THE THAMES THROUGH TIME

The Archaeology of the Gravel Terraces of the Upper and Middle Thames: The Thames Valley in the Medieval and Post-Medieval Periods AD 1000–2000

The Medieval Rural Landscape

AD 1000–1500

Historic England

The medieval rural landscape, c AD 1000–1500

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INTRODUCTION

The study of the medieval rural landscape entails a long history of research. The late 19th and early 20th century saw several pioneering works by historians who aimed to shift the spotlight from matters of political and religious history towards a better understanding of the countryside (eg Seebohm 1883; Vinogradoff 1892; Maitland 1897). The work of Gray (1915) built on these early studies by emphasising the considerable evidence of regional variation in landscape character. By the 1950s, interest in the medieval rural landscape, and particularly of the medieval village, was accelerating, with research by Beresford (1954) and W G Hoskins (1955) amongst the most prominent. The emerging knowledge base was now becoming founded on archaeological research and this was increasingly complemented by architectural (eg Long 1938–1941; Faulkner 1958; Currie 1992) and place/field-name studies (Gelling 1954; 1976; Bond 1982; Faith 1998) which added further detail and context to understanding of medieval settlements. Broader appreciation of the wider landscape, in terms of how it was used, organised and perceived by its medieval inhabitants have also been examined from the perspective of the elite (eg Creighton 2009; Langton 2010) and increasingly from the point of view of the peasant (eg Faith 1997; Dyer 2014). This chapter focusses on the development of the countryside of the Thames Valley, taking account of how the landscape was organised, its varied settlement patterns with their attendant architectural character, the different types of farming that were practiced, and the management of woodland through to the maintenance of game parks, fisheries and orchards.

THE ORGANISATION OF THE LANDSCAPE

Landholding

The basic unit of agricultural organisation during the medieval period was the *township,* which comprised a self-contained group of fields, farmed either from a single village, or from two or more adjoining settlements. The area of the township sometimes coincided with the *parish*, the

extent of territory which supported the church through payment of tithes; it might also coincide with the *manor* (see below), the basic unit of landholding which administered rights over both tenants and fields. However, the relationship between settlements, townships, manors and parishes did vary considerably from place to place, some parishes containing more than one township, and some parishes and townships being subdivided between two or more manors.

Medieval landholdings were usually expressed in terms of *hides* and *virgates*. The initial meaning of the Old English word *hīd* was simply 'household', from which it acquired the sense of an amount of land sufficient to support a single free family. Because of variations in the nature, resources and value of different types of land, the *hide* could never be equated with a set acreage; although 120 acres came to be reckoned as an average figure, in practice it could be as little as 60 acres, or, in upland areas, considerably more. The possession of five hides of land or more entitled the owner to the rank of a thegn and placed upon him an obligation for military service, anticipating the 'knight's fee' of the post-Conquest period. Five-hide units are commemorated in the common place-names Fifield (which occurs twice in Oxfordshire, on the Cotswolds, and in the Thames Valley near Benson), and Fyfield (one example of which occurs on the corallian escarpment in Berkshire).

After the Norman Conquest, the hide became a unit for the calculation of rent and public service, and each Domesday manor or holding was assessed at so many hides, each hide comprising four *virgates*. Virgates, or *yardlands*, were the standard unit of tenant holding, in open-field areas containing several strips scattered uniformly throughout the field system. The area of a yardland again varied greatly from place to place but was usually between 15 and 40 acres.

Manors

The manor was the smallest unit of lordship within the feudal system. It could be held in fee, that is as a heritable estate held by homage and service to a superior lord, or in socage, by non-military tenure usually involving a money rent. The derivation of the word from the Old French *maneir* shows that, from the outset, it had the connotation of a dwelling or habitation, and it came to mean specifically the principal house on the lord's land, the centre of his local estate. However, by extension the word took on board a range of additional meanings. It firstly came to indicate not just the house of a seigneurial lord, but also the lands, rights and privileges

attached to it; from there it came to denote a unit of territorial organisation within the feudal system, containing both demesne land intended for the direct support of the lord, and land held by tenants within which he retained certain privileges, and from the holders of which he could exact specific services or income. It has also come to be used as forms of social and agricultural organisation, particularly in the context of the regulation of farming through the manorial court. For the sake of clarity here the word 'manor' will be used only to refer to the tenurial unit of landholding, and the seigneurial domestic building will be referred to as the 'manor-house'.

Manors varied considerably in size, and could be held by laymen, churchmen or corporate bodies. A manor might be the sole piece of landed property held by its proprietor, or part of a much larger estate. It could be subinfeudated, leased out or sold; in some circumstances, it could also be confiscated by the king. Manors were not stable territorial units with fixed extents and well-defined bounds. They were dynamically evolving institutions, liable to both fragmentation and union. Fragmentation commonly occurred through female inheritance: in the absence of a legitimate male heir, manors were normally subdivided between all surviving daughters. During the later middle ages portions held by free tenants who had prospered and increased their holdings might gain sufficient independence to form separate quasi-manors, though these usually lacked sufficient tenants to justify the establishment of a manorial court. Parts which had become separated might become reunited through marriage of heirs or through purchase.

Many nucleated villages were divided between two or more manors; and where there is more than one house of manorial status in the village, it is necessary to establish which house belongs to which manor. Making the equation is not always easy. At Sutton Courtenay, for example, there are three substantial medieval houses known as the 'Manor House', the 'Norman Hall' and the 'Abbey' grouped around the reduced remains of a triangular green and attempts to relate these buildings to the documented manors has resulted in considerable confusion, which has only recently been resolved (Currie 1992, 207–12).

Settlement patterns

Ever since the earliest investigations of medieval rural settlement were undertaken at the end of the 19th century, a fundamental distinction has been drawn between areas characterised by

nucleated settlement (villages), and areas characterised by dispersed settlement (single isolated farmsteads and small hamlets).

One of the first attempts to map rural settlement zones across the whole of the British Isles was undertaken by Thorpe (1964). Although, under Thorpe's classification, areas where the emphasis was upon dispersed settlement did not occur within the Thames Valley, some fundamental contrasts were, nevertheless, defined. Over the dip-slope of the Cotswolds and north Oxfordshire uplands and the clay vales, the settlement pattern consisted of 'predominantly villages, with many scattered homesteads, occasional hamlets and market towns'; a similar pattern survived in the non-urbanised parts of the London Basin. The Berkshire Downs were categorised as an 'Intermediate area of villages interspersed with many scattered homesteads and hamlets, occasional market towns. In east Berkshire, the Chilterns and the North Downs, the pattern was 'predominantly hamlets, with many scattered homesteads, occasional villages and market towns.

The most recent assessment of English rural settlement at broad strategic level, refining the earlier work of Thorpe, was developed to provide English Heritage's Monuments Protection Programme with a national framework for evaluating medieval settlement sites (Roberts and Wrathmell 2000). In this project the rural settlement pattern of the early to mid-19th century, comprehensively mapped by the Ordnance Survey and published between 1805 and 1869, formed the basis for projecting a division of England into three broad provinces.

The Thames Valley spans two of these provinces. The Central Province includes the valleys of the Upper and Middle Thames and their tributaries north and west of the chalk scarps, and the remainder lies in the South-Eastern Province and is divided by the Berkshire Downs and the Chilterns. The Central Province is dominated by nucleated villages and hamlets, supported by the distinctive communally organised farming systems of open-field arable agriculture. In the South-Eastern Province, arable fields were more restricted in extent, open pasture and wood pastures were more significant, and early enclosures were more widespread. This was associated with a pattern of scattered nucleated settlement. However, mixed patterns of settlement containing both nucleated and dispersed elements in varying degrees occur through most of the Thames Valley and a range of sub-provinces can be defined on the basis of the preponderance of dispersal (Roberts and Wrathmell 2000). Most of our study area north of the Berkshire Downs/Chilterns lies within Roberts and Wrathmell's Inner Midlands sub-province, which they call the 'heart of village England'. The upper reaches of the Thames, however, lie within the Cotswold Scarp and Vale sub-province, which Roberts and Wrathmell

suggest has a 'transitional feel' between the homogeneous landscape of the midlands and the more mixed landscapes of the south-west. South-east of the Berkshire Downs and the Chilterns, within the South-Eastern Province, most of our study area falls within the Thames sub-province, focused on the floodplain and gravels of the Thames and its tributaries, with associated heathlands and claylands. This is an important sub-province of sharply contrasting landscapes. Broadly speaking, it is characterised by more dispersed settlement patterns, with more fragmented communal farming systems. The area west of London has a pattern of nucleated villages comparable to the Central Province, and this does not appear to be directly linked to 'suburbanisation' associated with the rise of London, but rather the product of an older layer of settlement in an area that might once, like the midlands, have been dominated by large, open, arable fields.

SETTLEMENT TYPES

Nucleated Villages

It is now generally accepted that sometime during the mid or late Saxon period, there was a major change in the organisation of rural settlement, with a more dispersed pattern of impermanent hamlets giving way to more permanent nucleated villages on new sites (*cf* Hamerow 2010). Precisely how, when or why such a widespread change in the locations and forms of rural settlement took place is still far from clear, and almost certainly there is no simple answer. Population increase and renewed pressure upon land resources is almost certainly an important factor, imposing a need to organise communities more efficiently to improve agricultural production. Indications are that the first moves towards greater nucleation were beginning perhaps as early as the 8th century, but that the process may not have been completed before the 12th century. In Surrey and the adjacent parts of Middlesex, however, the process of nucleation seems to belong to the later 12th and early 13th centuries (Poulton 1998, 242).

It seems highly likely that the appearance of larger and more permanent nucleated villages was linked with other major changes taking place in the landscape over the same period, notably the adoption of open-field strip farming. Other developments, such as the

reorganisation of the church into the parochial system and the imposition of feudal authority after the Norman Conquest may also be important.

Village components

The idea that studies of village plans might contribute towards understanding the evolution of rural settlement was first developed at the end of the 19th century by the German geographer August Meitzen. He recognised a fundamental distinction between the *haufendorf*, or agglomerated village, which appeared to be associated with communal forms of agriculture, and the *einzelhof*, or isolated farmstead, associated with individual cultivation. These classifications were developed further by Thorpe (1949; 1964), amongst others. It is probably no accident that most of the early detailed work in England took place in the north, where villages tend to have simpler and more cohesive plan forms (Thorpe 1949; Roberts 1982; Sheppard 1976). The more complex and diverse villages of the midlands and south presented a greater problem.

The first attempt to devise a classification of village forms in the Upper Thames region was undertaken by Paget (1954), who rather despairingly expressed the view that 'the present-day forms are as remarkable for their individual characteristics as for their broad similarities. For this reason, no clear-cut classification of settlement forms is possible'. Nevertheless, Paget (ibid., 162–4) provisionally distinguished six basic types: loose groupings with no regular pattern; street-line groups; composite villages; twin settlements; estate villages; and, dispersed settlements. Subsequently, a methodology for the classification of settlement forms has been developed in a series of papers by Roberts (1977; 1982; 1985; 1987). This operates along more strictly morphological principles, which can be operated independently of any considerations or preconceptions about date or siting. The approach devised by Roberts uses three fundamental morphological criteria to categorise plans:

(i) Basic shape, which may be based upon (a) rows or (b) agglomerations
(ii) Degree of regularity, the extent to which the plan elements are arranged either geometrically or without clear order
(iii) Presence or absence of an integral green

These basic criteria can be combined to identify twelve potential plan-types: regular and irregular row plans, regular and irregular grid plans, regular radial plans, and irregular agglomerated plans, any of which may or may not incorporate a green. Row plans can further be subdivided into single-row, two-row or multiple-row forms. Composite forms including two or more distinct plan-types also occur. Some grey areas remain between these types, for example, where a wide street with verges becomes a long narrow green remains to some extent a matter of subjective judgement.

The validity of morphological analysis as a technique of historical investigation has not gone unquestioned. Beresford and St Joseph (1958, 126), while providing and discussing illustrations of various village forms, made the point that '[l]ocal variations are so many that it may be questioned whether any system of classification can ever be realistic enough to aid historical research and indicate stages in the development of a village earlier than those from documents'. More fundamental concerns have been posed by Austin (1985), who suggests that morphological analysis appears to evade considerations of change and that morphological similarity has no relevance to the problems of dating.

Undeniably the morphological approach involves certain assumptions: that, once fixed, village plans will tend to remain comparatively stable over long periods; that in normal circumstances change will occur only on a piecemeal basis; and that when changes did occur, they will often leave some discernible trace in the plan. Like any assumptions, these may be shown to be unfounded in particular cases. Nevertheless, modern plans and plans documented from cartographic sources do provide a springboard for retrogressive analysis. Certainly, the further we attempt to project plans back beyond the earliest secure evidence, the more tentative our conclusions must be. However, for the majority of villages, where large-scale archaeological excavation is never likely to be feasible, plan analysis at the very least provides a means of formulating reasoned hypotheses. The recent employment elsewhere of extensive test-pitting as a means of assessing the earlier development of villages with minimal archaeological intrusion offers the most realistic hope of checking such hypotheses.

No attempt has yet been made to classify the villages of the Thames Valley using the principles laid down by Roberts. Such exploratory work as has taken place has concentrated upon the identification of recurring features, a few of which are outlined below (see also Bond 1985, 109–21 and Blair 1991, 58–62).

Nucleated villages in the Thames Valley

Composite, polyfocal village forms were widespread across the Thames Valley. Both Oxfordshire and Berkshire have many large sprawling villages made up, in effect, of several hamlets loosely linked together, but sometimes retaining an element of separate identity, either with their own names (eg Hook Norton and Chadlington) or with separate greens (eg Stanford-in-the-Vale, Kirtlington). Similar forms have been identified in the east midlands and in East Anglia (Taylor 1977). Several possible circumstances for such arrangements can be suggested. In some cases, we may be seeing the product of successive accretions caused by expansion from a single original nucleus, either by organic growth, planned additions or by a combination of both. Elsewhere we may be seeing the product of fragmentation due to divisions of seigneurial jurisdiction (eg Chalgrove), or through the segregation of diverse social components such as separate bond settlements. A third alternative is that polyfocal settlements are an inheritance from the more dispersed settlement pattern of Roman and early medieval periods and that they reflect an incomplete or arrested process of coalescence into a single coherent nucleation. Rarely do we have sufficient evidence to suggest which of these explanations, if any, is correct; and there is no reason to suppose that the same explanation will apply in every case.

Single-unit regular plans are less clearly represented in the Thames Valley than in the north of England. Nevertheless, a few examples do exist (Blair 1991, 60). The most striking group of regularly-planned villages lies in the Lower Thames Valley in north Surrey, on lands belonging to Chertsey Abbey. Blair (ibid.) suggests that their origins may lie in a systematic policy of settlement replanning, perhaps in association with the building of new churches on the abbey estates around the middle of the 12th century. The plans of Egham and Great Bookham, each with a regular layout consisting of a single main street with crofts on either side terminating in a back lane, are especially persuasive. Elements of regularity also survive at Sutton, Epsom, Chobham and Effingham, though there more modified by later changes (ibid., 58–60). Examples are less evident in the Middle and Upper Thames Valley. Standlake provides an example of a regular two-row village. Although it lies within an area rich in evidence of prehistoric, Romano-British and Anglo-Saxon settlement, there seems to have been a break in the continuity of settlement, the name of the village is unrecorded before the middle of the 12th century (also the date of the earliest recognisable fabric in its parish church). It had an unusual social structure, with no less than 38 free tenants recorded in the Hundred Rolls.

However, its neighbouring settlement at Brighthampton has produced evidence of 10th-century activity, and the two could be an amalgamation of two settlements dependent on separate manors (see Booth *et al*. 2007, 120).

Emery (1974, 81) drew a comparison with the new settlements on the Dutch polders, suggesting that it was a new settlement on the cultivation frontier, developing in association with the draining of land in the Thames Valley in the 12th century, a process which may also have brought neighbouring settlements such as Northmoor and Hardwick into being. Another possibility is that the village was replanned in a more regulated fashion following the acquisition of a market and fair charter in 1230, though any urban aspirations it ever possessed seem to have been short-lived. Long Wittenham, with its long straight main street and parallel back lane, also has the appearance of a planned settlement. If this was a product of seigneurial intervention, then it must have taken place before the early 13th century, when the manor was leased out and subdivided into three separate parts.

Less regular linear plans without parallel back lanes are common, but probably have a wide range of origins. Some examples seem to be associated with former marshland. Murcott lies on the very edge of Otmoor, its main street skirting the original limit of floodable land. The pattern of crofts suggests that it began as a single-row settlement on the edge of the moor, its relative regularity suggesting that it was a planned development rather than a haphazard encroachment of squatters; subsequent growth seems to have resulted in the cutting of crofts out of the open fields on the opposite side of the street. Examples of single-row settlements occur elsewhere, for example East End in North Leigh, a hamlet on the edge of an area of common pasture in Wychwood Forest.

Up to 200 villages in Oxfordshire formerly had one or more greens, though many of these have subsequently been lost through enclosure or encroachment. They span a wide variety of shapes and sizes, which almost certainly reflects an equally diverse range of origins and functions. Their shape is probably less significant than their size, their degree of regularity and their relationship to the tofts. At least four broad categories can be distinguished:

(a) Small greens occurring at road intersections, often triangular, usually less than 5ha in extent, and probably organic developments (examples include Great Milton and Finstock).
(b) Large rectilinear greens, up to 10ha, mostly surrounded by tofts (examples include Marsh Baldon, Fringford and Blackthorn), are sufficiently regular in form to suggest conscious planning; those mentioned all lie at some distance from their parish church.

(c) Large marginal greens, also up to 10ha, which appear never to have been fronted by buildings on more than one side (examples include Binsey, Stadhampton, Warborough and Weston-on-the-Green—the surviving green in Weston is only a vestige of a much larger green along the eastern side of the village, the majority of which has been lost by enclosure).
(d) More extensive commons with hamlets at their margins, which may have originated as squatter settlements on the edge of the waste, or as seasonal bases for herdsmen utilising the common grazing. The commons have often since been eliminated by enclosure, but early maps show Grafton, Lew and Woodcote falling into this group.

As a broad generalisation, greens often seem to be associated with secondary phases of settlement. In some cases, perhaps including Combe, Launton, Fringford, Tackley and Kidlington, relocation from an earlier nucleus may have taken place. Other examples, including North Leigh, Leafield, Finstock and Delly End, seem to be associated with the colonisation of woodland areas. Marsh Baldon seems to be a product of the colonisation of low-lying ground. A few examples also seem to result from the internal reorganisation of the settlement. Earthworks on the greens at Baulking and Goosey, both in the Vale of White Horse, suggest that they may at an earlier date have been occupied at least in part by buildings.

Several Oxfordshire villages include what looks like either an early nucleus or some sort of special precinct, compact and often roughly oval in shape, defined by a continuous alignment of lanes, property boundaries or building lines around its perimeter. Examples have been noted at Bloxham, Milton by Bloxham, East Adderbury, Burdrop in Sibford Gower, Spelsbury and Kidlington. Despite their broad morphological similarity, these features may not have any common origin, date or function. Some may be relict features of prehistoric or Roman origin which have influenced the form of the village subsequently growing up on the same site. Some may represent an early village perimeter, perhaps reinforced by some form of limited defensive boundary (the name of Burdrop, not recorded before 1314, means ‘hamlet by the *burh*’ (Gelling 1954, ii, 405)). Others may represent some sort of proto-manorial precinct which may originate as far back as the mid-Saxon period.

Changes in Village Plans

Although the progress towards nucleation and the achievement of some level of stability of site and plan had taken place well before the high-water mark of medieval settlement was reached, changes to the village plan could still take place in a variety of ways. Five different types of change could be anticipated:

(a) Expansion, to accommodate a rising population. This may take place by (i) subdividing the tofts and crofts within the village boundary, accommodating population increase without enlarging the extent of the settlement; (ii) converting communal space to private space, for example by permitting tofts to encroach over a former village green; or (iii) expanding the settlement by establishing new tofts beyond the earlier perimeter. The expansion of settlement over former open-field land is occasionally revealed in medieval documentation: examples indicated by late 12th-century deeds at Mitcham and Wandsworth have been noted (Blair 1991, 60). It may also be evident in the creation of new crofts with reversed-S aratrally-curved boundaries, or by crofts which enclose pre-existing ridge and furrow.
(b) Internal reorganisation, the superimposition of a new plan over an older layout. This can probably only take place through seigneurial replanning.
(c) Contraction, reflecting a diminishing population, which may involve (i) amalgamation of tofts and crofts, (ii) withdrawal from the perimeter of the settlement, or (iii) unlocalised toft abandonment, so that the settlement, in effect, becomes more dispersed.
(d) Migration, the abandonment of one site and the resettlement of the community on another, a process which may take place either rapidly or over a prolonged period and may be initiated by communal or seigneurial decision; this may leave all the physical evidence of desertion without any actual loss of local population.
(e) Desertion, the total abandonment or destruction of virtually all tofts in the settlement. Usually this was brought about by local decline of population over a period of decades or even centuries, but on occasions seigneurial intervention hastened the process through forced evictions.

There were many factors which encouraged stability: the development of a clearer distinction between private and public space and the fixing of clear property boundaries, the emergence of other fixed points such as the parish church, investment in buildings, and investment in the fertility of the crofts by the practice of concentrating manure from the toft there (relatively little medieval pottery tends to occur in manure scatters over the fields). For

these to be overthrown there had to be either significant pressures generated within the community, or strong seigneurial intervention.

Internal reorganisation

Evidence for the replanning of nucleated villages in the high middle ages has been detected archaeologically at the deserted settlement of Seacourt and has also been postulated by Currie (1992) for villages in the Vale of White Horse, such as Long Wittenham and Steventon.

At several villages, it is possible to detect a distinction between a core area of irregular settlement, usually including a church and manor-house, and an area of later expansion, sometimes including a more regular pattern of planned streets beyond. Examples in Oxfordshire include Bloxham and Kidlington (Bond 1985, 115). Several examples have been recognised in the Vale of White Horse. At East Hendred, there appear to be two early nuclei with irregular plots, one in the village centre shared between King's Manor and Abbey manor, another around Hendred House, which stands well back from the village street alongside the boundary between the High Street crofts and the open fields. At Sutton Courtenay, the original manorial precinct was divided into two during the middle ages, formed the irregular north-west side of a planned triangular green, which was fronted by regular plots defined by back lanes to east and south. Elsewhere in the Vale, for example at South Moreton, West Hagbourne, Steventon, and probably Childrey, manor-houses stand at one end or one corner of an apparently planned village (Currie 1992, 86–7). The original nucleus of Harwell appears to have been around the church at the south-eastern end of the present village, while the High Street was laid out as a planned extension (ibid., 86, 136–7).

Contraction: shrunken villages

Many existing villages include expanses of earthworks which indicate that the settlement formerly covered a more extensive area. These are commonly referred to as shrunken villages, though there may often be legitimate doubt whether the apparent contraction has been due to an actual decline of population, or whether the village has contracted on one side only to expand on another, a sort of piecemeal short-distance migration, leaving all the signs of partial desertion without there necessarily being any loss of population. The proportion of the village to have suffered abandonment or removal may be as little as one or two crofts or over three quarters of the entire settlement. Later periods of contraction may be followed by renewed periods of expansion, obliterating evidence of the contraction episode. For these reasons, it is

doubtful whether any accurate or meaningful assessment of the number or proportion of shrunken villages can ever be produced; the count of 113 shrunken villages in post-1974 Oxfordshire made in 1985 is certain to be an underestimate (Bond 1985, 110).

In the Upper Thames Valley, Langford, Alvescot and Clanfield survive as substantial villages, but also include small areas of earthworks indicating abandoned crofts. Lower downriver at Sandford-on-Thames, earthworks in Church Close to the west, north and east of the church include an embanked hollow way and several rectilinear enclosures. Several properties documented in the Sandford Cartulary around the middle of the 13th century appear to relate to properties in this area (Crickmay 1976–7). None of these sites have yet been examined archaeologically.

Drayton near Abingdon is first recorded by name in AD 958 and the manor may have been carved out of the extensive royal estate of Sutton Courtenay in the middle of the 9th century. It was a fairly minor settlement in 1086, when there were two separate holdings, one of 10 hides held by Robert d'Oilly and one of 5 hides held by Thorkill. It is possible that there were two separate hamlets or large farmsteads, antecedent to the development of the nucleated village. Two recent excavations in the village have revealed evidence for several phases of reorganisation in the marginal area between the edge of the medieval settlement, and the open fields. At Manor Farm, north-east of the church, small rectangular ditched enclosures of late Saxon date were identified, containing numerous ill-defined structures. The enclosure ditches appear to have been filled in probably in the 11th century (Challinor *et al*. 2003). A little further north, in the angle of the Abingdon Road and Henleys Lane, excavation in advance of building in 2000–01 revealed evidence of a similar series of rectangular paddocks or stockyards delimited by ditches and gulleys with droveways and gates between them. The initiation of this system seems to coincide with the abandonment of the paddocks further south by Manor Farm. The ditches were recut, and the layout subjected to several changes between the 11th and 15th centuries. Numerous large pits, mostly along the line of the ditches, appear to be ponds or watering-holes for livestock. During the 12th and 13th centuries a curved droveway defined by ditches 4 m apart was cut across the site but then abandoned (Anthony and Taylor 2006).

Village migration

In many instances within the Thames Valley, parish churches now stand somewhat isolated from the present village centre. Examples in Oxfordshire include Alvescot, North Leigh, Launton, Tackley, Kidlington, Tetsworth, Chalgrove and Yarnton. Churches may be isolated

for many reasons, but quite often the explanation will be that the village has moved away. There is a tradition that in the middle ages the village of Purley stood by the church near the Thames, but that it was moved onto the higher ground to the south-west because of floods (Cooke 1925, 24, n.1). In some cases, evidence of an older settlement nucleus near the church is evident from earthworks or scatters of pottery, and at Yarnton excavation has revealed a long process of settlement shift (Hey 2004). Sometimes the crofts of the present village reveal a distinct reversed-S pattern, suggesting that the settlement has been laid out over part of what had previously been open-field land.

Earthworks in a field called Copt Hay on a low ridge just to the west of the church at Tetsworth were first recognised during survey in advance of construction of the M40 motorway (Robinson 1973). They consisted of a ditched and banked enclosure on the higher ground, with a rectangular croft extending down the slope to the south. It seemed likely that this represented part of an early village nucleus which had subsequently become abandoned when the focus of settlement moved north-eastwards towards its present site. Subsequent excavation revealed what were probably elements of the original manorial complex. The site was occupied by the 10th or 11th century; the first phase of excavated buildings was 12th-century in date, and the area was subsequently reorganised in the 13th century. The area was abandoned to pasture by the late 13th or early 14th century. A second group of earthworks resembling peasant crofts at Tetsworth was discovered in a field called Church Piece, just to the south-east of the church. Small-scale trenching produced pottery dating from the 10th or 11th century up to the 14th or 15th century, but the work was not on a sufficient scale to identify any coherent structures (Hinton 1973). Despite the deserted areas near the church, tax records give no indication that Tetsworth suffered any serious loss of population during the middle ages, and it seems more likely that the village subsequently expanded north-eastwards towards the London–Oxford road, where a new settlement developed around a green, leaving the church and probable manor-house site isolated.

At Chalgrove the church now stands somewhat isolated, but the recovery of a certain amount of late Saxon pottery from the area just to the west, and the presence of surviving earthworks nearby, suggests that the area around the church formed the nucleus of the early village. The final systematic division of the manor into two near-identical half-shares in the 1230s, and the development of two separate manor-houses, may have led to the reorganisation of the village, with the focus of settlement shifting away from the church, and becoming aligned instead on two different streets (Hind 2005).

Deserted medieval villages

Evidence for the existence of deserted villages in the English countryside had been noted by a small number of observant antiquarians since the 16th century (Smith 1964, 73). Nevertheless, until the middle of the 20th century, most academic historians remained reluctant to accept the idea that substantial numbers of medieval villages could have disappeared from the landscape. The decisive breakthrough came with the evidence gathered and presented in the volume, *The Lost Villages of England* (Beresford 1954), which restated some of the probable causes of desertion and provided a series of provisional county lists of sites. Beresford's pioneer studies proved the catalyst for a major programme of research under the auspices of the Deserted Medieval Village Research Group, founded in 1952. A revised gazetteer for Berkshire published in 1962 raised the tally from the two desertions and five shrinkages postulated in 1954 to a total of 36 probable sites, tabulating the suspected period of desertion for each site, and classifying the quality of the historical and archaeological evidence (Beresford and Hurst 1962). In 1965, a more substantial monograph published on the deserted medieval villages of Oxfordshire identified 101 sites within the county, using the same classification framework (Allison *et al*. 1965). A further country-wide synthesis published a few years later (Beresford and Hurst 1971), considerably amplified the earlier county gazetteers, in particular increasing the number of known sites in Berkshire to 43.

During the 1970s and 1980s, the focus of investigation began to change, moving forward from the more limited objectives of identifying the dates and causes of desertion, towards a search for a wider understanding of the evolving nature of rural settlement in all its aspects. One aspect of this new direction was the realisation that many surviving villages lay alongside or included parcels of land which also contained evidence of former dwellings, suggesting that they had contracted, migrated or undergone replanning at some stage in the past. Revised estimates for Oxfordshire within its enlarged post-1974 boundary quoted 148 deserted villages (24 per cent of the total), 113 villages displaying some evidence for shrinkage or migration (18 per cent of the total, almost certainly an underestimate), and 356 'intact' villages where no significant evidence for contraction had then been recognised (Bond 1986). Even these figures presented a simplistic summary of a much more complex reality, as has been revealed by subsequent more detailed local studies.

Indications of the former existence of medieval settlements which have since become deserted can be obtained from both documentary records and field archaeology. Medieval records sometimes list significant numbers of inhabitants or taxpayers in locations where no village survives today. In the Upper Thames Valley, the Domesday survey lists at Buscot 25 villeins, 25 bordars and 6 serfs, at least 56 households, implying a substantial population. At Radcot, the 1279 Hundred Rolls record 36 households and there were 24 contributors to the poll tax of 1377, but by 1665 only three houses were assessed for hearth tax, and only a farm and three cottages remain there today. At Chimney near Bampton, 16 households were recorded in 1279, 9 taxpayers in 1327, but only 4 taxpayers in 1524, again suggesting a dwindling population.

Deserted villages: the field evidence

During the early search for evidence of deserted villages, the existence of isolated churches provided a promising clue. The Upper Thames Valley in particular has a number of churches which are either on their own in a relatively empty parish, or at some distance from the present village, including Inglesham, Buscot, Eaton Hastings, Bessels Leigh and Shifford. Churches which have fallen into ruin, such as Mongewell or Bix, or disappeared entirely, such as Tubney or Seacourt, may also reflect the decline of the settlement which they once served. Field-names may also point to the location of deserted settlements, such as the two fields called 'Old Town' east and south of the church at Eaton Hastings; the field containing the site of Woodperry was called 'Town Close', and the field containing the site of Gatehampton, 'Town Piece'. In such names the term 'town' has the original sense of the Old English *tun*, 'settlement' rather than the later meaning of 'market town'.

On land that went down to permanent pasture immediately after the depopulation of the settlement and where the final generation of peasant buildings was constructed in stone, the outline of the village plan may be well preserved under earthworks. This is particularly the case on the Cotswolds, where the remains of individual houses, crofts and abandoned roads are especially clear on sites such as the shrunken village of Farmington near Northleach, or the deserted hamlets of Broadstone and Upper and Lower Chalford in the Glyme valley (Reeves 1971; Bond 1989, 142). On the lower-lying claylands, where peasant building was normally of timber, individual house sites tend to be more elusive, but ditched croft boundaries and the

hollow-ways of abandoned roads may still be well preserved under pasture. Examples include Pinkhill, on the Thames alluvium to the south of Eynsham.

Changes in the plan of the village before its final desertion have been detected on some sites. A recurring feature is the presence of ridge and furrow apparently underlying croft boundaries, which occurs at Somerford, Tusmore, Water Eaton and probably Coat, and implies the encroachment of the crofts over former open-field furlongs. Re-entrants in the alignment of village boundary banks, as have been recorded at Broadstone, either reflect additions to the original settlement area, or adaptation of the plan to fit within pre-existing land parcels. Perhaps the most significant characteristic, however, is the recurring contrast between distinctively regular blocks of crofts and less regulated areas, which probably reflects the addition of a planned extension to an older settlement; examples have been noted at Burston, Quarrendon and Littlecote in Buckinghamshire and at Tusmore and Wretchwick in Oxfordshire (Bond 1989, 143–6). At Wretchwick the pattern of earthworks to the south-west of the surviving farm was distinctly more regular and rectilinear than that to the north-east, and when the construction of the Bicester ring road clipped the edge of this area in 1988, no pottery earlier than the 13th century was found (Chambers 1991).

Since the 1950s many earthwork sites have been damaged by ploughing. Despite the damage to their visual quality, this provides an opportunity to assess periods of occupation through collection of pottery by field-walking. In Oxfordshire, the sites of the hamlets of Asterleigh, Ilbury, Rofford, Walcote and Wilcote have all produced pottery predominantly of 12th- to 14th-century date, but at Astrop the sequence seems to begin in the 11th and terminate in the mid-13th century. Thomley has produced some early medieval pottery, but the bulk of it dates from the 13th to 15th centuries (Bond 1986, 142). At Buscot earthworks in fields adjoining the isolated church were ploughed in the 1960s, producing some Romano-British pottery, and quantities of medieval pottery mainly from the 12th to 14th centuries. Much of this had been produced by the kilns at Minety and at Brill or Boarstall, while other wares were from an unlocated source in the eastern part of Wiltshire (Mellor and Wilson 1986). Field-walking at Gatehampton in Goring has produced only small quantities of medieval pottery, despite good documentary evidence for the existence of a former village there (Preece 1993).

The distribution of deserted villages

The extensive investigations of the 1950s and 1960s which resulted in the compilation of county gazetteers also made possible the production of distribution maps and these have repeatedly shown the greatest concentrations of deserted settlements in zones of predominantly nucleated villages, extending from Northumberland through the Vale of York into the central Midlands and central southern England.

In Oxfordshire, the greatest density occurs between the River Thame and the Chilterns in the Vale of Aylesbury. This is almost equalled by a high density of deserted settlements through the Oxford Clay vale, which includes a line of sites on the Thames alluvium, very close to the river at Radcot, *Benneye*, *Puttes*, *Alwoldesberie*, Chimney, Shifford, Pinkhill, Armstalls and Somerford. Both areas had been dominated by open-field arable farming, but in many respects the heavy soils were more suited to grass, and so villages on the clay vales were more vulnerable when the balance tilted in favour of pastoral farming. Deserted sites are less common on the lower dip-slope of the Cotswolds, though examples are known both on the plateau and along the main tributary valleys. Most strikingly, however, no sites were recorded on the Oxfordshire Chilterns in 1965, an area in which the economy had been less firmly bound to the plough, where forms of pastoralism were long established, and where the small woodland clearances could not provide the extensive grazing grounds sought by the sheep farmers (Allison *et al*. 1965, 22–5). It is also notable that deserted sites are largely absent from the Middle Thames and surrounding area for similar reasons (R Poulton pers. comm.).

However, while simplistic theories based upon geographical determinism might seem superficially attractive when making broad regional comparisons, it has always been understood that they could not provide the whole answer. Beresford and his collaborators recognised that, even in areas where deserted villages were most common, they very rarely spanned a block of contiguous townships; there were almost always surviving villages between them, in near-identical conditions of soil, altitude and aspect, many of which managed to retain their open fields and traditional forms of husbandry into the 18th or 19th century (Allison *et al*. 1965, 25). Smaller settlements hemmed in by neighbouring villages, with limited land resources, open fields covering most of the township and no opportunity for expansion or flexibility of land use, seemed in general more vulnerable than places which had greater reserves of pasture and meadow. Social and tenurial differences between one township and its neighbours were even more important: places with a high proportion of customary tenants more heavily burdened with rents, with standardised holdings which could not readily be adapted to meet changing economic conditions were especially vulnerable. So, too, were villages

comprising only a single manor, where sole control could be obtained by an absentee family or monastic corporation able to take a wider view of their resources, or an opportunistic individual hoping to profit at the expense of the village community. Many of these considerations were aired in studies undertaken in the 1950s and 1960s, which at that time tended to lay most emphasis on a single cause of depopulation, the enclosure of arable land for sheep farming. This view itself has not entirely stood the test of time, and so a preoccupation with identifying environmental factors which might have predisposed settlements in certain areas to such a change has been of limited value.

To some extent one of the results of later investigations, which have encompassed settlement contraction as well as complete desertion (and the defined threshold between these categories has always been somewhat arbitrary), has been to blur some of the contrasts in distribution which had seemed so clear in the 1960s. As additional locations have become known, the small pockets of assumed immunity around Otmoor and in Wychwood Forest have been reduced, more sites have been recognised on the Cotswold dip-slope and in north Oxfordshire and, most significantly, a growing number of deserted settlements on the Chilterns have been discovered (Bond 1986, 140–3, 186). The expansion in the distribution of known sites has supported the view that not all desertions took place over the same period or for the same reason.

Causes of village desertion in the middle ages: the historical evidence

The early middle ages were a time of rising population and settlement expansion, and it might be expected that few settlements would become deserted under these conditions. However, as discussed earlier, the more dispersed settlement pattern of the early and mid-Saxon periods had been subject to considerable fluidity, with much local migration. Over a period of several centuries, hamlets and farms were abandoned as their inhabitants took up new sites for occupation, usually at no great distance. Some of the unidentified place-names recorded in the Domesday survey, including *Adlach, Bispesdone* and *Pereio* in Oxfordshire, *Acenge* and *Lierecote* in Berkshire, and *Dileherst* (which may have been near Taplow) in Buckinghamshire, which cannot securely be equated with any settlement appearing in later records, may reflect the final stages in this period of widespread mobility. The adoption of some form of open-field farming and the establishment of larger nucleated villages did much to stabilise the pattern of

settlement. Even after that, however, local movement still occurred, and examples have been discussed in the section on village migrations.

From the 12th century, there is occasional evidence for deliberate removal of settlements as part of the estate management policies of monastic houses. The Cistercians of Bruern, in the Evenlode valley, removed the Domesday vill of Treton or Drayton, which had contained 23 families, to create their grange of Sandbrook, and may also have had a hand in the removal of hamlets at Dunthrop and Sewell to make way for granges. The Augustinian canons of Osney in 1205 established a grange at Fulwell, which had been a vill of six households in 1086, and by the end of the 13th century, most of its land had been converted to sheep pasture and most of its inhabitants had been resettled at Mixbury (VCH 1907).

Owing to population expansion, areas of woodland, heath and marsh had been brought into cultivation, sometimes in association with new settlements. However, the onset of deteriorating climatic conditions around the beginning of the 14th century had made the continued arable cultivation of the most marginal land increasingly unviable, and the tide of expansion reversed into a retreat. Many hamlets were clearly in decline some decades before the Black Death, and among them were several smaller, more recent settlements on poorer land, such as Newton by Pusey Common. The hamlet of Somerford in Cassington lay on the low-lying flat alluvial land alongside the river Evenlode, not far from its confluence with the Thames. The Hundred Rolls of 1279 record seven cottars living there and mention a mill. A survey of the earthwork remains of the site, newly-discovered in 1982, revealed seven house platforms and a stone-revetted channel which probably indicates the mill site. Only four tenants remained in 1306 and even the name of the site disappears from the record after 1316. A limited quantity of pottery recovered from molehills produced pottery only of the late 12th and 13th centuries (Bond and Cooper 1983). The hamlet of Langley stood on the bleak and exposed watershed between the Windrush and Evenlode valleys, some 600ft above sea level; 18 tenants were recorded in the Hundred Rolls of 1279, but only 4 taxpayers remained in 1327. Elsewhere, rentals were already beginning to record abandoned and uncultivated holdings during the early 14th century. Three hamlets in Clanfield disappeared so completely that their names passed entirely out of use: *Alwoldesberie*, a Domesday vill with 5 villeins, 6 bordars and 2 serfs working 4 ploughs, which had 20 tenants in 1279, seems to have been abandoned by about 1400. Neither *Puttes* nor Benneye are recorded in 1086, but they had 8 and 19 tenants respectively in 1279; neither settlement seems to have survived long into the 15th century. Yelford, with 10 recorded households in 1086 and 16 taxpayers in 1327, had only one recorded

taxpayer in 1524. Other hamlets along the Upper Thames, including Radcot, Chimney, Shifford, escaped total extinction during this period, but were reduced in size.

The Black Death is popularly cited as the primary cause of village desertion, and in a few cases this may be correct. In 1359, it was reported that no tax could be paid from the hamlet of Tilgarsley near Eynsham, since no-one had lived there for the past ten years. Tusmore in north-east Oxfordshire is also well-documented as a Black Death desertion (Miles and Rowley 1976). Coat near Spelsbury had been occupied by at least a dozen tenant families during the early 14th century, but in 1350 the Abbot of Eynsham received no rents from the hamlet, and in 1360 he was excused payment of tax since no tenements remained; the site has produced no pottery later than the mid-14th century (Bond 1989, 143–4) However, very few places owed their desertion solely to the plague, and many of the villages which had been reduced to a low ebb after 1349 subsequently recovered. At Wretchwick near Bicester, 32 tenants had been recorded in the Hundred Rolls, and although a tax relief of 4s was granted in 1354, probably due to a reduction of population by the Black Death, the community nevertheless limped on at a reduced level into the later part of the 15th century.

The most important result of the Black Death was not its direct and permanent extinction of a small number of individual villages, but rather that, in effecting such a substantial fall in population, it pushed up the costs of labour and made more land available. At the same time, the gradual withdrawal of monastic houses from demesne farming was providing new economic opportunities for the more enterprising peasants who had survived the plague. Landowners no longer had the power to prevent the departure of tenants who wished to seek a better living elsewhere. There was a considerable increase in notices of abandoned tenements through the later 14th and 15th centuries. Shifford near Bampton had been a substantial settlement up until the later 14th century, with at least 13 households noted in 1086, 23 households in 1279, 15 taxpayers contributing 65s to the lay subsidy of 1325, and 50 occupants assessed for poll tax in 1377. However, the account rolls and court rolls of 1458–67 record messuages falling into ruin which were not repaired.

The fact that so much former arable land had gone down to pasture in the years after the Black Death was primarily a consequence of the difficulty of finding or keeping tenants and the high costs of hired labour. It did not reflect any growth in the demand for pastoral products; indeed, in the immediate aftermath of the plague, the demand for meat, hides, wool and dairy produce had declined as much as the market for grain. However, this situation began

to change during the 15th century, with the emergence of a renewed demand for wool, which reached its peak between about 1450 and 1520.

The processes of enclosure and conversion of former open-field arable strips for large-scale sheep-farming became a prominent target of agitation during the Tudor period, being seen at the time as the cause of destruction of many village communities. A commission set up by Cardinal Wolsey in 1517 heard evidence from local juries in a number of counties, including Gloucestershire, Oxfordshire, Berkshire and Buckinghamshire. A representative case is that of Wretchwick, where a jury swore on oath that the Prior of Bicester formerly had 5 houses and 200 acres of arable land there, but that on 2 March 1489 'those houses were laid waste and thrown down, and lands formerly used for arable there he turned over to pasture for animals, so that three ploughs are now out of use there, and 18 people who used to work on that land and earn their living there… have gone away to take to the roads in their misery, and seek their bread elsewhere, and so are led into idleness' (Beresford 1954, 107–8). However, this was not the full story, since Wretchwick had been considerably reduced since its probable zenith of 32 tenants in 1279. Bicester Priory had already undertaken some enclosure there in the early 14th century, and although there were still 10 resident tenants in the 1430s, there were also at that date 12 vacant tofts and much untilled land. The process of enclosure at Wretchwick was not completed until the later 16th century.

When possible causes of village depopulation were first being investigated in the 1950s, these kinds of graphic accusations understandably led to the belief that a major cause of depopulation was the eviction of tenants by Tudor landlords to enclose their open arable strips for sheep pasture. However, it is now generally accepted that active destruction played a less significant part during desertion than was initially thought. While some forced evictions undoubtedly did occur, these hardly ever led to the extinction of a thriving village community; instead they usually represented the final episode in a more protracted process initiated by the famines and plagues of the early and mid-14th century which, by reducing the population, afforded the surviving peasantry much more mobility and the opportunity to leave their villages to seek a better living elsewhere. Many lords suffered considerable losses through lapsed rents from vacant holdings and, far from taking the initiative in driving away their tenants, offered them considerable incentives to stay, reducing rents and manorial burdens. The Eynsham Cartulary records Abbot Nicholas making a new agreement to persuade two of his few remaining tenants at Woodeaton to stay (Eynsham Cart., 19). In most cases lords only took the drastic step of evicting their remaining tenants and converting to pasture as a last resort, when

lack of labour made it impossible to maintain an arable demesne, and when loss of rents made some alternative form of income essential. Enclosure and conversion to pasture, overall, appear to be a consequence rather than a cause of village depopulations.

Among the villages removed by emparkment in the late middle ages was Cuddington. This had been a small but not insignificant settlement in 1086, with a total recorded population of eleven villeins, thirteen bordars and four serfs. But by 1428 it had fewer than ten occupied dwellings and was exempted from tax. In 1537, Henry VIII had a full survey taken of the manor, which describes the manor-house standing near the church and surrounded by great trees. The manor-house had a small hall, 24ft x 18ft, three parlours and chambers, seven rooms for servants, a pantry, buttery, two cellars, a kitchen, pastry house and two larders, with a well outside the kitchen door to the west and a dovecote. The house lay on the southern side of a courtyard, 140ft x 100ft, which had a small barn and stable for 6 horses to the west and a new barn, 155ft long by 36ft wide, to the east. The farm buildings on either side of the court were of timber with tiled roofs. The court was closed off to the north by a stone wall with a small gatehouse and adjoining chamber. To the south there was a garden and orchard occupying an acre and a half. Within sight of the manor-house were four tenanted farmsteads. The arable land lay mainly to the south, with a well-stocked rabbit warren and keeper's lodge adjoining Banstead Downs, and there were enclosed meadows and pastures and open common to the north. Following completion of the survey, in April 1538 the king arranged an exchange of land with the lord of the manor, Richard Codington, so that he could raze Cuddington to the ground and replace it with his new palace of Nonsuch. Many of the roads through the parish were then closed, and about 1670 acres of land were enclosed by palings to make the new Great and Little Parks. By November 1538, about a thousand deer had been brought from other royal parks to stock the new parks at Nonsuch (Dent 1970, 21–35, 280–3).

The excavation of deserted village sites

Some excavation has taken place at deserted village sites in the Thames Valley, although much of the work has taken the form of rapid rescue excavation or limited sampling. One of the earliest recorded excavations took place at Woodperry, on the southern side of Otmoor, in the 1840s (Wilson 1845; 1847; Allison *et al.* 1965, 47; Hinton 1977, 107–9). Further small-scale work on the church and other structures took place in 1953, but no report was published

(Beresford and Hurst 1971, 180). The adoption of open-area excavation in the 1960s proved critical both in the recognition of timber peasant buildings and in understanding their context, exposing the serious limitations of earlier methods of trial trenching and box-system excavation. Even where excavation has been limited, however, some light has been shed upon the broad periods of occupation, the development of building plans and the equipment, produce and consumption of the villagers; but there are some questions, such as the reason for abandonment, which archaeological methods are usually unable to answer.

Case study: Seacourt

The most extensive excavations of a deserted village took place at Seacourt, which lies immediately north-west of Oxford on the Berkshire bank of the backwater of the Thames known as the Seacourt Stream, forming the old county boundary (Biddle 1961–2; see also Bruce Mitford 1940). It is first named in a grant of land to Abingdon Abbey in about AD 957 and was occupied in 1086 by 12 villeins and 15 bordars. However, a document of 1439 in the Vatican Library records that 'the church … of Seacourt was collapsed, that the houses … in the parish were uninhabited and exposed to ruin, except for two only, and they distant from the said church and from one another, and that, with this exception, the church had no parishioners' (*Eugenius* IV). Seacourt had been among the first deserted village sites in England to be photographed from the air, by Major Allen. Although even then its earthwork remains had been reduced by ploughing, the line of the village street was clearly visible, running close to and converging with the old Botley–Wytham road, and other ditches and hollows also survived. The projected Oxford Western Bypass was scheduled to bisect the site and excavations were carried out in 1958–9. A scatter of pottery ranging from the 10th to the early 12th century was noted, reflecting the proximity of the settlement named in the 10th-century charter and Domesday survey; but the excavations located no structures earlier than the mid- or late 12th century, apart from a shallow Roman ditch. It was concluded that the original nucleus of the settlement must lie elsewhere, beyond the route of the new road, perhaps on the gravels to the south. It was assumed that population growth had pushed the extension of the village onto the Oxford Clay.

The excavated area revealed a long straggle of widely-spaced buildings along either side of the main village street, with evidence of several side roads. The earliest buildings were aligned upon a broad shallow ditch beneath the later street, perhaps itself an unsurfaced hollow

way. These were of timber, represented by traces of beam-slots and post-holes. Timber construction continued into the early 13th century, and a group of buildings of this period on the east side of the road towards the north end of the site was interpreted as a farm complex, with a rectangular timber house containing a large clay hearth at right-angles to a larger five-bay structure, probably an animal shelter, with an open front to the yard. A fence and timber outhouse delimited the northern side of the yard, and the eastern side of the yard appears to have been open to the croft beyond. One corner of the yard contained a spread of dark soil and domestic debris which suggested a midden.

The early ditch or hollow way was regularised as a street soon after the middle of the 13th century, with a surface of closely-packed lumps of coral rag and other local stone, with a covered stone-lined drain along its centre. During the later 13th and 14th centuries the early timber buildings were replaced in stone, or at least with stone footings carrying a timber superstructure, a sequence which can be matched on many other village sites excavated elsewhere. The new stone buildings were all aligned with their long axes parallel with the paved street, with one exception which was aligned upon one of the side lanes. In several places the stone buildings appeared to be paired, facing each other across the street, and the larger houses seemed to be located at street junctions and opposite the site of the supposed manor-house. These arrangements suggested to the excavator that the village had been consciously replanned. The manor-house is believed to have stood on the east side of the street immediately north of the church, where portions of a possible boundary wall were located, along with a causeway and clay-lined pond; but most of the supposed manorial precinct lay outside the threatened area and was not investigated further.

The typical form of dwelling was a rectangular building of unmortared local rubble, between 7 and 8 m long and between 4 and 5 m wide, with a single clay hearth either in the centre of the building or against the middle of the rear wall facing the entrance. Many of the stone houses had outbuildings attached or nearby; there was rarely much evidence for their precise function, but one plot on the west side of the street had a long, very narrow, stone building immediately behind the house, the dimensions of which suggest that it contained a single row of cattle stalls. In some cases, there was evidence of yards surrounded by stone boundary walls. One of the last houses to be built in the village, dated by the fact that it overlay a ditch containing late 13th- and early 14th-century pottery, was a rectangular stone building facing a side lane to the east of the main street, some 110 m north of the church.

One early 14th-century stone house near the centre of the village was a little larger than average, about 11m x 2.2m internally, and of two bays. It had a cobbled entrance on the eastern side and contained not only a hearth of domestic type, but also a sort of internal stone drain more commonly associated with livestock housing. Its east wall was buttressed, at the northern gable end was a semi-circular projection which may have carried a staircase to an upper floor. This was clearly different from the other domestic buildings in the village, and it may have been either a priest's house or an inn. One other odd feature discovered during earth-scraping for the road construction was a circular gravel structure about 6.7m in diameter; this was possibly the remains of a cob-built dovecote, though it was at some distance from the supposed manor-house site, about 66 m to the north.

The economy of the community was based primarily upon agriculture and livestock farming, but there was some evidence of iron-smelting in a plot towards the southern end of the village. The pottery from Seacourt lacks examples of the most highly-decorated and most expensive glazed wares. Nevertheless, it is evident from the finds that the community was sufficiently prosperous to afford a little more than the basic necessities. Metalwork items from the site included not just workaday items such as iron knives and shears, but also bronze brooches, finger rings, belt fittings and horse harness pendants. Oyster shells show that at least some sea fish and shellfish were available at rural sites far inland, and that peasants were not confined to self-sufficiency and were able to risk more in production for market in the expectation that they would be able to buy foods in exchange. One particularly exotic item from Seacourt was a fragment of a cylindrical bottle of blue glass with traces of a gilded design which had come from the eastern Mediterranean, which must have been brought back by a crusader or pilgrim returning from the Holy Land. None of the finds dated from much later than the mid-14th century, and the site was probably deserted before 1400, which accords with the documented ruin of the church in 1439 (Biddle 1961–2).

Dispersed settlement

No part of the Thames Valley contained a settlement pattern that was wholly dispersed. There were, however, several distinctive districts where nucleated villages dating from the early middle ages were thin on the ground, and where small hamlets and isolated farmsteads were more prevalent. In general, these are the districts where open-field farming was less extensive,

if not entirely absent, and where more woodland and pasture survived. Some of those districts—Windsor Forest, Wychwood Forest and the Forests of Shotover and Bernwood—had the special legal status of royal forest, which, at least in theory, imposed certain limitations on the rights of tenants, and may have delayed the processes of colonisation until the 12th and 13th centuries. Other areas, particularly the Chilterns, never had the status of royal forest, but had retained more extensive woodland and waste for other reasons. Across much of Surrey nucleated and dispersed settlements existed side by side (Blair 1991).

Assart farmsteads

It can be debated whether dispersed and isolated farmsteads are a primary feature of settlement in such districts, or whether they represent a secondary dispersal by colonisation outwards from nucleated villages (a process known as assarting in the medieval period). It is perhaps futile even to raise such a question in the hope of a simple answer. The clearance of waste and settlement of more marginal land was never just a simple response to the pressures of rising population and pressures on land; its occurrence, or lack of occurrence, was also a product of estate management policy, which may change through time. It might be anticipated that farmsteads established at a relatively late period of the middle ages to work marginal land would become vulnerable to abandonment if physical or economic or demographic conditions deteriorated.

The investigation of areas of dispersed settlement poses significantly greater practical problems than the investigation of villages. Documentary evidence for the existence of isolated assart farmsteads may not appear until long after their first settlement, and, indeed, may not exist at all. It is relatively rare for small farmsteads which were founded during the middle ages, and which have remained under occupation since, to retain any of their medieval domestic or agricultural buildings, though more may survive behind later façades than is realised. Abandoned assart famsteads leave less extensive traces than deserted villages, and their recognition is significantly hindered where the site becomes recolonised by woodland.

Relatively few examples of abandoned assart farmsteads have been recognised or excavated. However, proposals for improvements to the A34 in 1971 threatened the destruction of the well-preserved remains of an assart farmstead in Slape Copse in Glympton in the Glyme valley, and this prompted survey and trial trenching. Documentary evidence indicates that this

site had become established by about 1220, and references to several inhabitants 'of Slape' in the Forest Pleas of the 13th century suggest that it may have developed into a hamlet. The place seems to have become largely depopulated by the 15th century, though local folklore recalled a John or Jack Slape still living there into the early 19th century. The survey revealed three clear buildings with limestone rubble footings. Excavation was unable to establish whether all three buildings were directly contemporary but showed that each had been constructed over earlier deposits, one over a 14th-century soil, one just impinging over an earlier hollow way and the third built over an earlier pit. The distribution of domestic debris and building rubble suggest that the extent of land occupied may have been greater than the visible building remains implied, and it is possible that there were further timber buildings which had left no visible trace. Pottery ranged in date from the 13th to 15th century. No evidence was found for any major occupation of the site after the 15th century (Fasham *et al*. 1986).

During fieldwork prior to the construction of the M40 motorway in 1972 a small extent of earthworks was discovered within an area previously thought to be devoid of medieval settlement, in Sadlers Wood on the high Chilterns above Lewknor. Two further deserted medieval farmsteads were discovered some 1300m to the south and south-east, neither of which was threatened by the road construction. Although much of Lewknor had belonged to Abingdon Abbey in the middle ages, no documentary reference to the Sadlers Wood site is known. The farmstead lay on marginal land and was probably associated with swine rearing rather than cereal production. Survey and excavation revealed a range of substantial mid-13th-century buildings set in ranges along the south side of a rhomboidal enclosure. The quality of the buildings, which had flint foundations, mortared walls, tiled roofs and well-constructed drains, suggested this was not a peasant settlement, and, despite the absence of documentation, it seems more likely to represent an investment by the abbey. The site seems to have been occupied for no more than a century and a half, before it was abandoned and allowed to revert to scrub and woodland. Presumably rising wages had made it impossible to farm the land profitably, and no tenant could be found to rent it (Chambers 1973).

Single-hide farms

Farms made up of single-hide units appear to be an archaic component of the settlement pattern, predating the emergence of nucleated villages and open fields. Yet even in areas of

predominantly nucleated settlement, single-hide units still sometimes survived as isolated, independent, self-contained (if not necessarily self-sufficient) family farms. Individual farms bearing the name 'Hyde' occur scattered throughout southern England, and a number of examples are known in the Thames Valley (Faith 1998). Hyde Farm in Marcham can be equated with the single hide of land held in 1066 by Alwine as tenant of the abbot of Abingdon and in 1086 by Ansketil. It was later occupied by a succession of prosperous yeoman farmers. The farm formed a contiguous block of land on the edge of the parish, and the farmhouse retains considerable medieval elements (Currie 1992, 167–71). In south Berkshire, Hyde End, in the parish of Brimpton in the Enborne valley, lies at the centre of a similarly compact block of land, bounded on two sides by the river and on the north side by an ancient road named in a late 10th-century charter boundary as a herepath.

Single-hide units stood the best chance of avoiding incorporation within communal open fields when they occupied marginal locations, either on the edge of a parish, as at Marcham, or at Heythrop on the Oxfordshire Cotswolds, or in upland parts of a parish where pasture and woodland survived, as in Nuffield, Rotherfield Peppard and Shiplake in the Chilterns.

Elsewhere, even though isolated farmsteads of this type might be abandoned at an early date by occupants forced by the adoption of communal farming systems to move into new villages, this did not necessarily entirely obliterate the identity of single-hide units. Faith's (1998, 33–4) listed survivals of Hyde place-names at Shaw in the Lambourn valley, at East Lockinge on the Berkshire Downs, north-east of Brightwell Baldwin below the Chiltern scarp, and at South Newington in north Oxfordshire, where the extent of the hide appears to have been preserved by a compact block of open-field furlongs, even though the farmstead no longer stood within its own fields.

Isolated farmsteads

Another feature of dispersed settlement is the occasional survival of isolated medieval farmhouses. Although the Chilterns lie towards the eastern limits of the regions within which cruck-framed buildings occur, a significant number of examples of relatively isolated cruck houses do survive there, probably dating from between about 1450 and 1550, for example Carter's Cottage at Exlade Street near Woodcote, and others at Goring Heath and Chazey

Heath. Further isolated cruck houses probably of similar date have been recorded in the wooded parts of central Berkshire west of Reading, at Beenham in the Kennett valley and at Frilsham Common on the hills north of the River Pang. White Cottage at Beenham appears to have been constructed as a yeoman farmstead of late 16th-century date and retains three cruck trusses with purlins carried on extended collars and with bridled scarf-joints. Magpie Farm, Frilsham Common, was built as a three-bay house, and the blades of all four trusses survive (Fletcher 1968, 84–6).

The social pattern of rural Surrey in the later middle ages was distinguished by large numbers of yeoman farmers, and many of their farmhouses were rebuilt from the 15th century. Here, the characteristic Wealden House developed, with a central open hall and end bays with their upper floors jettied forward. The distinctive feature of the Wealden house is that the roof eaves continue across the entire frontage of the building in line with the face of the jettied end bays, spanning the recessed upper wall of the hall, where they are commonly supported on curved braces. The distribution of isolated late medieval farmhouses of Wealden type extends thinly into south Buckinghamshire, for example at Austin's Farm, a mile south-west of Chalfont St Giles. However, in the midlands the Wealden house occurs more commonly as an urban house type. Other examples in Buckinghamshire occur within places which are now no more than villages, but which once had markets, such as Beaconsfield and Haddenham.

Moated sites

Moated sites were first defined as a distinctive class of earthwork in the late 19th century by the Committee on Ancient Earthworks and Fortified Enclosures set up by the Congress of Archaeological Societies. Examples were listed and surveyed in early volumes of the Victoria County History series, but the study of moated sites as an element in the medieval settlement pattern did not begin seriously until the 1960s (Emery 1962; Roberts 1962a; 1962b; 1964). Assessments of the number and significance of moats, including checklists or distribution maps or both, were made in several counties spanning parts of the Thames Valley, including Surrey (Turner 1977), Oxfordshire (Bond 1986) and Gloucestershire (Rawes 1978). The formation of the Moated Sites Research Group in 1972 did much to encourage further investigation. By the late 1970s over 5000 examples had been identified and mapped (Aberg 1978, 2). The greatest concentrations at national level occur in the east, across the claylands of Essex, Suffolk,

Cambridgeshire and Bedfordshire, and in the west midlands. The upper and Lower Thames Valley fall within the medium range of density, apart from the chalk escarpments, all of which appear largely blank on the map.

There is something of an anomaly in the very concept of the 'moated site', in that its definition depends upon the nature of its perimeter rather than by what went on inside it, and moats can surround a wide variety of features. In practice, the term is generally applied to a range of domestic sites, extending from royal or aristocratic rural retreats down through manor-houses to the homesteads of yeomen farmers, surrounded by a water-filled ditch, but usually without any further defensive components beyond perhaps a gatehouse. Commonly the main house stands within the island, with outbuildings and farm buildings which may be inside or outside the moat, or within a subsidiary enclosure. On sites of higher status, however, buildings may sometimes be arranged around a central court with their outer faces dropping sheer to the water. The magnitude of the moat itself can vary from a substantial defensive obstacle of considerable width and depth down to a mere boundary ditch.

The distribution of moats is, unsurprisingly, concentrated where surface water was plentiful and could be retained. They occur most commonly in the Gault and Kimmeridge clay vales beneath the Chiltern scarp, with a particularly high proportion being sited directly on the spring-line at the interface between the clays and the chalk or greensand; they also occur where a local capping of drift produces a perched water-table. Significant concentrations also occur through the Oxford Clay vale, extending through the Upper Thames Valley and into north-east Oxfordshire. Although moated sites are present in some numbers on the London clay of the Lower Thames Valley, their density appears not quite so great, though this may be a consequence of greater destruction through more intensive development. The comparative scarcity of moats on the Cotswolds, on the Corallian escarpment, on the Chilterns, Berkshire Downs and North Downs, and in the sandy country of the Windsor Forest area reflects the greater difficulties involved in creating a water-filled ditch on the more permeable subsoils. Nevertheless, if the need was deemed sufficient, moats could be constructed almost anywhere, by digging leat and dam systems to supply and retain water and by puddling their beds with clay.

The location of moated sites with respect to other settlements is an important consideration as, to some extent, this reflects their origin and status. An estimated 48 per cent of all moats known in Oxfordshire in the 1980s lay within the bounds of existing villages, and a further 23 per cent which are now isolated were associated with deserted village sites (Bond

1986, 150). Only a small minority of manor-houses in the Vale of White Horse appear to have been moated. Those that were enclosed by moats occur generally within or on the edge of villages, such as Appleton, West Hagbourne and South Moreton. In one case, at Steventon, the house stood outside the moat. Examples which are today relatively isolated usually lay alongside hamlets which have since become deserted, such as Lollingdon in Cholsey and Fulscot in South Moreton. (Currie 1992, 87, 111–3, 175). While there can be no simple equation between location and social status, the greater proportion of moats in Oxfordshire belonged to sites of manorial rank.

In other parts of England, particularly in the west midlands and the eastern counties, high concentrations of moats have been associated with assarting in areas of late colonisation. In the Chilterns, an area where farmsteads on assarted land certainly occur, the practical difficulties posed by the chalk subsoil have generally inhibited the construction of moats; nevertheless, although their numbers are few, the greatest proportion of isolated moated sites in Oxfordshire occurs in the southern part of the Chilterns. In Surrey, the concentration of moats in the south-east of the county was part of the colonisation of the Weald. However, moats are also widely scattered across the rest of the county (apart from the chalk escarpment of the North Downs), including the old-settled river gravels alongside the Thames, where the parish of Chertsey alone includes at least six examples (Turner 1977). Blair (1991, 64) has concluded that 'the moated sites do not, on the whole, testify to the colonisation of marginal land; they are merely one element in a pattern of dispersed settlement which had been evolving over many centuries'.

The origin of the moat tradition may derive from the ringwork castle, circular and oval moats appearing in the 12th century. The transition from ringwork to moat may be represented by Cogges Castle in the Windrush valley, which itself seems to have been superseded by the nearby unmoated Manor Farm by about 1250. From the beginning of the 13th century there was generally a rapid increase in the number of moats constructed. During the late 13th and early 14th centuries some moated sites seem to have undergone drastic modification by enlargement, realignment or some other form of elaboration. In the later middle ages the practice of moat construction seems to have declined, perhaps reflecting the general economic decline of the period, and possibly also reflecting the onset of wetter climatic conditions in the early 14th century, which may, in some cases, have encouraged a move to drier sites. After about 1600, however, the practice of digging new moats or modifying pre-existing ones

reappeared as an element of garden layout, and it is sometimes difficult to distinguish post-medieval garden moats from their medieval predecessors.

The commonest form of moat throughout the Thames Valley was a simple quadrilateral enclosure. Size varies considerably, but the majority fall between 0.2 and 0.8 hectares. More complex arrangements with multiple moat islands, concentric ditches and subsidiary enclosures have been recorded elsewhere in England but appear to be relatively unusual in this region. There are a few examples with two islands, such as Barentin's manor at Chalgrove, and a site at Sugarswell in north Oxfordshire. Concentric moats are fairly rare and appear to be characteristic of higher-status sites, such as the park lodge in Beckley. In several places, including Caswell and Standlake, physically separate moats are grouped in twos or threes. Without excavation, it is rarely possible to determine whether such juxtapositions represent replacement, where one of the moats has superseded its neighbour, or whether there is a functional differentiation, with one moat enclosing the main dwelling and subsidiary moats enclosing agricultural buildings, gardens or orchards.

Extensive excavations have been undertaken over several seasons between 2009 and 2015 at Woking Palace in Surrey (Poulton 2015). King Richard I granted the manor to Alan Basset in 1189. A manor house was recorded at the site in 1272, and the manor passed to a succession of families, including the Bassetts and Despensers, the Hollands, the Kents and the Beauforts. The site was moated at least by the 14th century, but probably earlier, and was always partly enclosed by the River Wey (see also http://www.woking-palace.org).

The practical purposes of moats have been the subject of considerable discussion (Clarke 1984, 55–8). The most favoured conclusion is that moat construction was a matter of prestige and a symbol of status, a small-scale imitation of the defensive works of the grander feudal castles. The number of moated sites seems to rise at the very time when legal and economic prohibitions were beginning to inhibit the construction of true castles. In villages, a moat would readily distinguish the manor-house from the peasant crofts. In areas assarted by free farmers, the moat may be a symbol of independence. The symbolic significance of moats is supported by the number of sites which seem to be moated only on the gatehouse side facing the main approach. As moats began to proliferate among the lesser gentry and free tenants, so their symbolic value as a badge of status declined; nevertheless, they reflect the aspirations of a widening social stratum.

The range of structures to be expected on and around a moat are clearly described in the accounts of the Merton College manor of Cuxham, which refer to a detached kitchen, dairy,

bakehouse, barns, byre, stable, carthouse, granary, hayhouse, pigsty, henhouse, dovecote, mills, gardens and orchard, in addition to the manor-house itself. Here, the moat is fairly restricted in size and can only have accommodated the main domestic buildings; the ancillary features and farm buildings seem mostly to have been in enclosures outside the moat, bounded by cob walls (Harvey 1965).

Excavated and surveyed sites

The most comprehensive excavation of a moated site in the Thames Valley took place at Hardings Field in Chalgrove in the late 1970s (Page *et al*. 2005). This contained a series of domestic and agricultural buildings which, in many respects, echo those which are documented at Cuxham. The visible earthworks, discovered only in 1976, consisted of two conjoined moats of differing shape and size. The larger of the two islands contained the buildings of the manorial complex; the smaller island, rectangular, with a bank around its perimeter, lay to the west; neither the initial survey nor subsequent trial trenching produced any evidence of internal structures here, and this was probably a garden, orchard or stock compound.

Documentary evidence indicated that the moated house and farm had belonged to the Barentins, a prominent county family, who had acquired one of the two manors in Chalgrove following its division in the early 13th century. Excavation of the larger island produced evidence of a late 12th- to early 13th-century cob building containing a hearth, and traces of at least one, and possibly two more buildings. Whether this was part of an ordinary peasant toft, or whether it was a predecessor of the more elaborate manorial complex which succeeded it, could not be resolved. The moat itself was dug in the mid-13th century, surrounding a new three-bay stone-built hall, which was constructed on a raised platform created from the moat upcast on the northern part of the larger island. It is likely that the two moat islands were contemporaneous, though this remains archaeologically unproven. The modest scale of the moat, on average about 10m wide and no more than 1.5m deep, rules out any serious defensive function. By the late 14th and early 15th centuries, the site comprised a substantial domestic complex with a farmyard area to the south. However, soon after the acquisition of the property by Magdalen College in 1485, the domestic buildings fell out of use and were demolished, though occupation in some form seems to have persisted until the end of the 16th century.

Excavations on moated sites elsewhere in the Thames Valley have, for the most part, been limited in scale. In 1970, excavation near the north-east corner of a rectangular moat on the edge of Park Wood, some 320m to the south-west of Lilley Farm near Mapledurham, revealed only part of a post-medieval building and floor (Fowler 1971). Two adjoining square moats at Cranford west of Hounslow were much damaged by the construction of the A312 Parkway and the redirection of the River Crane when the M4 motorway was being built. In 1973 a small excavation took place on the surviving western part of the eastern moat. Pottery ranging from the late 12th to late 18th century was found. Evidence for internal buildings was limited to fragments of roof tiles and a green-glazed floor tile, a shallow gulley which may belong to a timber-framed structure containing 14th-century sherds and a quantity of daub in the buried soil cut by the gulley (Lancaster 1974).

Over several seasons in the late 1970s trial trenching took place at Moat Cottage in Kidlington. The site had been considerably modified in the 17th and 18th centuries, but foundations of several earlier clay- and mortar-bonded stone buildings with slate or tile roofs were found, spanning several periods from the late 13th century up to the late middle ages. After several phases of alteration and rebuilding the medieval structures were replaced, probably in the 17th century, by a new L-shaped great house built just to the west (Chambers 1978; Chambers and Meadows 1981).

At Eynsham, a small sub-rectangular moated site lay to the south of the original course of the Chil Brook. This can be identified with the site of a house, courtyard and croft alongside the old Stanton Harcourt road which had belonged to Harvey, son of Peter, and which was purchased by Abbot Adam sometime between 1213 and 1217 to extend the abbey precinct. Excavation across the lower northern part of the moat island in 1992 revealed some evidence of medieval occupation between the late 11th and mid-12th centuries, prior to construction of the moat, which appears to have taken place after 1150. The ditches were about 14 m wide and about 1.5 m deep, and it was calculated that the digging of the moat would have produced some 3000 cubic metres of spoil, most of which had been cast up over the island to raise its level in a series of layers of sand and clay and to create a level surface. Pottery from the site confirmed the documentary indications that it had remained in occupation until the early 13th century, when it was incorporated into the monastic precinct (Keevill 1995).

Non-intrusive surveys (ie without excavation) have also shed new light on several sites. Cippenham Palace near Slough was a regular residence of Richard of Cornwall. The site is probably now represented by a sub-rectangular moated enclosure in Wood Lane, on the

northern edge of a slightly raised gravel terrace abutting the alluvium of the flood plain. A survey undertaken in the late 1970s showed that there was a low flat bank around the inner side of the moat, with slightly higher mounds at each corner, probably produced by the extra spoil dredged from the angle, but possibly surmounted by building platforms. In the centre of the moat platform traces of a rectangular outline 2 4m x 12 m were recorded. Large numbers of roofing-tile fragments were noted, embedded in the inner bank of the moat, and a further scatter of red tile and 13th-century pottery was found after the ploughing of a raised area outside the southern arm of the moat, enclosed by a former natural watercourse, where the outline of a chalk block building measuring 9m x 5m was also recorded (Miller and Miller 1979a).

A survey of the earthworks of Hartley Court Moat, also known as Harlequin's or Hardicanute's Moat, near the north-western margin of Burnham Beeches, recorded a sub-rectangular water-filled moat with both internal and external banks, the inner bank broken on the eastern side by the original entrance and by two probably later gaps on the west. The island extended over some 0.6ha (1.5 acres), and was subdivided by several internal banks, with evidence of small peripheral buildings in the south-western and south-eastern corners and abutting the southern side. There was evidence of a well near the north-eastern corner. No evidence for the main dwelling was found, but its likely location lay between two internal parallel banks extending inwards from the northern perimeter. The moated site was surrounded by an outer enclosure of some 3.7 hectares defined by a bank and external ditch, probably designed to keep deer and swine out of a cultivated area surrounding the inner moated enclosure (Miller and Miller 1978; 1979b).

ARCHITECTURE

Manor houses

Because manors varied so greatly in size and status and were liable to change through time, the capital messuages or manor-houses attached to them were equally variable in size and function. Whether it would be possible to identify a manor-house from architectural or archaeological evidence alone and without documentary confirmation is debatable. The oldest surviving manorial domestic buildings in England appear to date back to the 12th and 13th centuries. However, most houses of manorial status have had a continuous history of occupation since

the middle ages, and their medieval form and fabric have often been altered, concealed or destroyed by later changes. It is rarely possible to undertake archaeological excavation within occupied buildings. Nevertheless, many houses retain distinctive medieval architectural features to which a broad date-range can be attributed by their style, and careful examination of the upstanding structures can often reveal much more about their past evolution. Dendrochronological sampling of structural timbers can offer a real possibility of close dating by a completely independent scientific method.

Medieval high-status domestic buildings have been the subject of systematic study since the mid-19th century, beginning with the landmark trilogy of Turner and Parker (1851; 1853; 1859), which provided an illustrated record and analysis of domestic architecture from the Conquest to the Tudor period. Early investigations of medieval domestic architecture in the Upper Thames were undertaken by E T Long (1938; 1939a; 1939b; 1940; 1941). Analysis of the stylistic typology of building elements and forms as an aid to dating domestic ranges in castles, royal and episcopal palaces and manor-houses was developed further in a series of publications by Wood (1935; 1950; 1965; 1974). A more functional approach was adopted by Faulkner (1958), who examined the structure and plan of medieval domestic buildings to draw some conclusions about the living conditions which they represented. Later investigation has, however, called into question many of our inherited ideas about the development of manor-house plans (Currie 1992, 87–9).

Use of space in the manorial household

In the high middle ages, the domestic accommodation of the manorial classes included three principal elements: the communal great hall, one or more private chambers, and one or more service and storage rooms. Other components such as private chapels might also be present. These basic elements could be arranged in several different ways and evolved through time.

The hall was the principal indoor communal space of the medieval household, and, among all the domestic buildings of the manor, it was the grandest and most distinctive room. It provided accommodation large enough for flexible uses, which included eating, entertainment, sleeping, and the conduct of business. It served as a makeshift dormitory for servants. It was the place where tenants assembled to attend the manorial court, presided over by the lord or his bailiff. Above all, it was a theatre for ceremony and for the visible exercise

of power. Throughout the early middle ages, the hall was usually heated by a central hearth, and so the roof rose to a considerable height to accommodate the smoke from the fire.

Already by the beginning of the 13th century there are indications that the desire for greater privacy and comfort was prompting many lords and their close families to begin distancing themselves from their extended households and from the daily communal life of the great hall. The decline in importance of the great hall accelerated during the later middle ages, as the increasing provision of private rooms for family members and their respective staffs of servants encouraged and assisted the process of seigneurial withdrawal. In the 1360s Langland expressed his disapproval in *The Vision of Piers Plowman* at the change of custom: 'Wretched is the hall each day in the week where the lord nor the lady liketh not to sit. Now hath each rich man a rule to eat by himself in a private parlour because of poor men, or in a chamber with a chimney, and leaves the chief hall' (Langland 1966, 10.96–7)

Private chambers serving both as family sitting-rooms and bedrooms can be identified from before the Norman Conquest. For some time after the Conquest it appears that private rooms were often accommodated in a free-standing block, physically separate from the hall. From the early 13th century up to the end of the middle ages, however, the usual position of the main chambers was in a cross-wing attached to the upper end of the hall, quite often at first-floor level above an undercroft and entered by a stairway from the rear of the dais. In written sources from the 12th century onwards the term *solarium*, modern 'solar', was often used to described upper-floor chambers. Secondary chambers, which might be occupied by the eldest son and his family or might be available for guests, were sometimes also present above the service rooms at the lower end of the hall.

The service rooms in their mature form normally included a buttery and pantry beyond the lower end of the hall. These two rooms provided for the serving of the two great staples of the medieval diet, bread and ale. The buttery was the butler's domain, where the butts of ale (and wine, where it could be afforded) were stored; the pantry was primarily for the serving of bread, from the French *pain*. Other store-rooms such as larders for the storage of meat might also be found. Kitchens were commonly detached buildings, presumably because of the fire risk, though they came to be linked with the services and hall by pentices, and occasionally became fully integrated into the service end.

Medieval manor houses in the Thames Valley region

Because of the sheer volume of information, it is not possible here to offer any comprehensive synthesis of the development of medieval manor-houses in the Thames Valley. However, a few examples will be examined from different periods and different parts of the valley. The geographical incidence of investigation remains unbalanced. With the notable exception of the work of Wood-Jones (1963) in north Oxfordshire, investigators have tended to be drawn more towards the regions where timber-framed houses predominated. The Vale of White Horse has been particularly well served, from the pioneer work of Fletcher to the near-comprehensive survey of greater medieval houses by Currie (1992).

It is difficult to assess the survival of manor-houses from different chronological periods in the Thames Valley, but in the Vale of White Horse at least fourteen substantial houses date to the period before the Black Death, though only one of these, Sutton Courtenay Manor, retains any substantial fabric earlier than 1200. The later middle ages saw only about half a dozen new houses of manorial or quasi-manorial status being constructed which have survived, but a great deal of partial replacement and enlargement of older structures.

The 12th century

Hardly any upstanding manorial buildings are known to survive anywhere in the Thames Valley from before the 13th century. One of the few exceptions is the stone-walled central part of the south wing of the Manor House at Sutton Courtenay. Elsewhere, excavations at Cogges near Witney have revealed slots and postholes of 10th- or 11th-century timber structures near the church, plausibly identified as the residence of a local thegn, which was enclosed later in the 11th or 12th century by a substantial perimeter wall. This is probably the site of the early manor-house which Manasses de Arsic is known to have given to the abbey of Fécamp as an endowment for the dependent priory at the beginning of the 12th century (Blair and Steane 1982, 69–71, 103; Blair 1996, 141). The building in Sutton Courtenay now known as the 'Norman Hall' was regarded as a chapel in the early twentieth century (eg Lynam 1905–6). It was reinterpreted by Preston (1920) as a manorial hall built by Reginald de Courtenay in about 1190, and this view was followed by most later writers (eg Wood 1974, 22–3; Pevsner 1966, 236). However, Currie (1992, 212–4) has dismissed the interpretation of this building as a hall,

arguing that it was more likely to have been erected as a chapel, and that it only became converted to use as a manorial courthouse and centre of the manor farmstead in the 14th century after the transfer of the Manor House site to the Brounz family. The building was reroofed in the later middle ages, and soot-blacked timbers confirm that it did then have a domestic use. Otherwise only fragments of unfortified stone domestic buildings remain from the 12th century. Southrop Manor near Lechlade has a Norman doorway. A 12th- or 13th-century window of two chamfered oblong lights with a solid tympanum and a semi-circular hood with chevron ornament has been incorporated into a late medieval house in Balscott in north Oxfordshire (Long 1938, 55; Wood 1950, 55).

The 13th century

During the 13th century, the medieval manor-house began to evolve towards its mature form, typically adopting an H-shaped plan, the central range containing an unaisled hall which rose through the height of two storeys but was open to the roof, with projecting cross-wings at either end, each with an upper floor, and each roofed independently of the hall. The cross-wing at the upper end of the hall beyond the dais normally contained a solar or private chamber with a room below which might be used for storage or as a parlour. At the lower end of the hall was a spere-truss, usually aisled, separating it from the screens passage. Beyond this the further cross-wing contained the services, buttery and pantry, with access also to the kitchen. Aisled halls were still being built through the 13th century and on into the 14th century, but this arrangement was slowly superseded by alternative roof types which provided unencumbered floor space. The most spectacular of these was the hammerbeam roof, but this generally appears only in the most high-status buildings, such as Westminster Hall. The base-cruck made its appearance around the beginning of the 13th century. This consisted of a pair of curved principals resembling cruck blades, rising from near ground level, but tenoned into a collar-beam rather than rising to the roof apex: in effect this was a sort of hybrid between true crucks and trussed-rafter construction. It made it possible to achieve a wider span without the use of aisle-posts. Above the collar-beam there might be diagonal struts, a king-post or a crown-post. By the middle of the 13th century the base-cruck had emerged as a characteristic component of higher-status domestic buildings (Smith 1964, 147; Alcock and Barley 1972, 133–9; Mercer 1975, 99–101). Base-crucks evolved through several typological developments up to the 15th

century, when they passed out of fashion. Only in parts of the midlands did base crucks remained in favour in gentry houses into the 15th century; sufficiently solidly built for a proportion to survive, but as representatives of the dwellings of a small class, surviving only in limited numbers (Mercer 1975, 100–1).

Appleton Manor stands south of the church, within a three-sided dry moat. It incorporates the hall and two-storeyed service block of the medieval manor-house. The building has been described as late Norman in the past because of its employment of circular arches, but other architectural details point to a slightly later date, and it was probably built for Geoffrey of Appleton, who held the manor in the first decade of the 13th century. The decorative north doorway gives access to a ground-floor hall of 2½ bays, with a floor area of 38ft 6ins x 24ft 6ins. At the east end of the hall two large round-arched chamfered doorways to the service rooms survive, each with a roll-moulded hood, with a small head between the two. There are some indications that the service block was built a few years before the hall (Turner and Parker 1851, 29; VCH 1924, 335; Wood 1935, 175–6; Wood 1950, 7; Pevsner 1966, 65–6; Currie 1992, 100–2; Grenville 1997, 78).

Although somewhat outside the main study area of this volume, Cogges Manor Farm is one of the few manorial complexes in the broader region where the interpretation of the upstanding medieval buildings has greatly been enhanced by excavation, along with more detailed architectural recording and new documentary research. It is located on the east bank of the River Windrush, immediately opposite Witney. The farmhouse stands about 80m to the east of the church and about 120m east-north-east of the moated earthwork of Cogges Castle.

The rear wing of the early 17th-century farmhouse incorporates the remains of a range of mid-13th century date, of coursed oolitic rubble with ashlar dressings, originally of oe storey only. The surviving part of this medieval range has an internal width of about 5m, and was at least 13m long, though the position of neither end wall can be calculated with any precision. A cross-passage through the range retains an original segmental-headed doorway in the north wall. To the east of the passage was a room traditionally interpreted as a ground-floor hall, in the south wall of which there are two 13th-century windows. Subsequent alterations have included the insertion of upper rooms, with stone slate roofs now at two different heights. There are many anomalies in the stonework of the gable end of the taller adjoining 17th-century block to the east, including the line of a lower gable and two blocked doorways, one of which is now intersected by an internal floor. This incorporated a substantial part of an older structure,

perhaps a cross-wing containing a medieval solar which originally extended further south (Turner and Parker 1851, 161; Wood 1950, 56–7; Heward 1996).

A programme of architectural, archaeological and documentary research aimed at gaining a fuller understanding of the entire complex has confirmed that the surviving medieval wing is a portion of a much larger house built shortly after 1241, when half the manor was acquired by Walter de Grey, a member of the family who gave their name to Rotherfield Greys in the south Oxfordshire Chilterns. Grey had risen to prominence in the service of King John, gaining successive appointments as Chancellor of England, Bishop of Worcester, and, in 1215, archbishop of York. He also acted as chief justiciar and regent during Henry III's absence in France in 1242–3. He may have decided that he needed a grander local residence when the king's court was at Woodstock, although the fact that none of his surviving letters were issued at Cogges suggests that he made limited use of it.

The mid-13th-century complex had ranges built around two, possibly even three courtyards. Foundations of a substantial range across the northern side of the court within the angle of the upstanding 13th- and 17th-century buildings and the dairy have been discovered by excavation. Pitched stone flooring dated to the 16th century and later flagstone floors suggest a later decline in status, with the ground floor of the range being relegated to service use; a bread oven and several rough hearths were inserted not long before the final demolition of the range, which took place in the late 18th century; there is documentary evidence for part of the buildings being taken down in 1781. Foundations of further buildings were also uncovered further to the west, in the orchard to the south of the churchyard (Rowley 1996).

Major alterations took place in the late 15th century, when the part to the east of the putative hall was remodelled to accommodate new parlours or chambers. In the early 16th century the west end was rebuilt to serve as a kitchen, include a fireplace and ovens, with a chamber above it, and in the mid or late 16th a ceiling was inserted into the hall, and a large fireplace and stack added on the north side. In the early 17th century the medieval roof was removed, and the walls were heightened to accommodate a heated first-floor chamber and attic above (Heward 1996).

The manor of Charney was held by Abingdon Abbey from before 1066 to the Dissolution. The manor-house, located north of the church at Charney Bassett, had the plan of a hall with two projecting cross-wings. The hall and north wing were substantially rebuilt in the early twentieth century but had been recorded and illustrated before their destruction (Turner and Parker 1851, 153–5). The south wing, the only surviving medieval structure, is of

limestone rubble with some clunch, ashlar dressings and a stone slate roof, and contained the solar, which was about 30ft long by 16ft wide. This has a narrower rectangular projection to the east containing an oratory or chapel on its upper floor (Long 1939, 106–7; Wood 1950, 8–10; Pevsner 1966, 112–3). The most recent reassessment by Currie (1992, 163–7) argues that the wing was built in the early 13th century, probably under Abbot Hugh (1189–1221), and that it was remodelled at least twice later in that century, one of those occasions coinciding with the replacement of an early timber-framed hall by a new stone-built hall and north wing.

Swalcliffe Manor in north Oxfordshire, the former rectory manor of New College, Oxford, provides an example of a smaller manor-house, comparable in scale with later yeoman dwellings. It retains at its western end a much-altered mid-13th-century service wing and screens passage, with two doorways to the buttery and pantry only a foot apart, each with head-stops to the hood. The original hall may have been of timber, and was possibly aisled, but a stone hall and solar cross-wing was added to this between 1397 and 1423. The hall is about 38ft x 19ft and was altered in the 16th century by the insertion of a fireplace backed against the screens passage and the insertion of a first floor and new roof. The undercroft of the solar wing was vaulted in four quadripartite bays supported on a central column, and on the north side, a separate vaulted passage presumably originally gave access to a stairway in the north-east corner. The upper floor retains an original 14th-century window with pointed arch and hollow-splay jambs on its east wall. There may also have been a chapel at this level, but no evidence has survived. (Long 1938, 53; Wood 1950, 59; Wood-Jones 1963, 25–8; Wood 1965, 124; Sherwood and Pevsner 1974, 796–7).

The remains of another rectory manor-house survive at Castle House in Deddington, which incorporates the lower two floors of a tower-like structure dating from the 13th century. It is unclear quite what function this tower served, though it has been suggested that there was a chapel on the upper floor. The building was enlarged and much altered in the 17th century (Long 1938, 55; Wood 1950, 58; Wood-Jones 1963, 164; Sherwood and Pevsner 1974, 570–1). Several 13th-century fragments have been reused in north Oxfordshire, including a two-light window in Manor Farm at Barford St John, probably salvaged from the vanished medieval manor-house which stood within the moat to the south, and a doorway now in an outbuilding of the Joiners' Arms in Bloxham, taken from a demolished cottage in which it had previously been reset (Long 1938, 55; Wood 1950, 56; Sherwood and Pevsner 1974, 445, 483).

The early 14th century

By the early 14th century, the hall was usually at ground level and the aisled form was dying out. In some cases, the aisle-posts were removed, as at Westminster Hall, where they were replaced by a hammer-beam roof. Larger windows were appearing, often of two lights with a traceried head and a transom. Glass remained expensive and was often limited to the traceried head, with the transom being used for fixing shutters.

Fyfield Manor had been held from the early 13th to mid-15th centuries by a family who took their name from the place, and then by the Golafres, as undertenants of the earldom of Lancaster. The largely stone-built manor house, though much altered in the Elizabethan period and later, retains considerable medieval fabric, including a hall with a front porch, one wall of an east wing, a complete western cross-wing with extensions to north-west and south-west, and a south-western range flanking a courtyard on the main south front, which faces the church. The east wing was abutted by the upper end of the hall, and only its west wall survives, now forming the east end of the house. This is the oldest surviving part of the building, dating perhaps from about 1300. A curved wall at the north-east corner indicates the position of a spiral staircase which would have led up to a landing and to a room over the hall. Indications that the east wing was probably remodelled in the 15th century come from a Perpendicular traceried window re-set on the outside of the surviving wall when the rest of the wing was demolished in the 17th century.

The hall range now consists of two storeys and attics. Major reconstruction in the later 16th century, which inserted new windows and added four gables to the front, has obscured the fact that its basic plan and much of the walling probably date from the 14th century. In fact, this, and the adjoining service wing, seem likely to have been built for Sir John Golafre, who acquired the manor by marriage to the Fyfield heiress in the 1330s and died in 1363. Beyond the cross entry at the west end of the hall two adjoining doorways with double wave moulding led to the former buttery and pantry, while a third, to the rear, probably led to the contemporary kitchen. The porch at the southern end of the passage has been altered and restored, but retains arched entries, the inner doorway with ballflower decoration typical of the first half of the 14th century. The two-storeyed service wing has a basement with thick stone walls and a timber-framed upper floor of three bays which is elaborate enough to have served as an important guest chamber. Its roof is of unusual design, with moulded and cusped arch-braces rising from the principal posts to massive tie-beams, the soffits of which are partly cut away in the centre

so that the whole forms a cusped shouldered arch. Above the ties each truss has queen-struts supporting short principals with purlins let into their backs and trapped by a collar above, and upper principals set on their backs. The windbraces to the purlins are cusped to form trefoiled arches. The western extensions to the service wing probably date from about 1500, and the south-western range also appears to be late medieval, containing a smoke-blacked roof which possibly indicates its function as a later kitchen (Currie 1992, 120–24).

Upton Court near Slough is a timber-framed open hall house of early 14th-century date, probably on the site of earlier buildings. The manor of Upton had belonged to Merton Priory from the 12th century to the Dissolution (Trench 1979–80). Restoration work in the 1980s made possible a more detailed survey of the fabric. As originally built the house consisted of an aisled range containing a two-bay hall with screens passage and two-storeyed service bay to the south and a jettied upper-end cross-wing to the north. The passage had the usual buttery and pantry doorways with a third doorway at the west end giving access to a stairway to the floor above. Certain anomalies in the timberwork raises the possibility that the service end may once have had a further bay to the south, but this is not certain. The open truss in the centre of the hall is of unusual construction, consisting of an early, and perhaps experimental arrangement of slender hammer-beams tenoned into the wall-posts, with an arch-braced cambered double tie-beam and crown-post above. The beams alone are insufficient to carry the weight of the structure above, and originally the wall-posts must have continued upwards to accommodate further bracing to support the lower tie-beam; since they would have both broken above the general roof-line, there must have been a large central dormer window on either side of the hall. At a fairly early date, extra curved braces were added for reinforcement. Soot-blackening indicated that there had been an open hearth prior to the insertion of a central brick stack in about 1600. The northern cross-wing, though structurally independent of the hall range, is of the same date, with identical details and methods of construction. Dendrochronology has dated the building to about 1330 (Thornes with Fradgley 1988). Small-scale excavation undertaken by Wessex Archaeology in 1987 exposed the medieval open hearth and provided some evidence for an earlier phase of the building unrelated to the present arrangement of timbering. Three human inhumations were discovered, predating the construction of the court and presumably related to an earlier and larger extent of the cemetery of St Leonard's church to the north (Hawkes and Trott 1991–3).

The former royal manor of Sutton (Courtenay) was held by the Courtenays from 1160 to 1539, but, holding the earldom of Devon from the early 14th century, their main landed

interests lay elsewhere, and Sutton was repeatedly used for dowers of the countesses and for life tenancies of friends and relatives of the family. It was obtained from the Courtenays by John Brounz I shortly after the start of the 14th century and held by successive members of his family into the mid-15th century (Currie 1992, 210–12). The existing manor-house is a complex building of three ranges around a courtyard which is now open to the west; in the early 19th century, there was a fourth wing closing the court on the western side, which has since been demolished. The oldest part of the existing house is the central part of the south wing, which appears to be a chamber and barrel-vaulted undercroft of late 11th-century date belonging to the period of ownership by the Crown. The eastern part of the south wing and the east wing itself date from the mid-14th century and were probably built for John Brounz II (fl. 1317–48). They incorporate three arch-braced cruck trusses with smoke-blackening which indicate that this was an open hall, with a cross-entry at its northern end. The service wing to the north, much altered from the 16th century onwards, retains four principal-rafter trusses with arch-braced collars, probably contemporary with the hall. The north wing was extended further west by four additional timber-framed bays in about 1500, possibly the stable recorded in 1558, with servants' chambers over (Currie 1992, 214–22).

East Hendred had no less than six separate manors during the middle ages, but the only medieval manor-house to survive, Hendred House, belonged to Arches manor, which took its name from the family who were its tenants during the 14th century, one of whom, William de Arches, was M.P. for Gloucestershire in 1326 and for Berkshire in 1335. The oldest part of the house is the mid-13th-century chapel. The existing south wing included a four-bay great chamber at first-floor level, the central truss of which has a crown-strut braced to the collar and the west gable truss a crown strut braced downwards to a flat tiebeam. By comparison with other local chamber wings, one of which (Tudor House, Steventon) has been dated by dendrochronology to *c* 1314, it now seems likely that this range dates from the early 14th century, and it was probably built for William de Arches. Nothing else survives of the domestic ranges of the 13th or 14th centuries, and the existing four-bay hall appears to be a total rebuilding of the late 15th century, though its length, 32ft 6ins, unusual for such a late date, suggest that it may stand on the footprint of its predecessor. The new hall seems likely to have been built for John Eyston, who acquired the manor by marriage with the Arches heiress in 1453. Sooted roof timbers show that this originally had an open hearth. A large fireplace set in the centre of the east wall, with a four-centred arch and quatrefoil frieze, may have been brought from elsewhere; it could date from the later 15th century up to about 1530. The service wing

to the north is much altered, but elements could be of the same date as the hall (Currie 1992, 114–8).

Huntercombe Manor, to the south of Burnham, though externally mainly of 19th-century appearance, contains a 14th-century hall with a single truss, with large arched braces supporting a cambered tie-beam. Traces of the 14th-century service and kitchen wing survive to the west of the hall (Pevsner 1960, 78).

The late 14th century

Fletcher's (1965–6) study of Middle Farm, Harwell showed that it had originated as the largest freehold of Prince's manor, one of Harwell's two main manors. It was held by the Balliol family from about 1200 to 1350, and was then purchased in 1355 by Richard Brounz, one of the rising men of the later 14th century, who was also acquiring other property in the village. He became a Member of Parliament and Justice of the Peace for Berkshire, and in 1381–2 was sheriff of Oxfordshire and Berkshire. The Brounz family retained it until 1437, and after passing through a succession of heiresses it was sold in 1484 to trustees acting for William Waynflete, Bishop of Winchester, who included it in the foundation endowment for Magdalen College, Oxford.

Middle Farm is notable for the survival of not only of the medieval house, but also of two medieval outbuildings—one thatched; one cruck-framed—and a large four-bay cruck barn. The oldest part of the house is the present south wing, dated by Fletcher (1965–6, 47) to about 1280, but more recently shown by dendrochronology to have been constructed with timbers felled in 1323–4. It is not evident whether this was first built as a service or solar wing, but it certainly became the service-wing in the third quarter of the 14th century, when Richard Brounz added a screens passage, hall and north wing. The south range is 34ft in length, of three bays, probably containing two floors from the start, with a two-bay upper-floor chamber with a central open truss and crown-post. Arched timber doorways survive at either end of the cross-passage and at the two entries to the lower floor of the cross-wing, and the main door to the cross-passage is also original. The hall and screens passage together measure 31ft x 23ft. The heavy central truss takes the form of a base cruck with arch-braced double tie-beam, the canted upper side of which is embattled, supporting a crown-post. Smoke-blackened collars and windbraces indicate that there was an open hearth. The two-storey four-bay north wing is integrated with the hall and has similar framing and crown-post roofs. It probably included the

oratory licenced to Richard Brounz in 1389. Dendrochronology has shown that timbers used in the hall and north wing were felled in 1367, 1370 and 1371. The double tie of the base-cruck, dated by dendrochronology to c.1371, appears to be among the latest examples of this type of construction in a domestic context. The hall was divided into two floors in 1589 and a fireplace inserted (Fletcher 1965–6, 47–56; Currie 1992, 130, 143–51).

In 1969, medieval timber-framing masked by modern cladding was recognised in a barn at Church Farm, near the church at Lewknor. Subsequent examination showed that this comprised two open trusses and the east end wall of a timber hall-house of considerable quality. The hall proper occupied the two eastern bays, separated by a spere-truss from the screens passage in the western bay. The main truss formerly had arch-braces from the walls to an unusually long cambered tie-beam. Each truss had a pair of queen-posts standing on the tie, with braces up to the collar and purlins and a downward brace to each end of the tie Above this was a second arch-braced collar linking diminished principals with clasped purlins and wind-braces. Many of the braces were cusped. The considerable width of the building, nearly 30ft, later led to structural problems, aisle-posts were inserted to give support to the tie-beam, and the original braces were reset from the new posts to the tie in similar fashion to the spere-truss. There is no evidence of any further structure at either end, and it may have been a free-standing three-bay building. The roof-timbers show evidence of smoke-blackening, but this is relatively slight, which suggests that the open hearth within it cannot have been used for very long. The buildings belonged to the rectory farm, which had belonged to Abingdon Abbey from 1146 to 1440 and then passed with the glebe land, rectorial tithes and advowson to All Souls College, Oxford. The church had been founded and endowed in the middle of the 12th century by Ansger de Lewknor, a clerk who held parts of the manor from the abbot as a tenant, and three generations of his family served as hereditary lay rectors after him, up to 1298, when the abbey presented its own nominee. This did not interrupt the family's management of the rectory farm as the abbey's tenant, and by the 1330s John de Lewknor, like Richard Brounz at Harwell and his cousin William Brounz at Sutton Courtenay a little later in the century, had already achieved considerable prosperity, representing Oxfordshire in Parliament in 1331-2 and on three subsequent occasions. The nature of the timber-work would be compatible with a construction period in the second quarter of the 14th century, and John de Lewknor is the most likely candidate as builder of the hall. Its limited period of domestic use is likely to have been a result of the Black Death; though John de Lewknor himself survived, he died around 1360, leaving no male heir. The building may have continued to be used by the manor and hundred court for

a time, but never again served as a house (Turner 1972; Morrey and Smith 1973; Mercer 1975, 194, no.338; Fletcher 1975).

On the North Downs of Surrey, the late Victorian manor-house of Walton-on-the-Hill incorporates the stone walls of a two-storeyed range of the 14th-century house with an attached chapel, much altered in the 17th century and again in 1891. The ground floor retains at the west end a medieval doorway and possibly two windows, and there are two doors to the upper floor, one on the outer face of the east wall from a former exterior staircase, and one with daggers in the spandrels giving access to the chapel (Nairn and Pevsner 1962, 418).

The 15th and early 16th centuries

During the 15th century, the hall generally retained proportions of 2:1 or 3:2 and continued to serve as a reception and dining room, but its place in the daily life of most households was in decline. As the building of new aisled and base-cruck halls declined, so alternative forms of construction took their place. Morticed post-and-truss construction was becoming widely adopted after the middle of the 15th century in the manor-houses of the Vale of White Horse (Fletcher 1968, 76). Further to the south-east between about 1400 and 1550 the usual alternatives were either a range with a trussed-rafter roof employing crown posts and collar purlins, or the type of Wealden house mentioned above. Mural fireplaces with chimneys increasingly began to supersede the open hearth in the centre of the hall. Usually these were placed in one or both lateral walls, but occasionally they were inserted behind the high table. An immediate effect of the introduction of chimneys was much greater freedom from smoke, so the height of the hall could be reduced, which in turn provided more warmth and less draught. Windows in more important houses were increasingly likely to be glazed in their entirety, and as shutters were no longer needed so transoms became redundant. Before the final decline of the hall, a common late 15th and 16th-century addition was an oriel chamber projecting from the side wall, entered by a moulded arch from somewhere near the dais. This provided a small parlour or withdrawing-room for the private use of the lord. Often it also incorporated a stairway to the solar to prevent draught behind the high table and to remove any interruption to the arrangement of ornamental hangings. The reduction in the height of the hall meant that rooms could now be accommodated above it, and eventually it was reduced to a mere vestibule to separate living-rooms. The 15th century also saw an improvement in sleeping

accommodation, with both individual and dormitory-type bedrooms being provided. The east range of the roof of Broughton Castle contained a barrack-like dormitory for servants. Grander houses such as Minster Lovell in the Windrush valley were beginning to adopt a courtyard plan. In wealthier households, concerns of prestige and personal safety required the maintenance of large numbers of permanent attendants, and the provision of lodgings ranges to accommodate retainers becomes a feature of large houses.

Ockwells Manor, about a mile west of Bray, was built by Sir John Norreys sometime between 1446 and 1466. It is a sophisticated timber-framed courtyard mansion of exceptional quality. The east front has two main bargeboarded gables over the wider end bays. These adjoin two minor gables, also bargeboarded, of which that to the south projects over a small room above the porch, while the other is over the bay window at the upper end of the hall. Large windows adorn the entire façade, the original hall windows between the minor gables of plain arched lights, the more ornate windows at either end owing more to a restoration in the early twentieth century. The spandrels of the hall doorway are carved with a griffin and an antelope. The hall is of 4 bays, about 41ft long by 24ft wide. The open timber roof remains in place, resting on moulded posts, with collar-beams, arched braces and one tier of windbraces. The hall windows retain a fine set of armorial glass and were set high to allow space for wainscoting or tapestry below, with continuous benches set against the wall. A lateral fireplace was incorporated from the start, and there is no evidence that this replaced an open hearth. The chamber and solar are to the right, but the kitchen, buttery and pantry were placed in a separate west range, separated from the front range by a small courtyard. The service block is linked to the screens passage by a dog-leg cloister around two sides of the court. There was formerly a chapel, projecting forward from the south-east gable (VCH 1923, 93–6; Long 1941, 34–5; Wood 1965, 54, 64; Pevsner 1966, 187–9).

Princes Manor, Harwell, one of the two early manors in the village, takes its name from the Black Prince who held it from the 1340s to 1361. It had a manor-house described as ‘worthless’ in 1300. The manor-house was located immediately east of the church. What survives today is a timber-framed house probably dating from the late 15th century, extended eastwards in the late Tudor period and partly masked by a mid-18th-century brick front to the south. The medieval part consists of a main range with a two-bay open hall, passage and service room, and a two-bayed two-storeyed jettied cross wing at the west end. At the centre of the hall is an arch-braced open truss with an arch-braced tie-beam and arch-braced cambered collar, and at the east end a similar truss which was never meant to have been an outside face but was

intended to butt to a wing beyond. The roof of the hall range has tenoned purlins and the roof of the cross-wing has clasped purlins, but in other respects their braced wall framing is similar. The hall was ceiled in about 1580, creating a new chamber over it. The manor was generally leased through the later middle ages, and it is evident that the house was rebuilt to suit the requirements of a modestly prosperous lessee husbandman rather than a resident landlord (Fletcher 1965–6, 60–64; Currie 1992, 142–3).

Dorney Court, though much altered in the 19th and twentieth centuries, originally seems to have been an L-shaped building of the late 15th century, with the hall in the longer western arm and the parlour and solar in the shortern northern arm. The hall retains a roof with thin arched braces and windbraces.

Down Ampney House was altered at the end of the 18th century, but still has a 15th-century open hall of four bays with elaborate queen-post roof trusses. This was probably built by Sir Edmund Hungerford after his retirement from the Court in 1470. Its interior is lit by two large mullioned and transomed windows. A blocked buttery doorway survives at the service end. The hall roof is high-pitched, with crocketed finials on the gable ends and carved animals on the verges; similar devices appear on the gable at the solar end (Verey 1970, 220; Kingsley 1989, 210–11).

Icomb Place on the Cotswolds was rebuilt around two small courtyards in the first half of the 15th century. Its builder was probably Sir John Blaket, who had inherited the estate by 1410 and was killed in the French wars in 1430.The entrance front to the north-east has a projecting gateway flanked by buttresses with a four-light perpendicular window over and an embattled parapet. Two 15th-century chimneystacks are corbelled onto the front of the first floor. The gateway opens into the first irregular quadrangle, the south side of which is occupied by the great hall, which has an open roof with braced collar-beams and three tiers of curved windbraces. The four principal windows of the hall, three on the north and one on the south, have two lights with transoms, the upper lights having ogee arches and a pair of ovals above. In the north-west corner of the courtyard is a two-storey bay window with perpendicular tracery. The screens passage of the hall originally led through to an inner courtyard, but the buildings on the further side of this court were demolished in 1884 (Verey 1970, 281–2; Kingsley 1989, 111–13).

At Minster Lovell, Oxon, one of the two manors of Minster in the Windrush valley had been held by the Lovell family since the 12th century. Clearance of the ruins of the manor-house by the church in 1937–9 brought to light traces of earlier buildings beneath both the west

and east wings. No satisfactory archaeological evidence was found to date them, but they are unlikely to be earlier than the second half of the 13th century. Although the Lovells continued to have an interest in Minster, their principal seat was at Tichmarsh in Northamptonshire. By 1361, however, the castle at Tichmarsh was in ruins, and the importance of Minster Lovell increased. A survey of 1423 taken on the death of Lady Maud Lovell records the old house as consisting of a hall and four chambers, with two barns, a stable and other farm buildings. This was all swept away to make room for a new house by Lady Maud's grandson, Lord William, who had inherited the property on her death. He had acquired considerable wealth through inheritance of the barony of Holand and marriage to Alice, heiress to the baronies of Deincourt and Grey of Rotherfield. He was serving in the French wars until 1431, and it is likely that he began rebuilding the house at Minster Lovell in a style more fitting to his wealth and status soon after his return. Certainly, the greater part of the buildings appears to be of the first half of the 15th century. The relinquishing of three of Lovell's Norfolk manors, the acquisition of an imparking licence for Minster Woods in 1440 and the disafforestation of the woods to make a free chase in 1442, suggest that the building had reached completion and had become the new principal seat of the family.

The upstanding ruins are arranged around three sides of a quadrangular courtyard, with the main approach from an outer court to the north. A patterned cobbled pathway led to a porch with two bays of quadripartite vaulting, which gave access to the screens passage of the hall. The hall stood on the northern side of the main courtyard, of four bays, with an upper-floor solar to its west, buttery and pantry beyond the screens passage to the east and upper-floor chapel to its north. The dimensions of the hall are about 50ft x 26ft. The lack of any evidence for a mural fireplace suggests that even beyond the 1430s the open central hearth may have persisted. The hall was exceptionally high, with high-set square-headed two-light cinquefoil windows on the south wall, the abutting chapel reducing the windows of the north wall to upper lights only. An oriel projection from the south front of the hall gave access to stairs up to the solar. In addition to the hall, Minster Lovell was equipped from the start with sumptuous private rooms. The solar is aligned at right-angles to the hall, and links with a further range of private rooms to the west. This in turn links with a range of lodgings containing five ground-floor rooms, at least three of them with fireplaces, down the west side of the court. The east wing, built at the same period, included the bakehouse, the kitchen, containing a well and a large fireplace in its thick eastern wall, an entrance passageway with stabling at the southern end. In the late 15th century, a buttressed wall was built to close off the open side of the court facing

the river, with a tower in the south-west corner. Probably in the early 16th century a new well and a short pentice were built in the north-west corner of the court, a water-tank inserted into a room at the north end of the west range, and a small building added at right-angles to the wing outside the court. Possibly these additions relate to a building called the 'outer tanhouse' mentioned in a lease of the building in 1536.

The Lovell estates were seized by Henry VII following the attainder of Francis, 9th baron and first Viscount Lovel after the battle of Bosworth in 1485. Minster Lovell was then held by Jasper Tudor from 1486 till his death in 1495, whereupon it reverted to the Crown. Henry VII stayed there on three occasions, and the Crown maintained the buildings, but the manor was farmed out on successive leases through the 16th century. In 1602 it was purchased by the Attorney General, Sir Edward Coke, and it still appears in good order in 1729, when Samuel and Nathaniel Buck issued a prospect of the north front. However, any prospect of it becoming the Cokes' principal seat ended when their great mansion at Holkham in Norfolk was begun in 1734. The east and west ranges were quarried for building stone; the hall became a ruin and the range to the west was converted into a barn (Taylor 1975).

At Stanton Harcourt, the basic plan of the medieval manor-house is known from an estate plan of 1726. The medieval house was largely demolished in the middle of the 18th century when the Harcourts moved their family seat downriver to Nuneham Courtenay, but two major 15th-century structures survive. Of these, the kitchen is one of the most complete and spectacular late medieval domestic kitchens to survive in England. It consists of a roughly square stone tower, 31ft x 33ft and 40ft high, with an embattled parapet, surmounted by an octagonal lantern. Internally there are two fireplaces against one wall, formerly equipped with spits, and three ovens opposite. Smoke escaped through shutters below the eaves which could be adjusted according to the wind direction. The style of the windows suggests it dates to the 15th century. It was thought that the kitchen was built for Sir Thomas Harcourt, who died in 1417, and it is said to have been re-roofed in 1485. A long two-storey range adjoining the kitchen to the west retains some square-headed windows with cinquefoiled lights, and may also be of 15th-century origin, though extensively remodelled in the 18th century (Parker 1859, 151; Wood 1965, 254; Sherwood and Pevsner 1974, 782–3; VCH 1990, 276–7).

Wytham Abbey, begun in the early 16th century, originally had two courtyards, one of which has been covered over to contain the main staircase. Despite considerable alterations in the early 19th century, the west side of the house retains many details from the early 16th century, including an embattled oriel window with arched lights. Similar windows appear on

the eastern side, which also includes the gateway tower with as polygonal turret to the rear (Pevsner 1966, 314)

Peasant Houses

Hurst's synthesis in 1965 (discussed further in Beresford and Hurst 1971, 104–14) identified three distinct types of peasant house plan in use between the 13th and 15th centuries, and he very tentatively linked these with the different social levels of the peasantry defined in the documentary records. The most basic plan consisted of a simple one-room rectangular dwelling averaging about 5 m by 3.5 m, sometimes accompanied by a small storage shed, but lacking any associated farm buildings. It was suggested that these might represent the dwellings of landless cottars. Evidence for a slightly larger two-room version about 10m by 4m was recognised in the 1971 review.

Hurst's second type was the longhouse, which varied in length from 10 m to 25 m, and in width from 3.6 m to 6 m. The essential characteristic of the long-house was that it accommodated humans and animals under the same roof-line. The upper end provided domestic occupation, usually shows evidence of a laid stone hearth, and was sometimes divided into two rooms by a partition. The lower end of the building, usually separated from the domestic end by a cross-passage between opposed doorways, was used as a cattle byre or shippon, and can be identified as such by the presence of central or lateral drains, pens or mangers. Because of the concentration of surviving examples in northern England, Wales and the south-west of England, the longhouse had been assumed to be a characteristic house-type of what Cyril Fox had called the Highland Zone. However, the progress of survey and excavation on deserted medieval village sites showed that longhouses had also been present in some of the lowland regions of Britain during the middle ages, even though upstanding examples are rare. Within the Thames Valley longhouses occur particularly on the Cotswolds, but the excavations at Seacourt and surveys of other deserted village sites have so far failed to reveal any examples of this type of plan in the clay vales or along the course of the Thames itself. Longhouses appeared to be especially prevalent in villages which became depopulated through conversion to sheep farming in the 15th century, and where there were no independent farmers. It was suggested that the longhouse had been the typical home of the villein tenant,

who had to spend much of his time working for his lord, but who also had his own cattle to stall.

Hurst's third group was represented by peasant tofts contained a dwelling-house with a single doorway and a separate byre or barn and other outbuildings; examples of this plan-type had been excavated at Seacourt, among other sites. The documentary work of Field and Dyer in the West Midlands had also provided evidence for separate barns or granaries (the terms *grangia* and *horreum* seem to be used interchangeably in the records), sheepcotes, stables, pigsties, cartsheds, bakehouses, brewhouses and maltkilns occurring on peasant holdings (Field 1965, 119–21, 134–6; Dyer 1986, 25). Hurst noted that this type of plan seemed to be present in villages which were believed to have become deserted as part of the retreat from marginal land in the 14th century, and he associated it with the emergence of the independent yeoman farmer, working more for himself and requiring more agricultural and storage buildings. Tofts including groups of buildings around a yard have been recorded as earthworks on many sites, including Hullasey in Coates, close to the source of the Thames (Ellis 1984), and at Lower Chalford and Coat on the Oxfordshire Cotswolds (Bond 1989, 142, 144). A late medieval bakehouse or brewhouse was excavated on the edge of Latton village in advance of the A417/A419 improvement in 1995–6 (Mudd *et al*. 2000).

Records from the West Midlands indicate that longhouses accommodating both people and animals had there become a rarity after 1350 (Dyer 1986, 24). The transition from longhouse to farmstead can be illustrated from one excavated site just beyond the margin of the Thames Valley in the north Cotswolds. At Upton in Blockley Parish, the excavation of one toft revealed an early phase of timber structures dated to the 12th or 13th century, replaced in the late 13th century by a longhouse probably of stone construction up to its eaves, with a cross-passage and a hearth; subsequently an open rectangular yard was appended to the south and a further room was added to the upper, northern end. In the early 14th century a further dwelling with opposed doorways and an internal hearth was built in the same alignment still further upslope to the north, with two further attached unheated rooms beyond, each with separate external entrances. The latter building seems to represent an early stage in the segregation of livestock from humans, with the livestock moved into separate compartments attached to the domestic accommodation but with independent entrances. It was suggested that the two dwelling-houses on the same croft might represent accommodation for an older and younger generation of the same family (Rahtz 1969). Elsewhere at Upton earthworks of other tofts

suggested a wide range of internal arrangements, some containing parallel buildings, some buildings at right-angles, both linked and separate.

The presence of two houses within one toft at Upton may be a sign of the pressure of growing population through the 12th and 13th centuries, when some yardland holdings were subdivided into halves or even quarters, and the provision of an additional dwelling on the toft might represent an intermediate stage before the division was completed. Subletting might also result in an additional house being built on a toft (Dyer 1986, 25).

The relationship between dwelling types and social status now seems to be an oversimplification. The variety of terms used for the peasantry in medieval documents is essentially a form of pigeonholing for bureaucratic convenience: in practice, any one term such as 'villein' or 'yardlander' might embrace within certain limits a wide range of tenurial conditions and obligations, and many villein tenants could enjoy greater prosperity than many freeholders. The difficulties extend to the study of standing buildings, where Currie (1992, 81–2, 85) has noted the often arbitrary character of the distinctions made by investigators of medieval rural houses between 'peasant', 'gentry' and 'manorial' houses, and has underlined the difficulties in distinguishing houses of the upper peasantry from those of manorial status on the basis of size or plan-type alone.

The chronology of peasant buildings

Early excavations had suggested a broad chronology for the evolution of house types, which has become refined by subsequent work. The general change from earth-fast post constructions to high dry-stone walls (where stone was available) or to dwarf-wall and timber-framed buildings, previously dated to the 14th century, now seems to have occurred a century earlier (Dyer 1986, 35–6). The first half of the 13th century probably saw the maximum use of longhouses, but whereas these were once seen as entirely self-contained, later work has shown that they were themselves often accompanied by outbuildings of various kinds. Farmstead layouts with house and entirely separate farm buildings are found at the same time. The accumulated evidence from excavation suggests that the 13th century was itself a period of considerable innovation in peasant building, with a significant move towards more substantial and permanent structures, though the evidence from documents and from upstanding buildings

does not become prolific until the later 14th century. The dimensions of excavated 13th-century buildings are like those recorded in later medieval documents.

Dendrochronology has yielded some unexpectedly early dates for several surviving smaller medieval timber-framed houses which seem certain to lie below manorial status. It has become increasingly clear that the survival of peasant houses at least from the middle of the 14th century onwards is much greater than previously recognised. There is, moreover, a small but significant minority of survivals from an even earlier date. Within the Thames Valley there is now considerable evidence from the Vale of White Horse, an area which also continued to retain a strong timber building tradition long after the end of the middle ages. Currie's detailed survey of medieval houses in this area has revealed a gradual increase in the number of surviving smaller houses from about 1250 onwards. To some extent the pattern is affected by elements of the wealthier peasantry building in imitation of houses of manorial status, especially before 1350 and after about 1485 (Currie 1992, 90).

Among the earliest domestic buildings in this region to be dated by dendrochronology is Lime Tree House at Harwell, also known as Catewy's Farm, where a tie-beam from the oldest part, a four-bay aisled hall about 13m x 7m internally, has yielded a date of 1243–7 (Fletcher 1961, 39). Currie (1986; 1992, 138, n. 326, 152–9) has argued a convincing case for this house initially being the homestead of several generations of a peasant family called le Moygne. Before 1216, John le Moygne held half a yardland in Harwell, probably by customary tenure, but by 1256 the family had doubled its holding to a full yardland of 8.5ha (*c* 21 acres) and acquired the freehold.

Surviving sub-manorial buildings from the later 14th and 15th centuries are much more plentiful, coinciding with a period of peasant prosperity, when rents and restrictions were reduced, land was available, food was relatively plentiful and living standards were rising. A general improvement in the quality of materials and standards of workmanship increased the durability of the buildings. The overall distribution of longhouses was already contracting in areas like the Cotswolds and was ultimately to leave surviving examples only in the west and north of the country.

Cruck-framed houses had already begun to appear in the later 13th century, and by about 1400 they were becoming widespread among the more prosperous peasantry, reaching their peak of popularity through the 15th century. Crucks are not found uniformly throughout the Thames Valley, and do not occur at all below Windsor. Conversely, they are numerous in Berkshire, Buckinghamshire, Oxfordshire, Gloucestershire and Wiltshire. They occur most

commonly in the eastern part of the Vale of White Horse (*cf* Fletcher 1968), with significant numbers also in the Thame valley, the Chilterns and the more wooded parts of central Berkshire west of Reading. Examples of cruck building are less common, but by no means absent, over the western parts of the Berkshire Downs and Vale of White Horse, in the Upper Thames Valley above Newbridge and over the Cotswolds and north Oxfordshire uplands. The greatest concentration of crucks within the Thames Valley falls within the Vale of White Horse, and this district also contains most of the earliest dated examples. Two of the houses in the Vale where radiocarbon samples were taken from the crucks produced dates before 1300: Baker's cottage at Wellshead in Harwell and Godfrey's, No. 83 The Causeway at Steventon. This has been confirmed by subsequent dendrochronological investigation, which showed that the timber for a cruck blade at Baker's cottage had probably been felled between 1285 and 1295, while one of the crucks at 83 The Causeway yielded a felling date of 1305 (Hillam and Fletcher 1983, 62). At Sutton Courtenay, Manor Cottage consists of a small two-bay cruck hall and a contemporary three-bay cross-wing with a crown-post roof, and dendrochronology has shown that the timbers used here were from trees felled in 1317/18.

Elsewhere in the Middle Thames Valley, the felling of internal timbers used at Mill Farm Cottage, Mapledurham has been dated to about 1335, and this is so far the earliest known surviving house of lower status in the Thames Valley. It consists of a low three-bay cruck-framed structure, the two-bay hall having a central arch-braced open truss, the end room in the remaining bay having a fully hipped roof (Grenville 1997, 151). Two other early cruck houses in south Oxfordshire, 'Crossways' in Benson and 'Orchard End' in Waterstock, which have been discussed by Blair (1979). From the later part of the 15th century a decline in the quality of crucks becomes evident, perhaps a consequence of increasing shortage of suitable timber; the eastern cruck at Dell Cottage in Harwell is symptomatic of such a decline (Fletcher 1961–2, 210, 214). By the 16th century cruck houses were passing out of favour. Wythe Cottage, Church Street in East Hendred, may be among the last cruck structures to be built in the Vale of White Horse: it is a four-bay building with a ground-floor hall and probably two-storey bays at either end; the truss in the middle of the hall is box-framed, and the timber in the cruck-blades of the remaining trusses is narrow and often unsquared on one side; Fletcher (1968, 86) suggests a date as late as *c*.1600. The biggest single problem with cruck buildings was that their lack of height made it difficult to convert them into two-storey buildings when extra rooms were required in the 16th and 17th centuries (Alcock 1981, 58). Alternative types of building were, therefore sought. Morticed post-and-truss construction had already become widely

adopted in the manor-houses of the Vale of White Horse after the middle of the 15th century, and by the early 16th century was being adopted by the yeoman farmer (Fletcher 1968, 76).

Outside the cruck zone, work in Surrey has identified over 60 smaller vernacular houses dating from the later 14th century and over 400 from the 15th century. Features of the later buildings include the introduction of storeyed end bays, while the introduction of smoke bays and smoke hoods was becoming more widespread through the 16th century. One of the buildings excavated at Seacourt showed that upper floors had begun to appear in some peasant houses in the Upper Thames Valley before 1400 (Biddle 1961–2, 111). Documentary records also underline the seigneurial contribution to peasant building, especially in the later middle ages, when many lords were prepared to provide timber and other materials to encourage their tenants to remain on the land. At Coleshill, the lord was carrying out a major campaign of rebuilding in the 1430s: the construction of a four-bay thatched dwelling 51½ft (15.7m) long by 21½ft (6.6m) wide with stone walls 9ft (2.7m) high at the sides and 16ft (4.9m) high at the gables cost £7 6s 4d (PRO SC6 877/4–8, quoted in Dyer 1986, 31).

Detached chamber blocks had been a feature of early manorial buildings, but they were also used in peasant tofts, and persisted much later in smaller village houses, being documented at Fifield as late as the 16th century (Currie 1992, 88). An early surviving example, of two bays and two storeys, now forms the south-west wing of The Cottage in Aston Street, Aston Tirrold; it has been dated by dendrochronology to the early 1280s (ibid., 103–7). Another two-bayed two-storeyed chamber block which was originally detached survives at Abbey Timbers, Harwell; this was only joined with the main cruck-framed house in the 17th centuiry, when a chimney was inserted between them (ibid., 158–9). In other cases, the chamber survives backed onto the front of the hall range, as at Cruckfield Cottage, Long Wittenham, Old Manor Cottage, North Moreton (ibid., 163, 174–5).

The integrated single-range plan with service rooms and chambers at opposite ends of the hall was, from the evidence of surviving buildings, beginning to appear in the first half of the 15th century. Early examples in the Vale of White Horse include Church Farm (also known as Le Carillon) in Harwell, originally a cruck range of up to four bays, dated by dendrochronology to the 1420s, where the service bay at the north end had been replaced not long after its first construction by a three-bay box-framed wing at right-angles which reused common rafters from a vanished earlier detached chamber or kitchen; and Godfrey's Farm (2 St Mary's Road) at East Hendred, a four-bay box-framed wing of about 1432. Late medieval examples are numerous (ibid., 89, 120, 161).

L-shaped or T-shaped plans with a hall and a single cross-wing occur in some late medieval manor-houses but appears to be much more common among the dwellings of the more prosperous peasantry. Examples surviving from the first half of the 14th century include Manor Cottage at Sutton Courtenay, dated by dendrochronology to 1317–18, 42–42A High Street, Milton; Tudor House, Steventon; and 39 The Causeway, Steventon; and the popularity of this plan-type continued through the rest of the middle ages. Usually there was a service bay and one end of the hall and the cross-wing accommodated one or more chambers; but in 42–42A High Street at Milton there was a ground-floor chamber behind the hall and the three-bayed two-storeyed wing contained the services (ibid., 89, 171–3, 199–203).

FARMING

Medieval field systems

The earliest broad impression of the distribution of arable land within the Thames Valley comes from the Domesday record of ploughteams, which shows that arable farming was widespread throughout the Thames Valley. Ploughteams were especially numerous on the Cotswold dip-slope and the North Oxfordshire uplands, around the Vale of White Horse and the Corallian escarpment to the north, and beneath the Chiltern scarp. Significant concentrations also occur through the Oxford Clay Vale and Vale of Aylesbury, over the dip-slope of the Berkshire Downs and through north Surrey and south Middlesex. Only along the crest of the Berkshire Downs and the crest and dip-slope of the Chilterns, in the forest areas of Braydon, Wychwood, Bernwood and Windsor, and in the heathlands of north-west Surrey are records of ploughteams meagre or absent. Even through the chalk escarpments, there was a ribbon of land on either side of the Thames where plough teams were recorded in significant numbers (Campbell 1962a, 111; 1962b, 139; 1962c, 255; Darby 1976, 23; Welldon Finn 1979, 21; Jope and Terrett 1962, 203; Lloyd 1962, 379). However, although the Domesday record provides a reasonable assessment of the areas where arable farming was important, it yields no information on the nature of field systems within the Thames Valley.

From the early middle ages, up to the 19th century the landscape of the Thames Valley contained two fundamentally different types of field systems: *open fields* and *enclosed fields*. Both were associated with mixed farming systems, but there was a difference in emphasis:

open fields were devoted primarily to crop production, with the essential manuring being provided mainly by livestock grazing over the lands which lay fallow every two or three years; while the main purpose of enclosure was to control the grazing of farm livestock and to restrain it from straying over cultivated land or meadow. The proportion of open and enclosed fields has changed through time, with the extent of unenclosed land being reduced, and ultimately almost eliminated, through successive periods of active enclosure undertaken by a variety of agencies employing different means and processes.

A single medieval open-field township typically contained two, three, or more unenclosed fields, subdivided into furlongs, and then into strips. The size of a single open field was extremely variable from place to place; the majority would lie somewhere between *c* 300 and 700 acres, but individual examples might be much smaller or larger. The essence of open-field farming was that the land was held and cultivated as a communal operation. Enclosed fields, by contrast, were normally held in severalty (that is to say, by individual owners) and were bounded by hedges, ditches, fences or walls; a variety of characteristic shapes and sizes can be recognised, reflecting their varied origins in pre-medieval enclosures, piecemeal assarting (the extension of cultivated land into formerly uncultivated areas), Tudor conversion of arable land to pasture, later enclosure by agreement, up to the final transformation wrought by Parliamentary enclosure in the 18th and 19th centuries.

Distribution of open and enclosed field systems

It was recognised by the pioneers of agricultural history in the late 19th and early 20th centuries that different regions of the country were characterised either by open fields, or by enclosed fields, or by some combination of both. Gray (1915) was among the first to recognise that open two- or three-field systems dominated a wide belt of central England, extending from County Durham down through the Midlands into the Hampshire Basin and the margins of the west country. The entire Thames Valley and its tributaries upstream from the Chilterns fell within the midland open-field belt. However, Gray recognised in the Lower Thames Valley, extending over the dip-slope of the Chiltern escarpment and through north Surrey, Middlesex, south Hertfordshire and Essex, a region in which the field systems 'differed somewhat from the Kentish, East Anglian and midland districts, but borrowed characteristics from each'. While there were open fields within the Lower Thames Valley, their arrangement lacked the regularity

of the midland systems. Whereas in the midlands the virgates consisted of parcels of land equally distributed between two or three open fields, in the Lower Thames they tended to have an irregular distribution. There was a much greater proportion of land in ancient closes and in unenclosed common pasture.

Gray's map is echoed in the more recent work of Rackham (1986, 1–5), who makes a fundamental distinction in the Lowland Zone of Britain between what he calls 'Ancient' and 'Planned' countryside, a distinction which embraces not just different types of fields, but also different types of settlement patterns and road networks, and a differing extent and distribution of commons and woodlands. On Rackham's map, the Upper Thames Valley falls within his midland zone of 'planned countryside', characterised by the early appearance and long survival of open-field cultivation, with straight hedges predominantly of hawthorn surrounding rectangular fields created mainly by the process of Parliamentary enclosure. By contrast, to the east of the Chiltern scarp, the Lower Thames Valley falls within the 'ancient countryside', with irregular enclosed fields and ancient mixed-species hedges; here, open-field land, where present, was of limited extent and usually enclosed before about 1700.

The accepted dichotomy between the open-field belt of the midlands and the remainder of lowland England was endorsed and refined by Roberts and Wrathmell (2000) in their analysis of settlement patterns. Both the midland belt or 'Central Province' and the eastern and western zones were subdivided into smaller provinces, which accommodated variations in the degree of settlement dispersal or nucleation within the major zones. The Central Province, in which nucleated villages and extensive open fields predominated, corresponds with a zone of ancient colonisation which mid- and late Saxon place-names and the Domesday record show to have been largely devoid of woodland by the early middle ages; whereas in the western and eastern zones more woodland survived and pioneer settlement took a more dispersed form, with less communal organisation.

Such broad distinctions are useful but should not obscure the fact that within the major landscape zones there are significant local variations. These are particularly important in the midland open-field zone, which contains several pockets of more distinctive landscapes. The former royal forest areas, and parts of the Corallian escarpment, are characterised by less regular arrangements of open fields interspersed between areas of common pasture and woodland. The open-field townships of the Upper Thames are unusual in having considerable extents of alluvial floodplain within their bounds, providing them with generous resources of meadow and pasture.

Open fields

The components of open fields

In a classic open-field township the greater part of the land was normally divided between two or three large *fields*. In some cases, the fields were partly or entirely bounded by hedges, but not infrequently they were delimited only by access tracks or balks. Each field contained several *furlongs*, and each furlong was made up of a bundle of parallel *strips*, known in earlier sources by a wide range of dialect terms; in the Thames Valley, they were usually termed *lands* or *selions*. Odd corners between furlongs were occupied by triangular or wedge-shaped bundles of strips known as *gores* or *pikes*. The boundaries of the furlongs were delimited by unploughed paths, grass balks and headlands; and there are occasional references to the strips of the tenants being marked with merestones or stakes (eg Harvey 1965, 22–3). The size of all components varied considerably from place to place, but it is generally accepted that the length of the strips and furlongs was based upon the optimum length over which an ox-team could pull the plough through the soil before becoming ineffective through tiredness; while the rod or pole by which the width of the strips was measured was based upon the length of the medieval ox-goad.

The essential feature of communal open-field farming was that in each season one field would be left fallow and grazed by the township flocks and herds. The cultivated fields would also be opened for grazing the stubble after harvest. Not only did this arrangement provide valuable forage, it also ensured that the fields were manured in succession. The system accommodated greater flexibility than its later critics allowed, as some of the individual furlongs within the fields cultivated in any given year could be used for alternative crops.

Two- and three-field systems are widespread in the midland belt, without strong concentrations. However, two-field townships appear to be somewhat more prevalent over the poorer stonebrash soils of the Cotswold dipslope and in areas of heavier clay soils with limited meadowland, whereas three-field townships are more likely to occur in areas with more fertile soil and access to ample meadow. It is a characteristic of the Upper Thames Valley, and other parts of the midlands, that, within individual open fields, the arrangement of furlongs is usually complex and interlocking, with alignments of strips often at right-angles to those in neighbouring furlongs. This is in marked contrast to strip fields on the margins of the open-field zone, such as Holderness, the Yorkshire Wolds and the Fenlands, where much simpler

planned arrangements consisting of blocks of strips up to 1300 yards in length have been identified. It has been suggested that these long strips are a more archaic, antecedent form, and Hall (1979) has shown that some townships elsewhere in the midlands originally had similar long strips, which, by the middle of the 12th century, seem to have been broken up by a process of piecemeal adjustment into the pattern of interlocking furlongs more familiar from later records.

Demesne land and tenanted land

The greater part of the land within an open-field township was normally held by the lord of the manor by tenants. However, a portion of the land was normally retained by the lord as his *demesne*, providing produce both for his own consumption and for sale. In the early middle ages, the demesne was cultivated on the lord's behalf by his serfs and through the labour services of his villein tenants; with the disappearance of serfdom and the decline of labour services, it was increasingly worked by hired labour; and by the later middle ages it was frequently sub-let. On large estates held by non-resident lords, individual manors and their demesnes might be let to freehold tenants or worked through stewards. The demesne could consist either of a compact block of land near the manor-house, or of strips scattered in equal amounts through the open fields interspersed with the strips of the peasant tenants, or of a combination of both. Block demesnes appear to be more characteristic of the central manors of lordships; but compact and dispersed arrangements of the demesne land always seem to have co-existed, and there is no evidence of any general process of conversion of one form to the other. However, in individual cases significant changes can be traced as a result of seigneurial policy: at Cuxham, a previously more scattered demesne was consolidated into compact blocks of furlongs through purchase and exchange, mostly during the second quarter of the 13th century. Despite the consolidation, the demesne continued to be cultivated as an integral part of the open fields into the 18th century (Harvey 1965, 20–2). Elsewhere, as on some of the holdings of Thame Abbey, demesne consolidation was a prelude to enclosure.

Changes in the extent of cultivated land

Many townships added to their open fields by taking in new land from the marginal waste, and the resulting furlongs are often indicated by distinctive names, such as 'stocking' or 'inning'. In Oxfordshire, examples of the field-name 'Breach', derived from a Middle English term for land newly taken into cultivation, are widely scattered through most parts of the county, but

are distinctively absent from Wychwood and the Chilterns; the implication may be that this term designates small-scale extensions to well-established open-field systems (Bond 1982, 11). More extensive areas of clearance appear to be limited to a few localities, particularly the fringes of the royal forests and other wooded areas, and the country around Otmoor. The Knights Templars from their preceptory at Temple Cowley had assarted up to 40 acres from the edge of Shotover Forest, probably creating the East and Wood Fields later known as Newland (VCH 1957, 83). By contrast with the wide distribution of 'Breach' field-names, field-names incorporating the word 'Sart' or 'Assart', derived from another Middle English word meaning recent clearing from woodland or waste, are concentrated almost exclusively around the fringes of Wychwood and Shotover Forests; while another word implying cleared land, 'Grub', occurs commonly in the Chiltern parishes but is rare elsewhere (Bond 1982, 10–11).

It is generally accepted that medieval open fields had reached their greatest extent by the beginning of the 14th century, and there is little evidence that they were further extended anywhere after the Black Death. Reductions in the extent of cultivated land were already appearing during the first half of the 14th century. At Lechlade, the demesne in 1275 had included 518 acres of arable land, but by 1326 the demesne arable in hand had been reduced to 304 acres by the extension of the meadow, while 88 acres of the former demesne had been let to tenants (VCH 1981, 113–4).

Ridge and Furrow

Pasture fields corrugated by ridge and furrow have for long been a feature of many parts of the midland landscape, though the overall extent of ridge and furrow has been greatly reduced by modern ploughing. Some late 19th-century writers assumed that ridge and furrow was a product of medieval strip cultivation (eg Maitland 1897), and this view was strongly endorsed by Maurice Beresford who undertook a number of detailed comparisons between surviving extents of ridge and furrow and large-scale pre-enclosure maps (Beresford 1948). An examination of ridge and furrow in Berkshire and Oxfordshire by J E G Sutton (1964–5) accepted Beresford's equation: 'Though it cannot be stated dogmatically that all the ridges… recorded represent formerly ploughed open-field selions, it now seems certain that the vast proportion do'.

The mechanics of the creation of ridge and furrow have been described by Eyre (1955). It was formed by the action of a heavy swing- or wheel-plough with a share and coulter and a mouldboard mounted on the right-hand side. Contemporary records make it clear that each individual strip was ploughed as a unit: for example, Walter of Henley, writing in the later 13th century, states that the way to plough an acre strip of land measuring 40 rods by 4 rods (220 yards by 20 yards) was to go up and down it 33 times, which would leave a furrow at the edge of the strip a foot broad; a narrower furrow could be achieved by making 36 turns of the plough (Oschinsky 1971, 315). Ploughing began by a single run along the central axis of the strip, the coulter splitting the turf and the mouldboard turning over the sod to the right; the plough was then turned and, on the return run, a second cut made closely parallel with the first, overturning the second line of sods to overlie the first. The third run was then made adjacent to the first on the opposite side, again turning the sods over those turned by the first run. Thereafter, ploughing continued by successive runs in parallel, always in a clockwise direction, gradually moving to the outer edge of the strip. The effect was to accumulate the soil towards the centre of the strip, thereby forming the ridge; this process was known as 'filling' or 'gathering'. Regular ploughing in successive seasons within the precise boundaries of the same strip meant that the height of the ridge slowly became more accentuated, ultimately achieving an amplitude of up to four feet from furrow to ridge-top. However, erosion by rainwash, harrowing, and the trampling of livestock during the fallow course meant that the elevation of the ridges was always kept in check. Although 18th- and 19th-century sources occasionally refer to the strips being ploughed in an anticlockwise direction to reduce the heights of the ridges, there is no evidence that this was a regular practice in the middle ages, and, once created, the ridges retained a considerable degree of stability.

Two other almost universal characteristics of medieval ridge and furrow have been noted, the reversed-S profile of each ridge along its length (known as the *aratral curve*) and the headland ridge. If the strips had all been straight, there would have been considerable difficulty in turning a six- or eight-ox ploughteam at the end of each run. The solution was to have all the strips curved to the left at either end, so that the entire oxteam could continue to pull its full weight until the plough itself reached the end of the furrow, by which time the oxen had turned leftwards onto the headland at right-angles to the general alignment of the strip. Once this point was reached, the lead oxen would then be led round to re-enter the strip, so the headland needed to be no wider than the span of four oxen. The reason for the reversed-S curvature was the mouldboard being on the right-hand side of the plough; if an attempt was

made to turn the plough to the right when approaching the end of the strip, the rear end of the board would pull away, so that the slice could not be inverted and would simply fall back into place; but by turning always to the left, the ploughman was able to keep the mouldboard pressed against the slice and turning over the sod while the team was making its sharpest turn towards the headland.

The general pattern of movement of the plough not only pushed soil inwards towards the centre of the strip, but also dragged it along the length of each ridge towards the headland; when the plough was lifted out for turning, soil clinging to it was scraped off and deposited on the headland, and over a period this created a distinct heap, known as a head or butt, at the end of each ridge; in due course these would themselves coalesce into a headland ridge. In some localities the build-up of soil on the headland might be exacerbated by occasional removal of silt which had accumulated within the furrows in order to improve drainage. Even in open-fields where ridge and furrows were not created, headland ridges could be produced, and when ridge and furrow has entirely been removed by subsequent cultivation, headland ridges sometimes survive because of their greater height.

While the broad relationship between open fields and ridge and furrow is now generally accepted, they are not invariably associated. In a pioneer survey of Buckinghamshire, Mead (1954) showed that, in terms of general distribution, ridge and furrow was heavily concentrated in the northern claylands and was absent from the chalk of the Chilterns. Making use of the vertical aerial photographs produced by the Ordnance Survey to conform with the 1:10,560 map series, Sutton (1964–5) also demonstrated a close correlation between areas of extensive ridge and furrow and areas of heavy soil: the greatest concentrations were in the Vale of White Horse, the Vale of Aylesbury, the Oxford Clay Vale and those parts of north and north-west Oxfordshire which extended over the Liassic clays of the midlands. It was all but absent from the Oxfordshire Cotswolds, the Berkshire Downs, the Chilterns, the Kennet valley and the area of Windsor Forest. It is likely that one of the effects of ridge and furrow cultivation was to improve drainage, both within the individual strips and across fields. Drainage will have been a particularly important consideration where open fields have extended over the floodplain, and to the north of Binsey, immediately north-west of Oxford, ridge and furrow may still be seen abutting the Thames itself. Ridging also increased the surface area of soil available for cultivation within the strip, although the effects may only have been marginal, and the ridges formed permanent features on the ground so that the bounds of individual holdings could be readily determined year after year.

The form of ridge and furrow varies considerably. The statute furlong of 220 yards (201m.) was based upon an estimate of the average length of the agricultural furlong, but in practice in Oxfordshire these can be from as little as 100 yards (91m) up to 350 yards (320m), and occasionally even up to 500 yards (457m). Widths of ridges generally fall within the range of 7–13 yards (6.4–11.9m) but can be as little as 4 yards (3.7m) or as much as 24 yards (21.9m). While there is no very close connection between ridge size and soil-type or gradient, the magnitude of ridges does tend to be greater on the heavier clay soils: unusually broad and high examples are noted by Sutton (ibid., 107) around Water Eaton, Islip and Hampton Gay in the Cherwell valley. A high proportion of the ridge and furrow in the Upper Thames Valley displays the characteristic reversed-S aratral curve.

The high-backed ridge and furrow characteristic of the midland claylands and the vales of central Oxfordshire and north Berkshire usually shows up clearly on vertical aerial photographs, but ground-level field survey has detected other forms in other areas. On the claylands east and south of Reading, particularly around Waltham St Lawrence and Stratfield Saye, there have been observations of regular narrow straight ridges four-eight yards across (*c* 3.7–7.3m), some of which are of sufficient antiquity to underlie roads and hedges (ibid., 104). Evidence of long broad parallel strips rising only slightly between furrows can be seen on aerial photographs of parts of the Berkshire Downs, notably around Ashdown (ibid., 105).

The archaeological investigation of ridge and furrow through excavation has not been a priority in the Thames Valley, and such excavation as has taken place has invariably been incidental to other projects and not the focus of attention. No evidence has yet emerged to cast any serious doubt upon either its general equation with medieval open-field strips or its general stability through time. However, investigations at Frocester in the Severn valley, where excavation has revealed three distinct phases of ploughing between the early 9th and 17th centuries, each producing strips or ridges of different form on different alignments, suggests that any presumption of general stability still does need to be treated with some caution (Price 2008, 162–8).

Strip Lynchets

Strip lynchets occur in several localities within the Upper Thames Valley, particularly along the scarp face of the Berkshire Downs, for example at East Lockinge and in parts of the north

Oxfordshire uplands, for example near Shenington. In the past, these have generally been assumed to be of prehistoric origin, but some examples may reflect the extension of medieval open-field strips onto ground with steeper gradients, and future work should aim to date these more closely.

Meadows

Access to meadowland was vital for medieval farming communities to provide hay for winter fodder for livestock. The production of grass for mowing was usually the most profitable use for the alluvial floodplains of the Thames and its tributaries. From an early date, estates or vills which contained insufficient land suitable for meadow within their own bounds were making use of alluvial grassland which might be some distance away. Some meadows belonged to manorial demesnes but were opened for common grazing after the last hay crop was taken. Some were communal lot meadows, divided into parcels, which were allocated by drawing lots prior to cutting. In other meadows, the parcels were attached to specific holdings, but still opened for communal pasturage after cutting. Many of the meadows were intercommoned between several neighbouring townships as pasture after the hay had been cut (VCH 1996, 31–3). Several manors on the dip-slope of the Cotswolds, for example, acquired rights in meadowland by the Thames or in the lower valleys of its tributaries. In 1059, the south-western part of the Thames-side manor of Northmoor formed an outlier to the estate at Taynton, 14 miles to the northwest, and most of the 170 acres of meadow associated with Taynton in 1086 probably lay around Moreton in Northmoor (VCH 1996, 150–2, 159). The boundary clause of the extant copy of the Witney charter of 1044 mentions a ‘mead enclosure which belongs to Shilton’ (*on thone Maedham the hyrath into Scylftune*) (Grundy 1933, 82). Shilton lies some 6 miles to the west, and this meadow, later known as Shilton Ham, which lay between the two branches of the Windrush east of Ducklington, remained a small detached part of Shilton parish into the 19th century. In addition to Shilton Ham at Ducklington, Shilton also had 36 acres of meadow north of Tadpole Bridge on the Thames south-east of Bampton, which was also formerly a detached piece of the parish (VCH 1996, 6, 32). Parcels of meadow in Kempsford were also attached to various Cotswold estates, including Gloucester Abbey’s manors of Coln St Aldwyn, Aldsworth and Eastleach Martin, and the manors of Hatherop and Southrop, which had at different times been in the same ownership as Kempsford (VCH 1981, 101).

The Domesday Survey gives the fullest overall impression of the distribution of meadowland in the early middle ages, although understanding is hampered by different means of assessment. The floodplain of the Upper Thames contained substantial areas of meadow. In Wiltshire, 200 acres are mentioned at Ashton Keynes, 100 acres at Castle Eaton, 200 acres jointly for Latton and Eisey. In Gloucestershire, South Cerney had 100 acres on one holding, and another 30 acres shared with Ampney. In Berkshire, there were 300 acres at Buscot and 220 acres at Buckland. In some places, entries give the value of the meadow rather than the acreage, but considerable extents are implied: meadow at Kempsford produced an income of £9, as well as pasture for the oxen, while meadow at Lechlade produced an annual income of £7 7s plus hay for the oxen. By contrast, although most of the riverside settlements in the Middle Thames below Dorchester had some meadowland, the extents were much smaller. Only Reading, with 165 acres, stands out, and at least some of that meadow is likely to have lain along the Kennet. Direct comparison with the valley below Henley is difficult because of the different means of assessment used in Buckinghamshire and Middlesex; most places had some meadow, but only in Marlow, which had land for 36 ploughteams on four separate estates, does it run to any larger extent. Approaching London, the widening alluvial plain began once more to accommodate larger extents with 120 acres at Egham and 200 acres at Chertsey.

Among the tributaries, by far the most extensive areas of meadow lay along the River Ock and its headstreams in the Vale of White Horse, rising to 374 acres at Milton, 366 acres at Sparsholt, and 292 acres at Hanney. The Kennett valley also shows significant concentrations of meadowland: 200 acres at Benham near Speen, 147 acres at Thatcham, 124 acres at Aldermaston. Most of the vills along the narrow upper valleys of the tributaries on the Cotswold dip-slope, unsurprisingly, had relatively modest extents of meadow, rarely more than 20 acres, and, as already noted, some of the meadow which is recorded at places like Northmoor and Shilton lay elsewhere. On the Colne, Harmondsworth had meadow for 20 ploughteams, Iver for 30 teams and Staines for 24 teams. The lowest proportions of meadowland appear in the Berkshire Downs and Windsor Forest.

Later records show that the riverside meadows were especially valuable in the Upper Thames. Mowing rights in the meadows at Lechlade were sold in 1270 for £52, which amounted to one-third of the entire profits of the manor. The Lechlade demesne included 667 acres of meadow in 1275, and there were 596 acres of meadow in 1326. Meadows occupied most of the eastern and southern parts of the parish. Town East meadow, between the Kelmscott road and the river, was a large common lot meadow, with the lord of the manor holding the

right to the first math (hay crop) of 90 acres of the lots, the second math, and subsequent pasture rights in the meadow's entire 200 acres. This meadow, along with the smaller Town Rumsey to the south-west of the town, remained common meadow until 1859–60. There were also 82 acres of several (enclosed) meadow along the river to the south-east of the town which belonged to St John's Hospital (VCH 1981, 114). John Leland (1535–43) describes his journey from Lechlade to Fairford, 'about 4 miles, all by low ground, in a manner in a level, most apt for grass, but very barren of wood'. The Kempsford demesne included 156 acres of meadow in 1258, and in later centuries the extent of common lot meadow may have been 1000 acres or more. The largest area was Kempsford Meadow in the south-east of the parish, but there were others beyond the Coln to the north-east, and to the west. Several manors up on the Cotswolds, including Hatherop, Southrop, and the Gloucester Abbey manors of Coln St Aldwyn, Aldsworth and Eastleach Martin, all had parcels of meadow at Kempsford. The Fairford demesne included 70 acres of meadow in 1307, and by about 1327 it included over 105 acres. By 1597 the principal lot meadow was at Long Doles in the south-east corner of the parish, but there were other meadows above the town bridge to the west of the river.

Lot meadows were divided into strips, the bounds of which were marked by stakes or merestones. A few apparently early merestones remain in position in the meadow at Eaton Hastings, and others have been recorded on the Yarnton meads. The Yarnton Meads were formerly held in common between the farmers of Yarnton and Begbroke. Three separate lot meadows survived into the twentieth century, West Mead (75 acres), Oxey Mead (66 acres) and Pixey Mead (50 acres). Each meadow was divided into 'shots': five in West Mead, three in Oxey Mead, and two in Pixey Mead. Each 'shot' contained 13 strips, marked on the ground by stones or pegs. A total of 12 acres of the best land in the three meads was set aside for rectorial tithes. The remaining extent of the meadows was held in 13 lots, represented by 13 cherrywood balls, on which the name of each lot was inscribed. The names on nine of the 13 balls (William of Bladon, Walter Geoffrey, Perry, Dunn, Bolton, Freeman, Gilbert, Green and White) can be matched with those of Yarnton and Begbroke tenants recorded in the Hundred Rolls of 1279. In the 19th century, nine lots belonged to Yarnton, and four to Begbroke. The allotment was made each year by drawing one of the balls at the head of each strip; when an entire shot of 13 strips had been allocated by this means, the balls were returned to the bag and the process was repeated for the next shot. Traditionally, each meadow was allotted and mown on a single day on successive Mondays following the feast of St Peter and St Paul (29th June), which necessitated using hired labour from outside the parish; but after 1817, the lot owners

were allowed to cut their grass at any time before the meadows were thrown open for common grazing, on the Monday following the feast of St Bartholomew (August 24th). Grazing rights on the meadow following the cutting of the hay was limited to the lot owners, and in 1797 the stint was four cows or two horses to a lot. The drawing of the lots continued till 1978.

Eynsham had 250 acres of meadow recorded in 1086, and most of this lay in the south-east of the township, abutting upon the Thames and the old course of the Evenlode which still forms the parish boundary. The Eynsham Abbey records identify over 350 acres of demesne meadow belonging to the abbey, providing details of their management. Most were mown twice a year. Some were reserved exclusively for the abbot's use, others were commonable from either Lammas or Michaelmas until Candlemas (2nd February). One meadow called Overeyt was commonable from 24th June, but no sheep were allowed, and cattle were kept out until the adjacent Long Mead was mown and lifted. A few of the meadows were divided by ancient custom into parcels, some of which remained in demense while others alternated between the abbot and certain of the tenants. Other meadows were held by the tenants as common or lor meadows, and the abbot also had small pieces in those (VCH 1990, 129).

Natural flooding has always enriched meadows with deposits of silt and nutrient, and there is some evidence for deliberate irrigation by drowning during the middle ages. A custumal of the abbot of Westminster lists services owed by his tenants on his manor of Pyrford on the River Wey which included 'damming the water to overflow the lord's meadow' (Manning and Bray 1804, 154). This foreshadowed much more sophisticated systems of meadow irrigation which were to be developed in the 17th century.

Pasture

Grazing land was vital for the support of livestock, and was provided in several different ways. Areas of permanent pasture included both wet pastures along the valleys of the Thames and its tributaries, and dry upland pastures on the Cotswolds and the chalk downs. Grazing would also take place on the meadows after the hay crop had been taken, and on the fallow of the open fields. By the later middle ages closes of permanent grass were also appearing.

Areas of common pasture are recorded in the Domesday survey, but the record is very inconsistent, making it impossible to gain any clear impression of the overall distribution of pasture through the whole length of the Thames Valley.

Later records give a much fuller impression of the extent and location of pasture within individual townships, and show that grazing land could be held in common or in severalty. For example, in the north-west of Lechlade, 190 acres of pasture known as The Downs, which were probably open to common grazing, belonged to the manor up to the beginning of the 18th century, while there seems to have been another common pasture further south at Thorn Hill, comprising 91 acres in 1670 (VCH 1981, 114). The Kempsford demesne in 1258 included sufficient pasture to support 24 oxen and a grove with pasture for 40 cows; a large common pasture known as The Moors lay between the Grand Drain and the Kempsford-Whelford road (ibid., 101–2). The Fairford demesne had six several pastures in 1307, but there were also several common pastures, of which vestiges survived into the 18th century.

Wet pasture

The location of pastureland determines its character, and a broad distinction has been drawn between wet and dry pastures, which may still have been subject to some form of transhumance into the early middle ages (Sturdy 1963; Emery 1974, 55–6; Schumer 1984, 36–44; Blair 1994, 25–7, 87). Extensive examples of wet pastures subject to common grazing survived on either side of the Upper Thames late enough to appear on the 1st edition of the Ordnance Survey 1:63,360 maps, including Thrupp Common on the Berkshire bank north-east of Faringdon, and on the Oxfordshire bank the four Aston commons east of Bampton (Aston Common, Aston Lower Common, Aston Cow Common and Aston Sheep Common) and Standlake Common, along with Cowley Marsh to the south-east of Oxford. In the middle portion of the Thames Valley only a few relatively small lowland grazing commons survived into the 19th century, such as Bensington Common and Roke Marsh. Below Reading 166 acres of stinted riverside common survive at Dorney and Boveney, and there are over 40 acres of common and over 440 acres of Lammas land at Eton (Lammas lands were traditionally not thrown open for common grazing until Lammas Day, 1 August).

One of the best-known examples of a wet pasture alongside the Upper Thames is Port Meadow, which comprises 342 acres of grassland belonging to the city of Oxford, and is contiguous with the 74 acres of Wolvercote Common at its northern end. There can be little doubt that this equates with the pasture recorded in the Domesday survey which was held in common by all the burgesses and which yielded 6s 8d; the burgesses were paying precisely the

same rent to the king for the pasture of *Portmaneit* (burgesses' island) in about 1140. Despite its modern name, Port Meadow has been grazed all year round for at least the last thousand years, and the only occasion when it has ever been mown for hay was over three successive seasons during the Civil War. Pasturing was traditionally controlled by regular 'drifts', which usually took place once or twice a year. The gates were closed and guarded the previous evening to prevent any illicit removal of cattle. At dawn, the cattle were driven to a pound, a small charge was applied for their release, and a large fine was imposed upon owners of any cattle with no right to be there. In 1552, some freemen were keeping large flocks of sheep there, but grazing was subsequently limited to horses and cattle. Poultry, particularly geese, were permitted on Wolvercote Common.

Dry Pasture

The higher parts of the Cotswolds and Berkshire Downs provided extensive sheepwalks during the middle ages. Several different types of pasture were available on the heavily wooded Chiltern uplands. There were limited areas of open chalk downland over the crest of the hills. There were enclosed pastures on the upper part of the dip-slope, and small closes and orchards near the farmsteads. Those valleys containing tributaries of the Thames offered ribbons of valley-bottom land which could provide meadow aftermath, but the dry valleys offered only rough forage. There were also numerous green and woodland commons, extending into roadside verges and green ways. However, the quality of grazing on the Chiltern commons was generally poor. The larger wastes were intercommoned not only by neighbouring townships on the hills, but also by more distant communities in the Vale. Pasture in general was in short supply, and although some former arable land temporarily went down to grass after the plague of 1349, this change was rapidly reversed.

However, numerous patches of common grazing land survived into the 19th century, including Goulds Heath, Ewelme Cow Common, Woodcot Common, Gallows Tree Common and Binfield Heath. Extensive commons still survive on the Chilterns at Nettlebed (355 acres), Russells Water (263 acres), Kingwood in Rotherfield Peppard (152 acres) and Nuffield (107 acres) (Stamp and Hoskins 1963, 307–8).

In the Lower Thames Valley, several areas of common pasture extended over parts of the river terraces where the underlying gravel was coarse, dry and infertile. Surviving examples

include Wimbledon Common (over 1100 acres), Mitcham Common (410 acres), and the commons of Barnes (123 acres) and East Sheen (68 acres) (ibid., 148–50, 319–20).

Heathland

Areas of acidic sandy soils did not provide prime agricultural land, and extensive areas remained under heathland through the middle ages, covered with bracken, heather, gorse and birch scrub. The most extensive areas of heathland in the Thames Valley lay to the south-east of Reading over the outcrop of Bagshot Sands. This area includes the extensive commons of Chobham, totalling over 1800 acres, the Horsell Commons near Woking, totalling over 760 acres, the 186 acres of Bagshot Heath, and many smaller commons (Stamp and Hoskins 1963, 148–51, 319–23). An outlier of Bagshot Sands covers the watershed between the Pang and Kennett, underlying the extensive commons of Bucklebury, of which over 550 acres remains under scrub and bracken. Other outliers to the south of Newbury were occupied by Greenham Common, still extending for over 856 acres, and by the former commons of Burghfield and Mortimer (ibid., 248–9). Outcrops of the Lower Greensand were also locally occupied by acid heath, for example at Cumnor Hurst.

Later medieval changes in agriculture

Patterns of agriculture continued to evolve and change during the medieval period in response to fluctuations in population and market forces. A sequence of bad harvests during the early part of the 14th century had led to serious food shortages, and the arrival of the Black Death in 1348–9 was followed by further outbreaks which led to a catastrophic population decline. The consequences of the resulting shortage of labour and reduced demand for grain were most severely felt in the classic open-field areas of the Upper Thames Valley, where the emphasis had traditionally been on communal arable farming. Even on the largest and most prosperous manors along the Upper Thames there are indications of a contraction of arable cultivation and an increase in permanent grass by the second quarter of the 14th century. By about 1327, the arable land in hand at Fairford had been reduced to 574 acres, but the meadow land on the demesne had increased to over 105 acres (VCH 1981, 76). At Lechlade, demesne arable in

hand had been reduced to 304 acres by 1326 and, of this, 218 acres still lay in open fields, with 88 acres of the former demesne being let to tenants. The meadow land was then extended to 596 acres, and there were pasture rights for 27 oxen, 57 cows and calves and 300 sheep (VCH 1981, 114). In more marginal settlements, the impact of conversion to grass was much greater. Records of arable land in strips and the distribution of ridge and furrow at Radcot suggest that the open fields had occupied at least 160 acres, but in the late 14th century about 120 acres of demesne arable had been laid down to grass and arable cultivation was almost extinguished in the 16th century following the depopulation of the hamlet and the introduction of large numbers of sheep. By 1549, much of Radcot's demesne and former tenant land seems to have been leased to three graziers from outside the county, who kept 1100 sheep there (VCH 2012, 259–61). At Cassington, much of the land south of the village that had been brought under cultivation earlier in the middle ages was converted to meadow and pasture (VCH 1990, 45).

The reduced population opened possibilities for the more enterprising survivors to increase their prosperity by acquiring abandoned holdings and consolidating their field strips into larger blocks. In Dorchester-on-Thames, there is evidence of strip consolidation on the bishop's estate in 1545, when a lease described land lying in blocks of 10–20 acres, 30 acres and 50 acres in certain furlongs (VCH 1962, 47). At Wolvercote, the open fields seem to have been completely reorganised in the later 14th century, when Godstow Abbey consolidated much of its demesne land in Wolvercote and St Giles into a single block of land straddling the parish boundary (VCH 1990, 314).

The strains placed upon communal farming were reflected in an increase of land held in severalty and in piecemeal enclosure. These processes often seem to have begun on the grasslands. Enclosed meadows began to appear in Bampton as early as the 13th century, though a considerable area remained as common lot meadows into the 18th century (VCH 1996, 31). Before the middle of the 16th century, some townships, such as Nuneham Courtenay, Culham and Dorchester-on-Thames, experienced significant enclosure of open-field arable land as well as common meadow and pasture. Late medieval demesne closes around Friars Court to the south of Clanfield appear to have been taken out of the open fields (VCH 2006, 132). Godstow Abbey's demesne at Wolvercote included 121 acres of enclosed pasture at the Dissolution (VCH 1990, 314). Occasionally, details of the practicalities are recorded. For example, in 1443, £15 was spent on quickset fencing and ditching in the western part of Eynsham (ibid., 132). In 1517, Wolsey's enclosure commissioners recorded several accusations of large-scale enclosures associated with removal of tenants: Rewley Abbey was said to have enclosed 230

acres for pasture at Yarnton in 1486, allowing 6 acres and 4 cottages to become derelict, rendering 36 people homeless and causing 9 ploughs to be taken out of use (Leadam 1897, 386; VCH 1990, 478). The enclosed land lay to the south and west of the village and, by the 1520s, it was leased out as three farms, but half the parish remained unenclosed (ibid.). Elsewhere, abandonment of holdings and conversion of former strip fields to permanent pasture were followed by large-scale enclosure and the removal of entire village communities. However, for all the stresses placed upon it, open-field farming proved remarkably resilient and adaptable, and in many parts of the Thames Valley it continued to be practised into the first half of the 19th century.

Even on small manors, sheep numbers tended to increase in the later middle ages. Flocks of 60 or more sheep are recorded at Shifford in the late 14th and mid-15th century (VCH 1996, 35, 105). In the late 15th century, the Fairford demesne was farmed by John Tame, who employed at least four shepherds on his estates. His son, Sir Edmund Tame, owned at least 500 sheep at his death in 1534. However, the ever-present risk of disease meant that financial returns from sheep farming were always uncertain. The demesne flock at Eynsham numbered about 400 in 1443. Ten years later, at Michaelmas 1453, despite heavy mortality, it had risen to over 1000, but by the following year the entire flock of 950 was destroyed by murrain, except for a single ewe and her lamb (VCH 1990, 132). The increasing attention to sheep-farming was reflected in the numbers of sheepcotes being constructed. There was a sheephouse and dairy at Twelve Acre in Eynsham by the 1440s (ibid.). Kempsford's manorial sheepcote stood at Dudgrove in the south-east of the parish in 1517 (VCH 1981, 100).

WOODS, PARKS AND GARDENS

Woodland

The existence of woodland is recorded in a range of medieval documentary sources, which provide an indication of both distribution and management. Individual woods named in boundary clauses of Saxon charters can sometimes be identified with woodland still surviving today: for example, *Aesc leah*, a landmark on the bounds of Brightwell Baldwin attached to a charter with the reputed date 880 is Ashley's Wood to the east of Brightwell Grove (Grundy 1933, 11).

Records of woodland in Domesday Book are difficult to compare across the whole of the Thames Valley. Woodland was assessed in different ways in different counties and it was entered under the name of the vill to which the woods belonged although it is known from later sources that some vills in open country had rights in woodland at a considerable distance from their main settlements. The maps provided by the contributors to Darby's Domesday Geography volumes have to be used with a certain amount of caution. The line of substantial woodland renders plotted below the foot of the Chiltern scarp through Oxfordshire and Buckinghamshire is particularly misleading (as the authors themselves point out), since the greater part of this woodland will have been located across the dip-slope to the south-east, on the clay-with-flints deposits covering the chalk. A number of the Chiltern vills in Buckinghamshire had woodland for between 500 and 1500 swine (Campbell 1962b, 167–9). Elsewhere, concentrations of woodland records around the royal forests of Wychwood, Shotover and Bernwood do reflect genuine concentrations of woodland (Jope and Terret 1962, 213–5). The well-wooded Wychwood country is uncharacteristic of the Cotswold dip-slope as a whole, which otherwise has only a few scattered woodland records.

Woodland records in Berkshire are strongly concentrated across the southern half of the county, over the dip-slope of the Berkshire Downs, and to the east of Reading. Hardly any record of woodland appears in the Vale of White Horse or along the Corallian escarpment (Campbell 1962c, 263–4). The considerable extent of known medieval woodland within the great bend of the Thames, including Wytham, Bagley and Tubney Woods, escapes notice entirely. Areas where little or no woodland is recorded include the dip-slope of the Cotswolds (Wychwood excepted) and most of the Oxford Clay Vale.

The Domesday survey suggests that vills along either side of the Upper Thames possessed very little woodland, and the alluvial flood plain and gravel terraces remained almost entirely unwooded throughout the following centuries. However, there are hints from place-names and documentary records that small wooded areas stood close to the river in the early medieval period. The name of Grafton may imply an early specialisation in coppice production for fuel on the large Bampton estate, but there are no records of any surviving wood there in 1086 or later. At Chimney, there was a small area of demesne woodland of about 20 acres immediately east of the hamlet, but this was mostly converted to pasture closes by the early 17th century (VCH 1996, 83). Stanton Harcourt's Domesday assessment included woodland measuring one league by half a league, and a wood is recorded on the Harcourts' manor in the 13th century. This is almost certainly represented by the present Tar Wood, an exclave of the

parish surrounded by South Leigh (VCH 1990, 269). Although there are many difficulties in correlating Domesday statistics with precise areas on the ground, judicious use of later sources can go a long way towards resolving the question, as Schumer (1984) has shown in her study of Wychwood Forest.

The locations and extent of the Domesday woods belonging to Thames-side vills such as Stanton Harcourt and Eynsham can be established with a fair degree of certainty: Stanton Harcourt's woodland measured 1.0 league x 0.5 leagues, and the present Tar Wood almost certainly represents its vestiges, since irregular field boundaries in the area to the west show quite clearly that it has been considerably reduced in extent (VCH 1990, 269). Eynsham's Domesday woodland measured 1.5 leagues by 1 league, 2 furlongs; though this was later reduced by assarting in the Freeland area, the quoted extent is not much more than the area in the north-western part of the parish later occupied by Eynsham Heath and Woodleys and Blindwell Coppices, part of which was later still enclosed to create the present Eynsham Hall Park (ibid., 128).

Woodland in the middle ages was managed in several different ways. Areas of high forest, consisting entirely of timber trees allowed to grow to their natural height and form and affected only by competition with neighbouring trees, were uncommon and rarely very extensive. Areas of wood-pasture, in which grazing took place among trees which had been pollarded or shredded, occurred on commons, in parks, and in the royal forests. The majority of manorial and communal woods were, however, managed by coppicing (Rackham 1980, 3–5). Coppice-woods were harvested by cutting the underwood down to ground level at irregular intervals, which might range from four to 30 years; the wood would then be enclosed within fencing to exclude livestock to permit the stools to form a new generation of shoots. Woods were commonly compartmented, so that only part of the wood would be cut in any one year. By this process an endless supply of pole-wood could be produced. As the overall extent of woodland contracted, the proportion of surviving woods subjected to this more intensive style of exploitation increased, and coppices expanded at the expense of both high forest and wood-pasture. In most woods a limited number of oaks, ashes or other trees would be allowed to grow on for future timber, above the underwood, a style of management known as coppice-with-standards. Finally, the plantation of new woodland for the purposes of commercial forestry is traditionally believed to have been an innovation of the 16th century, but as Harvey (1981, 16) has shown, there is good evidence for a much longer tradition of woodland plantation. In 1307, for example, John Rutherwyk, abbot of Chertsey, is reported to have planted acorns and young

oaks to the east of Hardwick Grange near Chertsey, and this first plantation was augmented in 1331 and 1339.

Areas of wood preserved in otherwise open country and managed as coppice-woods often took on a roughly oval shape, in order to minimise the length of perimeter embankment, hedging or fencing. The extent of woodland belonging to the manor of Hanborough in 1086 was 7 x 6 furlongs. This certainly included the present Pinsley Wood, which measures 4 x 3.5 furlongs, and still substantially retains its medieval shape and size. Ancient woodland can often be distinguished by its botanical characteristics. It tends to have a wider variety of trees than more recent plantations, with a varied age structure, and these may include relatively uncommon native species, such as the small-leaved lime (*Tilia cordata*) and wild service (*Sorbus torminalis*). The ground flora may be similarly distinctive, including uncommon flowering plants such as Herb Paris (*Paris quadrifolia*). There is also likely to be a wide range of fungi, lichens and insect life. Archaeological traces of former woodland management practices may also survive, in particular the remains of boundary banks, commonly with an outer ditch to exclude livestock from newly-cut coppices.

The largest medieval woods on the Corallian escarpment lay within the great bend of the Thames above Oxford, where they formed part of the extensive landed endowments of Abingdon Abbey. These included the surviving large woods of Wytham and Bagley. Wytham Wood today is a complex mix of ancient and secondary woodland, but there are still detectable differences, certain shade-tolerant plants such as herb paris, ramsons, nettle-leaved bellflower, toothwort and violet helleborine hardly expanding beyond the ancient woodland limits (Marren 1990, 93; 1992, 50–53). To the west the low Corallian escarpment between Oxford and Swindon also retains numerous small areas of woodland, some of which are almost certainly of medieval origin. East of the Thames small areas of medieval woodland survive which always lay outside the bounds of Shotover and Bernwood Forests. Brasenose Wood is still managed as coppice-with-standards, with an understorey of hazel and aspen growing beneath the standard oaks (Marren 1990, 65–7). There is a further concentration of surviving woods of medieval origin around the western, southern and eastern margins of Otmoor, though in some cases modern management has drastically changed their character.

The most extensively wooded of all the regions in the Thames Valley was the Chiltern escarpment. Both private and communal woods existed on the Chilterns. By the 13th century, the surviving private woodlands in the south-western and central portions of the hills had come to be valued as timber reserves and were conserved as capital assets to be exploited on a large

scale only under exceptional circumstances (Roden 1968, 64–5). Although pannage of pigs was usually permitted, other grazing livestock which might damage the trees were normally excluded from private woodland. The communal woods were used by tenants in various ways, including grazing livestock and cutting wood for building, for fences and for domestic fires, rights locally known as 'Hillwork', a term commemorated in the name of Hillock Wood above Princes Risborough. Communal woods were always vulnerable to degradation through overexploitation and unstinted grazing and could degenerate into heath or scrub; by 1576 the occupants of half a dozen townships had unlimited grazing rights on Wycombe Heath, and the only trees recorded are thorns, bushes, holly, hazel and willow.

Medieval woodland in the Chilterns was of much more mixed character than the Chiltern woodlands today, many of which are dominated by beeches, although some elements of the more ancient woodland survive in the form of patches of mixed coppices on the steeper slopes. The ancient woods, managed as coppice-with-standards, produced oak timber, with an understorey of ash, oak, hazel, maple, and elm, regularly cut to provide firewood, fencing stakes and poles. Aspen, birch, rowan, gean, holly and yew tree are also present today in the more acid soils of plateau clays and gravels, while whitebeam appears on the more calcareous soils. Where medieval valuations survive, it is evident that most profit came from underwood products rather than from mature timber (Roden 1968).

The initial expansion of beech, present but not prolific in the medieval woodland, may have been encouraged by woodmen because of its value as firewood. Beech could be coppiced, but it required a long rotation, and its regrowth was vulnerable to overshading and fungal growth; lopping pollard trees was probably a more effective means of management. Much of the wood destined for firewood was carried down the Thames from Marlow to London, a trade which continued into the 18th century (Reed 1979, 101–2). Abbey Wood near Woodcote belonged to Eynsham Abbey, and some of the tenants of the abbot's manor of South Stoke in 1279 owed the service of carrying cartloads of wood for use in the abbot's kitchen (Preece 1986).

Charcoal deposits derived from firewood burned during the final period of occupation of Barentin's Manor at Chalgrove, which is most likely to have come from the nearby Chiltern woods, were dominated by beech, while oak, elm and ash were also represented, but hazel was conspicuously absent. Almost all the beech wood was from slow-grown and contorted branch-wood. The fuel used here seems to have been derived either from loppings produced as a by-product of felling beeches for timber, or from the pollarding of elderly parkland trees, or from

the clearance of beech scrub; there was little rapidly-grown wood such as might have been expected from well-managed coppices (Robinson 2005, 154).

Another significant source of profit from the Chiltern woodland came from pannage, the payments made by farmers to allow their pigs to forage in the woods for beechmast. In 1325 the value of pannage in a hundred acres of woodland at Penn came to 4s. However, beech produces a good fall of mast only once every four to seven years, so the income yielded varied considerably (Reed 1979, 102)

Hunting and Forest Law

By the late Saxon period, hunting had long ceased to be a means of securing food and was, by now, becoming an elitist recreation restricted to the royal, aristocratic and thegnly ranks. It had gained status as a form of masculine training designed to develop strength, stamina and weapon-handling skills, attributes which were also needed in warfare. Related obligations, the maintenance of deer fences and acting as drivers of game, were placed upon the peasantry, without allowing them any share in the rewards. Even before the Norman Conquest, hunting on certain royal lands was becoming reserved for the king alone. Those restrictions were greatly increased by the punitive new game laws imposed by William the Conqueror after 1066, which had provoked a vivid complaint in the Peterborough text of the Anglo-Saxon Chronicle. Under the Norman and Angevin kings, considerable areas of the country were laid under the special code of Forest Law, which was designed to protect the king's exclusive right to hunt deer and wild boar (Grant 1991; Langton 2010).

Of the two species of deer native to Britain, red deer (*Cervus elephas*) were the more prestigious quarry. They are by nature woodland animals, feeding on the young shoots of trees and shrubs, but can adapt to open grassland and upland moor. Red deer were regarded as providing good sport because they would take flight in a fairly direct line and could be pursued for considerable distances. They also provided excellent venison, consumption of which was regarded as an aristocratic privilege (though poaching was also widespread). Excavations on high-status medieval sites, particularly castles, have often recovered deer bones amongst food debris, and red deer are particularly well-represented in early post-Conquest contexts (Grant 1988, 164–5). The 'great hart', a male red deer at least six years of age with ten tines to its antlers, was particularly prized as a trophy (Almond 2010, 71). However, the overall numbers

of red deer declined severely during the middle ages, largely through loss of suitable habitat, much former wilderness and waste having been brought under cultivation or converted to sheepwalks. The same pressures also indirectly brought about considerable contractions in the areas under Forest Law.

Roe deer (*Capreolus capreolus*) had generally been the dominant wild mammal represented in animal bone assemblages from excavated high-status sites of late Saxon date. After the Norman Conquest, however, evidence for the consumption of roe begins to decline markedly in proportion firstly to red deer, and then to the introduced fallow deer (Sykes 2007, 59–60). Several reasons can be suggested for this. Roe deer became less valued for sport, partly because of their smaller size, and partly because they are inconspicuous and more difficult to find. Their preference is for woodland habitats with dense undergrowth, and they only emerge at dawn and dusk to feed along woodland margins and in clearings. When faced with danger, they prefer to take refuge in dense coverts rather than flee into open ground to be chased (Almond 1994, 316). As early as 1105, when Henry I granted custody of Cumnor and Bagley Woods to the monks of Abingdon Abbey, he forbade them to take any red deer there, but gave them exclusive rights to take all the roebucks they could find (Slade and Lambrick 1990, 53, 76). Although roe deer produce good venison, one early 14th-century hunting-book indicates that this may have been less esteemed in the middle ages because it lacked fat (Almond 2010, 72). Although initially protected under Forest Law, the status of roe became more ambivalent after 1338, when a court in the Forest of Pickering declared that, contrary to previous decisions, it was not a true beast of the forest, on the rather bizarre grounds that it was believed to drive away other deer (Turner 1901, xi; Cox 1905, 30). To what extent that verdict set an effective wider precedent is unclear. The ultimate reason for their decline, however, probably lies in environmental changes which reduced areas of suitable habitat. These seem to have affected roe deer even more severely than red deer, as their overall numbers dwindled, and they became more localized. By the Tudor period, roe deer were on the verge of extinction across much of southern England (Baker 2011, 12).

Fallow deer (*Dama dama*) are not native to Britain—their natural range is now believed to extend across Asia Minor into the Balkans (Sykes 2010). The date when they were first introduced to Britain has been much debated. There is evidence for a limited and relatively brief introduction in the Roman period (ibid.; Allen 2014), but it is not until after the Norman Conquest that a successful introduction was made, and zooarchaeological and documentary records indicate that they did not become numerous and widespread until around the middle of

the 12th century (Liddiard 2003, 20). Thereafter, archaeological evidence from high-status sites shows that the proportion of fallow deer consumed rose rapidly, becoming much more important than red or roe deer by the late middle ages (Grant 1988, 164–5). Fallow were brought in primarily to be bred and kept in controlled conditions in parks, which will be discussed further below. However, it would be wrong to make too rigid a distinction between 'wild' native deer in the forests and 'farmed' fallow deer in the parks. Even wild deer were managed to some extent, by the reduction and ultimate elimination of predators such as wolves, by culling, by transferring and releasing stock from other areas, and by providing supplementary feed and constructing deer shelters for the winter season (Birrell 1992). Both red and roe deer were sometimes kept in parks, while fallow deer soon escaped from their parks, establishing numerous viable herds in the forests, and eventually outnumbering the native deer.

Other animals which lay outside the protection of Forest Law were also hunted. The king could permit local lords to hunt certain small game on their own land by granting them rights of 'free warren'. Hares and wildfowl were particularly valued for the table. Rabbits and pheasants, introduced (or reintroduced) after the Norman Conquest, were also regarded as beasts of the warren. Foxes, badgers, wolves, martens, otters and squirrels were hunted as pests, being variously regarded as harmful to deer, domestic livestock or crops, and in some cases also valued for their pelts.

Hunting and trapping were carried out in various ways. Wild boar had traditionally been hunted on foot with spears. Numerous medieval illustrations depict the king hunting deer on horseback with hounds, a prestigious but expensive and not particularly efficient operation. Alternatively, deer could be driven by beaters to pass a stand from which they could be picked off by bow and arrow. Generally venison appears to have made only a limited contribution to the royal and aristocratic diet, but it was in regular demand for the great feast days. On such occasions when large quantities of deer were required, the most effective way of obtaining them was for beaters under direction of the royal huntsmen to drive them into nets. This method was also used for capturing live deer in the wild which were required for stocking deer parks.

Throughout the middle ages, 'Forest' was a legal term rather than a description of landscape (Langton 2010). It did not have the modern sense of extensive woodland. Instead, it meant a defined area placed under Forest Law, the aim of which, as stated above, was to safeguard the king's right to hunt large game there. Most lowland forests did include at least a core area of woodland or wood-pasture, but they also commonly included within their bounds

extensive areas of open country and cultivated land, along with many villages and even towns. It was not necessary for the entire area of a forest to be crown demesne; while many forests were originally centred upon a royal estate, much of the land within their bounds was often held by other lords, secular, ecclesiastical and monastic. The extent of the legal Forest fluctuated considerably: in Henry II's time several entire counties, including the whole of Berkshire, were placed under Forest Law, but the area was greatly reduced by the later middle ages.

The system by which the royal forests were administered has been described at length elsewhere (eg Cox 1905, 1–86; Young 1979; Grant 1991; Langton 2010), and only a brief summary can be provided here. Various courts dealt with forest pleas. The highest courts were the *Forest Eyres*, circuit courts intended to take place every seven years, although in practice the intervals between them were often considerably longer. They were concerned mainly with pleas of *vert* (damage to timber and underwood) and *venison* (poaching the protected beasts of the forest). All landowners, free tenants and others with interests in the forest were summoned to attend, along with forest officials and representatives of all townships within the forest bounds. A trienniel inspection, the *regard*, was intended to monitor other encroachments such as illicit assarts and purprestures within each forest. In practice, the regard tended to be made shortly before each Forest Eyre. The Forest Charter of 1217 established the *Swainmotes* or *Swanimotes*, assemblies meeting three times a year to commit offenders for trial at the Forest Eyre and to transact internal local affairs, such as arranging agistments of pigs in the autumn to forage on acorns and beechmast and to collect the pannage dues arising. The same term was also applied to the local courts which were supposed to meet every 42 days within each ward or bailiwick of a forest.

The terms applied to the hierarchy of officials administering the forests varied from one forest to another and changed through time (Cox 1905, 17–24). There were two Justices of the Forest, covering all forests north and south of the Trent. The principal local official in charge of each individual forest might bear the title *warden*, *keeper*, *steward*, *bailiff* or *master forester*. This often became a hereditary position, and in some places was linked with the custody of a royal castle. Directly under this official a small number of *foresters in fee* were responsible for supervising particular wards or bailiwicks within the forest. Each forest normally had up to half a dozen *verderers*, normally life appointments elected by local freeholders in the county court, who had to attend the swanimote courts and were responsible to the king for the care of the deer covert. The daily work was carried out by subordinate *foresters*, who were responsible for

the preservation of vert and venison within their own bailiwicks. In addition, there might be *woodwards*, responsible for timber and fuel, and for overseeing private woods within the forest and ensuring that their exploitation did not conflict with the king's interests; *agisters*, responsible for controlling the grazing of cattle and pigs; *regarders*, responsible for monitoring the condition of the forest through the regular survey; and *rangers*, charged with the enforcement of Forest Law. The king also employed professional huntsmen, who would travel round from forest to forest taking deer according to his requirements.

The costs of forest administration to the crown were, for a time, partly offset by the revenues and materials which they produced. The forest courts produced an income from fines from poaching and illegal tree-felling and assarting and from charges on agistments. Royal estates within the forests could produce revenue from normal farming activities. The forests produced timber for major royal building projects, fuel for the royal kitchens and hearths, and venison for the table, and these products were also frequently granted by the king as gifts to favoured subjects, to royal servants and to religious communities. In theory the bigger the forests, the more they worked in the king's favour, and Henry II exerted his power to enlarge many forests considerably beyond their earlier bounds. By about 1190 they had reached their maximum extent. For lords whose lands became incorporated within the enlarged bounds this adversely affected their own hunting rights and their freedom to exploit their lands as they saw fit. For communities living within a royal forest, the characteristic range of open and wooded countryside enabled them to practise a mixed economy based on arable and pastoral farming and various crafts which utilised woodland resources. However, for them too there were disadvantages, including obstruction and extortion by forest officials, restrictions on assarting, grazing and access to firewood, timber and wild game, damage caused to crops by deer, and obligations to attend forest courts. These restrictions were more deeply resented as population and pressures on land increased. Henry II's weaker successors were forced into concessions which resulted in the contraction of many forest bounds and the complete cessation of some forest jurisdictions. By the 14th century the reduced extent of the forests had greatly reduced their importance as a source of crown revenue, whereas, by way of compensation, alternative forms of taxation had been developed. The prolonged decline of the forest administration lasted into the 17th century, when many of the surviving forests were finally disafforested.

Forests of the Thames Valley

It is difficult to quote a precise figure for the number of royal forests within the Thames Valley, since some had a fairly ephemeral existence, some had one or more alternative names, and some were subdivided into bailiwicks which at times were regarded as separate forests in their own right. However, in three areas, forest boundaries for as time abutted directly upon the Thames: Braden or Braydon Forest in north Wiltshire, Wychwood Forest in west Oxfordshire, and Windsor Forest, straddling the border of east Berkshire and north-west Surrey. In each case, the heart of the forest lay several miles away from the river, but they left a significant long-term impact upon the wider landscape.

Although it is probable that most of the royal forests within the Thames Valley had been defined soon after the Norman Conquest, their record in the Domesday Survey is limited, since they were not subject to tax and may not even have been under the sheriff's jurisdiction. There is no record of Braden Forest by name in 1086; nevertheless, its area was then sparsely-populated, and surrounding vills had substantial allocations of woodland (Welldon Finn 1979, 25, 35). It has a shadowy presence in other early records, being named as a wooded area in a 12th-century manuscript of a probably bogus charter dated 796, and in an undated boundary perambulation in the Malmesbury Register (Brewer 1879, 291–2, 313–15; Sawyer 1968, S.149 and S.1577). At its greatest extent, as defined by a boundary perambulation of 1228, it extended over some 48 square miles across the Oxford Clay vale between Cricklade and Malmesbury. Its northern margin was defined by the Swill Brook from Hankerton down to the Thames, and by the Thames from Ashton Keynes down to the confluence with the River Ray at Water Eaton. To the south, it extended up on to the corallian escarpment at Wootton Bassett. These bounds were bitterly contested, and the local jurors in 1279 claimed that areas on its western and eastern flanks had been disafforested, reducing it to about 34 square miles. A further perambulation in 1300, endorsed by the forest eyre of 1330, reduced its bounds still further, to about 7 square miles south-west of Cricklade. Despite this, offences taking place in woods excluded from the 1300 bounds were still appearing in records of the swanimote records in the late 16th and early 17th century. Braden was finally disafforested in 1630 (Akerman 1857, 310–15; VCH 1959).

The Oxfordshire section of the Domesday survey names Shotover, Stowood, Woodstock, Cornbury and Wychwood as demesne forests of the king, having 9 leagues in length and the same in breadth. That same belt of central Oxfordshire contains numerous

typical woodland place-name elements such as *wudu* and *lēah*, and many of the vills within and around it included woodland among their economic resources in 1086. Parts of it, especially in Wychwood, remained well-wooded into the 19th century, and even today some portions of the characteristic juxtaposition of enclosed and formerly coppiced woods and open wood-pasture still remain. Customary payments related to the royal hunt rendered by the county in 1086 included £10 for a hawk and £23 for the hounds (Jope and Terrett 1962, 214–5). The Oxfordshire forests span a wide range of clays, limestones and sandstones, and parts of Wychwood rise to over 600ft above sea level, but little of this can be regarded as truly marginal land. Indeed, much of it had been settled and farmed through the late prehistoric and Roman period. The regeneration of extensive secondary woodland developed in the post-Roman centuries, perhaps in what was then a frontier zone. Once established the woodland came to be valued and conserved for its own sake, and provided the basis for the designated royal forests.

Wychwood was always the most extensive and most important of the Oxfordshire forests, and it was the only one whose bounds for a period abutted upon the Thames. Woodstock and Cornbury, named as forests in 1086, both became enclosed parks within the bounds of Wychwood. The Norman forest appears to have been bounded on the east and north by the Rivers Evenlode and Glyme and on the south by the Windrush and by the Thames between Northmoor and Eynsham. Those boundaries were considerably extended beyond the woodland nucleus by Henry II, eastwards to the Cherwell, northwards to the Worton Brook and south-westwards along the Thames as far as Kelmscott. Henry II's enlargements were reversed in the early 13th century, and further reductions in 1294–1327 broke the remainder of the forest into three separate portions, two of which were related to the royal manors of Woodstock and Cornbury. The third portion was attached to the bishop of Winchester's manor of Witney, and this in effect became a private forest or chase (Schumer 1984; Bond 1986 151–2, 189; Mileson 2010). Something like 10 square miles of coppicewood and open forest remained subject to the rights of the crown, the hereditary ranger, the commoners and various private owners holding their lands by royal grant up to 1857, when Wychwood was finally disafforested (Emery 1974, 158–62).

Shotover and Stowood were smaller forests extending over the corallian escarpment to the east of Oxford. The western boundary of Shotover Forest recorded in 1298 followed a short stretch of the River Cherwell, but did not reach as far as the Thames (Roberts 1963).

When the royal forests were at their maximum extent the whole of Berkshire lay under Forest Law. The bounds of the 'Forest of Berkshire', as recorded in 1221, covered over half the county, bounded on the west by the River Cole, on the north by the Thames and on the east by the Kennet (Cox 1905, 266–7). Though it is not named in the Domesday survey, entries relating to a couple of vills in south Berkshire west and north of the Kennet suggest that at least part of its area was already under Forest Law by 1086 (Campbell 1962c, 265). The remainder of the county downstream from Reading lay within the bounds of the Forest of Windsor. The 'Forest of Berkshire' was fairly short-lived: it was abolished in 1227, and the western part of Windsor Forest, between the Kennet and the Loddon, was disafforested at the same time.

The origins of Windsor Forest are probably linked with the Saxon royal residence at Old Windsor, and therefore antedate William the Conqueror's castle. It featured in several entries in the Berkshire folios of the Domesday Book: half the wood of Cookham lay *in foresta de Windesores*, four hides in Winkfield lay *in foresta regis*, and part of Windsor's own woodland was placed 'in enclosure' (*in defensa*). The description of Winkfield is confirmed by an entry in the chronicle of Abingdon Abbey, which complains bitterly of the extinction of the four hides by the enlargement of the forest. Characteristic woodland place-name elements abound across the east end of Berkshire, and the Domesday record suggests that parts of the forest were still heavily wooded, sparsely populated and under-cultivated (Stevenson 1858, 7; Campbell 1962c, 264–5; Steane 1981, 191). The eastern part of Windsor Forest extended into north-west Surrey, where the king was said to have three hides of the land at Pyrford in his forest, and there were a couple of entries relating to holdings of foresters at Walton-on-Thames and at Woking (Lloyd 1962, 389). At its greatest extent Windsor Forest included much more of Surrey in addition to parts of Buckinghamshire, Middlesex and Hampshire.

Windsor Forest had rather stronger connections with the Thames than the forests further up the valley. Although quite a lot of the forest was open common and its reserves of woodland were relatively limited, nevertheless Henry III made a number of grants of timber and firewood from the forest which are likely to have involved transport by water. Many of these were to religious houses, to the Benedictine abbeys of Chertsey and Westminster, to the Benedictine nunnery of Ankerwyke near Wraysbury and to various friaries in Oxford, Reading and London. Much building timber from the forest was used at Windsor Castle itself, but 80 beech trees were also sent downriver to make a wharf at Westminster, and forest trees were also used in other royal building works between 1228 and 1251, including a kitchen at Westminster and a barn at Kennington. Timber was also used in bridge construction and repair, two oaks being

sent for the bridge at Staines in 1228 and again in 1236, and eight timbers were sent to make posts and beams to repair Henley bridge in 1233 and 1235 There were also grants for building ships and boats. In 1221, a grant of beechwood was made to the Earl of Salisbury for building a ship, and the trees selected were to be growing near the banks of the Thames since the timber was to be taken down to London. In 1224 the constable of Windsor was directed to supply timber for a new ferryboat at Faversham, and a little later a good oak was supplied to make a boat for the ferry at Caversham (Cox 1905, 287–9; Steane 1981, 193–5)

Deer Parks

Origins, chronology and distribution

Some forms of deer enclosure are recorded even before the Norman Conquest. The term *haia* ('hay') may initially have meant a forest trap used for capturing game, but it was subsequently applied both to seasonal enclosures protecting does and fawns from predators such as wolves, and to temporary enclosures from which deer could be released into the forest to be hunted for sport. Features such as deer-hedges and leapgates appear on the boundary perambulations attached to some Saxon charters. Some of these early enclosures are in the same locations as later medieval parks, which suggests that there could be a direct relationship between them, though the precise nature of this remains unclear. Some hays later became converted to or incorporated within regular parks, and the two terms sometimes came to be used synonymously (Liddiard 2003).

The Domesday Book identifies 37 *parci* (parks), scattered through the southern half of England, nine of which were held by the king. None of these lie particularly close to the Thames, but there is a mention of a park at Hurley held in 1085 by the prior of Westminster Abbey's small dependency there (Pipe Roll Soc., 105), and some other early parks may have escaped notice in the Domesday record. A couple of Domesday parks elsewhere in the Thames catchment, at Ruislip and Long Crendon were described as being 'for beasts of the chase'.

These earliest parks must have contained red or roe deer, yet neither of the native deer species was especially amenable to controlled management within enclosures. Harts and roebucks become aggressive in confined areas, especially during the rutting season, and both require large areas. Both were also difficult to confine. Red deer are capable of leaping over

considerable barriers, and today the minimum recommended height of a fence to contain red deer is six feet. Roe deer are unable to clear such heights, but can penetrate gaps as little as a foot in width, and creep beneath fences. The early parks must, therefore, have been sizeable, with effective, strong boundaries.

Records of parks remained relatively rare up to the mid-12th century. Their rapid proliferation between 1150 and 1350 is partly a reflection of the expanding royal bureaucracy and the keeping of more detailed records; but it also coincides with a general reduction in the areas under Forest Law, an expansion of farmland and managed woodland at the expense of common waste, and a recognition that aristocratic demands for a continuing reliable supply of venison could only be met by more intensive forms of deer management. In particular, the increasing number of parks reflects the introduction and expanding availability of fallow deer. Fallow deer produced excellent venison and were much more suited than the native deer to being raised in parks, being more gregarious, adaptable, able to fatten on indifferent land, and less dangerous in the rutting season. Once breeding herds had become established, their success was assured. Rackham (1980, 191) has estimated that England contained about 3200 parks by 1300, covering 2% of its land surface. Some parks were held by the king, by bishops, heads of monastic houses and the nobility, all of whom were likely to have several examples scattered across large estates. They also began to percolate down to the lesser gentry, holders of single manors able to find space for one park somewhere on their land.

Parks were widely distributed throughout England in many different sorts of country, but densities tend to be greater in wooded and pastoral landscapes. There has been much debate about their relationship with royal forests. In forests the possession of parks tended to be more strictly controlled and, indeed, many parks within forests belonged to the king or to other members of the royal household. However, the relaxation of controls following disafforestation resulted in many more parks appearing within former forest bounds. Since deer were held to be the property of the king, it was theoretically necessary for a private individual to obtain royal consent to have a park, and it was especially advisable to do so if the park lay within or near the bounds of a royal forest. From the beginning of the 13th century such consents are well documented in the form of imparking licences. However, far greater numbers of parks existed without licences and, even where licences are available, they do not necessarily provide a secure date for the enclosure of the park – some were acquired retrospectively to secure royal agreement for parks already in existence, others were taken out as a declaration of intent, the fulfilment of which might be long delayed. In practice the crown's ability to control and

monitor the creation of deer parks was limited. The licensing system was never intended to restrict the creation of parks, but it did provide another source of revenue through payments for licences and opportunistic fines for unlicensed parks (Mileson 2009, 121–45).

To avoid sacrificing prime agricultural land, parks were often located a couple of miles or more from the palace, castle or manor-house to which they belonged, on less fertile land towards the margins of the manor. The primary requirements of deer, feed and water, could best be supplied by a tract of wood-pasture containing springs or streams. Medieval parks varied greatly in size, but the majority were between 100 and 300 acres, which was generally too small to permit large-scale hunting on horseback, but large enough to serve as animal enclosures which was initially probably their primary function. Their carrying capacity was varied, depending upon the local terrain, but the ratio of one deer per acre suggested by Whitaker (1892) probably represents a fair average. Substantial boundaries were needed to contain the deer, the classic form being a high bank surmounted by a paling fence with a deep, wide ditch on the interior, though stone walls and hedges were also employed. Because of the labour and expense of constructing and maintaining a deer-proof boundary, their ideal shape was circular or oval, maximising the interior area of pasture while minimising the length of boundary. Though medieval parks were intended primarily for the production of venison, they could also accommodate other game, such as hares, rabbits and wildfowl, they could provide timber and firewood, and on occasions they could also provide grazing for farm livestock.

The peak period for the creation of new parks had passed after the middle of the 14th century. The sharp fall in population after the Black Death had reduced pressures on the land for other purposes, thereby permitting some lords to lay out new parks on land on their estates which had no immediately viable regular agricultural use; but these were exceptional. Park boundaries required regular maintenance, and the high costs of labour became a deterrent. For some owners the maintenance of a tract of uncultivated, distant and rarely-visited land solely for the purpose of keeping deer began to seem like an unprofitable and increasingly unaffordable luxury. Relatively few new parks were created during the 15th century, and a number of old parks ceased to exist. Yet the possession of a park remained prestigious, a badge of status which would not lightly be abandoned. For the same reason it was an attractive proposition for those who were rising up the social scale, and a new phase of park creation can be detected from the early 16th century.

During the later middle ages parks began to develop in ways which reflected the changed circumstances. Some were adapted to accommodate a more flexible range of land uses

alongside the keeping of deer. Whereas many early parks had consisted mainly of wood-pasture, later they often became subdivided into compartments, with enclosed areas of coppice-wood, regular pasture and sometimes even arable land, in addition to the deer enclosure. Even in 1300, Edmund, Earl of Cornwall's park at Henley on Thames already included 60 acres of arable land in addition to pasture and woodland (Cal. IPM. III, 465). Where important residences were located within the park a distinction sometimes developed between a 'great' and 'little' or 'outer' and 'inner' park, the outer park remaining essentially a deer park, the inner park accommodating space for a much wider range of recreations and entertainments. This can be seen on a particularly impressive scale in the complex of parks at Windsor, discussed further below.

Whereas in the earlier middle ages there had often been a clear separation of house and park, in the later middle ages their association tended to become much closer, with new houses commonly being built within the park, or new parks being created around or alongside the house. This reflects an increasing interest in visual amenity: the house then provided a viewpoint over the park, a place from which spectators could enjoy the landscape and watch events taking place within it; equally the park provided a backdrop for views of the house, and the approaches to the house could be channelled to show the place off to best advantage.

The management of parks

The primary purpose of most medieval parks was the production of venison for the table, and deer were carefully managed for this purpose (Birrell 1992). Parks were often stocked, or restocked, with fallow deer given by the king from one of the royal forests. Braden Forest was the most important source of fallow deer in the Upper Thames Valley, supplying 2 bucks and 10 does for Fulz FitzWarin's park at Hailstone near Cricklade in 1236, 2 bucks and 6 does for the park of Margery, widow of Roger FitzPayn at Poole Keynes in 1241, and 3 bucks and 8 does for for Robert Tregoze's park at Lydiard Tregoze in 1256 (Close R. 1234–7, 237; 1237–42, 320; 1254–6, 342). Windsor Forest was a major source of supply for the lower part of the Thames Valley. In 1202, King John directed that 100 live bucks and does out of Windsor Forest should be given to Richard Montfichet to stock his park at Langley Marish (VCH 1907, 342). In 1223 Henry III granted 10 live does from Windsor Forest to William Marshall, Earl of Pembroke, to stock his park at Caversham (Rot. Litt. Claus i, 545; VCH 1907, 343). In 1233

Windsor Forest similarly supplied 18 does for Richard of Cornwall's park at Marlow and 2 bucks and 10 does for restocking Hugh de Gurney's park at Mapledurham (Close R. 1231–4, 208, 277). Occasionally live deer were transported over considerable distances, as in 1275, when Edward I ordered deer to be taken in Chute Forest in Wiltshire to stock the royal park at Windsor (VCH 1907, 345). Resentment against seigneurial privileges was often reflected in raids against parks to kill and carry off the deer, and numerous records of such episodes are recorded during the 13th and 14th centuries.

Despite the predominance of fallow deer, red deer are recorded in a few of the larger royal parks. There were red deer in Guildford Park by March 1250, when the keeper was required to deliver 19 *brocketti* (brockets, two-year-old male red deer) to the sheriff of London, to be salted and taken to the king for Easter. The following year the king ordered a stag from the same park, along with 10 fallow bucks (Cal. Lib. R 1245–51, 281; Close R 1247–51, 487). On two occasions the king's huntsmen were ordered to take brockets from Woodstock Park, ten for the Easter feast in 1261 and six more in 1263, and in 1271 Henry III gave away two brockets from the same park (Cal. Lib. R 1260–7, 28; Close R 1259–61, 366; 1261–3, 219; 1268–72, 340). Roe deer were also present in Windsor Park in 1251, when the king gave a few to Prince Edward (Close R 1247–51, 451, 452).

The keeping of deer did not preclude the use of parks by other livestock. Woodlands and wastes had often traditionally been subject to a range of common rights, and although afforestation and imparkment imposed new restrictions, it did not always succeed in eliminating them entirely. In 1244 the nuns of Ankerwyke obtained the important concession of being permitted to turn out 60 swine into Windsor Forest, either within or without the park, without paying any pannage fee (VCH 1907, 344). Windsor Park also had a herd of wild cattle up to 1277, when Edward I ordered the constable to capture and sell them, using the money for the expenses of keeping the king's children then lodging in the castle (VCH 1907, 344; Steane 1981, 197).

Forests and parks were also used for the breeding of horses. The accounts of William Mareschal, keeper of the king's stud in the 1330s, identify Windsor Forest as the site of one of the chief royal horse studs (Steane 1981, 198). Cippenham Park near Slough contained both deer and horses in the 1340s, though no surviving internal division can be traced today. In 1359 there was an order to provide hay, oats, shoes and litter for two destriers lent to the Black Prince to be stallions in Princes Risborough and Cippenham, and there are other records of Cippenham Park being used as a stud farm (Cal. Pat. R. 1343–5, 368; BPR iv 1359, 330).

Parks often contained a range of small game such as hares. Rabbit-warrens, discussed further below, were sometimes established within parks. In 1132 payments to the park-keeper of Windsor Great Park included 5s for feeding birds in the park (VCH 1907, 342).

Springs or streams were essential for watering the deer, but they could also be diverted into artificial ponds. Many parks contained fishponds, the enclosure affording them a degree of security from thieves when enclosed within a park. In Windsor Great Park one of the watercourses fed both a millpond and a fishpond. In 1252, an order is recorded for the fishpond to be stocked with 500 young pike or pickerels and 2000 roach and perch, while six years later two millstones were bought for the Park Mill and the head of the millpond repaired in stone (Steane 1981, 197). Edward I's improvements in Windsor Great Park included the removal of a pool next to the Manor Lodge and its replacement by a new fishpond. At Earley in 1308, there was a fishpond 'near the hedge of the park' (Cal. Close R. 1307–13, 146; Hatherly and Cantor 1979–80, 74). Foliejon Park also contained a fishpond connected to the moat by a drain and floodgate, and in 1390–2 a new boat was made to fish the pond (Brown *et al*., 1963, 940). Repairs to the king's stews in Easthampstead Park were undertaken in 1398 (ibid., 1963, 927).

Trees in wood-pasture parks were normally pollarded, where they were cut at regular intervals from a bolling at least 7ft above ground level, a height at which deer and other animals cannot reach the new shoots. This process provided a succession of crops of polewood. Parks were also a source of the sort of outsize timber required for roofing large buildings. The maintenance of park boundaries itself required regular supplies of wood. In 1275 Edward I ordered the felling of oaks and beeches within the park at Windsor to provide palings for its enclosure (Hatherly and Cantor 1979–80, 78). The Windsor Castle accounts in 1535–6 record payments of 1d a day to three men who occupied the office of repairers of the park pales (VCH 1907, 348). Sales of wood also provided an occasional income. In 1280, Geoffrey de Pycheford, constable of Windsor, was ordered to sell the alders and birches of the parks, to the king's best advantage (ibid., 344). The move towards compartmentation during the later middle ages commonly incorporated enclosed coppice-wood. A 13th-century agreement about the custody of the Abbot of Abingdon's park at Radley referred to the timber and rights to wind-fallen branches, but in a 14th-century confirmation the abbot inserted requirements for the preservation of enclosed coppices in the park (Slade and Lambrick 1990, 299–300; Mileson 2009, 66). Parks were also sometimes a useful source of stone and gravel for construction purposes. Chalk formerly quarried in the Little Park at Windsor, and gravel from the flood-plain north of the castle was once used to mend town's roads.

More recent studies of medieval parks have moved on from their purely functional aspects to consider a wide range of symbolic and aesthetic values (Liddiard 2007). They were undoubtedly a status symbol, ranking alongside other seigneurial privileges such as the possession of dovecotes, fishponds and rabbit warrens, but covering much greater expanses of land. They demonstrated the control of the lord over the landscape, often at the expense of the local community, who found their roads blocked and diverted and their access denied. Resentments against exclusion were occasionally expressed in park-breaking episodes, sometimes involving violence and deliberate damage as well as the poaching of game.

Parks often provided a setting for entertainments of varying kinds. A great tournament was held in Windsor Park in 1278. Entertainments for visiting magnates at Windsor often included hunting. On February 3rd 1505, Henry VII and Philip I of Spain took crossbows out into the Little Park at Windsor to kill deer. Deer coursing with greyhounds began to develop in the later middle ages, not just as a recreation, but also as a spectator sport. This involved fencing in a strip of land usually about a mile in length, and often narrowing at either end, within part of the park. At one end there was a pen, from which a deer could be released. Two greyhounds were then slipped from their collars to race each other down the strip after the deer. At the further end was a barrier, too substantial for the hounds to leap, over which the deer could escape. Near the finish was a stand for spectators, from which judges could also decide the outcome of wagers. Sometimes the timing of release of the deer and hounds was arranged so that the deer would be killed as part of the spectacle. Edward IV is known to have enjoyed deer-coursing at Windsor, and he probably laid out the deer course in the Little Park there in about 1465. Its position is significant, as it was overlooked by the royal apartments of the castle, and Queen Elizabeth is later recorded as enjoying watching deer hunted with hounds without stirring out of her own chamber. John Norden's 1607 map of this park shows a long, narrow strip of land labelled 'The Course: a Meadowe' along its north-east flank, separated from the main part of the park by a paling fence, with a small paled pen at its western end. A deer is shown being chased by a hound within this enclosed strip. To the north of the lodge in the middle of the park, overlooking the course, is a structure labelled 'The Standing' (Roberts 1997, 134–5, 137–8). In the park at Egham in 1539 there was a substantial grandstand of more than one storey, 14ft square and 26ft high. A walled deer course was laid out at Hampton Court in 1537, and this is shown on a map of 1653, about a mile in length by about 380 yards in width, with a 'standing' at its eastern end. An early map of Mapledurham shows 'the Deer Course' in the park immediately in front of the great Elizabethan mansion (Cooke 1925, 13,

n.3). This became even more popular during the 17th and 18th centuries, and many parks were modified to accommodate deer courses.

Until relatively recently, aesthetic motives in parkland design had been seen as an innovation of the great landscape gardeners of the 18th century; but on many medieval sites a strong case has now been made for conscious aesthetic manipulation of the landscape, including contrived approaches to the residence which framed views employing the various features of the park itself, open grassland, ancient individual trees, areas of enclosed woodland and fishponds (Creighton 2009).

Medieval parks in the Thames Valley

Deer parks occurred widely throughout the Thames Valley, with the densest concentrations along the Kennett valley through south Berkshire, in the south Chilterns and in the Windsor Forest area. However, they were not especially numerous in the riverside parishes. The site of a park held by John de Bohun in 1336 has been identified on the Swill Brook headstream, at Park Farm, Oaksey (VCH 2011). Nearby a park at Poole Keynes is first documented in 1241. Further downstream, near Cricklade, Fulk FitzWarin had a park at Hailstone in 1236 (see below). Between Lechlade and Oxford there were no known parks between the corallian scarp and the south bank of the Thames, but there were several along the north bank. A licence granted to Eve de Grey in 1230 permitted her and her heirs to enclose their wood at Standlake and to make a deerleap in the wood (Cal. Close R. 1227–31, p.348), and in the Hundred Rolls of *c* 1279 this was said to be worth 1s 8d. This can probably be identified with Home Wood, now in the parish of Hardwick with Yelford, which still has a curved boundary to the north and east. The abbot of Eynsham had a park on his home estate in 1229 which, from later field-names, extended immediately south of the abbey (Chambers 1936). At Stanton Harcourt, Sir John Wyard acquired a crenellation licence for his manor-house in 1327 and laid out a park at the same time (Mileson 2009, 113), while on the main Harcourt manor Robert Harcourt appears to have created the small park to the east of his manor-house in about 1495 (VCH 1990, 277).

Between Oxford and Henley on the Oxfordshire bank there was a park at Nuneham Courtenay, occupying the poor soils of the lower greensand. Its origins are unknown, and no record of it has been found before 1396–7, when it is mentioned in passing in the Abingdon Abbey sacrist's account, lying next to the abbey's meadow called Cowmead. This would place

it in the south-western angle of the present parish and park, where traces of the medieval park bank have been located (Kirk 1892, 59; Emery 1974, 128).

There are two references in the Patent Rolls in 1362 to a park at 'Combe' or 'Coumbe'. On January 22nd, John de Haytefield was appointed to take carpenters, sawyers and other workmen 'for the king's works in the park of Combe, to stay on the works at the king's wages as long as shall be required', and on April 28th, John Sokyn was appointed to bring the timber purveyed at Combe Park for the king's works at Windsor Castle (Cal. Pat. R. 1361–4, pp.145, 194). Cantor's (1983, 60–1) gazetteer identified this place with the royal demesne manor of Combe near Woodstock, but subsequent research has found no evidence of a park there. Two possible alternative identifications closer to the Thames can be suggested: one is Coombe Lodge in Whitchurch parish, though no other record of an early park there has been found, the other is at Whitley near Reading, discussed below.

A park at Mapledurham belonging to Hugh de Gurney is first recorded in 1233 (Cal. Close R., 1231–4, 277; VCH 1907, 343), and is shown on Saxton's county map (1574). A marriage settlement in 1595 made provision for the maintenance of 200 head of deer in Mapledurham park (Cooke 1925, 13, n.3). William Marshall, Earl of Pembroke, had a park at Caversham in 1223 (*Rot. Litt. Claus* i, 545; VCH 1907, 343), which was held by Edward le Despencer in 1366 (Cal. Pat. R., 1364–7, 273). Although not shown on Saxton's county map of 1574, a house and park at Caversham is identified by Plot in 1676 as belonging to the Craven family.

Edmund, Earl of Cornwall, had several parks on his estates. The endowment which he gave to Rewley Abbey in 1281 included two parks called Lesser and Greater Heymer (Midgley 1942, xii). The name places them on the manor of Highmoor in the parish of Rotherfield Greys, but no other record of them has been found, and it is difficult to discern any trace of them in the present landscape. There must be a possibility that the work 'parks' here simply meant 'enclosed fields' rather than deer enclosures.

Edmund's father, Earl Richard, appears to have created the park at Henley-on-Thames, which occupied the high ground to the west of the town. It is recorded as part of the manor in the ministers' accounts in 1296–7 (VCH 2011, 188). There are several later references, and by 1621 it had been enlarged to cover about 400 acres. In 1672 timber to the value of £2100 was cut down in the park (Climenson 1982, 90–91). Near Henley, but a little further from the river, John de Grey had a park at Badgemore in 1311 (Cal. IPM V, 194) and Robert de Grey had a park at Grays Court by 1290 (Cal. Pat. R. 1281–92, 396).

The first park below Oxford on the Berkshire bank was at Radley, set back from the river by a mile or so, to the north-west of the village. In 1262, when it is first recorded, this belonged to the Abbot of Abingdon, but up to the 15th century it usually seems to have been leased to secular tenants: Alexander le Parker held it in 1316. By the later middle ages a house had been built within it, and sales of wood from the park for fuel and for making hedges are also recorded (VCH 1924, 411). On the suppression of the abbey, the manor reverted to the crown, and Shirley (1867) states that disparkment had taken place before 1540, though some reduced area of ornamental enclosure may have survived. Thomas Hearne in the 18th century refers to the 'old park' as having been large and having contained fine woods, which had been destroyed.

The land over most of the Berkshire Downs was too open to be suitable for deer parks, but there were a few in the more heavily wooded eastern portion, to the south-west of Streatley. Philip de la Beche and his son Nicholas in 1335 acquired licence to impark their woods at 'la Beche'. Their manor house was located at Beche Farm, just south of Aldworth, and it provides a typical example of a later medieval gentry house not separated from its park, but just inside its boundary. The course of the park bank, which in part reutilises an Iron Age earthwork (Grim's Ditch), can still be traced, extending southwards across the Aldworth-Ashampstead parish boundary towards Beche Park Wood, which is named on Rocque's 1761 map (Cal. Pat. R. 1334–8, 190; Hatherly and Cantor 1979–80, 76) It has recently been shown that the creation of this park led to the diversion of two lengths of road along steeper and less convenient routes (Mileson 2009, 86–7)

There was a further group around Reading, where the abbey possessed a well-timbered park extending away towards Sonning. In 1283, poachers were carrying off deer belonging to the abbot (Hurry 1901, 24; Cal. Pat. R. 1281–92, 101). Around 1170, the abbot of Reading received permission to enclose another park in a place called Coombe in Whitley. This clearly involved enclosure of productive land, since the abbot excused one of his tenants part of the rent on a tenement so enclosed (Hatherly and Cantor 1979–80, 78). The herbage of the park was worth £3 in 1539, and it survived to be shown on Saxton's map in 1574. Two farms a couple of miles south of Reading retained its name. It is possible that this, rather than Coombe Lodge noted above, was the 'Combe Park' where carpenters, sawyers and timber for works at Windsor Castle were being gathered in 1362. Richard de Earley's manor of Earley in 1276 included a 'park of 40 acres' (Cal. Pat. R. 1272–81, 367; Cal. Close R., 1272–9, 268). In 1346, Ralph de Restwold and his heirs received a grant of free warren in all their demesne lands of

Crowmarsh and La Lee, also a licence to enclose and make a park of a piece of land, meadow and wood in La Lee, containing 100 acres, and to hold this park without interference by the king, his heirs or any their ministers' (Cal. Chart. R. 1341–1417, 54). 'La Lee' has been identified with Woodley in Sonning. At Sonning, there was already a park by about 1180, when the bishop of Salisbury exchanged 2 virgates with John de Earley for land held there (VCH 1923, 211). The bounds of Windsor Forest in 1227 indicate that the River Loddon entered the Thames below Sonning Park (Cal. Chart. R. 1227–37, 25), which suggests that the present East Park Farm lay within its bounds, and Crawford believed that substantial earthen banks close to the Thames might represent the northern boundary of the park (Hatherly and Cantor 1979–80, 77). Sonning was acquired by the crown in 1574, and was leased out in 1628, except for Holme and East Parks. Holme or Home Park surrounded the former episcopal residence, and may be a late medieval creation.

Three more medieval parks are known on the Berkshire bank between Reading and Windsor. In 1248 Peter de Montfort received licence to enclose his wood at Remenham. with a dyke and hedge and to hold it as a park, and this can be located about half a mile south of the church by names on the tithe map (Cal. Chart. R. 1226–57, 330; Hatherly and Cantor 1979–80, 76). The park held by the prior of Hurley in 1085, mentioned earlier, may have been included within the present Temple Park alongside the river.

In 1321, John de Foxley and his wife received licence to impark a plot of land, pasture and spiney in a place which is called 'Pokemere' or 'Puckmere', within the parish of Bray, in association with their new manor-house (Cal. Pat. R. 1317–21, 562; VCH 1923, 102). Thomas de Foxley complained of intruders poaching his deer there in 1344 (Cal. Pat. R. 1343–5, 295). Although the location is indicated by the name Great and Little Parks in 1639, nothing is shown on Rocque's map of 1761, and it was probably disparked before that date (Hatherly and Cantor 1979–80, 76). On the Buckinghamshire bank, a park at Marlow is known only from Henry III's grant to Richard of Cornwall of live deer from Windsor Forest to stock it in 1233 (Cantor and Hatherly 1977, 444; VCH 1907, 43).

During the time of Edward III the most important residences of the monarch became concentrated in that part of the Thames Valley which lay within relatively easy reach of London. By the late 14th century, five houses or lodges and six distinct parks had been acquired or established by the crown within the bounds of Windsor Forest.

The original park at Windsor, which forms the nucleus of the present Great Park, was enclosed out of poor-quality land in Windsor Forest, the northern part mostly oakwood growing

on the London Clay, the slightly higher southern part mostly heathland on the Bagshot Sand. It was probably created by Henry I soon after Windsor Castle became a regular royal residence, in about 1110 (Hatherly and Cantor 1979–80, 78), and was certainly in existence by 1131–2, when the Pipe Roll records payments to a park-keeper (VCH 1908, 342). Park-keepers are frequently named in later records. The park was consolidated by Henry III after 1241, though it remained much smaller than the present Great Park, its northern boundary running east-west from Sandpit Gate to Bishops Gate. In 1244–6, a new moated hunting-lodge was built for the king within the park. Edward II enlarged the park by enclosing much of the land to the north of the original boundary across Snow Hill in 1313, and further additions were made in this area in 1328 and 1335. Edward III then undertook major works to improve the buildings of Windsor Castle and to enhance its setting by extending the parkland still further. In 1359 he acquired from Oliver of Bordeaux the manor of Wychmere within the parish of Old Windsor, to the north-east of the old park, and by 1361 the moated manor-house and park of Wychmere had been absorbed into the Great Park (Hatherly and Cantor 1979–80, 78; Steane 1981, 198; Roberts 1997, 249–50). John Norden's survey in 1607 records the area of the Great Park as 3650 acres, and its circumference as 10¾ miles, it was then stocked with *c* 1800 fallow deer, while red deer still roamed in the unenclosed parts of the forest (VCH 1907, 349). The later history of the Great Park is well documented (Roberts 1997, 249–74) and cannot be followed here. Windsor Great Park still contains extensive wood pasture, with red deer and exceptionally large numbers of ancient sessile and pedunculate oak and beech pollards which are especially rich in fungus and insect species, including many rarities (Marren 1992, 44–8)

The extensions to the Great Park at Windsor mentioned above were made partly at the expense of farmland, and partly by the incorporation of previously separate parks. Wychmere Park is first named as the 'New Park' in 1278, when its paling was completed; it was to be stocked with live fallow deer from Chute Forest in Wiltshire (VCH 1907, 344). It was taken into the Great Park by Edward III in 1359–61 and surrounded with a new ditch and fence, but this caused some disruption to agricultural land, and in 1365 the king had to settle with the abbot of Waltham for lands which were 'lately tilled and sown and which are now enclosed in Wychmere Park' (Cal. Pat. R. 1358–61, 235; 1364, 5). In 1364 the distinction is made between the 'Great or Old Park' and the 'New Park' of Wychmere. The enclosure of the Wychmere extension had cost £184, a considerable sum (Hatherly and Cantor 1979–80, 78; Roberts 1997, 250)

The same difficulties attended the subsequent creation of Windsor Little Park (subsequently enlarged and known since the early 19th century as the Home Park). The Little Park extends over the river gravels and brickearth within the bend of the Thames immediately below the chalk outcrop on which the castle stands. It was initially created in 1368 by Edward III, who enclosed a field called Lydecroft on the low ground immediately north of the castle, paid compensation to the Abbot of Reading and various tenants and appointed a park keeper. In 1375, a further 15 acres were added to the east. However, the park remained modest in size, covering no more than 50 acres, up to 1467, when Edward IV enclosed a further 200 acres to the east of the castle and town of New Windsor. This land too had previously formed part of a common field, and the king acknowledged that its enclosure had caused great hardship to those who had held common pasture rights there, arranging for compensation to be paid. Further additions were made to the south-east in 1530, taking in the area labelled 'The newe grownde' on Norden's map. Norden's survey in 1607 estimated the extent of the Little Park at 280 acres; it was enclosed by a paling fence 3⅜ miles in circuit, and was then stocked with '280 fallow deer, of antler 68, bucks 30 by supposition', but it contained no red deer. During the occupation of Windsor by Parliamentarian soldiers in 1644 the keeper complained of wanton destruction and pillage in the Little Park, claiming that over 500 deer had been killed and the park pales burnt; but the Parliamentary Survey of 1652 describes the park as still fenced with a pale, amounting to 241 acres, of which 168 acres was pasture and wood. Deer were kept in the Little Park until 1807. Further land was added through the 18th and early 19th centuries, the extended area being bounded by a new wall. The Little Park finally linked up with the Great Park to the south in 1846 (VCH 1907, 346; Hatherly and Cantor 1979–80, 69, 78–9; Roberts 1997, 9–10, 13, 137–151).

A later addition to the Great Park was the area known as Moat Park, which lay to the south-west of the town. It took its name from a moated site probably constructed around 1300, but the surrounding area was not imparked until the time of Edward IV in the second half of the 15th century (VCH 1923, 52; Hatherly and Cantor 1979–80, 78). The presence of deer in the park is recorded in Queen Elizabeth's correspondence in 1599 (VCH 1907, 348). Norden's survey in 1607 shows the area as a compartmented park surrounded by a pale of 3½ miles and estimated to contain 390 acres; it contained about 280 fallow deer. Its interior was subdivided by more paling fences, with some compartments under meadow or pasture and others containing woodland of varying density. The moat is shown, with the two later unmoated lodges which had replaced it. The Parliamentary Survey of crown lands prepared in 1649

estimated the area of the park at 603 acres, and described the new lodge in some detail, but there were said to be no deer left in the park and no pigeons in the dovehouse near the lodge. Moat Park was incorporated into the Great Park by Charles II, and thereafter it lost its separate identity (Hatherly and Cantor 1979–80, 79; Roberts 1997, 275–8)

The manor of Foliejohn in Winkfield parish originated as an assart in Windsor Forest (Hatherly and Cantor 1979–80, 75). It was alienated by Edward I to John of Droxford, Bishop of Bath and Wells, and by Edward II to Oliver of Bordeaux, and it was the latter who in 1317 acquired a licence to enclose his wood and make a park there (Cal. Pat. R. 1313–17, 641). In 1359, along with Wychmere Manor, Foliejohn was recovered by Edward III and included in his grand scheme of improvements. Thereafter there are frequent references to the appointment of parkers, usually in combination with other forest offices. It is depicted by Norden in 1607 as a substantial impaled enclosure containing a moated house, and it had become an ornamental park by 1761 (Hatherly and Cantor 1979–80, 75)

The last of the royal parks within the bounds of Windsor Forest was at Easthampstead, a manor which had been obtained in 1320 by Edward II from John of Droxford, Bishop of Bath and Wells. He used the manor-house as an occasional residence without feeling any great need to alter or improve it, but among the expenditure on minor maintenance noted in the bailiff's accounts there are occasional mentions of a park. After 1360 it became one of Edward III's favourite residences, and the making of palings around Easthampstead Park is mentioned alongside Windsor Old and New Parks in the appointment of a new clerk of works in 1365 (Cal. Pat. R. 1364–7, 98–9). Maintenance of the house and payments to park-keepers continued into the 16th century, and the park is shown on Saxton's map of 1574. Norden's survey in 1607 shows the house within 265 acres of parkland, described as 'very mean, well timbered and stocked with 200–300 fallow deer'. The park was enlarged by James I, but its maintenance had declined by 1629, when Charles I eventually granted it away. In 1660, it was reported that all the deer had been destroyed during the civil war, and it was impossible to replace them (VCH 1907, 345–6, 348; VCH 1923, 77; Brown *et al*. 1963, 925–7; Hatherly and Cantor 1979–80, 74).

Opposite Windsor, on the north side of the Thames, Richard of Cornwall, Henry III's brother, held land around Slough which included three parks. The earliest and best-documented of these is at Cippenham, where Earl Richard had created a park in about 1250; shortly after his death in 1272 a complaint was made that, 20 years earlier, he had stopped up a public road which had formerly run through the middle of the park (Cal. IPM i, 274; *Rot*. *Hundr*. 4 Edw. I

no.2, m.23). Cippenham Park seems to have occupied low-lying land on the edge of the flood plain, well away from the common arable fields to the north. Its south-eastern boundary survives as a deep ditch up to 15ft wide and 8ft deep, with traces of a possible outer bank; here the park abutted against the strips of the common fields of Eton. In 1299 Cippenham Park is mentioned again as the 'park by the manor' held by Edmund, son of Earl Richard, together with a second park called 'Hartley' in the north-west part of the manor (Cal. IPM iii, 464). Hartley Park's later history is obscure, but Cippenham Park remained in use throughout the 14th century, providing deer for the crown on at least one occasion, and becoming used as a stud.farm for horses. Later in the middle ages it passed into ownership of the Holeyns family of Stoke Poges, who already had a deer park on their home manor, and there is little record of it after the middle of the 15th century, though it was still described as a park in the 1630s. It was probably reduced gradually up to the early 18th century, but its outline and some of its woodland survived into the 1840s (Cantor and Hatherly 1977, 436–7, 440–1). A third park in this area belonging to Richard of Cornwall was at Burnham, and he seems to have granted this to the Augustinian canonesses of Burnham Abbey, which he had founded in 1266 (VCH 1925, 166). The park at Abbess Park passed to the lay successors after the dissolution, and it may equate with the present East Burnham Park. A bank and ditch perhaps representing the southern boundary of the medieval enclosure was still visible in 1977 (Cantor and Hatherly 1977, 440).

Other medieval parks around Slough were in different ownership. A park at Langley Marish, possibly covering a similar area to the present Langley Park north-east of the town, is first recorded in 1202, when King John granted to Richard Montfichet 100 deer from Windsor Forest to stock it (VCH 1907, 342). In the 15th century, this was held by the crown, and it was still a going concern in 1536, when 6 bucks were slaughtered there and parkers were appointed (L and P. Hen. VIII, xi, 225). The survey made in 1605 by John Norden, surveyor of the king's woods, recorded that there were still 140 fallow deer there, about 35 of antler and about 14 bucks, but in other respects it was in a state of extreme neglect, most of its beech trees being unfit for use as timber (Lipscomb 1847, 533). However, its fortunes were revived soon after, the lodge was rebuilt in 1607 and new timber trees planted by John Kederminster, the new keeper, who in 1626 received an outright grant of the park from the Crown. In 1867, it covered 300 acres and contained 220 fallow deer (Cantor and Hatherly 1977, 443). In 1280, there is also a record of the 'new park' in Langley Marish, and this may be identical with Parlaunte Park, called 'Plaunte or new park', to which Henry VIII appointed Henry Norris as keeper in

1523 (VCH 1923, 295). This probably lay to the south of Langley Park, centred on a former moated house known as 'Parnham Farm' (Cantor and Hatherly 1977, 449).

South-east of Slough, in a detached part of Stoke Poges parish, an imparking licence for 38 acres in Ditton and Datchet was obtained in 1335 by Sir John de Moleyns, along with licence to crenellate his manor house (Cal. Chart. R. iv, 342; VCH 1925, 308). By 1338 Sir John had added a further 8 acres to the park from Langley parish (Cal. Pat. R. 1338–40, 62). Norden's survey in 1608 described Ditton Park as 'containing 220 deer, 50 of antler, and about 20 bucks, 195 acres of good ground but little timber in a circuit of 2 and a quarter miles'. The house of John de Moleyns, surrounded by a large rectangular moat, was later forfeited to the crown. It was repaired or rebuilt in 1511–16 as a royal house, and the park was further enlarged around it.

The property was granted to Sir Ralph Winwood, Principal Secretary of State to James I, who again rebuilt the house. In 1630, when it passed on to his widow, the park was 208 acres in extent (Cantor and Hatherly 1977, 441). A further park, at Eton, is mentioned in the inquisition post mortem of Richard de Grey in 1370 (Cal. IPM. XIII, 22).

Between Windsor and the tidal head at Twickenham almost all the medieval parks near the river were either created by the king or came into royal hands. Henry III acquired the manor of Kempton in Middlesex from Hubert de Burgh in 1228, in exchange for lands elsewhere, and there are records of improvements to the manor-house over the next 30 years. The park of Kempton is documented from 1246 onwards (Cal. Close R. 1242–7, 423). However, although Edward I and Edward II occasionally visited the place, the residential buildings soon fell into neglect, and a survey taken in 1331 details the dilapidations in the great hall, chambers and service rooms and the defects in the walls around the house and the park. In 1374, Edward III disposed of the house, giving consent for the sale of the stone and timber from it. Nevertheless, intermittent expenditure on the park and its lodge continued after demolition of the manor-house (Brown *et al*. 1963, 965–7). On the Surrey bank, a private park at Imworth in Thames Ditton held by Thomas de Braose is recorded in 1395 (VCH 1911, 464), while a park at Portnall in Egham belonged to the crown in 1485 (ibid., 425). The most important of the royal properties between Windsor and London was at Sheen, originally part of the royal manor of Kingston, but alienated under Henry I. It was held in the later 13th century by Robert Burnell, Bishop of Bath and Wells, and the first record of a park there appears in a survey made at his death in 1292 (VCH 1967, 569). The manor was recovered by Edward II, but no substantial work on its building and grounds are recorded before 1358, when Edward III began transforming it into a

major royal residence. In 1394 Richard II's queen, Anne of Bohemia, died there, and the king ordered its total demolition. Royal interest resumed under Henry V who, in 1414, began to construct an even grander palace, also founding three religious houses in the close vicinity. Henry V's palace was largely destroyed by fire in 1499. The third palace on the site was begun by Henry VII, who renamed it Richmond Palace after his own earldom. The Tudor palace fell out of use after about 1640, but the park remains today, and is noted for its giant oak pollards

Park Lodges and Park Residences

Many parks contained buildings to house park keepers and hunting-lodges for occasional occupation, and during the middle ages there was an increasing tendency for new parks to be extended around pre-existing manor-houses and new manor-houses to be built within parks. Residences for both keepers and owners were often surrounded by moats, which kept wild animals out of the domestic enclosure and provided a degree of protection for their occupants, as well as proclaiming their status.

Occasionally such lodges developed into something rather grander. In 1244, Henry III began construction of a new hunting lodge, later called Manor Lodge, in the southern part of the present Windsor Great Park, on the north bank of the Windles stream (now Virginia Water), about five miles south of Windsor Castle (Hatherley and Cantor 1979–80, 78; Roberts 1997, 9). The work was completed over the next couple of years. It included a hall, a chamber and two chapels, enclosed within a rectangular moat. Both chamber and chapels had glazed windows, wainscoting and wall paintings. Edward I appears to have preferred staying in this building to the castle itself, and he spent considerable sums on its embellishment, building at least one new chamber and a new chapel for the queen, painting both chapels, and levelling up the main court. Edward II also favoured it as a residence, and attempted to attach a collegiate chantry to the chapel there in 1313, though this was soon transferred to the chapel in the castle. After some years of neglect, Edward III ordered the constable of the castle and his clerk of works to keep the building in repair. However, no major new works were undertaken before 1394, when Richard II began to extend the buildings, adding new timber-framed chambers, two small chapels and one great chapel 70ft in length and a new gatehouse with a drawbridge over the moat. Seven new fireplaces were made in the new chambers and three back-to-back fireplaces in the new gatehouse. Five chambers intended for the king's use were painted. The

great chapel was decorated with harts with gilded horns, and wainscot boards were used for its ceiling. Some Reigate and Stapleton stone originally intended for repairs to St George's Chapel in the castle was used in the new work, along with materials salvaged from the demolished royal houses at Sheen and Wychmere. Maintenance continued throughout the 15th century (Brown *et al*. 1963, 1007–9).

Only the moat survives at the Manor Lodge site. There are two other moats within the complex of parks at Windsor. One belonged to the former Wychmere Park, added to the Great Park by Edward III. The Wychmere house was improved in 1364–6, when repairs to the hall, chamber, wardrobe, kitchen, gatehouse and granary were carried out, a new timber-framed range on stone footings and a roasting-house with an oven were added, and glass supplied for the windows and a dozen locks for the doors. Edward III occasionally stayed there, and for a time it served as another of the ring of hunting-lodges around Windsor Castle. However, subsequent rationalisation of the Great Park made it redundant, and in 1395 Richard II ordered its demolition (Brown *et al*. 1963, 1020–1). During the 16th century bear-baiting became popular, and the moat may have then been used for keeping bears for this purpose, since Norden's survey in 1607 gives it the name 'Bear's Rails' (Roberts 1997, 250). The site was excavated in 1920, but no report seems to have been published.

Norden's 1607 survey of Moat Park, to the north-west of the Great Park, shows the early medieval rectangular moat towards the north end of the park, then without buildings, its interior overgrown by trees. It had probably been replaced, first by a structure roughly in the centre of the park on top of Bromley Hill labelled as 'Old Lodge', and then by a larger range of buildings around a courtyard between the two earlier sites. In the Parliamentary Survey of 1649 the later lodge is said to have risen through four storeys with a large dining room on its first floor; a later map of 1750 labels the adjoining paddock 'Dining Room Close'; clearly one of its functions was as a banqueting-house. The moat island was reused in 1749 when the Duke of Cumberland had a pleasure pavilion built on it (Roberts 1997, 9, 275).

After the former manor-house and park of Foliejon in Winkfield had come back into the hands of Edward III in 1359 his clerk of works, William of Wykeham, sold off some redundant buildings, including a couple of ruined houses, a barn and a granary, but began modest repairs to the house, which became another of the minor lodges associated with the forests and parks of Windsor. A new kitchen and three new fireplaces were constructed in 1365; and in 1393 a great gate and two bridges, presumably over the moat, were built. A royal chapel with glass windows is recorded, though there is no record of the king ever actually staying

there. By about 1800, a new house had been built elsewhere in the park, and the site of the medieval lodge became occupied by the Home Farm (Brown *et al*. 1963, 939–40; Tyack *et al.* 2010, 716–7).

The moated house within the park at Easthampstead, intermittently documented during Edward II's time, included a royal hall, a house for the chaplain, a well-house, a great stable and a gatehouse with the king's chamber adjoining it. Edward III greatly elaborated the buildings between 1343 and 1367. In 1343 he re-roofed the hall, chapel and kitchen and added 10 new chambers to a couple of two-storey ranges on either side of the courtyard, equipping each chamber with a garderobe, oriel, staircase, doors and windows, and having them plastered and roofed with tiles. Much more expensive works were undertaken between 1353 and 1361, including various new buildings, the glazing of windows in the king's chamber, chapel and bath-house and the making of a great fireplace in the king's chamber. New bridges were made over the moat in 1363 and 1367, and eleven new fireplaces were fitted in 1365. Further major works there were carried out under Richard II, including further new glazing for the king's and queen's chapels and chambers, a new house for the pastry-cook, and a new palisade around the garden opposite the queen's chamber (Brown *et al*. 1963, 925–7). Nothing of this remains, and the existing Victorian mansion occupied a different site.

Across the Thames, a well-preserved moat close to the north-east corner of Cippenham Park may be the site of the parker's lodge recorded in 1299, while a second moated site, just outside the park's northern boundary, probably represents the site of the 16th-century manor-house, Cippenham Place. On the same manor, a surviving two-acre moated enclosure known as 'Hartley Court Manor' may have been lodge for the Earl of Cornwall's park of Hartley (Cantor and Hatherly 1977, 440–1). Elsewhere, a moated site at Foxley's Farm in Bray may represent the site of the lodge of John de Foxley's park of Puckmere, licensed in 1321, while a moat in Park Wood in Mapledurham probably marks the site of the lodge of Hugh de Gurney's park in the 1230s.

Rabbit Warrens

The rabbit or coney (*Oryctolagus cuniculus*) in some respects has a similar origin in Britain to that of the fallow deer. Rabbits are not a native species, coming ultimately from the Mediterranean region. A Roman introduction is yet be proven, but they were certainly

introduced (or reintroduced) after the Norman Conquest. Documentary and archaeological evidence for their presence begins to appear around the second quarter of the 12th century. Initially they were kept on offshore islands, where predators such as foxes were absent. By the 13th century, they had become well-established on the mainland, and by the end of the middle ages they were being raised all over the country. During the 16th and 17th centuries rabbit-farming became an important commercial activity in some localities. Although many escaped into the wild, resulting in some damage to crops, their numbers were kept in check for a time by natural predators, by poachers and by lack of winter feed. However, during the 18th century the increasing cultivation of winter fodder crops and the onslaught unleashed by gamekeepers against predators of pheasants and other game birds removed the restraints. The status of the rabbit changed rapidly, from being a scarce and carefully cossetted commodity in the early middle ages to a prolific and unwanted pest. By the middle of the 19th century, commercial rabbit production had ceased in all but a few particularly marginal areas.

During the middle ages, the meat and fur of rabbits were both valued as luxury items. In consequence, they were often kept in enclosures near palaces, castles and monasteries which might be surrounded by palings, hedges or water-filled ditches. Enclosures for rabbits also became a common feature of deer parks. Like deer parks, rabbit warrens, usually termed *coneygres* or *coneygarths* in medieval records, were an effective use of agriculturally marginal areas. Rabbits live in large groups in complex underground burrow systems, and breed prolifically. They can survive on thin, coarse or rank vegetation, though provision of supplementary feed was necessary through the winter. They are tolerant of a wide range of soil conditions, other than waterlogged and floodable land; but they prefer light, sandy soils to stony ground or heavy clay. They prefer sloping ground to flat ground for making their burrows, so that the excavated soil can fall away naturally downslope (Williamson 2007, 11–30).

Illustrations of rabbits in medieval sources such as the Queen Mary Psalter and Luttrell Psalter show them in association with mounds, and the mounds were themselves man-made constructions, originally known as *buries*, but now usually called ‘pillow-mounds’ by archaeologists, a term coined by O G S Crawford (1927, 431) to reflect their characteristic form. Typically pillow-mounds were rectangular in outline, bounded on all sides by narrow ditches, varying in length from about 30ft upwards to as much as 600ft, usually between 15ft and 25ft across, and rising to a height of 2–3ft; but there were many variations on this pattern, some examples being even more elongated, cruciform or doughnut-shaped. They are often slewed diagonally across the natural slope. They may occur singly, or in large scattered groups

of up to 100, or occasionally in a more regular arrangement. Excavation has shown that some were of simple dump construction, others incorporate lines of stones capping artificial burrows deliberately dug out along the original ground surface in complex patterns. Although some pillow-mounds are certainly of medieval origin, many are linked with documented 16th- or 17th-century rabbit warrens, and in some areas examples were still being constructed and managed into the 19th century (Williamson 2007, 31–58)

Within the Thames Valley, pillow-mounds, particularly in larger groups, are most common on the Cotswolds, on the Berkshire Downs and on the Chilterns. In Cirencester, the old quarry area near the Roman amphitheatre, now known as the Querns, but in the middle ages as the Crundles, was enclosed and converted to a coneygarth in the 13th century by the abbot of Cirencester, and it was still maintained as such in 1538; within this area an earthwork scheduled as a Neolithic long barrow now seems more likely to be a pillow-mound (Darvill and Gerrard 1994, 118). However, there are occasional examples in the lower parts of the Thames Valley. In the time of Henry VIII a new warren was set out at Hampton Court for a new introduction of black rabbits, and Robert Byng of the Wyke, smith, was paid for a large iron augur to bore coney holes within the king's new-made buries (Sheail 1971, 43).

As indicated earlier, the term 'warren' in the middle ages had no exclusive connection with rabbits; in its original meaning, grants of 'free warren' merely conveyed to an individual the right to take small game from a stated tract of land. 'Beasts of the warren', as defined in 1598 by the lawyer Manwood, were the hare, coney, pheasant and partridge, but at various times other species such as roe deer and woodcock were also included. As rabbits increased in numbers, the practice of keeping them in managed colonies began to descend down the social scale from the great landed magnates to the local gentry. The use of 'warren' in the specific sense of a rabbit reserve first appears around the mid-14th century, and had become fairly general by the end of the middle ages. Most of the references to rabbits and rabbit warrens in places close to the Thames date from the 14th century onwards. Grants of free warren at Hinton Waldrist made to the bishop of Coventry and Lichfield in 1307 and to Hugh le Despencer in 1318 (VCH 1924, 464) were taken one stage further by the creation of an artificial coneygarth, still called 'the Warren', a square plot about 230ft x 260ft (70m x 80m), enclosed on three sides by narrow rectangular ponds. An assignment of dower to Isabel, widow of Sir Thomas Bardolf, lord of Mapledurham in 1375, awarded her 20 couple of coneys, implying that the total production of the warren there was estimated at 60 couple of coneys a year (Cooke 1925, 28). A 'warren of conys' is mentioned in connection with the manor of Tidmarsh near Reading in

1544, and the right to keep rabbits there continued to be one of the privileges of its owner at least as late as 1656 (VCH 1923, 435). At about the same time Leland rode by a rabbit warren, which he declared to belong to Abingdon Abbey, about a mile out of Abingdon, on his way to Chiselhampton bridge (Smith 1964, 122); the site is today commemorated by the name Warren Farm at Culham. Abingdon Abbey's estate farmstead at Dean Court, Cumnor, is among the excavated high-status medieval sites in the Thames Valley from which rabbit bones have been recovered (Jones 1994).

Fisheries

Fishing has always played an important part in the life of the Thames Valley. Much of the medieval documentation for fisheries in the river concerns migratory fish, of which eels, salmon and lampreys were the most notable. Among this group, eels were the most widely eaten, and there are numerous records of large numbers being taken from the Thames. Full-grown eels were normally caught in traps. Salmon were commonly found in the Thames throughout the middle ages. They were trapped in the Middle Thames during migration. In 1530, the townsmen of Staines were rewarded with 20s for a fresh salmon sent to the king (Thacker ii, 388) and the arms of Kingston-upon-Thames depict three salmon on an azure field. Fresh salmon remained expensive, though the monks of Westminster had a claim to a tithe of all salmon caught on the Thames between Staines and Gravesend, it sometimes had to be bought in, and it appeared on the tables only on feast days (Harvey 1993, 47). Of all the varieties of fish consumed during the middle ages, lampreys had the highest value and status. Two species of lamprey occur in British rivers. The river lamprey or lampern (*Lampetra fluviatalis*) is normally found in shallow estuarine and coastal waters, while the larger sea lamprey (*Petromyzon marinus*) is a denizen of the Atlantic; but both come upriver in spring to spawn in fresh water. The river lamprey is more common, and the more edible of the two species, and a number of late medieval recipes survive for preparing and presenting it. There seems to have been a belief that lampreys had aphrodisiac properties, and this hope may have contributed more to their price than their culinary value: they were extremely expensive, especially during Lent, fetching 10s to £1 or more each in the 14th century. The lower Severn was especially famed for its lamprey fisheries, but they were also obtained from the Lower Thames. The only lamprey fishery mentioned in the Domesday Survey is on Chertsey Abbey's

manor of Petersham, on the Thames above Richmond, which rendered 1000 eels and 1000 lampreys (*lampridulae*) per annum. Lampreys are cartilaginous fish lacking any bony skeleton, and for this reason their remains are hardly ever found in archaeological contexts (Turner 2006). Other fish of coastal waters which move up rivers in May and early June to spawn include allis shad and twaite shad. The larger and more edible allis shad was relatively rare on the Thames, but evidence of its consumption has come from a site at Stert Street in Abingdon (Wheeler 1979).

Of the purely freshwater species, the Crown records and other medieval accounts show that bream and pike were particularly favoured, and a wide range of other fish such as perch, roach, tench and chub were also eaten on a fairly regular basis. All were available from the Thames and its tributaries, or could be kept in local fishponds, and all could be purchased in the markets, though the larger bream, pike and tench were invariably expensive by comparison with sea fish. The prestige attached to the consumption of certain types of fish, because of their relative scarcity on the open market probably outweighed their culinary value. After the late 14th century, inland fisheries and fishponds were increasingly leased out along with other demesne assets, so aristocratic consumers became more reliant upon the market. London fishmongers in particular developed a substantial trade in freshwater fish. The Stonor family of the Oxfordshire Chilterns were buying in chub, dace, gudgeon, minnows, ruff, trout, and occasionally barbel during the 15th century (Dyer 1988, 32).

Many different methods were employed to catching freshwater fish. They could be taken by hand using bait, from the bank or from a boat; they could be speared or harpooned; they could be taken by fishhook and line; they could be trapped in various types of nets; they could be caught in various forms of basketwork traps set in weirs or millraces. Medieval fishermen used a considerable range of equipment, but many of the metal, stone and ceramic artefacts, such as fish-hooks and net-sinkers, tend to show little evolution over a prolonged period, and so are difficult to date, while wooden or basketwork items require special conditions for their survival. Basketwork traps were made from autumn-cut green willow or osier, which would survive prolonged immersion in water. This method of fishing continued to be used on the Thames and other rivers into the early 20th century. In the more recent past such traps have come in a wide range of forms and sizes, adapted for different water conditions and different types of fish. Large conical traps were used for fish such as salmon, while eels were caught in bottle-shaped traps entered from the broad end, where a ring of rods pointing inwards effectively served as a non-return valve and a removable bung at the narrow end

permitted retrieval of the eel. The variety of terms used in documentary records imply that an equally wide range would have been used in the middle ages. The words most commonly used were kidell and wele, but the accounts of Eynsham Abbey include expenditure on clereweles, eseweles and a drystewele (Salter 1908, ii, xiv–xvi), and none of these terms can be defined with precision. A common arrangement was to set a trap at the point of a V-shaped alignment of wattle barriers which would serve as a funnel, the openings facing upstream to catch full-grown eels moving towards the sea on their autumn migration, or downstream to catch salmon moving towards the upper reaches in spring (Blair 1994, 124). Alternatively, traps could be set in fixed weirs across the river, or in frames which could be lowered into and raised up from the water. Remains of a late Anglo-Saxon conical trap were recovered from a side-stream of the Kennett near Burghfield just above Reading (Butterworth and Lobb 1992), and a well-preserved late medieval fish trap, weighted and pegged down in its original position, was discovered during the excavation of the west moat of the Tower of London in 1997–8 (Cohen 2011, 137).

Thames Fisheries

Medieval references to river fisheries sometimes imply no more than a legal right to take fish from specified lengths of river, but quite often, however, there is an implication of some physical structure, a dam or barrier placed across the river with nets or traps. Fisheries are among the demesne resources routinely listed in the Domesday Survey where the term normally used is *piscaria*. Fisheries, weirs or some other indication of fishing are mentioned in connection with over 60 places along the Thames between Lechlade and Fulham. They occur commonly on the Upper Thames between Lechlade and Abingdon, they are present but less common in the middle reaches of the river between Abingdon and Reading, and they become more prolific once again between Reading and London. The per annum value of Domesday fisheries is quoted either as a cash sum or as a render of eels, often reckoned by stiches, a stitch or stick comprising 25 eels. The annual cash renders ranged from as little as 5d, received by a tenant of Abingdon Abbey from a fishery at Shippon (possibly in the Ock rather than the Thames), up to 40s from Abingdon Abbey's fisheries at Cumnor. Annual renders of eels ranged from 125 from an unlocated fishery in Kingston Hundred in Surrey belonging to Walter FitzOther and 175 from Henry de Ferrers' fishery at Lechlade, up to a thousand eels, the yield

of a dozen fisheries on the Middle Thames between Wargrave and Petersham. While such figures represent a sizable contribution to the local economy, they do not compare with the huge renders of eels recorded from the Fenland or from the Humber.

River-fisheries were periodically the subject of legislation, partly because they became too effective, reducing stocks by the indiscriminate capture of young fish, partly because they presented an obstruction to navigation. The first attempt to prohibit the placing of fish-weirs on the Thames was enacted by Richard I in 1197 (Rymer, *Foedera*, i, 67), and Magna Carta (1215) contains an injunction ordering the removal of kidells from the Thames and Medway. Quite probably the intention was not to stamp out the practice of fishing by trap entirely, but simply to limit the damage and conflict which it was believed to cause. Certainly, the repetitive nature of the statutes from the 13th to 15th centuries suggests that they were never effectively enforced (Bond 1988, 86–7).

Fishponds

While river fisheries provided an effective method of catching fish, they depended upon the continuing availability of a natural supply which was never consistently reliable. There had been a long classical tradition of creating artificial fishponds for sorting, storing and breeding fish, and this tradition may have begun to revive in England as early as the 10th century. Two pre-conquest charters with nominal dates of AD 959 and 968 relating to adjoining estates at Besselsleigh and Cumnor mention in their boundary perambulations a feature called *styrigan pole* or *strygan pol*, which has been interpreted as meaning 'fishpond'. An attempt was made to identify this with a rectangular embanked pond alongside a stream in Lower England's Copse in the present parish of Appleton-with-Eaton, though this has subsequently been questioned (Gelling 1976, 724–5, 731–2).

The construction and upkeep of fishponds and the management of fish stocks was expensive and demanded specialist labour. Investment in ponds was therefore limited to a wealthy minority. From the crown and the nobility, the adoption of fishponds progressed to episcopal and monastic proprietors and on to the estates of the knights and gentry.

Surveys of several counties impinging upon the Thames Valley, based upon combined reviews of documentary and field evidence, have produced preliminary assessments of the distribution of fishponds and attempts to devise a typology (Croft and Pike 1988; Bond and

Chambers 1988). It might have been anticipated that the location of ponds would merely reflect the geology and availability of water; and, indeed, it comes as no surprise to find them absent from the Cotswold plateau, from the Corallian escarpment and from the chalk hills. However, their distribution in Oxfordshire has revealed some interesting contrasts with that of moated sites. The steep-sided, flat-bottomed valleys of the Cotswolds and north Oxfordshire uplands have provided numerous sites for fishponds, but damp conditions below the spring lines have not encouraged settlement, so there the manor-houses to which the ponds belong normally lie higher up above the spring line, some distance away, in situations which precluded the construction of moats. Moats and fishponds occur together most commonly in the clay vales, but here there are certain localities, including the Upper Thames Valley above the Windrush, the area around Otmoor and the spring-line beneath the Berkshire Downs and Chilterns, where moats are present in some numbers but few fishponds have been recognised; an assumption that here the moats themselves were used for the storage of fish receives some support from the documentary record (Bond and Chambers 1988, 353–5).

A wide range of forms, defined on grounds of shape, size, complexity and location in relation to water-supply can be recognised. Some are simple sunken features without dams or leats, created simply by digging into the natural clay, and supplied by ground-water seepage. Examples include the single ponds within the precincts of Osney and Dorchester abbeys and within the curtilage of the moated site of Barentyn's manor at Chalgrove. Valley locations favoured the creation of single ponds retained by dams, such as that at Daisy Banks near Abingdon. Chains of up to half a dozen valley-bottom ponds can also be recognised. The creation of ponds in valleys required the diversion of the natural stream into a leat along the side of the valley. Spring-fed ponds were sometimes located on sloping ground or on valley sides retained by longer embankments. On flat open ground, more complex arrangements of multiple ponds in various shapes and sizes could be developed. Many single ponds or pairs of ponds were attached to moated manorial sites, as at Cuxham. Even in the middle ages it is likely that some ponds were constructed for their aesthetic appeal, as part of a garden layout, and if they contained fish that was a bonus rather than their primary purpose (Bond and Chambers 1988, 360–4).

The survival of freshwater fish remains

The evidence from occupation debris and middens on medieval manorial, monastic and urban sites underlines the conclusion that, even in the Upper Thames Valley, the proportion of pond and river fish consumed was slight compared with the consumption of marine fish. The castle and manor site at Middleton Stoney, occupied during the 12th and 13th centuries, produced bones of only three freshwater species, eels, pike and chub (Levitan 1984, 111, 121–2). The site of Barentin's Manor at Chalgrove produced small quantities of bones of freshwater and migratory fish, eel being best represented, along with tench, roach, chub, perch, and salmon or trout (Wilson *et al*. 2005). At the Oxford Blackfriars, marine species were dominant, while freshwater fish were represented only by small quantities of chub and gudgeon (Wilkinson 1985, 292–3). At Abingdon Abbey's manor of Dean Court, fish bones were recovered from a 15th-century occupation deposit from the hall. Herring was the dominant species. Eel was the best-represented species likely to have been available locally. Other edible freshwater fish were limited to pike and roach, and these were mostly from small individuals which today might be regarded as hardly large enough for consumption (Jones 1994). Patterns of consumption in urban sites on present evidence seem variable. At Stert Street, Abingdon, freshwater fish were well-represented in deposits from the 13th to 16th century: eel were by far the most numerous species, but pike, bleak, barbel, dace, chub, roach, stickleback, perch and ruff were also present, most of which could have been caught locally, along with the migratory salmon and allis shad (Wheeler 1979).

Wildfowl

At no time in the middle ages did wildfowl make more than a small contribution to the human diet. Their remains rarely make up more than 4% of faunal assemblages (Sykes 2004). However, it is worth pointing out that wildfowl, like venison, by its relative rarity on the table, came to be a marker of aristocratic diets, although the social value attached to the consumption of particular species was subject to change through time. The percentage of wild birds within excavated faunal assemblages, like that of wild mammals, exhibits significant expansion from the mid-5th century to the mid-16th century. That expansion is mostly concentrated on elite sites such as palaces, castles and manor-houses, but it is also possible to discern significant growth in the consumption of wild birds on rural sites after the middle of the 12th century and on religious sites such as monasteries after the mid-14th century (ibid., 84–7).

Falconry was already a high-status sport before the Norman Conquest, exemplified by the depiction of Harold riding out with his hawk and hounds on the Bayeux tapestry; the social cachet of hawking, like other forms of hunting, was enhanced after the Norman Conquest, while there was also a significant rise in the number of employed fowlers, servicing seigneurial and monastic households.

A variety of birds of prey were kept for falconry: skeletal material from Deddington Castle showed that peregrine falcon, kite, Montagu's harrier, several hen harriers and two buzzards were kept there between the 12th and 14th centuries, and remnants of their trappings were also found (Jope and Threlfall 1947). Sparrowhawk and possibly hobby was found at Middleton Stoney Castle (Levitan 1984), while merlin bones were identified at Copt Hay, Tetsworth (Bramwell 1973). Traditional targets of hawking included bittern, heron, crane and smaller game birds such as partridge. Wild birds could also be caught by less prestigious activities such as netting, snaring, liming, whistling and trapping. While some birds captured by such means, such as woodcock, seem not to have been valued especially highly, others, particularly swan and partridge, were greatly prized (Sykes 2004).

No evidence has yet been found for the consumption of heron in the late Saxon period, but it was commonly eaten in medieval France, and from the Norman Conquest to the end of the middle ages it became popular in England too, though largely restricted to aristocratic and religious houses. Another factor in the increased consumption of heron may be the large numbers of artificial fishponds constructed after the 12th century, which almost certainly encouraged a rapid expansion in the number of herons, and in their availability to wildfowlers. There were attempts after the Conquest to restrict the consumption of some birds by means of legislation: the crown has asserted special rights over swans at least since the 12th century. Between the mid-12th and mid-14th centuries swan became particularly associated with great royal and aristocratic feasts, being served up as a centrepiece dressed in full plumage. However, those legal restrictions began to decline in effectiveness from the late 12th century onwards, and in rural areas the consumption of wild birds once more began to extend down the social scale; poaching may be both a symbol of defiance against the seigneurial classes and a practical response to the uncertainties of the grain harvest (Sykes 2004).

The aristocratic response was to identify species that could be kept within private enclosures and maintained as an exclusively high-status source of food. It is no accident that swans, herons and partridges became prominent heraldic symbols. Heron, supplied from heronries within parks, achieved their greatest popularity during the last couple of centuries of

the middle ages, but were consumed exclusively on the tables of aristocratic and religious houses. Partridges had been a target of the aristocratic sport of falconry since the Anglo-Saxon period; but aristocratic consumption increased markedly after the middle of the 12th century, reflecting the raising of partridges in parks and warrens and the use of nets and traps to capture them. Cranes, common and not especially prized during the early middle ages, gained in status after the mid-14th century because of their increasing rarity. Woodcock, traditionally a low-status game taken by net or snare, also gained in popularity, particularly in monastic houses and towns, to which they were supplied by fowlers; there is also evidence for increased consumption of woodcock in seigneurial households after the 12th century, perhaps simply through a desire to add variety to the diet. Swans, by contrast declined in status in the later middle ages; the aristocratic programme of securing supplies of semi-domesticated swans from controlled swanneries had the effect of increasing their numbers, surplus stock found its way into town markets and, though always the most expensive of meat, became accessible to the rising middle classes and therefore less exclusive and less attractive to the aristocracy (Sykes 2004).

Vineyards and orchards

Viticulture had been practised in Britain during the Roman occupation (Brown *et al*. 2001) and may have revived in a limited way before the Norman Conquest, though the evidence is weak (Hooke 1990; Unwin 1990). Bede asserts that vines were commonly grown in Britain in the 8th century, and the laws of King Alfred made provision for compensation when vineyards were damaged (*Eccl. Hist*. b.1, c.1). There are occasional records in pre-Conquest charters. In AD 962, for example, a vineyard at Waecet was granted to Abingdon Abbey, ‘with the vine-dressers on the estate’. *Waecet* is usually equated with Watchet in Somerset, which certainly accords with the place-name; however, because of the distance and the lack of any subsequent connection between Abingdon and Watchet, Watchfield in the Vale of White Horse may be a more likely site.

The beginnings of a considerable expansion in the number and extent of vineyards are recorded in the Domesday Survey. A significant concentration of Domesday vineyards can be recognised in the middle and Lower Thames Valley, extending down towards the outskirts of London itself. Usually these were to be found on the demesne holdings of important Norman

tenants-in-chief, and a few examples are specifically stated to have been planted recently. Their extent is usually quoted in arpents, a French measure similar to an acre. Vineyards sometimes occurred on manors right by the Thames: Henry de Ferrers had 12 arpents of vineyard at Bisham in Berkshire, Westminster Abbey had 2 arpents at Staines and the Count of Mortain had eight arpents newly-planted at Kempton and the abbot of La Trinité at Rouen had a single arpent on his manor of Harmondsworth.

During the high middle ages, vine cultivation became widespread on monastic and other high-status sites. A vineyard belonging to Reading Abbey is mentioned in a lease dated 1158–65 (Kemp 1987, 312, no. 1205). Abingdon Abbey's vineyard is first mentioned in a 13th-century entry in the abbey chronicle referring to a transaction of about 1180. Its site is commemorated by a street-name, and the vineyard seems to have occupied land on the southern side of this street. Manorial estates also often set aside a plot for vine cultivation. These are often known only from chance documentary references, but can occasionally be located from later field-names. An agreement made in 1239 in settlement of a dispute over the manor of Tidmarsh, allocated one third of a vineyard there, on the death of Gunnora de Bendenges, who held it in dower, to her daughter Juliane and her husband Adam son of Hervey (VCH 1923, 434).

Vine cultivation appears to have reached its greatest extent in England between about 1100 and 1220, when frosts were rare after the beginning of May, average summer temperatures were a degree or two warmer than today and Septembers were usually warm and dry. Even during the climatic optimum of the early middle ages there were occasional bad years when the grapes failed to ripen fully. They were then usually pressed and fermented to make verjuice, a kind of sharp vinegar used in cooking and pickling. The accounts of the gardener of Abingdon Abbey record no income from grapes in 1412–13, since they had all been retained in the infirmary for making verjuice. During the 13th century, some vineyards began to fall out of use, and the decline accelerated considerably during the 14th century. The vineyard at Tidmarsh seems to have gone out of use by 1305, when the holdings of John de Tidmarsh on his death included a dwelling with a garden 'without the court which is called Wynherd' (VCH 1923, 434); there is no evidence that the manorial vineyard recorded there in 1239 was ever cultivated again.

The Domesday survey records three instances of gardens in or near towns in the Thames Valley, presumably producing for the town markets. A garden rendering 2d in Cricklade belonged to the manor of Earlscourt; the entry for Holywell Manor immediately outside the

northern walls of Oxford lists 23 men with small gardens (*hortulos*); and the Middlesex folios mention gardens (*orti*) at Westminster. Apples, derived from the native crab apple and improved by Roman and Norman introductions, were the most widely grown fruit in the middle ages. Most of the apple crop was used in the making of cider; an inventory of goods in the store of the gardener of Abingdon Abbey in 1389 lists a couple of items of cider-making equipment (Kirk 1892). Pears, cherries and plums were also cultivated, though were more localised.

It is likely that there were many small monastic and manorial orchards in the Thames Valley during the middle ages but fruit cultivation is hard to identify archaeologically as the evidence is difficult to identify. A grid of tree-planting pits excavated at Beaumont Palace, Oxford, is datable to the 12th or 13th century and probably represents the remains of ornamental planting, though fruit trees may have been planted and it is known that Henry III had 100 pear trees planted at Woodstock Palace in 1264 (Poore and Wilkinson 2001, 17–19, 30). Garden and orchard planting was also suggested by an unusual range of material from a 13th-century pit at Merton Street, Oxford, where fruit and nut remains were found with remains of ornamental trees, including lime, field maple, birch and beech (Poore *et al.* 2006).

SUMMARY

The basic organisation of the medieval landscape in the Thames Valley largely followed that for the rest of the country, being divided into agricultural units based around the manorial system. However, settlement patterns somewhat varied in the region, partly due to the different landscape zones. Much of the land north of the chalk downland of the Chilterns and the Berkshire Downs may be considered as the archetypal medieval landscape of nucleated villages and hamlets surrounded by open arable farmland. Open-field arable farming underwent many pressures throughout the medieval period, from the dramatic impact of the Black Death and subsequent plagues in the 14th century to the enclosure of arable land for pasture by landlords. Yet, open-field farming managed to survive in the Upper Thames Valley through to the 19th century, which demonstrates its remarkable resilience and dominance as a form of land-use. To the south-east and into the Middle and Lower Thames Valley, which is dominated by floodplain gravels and a much higher proportion of heath and clayland, medieval settlement patterns were comparatively mixed. Although villages were still present, there was a seemingly greater number of dispersed farmsteads and more pocketed areas of farmland.

While the natural environment clearly influenced settlement patterns, modes of farming and the types of settlements present in different areas very much reflected human decisions within the landscape. The process of settlement nucleation was far from uniform across the Thames Valley. There are signs that it began as early as the 8th century in some parts of the region, and in places developed very gradually, while in other areas, such as Surrey and Middlesex, settlement nucleation did not take off until the 12th and 13th centuries, by which time when it had been well established elsewhere. Equally, the process of assarting (the expansion of settlement outward from villages) was not simply a response to population increase and land pressure but was the result of systematic estate management.

The elite had major influences on the landscape, notably in the form of moated sites, many of which enclosed manor-houses. The construction of moats would have taken large amounts of labour, suggestive of local power relationships, and the visual impact of these defended settlements would have been a clear reminder of social differences (though there was a notable degree of variation in the status of different moated sites). The role of the elite is perhaps no more prevalent than in the establishment and use of forests. Although hunting had been prominent in the early medieval period as a marker of high-status, it was the Normans who took it to a whole new level by completely removing access to the land and its resources from the peasantry. There were numerous forests in the Thames Valley, with some extending right up to the banks of the river, such as at Braydon, Wychwood and Windsor.

Alongside farmland, forests served to maintain power relations between different levels of society through land-ownership. The settlement patterns and landscape features that made up the medieval countryside continue to have a legacy today, though the post-medieval period brought with it social and political changes that further impacted the character of the Thames Valley, and these are examined in the chapter, *The post-medieval rural landscape, c 1500–2000*.

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