THE BAYLEAF MEDIEVAL FARMSTEAD

The Research – A Road of Discovery
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Front cover:
The hall at Bayleaf farmhouse, furnished with replicas of furniture and equipment of circa 1540.
Photograph: Paul Russell

Back cover:
The tester bed in the parlour chamber where the master of the house and his wife would have slept, with the trundle bed for younger children stowed away beneath and a chest for important personal belongings at its foot.
Photograph: Paul Russell

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The project to recreate and furnish a medieval farmstead at Bayleaf Farmhouse was conceived to help visitors understand more about the way the house would have been used in late-medieval times.

The Museum wanted to present a picture of the possessions and surroundings of the occupier of Bayleaf Farm circa 1540. To achieve this we have furnished the house and equipped the farm buildings and yard using accurate replicas of domestic and farmstead furniture and equipment; and planted the garden and arranged the fields using historic plant varieties and traditional methods.

Two major buildings comprise the farmstead. Bayleaf Farmhouse is a Wealden hall-house dating from the 15th century, which was dismantled by the Museum when the valley in which it stood near Edenbridge, Kent, was to be flooded for a reservoir. The barn, from Cowfold in Sussex, was built a little later, probably in 1536, but is of the same crown-post roof construction.

Knowledge of the details of domestic life in rural England in late medieval times is limited. For the Bayleaf project we used evidence from three main sources: probate inventories, particularly a fine series from Kent, commencing in 1565; surviving artefacts, including those found in archaeological digs; and contemporary writing and manuscript illustrations. There are tantalisingly few English illustrations of domestic life at that period, so we have studied the numerous Flemish and French illustrations, as the scenes they depict are in many ways comparable with England.
Bayleaf Farmhouse was built in two phases during the 15th century. It has been rebuilt with its central hearth and open hall, unglazed windows and earth floor, as we believe it would have appeared in the early 16th century.

The house consists of six rooms, four on the ground floor and two upstairs. All but the room in which the exhibition stands have been furnished with replica furniture carefully researched and authentically constructed to represent the type of furniture and furnishings which would have existed in a farmhouse in the Weald of Kent in late medieval times.

The Hall
This room, open to the roof, was the focus of family and domestic life. There were two definite ends to the room. The lower end incorporated the entrance and the more public area where junior members of the household were seated at mealtimes and where domestic chores were carried out. The upper end where the dining table stood beneath the moulded beam reflected the position of the master of the house and his family. The open hearth near the centre of the room provided warmth and a focus of activity.

The Parlour
This was a multi-purpose room, containing a bed, storage furniture and working equipment for activities such as carding and spinning wool.

The Parlour Chamber
This was the chief private family room in the house where the master and his wife would sleep along with their younger children. The furnishings were more elaborate than in the other rooms, and in one corner is a garderobe, or “privy”. This room was known in earlier times as the “solar”.

The Service Rooms

The Buttery
This small room was used for storage, treen, pots and pewter, for barrels of beer and ale, and for food.

The Milkhouse
This room, next to the Buttery, was used for milk processing activities – butter and cheese making, and also for storing flour for bread, and the salting of meat for the winter.

The Service Chamber
This room would probably have been a bedchamber for younger members of the household and farm servants, as well as providing additional storage space.

The External Kitchen
In late medieval times cooking was either done on the open hearth in the hall, or in a separate kitchen. By the mid 16th century most houses of the status of Bayleaf had kitchens, sometimes attached to the house and sometimes detached. The kitchen was used for cooking, brewing and baking. We do not have a kitchen available for reconstruction, although Winkhurst Farm, also re-erected on the Museum site, is thought to have been a kitchen.

An example of a medieval kitchen. Little Winkhurst, a medieval hall house situated very close to Bayleaf, had a kitchen added in about 1540, consisting of a “smoke bay” hearth, a ground floor room and a first floor room.

Drawing by Richard Harris
The Status of Bayleaf's Tenants

The late-medieval tenants of Bayleaf were probably prosperous yeomen, but the surviving evidence is not sufficient to tell us exactly what their status was in the community. The tenant in 1558 was bailiff of Bore Manor, the lowest in a complex tier of manors controlling the estate of which Bayleaf was a part. From a study of the manorial documents we find that from about 1400 Bayleaf was the home of Henry Bailly and his descendants, tenants of the Manor of Hever Brocas. By the beginning of the 16th century the holding had passed to Edward Wellys, who paid a rent of £5 10s. to the owners of Bore Place. William Wells was the next tenant and in 1558 Bridget Willoughby, of Bore Place, died leaving 13s.4d. to “Wm. Welles my bayle” – i.e. the bailiff of Bore Place.

It is likely that the tenants of Bayleaf would have had about 100 acres to farm, but we have no details of how this was organised and used. The tenants seem also to have operated the nearby mill, and they may have been involved in other commercial activities, such as tanning and weaving.

The house itself has some fine architectural features. The arched doorways and moulded beams suggest that it was built for someone who was a pillar of the community, perhaps even aspiring to higher status. Whatever his rank may have been in the community at large, however, the tenant of Bayleaf was lord and master within his own household. The architectural features express his rank, while the standard layout of hall, service and parlour end served the needs of the hierarchical household just as much in Bayleaf as it did in the houses of all ranks further up the social scale. The household must have been run with some degree of ceremony expressing the hierarchy of its members – but we will never know exactly what form it took.

Probate Inventories

One of the most useful sources of information for the Bayleaf project has been probate inventories. An inventory of the goods and chattels of a deceased person had to be produced at the time of the granting of probate of a will. The appraisers, often neighbours of the deceased, visited each room in the house, and if necessary, the yard and outbuildings, recording and valuing what they saw.

In most areas inventories were kept in their original form of single sheets, and many have been lost, especially from earlier times. But in Canterbury Archdeaconry inventories were copied into a register, starting on 19 September 1565, giving us a complete set of inventories for 1565-6 for that area – a date only 25 years later than our target date for the Bayleaf farmstead. Bayleaf’s parish of Chiddingstone was not within Canterbury Archdeaconry, but several similar Wealden parishes were, and some of the inventories are for holdings similar to Bayleaf.
Domestic Furniture

Beds

In 1577 William Harrison wrote of the changes old men in his village had experienced in their lifetime about their sleeping arrangements. "For, said they, our fathers and we ourselves also have lien full oft upon straw pallets, covered only with a sheet, under coverlets made of dagswain or hopharlots ... and a good round log under their heads in stead of a bolster, or pillow," but now a farmer would expect to have three or four featherbeds in his home.

The Kent inventories of 1565 confirm the widespread use of bedsteads, with feather beds and flock beds, although some younger members of the Bayleaf household may have slept on straw pallets.

At this period a number of people would sleep in one room. In the Parlour Chamber, for instance, the Master of the house and his wife would have shared the main bed, and their younger children would have used the truckle bed.

Beds, like other furniture, were an expression of precedence within a household. The "best" bed would have had curtains and a ceiling (known as a "tester"), which would either be hung from the ceiling of the room on cord, or from a structure supported by posts. The tester was of cloth — sometimes a painted cloth, sometimes with a woven pattern — or of "wainscot" (wooden panelling). The head of the bed would also have been closed with a cloth or wainscot. The other three sides would have been hung with curtains.

The "second-best" bed would have had less expensive hangings, or none at all, with a half-headed bedstead very similar in size to those in use today. "Truckle" beds, small beds on wheels, could be tucked underneath larger beds during the day to make more space in the room.

The relative importance of different beds (like other furniture) was also distinguished by their construction -- some were "joined", made by a joiner; and others were "plain" or "boarded", made by a carpenter.

Inventories mention both types, but surviving boarded bedsteads are very rare from this period. We have copied simple joined examples with only a small amount of decoration.
Chests

Chests were the main type of closed storage for personal and household goods in the Middle Ages. In the Kent inventories most households had three or four chests, usually placed in the chambers or parlours. Mostly they are listed immediately after a bedstead, suggesting that the chest was placed near the bed. Chests were probably acquired and used by families over a long period.

Many chests have survived from the 16th century, and there are several forms of construction and decoration. The most valuable were the “joined” chests, which had a jointed framework and panels.

Another common type is the “boarded” chest, made from boards nailed or pegged together, but sometimes with rich decoration. A hybrid form is also found in which the body of the chest is boarded, and the front is a joined panel.

The fourth type is the “clamp-fronted” chest, in which the front consists of horizontal planks slotted into broad uprights. This type first appeared in England in the early 13th century, and appears later at a much lower social level as the ark or corn-chest.

We have made replicas of one of each of these four types, each of a different size.

Tables and Trestles

In the Kent inventories the first item recorded is very often the table:

In the hall, a table, form, trestles, a cupboard, two chairs ...

In the hall, two tables, a form, a halling (hanging cloth), two cupboards, two chairs ...

In the hall, a table, a form, and stools ...

Up to the mid-16th century most hall tables consisted of a top (“table board”) on trestles. In the 14th and 15th centuries manuscript illustrations show that even the tables of kings and noblemen were on trestles. By the mid-16th century “joined” or “framed” tables were becoming more common, but the Kent inventories of 1565 list trestles in most cases.

No trestles have survived from this early period, but they are frequently shown in manuscript illustrations. There were several patterns, but the most common are two types of three-legged trestle, and we have made one pair of each for Bayleaf.

The inventories always list a single form for each table. The medieval custom of sitting only on one side of the table may have been still prevalent in Kent in the early 16th century. It is also possible that a bench was fixed to the wall, as was common in some parts of the country, with the form placed on the other side of the table. In Bayleaf we have placed the form behind the table.

There are two tables in the hall at Bayleaf – one, a “high table” for the master and his family, set against the end wall with its hanging cloth (one of the inventories lists: “A painted cloth that hangeth before the table in the hall”). The other has been placed against a side wall for the use of the rest of the household.
Stools

Two types of stools have been re-created for Bayleaf: boarded stools and turned stools. A third type, joined stools, appear quite frequently in the Kent inventories but were probably not so common in earlier times. Paintings and manuscript illustrations of the 15th and early 16th centuries show almost entirely boarded and turned stools.

No authenticated examples of boarded stools have survived from the 16th century, but there are many later examples which are similar to those shown in earlier illustrations.

Three-legged turned stools are equally common in illustrations but few, if any, examples have survived. The legs and stretchers were turned and decorated with incised lines, while the seat was a solid wooden board. In a "back stool" one of the legs is continued upwards to form a T-post backrest.

Cupboards

A cupboard was another standard item of furniture in the hall. The word cupboard was previously used to mean literally a "cup-board", a board on which cups and plates were set, which might be supported on an open framework, or a closed "aumbry". By the mid-15th century it was being used to refer to the whole structure, the support as well as the "cup-board" on top.

The cupboard we have made for Bayleaf is copied from a surviving example of 15th or early-16th century date. It is made of planks, not a joined frame, and has pierced openings to provide ventilation. Such cupboards would almost certainly have been used to store food, and traces of hair-cloth are usually found behind the pierced openings where it was nailed to keep out insects.

The top of the cupboard would have been covered with a cupboard cloth similar to the table cloth, and on this would have been set out the household's best plate, if any, pewter, or glassware.
Textiles were used not only out of necessity but as an expression of status. The quality of the wallhanging behind the high table and the extent of the bedhangings are examples of this.

To choose the textiles for Bayleaf Farmhouse we examined documentary evidence from manuscripts and drawings, and the Kent inventories. Experts advised on the correct yarn, pattern and weaving techniques for the period.

**Hanging Cloths**

One method of decorating the plain walls of the main living rooms, the Hall and Parlour Chamber, was with hangings of cloth. The most important area of the Hall was the table at which the master of the house sat in the central position at mealtimes. Behind him, a cloth would have been hung, fixed beneath the dais beam. The cloth of wool and linen we have used is based on contemporary designs.

In the Parlour Chamber a different type of hanging has been used - a painted cloth. From the evidence in the Kent inventories more than half the households in Kent in the mid-16th century must have had painted cloths.

Very few painted cloths survive - only a dozen or so in the whole country, and mostly from the 17th rather than the 16th century. The painted cloth in Bayleaf is copied from a 16th century fragment in the Victoria and Albert Museum. This has a stencilled pattern in three colours, with an ochre border divided into panels. The pattern is exactly the same as that on a contemporary cloth which was block-printed, and similar to one on a 16th century Italian silk altar cloth, also in the Victoria and Albert Museum - the pattern appears to have been widely copied.

**Tablecloths**

Considerable importance was attached to the use of tablecloths, napkins and towels. Cupboards were also covered with cloths.

Different grades of table linen would have been used on different tables as yet another pointer to status. “i gud borte cloyth (tablecloth) for the hey bord (high table), another for the secunde borde, and thredde (third) for the meny borde (retainers' table).” (From M.E. Dictionary quoted by Bridget Henisch in Fast and Feast.)

The tablecloths we have used are made of linen damask with an eight-leaf figure.

**Bedclothes**

In the Chamber where the master of the house and his wife slept, emphasis was also placed on the quality of the textiles. The curtains around the four poster bed are of serge. The bedhead and tester are made of a specially woven piece of woollen cloth, based on an example at the Victoria and Albert Museum.

The blankets are of white woollen cloth of tabby weave with a blue coloured band at each end, a form of decoration still in use today. Two qualities of sheet have been chosen - for the principal bed bleached linen is used, and for the truckle, second bed and cradle unbleached linen sheets.

The mattress is based on a surviving example, thought to be 17th century, in Dorchester, which is a woven mattress of reed plaits. Inland, straw is thought likely to have been used. We have used straw rather than reed.

The flockbed (above the mattress) and the pillows are made of coarse linen and filled with flock (wool unsuitable for spinning).
**Household Equipment**

**Treen**

Treen is the general name for household articles made of wood. These extracts from the Kent inventories give an idea of the range of items under this name.

10 wooden platters and wooden saucers and 24 trenchers, 1 churn, 7 dishes.

3 tubs, 3 keelers, 6 barrels, a tun, a kneading trough, with all manner of wooden vessels, milk bowls, trenchers, platters.

All manner of wooden vessels, to say barrels, tubs, dishes, pails, troughs, pipes and bunting hutches.

Treen is highly perishable and very few early items have survived or been excavated. On the table we would expect to find “trenchers”, flat wooden plates, oblong or round, and small turned dishes and bowls.

Coopered ware includes tubs and barrels of various sizes, pails and well-buckets. Tubs and barrels were little different from their modern form, but were usually bound with wooden hoops rather than with iron.

Brewing, dairying and baking had their own range of special-purpose vessels. Brewing requires a tub for cooling, called a “cool-bake” or “keeler”, and a mash-tun, together with a strainer, bale and funnel and barrels to hold the beer.

Butter-making needed a churn, milk-pails and coolers, and boxes, baskets or small barrels to hold the end-product. Cheese-making required tubs, and a cheese-mould.

Baking took place in the kitchen where there was one, and the main items needed were the “boulting” or “bunting hutch”, a chest in which sieved flour was stored, a kneading trough and a moulding board.

**Pottery**

Archaeological evidence in the form of pottery fragments shows that pottery was common in medieval times.

Most of the pottery selected for the reconstruction at Bayleaf has been based on Surrey Whitewares, which dates from the mid-13th – mid-16th century, and is found in London and the South-East.

The models we have used are Coarse Borderware and Cheam Whiteware items in the Museum of London. They include cooking pots, drinking jugs, measures, small dishes, a urinal and a curfew pot (used to cover the fire safely at night).

Other pottery in Bayleaf was made at the Museum during experimental kiln firings in the 1970's.

Cheam Whiteware – a cooking pot and a jug, in the Museum of London.
Pewter

William Harrison, writing in 1577 of the things “marvellous altered in England”, describes “the exchange of vessell, as of treene platters into pewter, and wooden spoones into silver or tin. For so common were all sorts of treene stuffe in old time, that a man should hardly find four peeces of pewter … in a good farmers house.” Now, he comments, a farmer expected to have “a faire garnish of pewter on his cupboard.”

The Kent inventories show that in 1565 all but the very poorest households had pewter. A “garnish” of pewter consisted of 12 platters, 12 dishes, and 12 saucers, and most households had half a garnish or more.

Platters were the largest of the three categories of “flat-ware”, about 13 inches in diameter, dishes next at about 10 inches, and saucers the smallest at about six inches. Other common items were porringers (small bowls with two ears), salts (small pots to hold salt), spoons and candlesticks.

Old pewter would have been returned to the pewterer to be melted down and re-cast and so very little early pewter survives. But from excavations and finds such as those from the Mary Rose we know that early-16th century pewter flatware had rather broad rims, a shallow sloping “booge” (curve between the rim and the base) and a raised boss in the base, the so-called “bumpy bottom”. The pewter for Bayleaf has been made specially to those specifications.

Iron and Brass

The Kent inventories show that iron was used for items connected with fire, and most of the cooking vessels were brass. Very little everyday domestic ironwork has survived in use and our knowledge of iron implements comes from archaeological excavations.

Candleholders of various kinds were made of iron, although many households had pewter or brass candlesticks as well. Iron candleholders either had a “pricket” – a sharp spike on which the candle is impaled – or a socket, and were designed to be driven into a wooden beam or a turned wooden base.

1 fire shovel, 2 spits, 2 trivets, 2 rakes of iron, 1 bad gridiron.
2 small brass pots, 1 stupnet, 5 small kettles of brass, 1 bad skillet, 1 bad brass pan.
1 spit, an andiron, a pair of tongs, 1 trivet, 1 gridiron, and the pot-hangers.
2 candlesticks, a chafing dish, 3 kettles, and 1 brass pot.
2 trivets, 2 brandirons, a fire rake, a pair of tongs, a fire pan, and a spit.
5 latten candlesticks, 2 chafing dishes, 3 brass pots, 11 kettles, 9 pans, 3 dripping pans, 2 frying pans, 2 skimmers, and a latten ladle.

These extracts from the Kent inventories show the range of iron and brass implements in use in households in late medieval times.

At fireplaces not used for cooking only a few iron items were used – a pair of “brandirons” (small firedogs), tongs, a fork and bellows, much the same as a modern fireplace.

Cooking, either in the hall on the open hearth, or in an attached or detached kitchen, involved both iron and brass equipment. For attending to the fire a pair of tongs and a fire rake are usually mentioned in the inventories, together with a gridiron and trivets to support cooking vessels over the fire.

Iron spits and dripping pans were used for roasting, and other common items were frying pans, ladles, skimmers (slotted spoons) and flesh hooks (hook-ended implements for pulling meat from pots).

Most cooking vessels were of brass or latten, the most common being pots, pans, kettles, skillets, “stupnets” (small saucepans), and “chaffers” in which hot coals or embers were placed to heat food away from the fire.
The main purpose of the garden of a medieval farmstead such as Bayleaf would have been to produce fresh vegetables, herbs and fruit – this would have been chiefly the responsibility of the housewife:

“And in the beginning of March, or a little before, is time for a wife to make her garden, and to get as many good seeds and herbs as she can, and specially such as be good for the pot, and to eat: and as often as need shall require, it must be weeded, for else the weeds will overgrow the herbs.”

*Fitzherbert’s Husbandry, 1523*

The nobility had enjoyed the pleasures of ornamental gardens with trees, shrubs, flowers, lawns and even fountains since 1100 or earlier. Such a garden was far beyond the aspirations of the tenant of Bayleaf, but there may have been a turf seat and small vine arbour similar to those depicted in courtly gardens. Ordinary people certainly took pride in their gardens, just as they do nowadays:

“They set great store by their gardens ... Their study and diligence herein cometh not only of pleasure, but also of a certain strife and contention between street and street, concerning the trimming, husbanding and furnishing of their gardens.”

*Thomas More, Utopia, 1519*

There would have been little leisure time for the housewife of Bayleaf, but there might be a fenced corner known as a “herber” where a baby in a cot could be put in safety, while the housewife sat on a turf seat to spin or sew.

In the garden we have built a well based on illustrations from medieval illuminated manuscripts. Most of them show that the wooden stave-built bucket was hauled by a pulley wheel rather than the axle and handle familiar from later times. The well has been built of Wealden sandstone with the “kerb”, rising to waist height.

A plan of Wilton, Wiltshire, showing the layout of houses and gardens along streets. In the bottom left hand corner is a farmyard, with orchards and geometrically laid-out vegetable and flower beds.

*From the Survey of the Lands of William, 1st Earl of Pembroke, 1563*
Top right: Women milking and shearing sheep in a wattle enclosure.
   From the Luttrell Psalter, c. 1340 British Museum

Centre left: Gathering acorns for pigs.  From the Calendar of the Playfair
   Book of Hours, late 15th century. Victoria and Albert Museum

Centre right: Tethered hen and her chicks being fed with grain by a woman, who
   has a distaff tucked under her arm.  From the Luttrell Psalter,
   c. 1340 British Library

Bottom: A general purpose cart drawn by three horses in tandem. The
   "cartladder" is held by rope, and the sides of the vehicle appear to have been
   lined with temporary wattles.  From the Luttrell Psalter,
   c. 1340 British Library f. 162

Far right: The barn and yard
   Photograph: Paul Russell
There is no “right” size for the garden. Illustrations show that even in a single street gardens varied greatly in size. The Bayleaf garden is an adequate size to fulfill the food and medicinal needs of about six adults and farm servants: the daily produce for potage might be half a small cabbage or similar greens, a leek, an onion, a few garlic cloves, a handful of parsley and a bowlful of salad, with seasonal variations, such as green peas or beans. The garden would also contain herbs for sauces, medicine, and preserving food.

Size of the Beds
The size of the beds varied. They had to be narrow enough for the gardener to reach across, standing or kneeling. The paths between them were at least one foot wide, with wider paths at intervals for access with barrows, baskets and tools. If the beds were too short they wasted space, if too long they entailed too much walking.

“...The beds raised newly afore with dung, and finely raked over, with the clods dissolved, and stones purged forth, shall be artly trodden out, into what length the owner or gardener will: but to such a breadth especially trodden forth, that the weeders’ hands may well reach into the midst of the same, lest they thus going the beds, and weeding forth the unprofitable herbs and grass, may in the mean time tread down both the seeds shooting up, and the plants above the earth. To the help of which, let the paths between the beds be of such a reasonable breadth (as a man’s foot) that they passing along by, may freely weed the one half first, and next the other half left to weed."

Thomas Hill, The Gardener’s Labyrinth, 1580

These principles seem to have always been followed, although the actual measurements could vary. We have chosen to make the beds four feet wide and 14 feet long.

Grouping of the Beds
The earliest English garden plans date from the mid-16th century, and show large rectangles of equal width but different lengths. These rectangles probably represent blocks of beds, each block bounded by a wider access path. We have laid out the Bayleaf garden in blocks which are 14 feet wide, so that together with the 2½ feet access paths the blocks are set out at 16½ feet centres. 16½ feet is the statutory rod, pole or perch. The four together make 66 feet, the width of a statutory acre.
The Plants

The vegetables and herbs in the Bayleaf garden have been selected mainly from two medieval lists: a poem The Feate of Gardening, by Mayster Jon Gardener, written before 1350; and a list found in a cookery book, the Fromond list, of c. 1525-30.

The daily pottage or vegetable stew was the mainstay of the English medieval diet. Pottage is not so much used in all Crystendom as it is used in Englaende: Andrew Boorde, Dyetary, 1542. Salads and sauces to accompany meats were also common. Herbs such as hyssop, marjoram, camomile and rue were infused as tea, and many others were used in ointments and dressings.

Comparing Medieval and Modern Plants

Modern vegetables may be very different from medieval vegetables of the same name. To find the closest match we have to use contemporary drawings and written descriptions, comparing them with modern varieties. For instance, the medieval coletewort is similar to a non-heading broccoli plant. Brassica oleracea is a native cliff plant, so we are using it in the garden, and also the collard which still survives in the United States but has not been available in Britain in the right form since the 1960's.

Herbs have changed very little, but we avoid modern named varieties like Jackman's Blue Rue, Severn Sea Rosemary and English Curled Tansy, and modern salad plants, such as curled parsley or heading chicory.

Crop Rotation

Rotation of crops is vital to maintain good yields. This was an essential part of the organisation of field crops in medieval agriculture, and must also have been carried out in gardens. The garden bed and plot crop rotation echoes the farm strip and three-fold field rotation.
Cultivation

Shakespearian actor Edward Alleyn, writing to his wife in 1590 says:
You send me not word of my garden. But remember that all that bed which was parsley in September, you sow it with spinach for then is the time. I would do it myself but we shall not be home till All Hallows Tide.

Manure was used on gardens, as it was on fields. In 1580 Thomas Tusser wrote:
Foule privies are now to be cleansed and fide (purified)
Let night be appointed such baggage to hide,
Which buried in garden, in trenches a-low
Shall make very many things better to grow.

By putting together small fragments of information we can build up a good picture of methods of cultivation. For instance Jon Gardener in The Feate of Gardening, pre-1350, instructs us to thin onions:
When they begin to grow high,
Let none of them touch other nigh.
As to peas, Thomas Tusser advises:
Stick plenty of bows among runcyval pea
To climb thereon, and branch at their ease.
So doing more tender and greater they wax.
And in The Gardener’s Labyrinth, Thomas Hill observes that:
Radish and Navew (turnip) roots grow the fairer and bigger, if divers of the green leaves (after some growth) be handsomely clipped or broken off.

Part of The Fromond List of Plants, c. 1525-30, transcribed and identified by A. Amherst in 1895 and in 1972 by John Harvey, who has recently carried out further revision. It contains a list of plants with common and Latin names; those in capitals are also found in The Feate of Gardening. Copyright

Facsimile of part of The Feate of Gardening by Mayster Jon Gardener, which was the first account of horticultural technique written in English. From Trinity College, Cambridge.
MS 0.9.38, ff. 18v-20r.
The two original buildings which form the Bayleaf farmstead came from parishes on the Weald clay, but a long way apart - Bayleaf from Kent, near the border with Sussex, and the barn from Cowfold, near Horsham. Neither were associated with other surviving medieval buildings and in neither case do we know for certain what the medieval farmstead layout might have been. The earliest evidence for both is the Tithe Map of the mid-19th century.

The layout we have chosen for the Bayleaf farmstead at the Museum is based on three main points. First, as far as we can tell from surviving Wealden farmsteads, there was no formal arrangement for the buildings - this did not become common until the 18th century.

Secondly, we have not discovered any relationship between the position of houses and barns and the points of the compass in the Weald. Buildings seem to have been placed according to local considerations - such as the lie of the land and the space available.

Thirdly, early surveys indicate that a farmstead would include a garden, orchard, yard and another close sometimes called the "forstal". One example is the description of the farmstead at Bodiam vicarage in 1635, quoted by David Martin in "Old Farm Buildings in Eastern Sussex 1450-1750".

The Barn

The barn from Cowfold was originally built in 1536. Dendrochronology (tree-ring dating) has revealed that the timbers were felled in that year. It underwent various alterations, including the addition of a bay at one end. It is even possible that it was taken down and re-erected at some time.

Originally, or at an early stage, it had leanto outshots on one side and one end. These had disappeared by the 19th century, but their previous existence was shown by empty mortices in the timbers. We have reconstructed these outshots in modern timber, in the form of open-sided sheds. It is possible that in their original form one or both may have been enclosed sheds, used as stables or cowhouses, and that the walls of the barn onto which they join were originally left unboarded.

Fencing

Illustrations in manuscripts have been the chief source of evidence for fencing. Three main types would have been used around the farmyard and fields - a woven (wattled) fence of small diameter wood in the round, usually hazel; sections of fencing (hurdles) using cleft hazel for smaller folds; and around the yard itself, a strong fence of cleft timber or planks set close together and pegged or nailed into position on horizontal rails.

Gates appear to have been made with curved hanging stiles, taken from a piece of curved timber, braced by a diagonal. There appear to be two methods of hanging gates and we have used both at Bayleaf.
The Bayleaf Shaws

Shaw – “a thicket, a small wood, copse or grove; a strip of wood or underwood forming the border of a field”

(Shorter Oxford English Dictionary)

Three shaws are being recreated by the Museum to demonstrate an important part of the medieval landscape of the Kentish Weald from which Bayleaf Farmhouse comes. Shaws are among the oldest landscape features of that region, dating back at least to the 13th century.

The original Bayleaf shaw still exists, on the Bore Place Estate at Chiddingstone in Kent, next to the original site of the farmhouse. The present-day state of the shaw gives us vital information, although it is unlikely to be the same as it was five centuries ago.

Old maps of Bore Place Estate dating back to 1765 were consulted – they show a Wealden landscape of six-acre fields with thick hedges and numerous shaws. Other sources of information were modern books and researchers who have studied the history and ecology of shaws.

The recreated shaws are authentic in size and shape. The soil is completely different from the Weald, although the species of trees and shrubs are the same. Shaw A is modelled on the existing Bayleaf shaw, and includes ash, oak, crab apple, field maple, laurel, hawthorn, holly, wild cherry and wild roses, with one wild pear. The other shaws include different species of tree and shrub, all found in the Wealden shaws.

It will be difficult to grow authentic wild flowers because of the different type of soil. The new shaws have all been planted at the same time, whereas the original shaws would have included species of different ages. The animal life will only be partly authentic – red squirrels and pine martens, which lived in the medieval shaws, are now extinct in south east England.

The new shaws will be managed to have a row of timber trees down the middle with regularly coppiced shrubs forming a layer below, as in medieval times. The timber, coppiced poles, wild fruits and seeds will be used in different ways around the site, particularly at Bayleaf Farmhouse.
The Cart

The most common vehicle illustrated in medieval times is the two-wheeled cart, drawn by a single horse between shafts, with other horses harnessed in tandem if necessary.

English carts are thought to be part of a north-west European cart tradition—French and Flemish illustrations are similar. The four-wheeled wagon is much less common in documents and pictures at this time.

Piecing together information from a number of sources, a cart was designed and built for the medieval farmstead with railed sides, open front and rear with a hinged "cart-ladder".

The wheels are thought to be of six felloes with between seven and 12 spokes, shod with "strakes" of iron, nailed on to the felloes. It is not certain whether cartwheels were dished. The cart is designed for a horse standing no more than 14.2 hands.

Wheelbarrow

Our evidence for wheelbarrows comes mainly from archaeology, in particular the remains of a late medieval wooden wheelbarrow found in London waterfront excavations in 1987. Full-size tracings were made of the pieces to enable us to make a replica.

Medieval illustrations also show barrows with curved shafts and an open wood framework, which appear to have been used for carrying bulky objects, rather than loose substances.

Harrow

A harrow, used to break up the earth after ploughing before sowing seed, was made of wood with teeth of wood or iron.

There be horse-harowes, that have tyndes of wodde: ... and those tyndes be mooste commonly made of the grounde ende of a yonge asshe, and they be more thanne a fote longe in the begynnynge, and stands as moche aboue the harowe as beneathe.

And as they weare, or breake, they dryue them downe lower; and they wolde be made longe before, ere they be occupied, that they maye be drye; for than they shall endure and last moche better, and stycke the faster. From Fitzherbert's Book of Husbandry, 1534
Tools
Many tools changed remarkably little between the Middle Ages and the present century, when mechanisation finally took the place of some specialist tools. Some tools differ only in detail, the principle remaining the same, for example, edge tools such as axes and billhooks; pitch forks, rakes and picks.

Harvesting – Sickle and Scythe
Sickles were used for harvesting cereal crops, and they appear frequently in medieval illustrations, sometimes with a saw edge. Archaeologists usually find only the blades surviving, and these vary in size and angle.

In the later ende of July, or in the begynnynge of Auguste, is tyme to shere Rye, the whiche wolde be shorne cleane, and faste bounden ... but for a general rule, take good heed, that the sherers of all manner of whyte corne cast not yppe theyr handes hastily, for thenne all the lose corne, and the strawes, that he holdeth not fast in his hand, flieth over his head, and are lost: and also it will pull of the cares, and specyalle of the cornes that be verye ype. From Fitzherbert's Book of Husbandry, 1534.

Scythes were used mostly in haymaking and for mowing grass, and sometimes as an alternative to the sickle in harvesting barley, oats, rye, peas and beans.

In medieval times the handles were straight, not curved, a later introduction. They are sometimes shown with “cradles” to form the cut crop into a uniform bundle.

Beehives
Evidence for medieval beehive types comes from the earliest beekeeping books written in English between 1590-1620, and a few early English illustrations, notably the beehive in the Luttrell Psalter of 1340.

There were two main types of beehives, grass hives, made of wild grasses, rushes, reeds, sedges or cereal straw (particularly rye and wheat); and wicker hives, made from wood plants such as hazel, willow and privet. Both types are represented in the Bayleaf

shape. The grass hives are made of coils of wheat straw stitched together with bramble. The wicker hives are made of willow rods woven horizontally round vertical splints.

Inside is a horizontal and vertical framework of hazel or willow called spleeting, which put the hive under tension and gave the bees a framework on which to build the wax combs. No old hives with spleeting are known in Britain and the recreation of our medieval hives was undertaken using trial and error.

The wicker hives were daubed outside, but the straw hives did not need it. Both types were protected with a hackle usually made of a sheaf of straw. The hives were washed inside with sweet scented water, and placed on a stone or board up to two feet off the ground. They were put in lots of 1-40 in gardens away from domestic stock, to avoid the hives being bumped and upsetting the bees!

The bees in the hives will never be authentic. The native British Black Bee nearly died out early this century.
The Animals

The Museum does not intend to run a medieval farm, but some examples of livestock are needed to help illustrate a working steading of the period. At Bayleaf we have gathered a token collection of the different types of animals which existed on medieval farmsteads. Deciding which breeds to include proved a difficult task.

Farm animals have changed so much in response to changing demand that today’s livestock bear very little resemblance to their medieval forbears. This presented us with a problem. How could we show what medieval animals looked like? The answer is: we can’t, at least not in the flesh.

Originally we considered trying to recreate animals that looked like those of 1540 by crossbreeding. This would have been difficult and the resulting animals would not have been genetically authentic. It is not possible to establish groups of “look-alikes” which reproduce themselves in the same form.

It would have been misleading to give our visitors the impression that conserving old types of livestock was not important as they could be recreated anyway.

So the Museum decided to display livestock of modern breeds, but where possible, the traditional type within the breed. In addition we chose breeds associated with South East England. This meant that there was a tenuous link between today’s animals and their medieval equivalent.

All breeds are in a constant state of flux, but preserving some traditional lines is increasingly seen as important to the healthy future of livestock.

Cattle

The place of cattle in farming has changed fundamentally over the centuries, and this has also meant significant changes in their appearance. However today’s Sussex Cattle are directly descended from those of 1540.

Four hundred years ago Sussex cattle were used to pull ploughs to cultivate the land. They were far too valuable to slaughter for meat, until they were too old to work. Plough oxen need very heavy fore-quarters to bear the weight of the yoke and their shoulders were well developed compared with their hindquarters.

But from 1730-1871 the population of England rose dramatically, and this brought a huge increase in the demand for meat. The emphasis on meat development transferred weight from the shoulders to the hindquarters, and the animals’ appearance changed.

In recent years two main changes have occurred. Farmers have preferred hornless cattle for easier management. Since 1980 many Sussex breeders have crossed their cattle with the Limousin of France, which grows faster and produces a leaner, larger carcase.

The Museum had to find cattle which were free of these influences, and located its first animals through the Petworth Estate, breeders of Sussex cattle for centuries. Whilst we cannot recreate the specialised draught type of Sussex cattle, ours are their direct descendants and a living link with a vanished farming system.
Sheep

At the beginning of the 16th century English sheep were small with an average fleece weight of about 1 kg. Most wool was of poor quality although there were some fine-wooled fleeces. They were the same size as modern Soay sheep, with a long tail, long neck and very often, polled.

Few remains have been found of these medieval sheep, but in Sussex and Kent they gave rise to two breeds which have had a huge influence worldwide – the Southdown and the Romney.

John Ellman of Glynde (1753-1832) did most to change the native sheep of the Sussex downs into the finest quality meat sheep in the world, bearing wool of considerable value. More recently they have been influenced by Southdown rams imported from New Zealand.

Our task at the Museum was to find Southdowns with little trace of this blood.

The Romney sheep are also from flocks where the traditional type is predominant – fewer changes have taken place in the breed. It is thought they may be descended from Roman sheep.

Southdown and Romney sheep are used for quite different purposes today. The Southdown is a “meat sire” breed while the Romney is a “maternal” breed.

The medieval ancestors of these two breeds of sheep would have looked very different and the links are therefore weak, but the animals we have introduced at the Museum can claim direct descent from sheep in medieval Sussex and Kent.

Horses

The South-East of England has never had a distinctive breed of farm horse. Before 1500 horses were small and of poor type. Laws were passed to encourage the breeding of better horses and big stallions were imported from the Low Countries. These crosses gave rise to the British heavy horses of today, which are huge, docile and soft-boned animals.

In medieval times the horses in the South-East were probably similar to the native animal we have introduced to the re-created medieval farmstead: a general purpose animal, used as a pack horse, for riding and for draught, no more than 14.2 to 15 hands high.

A single horse harrowing in seed. The horse wears a leather bridle, and at this early period, a collar made probably of straw. The traces, from the collar to the swingle-tree, are of rope, and a further rope attachment slides along the bar at the head of the harrows. Behind the horse a man slings stones to scare the birds away from the seed.

From David Low, The Breeds of the Domestic Animals of the British Isles (1842).

Horses were often used in draught together with oxen, although oxen always predominated. It was only in the 18th century that horses began to take over from cattle as the principal draught animals working the land. Sussex was in fact one of the last strongholds of ox-draught.

“...in thirteenth century Sussex wagons might be drawn by two oxen and one horse, or by four oxen if no horse was available, but oxen were far and away the majority for draught purposes. About the year 1400 on the Earl of Arundel’s farms in East Sussex there were only 34 horses to 211 oxen, and in West Sussex 33 horses to 237 oxen”

Alexander Fenton
Draught Oxen in Britain. The Shape of the Past.
Pigs

British domestic pigs of c. 1540 were small, rangy, prick-eared animals with darkish skin and a bristly coat. At some time in the next 200 years the lop-eared characteristic and white colouring became established. In the late 18th century Chinese pigs influenced British stock, introducing the compressed snout, black colour and pork conformation of several breeds.

Pigs were important everywhere in the South-East except on the Downs where pannage was limited. Traditionally pigs were driven into the woodlands to forage in the Autumn.

They were hardy animals well adapted to the outdoor husbandry practised in medieval times. However no present-day British pig maintains many original characteristics – the hardiest are to be found among our rare breeds.

Poultry

Poultry were important to the people of medieval England – there is evidence of specialisation into two types – heavy table birds and egg laying varieties.

Game birds also existed, and fowl were kept for cock-fighting. The flesh of capons (castrated males) was especially prized. Poultry were of particular value to the poorer farmers.

Two of the traditional breeds have been chosen to represent poultry in the re-created medieval farmstead – the Dorking and the Light Sussex. The Dorking in particular has similarities to fowl described by Columella, the Roman authority on poultry.

Chaucer, writing at the end of the 14th century, described a cock:

His comb was redder than the fyn coral,
And batailed, as it were a castel wal.
His bile was blak, and as the jeet it shoon;
Luk asur were his legges, and his toon;
His nayles wytter than the lilie flour,
And lyk the burned gold was his colour.
HUSBANDLY FURNITURE

Barn-locked, gofe-ladder, short pitchfork, and long, flail, straw fork, and rake, with a fan that is strong; Wing, cartnave and bushel, peck, strike ready hand, get casting shouel, broom, and a sack with a band.

A stable well planked, with key and with lock, walls strongly well lined, to bear off a knock; A rack and a manger, good litter and hay, sweet chaff, and some provender, every day.

A pitch-fork, a dung-fork, sieve, skep, and a bin, a broom, and a pail, to put water therein; A hand-barrow, wheel-barrow, shovel, and spade, a curry-comb, mane-comb, and whip for a jade.

A buttrice, and pincers, a hammer and nail, and apern, and scissors for head and for tail, Whole bridle and saddle, white leather, and nall, with collars and harness, for thiller and all.

A pannell and wanty, pack-saddle, and ped, a line to fetch litter, and halters for head; With crotchets and pins, to hang trinkets thereon, and stable fast chained, that nothing be gone.

Strong axle-treed cart, that is clouted and shod, cart-ladder and wimble, with percier and pod; Wheel-ladder for harvest, light pitch-forks, and tough, shave, whip-lash well knotted, and cart-ropes enough.

Ten sacks, whereof every one holdeth a coom, a pulling-hook handsome, for bushes and broom; Light tumbrel and dung-crone, for easing (Sir Wag), Shouel, pickax, and mattock, with bottle and bag.

A grindstone, a whetstone, a hatchet and bill, with hammer, and English nail, sorted with skill; A frower of iron, for cleaving of lath, with roll for a saw-pit, good husbandry hath.

A short saw, and long saw, to cut a-two logs, an axe, and an adze, to make trough for thy hogs; A Dover Court beetle, and wedges with steel, strong lever to raise up the block from the wheel.

Two ploughs and a plough-chain, two culters, three shares, with ground clouts and side clouts for soil that sow tares With ox-bows and ox-yokes, and other things mo, for ox-team and horse-team in plough for to go.

A plough-beetle, plough-staff, to further the plough, great clod to asunder that breaketh so rough; A sled for a plough, and another for blocks, for chimney in winter, to burn up their docks.

Sedge-collars for plough-horse, for lightness of neck, good seed and good sower, and also seed peck; Strong oxen and horses, well shod, and well clad, well meated and used, for making thee sad.

A section of Thomas Tusser's Husbandly Furniture, 1557, which lists tools and equipment needed on an English Farm.