Chapter 8 Conclusions

A SUMMARY OF THE EVIDENCE: THE STATE OF KNOWLEDGE TODAY

The late Iron Age

The late Iron Age, with which this survey starts, is often associated with significant economic and socio-political change in much of southern Britain. Our knowledge of the archaeology of the Thames Valley in this period has advanced considerably over the past 30 years, especially in the upper parts of the valley in Oxfordshire and Gloucestershire. The late Iron Age in this region is dated ceramically to about the start of the 1st century AD (it is as early as c 50 BC in the Middle Thames). It is characterised by numerous small rural communities living on individual and (occasionally) grouped farmsteads operating a variety of agricultural regimes. The fundamental character of agricultural practices at this time shows little change from the middle Iron Age. The lower terraces and floodplains were largely used for grazing, and more mixed pastoral and arable agriculture was practised on the higher terraces. However, there are signs in the Upper Thames Valley of intensification in pastoral activity on the lower terraces, possibly related to greater pressures on land use. The more acidic soils of the Middle Thames may have resulted in this region being less densely settled, although the comparative lack of large scale excavation here necessitates caution. Certain areas of the Middle Thames, such as around the Thames-Kennet confluence and in the vicinity of Staines, do appear to have been quite densely settled in the late Iron Age-early Roman period.

A general increased emphasis on settlement definition in the form of boundary ditches has often been noted on later Iron Age sites in the valley, although there was still considerable variety of settlement form and development, even on a very local scale. Building traditions appear to have changed fundamentally in the Upper Thames at least, with the relative lack of archaeologically recognisable roundhouses meaning that new construction methods (eg cob or turf walls) must have been used. However, roundhouses were present in the Surrey part of the Thames Valley, and there is some evidence for the occurrence of circular buildings in the Roman period in the Upper Thames.

Upstream from Dorchester we see the development of substantial defended enclosed settlements in the lower-lying parts of the valley adjacent to the river and its tributaries. These 'enclosed oppida' must have represented centres of power within the developing tribal network, although they were probably still localised and largely independent entities. The lack of such sites from the Middle Thames may reflect differing methods in the physical articulation of power, possibly linked to wider tribal affiliations. Based primarily upon coin evidence, this region is generally viewed as being a boundary zone between the 'tribal territories' of the Atrebates to the south and Catuvellauni to the north, while much of the Upper Thames would lie within Dobunnic territory. In reality it is unlikely that these late Iron Age tribal areas were closely defined cohesive units, as most systems of power were probably still operating on quite a small scale, with significant levels of local autonomy. Perhaps significantly, none of the larger 'territorial oppida' (eg at Silchester, Bagendon and St Albans), which are usually regarded as the main tribal centres, lay within the Thames Valley itself, although they probably had a growing influence on many of the settlements there.

The early-middle Roman period

The Roman conquest in AD 43 had no immediate archaeologically perceptible influence on settlement and land use within the Thames Valley, although the establishment by AD 44 of a major fortress at Alchester, 13 km north of the Thames, must have had significant effects across the region. The only early Roman military bases within or in the immediate environs of the valley were at Cirencester, Dorchester and just possibly at Staines, all of which appear to have been founded between 7 and 20 years after the conquest itself. All three soon became Roman towns, with Staines and Dorchester both lying at important road junctions across the river Thames. In general, however, the early Roman road system largely bypassed the Thames Valley. The major roads emanating westward from London passed to the north of the valley via Alchester, and to the south via Staines and Silchester, although the latter road did also cross the Thames at Cricklade, where a possible small town developed. The only other road of major significance ran from Silchester to Alchester, crossing the Thames at Dorchester. These roads were all focused upon the important major early urban centres, which generally (with the main exception of London) lay at or near the late Iron Age centres of power, suggesting some continuity of power structure. At Cirencester the civilian town appears to have been established at some point following the abandonment of the military base in the early AD 70s, although it was probably not until the late 1st century (or possibly the early 2nd) that the first major public buildings were completed in what was then the regional (civitas) capital. Prior to this it is possible that much of the Upper Thames Valley was part of a semi-autonomous client kingdom, either of the Atrebatic king Togidubnus or even of the local Dobunnic tribe itself.

The early history of the town at Dorchester remains very poorly understood, with the earliest datable post-military buildings belonging to the mid 2nd century AD. Staines was clearly flourishing by the later 1st and 2nd century AD, but apparently in decline from the 3rd century onwards, as was the provincial capital at London, some 30 km further east. Elsewhere there is still scant evidence for other Roman 'small towns' in the Thames Valley. Possible nucleated settlements existed at Cricklade and Gill Mill (Ducklington), which may have served as local market centres with minor administrative functions.

Most of the people within the valley continued as before to live in small rural settlements, and such sites remain the major source of our archaeological evidence. There are few signs that the Roman conquest caused any immediate disruption to the rural settlement pattern. In the Upper Thames sites like Claydon Pike show clear evidence for continuity, and this is also apparent further east, for example at Little Lea Park, Cippenham and Eton Rowing Lake. Even the early rapid growth of Staines appears to have had little noticeable effect on surrounding settlements such as Hengrove, although it is hard to believe that there was no social or economic impact at all.

In the Upper Thames Valley we see widespread changes to settlement and landuse patterns in the early 2nd century. Many excavated rural settlements were established, abandoned or reorganised at this time. The short timescale in which these changes occurred suggests that they were due to political or social factors, rather than longer-term developmental processes. In the Middle Thames region there are also a number of settlements with an apparent early-mid 2nd-century transformation, although in general the chronology seems more variable.

Genuine concentrations of rural settlement are apparent in certain areas, some perhaps influenced by the location of urban centres or communications routes (road or river). The agricultural productivity of the land itself is also likely to have been a major factor, possibly accounting for the less dense settlement patterns on some of the Middle Thames gravels where acidic soils predominate. Most of the settlements excavated along the valley were lower status farmsteads, with far fewer villas apparent than in, say, the Cotswolds or Berkshire Downs. Some of the gravel terrace and floodplain sites were probably incorporated into larger agricultural estates, perhaps operating from villas (or aisled building complexes in the case of Claydon Pike, Glos). Others may have been largely independent. The general lack of structural evidence from most non-villa rural sites suggests that building traditions of the late Iron Age continued.

The economy of the Thames Valley during the Roman period, as in the Iron Age, was based on agriculture. Much Iron Age agricultural practice continued unchanged, with spelt wheat, for example, continuing to dominate cereal crop assemblages. Roman impact can be seen in the introduction of a range of horticultural crops, and there were some significant developments in the technologies of cultivation and processing grain. The same range of domestic animals is evident as in the Iron Age, although an increase in size suggests improved animal husbandry techniques and the importation of breeds from the continent. There was a general increase in the intensity of farming during the Roman period in the valley, with previously marginal land being cultivated and parts of the floodplain being managed as hay meadow. Some pressure on land resources was shown by the extension of cultivation onto higher areas of the floodplain just as increasing flood levels were making conditions unsuitable for arable. Although agriculture predominated, a much wider range of other economic activities can be seen during the Roman period, including small-scale crafts, building construction, and larger-scale pottery production, notably the Oxford industry. The use of iron was much more widespread in the Roman period than earlier and smithing was consequently important, but there was no primary iron production in the

There were major developments in the area of religious expression in the Roman period, although Iron Age practices of ritual deposition persisted, with the Thames itself remaining a focus in certain areas. However, from the 2nd century AD onwards specialised shrines and temple complexes appear in various places, and iconic representations of deities occur with increasing frequency.

The late Roman period

The late Roman landscape of the Thames Valley was in some ways quite different. There is a clear contrast in the development of urban settlement between the Upper and Middle Thames Valley. Staines follows the pattern of London in apparently having a greatly reduced population density at this time. Dorchester on the other hand has evidence for a thriving population during the later Roman period, and in this respect mirrors the situation at Cirencester. It is quite plausible that this pronounced division was connected with the large scale administrative changes of the late Empire, with the two parts of the valley belonging to separate provinces centred on Cirencester (Britannia Prima) and London (Maxima Caesariensis).

Changes in rural settlement are also evident, particularly in the Upper Thames Valley where there is more evidence for activity of this period. A number of sites were established, abandoned or

transformed in the late 3rd to early 4th century, and in some parts of the valley the evidence points to widespread reorganisation of territory. These patterns are not universal, however, and there seems to have been less reorganisation than in the 2nd century. These changes may well have been brought about by the same stimulus that affected the Cotswolds, where there is evidence for widespread construction and/or embellishment of villas at this time. In the Middle Thames Valley, many sites were certainly occupied into the 4th century, but there is as yet little evidence for widespread settlement transformation of the type seen in the Upper Thames region.

Basic agricultural practice shows little change from the earlier Roman period, although seasonal alluviation had extinguished any cultivation on the floodplain. The diet enjoyed by many late Roman inhabitants may have been more diverse as early Roman plant introductions (eg celery and coriander) became more widespread.

A distinctive feature of the late Roman period is the dramatic increase in evidence for human burial, with a number of urban cemeteries being located around Cirencester and Dorchester (as well as London) and many small rural cemeteries found across the valley, often on the outer fringes of modest settlements. One of the cemeteries around Dorchester at Queenford Farm is suggestive of a Christian community, although other evidence for Christianity in the valley is limited to a few portable objects, including two lead fonts.

Much of the Upper Thames Valley seems to have been flourishing in the second half of the 4th century, with evidence for continuing activity at most rural and urban settlements. The situation in the Middle Thames is less clear, but there is less evidence that activity was sustained until the end of the Roman period, and many sites may, like the urban centre of Staines, have been in long-term decline by this time.

The 5th century

In a study spanning the whole of the first millennium AD the major questions surrounding the transition from late Roman Britain to Anglo-Saxon England cannot be sidelined; treated either as a problematic appendix of decline and fall (from a Roman perspective) or as the troublesome introductory period of spurious Anglo-Saxon origin myths (from a later perspective). Instead it is necessary to attempt to demonstrate for our region the evidence for the nature of the transformations that occur and then to attempt to explain the processes that lie behind them. These transformations affect different areas of activity in different ways, not all of which are archaeologically detectable. The fundamental question relates to the rural population of the region - to what extent, if at all, was this reduced in number in the late Roman period, and to what extent, if at all, was it subsequently reduced, by violence or displacement, or replaced by immigrant peoples? If none of these factors had a major impact on the Romano-British population, what were the processes that resulted in the changes of identity revealed by the archaeological evidence for settlement types, burial practices (up to a point) and a wide range of aspects of material culture?

Unsurprisingly, in view of the difficulties of this period, there is less agreement between the contributors to this volume about the significance of what archaeological evidence we do have than for any other part of the first millennium. The invisibility of most settlement evidence in the 5th century is a major problem, though not in itself a point of dispute. The scarcity of evidence for low status buildings in the valley, despite plentiful evidence for settlement activity generally, is a well-known problem in the Roman period. Potentially, therefore, the form adopted by the 'invisible' structures could have been maintained through the 5th century. A recent discussion (Fulford 2004) has suggested possible explanations for the 'disappearance' of Romano-British material culture in the 5th century (see Chapter 4 above), while the situation in terms of maintained high level contacts (political and ecclesiastical) between Britain and the western empire has been discussed by Wood (2004). Moreover, developing ideas about the transformation of late Roman elite culture in the west (Lewit 2003; Bowes and Gutteridge 2005) have attempted to move away from 'the preoccupation with change and continuity' (ibid., 406) and have suggested significant changes in the character of late Roman society which may help understanding of the radical transformation of the archaeological record of this period. These assessments may provide a framework within which it is possible to see continuity of some aspects of Romano-British society well into the 5th century, though without clarifying the key question of changes in the level of popula-

In many ways it is environmental evidence that provides a link between 'Roman' and 'Anglo-Saxon'. The main conclusions to be drawn from the wider, albeit indirect, evidence are that the countryside continued to be exploited, but that early 'Saxon' agriculture was less intensive than that of the 4th century. From this a significant drop in population has been inferred, although it is clear that the landscape was not empty, even at a time when (on current understanding of the dating evidence) there is no recognisable settlement evidence. Identification of population decline seems unavoidable, but its chronology, scale and causes are as elusive as ever. Almost equally uncertain is the related issue of the relative proportions of residual Romano-British and immigrant Anglo-Saxons in the late 5th and 6th century population of the region. That the developing political powers of the 6th century were Anglo-Saxon in outlook (though not necessarily in terms of individual ethnicity) seems fairly clear, but did these powers represent only a small but dominant proportion of the population or a much more substantial (even if possibly still minority) component? What scale of population replacement was required to bring about the fundamental changes in settlement form and material culture discussed in Chapter 4, or in aspects of agricultural practice considered in Chapter 6, or in terms of language (not considered here, but see eg Hines 1994)? Can these be explained as adjustments to minority practices on the part of the residual majority in the wake of the collapse of the economic system that had supported a 'Romanised' lifestyle?

The changes in these different areas are not uniform. Romano-British material culture disappeared and was replaced by something completely different within the relatively short span of a century or so - and perhaps rather less if it had survived in some form up to the middle of the 5th century. The basic building blocks of agriculture, the animals and cereal crops, were less easily changed, but nevertheless significant changes did occur, particularly with regard to cereals, albeit over a more extended time frame. One view of these developments is that the transition from spelt to bread-type wheat reflects population change: the Romano-British populace had the choice of either but favoured spelt wheat, whereas the Saxon colonists preferred bread-type wheat. An alien elite could easily have had different dietary preferences from the general populace but it seems unlikely that they would have forced a change in the basic cereals used by the peasantry. On this view the Saxon colonists of the Thames Valley, bringing their own tradition of cereal cultivation, were settling a landscape which had been substantially depopulated. This is not to say there were no surviving Britons but that their numbers were sufficiently low that they rapidly lost their culture through assimilation or slavery. Whether this reduction in population was achieved by disease to which Saxons were less vulnerable because of their genetic makeup or their different settlement pattern (for example avoidance of towns), or by slaughter following Saxon military victories, remains uncertain. It took several centuries before arable production again approached the levels of the late Roman period. Likewise, it was not until the later Saxon period that the raising of domestic animals for secondary products, rather than just for meat, returned to its former level.

An alternative view of the changes in agriculture sees the move away from Romano-British practice as more gradual. It is arguable that the continued importance of spelt at several locations in the valley in the Saxon period has been underestimated. The extent to which spelt remains could already have been residual in early Saxon assemblages is admittedly a problem, but it seems unlikely that all early Saxon occurrences of spelt can be explained in this way. At sites such as Yarnton the typical Roman-British cereals (particularly spelt wheat) were

present (though probably not dominant) in the early Saxon period but had become minority components in the range of cereals by the mid Saxon period. The cultivation of the principal early Saxon cereal, bread wheat, was already established in the region in the late Roman period. On the face of it, however, the evidence from the major early Saxon site at Barrow Hills, which has no underlying Roman settlement to produce potentially misleading residual material, may represent a move to a different agricultural regime, with an emphasis on bread wheat. Other cereals such as barley and even emmer, which became more common in the Saxon period than earlier, had been cultivated at various sites in the valley in the Roman period. The cultural change was thus less radical than has been suggested. The fact that rye, which was absent during the Roman period, did not reappear in the region until the mid Saxon period, argues for a long cycle of change. What remains uncertain, however, is the extent to which these more subtle changes can or cannot be correlated with changes in ethnicity and population composition.

At least some of the evident variation in the chronology and density of Anglo-Saxon settlement can be explained in political terms. There were places where Anglo-Saxon settlement may have been actively encouraged, as for example in the Dorchester/Abingdon area, from at least as early as the mid 5th century onwards, although it is likely that there was still a significant British population around Dorchester itself. Elsewhere, for example in areas adjoining parts of the Middle Thames, there may have been more extensive enclaves of more or less purely British settlement, but their existence, as far as the valley itself is concerned, is based more upon negative evidence than anything tangible. Given a general retrenchment of population in the late Roman period it is possible that parts of the Middle Thames, where there is in any case little clear evidence for widespread rural settlement in the 4th century, were very thinly populated indeed by the second half of the 5th century – here the environmental evidence, unfortunately, is less helpful than in the Upper Thames. As discussed above (Chapter 7), some areas closer to London may have been protected by early Saxon settlements, perhaps of a similar character to the earliest settlements of the Dorchester area, but their subsequent trajectory of development seems to have been different. The point in time at which Anglo-Saxon immigration developed an unstoppable momentum cannot be identified with certainty in any part of the valley, but will not have been earlier than the 6th century anywhere.

The Anglo-Saxon period

In broad terms, present knowledge suggests that Anglo-Saxon settlement of the Upper Thames gravel terraces was widespread by the 6th century. The cropmark evidence surveyed by Benson and Miles (1974a) indicates sizeable spreads of probable sunken huts at numerous locations. Chance discoveries during earlier gravel quarrying and more recent systematic excavations in advance of development have confirmed the presence of numerous settlements of this period, often in close proximity to one another. It is likely that we should anticipate the presence of Anglo-Saxon occupation throughout much of the area, even where it is at present unknown. Population levels are, however, likely to have been very low. Individual farmsteads may have exploited relatively large areas of land, shifting location at intervals, and the excavated evidence reviewed in Chapter 3, above, shows that sunken huts could be constructed at some distance from the main settlement focus. The post-built houses and agricultural structures of the small early to mid Saxon populations may therefore always remain very hard to find, although sunken huts are seen individually or in small numbers relatively frequently. This general impression of the spread of occupation is very clear in those parts of the study area where cropmarks are relatively abundant. Recent evidence confirms, contrary to earlier views, that Anglo-Saxon settlements were located on the floodplain terrace as well as the higher Summertown-Radley (2nd) terrace. There is now also increasing evidence for settlement of this period in Gloucestershire, and in the area between Wallingford and the Goring Gap. Much less is currently known about areas where cropmarks are not so abundant; the North Wiltshire bank, for example, where the gravel terraces are much narrower, has seen relatively little work. Similarly, a lack of comparative information from the higher ground to the north and south of the Upper Thames Valley makes it difficult to assess whether the gravels attracted an exceptional density of settlement, or whether this formed only a part of a wider pattern of occupation extending up into the Cotswolds and the Berkshire Downs. The presence of early Saxon burial sites in these areas suggests that they were settled and farmed, but our knowledge remains very slight.

Much less is known about early to mid Anglo-Saxon settlement in the Middle Thames Valley. A number of recent large-scale investigations (at Thames Valley Park, Reading, at Dorney and Eton, and at Heathrow Airport) have confirmed the virtual absence of settlement remains of this period over large areas of landscape. The distribution of Domesday manors and population in the Middle Thames suggests that the area may have remained relatively sparsely populated throughout the Anglo-Saxon period. There is no doubt that it was less favourable for agriculture, with soils that tend to be more acidic and less fertile than those of the Upper Thames Valley (see Chapter 1). To date, where evidence has occurred, it appears to be closely associated with the river system, along the Thames itself (as at Cookham, Windsor and Wraysbury), at confluences (as at Pangbourne, Reading and Shepperton), or in tributary valleys (as at Burghfield and Harmondsworth). Perhaps the most significant recent discovery in the region is the excavation of settlement remains at the prehistoric hill fort at Taplow. This implies re-use, or re-occupation, of the site in the early to mid Saxon period, quite possibly contemporary with the famous barrow burial itself. The presence of a sherd of imported east Mediterranean pottery, of a type usually found at re-occupied British hillforts in the south-west, is of particular interest. The evidence remains under analysis at the time of writing, and no clear conclusions are yet available.

The likelihood that many excavations reveal only a small proportion of much larger settlement sites remains a significant problem in understanding settlement form, function and evolution. Little progress has been made in this area in recent years, and there has been insufficient evidence to support discussion of questions such as the social structure of these settlements, and their place within wider economic and political systems. Until recently Radley Barrow Hills and New Wintles Farm were the only large-area excavations of early Saxon settlement sites. However, recent work at Somerford Keynes Cotswold Community and Horcott has revealed early to mid Saxon settlements within the very large excavated areas of new quarries. These may provide some of the best evidence to date for analysing the relationship between the settlements and the wider landscape, and between early to mid Saxon settlement and that of earlier and later periods.

Until recently, mid Saxon settlements in the study area were almost unknown, or at least unrecognised. The difficulties of dating sites of the 7th century and later are discussed in Chapter 3, above. Results from the recent excavations at Yarnton have shown, however, that sunken huts and post-built halls continued to be constructed on what had been early Saxon settlement sites well into the 8th and even 9th centuries. Pottery and other finds from these buildings had been largely indistinguishable from earlier material, and the true date of the Yarnton structures only became apparent through the use of radiocarbon dating. This raises the strong possibility that mid Saxon buildings elsewhere may have been wrongly assigned an early Saxon date. More consistent use of scientific dating techniques for sites of this kind is clearly called for in the absence of readily datable artefacts. Sites showing evidence for formal laying out of fenced enclosures around buildings, and for the delineation of trackways and droveways, are particularly likely to be of the 7th century or later. An important recent development has been the identification of mid to late Saxon burials at a number of rural sites by the use of radiocarbon dating.

A number of sites in the study area show evidence for some agricultural specialisation from at least the mid Saxon period onwards, and the growth of agricultural specialisation to meet increasing demands for surplus from a variety of sources is a research topic that would be worth more consideration in the future (see Chapter 6). The most important evidence comes once again from Yarnton, where environmental assemblages suggest an intensification of arable cultivation from the 8th century onwards. Heavier clay soils were being brought into cultivation, possibly with the introduction of a mouldboard plough; fields were being manured and the cultivation of hay resumed for the first time since the Roman period on the settlement's grassland.

Excavated evidence for late Saxon rural settlement and the origins of villages is still very limited. In such an extensively investigated region this must mean that late Saxon settlements are consistently much closer to the sites of today's towns and villages, in areas that rarely become available for excavation in advance of quarrying or other largescale development. In the present volume, an attempt has been made to set the results of late Saxon excavations in the context of village plans, historic land-use patterns and documentary information about early estates and landowners. The archaeological information these 'keyhole' sites offer is often very limited, but its value is enhanced when set in the context of information derived from other sources. In addition, finds and environmental remains from such sites have the potential to provide useful information about the relationships between rural settlements and local markets and trading networks.

Our current models for understanding the processes of settlement shift and nucleation remain very crude, however. At a number of sites, albeit excavated on a very small scale indeed, 9th- to 12thcentury ditched enclosures, pits and buildings have been identified within modern villages. At Yarnton, large area excavations showed that there had been a shift away from the mid Saxon focus of settlement towards the site of the later medieval and modern village at some point in the 10th century, which is likely to be associated with continuing expansion and reorganisation of the agricultural regime of the estate. At Eynsham and Abingdon we see ample evidence for early Saxon occupation at places that were to become mid Saxon minsters and late Saxon towns. At the small village of Shepperton Green there appears to have been continuous occupation of the same site throughout the Anglo-Saxon period and beyond. Were such places exceptional, or are they showing us a pattern that is commoner than we expect? Is our current view, that late Saxon settlements are the result of a final shift to a new site, largely a function of absence of evidence for what may have been on those sites before? Or did the process of reorganisation of agricultural regimes tend to favour the choice of a new site for a new village? Are towns and villages different in this respect?

Specialised sites of the mid and late Saxon period have seen an increasing amount of work in recent years, adding to our understanding of the evolution of a hierarchy of settlement associated with an increasingly stratified society, and the operation and growth of trading and marketing networks. Limited investigations have now been undertaken on the important cropmark site at Drayton/Sutton Courtenay, possibly to be associated with the emerging ruling house of the Gewisse, the kin of Ceawlin and Cynegils (Chapter 7). The association here of a number of settlement sites, sizeable cemeteries with significant grave good assemblages, and the Roman small town and 7th-century episcopal centre of Dorchester may provide a valuable opportunity to study the evolution of a centre of power from the 5th century into the 8th. Our knowledge of the form of mid Saxon minsters has been significantly advanced by the excavations at Eynsham, which also recovered rare evidence for the claustral layout of an abbey of the Benedictine reform movement, and the rich material culture associated with a site of this type. Important evidence for the form of a 9th-century minster church was recovered in excavations at Cirencester. A number of recent excavations have added to the evidence for urban church or minster cemeteries and what may have been distinctive burial rites associated with them. There has been very little recent study of rural parish churches.

Evidence from late Saxon towns in the study area is increasing, although it remains the case that Oxford is much better understood than other sites. There is now a substantial amount of evidence from Oxford for early 11th-century urban occupation, the form of buildings and tenement plots, defences, streets, trade, urban crafts, diet and provisioning. Recent and current work is also improving our understanding of Cricklade, Wallingford and Reading. Our knowledge of 10th-century occupation of towns remains very slight, however, and virtually nothing is known of the way in which these places functioned as *burhs*, or fortified centres to resist Viking attacks. It is also the case in the study area, as elsewhere, that relatively little is known about the development of the smaller market towns that grew up around abbey sites such as Eynsham and Abingdon.

One of the most unusual sites identified to date in the study area was the possible meeting place found at Dorney, in border territory between Wessex and Mercia, in use sometime around the middle of the 8th century. Another relatively new site-type for the area, also associated with the operation of government in the late Saxon period, is the cemetery recently excavated at Staines, where a number of burials appear to have been execution victims.

By contrast there have been some aspects of the period where there has been relatively little advance in knowledge in recent years. No pagan Saxon religious sites are certainly known in the study area, and evidence for belief during the 5th and 6th centuries is virtually non-existent. The pace of discovery of early to mid Saxon burials has also slowed markedly since the early 1990s. Some

research using modern scientific techniques has been carried out on skeletons excavated at an earlier date, and there is clearly great scope for further studies of this kind to shed light on the controversial issues of the migration period. There is little or no explicit evidence for the period of Mercian domination of the study area from the later 7th century, and its significance should probably receive more consideration than it generally does. Recent research into river engineering and navigability from the late Saxon period onwards suggests that the river was used for the transportation of goods on a regular basis. Given the vast increase in data from finds and environmental assemblages since the introduction of PPG16, there may now be considerable scope for further investigation of this topic from the evidence of these kinds of remains.

THE LIMITATIONS OF THE EVIDENCE

The imbalance of evidence towards the valley at the expense of adjacent areas was identified as an issue from the very beginning of this study. Inevitably the increase of evidence does not proceed uniformly. The availability of relatively very extensive evidence for rural settlement in the valley, for example in the Roman period, may be of value in generating possible models of such settlement elsewhere. It is important to emphasise, however, that these are models and not prescriptive frameworks in the way that the 'Little Woodbury' or Wessex model was seen as the standard form of British Iron Age farmstead for so long, before its regionally specific character was recognised.

How far the Thames Valley is representative of adjacent areas, or of comparable areas further afield, is very difficult to say. It remains a focus for disproportionately intensive development and large scale development-related activity, of which gravel extraction is a major component. This will continue to necessitate major archaeological projects, some of which will produce evidence resulting in substantial modification of the picture presented here, even for relatively well-known areas. Almost all of the sites making the most important contributions to understanding the archaeology of the valley have been examined in the context of development-led work. Notwithstanding the likelihood of further significant new discoveries in the valley, we know less and less comparatively about the adjacent nonvalley areas. In some respects we are already aware that there were significant differences between these areas and the valley itself. Aerial photographic evidence suggests, for example, that Iron Age settlement patterns were very different in the Cotswolds. There is a clear difference in the scale and distribution of Roman villas in the Cotswolds, and cemetery evidence suggests that there was quite widespread occupation on the Berkshire Downs in the early Saxon period, and yet opportunities to study this by excavation remain very unusual indeed. The integration of higher and lower ground in farming units to provide a mix of resources is evident from the Iron Age onwards. All this suggests that our current understanding of the relationship between the valley and the hills around may be quite inadequate. Ultimately these areas may require positive discrimination in their favour in order to redress the imbalances discussed here, although we also need to bear in mind that small-scale work does not often produce the insights that emerge from more extensive excavation of sites in their landscape settings.

Beyond the immediate study area, it also remains unclear how far the archaeology of the Thames Valley is typical or exceptional in the context of river valley settlement on a wider regional or national scale. Further synthetic studies of other major river valleys will be a valuable source of comparanda (eg Knight and Howard 2004).

The merits of development-led 'rescue' archaeology contrasted with research excavation have been the subject of long and sometimes intense debate. Within the Thames Valley the contribution of research archaeology, in the sense of excavation carried out purely for research purposes, has been relatively limited. The introduction of PPG-16 has generated an explosion of new data in the study area, and has undoubtedly promoted the discovery and investigation of a large number of lower status settlements that might not have attracted much research interest otherwise. How far this distorts our understanding of processes and patterns in the past remains unclear. The current emphasis in heritage management on preservation and curation means that sites at the top of the settlement hierarchy, which are usually under statutory protection from development, are rarely (if ever) available for excavation. Ironically, therefore, the sites about which we have least information may have been some of those that exercised the greatest influence in the region at the time, such as late Iron Age Dyke Hills, the Roman town of Dorchester, or the Roman villas whose agricultural estates may well have included significant elements within the study area. How such places were related in contemporary systems and landscapes to the sites we excavate on the gravels remains largely a matter of conjecture. Current opportunities to investigate part of the early to mid Saxon cropmark complex of highstatus buildings between Drayton and Sutton Courtenay are a rare exception to this rule.

There is, of course, no reason why 'rescue' archaeology and research should be mutually exclusive, despite the fact that much development-led work is, inevitably, focused on single sites rather than wider landscapes. Much of the work carried out by Oxford Archaeology in the Cotswold Water Park in advance of gravel quarrying during the 1970s and 1980s was informed by clear research aims relating to understanding the evolution of the Iron Age and Roman landscape and agricultural systems. Similarly, 'rescue' work carried out by the Surrey County Archaeological Unit at sites such as

Shepperton Green and Staines is integrated with earlier results in evolving models of settlement development for the area. Regional research frameworks, currently under development or revision across the country, provide a means by which future excavation, both development- and research-led, can contribute to a more comprehensive understanding of patterns and diversity at a regional level, and key current research questions. The Thames Valley falls into several different research framework regions, with Gloucestershire and Wiltshire in the South-West, Oxfordshire, Buckinghamshire and Berkshire in the Solent-Thames region, and Surrey in the South-East. The Thames gravels form only one element of a diverse archaeological resource in each of these regions. The frameworks thus offer an opportunity to define and promote complementary research, the need for which has been discussed above, allowing us greater scope to compare the archaeology of the valley with that of other types of landscape and geology.

Chronology and archaeological science

A major concern, of relevance to all periods, is chronology. Broad brush schemes of chronological development across the region seem clear enough, but anything like detailed resolution is frequently totally lacking. The chronology of the introduction of late Iron Age material culture into the valley needs refinement, and dating (largely ceramicbased) for the Roman period is often in terms of quite broad ranges, particularly when assemblages are small. This problem is exacerbated in the early Saxon period, and for the middle Saxon, as we have seen, there is often no ceramic material to speak of at all. For the Roman period the question of ceramic dating is ripe for review; it is now the best part of a generation since the publication of studies on major industries such as those of Oxford, the New Forest and Alice Holt. Understanding of some of these industries can now be refined while others, such as the important North Wiltshire production sites, badly need detailed synthesis. The particular problems relating to dating in the 5th century have been referred to several times. These can be addressed at least in part by routine application of radiocarbon dating: assumptions about the date of 'late Roman' and 'early Anglo-Saxon' sequences need to be tested in this way and not just based on artefact chronologies. Even if settlement evidence is scarce, radiocarbon dating could still be much more widely applied than at present in cemetery contexts, where its potential to challenge expected chronologies has already been well demonstrated.

The use of radiocarbon dating at Yarnton revealed the existence of an 8th- and 9th-century settlement and cemetery complex whose true date and nature was not identifiable using conventional assumptions about building typologies and artefact dating. Radiocarbon dating should now be regarded as an essential component of any project involving potential early or mid Saxon settlement or cemetery remains. The application of new scientific techniques does not, however, need to await new discoveries. Existing archival collections from past excavations have been used for recent studies using stable isotope analysis to investigate diet in Roman and early Saxon populations (see Chapter 4, above). This important material, from late Roman and early Saxon cemeteries in the Dorchester area, offers considerable opportunities to apply scientific techniques to the vexed questions of the dating of burials, and the origins and possible relationships of the cemetery populations

The Thames Valley also benefits from a long tradition of study of environmental remains from excavated sites. Plant and animal remains are now routinely collected at development-led sites. However, lack of integration with excavation strategy often results in a disappointingly mechanistic reiteration of unremarkable information. Where environmental archaeology is fully integrated into the research aims of the excavation, by contrast, the results can be of exceptional value and provide critical evidence that is not available from other sources. It was, for example, essentially the remarkable group of animal, bird and fish bone in a large pit at Eynsham that provided the clearest signal that there had been a significant change in the status of the site around the turn of the 8th century. At Yarnton, the study of plant remains provided key evidence for the maintenance of a cleared landscape in the 5th century, and for the revival of hay cultivation and the intensification of arable farming in the 8th and 9th centuries.

EMERGING THEMES AND PROBLEM AREAS FOR FURTHER WORK

A number of major themes emerge from this crossperiod review of the archaeology of the Thames Valley, while several significant problem topics can also be identified, despite the relative wealth of archaeological data for settlement and other activities in the valley for large parts of the first millennium. The nature of our understanding of the valley has changed out of all recognition in the last generation as a consequence of the detailed mapping of aerial evidence and, particularly, of excavation on a scale that was previously inconceivable. Size alone does not necessarily produce results of value, however, and even in the largest excavations our view of settlements is often only partial, but we can at least begin to see these as components of complex, dynamic landscapes.

Diversity

The principal feature that emerges from this assessment of new evidence alongside the old is the diversity that it reveals, in terms of settlement form, chronology and agricultural economy, amongst

other factors. This diversity can be seen at several different levels. In broad terms there are differences between the archaeological record of the Upper and Middle Thames that extend well beyond some of the imbalances in the quantity and (sometimes) quality of data available for the two areas. For the Roman period (and also later) these differences are most evident perhaps with regard to settlement density; parts, at least, of the Middle Thames appear to have been less densely settled than the Upper Thames. Chronological distinctions are also evident, with a relative dearth of late Roman settlement apparent in the Middle Thames, for example. This appears to reflect a broad pattern, the explanation of which is one of the major challenges facing the study of the valley as a whole, but seems to be linked to very large scale regional differences in the trajectory of development of settlement - broadly a difference between east and west across southern Britain particularly in the later Roman period. The interest of the valley is that it may be possible to identify the point, or at least the general area, where the transition from one pattern of development to another can be seen. It may be roughly coincident with the boundary between the late Roman provinces of Britannia Prima to the west and Maxima Caesariensis to the east, but this is a hypothesis to be tested rather than an established fact. The extent to which a distinction between Upper and Middle Thames is apparent in the post-Roman period is less clear, although again the density of both settlements and cemeteries appears greater in the Upper Thames. The environmental differences between the alkaline gravels of the Upper Thames and the more acidic ones of parts of the Middle Thames probably continued to exert an influence on the nature of agricultural practice, at least, and thus potentially on settlement form. However, so little is known about the latter for the mid and late Saxon periods in either part of the valley that this cannot be demonstrated with confidence (the exceptional sites such as Yarnton are still so rare that their significance as 'typical' settlements cannot yet be established).

Diversity is also evident in many ways at more local levels. For example it can be seen very clearly in the different scale, sequence of development and degree of association with other settlement types exhibited by the small number of excavated villa sites in the valley. At the most basic level it is evident in the simple variation in complexity and density of features within other excavated rural sites, while much more subtle indications of diversity are seen in the picture of differential status and aspirations revealed by careful analysis of the adjacent and superficially similar 1st-century settlements of Thornhill Farm and Claydon Pike. Such differences could not have been detected in small scale excavation, much less from the aerial photograph evidence, despite the high quality of the latter. Although synthetic studies depend upon generalisation, this is only possible down to a certain level. Below this, the quantity and quality of the data now available for some parts of the valley make generalisation about the detailed nature of rural settlement very difficult. The results of new excavation, while for the most part falling within recognisable broad frameworks of, for example, generalised settlement type, in detail show a variety that reflects (however dimly) a wide spectrum of human activity and experience. This is unsurprising in a situation in which the world outlook of most communities was extremely limited; for most of them there was no widely-disseminated pattern book that dictated the nature of settlement form, and a degree of variety was a natural consequence.

The corollary of this is that, wherever possible, detailed examination of individual landscapes is the key to understanding their diversity. The potential of this is enormous, particularly in the Roman period, although it has been insufficiently realised in this study (and the approach to the Anglo-Saxon archaeology of the region is still very heavily site based, albeit in part for the good reason that early Saxon settlement does not appear to incorporate extensive coeval landscape features). Analyses of the development even of limited landscape areas, such as that attempted by Baker (2002) for Long and Little Wittenham, remain few and far between, but excavation and other data could now be correlated with cropmark evidence in a number of areas in the valley, with very significant results. The importance of the integration of environmental evidence into the archaeological picture, to elucidate the wider setting of sites as well as their agricultural regimes, is fundamental to such studies. The potential contribution of artefacts, not just as dating media or even illuminating the whole range of daily life, but as important guides to the character, status and beliefs of the people who used them, if carefully applied, is of equal importance, though often underrated.

The river, trade and settlement patterns

However great the recent advances in archaeological knowledge of the valley, many significant problems remain to be addressed, through new data or new analyses of existing evidence. The first of these relates to the role of the river itself in our period. It seems that part of the Middle Thames was an important frontier zone in political and perhaps also in military terms in the later Iron Age, and may have marked the boundary between civitas territories in the Roman period. Subsequently, Oxford emerged as a frontier settlement of significance in the mid Saxon period in the context of the struggle between Mercia and Wessex, while further downstream the river formed the northern boundary of the territory of Surrey. It was periodically used as a place of significant deposition of weaponry and other objects, probably in a ceremonial context and perhaps related in part to the concept of the river as a boundary. However, the evidence for the use of the river as an artery of trade remains frustratingly slight, both for the Roman period and later. In the

late Iron Age there is evidence for some trade from the south at least as far as Abingdon area. This is likely to have utilised the Goring Gap, but its scale and details of its operation are still not clear. Evidence for Roman use of the Upper Thames is based largely on discussion of the distribution of Oxford pottery, the significance of which remains debatable. How far is a simple functional explanation, that the Roman regional infrastructure was principally road based, satisfactory? Was it the case that this, in combination with the physical difficulties of using the river, was sufficient to deter extensive exploitation of the waterway? In the long term, however, did the failure to maintain the Roman road network lead eventually to increased emphasis on the river itself as a reliable means of transport? The intuitive view, summed up in Dickinson's (1976, 416) assessment that 'the Thames was a major line of communication for the Upper Thames region with other Saxon communities', is only supported by very modest quantities of material that are likely to have moved up and down the valley, and whether any of these were actually transported by water is quite unknown. It is now fairly clear that there were considerable obstacles to long-distance navigation for much of our period, but that this situation changed with improvements in the late Saxon period (see Chapter 6, above; also Blair forthcoming). Is it a coincidence that these developments took place after the closer integration of Mercia and Wessex, and can this be seen to have resulted in a more unified view of the Upper and Middle Thames? How far can the impetus to improve navigability be associated with economic and population growth from the late Saxon period onwards, and perhaps increasing incentives for landowners and producers to move goods to market rather than consuming produce within the estate centres themselves? Can improvements of this kind be linked, for example, with the evidence for a growing trade in marine fish at this time?

The lack of Roman strategic interest in the river is reflected in the dearth of nucleated settlement in the valley itself, except at the very limited number of points where it was crossed by major roads, particularly at Staines and Dorchester. This pattern contrasts markedly with that seen later in the medieval period and already developing by the later part of the first millennium. A whole series of towns of varying size eventually grew up alongside the river, at the locations of minster and monastic sites, such as Eynsham and Abingdon, at the *burhs* such as Cricklade, Oxford and Wallingford, and then at market and other centres – all suggesting a much more river-based outlook than is evident in the Roman period.

In contrast the evidence for Roman rural settlement is much more pronounced and is, on present evidence, of much greater density. It is nevertheless not unproblematic. At a basic level the difficulty of identifying structures in most of these settlements remains acute and needs to be addressed at several

levels. Are we looking carefully enough, and for the right things? More widely, what does the apparent absence tell us about rural society at this time? Are we simply suffering the consequences of a change in construction type to one that leaves little tangible trace, but if so, why did this happen, apparently so comprehensively, in the late Iron Age? Furthermore, can we project the existence of 'invisible' Roman rural structures right through the period and into the 5th century?

For the Anglo-Saxon period, one of the top priorities must be to reconsider our conventional assumptions about the dating of early and mid Saxon rural settlements. The fact that radiocarbon dating has not been used routinely on sites of this period until recently may mean that mid Saxon settlement evidence has simply been missed and wrongly assigned to an earlier date. There needs to be much greater awareness of a wider range of possibilities on the part of those currently excavating within the valley. For the reasons outlined above, there may continue to be only very limited opportunities arising from development to study late Saxon rural settlement and the origins of villages within the study area. At the very least the value of data from sites of this period should not be underestimated in a development-led context, even if they are limited in range and quantity. The best opportunities for understanding late Saxon rural settlement would come from a major redevelopment in or around a contemporary village, which is unlikely, or from development at a deserted village site. Since these are comparatively rare within the study area (and not necessarily likely to have originated as early as the late Saxon period in any case) the best opportunities to pursue research may come from the comparative study of the more abundant sites in neighbouring regions away from the valley itself.

Agriculture, population and land tenure

Development in agricultural practice is a key feature of much of the period because it ultimately affected the great majority of the people of the Thames Valley, whose communities remained essentially rural throughout the first millennium. Understanding the rate and nature of such developments is therefore very important, but is not easily achieved; tracking change at the scale of generations or even half centuries is frequently impossible because sample sizes in these small chronological units are often not large enough to guarantee statistical validity in their results. Again, diversity has to be taken into account; the general chronological trends in management of livestock seen across the region (see Fig 6.9) will not hold good for all sites in any one period, for example. There has been a tendency to see some of the identifiable changes in agricultural practice as marking quite radical transformations, but this may be in part because of the general lack of chronological depth or definition in the relevant data. These data allow us to recognise

that things have changed, but do not often illustrate the actual processes and timescale of those changes. It is possible, therefore, to take a different view, that transformation of agricultural regimes was more gradual and that for every aspect of development there were many continuities with previous practice.

This view gives a rather static impression of the rural world. While this undoubtedly had its own rhythms which are hard to comprehend from a 21stcentury perspective, we have to ask if these can be seen apart from the political, social and wider economic developments of the period? Did agricultural practice provide a fundamental continuity beyond these developments, or should it be seen as subjected to the same forces that led to significant changes in material culture through this period? To put it another way, if there were several particularly significant times within the first millennium when substantial changes were made to domestic architecture, dress and other aspects of personal appearance, to ways of presentation (and probably cooking) of food, to say nothing of the wider changes in society that these physical developments reflect, is it likely that the underlying processes of food production were unaffected? If a correlation between these developments is probable, it may be reasonable to suggest that changes in agricultural practice varied in velocity, with periods of particular stress perhaps associated with more rapid change. Such changes need not, of course, have been synchronous across the region, and it is always likely that within particular regions there would have been variable rates of individual response to new ideas.

This interpretative framework would see much agricultural development and innovation as being socially instigated, rather than driven directly by environmental changes such as variations in groundwater levels or increases in flooding (though these must have been important within a broader timescale). Market economic forces were probably less important, though even these would have had a part to play in some agricultural communities at particular times and places, and the need for communities to produce a surplus in order to meet the demands of the Roman taxation system should not be forgotten.

If this broad conclusion is accepted some of the most obvious developments in agriculture, such as the abandonment of the hulled spelt wheat, the greatly increased importance of bread wheat and barley and the introduction of rye in the Saxon period, can be seen as part of the process of transformation of identities reflected by the transformation of settlement and dress types in the same period. The nature of the forces behind those transformations of identity remains a major topic for debate, however.

As already indicated, speculation about population levels has formed part of the debate about the events of the 5th century. At a wider level it seems

that there was not only considerable variation in population levels through the valley in different periods, but that density within any one period was also quite variable. On present evidence the principal factor affecting this may have been broadly environmental, but we do not have the kind of evidence for the Middle Thames, in particular, that might allow us to identify relevant social factors as well, although it is possible that the two were closely linked. It is notable, though unsurprising, that some areas recur consistently as foci of settlement and other activity. The stretch of the Thames from Abingdon to Dorchester is one such. This landscape, with evidence for organisation and land division dating from as early as the middle Bronze Age, was densely exploited in the Roman period and also contains a significant concentration of settlement and cemeteries in the Saxon period. In the Domesday survey it emerges with one of the highest recorded population densities in the country (see Chapter 4 above). This evidence appears to underline the importance of good quality agricultural land as a basis for settlement regardless of changes in political and socioeconomic structures.

One of the most difficult and intractable issues under the latter heading, certainly for the Roman period, is that of land tenure. This has traditionally been avoided on the basis that archaeological evidence can tell us little or nothing about it. It is clear, however, that some understanding of patterns of land tenure is extremely important for increasingly complex societies, as in the Roman period. Detailed reconstruction and understanding of the Romano-British rural economy ultimately founders on the lack of evidence for this issue. We do not know if the Thames Valley in the 4th century was farmed by tenants or tied workers (coloni) of a relatively limited number of large estates, or whether the farmers in the lower status settlements held their own land with minimal interference from others. Were there estates owned by magnates based elsewhere within the Roman Empire, or part of the holdings of the emperor? We know that such estates existed in Britain, but we have no means of identifying these or other forms of ownership from archaeological evidence. Equally we do not know what evolution may have taken place in patterns of tenure between the early and late Roman periods. These questions are not new. If we could combine the late Roman archaeological evidence for settlement and for agricultural practices with the kind of information available for estate boundaries and ownership (and for the sort of people that the owners were, as seen in the discussion of Yarnton in Chapter 7, above) that we have for some places in the mid and late Saxon periods, major advances could follow. For the later period, the possibility of integrating new archaeological evidence with documentary sources remains; for the Roman period we have to rely on the archaeological evidence alone. Here, however, the Thames Valley evidence must hold out some hope. The quality and quantity of data for settlement patterns in some parts of the valley are such that careful analysis of the interrelationships of sites, in terms of physical movement from one to another through the landscape and their other characteristics revealed

through structural, environmental and artefactual analysis, might begin to reveal how they worked together at subregional level. Such analyses will not necessarily provide a clear resolution of patterns of tenure, but should help considerably in consideration of such questions.

Appendix

THE ANGLO-SAXON CEMETERIES OF THE THAMES VALLEY

A considerable number of larger and smaller cemeteries of certain, probable or possible Anglo-Saxon date have been discovered in the Thames Valley region. These range, however, from sites fully excavated under modern conditions, to those represented by no more than a note of the chance discovery of skeletons and objects that no longer survive and for which there is therefore no certainty of an Anglo-Saxon date. All sites known at the time were investigated and catalogued by Tania Dickinson for her University of Oxford doctoral thesis, submitted in 1976. We are most grateful to Dr Dickinson for allowing us to reproduce a summary table of her catalogue in the present volume, together with the accompanying

map showing the site locations. Sites listed in the table that have been discovered since 1976, or that lie outside Dr Dickinson's study area, have been added by the present authors. The map shows sites within the Upper Thames Valley region only, which represent the great majority; the locations of the few additional sites known within the Middle Thames Valley can be found on Figure 3.19. Within the scope of the present project, we have been able to take account only of the cemeteries listed by Tania Dickinson, and major sites published subsequently. Numerous further possible sites are coming to light all the time, particularly through the reporting of new finds. Readers are referred to the Portable Antiquities Scheme and to the county Sites and Monuments Records for current information.

Notes to the table

- * Cemeteries numbered in the table and on the map were catalogued by Tania Dickinson, and her catalogue numbers are used here. Cemeteries without numbers were not included in her original catalogue, being outside her study area, or more recent discoveries.
- ** Dating is given as suggested by Tania Dickinson in 1976, or by the authors of the published reports for sites not included in her survey. Readers are advised that the dating of individual graves may have been subject to subsequent revision as the chronologies of artefacts and decorative styles have been reviewed. It has been beyond the scope of this project to pursue this in detail. As a general rule, where dating has changed within the 6th century, it may now be slightly earlier than was previously thought.
- *** References listed are those given by Tania Dickinson, or the published report in the case of cemeteries not included in her original survey. In order to avoid greatly overburdening the main bibliography of this volume, those references that occur only within the table of cemeteries are given in a separate list of references and abbreviations for the cemetery table, in this appendix, below. Works also cited elsewhere in the volume will be found in the main bibliography.

Map (opposite) Early Anglo-Saxon cemeteries in the Upper Thames Valley region