggesting that Gallo-Belgic B coins were being minted in Hampshire as well as on the Continent). What changes in society have produced these changes? At present nothing suggests a dramatic shift as a result of the Roman 'conquest'; rather what evidence we have indicates that things mostly continue as before, with added material goods.

Carbon-dating for Iron Age sites should be obligatory as there is a great need to produce secure dating for local pottery styles. Any local site with pottery securely datable by association would be of national significance.

Key issue:

- Closer dating of pottery.

Possible projects:

- ❖ Reassess museum holdings to find carbon-dateable material with associated pottery: for example material from the excavations at Purberry Shot in Ewell.
- ❖ Collate and analyse all evidence for sites with Iron Age and Roman period occupation and use this to plan further fieldwork.

Conclusions:

Surrey contains far more ‘marginal’ land than some of the ‘classic’ areas and thus might be of greater relevance to the development of the Iron Age outside those classic areas. It may well be that Surrey will prove to be a litmus test for what was happening throughout the Greater London region.

Clearly it is important to find well dated site evidence and this might be done by revisiting known sites, and carrying out carefully targeted work. One technique to clarify some of the older reports would be to re-excavate the old trenches to redraw the sections, and seek opportunities to recover the all-important environmental evidence. The discovery of new sites is also clearly important but difficult in an area where aerial photography and fieldwalking are limited by circumstances.

Romano-British

Introduction:

Key sources: Bird 1987; 2000; 2004a; 2004b; 2006; Rudling 1988b; Sheldon 2000; Perring with Brigham 2000; James and Millett 2001.

Although there is a considerable amount of evidence for the Roman period in Surrey, this evidence is strongly biased towards larger settlements and villas, and if we remove them from the equation the state of our understanding differs little from that for other periods. As Surrey was such a rural county the bulk of the evidence should relate to non-villa rural settlement, and this is a major gap in our knowledge, except, as usual, on the gravels. Even for the more Romanised sites, much information has been lost or was poorly recorded by today’s standards because earlier excavators were attracted to big ‘Roman’ sites.

Discussion:

- Political and administrative geography

The Surrey area may have fallen initially within the client kingdom of the Atrebates. Later, when this was absorbed into the province, it probably fell mostly within the new smaller Atrebatian area with its chief town at Silchester. The eastern part of the county may have been in the civitas of the Cantiaci, 'capital' Canterbury. North of the Thames was probably part of the civitas of the Catuvellauni, chief town Verulamium. There may have been smaller units, *pagi*, within the civitas areas. In practice, Southwark (as part of London) must have exerted a powerful pull, but it is not clear if this major trading settlement had a formal territory of its own. Inscriptions, especially on milestones, might give specific information about a civitas, but nothing is known from Surrey.

It would be of interest to establish if these divisions can be seen in any way, either as physical boundaries or in the way they influenced links with other places. Boundaries might reflect pre-existing 'tribal' divisions or subdivisions and might in turn have influenced arrangements in the post-Roman period. Links might be shown by patterns of pottery supply and other economic markers, or by local differences in ritual practice. It is of interest for example that fragments of five mural crown pots are known from Surrey and Sussex; they come from an area which otherwise has no face pots and may indicate a wider Atrebatian link.

Key issues:

- If there was a boundary between the Atrebates and the Cantiaci within the county, where was it? On the watershed between Mole and Darent? And how does it reflect earlier divisions?
- Can we identify any smaller groupings? For example, might major temple sites reflect different groups?
- Might boundaries from the Saxon period (eg *Fullingadic*) reflect earlier divisions?
- Is it possible to illuminate the nature of the links with London/Southwark, Silchester, Verulamium, Chichester and Canterbury (or Rochester)?

Possible projects:

- ❖ Characterise pottery and tile supply and brooches across the county area (and beyond).
- ❖ Consider anything that might indicate links to cantonal capitals (and London/Southwark): mosaic schools; tile and pottery supply.

- Communications

The main road network is reasonably well known except that various indications suggest that there ought to have been a London-Winchester road. The further continuation of the branch road from Alfoldean to Farley Heath is also not certainly established. Settlement patterns and later analogies suggest that there should have been major routes along the corridors of the A246 and the A25; the latter in particular

would link a number of villas and would be a parallel for the Greensand Way in Sussex which seems to have had properly metalled sections. There were presumably Thames crossings other than those at Southwark and Staines, and evidence for bridges might survive at the smaller river crossings such as on Stane Street. Use of the rivers for transport is sometimes postulated but there is no good supporting evidence at present, even for the Thames.

Key issues:

- Some of the known roads have missing sections. In several cases filling the gaps would be of value as a guide to settlement locations and patterns. Examples include Stane Street in the Dorking area and the northern courses of the London-Lewes and London-Brighton roads (eg around Croydon).
- Was there a London-Winchester road?
- Does the road from Alfoldean continue to the north of Farley Heath?
- Was there a road in the Chiddingfold area or one from Chichester to Staines via Iping, or a road north from Staines to Verulamium, or a road from Staines to Ewell via Kingston?
- Can the A246 and A25 routes be shown to exist in the Roman period?
- Was there continued use of north-south routes, and is there any means of showing the use of local, non-metalled roads?
- Can the use of rivers for transport be demonstrated?
- Is there any evidence for bridges?
- What evidence can be found for the means of transport?

Possible projects:

- ❖ Gather all available evidence for missing road lines (aerial photographs; old maps; documentary evidence; place-names; distribution patterns) and target fieldwork and test sections.
- ❖ Consider evidence for river transport (especially for difficult sections that might have required water control features). Note that use of distribution patterns can be misleading because settlements and land routes are also attracted to river valleys.
- ❖ Target appropriate crossing points for evidence for bridges. The location of the Staines bridge or bridges would be of particular interest.

- Settlement evidence

There is no major Roman town in Surrey except for Southwark, effectively part of London south of the Thames. Larger settlements, small towns or roadside villages, are known at Staines and Ewell and there may have been others at Croydon and in the Kingston area (perhaps both at north Kingston and on Kingston Hill). Putney may have been a small riverside settlement. There may also have been 'posting stations' at Merton (the Wandle crossing) and in the Dorking area (Burford Bridge?) and possibly on the London-Winchester road. The evidence from Dorking town centre is not yet sufficient to postulate more than a villa or two. There ought to be a larger settlement somewhere in the south-west of the county, on general distribution grounds and in view of the evidence for a well-settled countryside there, with the implied need for a market. The Wanborough/Tongham area and Broad Street Common near Guildford

have been suggested but there is no convincing evidence. In general, apart from Southwark, the evidence from the settlements is sketchy, with little in the way of complete building plans or even overall knowledge of the settlement layout.

There is little evidence for defended sites either military or civilian in Surrey. A ditch system at Petters Sports Field near Egham might have had a military function and if so probably in the immediately post-Boudican period. Southwark and Staines had some protection as a result of being set on islands surrounded by wet or marshy land, but defences as such are not known. There is no convincing evidence for defences at Ewell or at the postulated posting stations, and therefore nothing to match the enclosures at Hardham and Alfoldean in Sussex, or Neatham in Hampshire. It would be of interest to establish if this is a genuine difference, because of the implications.

Key issues:

- Location and characterisation of possible larger settlement sites: SW Surrey; Dorking; Croydon; north Kingston; Kingston Hill; postulated posting stations.
- Consideration of 'history' of larger settlement sites (starting date; fluctuations in fortune; end date (ie for Roman period); main function(s) and links to other places; extent; layout (eg temples/religious foci; communal areas; burial grounds).
- For Staines, location of bridge(s); did the town really have fewer buildings to the north of the main road; was there late expansion to the west?
- Were there any military sites in Surrey? If Petters was military it should be possible to establish its context (ie where should there be other 'camps' if it is one?).
- Were there defended 'posting stations' equivalent to Hardham and Alfoldean in Surrey? If not, why not?
- Were any of the larger settlements defended?

Possible projects:

- ❖ Achieve archive order and publication of the outstanding Staines excavations (including 2-8 High Street).
- ❖ Achieve archive order and publication of all Ewell excavations.
- ❖ Consider and test likely defence lines of known settlements. Priorities are the postulated posting stations and the more remote rural sites.
- ❖ Re-examine all material evidence in museums coming from the possible settlements, as much more information can be gained now, even from old finds, and quite a lot of the material has never been properly studied. Can material be zoned? For example, could it be burial related, or indicate locations of specific activities (eg ritual or manufacturing)?
- ❖ Use the new evidence to postulate answers to the questions and prepare suggestions for carefully targeted fieldwork.

A number of villas are known in Surrey although most were excavated poorly by today's standards and only Beddington, Rapsley and Barnwood can provide reasonable evidence for the surroundings of the main building. Other rural settlements are not well understood. There are areas where villas might be expected but none are known and there is insufficient evidence to generalise about the history of rural

settlement and the effect of the development of towns. We thus lack good evidence for the surroundings of the towns and other larger settlements and we cannot understand the ways in which the villas and other sites functioned.

Key issues:

- Can new villas be located, especially along the 'fertile greensand' south of the Downs, along the Mole or the Wey, in the Churt corridor, and along the spring line north of the Downs? Is the lack of villas on the gravels genuine? (Be wary of the equation 'tile = Romanised building').
- Evidence for buildings and other structures associated with villas; villa settings (practical); water supply; dating (origin, 'history', end).
- Location of 'native' sites and evidence for structures.
- Changes through time to 'native' sites?
- Did rural sites (especially the more remote ones) require protection against people or animals?

Possible projects:

- ❖ Re-examine all material evidence in museums coming from the possible rural settlements as much more information can be gained now, even from old finds, and quite a lot of the material has never been properly studied.
- ❖ The priority must be to locate and understand more non-villa rural sites.
- ❖ Postulate likely extra villa sites and test (geophysics, fieldwalking).
- ❖ Achieve archive order and publication of the Cocks Farm, Abinger excavation.

- Land use and environment

There is not a great deal of evidence for the landscape and what we have is almost entirely confined to the gravel areas, such as at Hengrove Farm, near Staines, or Wey Manor Farm. Some of the 'Celtic' field systems on the chalk either side of the Mole Gap may have been in use in the Roman period. A number of villas are sited on or near London Clay or Weald Clay and this may imply a more permanent use of the clays than hitherto. Land use probably varied across the different subsoils but at present it would be difficult to say how; it would be particularly of interest to know if villa estates covered long north-south strips like the later parishes. At present we have no means of assessing if parts of the county felt remote and 'wild'. We have a serious lack of knowledge about animals and crops. There is some evidence to suggest that there was a major change in land use around the middle of the Roman period but this needs to be confirmed. Woodland industry is likely to have been important but there is little evidence at present, and other land uses are poorly understood.

Key issues:

- Much more evidence is needed for animals, both wild and domesticated.
- Much more evidence is needed for the environment: for crops, 'wild' vegetation (how much 'wild' survived?), for management and use of woodland. Is it possible to identify heathland, fisheries, vineyards?
- Surrey's geology might have led to different land uses in broad zones; can this be demonstrated? Was there greater use of the clays (and of the Weald

generally - was transhumance used?)? Did roads open up land to more permanent settlement?

- Much more evidence is needed for field systems and land boundaries, especially in non-gravel areas. Absence is as important as presence.
- Villa functions.
- Functions of 'native' sites; relationship to villas and towns, including effect on the rural population of the establishment of towns/roadside settlements.
- Can villa estates be identified (might these show a north-south pattern similar to the later parishes?), and how do they relate to 'native' sites?
- The placement in the landscape of villas and temples should receive careful analysis, including views to and from the site.

Possible projects:

- ❖ Analysis of existing information should be used to predict villa estates and the nature of the link to 'native' sites. This should then be tested by fieldwork, especially by fieldwalking and geophysics, with attention to possible boundaries and field systems.
- ❖ Attention should be given to the location and testing of evidence for woodland industry, for crops and for animal husbandry. Environmental evidence is crucial and should always be a priority.
- ❖ The archive of the King William IV site in Ewell contains over 25,000 bones or fragments of bone. Some analysis has been started but many questions could be asked of this material, including about butchery practices. A project to study all of the animal bone from Ewell would be of value, particularly from reasonably dated contexts.
- ❖ Comparison with the material from Staines would then be of considerable interest.

- Material culture and the economy

Pottery and tile are the major visible indicators of trade and industry, but far more work could be done to analyse trading patterns. There was probably only local ironworking and there are unlikely to have been major quarries, although further study of the Reigate stone industry may be revealing. Woodland products may have been a major part of the economy. Because little is known about crops and animals it is not possible to say if or how farming practices were influenced by the proximity of the London/Southwark market.

Key issues:

- Three tile production sites are known (if Horton is taken with Ashted); how are they related and how do they relate to other sites such as at Hartfield? Why are they placed where they are and what influenced the pattern of supply? How representative are they?
- How much does London/Southwark act as the main funnel for goods in and out?
- Is it possible to locate Roman period quarries (building stone, road materials, querns, chalk)?

Possible projects:

- ❖ Sourcing of products: tiles and stone at villas for instance, querns, pottery.
 - ❖ If sources of building stone can be accurately identified this could be used to target possible quarries for further study (quarries might be expected to be associated with road lines (for ease of transport and for the production of material for the roads themselves). Mortar-production places associated with major buildings should be located and studied.
 - ❖ Coinage patterns should be analysed; how do they match national patterns and can they be used to help characterise sites?
 - ❖ Use the evidence to suggest trading patterns.
 - ❖ It is probably time for reanalysis of evidence for pottery production in and near the county area.
 - ❖ Achieve archive order and publication of the Ashtead Common tileworks excavation and reassessment of all related evidence.
- Belief and burial

In comparison to many other aspects of archaeology, Surrey is well served with evidence for Roman period sacred sites and other evidence for ritual, but inevitably this raises many questions. There are hints at continuity from the Iron Age or even earlier at a number of sites, but the evidence is not conclusive. Temples as such are a Roman period introduction but it is not clear how much true change they represent. It is also possible that some sites continued to be sacred into the Saxon period, especially if there was some continuity of population, and if Christianity – for which we have very little evidence - did not gain much hold in the countryside.

The major temples might have functioned as centres for tribal groups or sub-groups, but there might have been other more local ritual locations. Detailed study of potential non-temple Roman-period sacred sites is needed in an attempt to confirm that they did not have temples; if this is thought to be the case, how might the site have been marked? Information currently available should be reassessed, especially concentrations of brooches and coins. There may also be new information available as a result of the activities of the Finds Liaison Officer appointed under the Portable Antiquities Scheme.

Key issues:

- How frequent were temples in the countryside? Were sites with temples just the most successful sacred sites?
- Can we recognise ritual sites made significant by their location but which did not come to have temples or built shrines?
- Is it possible to confirm continuity of sacred sites from the pre-Roman period and into the Saxon period?
- How did the known temples function? How big an area did they serve?
- Can it be shown that Ewell and/or Chiddingfold were religious centres, as has been suggested?
- Are there locally significant aspects of ritual: for example particular offering habits, or types of site?

- Is the limited evidence for Christianity, even in the towns and villas, a true reflection?
- Environmental evidence is crucial and should always be a priority: it is possible that offerings at some religious sites were largely of organic material, which would otherwise be difficult to recognise.

Possible projects:

- ❖ The origins of material at temple sites could be contrasted to nearby sites of the period to explore the possibility that this would show the catchment area for worshippers.
- ❖ Consider sites likely to have been especially numinous and identify possible groups of offerings to target exploratory fieldwork.
- ❖ Consider how major temples were accessed.

Apart from rural cremation cemeteries in south-west Surrey, burial evidence is surprisingly weak including at towns and villas, except for Southwark. This makes it largely impossible to assess potential differences in the population of London/Southwark and the areas around. It also means that information about the people of Roman Surrey is hard to come by.

Key issues:

- It should be possible to locate further evidence for settlement cemeteries, including by careful study of the location of finds such as complete pots
- Where were the villa burial grounds?
- Were burial groups placed at significant locations in the landscape – such as along the road from Farley Heath or other temple sites?

Possible project:

- ❖ Careful reanalysis of existing information and parallels from similar areas in order to target likely places for town and villa burials.
 - Changes through time

What evidence we have for the landscape suggests that there was generally continuity from the Iron Age and that major changes did not occur until around the middle of the Roman period. The evidence is, however, not extensive, and is mostly confined to the gravels. Material from several sites suggests some continuity of use of settlement locations, but we cannot at present show very clearly that villas grew out of pre-existing farms, or temples succeeded earlier sacred sites, or towns/roadside settlements were preceded by earlier occupation larger than just a farm.

Evidence for the transition from Roman to Saxon is also difficult to come by, but Surrey should be a key area to study this transition. The early Saxon cemeteries in the Croydon area and the place-names implying some sort of accommodation between 'Romans' and 'Saxons' suggest that it ought to be possible to find sites to bridge the gap. It is generally accepted that the south-west of the county may have remained

largely sub-Roman for decades after AD410 and again we need to be able to test this in some way.

Key issues:

- Can we demonstrate continuity from the Iron Age of use of occupation sites, of sacred sites and of burial sites, to go with the apparent general continuity of land use?
- Are there 'new' civilian sites, especially types marking a break with the past? Is it possible to demonstrate the effect of the new towns and roadside settlements? Was their population derived from a general increase or from abandonment of some sites in the countryside?
- Can we demonstrate changes in the style of living (types of pottery such as mortaria, metalwork)? How does this vary from site to site, and over time?
- Was there a major change in land use patterns at some point broadly in the period around AD200?
- How can we identify the latest 'Roman' sites or sub-Roman sites?

Possible projects:

- ❖ Reconsider and characterise all available evidence for earlier use of Roman-period sites.
- ❖ Consider evidence for Iron Age/Roman-period sites around roadside settlements/towns; is there anything to suggest abandonment of some in the Flavian period (perhaps indicating a move to new settlements)?
- ❖ Use all existing evidence to establish broad dates for occupation of sites to establish if there are shifting patterns (but beware of bias caused by fluctuations in coin and pottery supply).
- ❖ Consider late and post-Roman evidence carefully, especially anything that might indicate British survival; target likely areas eg *wealh* place-names; south-west Surrey; any site with later Roman and pagan Saxon material.

Conclusions:

A great deal could be achieved by the reassessment of the information available from material held in museums, together with the publication of unpublished excavations and analysis of finds reported under the Portable Antiquities Scheme. In particular the origins and dating of pottery and tile could provide useful information even when it is unstratified. Information about non-villa rural settlement (farms, 'villages'?) is crucial, and should be linked to study of later Iron Age rural settlement. Environmental evidence is also crucial, especially to provide information about the plants and animals and the nature of the different environments across the county.

The completion of the main road grid is of importance because of the potential insight into settlement patterns; local roads and lanes also deserve attention. Much more evidence is needed to make possible understanding of the ways in which the settlements – towns, villas and 'lower status' sites - interacted. The location of burial sites should be a priority.

Saxon

Introduction:

Key sources: Poulton 1987; Gardiner 1988a; 1988; Blair 1991; Cowie 2000; Cowie with Harding 2000; Hines 2004.

Surrey is relatively rich in evidence for Saxon cemeteries, in marked contrast to some of the so-named 'Saxon' counties, although unfortunately much has been lost or was poorly recorded a long time ago. This, together with proximity to London (and later on Winchester) means that there is great potential for the study of the Saxon period. Evidence for middle Saxon is largely lacking and in general the state of our archaeological evidence for Saxon Surrey is poor.

Discussion:

- Political and administrative geography

There is a good case for the major Saxon cemeteries around Croydon being the centre of an early region controlling much of Surrey and parts of Sussex and West Kent. Thereafter, Surrey seems to be a frontier area, caught between Kent, Wessex and Mercia. The sub-kingdom or 'province' in due course modulated into the county as such. By the end of the period London's dominance had resumed as Winchester ceased to be the capital, but it had probably been growing *de facto* once the city's function as a major trading centre had been re-established. Several late Saxon kings were crowned at Kingston, but it is not clear why this place was chosen.

It has been postulated that the county area was split into large divisions, multiple estates, etc, and in due course hundreds. It is not clear how these could have been established and how they relate to one another or to a system of royal land holdings. Hundreds have (mostly) known boundaries and some earlier earthworks are known or suggested that could be tested by excavation. It is clear that the later parish boundaries are based at least in part on earlier landholdings and these may also have testable boundaries. There is no doubt that it would be of considerable interest to establish the origins of the parishes, particularly the long strips running north or south from the Downs.

There is a curious lack of defended sites in view of the supposed constant uncertainties of the times, both early and late. A few hints suggest that there could have been early reuse of some of the hillforts. Some earthworks surviving or indicated by place-names are likely to date to this period, for example the county boundary bank crossing the A25 and the *Fullingadic*, presumably related to the Dittons. Viking raids troubled Surrey from time to time, for example in the Farnham area, and on the Thames at Chertsey and Staines. Burghal Hidage forts were probably placed at Southwark and Eashing although neither has yet been established with certainty.

Key issues:

- Location and recording of early boundary earthworks.
- Study of origins of the long strip parishes.
- Is there archaeological evidence relating to the ‘council’ role of Runnymede (as suggested by the place-name)?
- Why was Kingston a place of coronation? What were the characteristics of the late Saxon settlement?

Possible project:

- ❖ Develop a project to collate existing archaeological evidence about boundaries (including negative evidence) and carry out further targeted fieldwork to locate and test possible boundaries.

- Communications

It may be noted that better knowledge of the Roman road network would be valuable for the understanding of the Saxon period. For instance, if there was a London-Winchester Roman road, what are the implications of it being lost? What date is the A3? Routes following the A246 and A25 corridors would have been needed to link the strings of named settlements that grew up along the spring lines. Some early place-names, eg Weybridge, indicate crossing places; we need more attention to the Thames crossings. Do the hythe names like those at Egham and Chertsey indicate transport along the Thames, as is presumably the case at Rotherhithe further down river?

- Settlement evidence

As usual in Surrey, evidence for houses is hard to come by, and there is very little for any part of the Saxon period. Place-names indicating settlement ought to be a clue as to where to look, including potential ‘British’ sites, and perhaps the early church sites (some of which imply settlement away from both earlier and later occupation (eg Staines). There are a few early sunken featured buildings (eg Ham, Farnham, Hurst Park), but nothing to link settlements with cemeteries. Even Southwark is elusive in the mid Saxon period and although Guildford probably starts to develop from a royal site to a town in the late Saxon period, there is a shortage of archaeological evidence. We need to explain why Guildford in particular became important, in apparent contrast to what had gone before. The development of places like this and Leatherhead imply a new settlement pattern (and the similarity of pagan cemetery grouping around Guildford and Leatherhead ought to be telling us something).

Domesday Book gives us some evidence for part of the late settlement pattern although we cannot be sure of exact sites in most cases, and probably lack knowledge of many sites in the Weald. It would be of great interest to locate and study some of the later Saxon manors; some may have had defensive towers. Late town defences existed at Guildford, and were perhaps largely unnecessary at Southwark, Kingston and Staines because of their quasi-island locations. Archaeological evidence from places like Reigate indicates how settlement shifted at least into the medieval period.

Key issues:

- Can we find evidence for 'British' settlement?
- Where are the settlements related to the pagan cemeteries? Can place-names help?
- And conversely we lack the cemeteries for the settlements eg on the Thames-side gravels. What does this mean?
- Where are the middle Saxon settlements?
- Can we identify some of the high status Saxon settlements including the royal sites?
- Will it be possible to test the Guildford defences by excavation in the proposed redevelopment north of the town?

- Land use and environment

As usual we lack environmental evidence but Domesday Book and place-names can be used to provide a far better picture of the environment than has been possible hitherto, even allowing for all the problems associated with their use. Use of the Weald for transhumance is usually argued, backed by some place-names and limited documentary evidence. It is also argued that the temporary settlements in the Weald gradually became permanent and that Domesday Book obscures the true picture as it is known to do in Kent, but this cannot be demonstrated by archaeology at present.

If parishes develop from earlier estates then they will give a clue to late Saxon landholding; place names also suggest that estates once specialised, as proposed for the parishes grouped around Chipstead for example.

Key issue:

- Is there any prospect of an up-to-date survey of Surrey place-names? Field names and the like are missing from the 1934 survey. It should be noted that interpretation of place-names is a very specialised field of study.

Possible project:

- ❖ A thorough survey of topographical place-names should be carried out to provide information to suggest the location of features of the Saxon landscape: fords, bridges, ditches, barrows, earthworks, trees, ponds, marshes etc.

- Material culture and the economy

The main question is how to recover more evidence. At present we could conclude that much of the area was aceramic for most of the Saxon period (survival of the evidence may be a problem), and there is not a great deal of metalwork. Some of the early finds raise the possibility of sub-Roman involvement: influences on the pottery and the production of cheap brooches. There is a serious problem in being able to identify evidence of any kind for the surviving British; it must be possible, perhaps even likely that they took on the material culture of the 'Saxons'.

There is a great need for more archaeological evidence for the middle and later Saxon periods. We know little of the economy apart from hints in place-names and some knowledge of the situation in 1066.

Key issues:

- An up to date reassessment and record of all early Saxon finds is needed.
- More evidence for mid to late Saxon.
- Domesday Book indicates that a number of Surrey watermills must have Saxon origins. How can they be studied?

Possible project:

- ❖ Establish a corpus of Anglo-Saxon finds from Surrey and maintain an up to date digital version, for example with evidence from the Portable Antiquities Scheme.
- Belief and burial

Place-names (eg Peper Harow) suggest a few pagan Saxon sacred sites, but there is no archaeological evidence. If they could be located and studied they would be nationally important. It may be possible to use evidence from elsewhere to suggest likely topographical locations.

There is some documentary evidence for early Christian sites such as Chertsey Abbey but again there is no archaeological evidence and again it would be of national importance. More might be made of the limited evidence for Saxon churches, particularly where it is possible that they were replaced by later churches on adjacent sites (eg Headley). There may be a case for a careful re-examination of the Tuesley minster site.

Key issues:

- Location of the named pagan Saxon shrines.
- How can we test postulated minster sites?

There has unfortunately been little modern excavation on the pagan cemeteries, but where there has (Croydon; Goblin Works, Leatherhead) it has provided important evidence. Where there is surviving human bone from old digs it may yet provide new information. Although only a salvage excavation, the Tadworth site is important as it is perhaps on the transition to Christianity (where was its settlement?).

The cemeteries may yet provide proper information about the 'Saxons'. If they were part of forces positioned in a ring around the south of London then it is likely that they were a mixed group, probably Frisians, Franks, Jutes, Saxons, and other rag-tag from the field army. To some extent the mixed burial rites support this.

Some of the pagan cemeteries show reuse in the late Saxon period as execution cemeteries; several have now been certainly identified and others are possible.

Key issues:

- Location, date and type of pagan cemeteries (there is a need for re-examination and re-dating of some of the evidence).
 - Most of the cemeteries are on gravel or chalk; is this a reflection of choice or is survival a factor of the subsoil? Might we have lost some of the evidence from the Greensand?
 - Can new techniques determine the origins of 'Saxons' by restudying skeletal material? If this can show 'Saxon' women presumably it means incomers with families.
- Changes through time

It is generally accepted that there was a ring of pagan cemeteries around the south of London, marking settlements inhabited by people settled there as part of an attempt to protect the city or a sub-Roman enclave further north (eg Hertfordshire/Essex). Place-name evidence hints at accommodation between Britons and Saxons especially in north Surrey and there is a little support from archaeology, such as a late Roman burial on the edge of the Croydon Saxon cemetery and Roman objects from the early cemeteries at Croydon and Mitcham. Any late Roman or early Saxon sites in the area have the potential to fill the gap and could thereby be nationally important.

The cemeteries further out into Surrey may be a little later, in which case we need to know if they represent 'Saxon' expansion or British adoption of the new ways – if there is any way of establishing this with any certainty.

Some evidence suggests that settlements were still shifting across the Saxon period (earlier sites for places like Haslemere and Reigate for example), but with so little knowledge of the location of most sites it is difficult to do more than seek more settlement evidence in general for the moment and seek patterns later.

Key issues:

- Is it possible to demonstrate a late Roman or sub-Roman military connection for the early pagan cemeteries?
- Did early Saxon settlements use Roman sites and if not why not?
- Can we postulate and test continuity of estates?
- Opportunities to study sites relevant to the Roman-Saxon transition should be given the highest possible priority.
- Can we trace any sub-Roman British settlements (*wealh* places, especially along the Thames, or in the south-west of the county where there are no pagan cemeteries)?

Conclusions:

Once again it seems that a lot could be achieved by the reassessment of old publications and finds in museums, together with the publication of any outstanding excavations. Much greater use could be made of place-name evidence for the location of sites and for studying components of the landscape.

Medieval

Introduction:

Key sources: Turner 1987; 2001; 2004; Poulton 1988; 1998a; 1998b; 2005; Brandon and Short 1990; Blair 1991; Sloane et al 2000; Vince 2000.

Clearly use of historical sources is much more important from now on. Religious sites received attention from early excavators with a consequent loss of information. Some major excavations fell victim to the old Ministry of Public Buildings and Works system of paying for excavation but not for publication; some, but not all, of these sites were picked up by the English Heritage backlog programme and in particular Chertsey Abbey was published. Surrey's medieval archaeology has suffered badly from 19th century and later development. Many churches lost archaeological information (buried and standing) at the hands of Victorian 'restorers' (in an era of rapidly expanding population), and town centres have been heavily redeveloped; villages have often expanded beyond recognition (and may often be fake as villages).

Discussion:

- Political and administrative geography

Guildford Castle was the royal centre of power for Surrey and Sussex. Surrey does not seem to have served as a centre for any great lord for most of the time but the religious institutions and in particular Chertsey Abbey had great influence as a result of extensive landholdings. Different patterns of lordship created different patterns of landholding and village or town development. Parish boundaries were established mostly on a manorial basis. We need to study and attempt to understand the ways in which boundaries came into existence and how they changed through time.

Possible projects:

- ❖ Can we create accurate map(s) of earlier parish boundaries?
- ❖ Field study of the boundaries (hundreds and parishes).

- Communications

We need to know more about the road network and how bad it really was (especially in the Weald) and how dangerous (eg crossing heathland). The medieval bridges on the Wey between Farnham and Guildford are well known; documents and place-names should help to locate others together with fords, which would serve as fixed points in the road network and facilitate further research. The principal causeways across the Lower Wey must have involved considerable economic cost when constructed. They seem to have led across flood plains to fords, which were later replaced by bridges. The major causeways between Old Woking and Send, and between Pyrford and Ripley, were probably in existence by 1200 and may have been constructed around the time of the foundation of Newark Priory but may be a good deal earlier. Similar features on other rivers, including the Thames (eg Egham

Causeway) also deserve further study. Were north-south roads and trackways in use to facilitate movement into and out of the Weald? Was this seasonal? Is this reflected in the surviving fabric of early buildings?

There is little evidence of river transport being important other than on the Thames, and even there documentary records indicate the difficulties caused by conflicting uses. Evidence regarding the Wey tends to suggest only local and down-river transport (of timber and building materials in particular). The Mole and the Wandle seem unlikely to have been suitable for much river traffic at any period.

Key issue:

- Development of maps of the road system, with changes through time if possible.

Possible projects:

- ❖ A study of manorial records, ecclesiastical cartularies and letters would probably reveal significant detail about the 'public obligations' to maintain roads, causeways and bridges, and thus the likely location of the road network, that could then be tested by fieldwork.
- ❖ Undertake a project to obtain evidence to date the principal causeways across the Lower Wey.
- ❖ A study of likely routes serving known Wealden production (eg glass) or settlement sites should make it possible to establish if any were deliberately improved.
- Settlement evidence

Most of Surrey's towns were founded in the medieval period proper and they were small, with rarely more than one main street. Apart from sections across the ditch at Farnham there is little evidence for town defences although the line of Guildford's ditch system is largely known, as it is in Staines. There seems to be nothing to suggest that any of Surrey's towns had defensive walls or stone gates. Domestic structures were rarely of stone (but note undercrofts at Guildford, Reigate and Kingston) and only limited evidence has been found in excavation (for example in Guildford and Reigate). Some timber-framed structures survive standing, in recognisable condition. There is a clear need to find plans of earlier medieval town buildings. More evidence is needed for the origins of most of the towns and the way they developed. Is it possible to measure the effect of London by the use of documents?

There has been very little detailed work on village plans or excavation in villages; it is in general probable that larger more recognisable villages were mostly in the north of the county and particularly on the gravels or other favoured spots. Settlement elsewhere was probably much more dispersed and also needs a great deal more analysis and the recovery of archaeological evidence. Only this is likely to provide good evidence for the origins and development of villages, hamlets and farms, particularly for the earlier part of the period.

There are several castles in Surrey, most of which would benefit from fresh study like the recent excavation and documentary research for Guildford. Reigate is especially in need of research, as is the relationship between the castles and their adjacent landscapes, including deer parks. Lesser castles are a matter of debate and definition. Starborough may be too far gone for meaningful work although archaeological evidence may survive. Was the earthwork at Walton on the Hill a motte or a later garden feature (or both?). Although many moated sites are known, particularly in the south, few have been examined and published. There is only a preliminary study of all possible sites and it may be time to bring this up to date and give more attention to the available evidence. A programme of small-scale fieldwork might then be developed to test if postulated sites were moated. More work is needed to explain the enclosure sites like those in the Chelsham area.

There is little archaeological evidence for early domestic buildings in town or country (Hextalls near Bletchingley is an important exception) and this is a serious gap in our understanding. Where buildings survive, the recent dendrochronology project has made great strides and has made it possible to build on the years of patient recording by the Domestic Buildings Research Group (Surrey). Impressive results have already been achieved including the dating of one structure to AD1254. Perhaps more importantly it is becoming possible to offer dates for some of the major developments, eg for the replacement of the construction of open halls by smoke-bays which seems to have occurred all over the county around AD1540. By providing very accurate dates, the project may make possible detailed research about building owners and occupiers, and their uses of the buildings. The project is less successful in some places, particularly in the north of the county and where elm rather than oak was used.

Documentary research by the DBRG is leading to questions about the use of buildings and the rooms within them. For example: how were the early houses used? e.g. were detached kitchens the norm, even in relatively small houses? Why is it that Probate Inventories show that practically all rooms (even apparently 'parlours') contained at least one bed? Is there a particular nomenclature for rooms in Surrey that we don't understand (e.g. there appear to be no 'kitchens' but plenty of 'milk rooms')? The nomenclature in Surrey does appear to differ from the nomenclature in West Sussex. How do the surviving houses fit into their local 'landscape'? What sort of agricultural /commercial/'industrial' buildings were a key part of each 'establishment'? How does each relate to the rest of the village and the surrounding field systems?

Key issues:

- Origins and development of Surrey's towns.
- Origins and development of Surrey's villages.
- Use of rooms in early houses; study of attached or detached kitchens.
- The use and setting of early houses.

Possible projects:

- ❖ Achieve archive order and publication of outstanding excavations in Reigate, Kingston, Staines and Guildford (for the latter including the 12th century chamber in the High Street and sites in Quarry Street).

- ❖ Survey evidence for manorial sites and locate them (ensure information is passed to the SMRs).
- ❖ Achieve archive order and publication of excavations at Bletchingley Castle.
- ❖ Achieve archive order and publication of the Preston Howe excavation.
- ❖ Achieve archive order and publication of the backlog of excavation work on moated sites.
- ❖ Continuation of the dendrochronological dating programme, with further development of the use of the information in other fields.
- ❖ Encourage continuation of the Surrey Archaeological Society village study projects.
- ❖ Develop a project to recover pottery from village gardens (fieldwalking in villages) plus test pitting and perhaps more extensive excavation with clearly targeted aims.
- ❖ Make a study of the distinctive pattern of survival of medieval buildings and compare this to population studies in order to estimate survival rates.
- ❖ Make a new survey of moated sites.
- ❖ Develop a project to record information extracted from documents about houses on a computer database to facilitate future research.

- Land use and environment

Domesday Book provides a basis for some understanding of land use in the mid 11th century but there is a clear need for fieldwork to provide confirmation and also provide evidence for changes, and in particular there is a need for more environmental evidence throughout the period. It is usually assumed that it is during this period that the Weald saw a real expansion of permanent settlement and there is also supposed to be an expansion of land brought into cultivation generally, up to the Black Death. Again, there is little archaeological evidence at present.

Surrey is often seen as mostly marginal land which may be one reason why there were no major landowners in the medieval county. There is evidence that landowners came to specialise to satisfy the market in London and Londoners might acquire Surrey property in the later periods; were the returns mostly spent elsewhere? If there was specialisation can its effects still be seen in the landscape? The major religious sites must have had a big impact on the countryside. Documentary records for Chertsey Abbey may make it possible to identify items specified on their holdings. More work is needed for all of the monastic estates.

It should now be possible to make detailed studies of medieval field systems in the county, but this has not yet been done apart from the preliminary survey by Nicola Bannister as part of the Historic Landscape Characterisation Project. Presumably much of the existing field pattern especially in the south is medieval in origin, but this needs to be tested. The dendrochronology project has shown that in a number of cases in the late medieval and early modern period houses and large barns were constructed at the same time, sometimes to replace earlier buildings and sometimes on sites not previously used. Were some of these agricultural units built from the outset for rent? There is a need for much more work on farms, building on the initial survey for the administrative county carried out by Peter Gray (1998).

Commons have also received surprisingly little published attention given that Surrey has so many of them. We need study of their origins, use and layout ('gates', funnels, etc). Woodland has received more attention in recent years but much more fieldwork is needed and in particular test excavations of features. The dendrochronology project has recently shown that in much of Surrey oak woods were being managed by the 15th century, with the regular cutting-back of lower branches on a 15 or so year cycle – although oaks from the High Weald did not show this pattern. It is becoming clear that most timber was used close to where it was felled, and it is possible to show that some houses (sometimes quite widely separated and of different social classes) were built from timbers cut from the same wood in the same year. These discoveries should be followed up by fieldwork and documentary research.

We need to establish a full list of medieval parks, building on the work of the Surrey Gardens Trust. Some areas seem to have far more parks than others that appear comparable and this needs explanation. For instance, there are several parks in the parishes from Lingfield to Bletchingley and Burstow, but few in the parishes immediately to the west of this block

We need far more evidence for animals, gathered both from archaeology and from study of the available documents. Surrey has the first record of rabbits on the mainland (the royal coneygarth at Guildford), but the subject has been little studied in the county. How long did transhumance continue into the Weald (and of what)? Sheep breeding is documented around Epsom on the Downs and in East Surrey, but the wool processing industries seem to have grown up in the medieval period in the West Surrey towns (especially Guildford and Godalming, with a fulling mill in Guildford by at least the mid 13th century). Were sheep kept on the heathlands?

There has been little study of fishponds in the county, or the other evidence for water control and use. The area around Newark Priory from Pyrford down to Wisley shows the creation of many new channels and remodelling of the historic course of the river, and at least some of these works may be associated with the foundation of the Priory at the end of the 12th century. Documents show that similar works were undertaken by Chertsey Abbey, around Chobham for instance. There may be many instances of water control features in need of recognition and recording.

Key issues:

- More work is needed on medieval farms (to go with their fields).
- To what extent does the 'shape' of a farm vary with geology/soils across the County? Is land close to rivers and streams nearly always more valuable than land further up the hillsides?
- Where were sheep kept?
- Why were there no major landowners in medieval Surrey? Was Surrey really a miserable backwater with poor soil? How did London influence development?
- Establish a list of medieval parks.
- There is a need for study of the effect on the landscape of the religious houses (including water control).
- There is a need for study of the setting of seignorial centres.

- What were the cultural links and the economic basis for large houses deep in the Weald (eg Starborough Castle, Old Surrey Hall, Crowhurst Place)?
- Were the earthworks called medieval stock enclosures really used for that purpose?
- There is a need for much more environmental evidence to back up and amplify what we can learn from documents.

Possible projects:

- ❖ Carry out a survey of the evidence for rabbit and hare keeping.
- ❖ Use London-based documentary research concerning agricultural production and specialisation to develop a project to examine the effect on the ground.

- Material culture and the economy

There is little evidence to suggest that Surrey was ever a rich 'boom' area, but there were nationally important industries such as the production of glass around Chiddingfold. There is scope for much more work on this industry. Woodland must have been an important resource but is usually archaeologically invisible, although there is scope for study of earthworks and woodworking tools (and see the results of the dendrochronology project, noted above). It is likely that Surrey woodland provided fuel for London (coppice wood is said to have been more valuable than standards), but there was presumably a demand for timber as well.

There were several pottery industries, often supplying London, and it may be time for a comprehensive survey. More work is needed to provide closer dating for pottery. Little is known about location and marketing areas of local potteries pre-dating the major industries. Fresh study of medieval floor tiles, particularly of production, would also be of value.

The Reigate stone industry was clearly of major importance but as yet we cannot certainly locate medieval quarries (or mines). The project currently in progress should provide new information that may aid further fieldwork. There appears to be significant iron production in the low Weald around Horley and Burstow in the late medieval period, with hints that this used a different technology to that being practised in iron processing in towns such as Reigate, and this should lead to further work.

Key issues:

- The need for further work on the glass industry.
- A new survey of knowledge of the medieval pottery industries.
- Location of medieval stone quarries.
- Better understanding of the woodland industries.

Possible projects:

- ❖ Achieve archive order and publication of the Vicars Haw, Limpsfield pottery workshop.
- ❖ Complete publication of pottery from the Earlswood kiln.

- ❖ Develop a project to study iron production around Horley and Burstow.
- ❖ Map distribution of materials such as Reigate stone on a regional basis and use the results to study transportation methods.
- ❖ Study manorial and other documents to provide information to aid understanding about the use and availability of materials. How much was this influenced by the manorial system?

- Belief and burial

A great deal of archaeological evidence for Surrey churches has been lost without record, and it would be of value to highlight what may survive so that it can be properly managed. An examination of the choice of sites for churches would be of interest.

We need more finds from religious houses to south and west. Publication of excavations at Merton, Southwark and Bermondsey will make available important information, but very little has survived from the early excavations at Chertsey, Newark and Waverley. There may be a case for targeted excavation to answer questions arising from the early excavations and obtain more material. We need to know much more about other houses such as Tandridge and Guildford's leper hospital. We also need to locate chapels known from documents.

There is comparatively little burial evidence available but this can only come from major redevelopment of churchyards which is unlikely (with the possible exception of Holy Trinity in Guildford?) and obviously undesirable as a general rule.

Key issues:

- Study of the choice of church location.
- Better knowledge of key religious sites.
- Location of chapel sites.

Possible projects:

- ❖ Achieve archive order and publication of the Barnes church excavation.
- ❖ Achieve archive order and publication of metal detector finds from around Newark Priory.
- ❖ Develop a project to survey potential surviving buried (and standing) archaeology in churches – tie to church conservation plans.
- ❖ Carry out more dendrochronological work on churches with surviving old timbers.

- Changes through time

Although there is evidence to suggest that the Norman Conquest led to some destruction on the army route through Surrey, in general there was probably little immediate visible change. It should be possible to demonstrate changes through time brought about by the foundation of towns, the development of villages and hamlets, the foundation of religious houses, the growth of royal palaces, the introduction of parks and an intensification of land use, including increasing settlement in the Weald,

and later on the changes brought about as a result of the effects of the Black Death. This all requires a great deal more work on documents and in the field.

Conclusions:

The dendrochronology project has been a real success and it has many ramifications for later medieval studies and beyond. It is a reminder that it is essential to ensure good coordination between archaeologists, buildings recorders and (local) historians. There is as with all periods a need to achieve publication of outstanding sites and reassess old publications and finds in museums, and a need to find much more environmental evidence. Far more work is required on the 'lesser' sites, especially the need to find and record early domestic buildings of all types.

After 1540

Introduction:

Key sources: Brandon & Short 1990; Schofield 2000; Crocker 2004; Hodgkinson 2004; Hughes 2004; Palmer 2004; Thurley 2004.

It emerged at the seminars that it would be best to tackle this period in two separate sections: c1500 - 1750 and then after 1750, which could be studied as 'the archaeology of industrialisation' (Palmer 2004, 200). The starting date could be made at about 1540 in view of the impact of the Dissolution and other changes at around this time. Much more work would be needed in order to bring about the division into two parts and therefore they are presented together here, but it should be a priority to bring about further study. Most of the work on the period after about 1500, and in particular for the later centuries, has been carried out by the Surrey Industrial History Group (SIHG), although of course in some cases the Group's activities and interests go back earlier. There has been comparatively little work on the archaeology of the period as a whole, except for the first century or two.

This section attempts to concentrate on archaeological questions and projects, but clearly far more are needed. There is of course an ever increasing body of documentary information but archaeology still has a lot to offer, particularly for what is missing from the documents, for example at the lower end of the social scale.

Discussion:

- Political and administrative geography

The period sees the decline of Guildford Castle as a centre of power and an increase in royal palaces in the north and east. The topic can be studied mostly from documents, but some archaeological work may be required, for example on the recording of boundary markers, such as the County Council stones north of Kingston.

- Communications

Most transport-related research has been of the period from about 1850. It has often been published by specialist societies or enthusiasts, and there are doubts about the accuracy of some of the work. Archaeology has a key role to play in considering the physical process of constructing the various categories of transport infrastructure and then the subsequent effects on the landscape, both material and economic, of the transport systems when in use.

Very little is presently known about the medieval and pre-turnpike road network in Surrey. There is also still a need for further study of the turnpikes, including fieldwork (for example to explain the oddly located milestones in the Esher area). The importance of the pack-horse should not be underestimated for the earlier part of this period: pack-horses do not need wide roads or wide bridges. Do we have much evidence for pack horse bridges (one at Hurst Farm, Oxted is scheduled)? How well documented is the effect of designed landscapes (eg Titsey, Gatton and Albury) on the courses of roads? A study might also be made of abortive road developments.

Surrey has a number of canals including the very early Wey Navigation. Restoration work on some of them has been carried out with insufficient thought for the proper recording of earlier structures. The currently unused stretch of the Wey and Arun canal through Sidney Wood near Chiddingfold has considerable archaeological potential. Parts of the Croydon, Merstham and Godstone Railway terminus at Merstham were recorded in advance of destruction by the M25 but it is not known if records survive. Archaeological fieldwork would be of particular value on railway lines where construction was started but never completed. Such uncompleted railway lines include embankments as at Peasmarsh and partially bored but now lost tunnels (eg in Croydon and near Oxted). Temporary labour camps for the teams constructing the railways and canals could perhaps be located by metal-detectorists or other fieldwork, and in some cases by documentary research. This should be kept in mind by the Portable Antiquities Scheme.

As well as the significant early sites related to aviation history (including Croydon and Brooklands), there were many smaller sites that were important in the development of aviation and during World War II, including manufacturing sites as well as operational sites. What archaeological work is needed? Up until World War II anyone could create a private landing strip on any fairly flat piece of ground and many farmers/landowners created such ephemeral 'air-strips' with associated structures for their own use. Can these be recorded?

Key issues:

- Study of the pre-turnpike road network.
- Further studies of turnpikes.
- Study of pack horse bridges.
- Study of post-turnpike changes.
- Study of railway construction methods from unfinished earthworks or tunnels.
- Location of records of the CMGR terminus excavations.
- What archaeological work is needed on sites relevant to aviation history?

Possible projects:

- ❖ Develop a project to bring together evidence from medieval and post-medieval Court Rolls about roads and related structures like bridges and fords, with evidence from field archaeology and other historical sources.
 - ❖ Carry out recording of transport-related features: toll-houses, gate positions, railway structures being overtaken by modernisation, etc.
 - ❖ Target excavation to record construction methods eg of short-lived or non-completed sections of railway.
- Settlement evidence

For this period there is obviously good documentary and map evidence for settlements, especially later on, but archaeology is needed to fill gaps in what is recorded, even for the 19th century. For the earlier part of the period there is a natural continuation of the work on villages and domestic buildings already indicated for the medieval period (including dendrochronological work). Excavations that have been undertaken on several great houses is still in need of publication.

There is a need for study of the ways in which our towns expanded particularly in the 19th century; the effect on their layout (markets, zoning of inhabitants, etc) and building types involved. There may be scope for re-examination of some recent urban excavation archives together with documentary research to match finds and occupiers of late buildings. Plans of later buildings of less than grand type are important because they are becoming rarer and are not usually protected. People are already beginning to forget how the ordinary houses were laid out, were heated, got water, etc. Many buildings of social control such as workhouses, prisons and hospitals have been recorded individually but we need a county summary. Surrey is clearly a key area for the study of suburbanisation.

There is scope for a comprehensive project on leisure and entertainment: football grounds, cinemas, race tracks, etc.

Key issue:

- Consideration of how archaeological methods can add to other methods of study, and integration with these methods.

Possible projects:

- ❖ Continue village studies.
 - ❖ Achieve archive order and publication of excavations at Nonsuch Palace, Oatlands Palace, Richmond Palace, Kew Palace and Place Farm near Bletchingley.
 - ❖ Carry out an analysis of Surrey fire insurance policies to build on the detailed study that has already been carried out for Wandsworth.
 - ❖ Continue the dendrochronology project with attention to post-timber-frame tradition roofs.
- Land use and environment

There is a need for much more work on agriculture and as this overlaps with earlier periods it is considered further below, in the overarching section. It would be appropriate to note here the 19th century model farms which probably deserve more detailed study, and the effect of the attempts to find economic uses for the heathland derided as useless by the agricultural improvers. Surrey has suffered less than many areas from the changes to agriculture since World War II, but it may still be necessary to consider how they might be documented. The Surrey Historic Landscape Character Survey project provides a basis for further study.

Surrey has several nationally important landscape gardens. There is a need to ensure the proper use of archaeological techniques in conjunction with, and in advance of, restoration. The techniques also assist with the understanding of lost gardens, as at Carshalton House. How can we make use of the increasing body of evidence for historic parks and gardens being collected by the Surrey Gardens Trust? Perception of the landscape as such changed in the 18th and 19th centuries and played its part in changing settlement patterns and the growth of activities like day trips out from London.

In this period it is possible to consider the study of industrial landscapes such as along the Tillingbourne valley, and the Wandle valley. There are industrial woodland landscapes connected for example to glass and charcoal production and the whole area of woodland management needs further attention. Large scale extraction eg for chalk makes a considerable mark on the landscape. It is possible to plot the effect of new transport systems on industry and settlement.

Possible project:

- ❖ Achieve archive order and publication of the archaeological work in Painshill Park.
- Material culture and the economy

Documentary evidence suggests that London and its market had an increasing effect on Surrey's economy by the 17th century, by the end of which the county was second in order of prosperity by county. Obviously there has been a great deal of research on industrial aspects, especially later on, but we need to consider also more traditional archaeology, which has tended to receive less work. How much is really known about

material culture? Do we have good knowledge of the pottery, etc, used in the county throughout these centuries? Are there reference collections of ceramics, glass bottles and metal objects, particularly for after 1750?

More work (including publication) is required on medieval and post-medieval pottery industry sites, including structures round the kilns, fuel supplies, etc. Some are known only from documentary evidence. There is a need for further study of the glass industry using modern scientific techniques, together with the location of further sites and the study of the relationship between furnaces and coppice woodland. The brick industry needs much more attention. It should be possible to identify brick- and terracotta-making areas firstly related to houses like Sutton Place and then when brick comes into more general use about 1600. Where were the tiles made that were widely in use from the medieval period? Again there are documentary references to manufacture at places like Clandon Common. Where are the clay-pits and the remains of the clamps? How was the material transported? The transport of building materials in general deserves detailed attention; current evidence suggests that it was mostly taken by road, even in the case of a site like Oatlands, near both of the main rivers.

There is still a need for a study of the use and distribution of the various types of local building stone, both in the medieval period and in the years after 1500. Quarries in general need closer study, in some cases using standard archaeological techniques. Close dating of the well-recorded stone quarries near Reigate is a priority if a method can be found.

A large number of small workshops existed until recently in town centres and residential areas but they are rapidly disappearing. They would make a good subject for study and need recording, particularly while it is still possible to make use of oral history methods.

Key issues:

- Knowledge of pottery, glass, etc used in the county, especially after about 1750.
- Further study of the glass industry.
- Study of the brick and tile industries.
- Is there a need for the study of (comparatively) modern extractive industries in Surrey, such as chalk, sand and gravel?
- Can missing watermill sites be located? Water control features associated with mills need more detailed survey.
- Is there scope for archaeological study of windmill sites?
- Is there scope for archaeological study of the cloth industry? And tanneries?
- Use of archaeology to study consumption and life in the suburbs.

Possible projects:

- ❖ Recording of mushroom farming enterprises of the earlier 20th century in the Godstone quarries while the evidence survives.
- ❖ Recording of small scale chalk extraction pits dug to provide material for field dressing.
- ❖ Recording of small workshops and workshop practices.

The following is a list of projects that SIHG hopes will be undertaken over the next few years:

- ❖ Studying the history, activities and remains of the large concentration of industrial and government and academic research establishments in Surrey, e.g. Central Electricity, Paper Industries, Fighting Vehicles, and Satellite Technology.
- ❖ Preparing and publishing a history and gazetteer of the brick and tile industry, comparable to that produced by the Sussex Industrial Archaeology Society.
- ❖ Studying public utilities in Surrey. Brief references to these utilities (water, gas and electricity) have been presented in the SIHG guides and discussed generally in the SIHG books but deeper research is required.
- ❖ Studying the manufacture of machine tools and engines in Surrey. Examples are Drummond lathes, Mark Webber engines and the products of J L Jameson Ltd in Ewell.
- ❖ Publication of a survey of the waterwheels of Surrey, corresponding to the account of water turbines already published in the *Surrey Archaeological Collections*.
- ❖ Completion of a detailed study of iron processing sites in Surrey that started at the time of the SIHG 'Alexander Raby Ironmaster' conference at Cobham in 1998.
- ❖ A detailed study of the breweries of Surrey, extending the published work on Guildford to the rest of the county, including more detailed surveys of surviving structures.
- ❖ Study of census enumerators' returns for details of occupations and mobility of workers; already carried out for the hosiery and knitwear industries.
- ❖ Oral history projects, encouraging people, who are able, to provide information about the industries of which they have first hand knowledge, e.g. the manufacture of Spitfire jettison fuel-tanks at Shalford.
- ❖ Publication of industrial history guides to the south-west London Boroughs, in collaboration with the Greater London Industrial Archaeology Society (GLIAS). Croydon will be the first.
- ❖ Recording of industrial buildings that may be threatened. Current examples are Unwin's St Martha's Printing Works at Old Woking and raw materials (charcoal and saltpetre) buildings at the Chilworth Gunpowder Mills.

- Belief and burial

There is perhaps comparatively little interest for archaeological studies in this period but changes to churches should be documented and there should probably be a study of such things as the underfloor church heating systems that caused so much damage to earlier archaeology before all the evidence is removed in its turn. Some cemeteries have been recorded before destruction with much useful information recovered about disease, stature, etc. There is scope for a major project to document and study non-Anglican burial grounds and produce detailed study of buildings associated with new denominations and their use.

- Changes through time

The period of course sees huge changes; there is scope for detailed study of the effect of the Dissolution near the beginning of the period and the effect of the coming of the railways near the end.

Conclusions:

The key concern is how to widen interest and carry out work to establish an archaeology of the period of industrialisation from c1750 and encourage more archaeological work throughout the period from 1540. A major problem is the degree to which there should be recording of little regarded aspects as they disappear almost unnoticed, for example unlisted buildings or minor farm structures.

Archaeology is the study of the physical evidence for the human past, but difficulties arise with very modern industries. How do we ensure that the industries present at the moment are recorded when it is usual for every last scrap to be extracted and sold with demolition of the buildings or destruction of artefacts? Where will future industrial archaeologists get their information? We need to try to ensure that records of all types are preserved for the Surrey History Centre (where a balanced selection can be made). There has been very little work drawing on trade journals, including the adverts. They represent a huge reservoir of information which has not been tapped.

Key issue:

- There is clearly a need for much more work to provide a summary of knowledge about this period on the basis of which it can be split into two parts and more questions and projects for each part can be developed.

Overarching themes

Introduction:

Surrey seems to have been in a sort of frontier location for much of the time, set between clearly different blocks. This together with the poor soils leads to a general impression that it was often a backwater. Interestingly, this makes it a good area to see how things work outside the classic territories, and it should also make it easier to find evidence for continuity (or lack of it) from one period to another. We should not make the mistake of equating a lack of big and glamorous sites with a lack of potentially important archaeology that might answer some nationally important questions in ways that other areas cannot. Surrey has a lot to offer in key areas of

knowledge. It is important to concentrate on the value of local studies for their own sake, taking account of work elsewhere but not being led by it.

Geology and soils need to be better understood, including changes to the latter through time as a result of differing land uses. Surrey is complicated: not only is there a great variety of solid geology, but there are many different superficial deposits and the topography leads to a lot of soil mixing as well. It may not only vary from field to field but even within the same field. At a larger scale some generalisations must be possible - for instance the way Roman villas encircle the Weald must mean something - but we will always have to be wary of anomalies brought about by special very local conditions. No wonder Surrey's historic landscape is so complex!

In what follows consideration of most of the themes used in the period discussions is preceded by sections on geology, topography and soils and then on regionality and identity; security is also considered. Discussion of geology owes a great deal to comments from Paul Sowan.

Discussion:

- Geology, topography and soils

Key sources: Macphail & Scaife 1987; Rackham & Sidell 2000; Branch & Green 2004; Short 2006

Surrey's topography is heavily influenced by the underlying geology, resulting in considerable barriers to easy movement across the county, and creating many small areas with subtle differences of climate and soils. There has been little detailed study of the rivers through time and this is much needed as it will obviously have influenced nearby settlement. Tree clearance and soil runoff can seriously affect river systems and the ways in which nearby land can be used, as well as possible crossing places.

Archaeologists are concerned principally with the 'drift' deposits and the soils that have developed on them, but many archaeological reports refer only to the buried 'solid' geology as given on the published maps. In fact this is based on interpolation between widely scattered visual observations so may not be accurate anyway. It is therefore essential to approach each site with an open mind and understand the soils that are actually present. There is a need for more generally available information about soils in the county, with consideration of the possible effects of climate changes, aspect, rainfall, drainage, overuse, or erosion as a result of tree cover being removed, etc. We need to be able to relate sites to the contemporary situation of course.

Geological factors are also of obvious significance for raw materials and industry, from the gathering of flint for tools through the location of early manufacturing sites such as potteries, tileries and ironworking, to the major extraction sites for stone and chalk, sand and gravel. The subtleties can be very important: particular clays for pots; the best kind of stone and so on. Deposits with the same name in Kent and Surrey should not be assumed to be the same deposit geologically (eg Thanet Sand in Kent is not the same as Thanet Sand in Surrey). There are important geological differences

between the east and west Surrey Weald. Quite apart from the obviously far wider outcrop of the Lower Greensand beds in the west, there are significant differences within each named formation. The Sandgate Beds have fuller's earth in the east, but Bargate stone in the west. The Hythe Beds are a limestone (Kentish Rag) around Maidstone, but mutate into a sandstone (the Hosey Common/Westerham equivalent of Kentish Rag) westwards, and change further through Surrey. Some of the beds, notably the Atherfield Clay, are so rarely well exposed that relatively little is known about them - they may be as variable as the other Lower Greensand beds for all we know. London Clay, particularly west of the Mole Valley, contains lenses of sands and gravels up to 50 feet thick and this needs to be borne in mind when looking at geological maps showing 'London Clay' overlying the Chalk deposits on the dip slope of the North Downs. There is some indication that Romano-British and medieval settlements are more likely to be found on such lenses of drier material. Similarly, the Weald Clays contain thin beds of limestones and sandstones, which again have an influence.

Key issues:

- Better knowledge of soils.
- Studies of rivers through time.

Possible projects:

- ❖ Production of a guide for Surrey archaeologists to the vast range of geological literature and resources available.
- ❖ Production of an archaeologist's guide to the soils of Surrey.
- ❖ Production of a map of peat deposits with the age of formation.
- Regionality and identity

Surrey as an entity is difficult to classify because it is so varied. This is presumably one reason why it seems to be something of a frontier or a 'buffer zone' between other major blocks like Wessex and Kent. Yet Surrey as such has a long history as a unit of some sort. There is some logic to the boundaries: heathland to the west (and the Blackwater as a convenient dividing line), the Thames to the north and the Weald to the south; only the Kent boundary seems arbitrary and it is interesting how this can be seen as a rough line drawn south from the tidal pool on the Thames. On the other hand this boundary may have been further east in the early Saxon period, perhaps forming a more equal division with Kent of the area north of the Weald. In general terms it is evident that what one might call the greater Weald (ie south of the Thames and east of the Hampshire block) was somehow divided into sections between Kent, Sussex and Surrey.

Although the county may thus have formed a unit the links to surrounding areas must always have had a considerable effect, leading to differences in each corner. The Thames will always have been important as a highway for ideas and goods but no doubt usually acted as a frontier of some sort as well. Even now people recognise that it is somehow 'different' north of the Thames. The Farnham area has always had strong links with Hampshire (reinforced by the medieval link with the Bishop of Winchester). The Weald is often seen as a barrier and was probably only thinly settled

until relatively recently, but there are many pieces of evidence for links between Surrey and Sussex that hint at a different picture. This deserves more attention through time.

There are hints that there were divides within Surrey between east and west, and north and south: different types of Bronze Age hoard for example, or distribution of finds in the Iron Age, or medieval building styles; nucleated settlement to the north and dispersed to the south in the medieval period. Yet a major question must be how much this represents separate areas with separate populations and how much it shows differential use of a wider area by the same population. It may of course have changed through time and is in any case partly a matter of definition.

The overall pattern is complicated by the foundation of London, which must be a key factor from the Roman period onwards. Much more work is needed to study the effect, and this needs to take account of the effect on all the other counties neighbouring London.

Key issues:

- Relationship to London.
 - Relationship to the Thames Valley (river as frontier/barrier or highway and link).
 - East-west split (and therefore relationship to Hants/Berks and to Kent).
 - Relationship to Sussex (the Weald as barrier and resource).
- Political and administrative geography

A general consideration is that exploitation of Surrey's varied habitats from early on may always have led to the development of north-south 'territories'. We are used to the idea that many of the parishes are laid out in this way so as to exploit the different geologies, and we accept that even as late as Domesday there were chief settlements further north with links to subsidiary land well into the Weald. It seems reasonable to suggest that this approach would have been in use throughout – but originally with larger territories Thames-Weald. The implication is that some units, and their boundaries, could be of great antiquity in origin.

Earthwork boundaries are important but difficult to date and they need further study, which should involve both documentary research and fieldwork. It should be possible and worthwhile to develop a gazetteer of excavated boundaries of different origins to assess form and structure, including the living component of trees and shrubs (note also field boundaries, discussed below).

Key issue:

- Antiquity and development through time of north-south links within Surrey.

Possible project:

- ❖ Develop a boundary research project to establish the course and if possible the dating of major administrative boundaries.

- Security

Key source: Shephard & Crocker 2004.

Security must always have been a concern but specifically defensive structures are not common apart from in the last two centuries. It would be of considerable interest to establish how 'wild' the county area was at any particular time, and what steps were taken for example to protect against animals. There is for instance little evidence to suggest that the more remote Roman villas were 'defended'. On the other hand there are stories of highwaymen in the Bagshot area and medieval records of the dangers of moving prisoners from place to place. Structures that at first sight look to have been created for defence have often been interpreted as having other purposes. The function of the county's hillforts is still open to debate and it is generally accepted that medieval moated sites were meant for display (and other purposes such as keeping fish and providing for drainage) more than for defence. Even medieval castles were as important as dwelling places as they were defended centres (and again display was important).

At times the county served a part in the defence of London, perhaps in the sub-Roman period and certainly from the late 19th century. Surrey has a significant late military history but relatively little earlier on. There are no recognised battlefields. Metal detector surveys may be of value for locating and understanding the sites of Civil War actions and later militia camps. There was important use of the western commons for military training from the mid-19th century and in places this has continued ever since. Associated evidence includes earthworks, barracks, concrete training structures and secret development sites and all need further study. The late 19th century forts along the Downs are comparatively little studied in Surrey. There were camps all over the county in both World Wars with associated practice trenches; these need to be documented to avoid confusion with earlier features. Oral history should be used, with care. Prisoner of War camps should also be recorded, like the one at Felday.

More work is required on the defence works of 1939 through to 1942 which were less well documented than those constructed later in World War II, particularly on the lesser features like tank traps. The main Anti-Tank line of 1940 should be fully recorded: it was in places a substantial ditch. It would be interesting to know the location of the special hideouts created in Surrey in 1940 from which soldiers would have emerged after Southern Britain had been overrun to harass the invading forces by sabotage from the rear. There is also a need to record and/or protect more recent defence structures before they are lost. There may be a need for a list of the smaller World War II airfields and temporary landing grounds and of aircraft crash sites (note that there are war grave implications). It should be possible to achieve a county map of bomb sites, already done for some areas (eg Ashted, Croydon). This would have value for earlier archaeological work as well.

Key issues:

- How 'wild' was the county through time?
- Recording of Second World War and later defence structures while it is still possible to obtain personal recollections.

Possible projects:

- ❖ Study militia-related structures and practice areas (metal detector surveys?).
 - ❖ Further publication and analysis of World War II defence survey material.
 - ❖ Further work on Second World War defence systems; eg lesser category nodal points: establish locally-based survey projects?
- Communications

It would be valuable to study the development of routes through time: if it is right to think in terms of seasonal use of the county's rich variety of different habitats from the very earliest periods then it follows that some of the north-south routes could be of great antiquity. Routes are influenced by topography but it is important to consider how lack of a bridge or a ford might have affected contemporary settlement. Obviously all routes had a purpose, so there is clear potential for settlement studies and use of resources, and vice versa – known dated settlements and sources of material need access.

Because of the topography many north-south routes were forced to cross the Downs and climb the Greensand, leading to the development of holloways. Some of these are impressively deep; can we find a way to assess their age? East-west routes also deserve better study. The Pilgrims' Way was shown to be a myth a long time ago (although the idea refuses to die), but a reasonable case can be made for a longstanding route along the Greensand on roughly the course of the A25.

Surrey's rivers do not seem to have been well suited to river traffic, but this aspect deserves further study (including for the Thames). It is also noticeable that the river valley corridors do not seem to act as the basis for major land routes and this merits further examination.

Key issues:

- Study of the use of the rivers for transport
 - Studies of the antiquity of north-south routes and main highways
- Settlement evidence

Surrey presumably always had a comparatively low population until the coming of the railways, except for the effect of London and Southwark on their immediate vicinity, as a result of the generally poor soils. There is scope for further study of the available documentary evidence to confirm this picture and to highlight any changes in the pattern overall.

A constant theme throughout this Framework is the lack of evidence for domestic buildings of all ages; even for the medieval and later periods we still need evidence for lower status dwellings. Until relatively late they will almost always have been timber buildings, and these need careful area excavation if they are to be detected, although it seems that the construction methods used in our area often leave very little archaeological trace. Even demolished wings of medieval buildings that are otherwise

standing can be impossible to trace in an excavation, although well attested by documentary sources. We need to give attention to the development of techniques that might provide some answer to this problem. For the Roman and medieval periods at least careful plotting of roof tiles and other material should always be undertaken in the hope that it might reveal building plans. For the earlier periods in particular there is the possibility that some sites have been buried by colluvium. A project to plot and test likely locations might produce valuable results.

Another topic common to more than one period is the absence of a south-west Surrey centre. It would be logical to expect something for the Late Bronze Age at least, and distribution patterns also imply the existence of a larger Roman-period settlement. From the late Saxon period Guildford takes on an important role, but nothing suggests that it was an earlier centre. There is a need to locate the earlier centres for the south-west so that we can begin to understand better the reasons for the development of Guildford.

Key issues:

- Study of population densities through time.
 - Development of methods for locating timber buildings.
 - Location of a centre or centres for south-west Surrey before the late Saxon period.
- Land use and environment

Key sources: Macphail & Scaife 1987; Bannister 1996; 2004; Gray 1998; Rackham & Sidell 2000; Branch & Green 2004; Short 2006

We need much, much more evidence for the environment in all periods. Continuation of the current Royal Holloway College palaeo-environmental studies (with support from the Surrey Archaeological Society and Surrey County Council) will be of key importance.

Study of agriculture generally needs a lot of attention. The problem is the wide variety of topography and soils so there is a need for many very local studies. Agriculture and land use generally are particularly well suited to study through time as it is often difficult to date features with certainty to a particular period, even if comparative dating is possible. Some features survive as earthworks (often called 'stock enclosures') but their purpose and date is usually conjectural. Many Surrey commons have ponds but there has been little detailed study of any of them. Transhumance into the Weald is argued for several periods but needs further study. In the early periods it is likely that the marginal soils will have led to short-lived attempts at agriculture. In some places this may have led to the creation of heathland and traces of early field systems may survive. Heathland does not usually survive as such in Surrey unless it is managed and there is need for much more detailed study of this land use for its own sake. Some areas are apparently mostly 'empty' of archaeological evidence, especially much of the heathland in Surrey Heath and in the south-west. There was apparently little settlement along the Blackwater Valley as well. There is evidence from as early as the Roman period to suggest the use of marling to improve soils in

Surrey, but limeburning for agricultural use may not be generally used until the 18th century.

Study of agriculture in the pre-medieval periods will have to rely mostly on archaeology and in particular on environmental evidence. After that, there is a vast mass of material on particular aspects of agriculture in the county, much of it published in the form of articles spread over many journals. There seems to be a need for a project to produce a list of all the secondary sources, and to build on these to create a history of agriculture in the county, from as early in the medieval period as possible. The main sources for creating a synthesis of the development of agriculture in Surrey are likely to be documentary, although standing buildings research may also provide insights. Excavation is not likely to be a primary tool in this research, but archaeological methods in understanding field patterns and the like may be important.

For each century from medieval onwards it would be useful to know the relative importance in Surrey and its various districts of corn and other cereals, market gardening, flax, hops, orchards and other specialist products; cattle, sheep, and pigs (for, variously, meat, milk, wool and their hides); woodland. To what extent over time were the farms specialised? How does this vary by underlying geology and soil type?

Woodland must always have been important in Surrey and several areas of the county have been studied (see eg Bannister 1996). There is a need for more work to follow up the initial surveys and to examine other areas.

Key issues:

- Continuation of the Royal Holloway College palaeo-environmental studies.
- Local studies of agriculture over time.
- How can we test the theories about transhumance into the Weald?
- What use was made of heathland through time? Were heaths long-lasting or did they go through cycles of reversion to woodland?
- Are the 'empty' bits of the county really empty? And if there was not much settlement, can we find real evidence for how they were used?
- Was there really little settlement along the Blackwater?
- Can we develop a programme of work to explain the purpose of the many enigmatic earthworks in Surrey?
- When did marling of land begin in Surrey? And when did limeburning for agricultural use start?
- Study of changes to animals through time.
- Study of woodland use through time.

Possible projects:

- ❖ Build on the results of the Historic Landscape Characterisation Project, with more detailed research to provide additions and corrections.
- ❖ As a result of administrative Surrey planning policies, development sites over 0.4ha have often been subject to archaeological evaluation. It would be a very useful exercise to carry out a survey of the results of all such projects compared, for example, to site subsoils.

- ❖ Develop a programme to date and interpret landscape features, especially woodland and field boundaries. Develop a gazetteer of excavated boundaries of different origins to assess form and structure, including the living component of trees and shrubs. Are there different boundaries associated with different periods of assarting? Excavate and record profiles etc. in order to build up a reference set of different boundaries.
 - ❖ Explore timber sourcing and timber management practices across Surrey, using dendrochronological data on sources.
 - ❖ Develop a further programme of fieldwork in woodlands. Carry out targeted excavation to examine the construction, use and age of features resulting from traditional management of woods: charcoal hearths, saw pits, wood banks, extraction tracks, etc.
 - ❖ Establish all Tithe Award Map information on a GIS base, using first edition 6" Ordnance Survey maps as a basis, as a foundation for further study of field systems.
 - ❖ Establish a project to study all land use information available from manorial documents, place-names, etc.
 - ❖ Carry out surveys of features related to stream and river use through time.
 - ❖ Carry out a survey of ponds in Surrey: age, purpose, dam construction, etc.
- Material culture and the economy

Key source: Schofield 2004

The key overall question is the effect of London on Surrey's economy once the city was established. All aspects are likely to have been influenced and interlinked: contemporary transport systems, often London-related, will have affected agricultural production and extraction sites as well as settlement locations. The main problem is finding a way to create a picture of how the county might have functioned if London had not existed. For the pre-Roman periods there is the opposite problem; we are so used to the overwhelming presence of London that it is difficult to imagine the area without a strong focus in that direction, but this must be done.

There is scope in Surrey for a long-term examination of economic development in an area with woodland and mineral resources but relatively poor agricultural resources.

- Belief and burial

Key sources: Field 2004; Bradley 2005

The main overarching interest must be in evidence for continuity of use for specially sacred sites from one period to another, but this can be very difficult as it involves recognition of ritual aspects as such, and as Bradley makes clear (2005) ritual was very much a part of everyday life. It is well established that there were offerings to the Thames in prehistory. How far back was this a prevalent practice in this area, and to what extent is there evidence for similar practices on tributaries of the Thames? Careful attention should be paid to discoveries of all periods related to springs.

Can we recognise other aspects of the landscape that attracted ritual activity? It is now generally accepted that many finds were not the result of casual loss (Neolithic axes,

Roman brooches, etc), but were carefully placed as offerings for a variety of reasons. Therefore even isolated chance finds deserve careful attention and recording. The Portable Antiquities Scheme has an important role to play here.

Key issue:

- Is it possible to recognise long-lasting sites of special ritual importance?

Conclusions:

It is very clear that it is important to study the evidence from Surrey itself, not look at what is known elsewhere and try to find it in the county. Recent work on prehistory has demonstrated very clearly that models derived from well-studied areas such as Wessex simply do not work over much of the rest of the country. Thus monuments seen as 'standard' are merely characteristic of certain areas and should not be expected as a matter of course in Surrey. Moreover, if they are found, their interpretation should be based on the local finds as their use is likely to have been subtly different from place to place. This lesson applies to all periods and from place to place within Surrey as well.

The message is: play to the strengths of local studies and let the evidence have its strengths. There is no a priori reason why areas in Surrey should follow some assumed national or regional 'norm'. Examine the Surrey evidence for itself, and only then compare and contrast to what is known elsewhere without being led by it. In many areas of research we still require a great deal more basic information from the county itself. At the same time, we need to maintain links with surrounding areas as of course archaeology does not stop at county boundaries.

IMPLEMENTATION

The best way in which the Research Framework can be implemented is by professional and amateur archaeologists working together. As noted above, however, delivery of research projects will inevitably fall mostly outside the professional sector as this is tied so closely to rescue archaeology for its funding. Unless ways can be found to address this problem there will be difficulties for effective delivery of the Research Framework largely because of the lack of enough adequately qualified and experienced directors for projects of all kinds, and of experienced fieldworkers and finds specialists. The seminars also identified a need for training in the reading and interpretation of historic documents and how to achieve archive order and publication.

Serious attention must therefore be given to the establishment of training programmes to cover these areas and to work at all levels. This may range from sending people on established training courses to setting up special training events, where necessary hiring in the required expertise. All newcomers need to be fostered and potential project directors need to be able to undertake a graded training programme, graduating from trainees to assistants and then undertaking small projects, completing them to publication level before moving on to more complex work. We must make sure that the days are over in which largely unqualified and inexperienced people attack a local important site and fail to publish, having bitten off more than they can chew (and having incidentally destroyed important archaeology).

The existing and proposed Surrey Archaeological Society period and subject working groups and other similar groups in the county could play a key role in this process. Groups would serve as a means of coordinating work for their chosen area, fostering the acquisition of skills and experience while maintaining standards, staying up to date with research carried out elsewhere and establishing links with other groups and specialists, and with appropriate universities and centres of excellence outside the county. The groups could also develop the Framework into more detailed agendas for periods or themes, develop and carry out projects, hold technical seminars to air questions and establish approaches to particular problems, and set up workshops for training purposes (handling different types of finds or working on different kinds of documents, for example).

The Government has now ratified the European Convention on the Protection of the Archaeological Heritage (revised) 16/1/1992 ('The Valletta Convention'). Among other things this requires the Government to

- 'ensure that archaeological excavations and prospecting are undertaken in a scientific manner' (with a stress on using non-destructive methods wherever possible) (Article 3ib);
- 'ensure that excavations and other potentially destructive techniques are carried out only by qualified, specially authorised persons' (Article 3ii);
- 'subject to specific prior authorisation the use of metal detectors and any other detection equipment or process for archaeological investigation' (Article 3iii).

Although these requirements have been controversial, no responsible archaeologist would argue with the general principle that archaeological work should only be

carried out to the highest possible standards under the direction of properly competent people. We should build on Valletta and establish agreed standards for archaeological work in Surrey whether carried out by professionals or by amateurs (it should be noted that ALGAO, IFA and the CBA are all working on the establishment of standards). In fact experience suggests that properly targeted and well implemented archaeological work is much more interesting and satisfying to all participants than more random activity.

A code of practice should be adopted for archaeological work in Surrey that includes preparation of a Project Design for all pieces of work. This is important because it imposes discipline and clarity of thought about a proposed project and what will be needed to carry it through successfully, and gives a commitment to and time for publication. Once again, if a training system can be established then it is easy to develop the use of this system by starting with small projects and working up to larger ones.

There is a need to develop a programme of fieldwork covering large areas, preferably parishes or groups of parishes, linked to documentary and other research. To some extent the proposed Three Parks Project in the Bletchingley area should serve but if possible more such projects are needed. Can we establish a controlled consistent programme of fieldwalking, perhaps linked to metal detecting under the aegis of the Portable Antiquities Scheme? The work carried out by Robin Tanner at Outwood over many years has revealed evidence of all periods and illustrates the potential, but it also indicates the difficulties connected with study and publication of the finds. Multi-period historic landscape studies link well with the Surrey Archaeological Society village studies programme. This type of work needs to be coordinated with the activities of period and theme-specific Groups and their research.

Surrey has many local historians who have carried out a great deal of documentary research, but there has been relatively little link to archaeological work. We need to find a way to foster this link. It may be noted that there are members of the local societies who are willing and able to carry out targeted research if they can be given the raw material. Joint projects (leading to publication) should be encouraged.

There is a case for a programme of experimental work. Many amateur archaeologists will have useful practical experience in other fields that should lead to interesting experiments. It is important to remember the Peter Reynolds dictum that a successful experiment does not prove that it was done in that way in the past. As usual, publication of results is important. Experimental archaeology is likely to appeal to members of the public and this should be kept in mind when considering possible projects.

Many projects need not involve excavation, which has to be targeted carefully in view of the costs of scientific back up and the imposition of post-excavation work on project directors, especially if there are many finds. It is clear that there is a need to reassess much of the information we already have. It should all be re-examined in the light of current knowledge: pottery and other finds checked; excavation records analysed, findspots of scattered finds confirmed, etc. It is likely that this would lead to redating of some sites and less certainty about plans and therefore purpose of others.

There is a strong case for more publication including republication of some key groups to modern standards.

Many important excavations carried out in Surrey remain unpublished, some dating back many years. Some of the key sites have been highlighted in this document. It is important that they are published as soon as possible: they would help to raise the profile of archaeology in Surrey, make it possible for others to use projects as models and allow other researchers to see the evidence for themselves and consider alternative interpretations or make use of the information in a wide variety of ways. One difficulty is the availability of sufficient vehicles for publication, particularly of large professional unit reports. There has been considerable preliminary work to establish a South-East Archaeology publication series but this has stalled. Some of the Surrey County Archaeological Unit backlog sites noted above have been prepared for publication in this series and it or an alternative needs to be set up as soon as possible.

The Surrey Archaeological Society Artefacts and Archives Research Group has begun a programme of work to tackle some of the backlog of amateur work but more is needed. We need to identify key sites and support the original directors or a new leader to achieve archive order and publication. We also need to develop suitably experienced finds specialists wherever we can, as there are too few and they have too much work. It should be possible to make use of reference collections and already established type series for some of this work. Links with established experts should be maintained so that draft reports can be monitored.

Formal publication is expensive and time consuming and sometimes has a small audience. It may be time to consider changes to the traditional approach while maintaining standards and ensuring that proper archives are prepared for archaeological work. If excavations receive only selected publication, how can we ensure that the full archive is readily available without the need to pay extensive (and expensive) visits? How can we ensure publication of interesting archaeological and historical research of all types when it is not prepared to a standard suitable for scholarly publication? Can we develop a web-based system for making available data collections of all kinds that do not otherwise merit publication? Is there sufficient opportunity for kite-flying to encourage new thinking?

The Surrey dendrochronology project is an excellent model for how projects should be tackled: develop and set out clear aims, raise the necessary funding and then carry out the project to meet the original aims while formulating new questions arising from the findings. It also illustrates how one project can impact on many other areas and the need to ensure that it can do so. Many possible projects have been suggested in this document and it will clearly not be possible to tackle them all. We will need to make choices. Probably the aim should be for one or two major projects at most in any one year, but with several smaller pieces of work. The latter would form an important part of the proposed training system, providing opportunities for budding project directors.

The choice of major projects may prove difficult, but a suggestion in the draft Fishbourne Area Project Design may help. This is for a simple scoring system:

Research importance: high 5 to low 1
 Approximate cost: cheap 5 to very expensive 1
 Ease of doing: easy 5 to very difficult 1

When the results are added together the highest scores are the best projects to pursue. The cost should be seen as being internal Surrey funding, that is discounting external funding such as from the Lottery where this can be achieved.

Finally, there is need to consider reaching out to the public as well. This point has already been made in connection with experimental archaeology. The dendrochronology project is again a prime example of something that has great public appeal, because the precise dating of the construction of houses and additions makes possible correlation with events known from, or to be found in, historical sources, such as the marriages and deaths of particular individuals who had owned the houses, or the contents of particular rooms at a known date in the past. There is a lack of good standing archaeology in Surrey, for the earlier periods at least, but we ought to be able to make more of what we have, particularly the major sites such as castles and religious buildings. The real challenge comes with prehistory.

Key issues:

- Development of a training programme for all levels.
- Adoption of a code of practice and use of project designs.
- Rapid reduction of the backlog of unpublished excavations.
- Consideration of alternative publication methods.
- Coordination of activity.
- Selection of key projects.
- Develop more use of experimental archaeology.

Possible projects:

- ❖ Establishment of a county-wide forum to coordinate all research in progress (to involve SCC curatorial (planning) archaeologists, the Surrey Archaeological Society (including constituent groups) and others as appropriate).
- ❖ Maintain input to the establishment of a South-East Archaeology publication series or alternative.
- ❖ Development and acceptance of a Code of Practice for archaeological work in Surrey.
- ❖ Development of a recognised training programme for all levels of archaeological and related research.

BIBLIOGRAPHY

- Bannister, N, 1996. *Woodland archaeology in Surrey. Its recognition and management*
- Bannister, N, 2004. The Surrey historic landscape characterisation project, in Cotton et al (eds) 2004, 119-132
- Bird, D G, 1987. The Romano-British period in Surrey, in Bird & Bird (eds) 1987, 165-96
- Bird, D.G. 2000. The environs of Londinium: roads, roadside settlements and the countryside, in Haynes et al (eds) 2000, 151-174
- Bird, D G, 2004a. Surrey in the Roman period: a survey of recent discoveries, in Cotton et al (eds) 2004, 65-76
- Bird, D G, 2004b. *Roman Surrey*
- Bird, D G, 2006. Roman-period temples and religion in Surrey, in D Rudling (ed), *Ritual landscapes of Roman South-East England*
- Bird, J, and Bird, D G (eds), 1987. *The archaeology of Surrey to 1540*
- Blair, J, 1991. *Early medieval Surrey. Landholding, church and settlement before 1300*
- Bradley, R, 2005. *Ritual and domestic life in prehistoric Europe*
- Branch, N P, and Green, C P, 2004. The environmental history of Surrey, in Cotton et al (eds) 2004, 1-18
- Brandon, P, and Short, B, 1990. *The South East from AD 1000*
- Brown, N, and Cotton, J, 2000. The Bronze Age, in MoLAS 2000, 82-100
- Cotton, J, 2000. Foragers and farmers: towards the development of a settled landscape in London, c4000-1200 BC, in Haynes et al (eds) 2000, 9-34
- Cotton, J, 2004. Surrey's early past: a survey of recent work, in Cotton et al (eds) 2004, 19-38
- Cotton, J, Crocker, G, and Graham, A (eds), 2004. *Aspects of archaeology and history in Surrey: towards a research framework for the county*
- Cotton, J, and Field, D (eds), 2004. *Towards a New Stone Age. Aspects of the Neolithic in south-east England*, Councl Brit Archaeol Res Rep, **137**
- Cowie, R, 2000. Londinium to *Lundenwic*: early and middle Saxon archaeology in the London region, in Haynes et al (eds) 2000, 175-205
- Cowie, R, with Harding, C, 2000. Saxon settlement and economy from the Dark Ages to Domesday, in MoLAS 2000, 171-206
- Crocker, G, 2004. Surrey's industrial past: a review, in Cotton et al (eds) 2004, 213-32
- Drewett, P, 1988a. The formation of the landscape and its peopling by hunters, in Drewett et al 1988, 1-23
- Drewett, P, 1988b. The earliest farmers, c4300-3000 BC, in Drewett et al 1988, 24-62
- Drewett, P, 1988c. Farming communities, c3000-1400 BC, in Drewett et al 1988, 63-86
- Drewett, P, 1988d. Farmers and craftsmen, 1400-600 BC, in Drewett et al 1988, 87-118
- Drewett, P, Rudling, D, and Gardiner, M, 1988. *The South East to AD 1000*
- Ellaby, R, 1987. The Upper Palaeolithic and Mesolithic in Surrey, in Bird & Bird (eds) 1987, 53-69
- Field, D, 2004. Engraved sequences and the perception of prehistoric country in south-east England, in Cotton et al (eds) 2004, 39-49
- Field, D, and Cotton, J, 1987. Neolithic Surrey: a survey of the evidence, in Bird & Bird (eds) 1987, 71-96

- Gardiner, M, 1988a. The early Anglo-Saxon period, 410-650AD, in Drewett et al 1988, 246-286
- Gardiner, M, 1988b. The middle and late Anglo-Saxon periods, 650-1000AD, in Drewett et al 1988, 287-341
- Gray, P, 1998. *Farmsteads and farm buildings in Surrey*
- Gray, P, 2002. *Surrey medieval buildings. An analysis and inventory*
- Hanworth, R, 1987. The Iron Age in Surrey, in Bird & Bird (eds) 1987, 139-64
- Haslegrove, C, Armit, I, Champion, T, Creighton, J, Gwilt, A, Hill, J D, Hunter, F, and Woodward, A, 2001. *Understanding the British Iron Age: an agenda for action*
- Haynes, I, Sheldon, H, and Hannigan, L (eds), 2000. *London under ground. The archaeology of a city.*
- Hines, J, 2004. *Sūpre-gē* - the foundations of Surrey, in Cotton et al (eds) 2004, 91-102
- Hodgkinson, J S, 2004. Iron production in Surrey, in Cotton et al (eds) 2004, 233-44
- Hughes, A, 2004. Vernacular architecture, in Cotton et al (eds) 2004, 147-154
- James, S, and Millett, M, 2001. *Britons and Romans: advancing an archaeological agenda*, Counc Brit Archaeol Res Rep **125**
- Lewis, J, 2000a. The Lower Palaeolithic period, in MoLAS 2000, 29-43.
- Lewis, J, 2000b. The Upper Palaeolithic and Mesolithic periods, in MoLAS 2000, 45-62
- Lewis, J, 2000c. The Neolithic period, in MoLAS 2000, 63-80
- Macphail, R I, and Scaife, R G, 1987. The geographical and environmental background, in Bird & Bird (eds) 1987, 31-51
- Merriman, N, 2000. Changing approaches to the first millennium BC, in Haynes et al (eds) 2000, 35-51
- MoLAS [Museum of London Archaeology Service] 2000. *The archaeology of Greater London. An assessment of archaeological evidence for human presence in the area now covered by Greater London*
- Museum of London, 2002, *A research framework for London archaeology 2002*
- Needham, S, 1987. The Bronze Age, in Bird & Bird (eds) 1987, 97-137
- Oakley, K P, Rankine, W F, and Lowther, A W G, 1939. *A survey of the prehistory of the Farnham district (Surrey)*
- Palmer, M, 2004. The archaeology of industrialization: towards a research agenda, in Cotton et al (eds) 2004, 199-212
- Perring, D, with Brigham, T, 2000, Londinium and its hinterland: the Roman period, in MoLAS 2000, 119-70
- Poulton, R, 1987. Saxon Surrey, in Bird & Bird (eds) 1987, 197-222
- Poulton, R, 1988. *Archaeological investigations on the site of Chertsey Abbey*, Res Vol Surrey Archaeol Soc, **11**
- Poulton, R, 1998a. *The lost manor of Hextalls, Little Pickle, Bletchingley. Archaeological investigations*
- Poulton, R, 1998b. Introduction [archaeological investigations in historic Surrey towns], *Surrey Archaeol Collect*, **85**, 1-2
- Poulton, R, 2004. Iron Age Surrey, in Cotton et al (eds) 2004, 51-64
- Poulton, R, 2005. *A medieval royal complex at Guildford. Excavations at the castle and palace*
- Rackham, J, and Sidell, J, 2000. London's landscapes: the changing environment, in MoLAS 2000, 11-27
- Rudling, D, 1988a. Centralizing power, 600BC-AD43, in Drewett et al 1988, 119-177

- Rudling, D, 1988b. A colony of Rome, AD43-410, in Drewett et al 1988, 178-245
- Schofield, J, 2000. Post-Medieval London: the expanding metropolis, in MoLAS 2000, 255-81
- Schofield, J, 2004. What did London do for us? London and towns in its region, 1450-1700, in Cotton et al (eds) 2004, 187-197
- Serjeantson, D, and Field, D (eds), 2006. *Animals in the Neolithic of Britain and Europe*
- Sheldon, H, Roman Southwark, in Haynes et al (eds) 2000, 121-150
- Shepherd, C, and Crocker, A, 2004. Second World War defences in Surrey, in Cotton et al (eds) 2004, 245-53
- Short, B, 2006. *England's landscape: the South-East*
- Sloane, B, and Harding, C, with Schofield, J and Hill, J, 2000. From the Norman Conquest to the Reformation, in MoLAS 2000, 207-54
- Thurley, S, 2004. The impact of royal landholdings on the county of Surrey 1509-1649, in Cotton et al (eds) 2004, 155-168
- Turner, D J, 1987. Archaeology of Surrey, 1066-1540, in Bird & Bird (eds) 1987, 223-261
- Turner, D, 2004. Manors and other settlements, in Cotton et al (eds) 2004, 133-146
- Turner, D, 2001. The origins and development of Surrey villages, *Bull Surrey Archaeol Soc*, **347**
- Vince, A, 2000. The study of medieval pottery in London, in Haynes et al (eds) 2000, 239-251
- Wait, G, and Cotton, J, 2000. The Iron Age, in MoLAS 2000, 102-17
- Wessex Archaeology, 1993. *Southern rivers Palaeolithic project report 2, 1992-3: the South-West and south of the Thames*
- Wymer, J J, 1987. The Palaeolithic period in Surrey, in Bird & Bird (eds) 1987, 17-30
- Wymer, J J, 1999. *The Lower Palaeolithic occupation of Britain*