



Historic Farmsteads

Preliminary Character Statement: South East Region



ENGLISH HERITAGE



The Countryside Agency
**Landscape
Access
Recreation**

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This document is one of eight Preliminary Character Statements which provide information on the characteristics of traditional farm buildings in each Region. They can be viewed and downloaded at www.helm.org.uk/ruraldevelopment and at www.ahds.ac.uk.

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Contents

SUMMARY	6		
1.0 INTRODUCTION	10		
2.0 UNDERSTANDING CONTEXT AND CHARACTER	12		
2.1 LANDSCAPE CHARACTER AND CHARACTERISATION	12		
2.2 THE CHARACTER OF THE SOUTH EAST REGION: AN INTRODUCTION	12		
2.3 THE CHARACTER OF RURAL SETTLEMENT	16		
2.3.1 National Framework	16		
2.3.2 Rural Settlement in the South East	17		
3.0 BUILDING MATERIALS	18		
3.1 NATIONAL OVERVIEW	18		
3.1.1 Walling	19		
3.1.1.1 Temporary structures	19		
3.1.1.2 Mass walling	19		
3.1.1.3 Timber frame	19		
3.1.1.4 Timber cladding	20		
3.1.1.5 Corrugated iron	20		
3.1.2 Roofing	20		
3.1.2.1 Thatch	20		
3.1.2.2 Plain clay tiles and stone slates	20		
3.1.2.3 Corrugated iron and other prefabricated modern materials	20		
3.2 BUILDING MATERIALS IN THE SOUTH EAST	21		
3.2.1 Walling	21		
3.2.1.1 Stone	21		
3.2.1.2 Earth	21		
3.2.1.3 Timber	21		
3.2.1.4 Brick and tile	23		
3.2.2 Roofing	23		
3.2.2.1 Thatch	23		
3.2.2.2 Slate and stone	23		
3.2.2.3 Tiles	23		
4.0 AGRICULTURAL HISTORY AND FARM BUILDINGS	26		
4.1 AN INTRODUCTION TO ENGLISH AGRICULTURAL HISTORY AND FARM BUILDINGS: THEIR DEVELOPMENT, SURVIVAL AND SIGNIFICANCE	26		
4.1.1 Up to 1550	26		
4.1.1.1 Survival and value	26	4.1.4.1 Survival and value	30
4.1.2 1550 to 1750	26	4.1.5 1940 to the present	30
4.1.2.1 Survival and value	27	4.2 FARMING IN THE SOUTH EAST	31
4.1.3 1750 to 1880	27	4.2.1 The South Downs	31
4.1.3.1 Survival and value	29	4.2.2 Hampshire Downs and Berkshire and Marlborough Downs	32
4.1.4 1880 to 1940	29	4.2.3 North Downs	33
		4.2.4 Chilterns	34
		4.2.5 South Coast Plain and South Hampshire Lowlands	34
		4.2.6 North Kent Plain	34
		4.2.7 The New Forest	34
		4.2.8 Coastal Marshes – Pevensey Levels, Romney Marshes and Greater Thames Estuary	35
		4.2.9 Thames Valley and Basin	36
		4.2.10 The Weald	36
		4.2.11 Isle of Wight	38
		4.2.12 Upper Thames Clay Vales and Midvale Ridge	38
		4.2.13 Northamptonshire Uplands and The Cotswolds	39
		5.0 FARMSTEAD TYPES	41
		5.1 NATIONAL OVERVIEW	41
		5.1.1 Linear plans	43
		5.1.2 Parallel plans and L-shaped plans	43
		5.1.3 Dispersed plans	43
		5.1.4 Loose courtyard plans	43
		5.1.5 Regular courtyard plans	44
		5.2 FACTORS INFLUENCING FARMSTEAD CHARACTER	44
		5.2.1 Farm size	44
		5.2.2 Estate policy	45
		5.2.3 Local variation of farming systems	45
		5.2.4 Internal workings of the farmyard	45
		5.2.5 Development of farming systems	45
		5.3 Farmstead Plans in the South East	46
		5.3.1 Linear, L-plan and parallel plans	46
		5.3.2 Dispersed plans	46
		5.3.3 Loose courtyard plans	46
		5.3.4 Regular courtyard plans	46
		5.3.5 Row plans	47
		6.0 KEY BUILDING TYPES: CROP STORAGE AND PROCESSING	48
		6.1 BARNs	48
		6.1.1 National Overview	48
		6.1.1.1 Plan form	48
		6.1.1.2 Size	49
		6.1.1.3 Combination barns	50
		6.1.1.4 Evidence for mechanisation	50
		6.1.1.5 Evidence for reuse and adaptation	50
		6.1.2 Barns in the South East	50
		6.1.2.1 Threshing Barns and Aisled Barns	50

6.1.2.2	Combination Barns	52	7.3	STABLES	64
6.1.2.3	Staddle barns	52	7.3.1	National Overview	64
6.1.2.4	Mechanisation	53	7.3.2	Stables in the South East	65
6.2	GRANARIES	53	7.4	PIG HOUSING	66
6.2.1	National Overview	53	7.4.1	National Overview	66
6.2.2	Granaries in the South East	55	7.4.2	Pig housing in the South East	66
6.3	CART SHEDS AND IMPLEMENT SHEDS	56	7.5	SHEEP HOUSING	67
6.3.1	National Overview	56	7.5.1	National Overview	67
6.3.2	Cart sheds in the South East	57	7.5.2	Sheep housing in the South East	67
6.4	OAST HOUSES	57	7.6	DOVES AND POULTRY	68
6.4.1	National Overview	57	7.6.1	National Overview	68
6.4.2	Oast houses in the South East	58	7.6.2	Doves and poultry in the South East	70
6.5	HAY BARNs AND OTHER CROP-RELATED BUILDINGS	59	8.0	KEY BUILDING TYPES: OTHER FARM BUILDINGS	71
6.5.1	National Overview	59	8.1	OUTFARMS AND FIELD BARNs	71
6.5.2	Hay barns and other crop-related buildings in the South East	59	8.1.1	National Overview	71
			8.1.2	Outfarms and field barns in the South East	71
7.0	KEY BUILDING TYPES: ANIMALS AND ANIMAL PRODUCTS	60	8.2	MINOR AND MISCELLANEOUS BUILDINGS	72
7.1	CATTLE HOUSING	60	8.2.1	National Overview	72
7.1.1	National Overview	60	8.2.2	Minor and miscellaneous buildings in the South East	72
7.1.1.1	Longhouses	60			
7.1.1.2	Ox houses	60	9.0	GLOSSARY	73
7.1.1.3	Combination barns	60	10.0	SOURCES	77
7.1.1.4	Open-fronted sheds	60	10.1	GENERAL SOURCES	77
7.1.1.5	Lean-tos (outshots)	61	10.2	NATIONAL BIBLIOGRAPHY	78
7.1.1.6	Free-standing cow houses	61	10.3	REGIONAL BIBLIOGRAPHY	82
7.1.1.7	Looseboxes for fatstock	62			
7.1.1.8	Covered yards	62	11.0	JOINT CHARACTER AREA DESCRIPTIONS: URLS FOR PDF DOCUMENTS	84
7.1.2	Cattle housing in the South East	62			
7.2	DAIRIES	62			
7.2.1	National Overview	62			
7.2.2	Dairies in the South East	64			

Illustrations

Figure 1	Geology and Landscape Character in the South East Region	13–14	Figure 17	Distribution of listed longhouses in England	44
Figure 2	Rural settlement in the South East	15	Figure 18	Isometric view of a large, regular courtyard farmstead in Northumberland	45
Figure 3	Distribution of cruck-framed and aisled barns	18	Figure 19	Power in barns	49
Figure 4	Cruck and aisled barns	19	Figure 20	Barns in the South East	51
Figure 5	Distribution of listed earth-built agricultural buildings in England	19	Figure 21	Interior of a granary showing grain bins and example of louvered vent	53
Figure 6	Distribution of listed timber-framed barns in England	20	Figure 22	Isometric drawings of a free-standing granary on staddle stones and a granary at first-floor level as part of a range of buildings	54
Figure 7	Distribution of listed thatched agricultural buildings in England	21	Figure 23	Granaries in the South East	55
Figure 8	Examples of walling materials in the South East	22	Figure 24	Cart sheds in the South East	56
Figure 9	Examples of roofing materials in the South East	24	Figure 25	Distribution of listed hop kilns/oast houses in England	57
Figure 10	Distributions of listed farmhouses in England pre-1550 and 1550–1750	27	Figure 26	Hop kilns/oast houses in the South East	58
Figure 11	Distributions of listed barns in England pre-1550 and 1550–1750	28	Figure 27	Principal forms of cattle housing – some national examples	61
Figure 12	Farmsteads in the landscape: Hampshire Downs	33	Figure 28	Cattle housing in the South East	63
Figure 13	Farmsteads in the landscape: New Forest	35	Figure 29	Interior of a stable	64
Figure 14	Farmsteads in the landscape: High Weald	37	Figure 30	Stables in the South East	66
Figure 15	Farmsteads in the landscape: Cotswolds	39	Figure 31	Pigsties in the South East	67
Figure 16	Farmstead plan types	42	Figure 32	Distribution of listed dovecotes in England	68
			Figure 33	Accommodation for birds and poultry	68–9
			Figure 34	Outfarms and field barns in the South East	71
			Figure 35	Other buildings in the South East	72

Summary: South East Region

I LANDSCAPE AND AGRICULTURAL CONTEXT

NATIONAL FRAMEWORK

Patterns of land use were very varied, reflecting cultural factors as well as climatic conditions and the physical structure of the landscape. The distribution of farmsteads, their dates of foundation and their relationship to the farming landscape are intimately linked to **historical patterns of fields** and **settlement** in the landscape. Areas of nucleated settlement, concentrated in a central band running from Northumberland into Somerset and Dorset, are associated with villages whose communally farmed townfields were subject – at varying rates – to amalgamation and enclosure by tenants and landlords from the 14th century. This process was often associated with the creation of new holdings and farmsteads within the new enclosures. Areas of dispersed settlement, where farmsteads are either isolated or grouped in hamlets and surrounded by originally smaller townfields and more ancient patterns of enclosure, are most strongly characteristic of western and parts of eastern and south-eastern England. Between the two extremes are areas that contain both nucleated and dispersed settlement to varying degrees.

Agricultural development in England can be divided into the following major periods:

- *Up to 1750* Economic boom in the 12th and 13th centuries, which included the development of large farms on monastic and secular estates, was followed by contraction of settlement and the leasing out of estates after the famines and plagues of the 14th century. The period from the 15th century was characterised by a general increase in agricultural incomes and productivity and the emergence – particularly from 1660 – of increasingly market-based and specialised regional economies. Substantially complete farm buildings of this period are rare, and provide the first evidence for the development and strengthening of regional traditions and building types. Many surviving farmsteads in upland areas, with farm buildings attached to their farmhouse, survive from the later 17th and 18th centuries. It is otherwise very rare for farmsteads to have more than a house and barn dating from this period.
- *1750 – 1880* This is the most important period of farm building development, the production of farmyard manure by cattle playing a major role in increasing agricultural productivity. The increased output of this period was encouraged by rising grain

prices and the demands of an increasingly urban population, and was enabled by the expansion of the cultivated area (especially from the 1790s to 1815), the continued reorganisation and enlargement of holdings and the final phase of the enclosure of open fields – concentrated in the Midland counties. Substantial improvements in animal husbandry were made with the development of improved breeds and a greater awareness of the importance of the need for housing, particularly for cattle, which hastened fattening and meant that manure could be collected and stored better. The high-input/high-output systems of the 'High Farming' years of the 1840s to 1870s were based on the availability of imported artificial fertilisers, manures and feeds.

- *1880 – 1940* There was little fresh investment due to the long farming depression in this period, notable exceptions being some estates and continuing developments in dairying areas. Hygiene regulations in the inter-war period resulted in intense forms of housing for pigs and poultry, and the replacement of earlier forms of housing for dairy cattle by new forms of cow house with concrete floors and stalls, and metal roofs and fittings.
- *1940 to present* The 1937 Agriculture Act anticipated the need to increase self-sufficiency, and the Second World War witnessed a 60% rise in productivity. This was the result of the growth in livestock numbers, increasing scientific and government control and guidance, more specialised systems of management and the conversion to arable of permanent pasture. The Agriculture Act of 1947 heralded the intensification and increased specialisation of farming in the post-war period, accompanied by the development of government and industry research and guidance. The Government provided grants to cover the capital cost of new building under the Farm Improvement Scheme (introduced 1957). The introduction of wide-span multi-purpose sheds in concrete, steel and asbestos met increasing requirements for machinery and for the environmental control of livestock and on-farm production, particularly of milk.

REGIONAL PATTERNS

The northern part of Buckinghamshire and most of Oxfordshire is characterised by nucleated villages with low levels of dispersed settlement. Settlement is also strongly concentrated in the valleys of the chalk areas of the Hampshire Downs, the South Downs and the North Downs. Settlement is otherwise generally dispersed with

a high number of hamlets and isolated farmsteads, many of medieval date or even earlier; on the clays and sandstones. In the area immediately west of London, along the plain of the River Thames, there are significant numbers of villages intermixed with scattered farms and hamlets.

Probably of greatest significance to the farming of the Region is its proximity to London, which provided a ready market for most goods, especially corn. Much of the Region was well-placed to meet this demand, due to the navigability of the Thames and some other rivers, and the use of coastal shipping. The growing demands of London meant that much of the Region continued to specialise in corn production, even in the 15th century and the period 1650 to 1780, in contrast to some other parts of the country where arable significantly contracted in favour of pastoral farming. Some areas of the Region that did not have access to water transport for arable produce or where corn was less profitable, such as the coastal marshes, began to specialise in stock that could be driven to market on the hoof, or in higher value goods that made land transport financially viable.

The demands of London also encouraged specialised production: Kent was already recognised for its fruit, vineyards and cider by the 13th century and by the 17th century fruit growing to supply the London market was increasing in importance. Hop growing developed from the later 16th century and spread into neighbouring counties.

A highly distinctive feature of the Region was the contrast between the large capital-intensive farms of arable landscapes and the smaller farms of wood-pasture landscapes, which supported a greater degree of diversity in agricultural practice, including woodland enterprises, fruit growing, dairying and fatstock. The arable areas were hard-hit by the depression from the late 1870s, there being a vast increase in dairying for example on the chalk of Berkshire.

2 BUILDING MATERIALS

NATIONAL FRAMEWORK

The use of locally available materials, combined with local vernacular traditions, makes a fundamental contribution to local and regional diversity.

Long-rooted traditions such as earth walling, thatch and timber frame, survived much longer on farm buildings than farmhouses. Buildings in stone and brick, roofed with tile or slate, increasingly replaced such buildings from the later 18th century.

Standardised forms of construction, including softwood roof trusses, developed across the country in the 19th

century, often reflecting the availability of materials such as Welsh slate transported along the canals and, later, the railways. Corrugated iron was used from the late 19th century as a cheap means of replacing or covering roofs (particularly thatch) in poor condition.

REGIONAL PATTERNS

In the northern part of the Region building stones of an excellent quality were widely available, in contrast to the southern parts of the Region – notable exceptions being Kentish ragstone and the carstone of Surrey and Sussex.

Earth construction is concentrated in the western and northern parts of the Region.

Timber framing was the dominant building technique across much of the Region until the early 17th century for housing and the early 19th century for farm buildings. For most timber-framed agricultural buildings weatherboarding was the typical wall covering, examples of which date from the medieval period.

By the 18th century brick was often being used in preference to timber framing in the clay areas of the Region. It was not until the end of the 18th and into the 19th century that brick, usually combined with flint, became common in the chalk areas. Usually brick and flint were banded horizontally but occasionally the brick was used to create square panels.

The predominance of arable across the majority of the Region meant that straw for thatching was widely available, and in the western half of the Region long straw thatch remains as a highly distinctive feature. Water reed was used in coastal areas, and a small number of solid thatch roofs also survive. Clay tiles were widely used in the Region, and stone slates were quarried from the limestones of Oxfordshire and the Wealden sandstone of Sussex (Horsham slate).

3 FARMSTEADS

NATIONAL FRAMEWORK – FARMSTEAD TYPES

The scale and form of farmstead plan types are subject to much variation and are closely related to farm size and status, terrain and land use. It was far more common for the houses on farms in northern and western England to be attached to the farm buildings. By contrast, even small farms in the South East and East Anglia were characterised by detached houses and separate buildings, often loosely arranged around the sides of a yard.

- *Linear plans*, where houses and farm buildings are attached, were ideally suited to small farms (usually stock rearing and dairying), especially in northern pastoral areas with little corn and longer winters

where there was an obvious advantage in having cattle and their fodder (primarily hay) in one enclosed building. They now display a wide range in scale, from large steadings of independent Pennine yeoman-farmers to the smallholdings of miner-farmers.

- *Dispersed plans*, comprising clusters and unplanned groupings of separate buildings, were more widespread. They now range from those of hamlets, where the buildings of different owners were often intermixed, to large-scale individual steadings, some of which were of high status.
- *Loose courtyard plans* became most strongly associated with large and/or arable farms. The buildings are built around a yard with or without scatters of other farm buildings close by.
- *Regular courtyard plans*, where the various functions were carefully placed in relation to one another in order to minimise the waste of labour, and where the manure could be conserved, were built – at first on large estates – from the later 18th century.

REGIONAL PATTERNS – FARMSTEAD TYPES

The longhouse is unknown in the South East Region and linear plans are uncommon except in the limestone uplands in the north west of the Region.

The loose courtyard plan, formed by a collection of detached structures arranged around a yard, usually with the farmhouse located on one side of the yard, is the predominant farmstead type in the Region. There are a number of 17th-century gentry farmsteads in Hampshire that have detached buildings to all four sides of the yard. They exhibit considerable differences in scale depending on farm size and farming region, particularly the contrasts between open arable and wood pasture landscapes.

A great variety of dispersed farmstead types are found in the Region, concentrated in areas of ancient enclosure (especially the Weald) and on the heathland fringes where small farms with few buildings were usual.

Although estates were active in many parts of the Region the South East does not contain high numbers of model farms: the activities of estates are to be seen less in new integrated plans than in individual examples of barns, granaries and cattle housing.

NATIONAL FRAMEWORK – BUILDING TYPES

The functions of crop processing and storage and the accommodation of animals and birds determine the variety of building types, which could house one or a combination of functions. The principal types are listed below.

Barns are generally the largest farm buildings to be found on farms. They were either designed solely for

storing and processing the corn crop, these being most common in areas of arable production, or as combination barns to incorporate many functions. Threshing machines, usually powered by horses accommodated in a projecting wheel house, were introduced from the later 18th century. Split-level mixing barns developed in many regions from the later 18th century as a result of the widespread introduction of machinery for processing corn and fodder. The introduction of the portable steam engine and threshing machine in the 1850s heralded the end of the traditional barn as a building for storage and processing.

Field barns were built in areas where farmsteads and fields were sited at a long distance from each other, and where holdings were intermixed. **Granaries** were either detached or built over stables and cart sheds. **Cart sheds** often faced away from the farmyard and were typically close to the stables and roadways, giving direct access to the fields. **Stables** were normally two-storey well-lit buildings with a hayloft above. **Cow houses** were typically built for dairy cattle. The folding of stock in strawed-down yards and feeding them with root crops became more general from the later 18th century, together with the subdivision of yards into smaller areas and the construction of **shelter sheds** and **looseboxes**. **Pigs** were undoubtedly kept on most farms and particularly on dairying establishments, where there was a ready supply of whey on which to feed them. **Dovecotes** were built to house pigeons, which provided variety to the diets of high-status households and a rich source of manure.

REGIONAL PATTERNS – BUILDING TYPES

As also found in the East of England region, this Region has high densities of pre-1750 barns. Some, particularly in wood-pasture areas, were combination buildings, housing both the crop and stock with one or two bays divided off and often lofted. A highly distinctive characteristic of the Region, also shared with the East of England, is the concentration of aisled barns dating from between the 12th century and the 19th century. They are particularly concentrated in northern Hampshire, Berkshire and Kent.

An unusual type of barn that appears to have developed in the chalk downland areas of Hampshire, Berkshire and Wiltshire (in the South West Region) is the staddle barn, which has an unaisled timber frame raised on staddles as for a granary. Most appear to date from the mid- to late 18th century.

The free-standing timber-framed granary set on staddle stones (or cast-iron staddles in some later 19th-century examples) is more commonly encountered in the South East Region than in any other part of the country. Most date from the 18th and early 19th centuries although

there are some 17th-century examples. Brick-built granaries supported on arches are occasionally found in the South East although they are more commonly encountered in the South West Region.

The Region also has some very early examples (17th century and earlier) of stables and cart sheds and probably contains the greatest number of early cart sheds in the country. These buildings are usually free-standing and timber-framed. Brick was commonly employed for stables earlier than for other farm buildings.

The Weald contains some of the earliest evidence for cattle housing in the Region, where multi-functional barns or outshots to barns were used. Only rarely were

individual structures provided. From the later 18th to the mid-19th century there was an increase in the provision of open-fronted single-storey cattle sheds on many farms, where they were usually ranged along one or more sides of the yard, often attached at one end to an earlier barn.

Cattle increased in importance on many chalkland farms in the later 19th century, either as a move to dairying during times of falling wheat prices or to produce manure to maintain soil fertility for cereal production. New, cheaper, technologies such as mass concrete were used for many dairy buildings and new shelter sheds were added to many farmsteads. In East Hampshire, L-plan yards, often replacing earlier buildings, provided enclosed cow houses and fodder storage.

1.0 Introduction

If the land is best suited for tillage, then the outhouses must be adapted to the purposes of keeping cattle for plowing; of holding and thrashing corn; and of preserving straw, &c. for winter food. In the counties where oxen plow, ox-houses must exceed the quantity of stabling: if where horses only are used, stables alone will be sufficient. If the land seems to promise fairest for pasturage, then cow houses, suckling-houses, sheepcots, dairies, and fattening houses must predominate; and if for grass, much barn-room seems unnecessary.

The Complete English Farmer, 1771, quoted in Wiliam 1986, p.67

Farm buildings are the leitmotif of the countryside. It seems appropriate to describe them with a musical term for they are thematic, and the resonance of their forms, colours and textures within the scenery is that of sound, overall and orchestrated. Here and there is the solo instrument, spectacular in its own right, but much more important is the orchestral effect.

Darley, Gillian (1981) *The National Trust Book of the Farm*, The National Trust, London, p.7

Historic farmsteads and their buildings make a fundamental contribution to the richly varied character of our countryside, and illustrate the long history of farming and settlement in the English landscape. England displays a huge diversity in geology, with a greater variety in small areas than anywhere else in Europe, which combined with varied farming practices has resulted in a great diversity of materials and types of farmstead.

It is clear, however, that we know far more about the nature and processes of change affecting land cover and field pattern than we do about agriculture's built environment and its contribution to countryside character and local distinctiveness. Furthermore, we know far less about the working than the domestic buildings of the farmstead. Recent research has made initial efforts to address this issue, and has made it clear how the domestic and working buildings of the farmstead are subject to very different processes of change (Gaskell & Owen, 2005).

English Heritage is now undertaking to develop this knowledge base in order to inform diverse future outcomes, such as the targeting of grant aid and the development of character-based policies for the sustainable reuse of farm buildings. This document is one of eight regional *preliminary character statements* that aim to promote better and more accessible understanding of the character of farm buildings. It is important, as a first step in this process, to present an information base for a broad diversity of users with an interest in researching,

understanding and managing historic farmsteads. It has therefore been written as a sourced synthesis of information, drawing together information that will enable the farmsteads of each Region to be better understood within the national context of farmstead and agricultural development, and their surrounding fields and settlements. As this is a preliminary statement, it and future work will benefit greatly from information and comments. These will be gratefully received at the following e-mail address:

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The objectives of this document are:

- To provide an information base and introduction to the subject.
- To place the development of the farmsteads and farm buildings of the South East Region within their national context.
- To demonstrate, with examples, how the *present* stock of farmsteads and their buildings reflects the diversity of farming, settlement and landscape character in the South East Region.
- To provide broad guidance on the value and survival by period and functional type.

An accompanying policy booklet has also been prepared, which makes the case for urgent action and considers

the importance of historic farm buildings, their value and their future. See *Living buildings in a living landscape: finding a future for traditional farm buildings*, at www.helm.org.uk/ruraldevelopment.

In each of the following sections, the national overview is presented immediately before the regional statement. For example, on the topic of barns, the national overview describes the development, variety and uses of barns nationally while the regional statement describes the variety that can be seen in the barns of the Region.

Section 2 provides an introduction to characterisation and briefly describes the landscape character of the Region, examining the pattern of rural settlement across the Region.

Section 3 describes the predominant building materials used for farm buildings nationally and in the Region.

Section 4 provides a brief introduction to the agricultural history of England with particular reference to the development of farmsteads and farm buildings divided into the major periods, supported by statements relating to the survival and significance of farm buildings from each period. This is followed by a summary of the

agricultural history of the Region.

Section 5 provides a national and regional background of types of farmsteads and farm buildings.

Sections 6, 7 and 8 provide a national and regional overview of key building types.

Section 9 provides a Glossary of terms both familiar and unfamiliar to the reader (e.g. dairy, linhay, enclosure).

Section 10 provides a list of national and regional sources for further reference.

It is also important at this stage to outline a distinction in terminology. 'Traditional' is a term often used to describe farm buildings pre-dating 1940, after which modern building materials (concrete, steel, asbestos sheet) and revolutions in farming technology and farmstead planning marked a sharp divide with previous practice. 'Historic' is more encompassing, as it includes farmsteads of all dates, irrespective of changes in form and material; it has been used in this document in order that the reader can view the history of farm buildings, and their change and adaptation over the centuries, within their broad historical context.

2.0 Understanding Context and Character

2.1 LANDSCAPE CHARACTER AND CHARACTERISATION

Landscape character is defined as a distinct and recognisable pattern of elements that occur consistently in a particular type of landscape. Particular combinations of geology (Figure 1A), landform, soils, vegetation, land use, field patterns and human settlement create character. Character makes each part of the landscape distinct, and gives each its particular sense of place. Landscape-scale techniques for understanding and guiding future change, now brigaded under the heading of characterisation, have developed since the 1990s. These have developed as multi-disciplinary and holistic tools for understanding the whole rural environment, its capacity to absorb change and its links to community values and needs.

During the 1990s the Countryside Commission worked with English Nature and English Heritage to identify Joint Character Areas (159 in total) for the whole of England, each of these resulting from a combination of factors such as land cover, geology, soils, topography, and settlement and enclosure patterns. These are now being used as the framework for the delivery of advice and the targeting of resources for many aspects of the rural environment, most recently to farmers under the Higher Level Stewardship Agri-Environment schemes, and local authorities have taken forward this methodology for Landscape Character Assessments on a finer scale. These are also being used as the spatial framework for reporting change in the countryside, in the Countryside Quality Counts project (see www.cqc.org.uk).

The South East region extends over the Joint Character Areas listed in Figure 1B. Whenever the text cross-refers to the Joint Character Areas, they will be listed by their number (i.e. JCA 152). The key characteristics and a detailed description and map for each Character Area are available from the Countryside Agency's website (www.countryside.gov.uk/lar/landscape). The web addresses for each JCA are detailed in Section 11.

Human impact has been central to the development and present character of landscape. Historic Landscape Characterisation (HLC), which is being developed by English Heritage with its county and local partners, is using GIS mapping techniques to deepen our understanding and perception of the long historical development of our landscapes. The practical applications of HLC now include development plans, a broad range of conservation and enhancement strategies, strategic land-use planning and similar initiatives, and research and academic implications (Clark, Darlington & Fairclough, 2004; Rippon, 2005, 100–142).

Pilot work is now indicating that the density and time-depth of farmsteads, and the rates of survival of different types of steading and building, are closely related to patterns of historically conditioned landscape character and type (Lake & Edwards 2006). This work represents a shift in focus away from individual buildings to a more question-based and holistic approach, one that uses landscape to both reflect and inform the patterning of the built environment. Recording and understanding at a local scale can both test and refine these broad-based, contextualised statements and contribute towards a more integrated understanding of both buildings and landscapes.

For characterisation see: www.english-heritage.org.uk/characterisation

2.3 THE CHARACTER OF THE SOUTH EAST REGION: AN INTRODUCTION

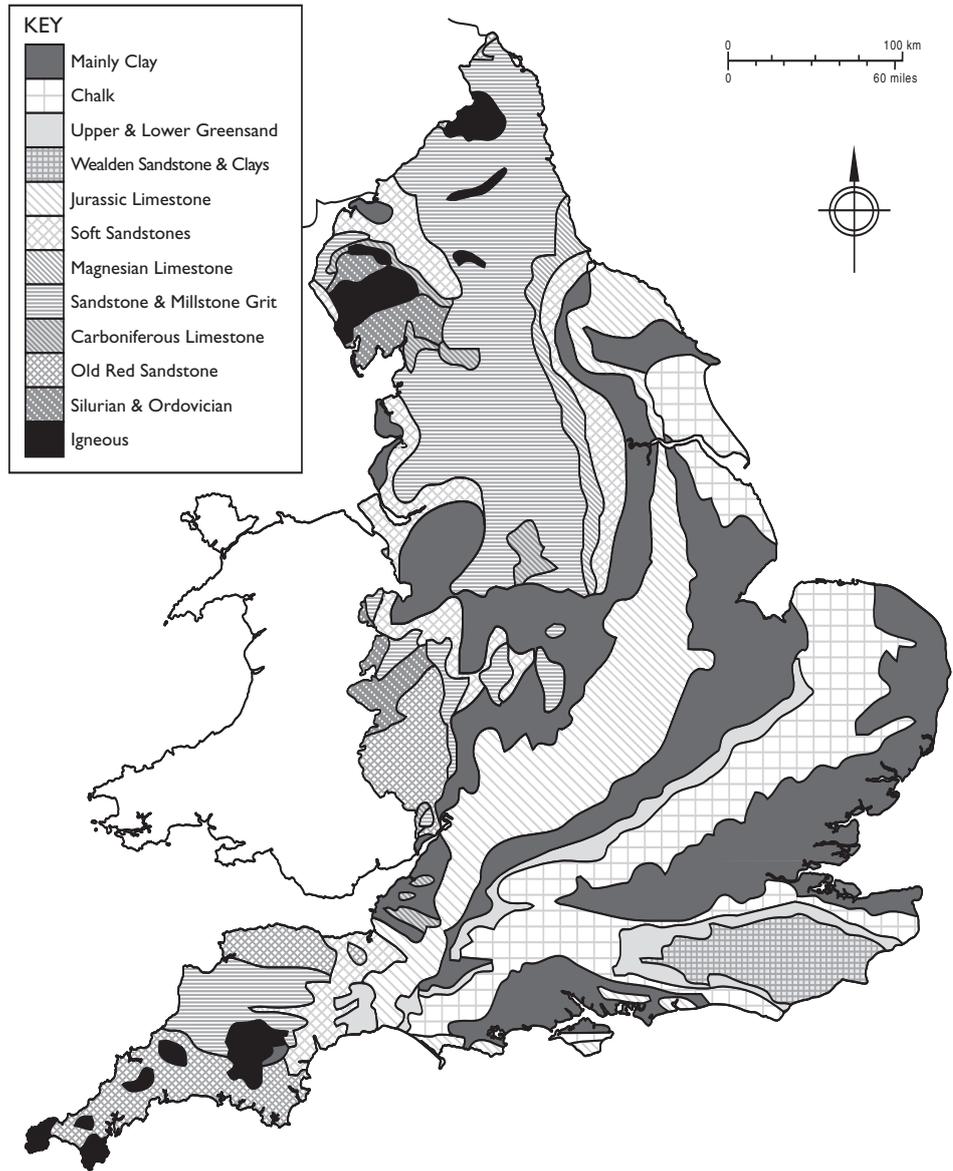
The Government Region of the South East comprises the counties of Buckinghamshire, East Sussex, Hampshire, Kent, Oxfordshire, Surrey and West Sussex and includes the Unitary Authority areas of the Isle of Wight, Milton Keynes, Portsmouth and Southampton, Medway Towns, Brighton and Hove, West Berkshire, Reading, Slough, Windsor and Maidenhead, Bracknell and Wokingham.

Geologically, the Region predominantly consists of young rocks such as chalk, tertiary clays and gravels overlying sandstones (Figure 1A). Chalk is the dominant geological feature of the Region, with two belts of chalk crossing the area from the western edge. To the south the chalk forms a wide band across Hampshire before dividing into two narrow bands, one extending south-east to the coast in East Sussex, the other, after a short break, continuing eastwards through Surrey and across North Kent. The second main belt of chalk runs north-eastwards across south Berkshire and into Buckinghamshire, cut through by the River Thames to the north of Reading.

In Kent and Sussex, lying between the two chalk ridges, is the sandstone upland of the Weald and the bordering clay vales. On the fringes of the Weald lower greensand is also exposed. South of the South Downs is the Hampshire Basin, which runs across the coastal fringe of Hampshire and part of West Sussex. Along the Thames Basin north of the chalk of Hampshire and the North Downs are clays, sands and gravels. Clay is also found along the Oxford Clay Vale, which extends across Buckinghamshire as the Bedford Lowlands. A line of small hills of Corallian Limestone breaks up the southern part

IA Geology Map of England

England displays a huge diversity in geology, with a greater variety in small areas than anywhere else in Europe. The varied geology in the South East Region offers a wide range of building materials for walling and roofing, making a major contribution to local distinctiveness in parts of the Region. Over much of the chalk and clay areas timber framing and brick are characteristic. Based upon 'Solid Geology' Source Defra/BGS, NERC: by permission of the British Geological Survey IPR/52-65C. ©NERC/Crown copyright. OS Licence no. 100042054



of this broad, flat vale. To the north of the Oxford Clay Vale is the Jurassic Limestone of the Cotswolds, the oldest rocks found in the Region.

The Region, like the East of England, does not display the strong contrasts between upland and lowland that can be seen in most of the other English Regions, but there are marked contrasts in the character of the landscapes (Figure 1B). In the south west is the New Forest with its large, open areas of barren lowland heath and woodland with little settlement; fringing the heaths are the fertile areas of the River Avon and the coastal fringe. Heathland is also a major element in the character of the Thames Basin Heaths of north Hampshire, south Berkshire and north Surrey, although the heathland is now far more fragmented and degraded than the heathland of the New Forest. Remnants of heath also survive on the sandstones of the Weald.

The chalk landscapes of the Berkshire and Marlborough Downs, the Chilterns, the Hampshire Downs, the South Downs and the North Downs dominate much of the

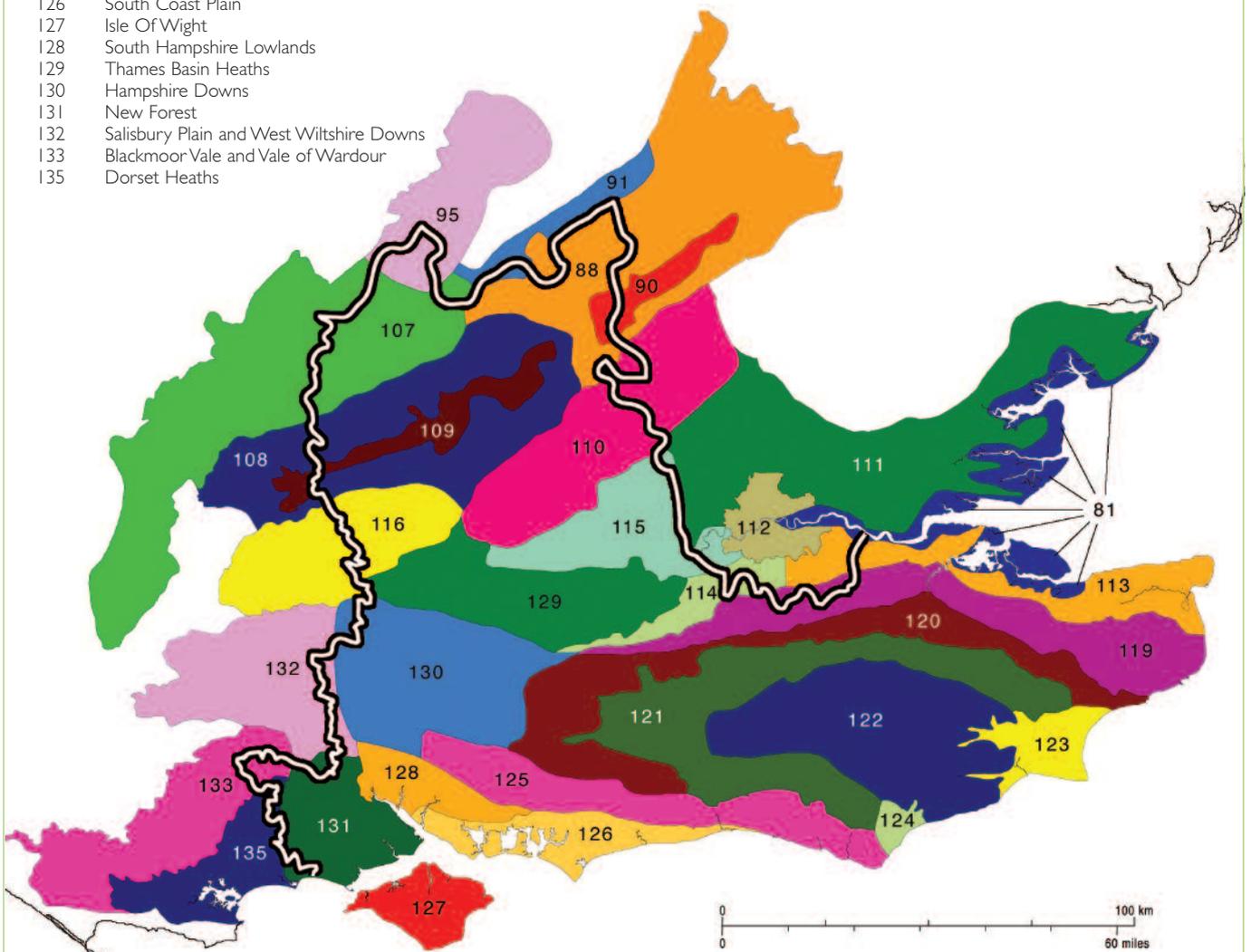
character of the landscape of the Region. Broadly, these areas have similar characteristics in that they form high, largely open, rolling landscapes, often with a scarp slope to the north, and are cut by dry valleys and chalk stream valleys where settlements are concentrated. Areas of clay with flints overlying the chalk often support woodland. The greater coverage of clay with flints on the North Downs and the Chilterns in comparison with the other chalkland areas has resulted in a greater level of woodland cover, making the Chilterns one of the most wooded lowland landscapes in the country. The higher levels of woodland in the Chilterns resulted in a different system of agriculture and enclosure to the other chalk areas, with smaller, ancient enclosures being typical as opposed to the relatively late enclosure of other downland areas that created large arable fields.

In the south-eastern corner of the Region is the Weald with the High Weald, a well-wooded landscape with areas of heath and sandstone ridges, bordered to the north, west and south by the gently undulating clay vales of the Low Weald. Where the Low Weald approaches

JCA JCA name
number

- 81 Greater Thames Estuary
- 86 South Suffolk and North Essex Clayland
- 88 Bedfordshire and Cambridgeshire Claylands
- 90 Bedfordshire Greensand Ridge
- 91 Yardley-Whittlewood Ridge
- 95 Northamptonshire Uplands
- 107 Cotswolds
- 108 Upper Thames Clay Vales
- 109 Midvale Ridge
- 110 Chilterns
- 112 Inner London
- 113 North Kent Plain
- 114 Thames Basin Lowlands
- 115 Thames Valley
- 116 Berkshire and Marlborough Downs
- 119 North Downs
- 120 Wealden Greensand
- 121 Low Weald
- 122 High Weald
- 123 Romney Marshes
- 124 Pevensey Levels
- 125 South Downs
- 126 South Coast Plain
- 127 Isle Of Wight
- 128 South Hampshire Lowlands
- 129 Thames Basin Heaths
- 130 Hampshire Downs
- 131 New Forest
- 132 Salisbury Plain and West Wiltshire Downs
- 133 Blackmoor Vale and Vale of Wardour
- 135 Dorset Heaths

IB This map shows the Character Areas relating to this Region. These are known as Countryside Character Areas or most commonly now as Joint Character Areas, this reflecting their development as multi-disciplinary means of mapping, defining and describing the character of distinct areas. The boundary is drawn around the Greater London area. Based upon Joint Character Areas. Source: Defra/English Nature/Countryside Agency. ©/Crown copyright OS Licence no. 100042054



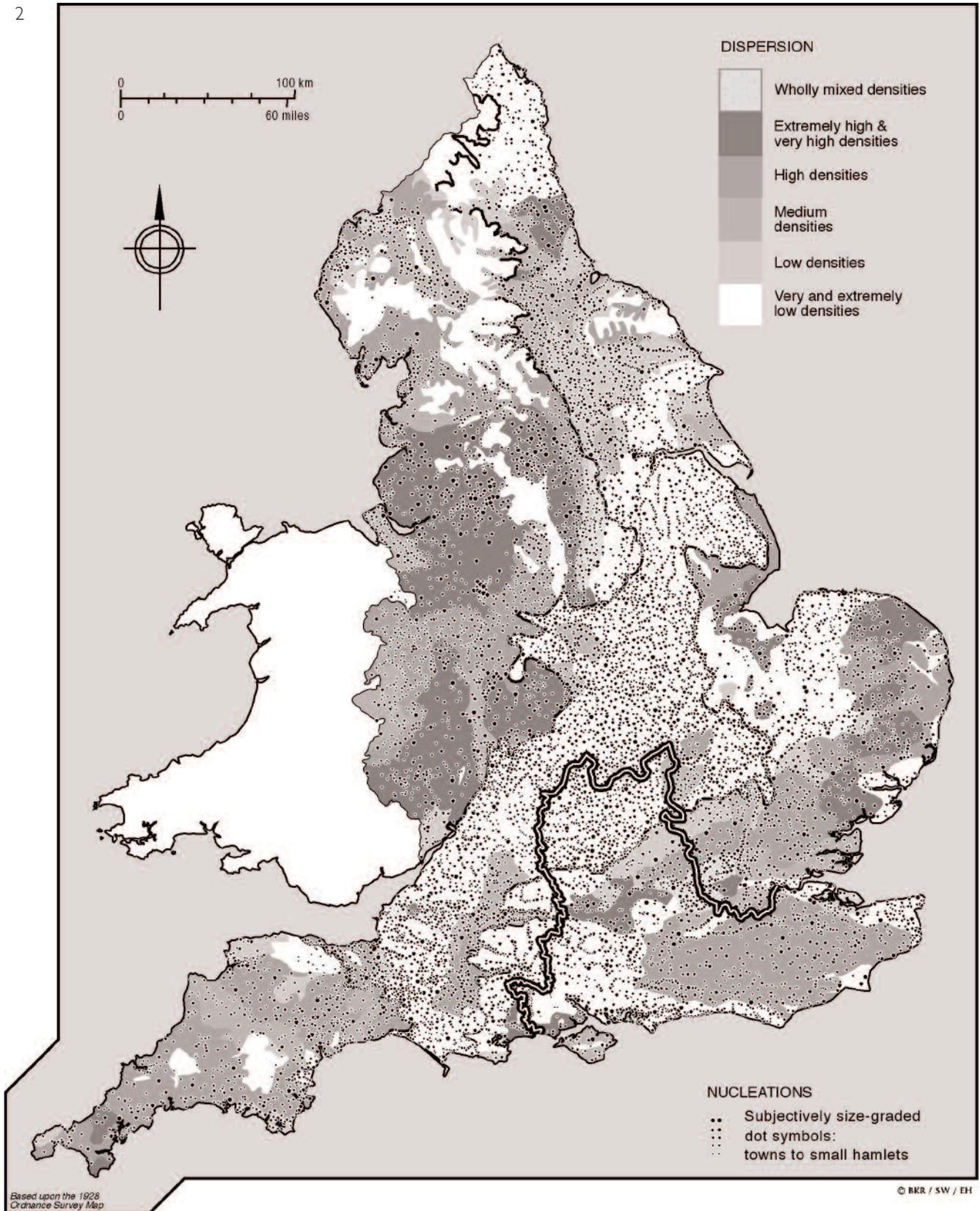
the coast it opens out into the flat, low-lying marsh areas of the Pevensey Levels and Romney Marshes. These areas are largely reclaimed wetland, maintained by drainage ditches to provide rich grazing land. The few settlements and farmsteads found in these areas are usually located on slightly higher areas of ground. Lying between the Low Weald and the North Downs is the Wealden Greensand, a greensand escarpment that carries extensive belts of ancient mixed woodland,

often on steep hangars, and areas of heathland and former heathland.

North of the North Downs chalk is the North Kent Plain, a low, gently undulating landscape that has long provided fertile arable and horticultural land with extensive areas of grazing marsh and reed beds along the coast. This area has experienced significant urbanisation focused on the main road between London

2 Rural settlement in England. Rural settlement can broadly be divided into two types: nucleated villages and dispersed farmsteads and hamlets. Figure 2 presents an analysis of the settlement pattern of England in the mid-19th century which identifies three 'provinces'. The Central Province, mostly characterised by nucleated settlement and once dominated by communal fields, stretches from Dorset, through Gloucestershire, the East Midlands, Yorkshire and along the north-east coast. This area is flanked by a South-Eastern Province covering the area from Dorset and Wiltshire to East Anglia, and a Northern & Western Province. In these Provinces settlement is mostly dispersed. Most of the South East Region lies in the South Eastern Province but even within this area of largely dispersed settlement there are areas of nucleated villages – particularly on the western chalk of Hampshire and Berkshire where villages lie in the chalk valleys. Only the north-western part of the Region extends into the Central Province. Based upon 'England: Rural Settlement in the mid-19th century'. Source: *An Atlas of Rural Settlement in England* (2000) © English Heritage / Roberts, B.K. and Wrathmell, S.

2



and Canterbury. The open and largely treeless character of the area means that this urbanisation can be visually dominant in the landscape.

There are considerable areas of high-quality land in the Region, although only about 12% is classified by the Ministry of Agriculture, Fisheries and Food (MAFF) as Grade 1 and 2, i.e. excellent and very good-quality land, compared to over 16% for England as a whole. Conversely, the area of Grade 4 and 5, i.e. poor and very poor land, is also about 12%, compared to the 21% average for England as a whole. Approximately 60% of the land area is used for agricultural production, lower than the national average of about 81% due to the extent of woodland (around 15%) and developed land (23% of the area, making the South East the most developed region of the UK outside London). There is no Less Favoured Area in the Region, although limited areas in, for example, the Chilterns and South Downs, are sufficiently restricted by altitude, soils and slope to fall within the criteria used to designate larger areas elsewhere in the country (ERDP 2000).

The climate is favourable for a wide range of crops, with a relatively long growing season and frost-free period in the coastal areas, although inland areas can suffer from late spring frosts. High light levels are a feature of the south coast of the Region, enabling farmers to grow a wider range of crops than other regions of England. Average rainfall is 758mm, 78mm less than for England as a whole, whilst monthly rainfall is fairly constant, providing good growing conditions for crops on medium and heavier bodied soils. In general terms rainfall is progressively less from west to east and south to north, due to the predominant south-westerly winds bringing weather fronts from the Atlantic. However, the topography has a major influence on rainfall: higher areas such as the Chilterns and South Downs cause precipitation and shelter adjacent low-lying areas (ERDP 2000).

2.3 THE CHARACTER OF RURAL SETTLEMENT

2.3.1 NATIONAL FRAMEWORK

Farmland has historically been divided into arable for growing corn and other crops, and meadow for hay and grass. In the past, farmers also had access to fallow land, land laid open after the harvest and areas of rougher common ground for grazing livestock. Patterns of settlement in the countryside varied from large, nucleated villages to dispersed settlement areas with scattered, isolated hamlets and farmsteads, both being closely related to the patterns of fields and their associated boundaries in the surrounding landscape. There were many variations between the two extremes of communal open fields with their scattered holdings,

which typically developed around larger nucleated settlements, and the anciently enclosed fields of isolated farmsteads and hamlets.

Re-arranging previously communal fields or common pasture land into self-contained private land units enabled the rationalisation of formerly scattered holdings, allowing better management of livestock and rotation of crops. This process of enclosure – evident from the 14th century and even earlier – resulted in the immediate or gradual establishment of new isolated farmsteads out in the fields. It could be undertaken on a piecemeal basis, or in one single phase, the latter form of enclosure being typically more regular in its appearance. Enclosure by parliamentary act, some of which formalised earlier agreements, often resulted in new designed landscapes. Parliamentary enclosure was concentrated in the period 1750 to 1880.

English Heritage has commissioned work on mapping these patterns of settlement in the English countryside, now published as *An Atlas of Rural Settlement in England* (Roberts & Wrathmell 2000) and *Region and Place, A Study of English Rural Settlement* (Roberts & Wrathmell 2002). In summary, it has been demonstrated that a Central Province mostly characterised by nucleated settlement and, by the 14th century, communal fields which occupied the great majority of the land area, is flanked by a South-Eastern Province and both a Northern and Western Province where settlement is mostly dispersed (Figure 2).

In areas of *nucleated settlement* in the medieval period and later, the majority of farmsteads were sited in villages and the surrounding land dominated by communally managed open fields, where the holdings of individual farmers were inter-mixed and farmed in rotation as meadow or arable land. Many open field systems were created during the period from the 9th to the 12th centuries, replacing earlier dispersed patterns of settlement with nucleated villages with communally managed fields, many of which were clearly planned by estates.

Farmsteads in areas of *dispersed settlement* are commonly isolated or clustered in hamlets. They are commonly medieval in origin (pre-14th century generally) and often surrounded by ancient and irregular patterns of field boundaries, including the reclamation of woodland or waste. Typically smaller and more numerous than the open fields of Midlands villages, these fields were either farmed from the outset as compact farming units or contained the scattered holdings or strips of individual farmers that were farmed on a communal basis. Areas of pasture and rough grazing were typically far greater in extent than in areas of nucleated

settlement, and have again been subject to varying rates of enclosure from the 14th century.

Between the extremes of nucleation and dispersion are the areas that to some degree included both villages and scattered farmsteads and hamlets. In these areas, nucleated villages again originated from developments between the 9th and 12th centuries, but were often intermixed with isolated farmsteads that date from both the medieval period or earlier and from the later enclosure of open fields and common meadow and pasture.

In some areas, the remains of earlier, including pre-Roman, farmsteads are visible as crop-marks or earthworks close to existing farmsteads or villages (see Roberts 1976 and Taylor 1983 for a useful introduction). While research is demonstrating that existing parish and field boundaries possibly originate from very early, even pre-Roman, field and estate boundaries, it is exceptionally rare for present farmstead sites – as in Cornwall's West Penwith – to display such continuity.

2.3.2 RURAL SETTLEMENT IN THE SOUTH EAST REGION

The greater part of the South East Region lies within Roberts and Wrathmell's South-Eastern Province, where settlement tends to be more dispersed with a higher number of hamlets and isolated farmsteads. Only the northern part of Buckinghamshire and most of Oxfordshire lie within the Central Province, which is characterised by nucleated villages with low levels of dispersed settlement (Figure 2).

Within these broad generalisations there are some significant differences in settlement patterns across the Region. Although across the majority of the Region dispersed settlement is considered to be typical, across the chalk areas of the Hampshire Downs, the South Downs and the North Downs the levels of dispersed settlement are extremely low; in fact they are lower than

any other area of lowland England. Across the western parts of the Hampshire Downs, for example, settlement is closely related to the river valleys, where linear settlements lie alongside the chalk streams with characteristic long, narrow land units stretching from the river to the downland giving each community a full range of the various landscape resources (Hare 1994, p.159). It is acknowledged that this area could have been included in the Central Province (Roberts & Wrathmell 2000, p.44).

In the area immediately west of London, along the plain of the River Thames, there are significant numbers of villages intermixed with scattered farms and hamlets (Roberts & Wrathmell 2000, pp.42–3). (The settlement pattern of this area stands in contrast to the rest of the Region.)

Away from the chalk areas, on the clays and sandstones, settlement typically comprises high numbers of small hamlets and scattered farmsteads. In the Weald the colonisation of the woodland, converting the summer lodgings of distant communities to permanent occupation, probably began in the 10th century but was not complete until the late 15th or 16th centuries when there was a substantial growth in population (Everitt 1986, p.54). Charter evidence suggests that some of the other wooded clay areas such as north Hampshire were being assarted by the 10th century, resulting in a similar pattern of isolated farmsteads, hamlets and small irregular fields. Where heathland dominated, settlement tended to congregate on the fringes of the heath and to encroach upon the open common, often creating distinctive 'islands' of small closes and building plots.

In the northern part of the Region, falling in the Central Province, settlement generally consists of nucleated villages. Where there are isolated farms they are typically moated sites in the clay vales of Oxfordshire and Bedfordshire or represent movement out of villages at the time of enclosure (Roberts & Wrathmell 2000, p.49).

3.0 Building Materials

3.1 NATIONAL OVERVIEW

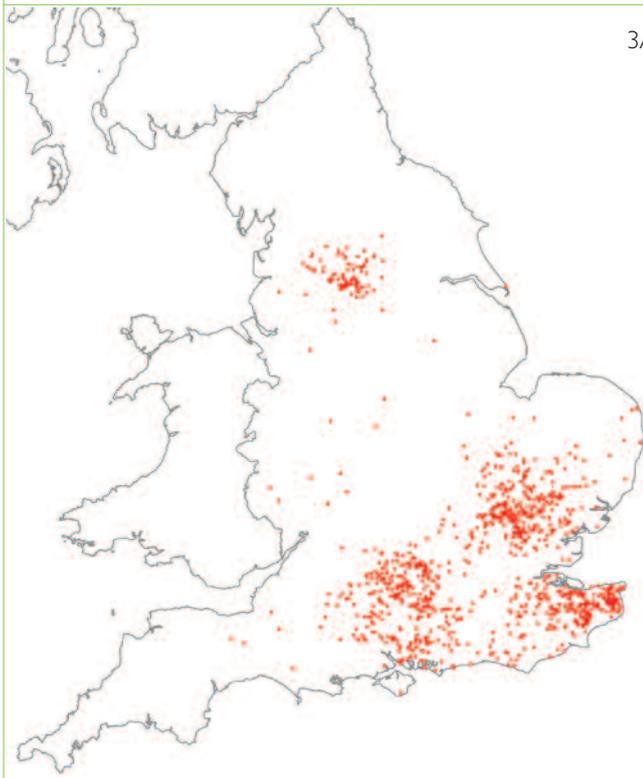
Farm buildings were frequently altered and re-roofed, and survivals can display evidence for successive phases of rebuilding, marked by straight joints in masonry or indications of mortise holes and joints in timberwork.

The present stock of farm buildings displays strong local and regional variation. This is the result of a range of factors, particularly England's huge diversity in geology, the status of the owner, availability of resources managed in the local landscape and the cost of manufactured materials (Rackham 1972; Moir 1997). Long-rooted traditions such as earth walling and thatch in Cornwall and timber frame in Norfolk, survived much longer on farm buildings than farmhouses, and were not overtaken by increasingly fashionable and robust forms of construction (such as stone in parts of Cornwall, brick in Norfolk) until the early to mid-19th century (Potts 1974; Lucas 1997). The coastal shipping trade had for many centuries allowed the transport of building materials, but the arrival firstly of canals and then railways allowed the easier transportation of building materials into inland

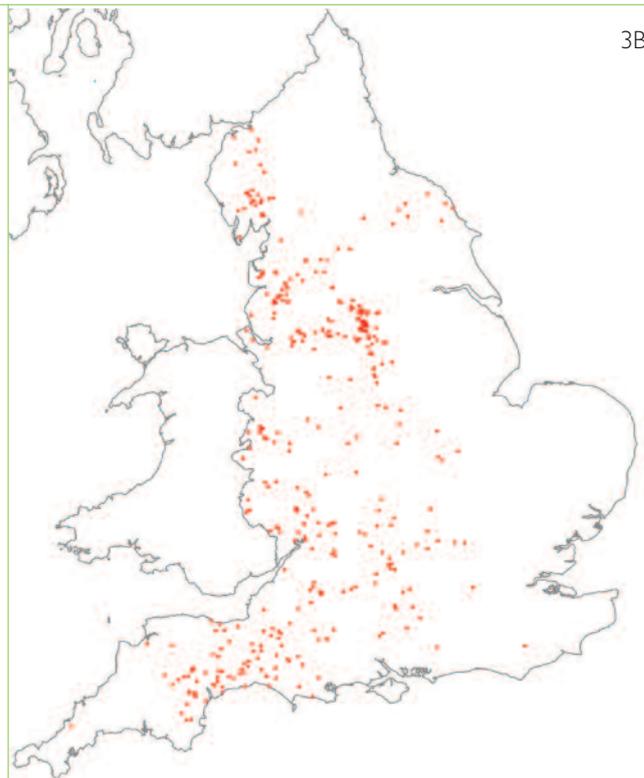
areas. Buildings in stone and brick, and roofed with tile or slate, increasingly replaced buildings in clay, timber and thatch from the later 18th century. Mass-walled buildings comprise the majority of listed agricultural buildings (67%), with timber framing accounting for just over one quarter of entries.

There are strong regional and local differences in roof construction and carpentry, as is still demonstrated by the distribution of aisled and cruck buildings (Figures 3 and 4). From the medieval period, the unit of reference in timber-framed and mass-walled buildings became the bay, the distance between principal roof trusses. These bays could also mark out different areas of storage within barns and other buildings (see 3.1.1.3). Iron bolts, straps and tension bars became increasingly common, often in combination with imported softwood, in the 19th century. Textbooks such as Waistell's *Designs for Agricultural Buildings* (1827) and Stephens's *Book of the Farm* (1844) helped to promote more standardised forms of construction. Metal roofs were used from the 1850s for covered yards and other buildings on expensive planned

3 The distribution of listed aisled (left) and cruck (right) barns in England
Aisled construction, used for domestic buildings from the 12th century at the highest level in society, was suited to the storage and constructional requirements of large barns. The weighting of the distribution is southern English, outliers being generally of a high status and dating from before 1550; a notable concentration in northern England is in the Halifax–Huddersfield area, where the wealth derived from a combination of farming and the cloth industry in the 15th and 16th centuries led to the construction of a notable group of aisled houses and barns. Aisled construction continued to be employed in southern England into the 19th century.
Crucks in domestic buildings have a date range from the mid-13th to the mid-17th centuries, examples in the north of England being generally later in date, whereas in agricultural buildings the earliest survivals are 15th century and the latest (in the southern Pennines) early 18th century. There is a wide variety of forms in cruck construction. © Crown copyright. All rights reserved. English Heritage 100019088. 2005



3A



3B

4 A Aisled barn, Cressing Temple, Essex. One of the earliest barns in England, one of two surviving from an estate of the Knights Hospitaller and erected with timber felled between 1259 and 1280. (South Suffolk and North Essex Claylands)

B Barn at Cross Farm, Burgh-by-Sands, Cumbria, showing the full crucks to the interior of a late 17th-century clay-walled barn. This is one of a group of such barns on the Solway Plain, dating from between the 14th and 17th centuries. (Solway Basin)

A © English Heritage / Michael Williams;
B © Jen Deadman

5 Listed earth-walled agricultural buildings in England. Survival is much more extensive than this map indicates. The concentration of cob in the South West Region, particularly in Cornwall and Devon, is highly characteristic. The use of cob also extended across the Dorset, Wiltshire and Hampshire, Berkshire, Oxfordshire and Buckinghamshire (South East Region). In the latter county the use of chalk earth is called witchert, and is similar to chalk cob. Cob buildings usually had thatch roofs.

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farmsteads, but did not come into general use – mainly for covered yards – until the end of the 19th century. Pre-fabricated buildings in iron were manufactured and exported from the 1840s, the most well known on the farmstead being the Dutch barn (see 6.4.1), popular from the 1880s. Factory-made prefabricated buildings, built to standard widths applicable to a wide variety of uses, have since the 1950s been the standard building type used on farms. The principal materials are summarised below.

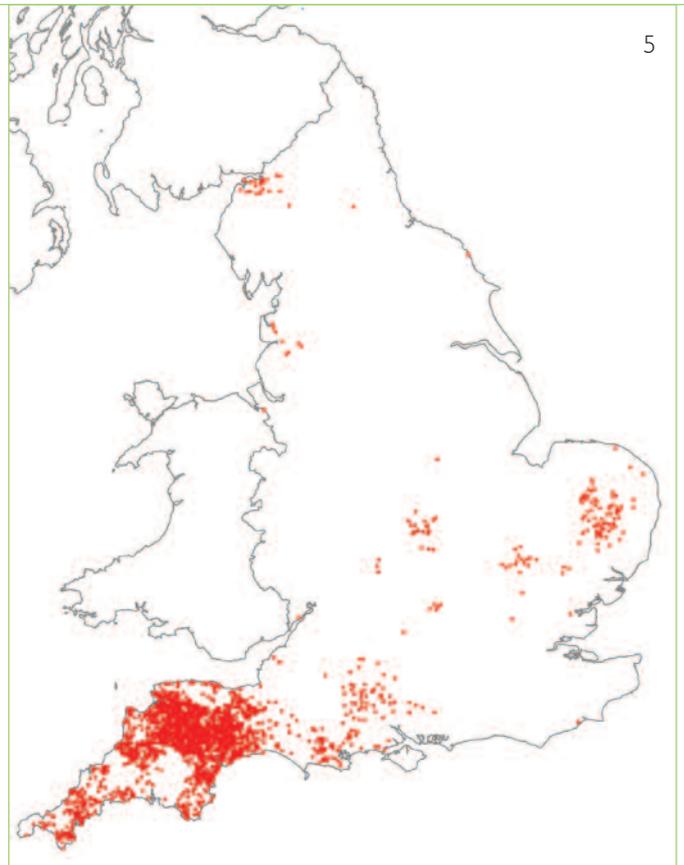
3.1.1 WALLING

3.1.1.1 Temporary structures

As could be expected, the most fragile structures are documented from excavation or archives (for example the Wiltshire vicarage stable 'enclosed with hurdle work' in Hobbs [ed] 2000, xvi and p.438) but have not survived. A long-standing building tradition, where posts were set directly in the ground with no definable bay structure, is documented from excavation and has survived in use for single-storey structures (including 18th-century cart sheds and 20th-century tractor sheds) to the present day (Lake 1989, p.43).

3.1.1.2 Mass walling

Mass-walled buildings now dominate the traditional farm building stock, almost exclusively so in the three northern regions. Stone and brick display a wide variety of treatment, their use reflecting not only the availability of materials but also the status of the farm and its owner. Large parts of England – particularly in the South East, South West, East of England, the East Midlands and the North West – display different traditions of walling in earth, dating from the 14th century (Figure 5). Concrete was used from the 1860s on some farms, for example for silage clamps, but did not achieve general use until after the 1950s.

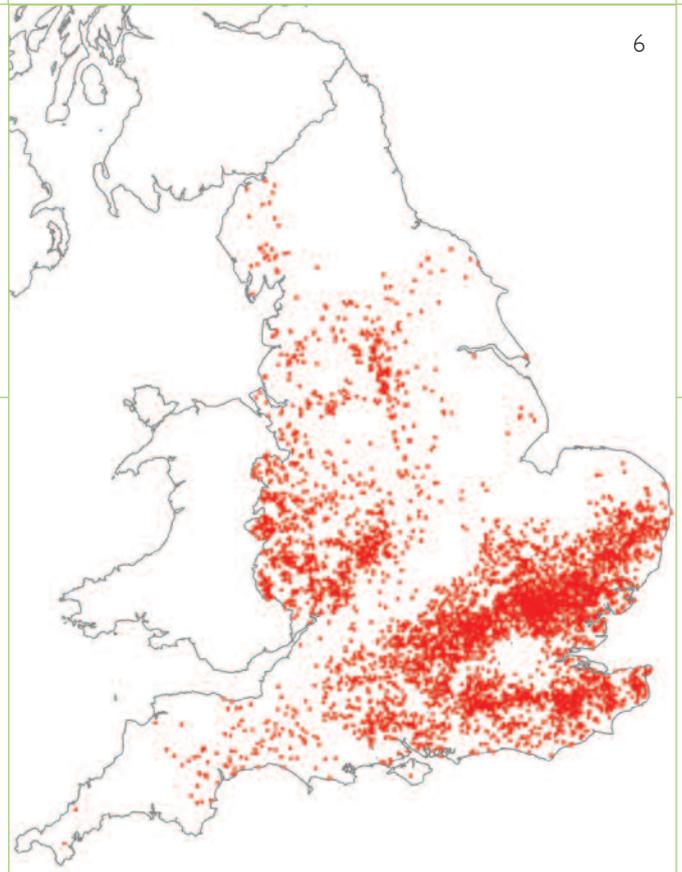


3.1.1.3 Timber frame

Timber-framed buildings are concentrated in the East of England, the South East and the West Midlands. The basic vocabulary of construction had been developed by the 13th century – notably the use of sophisticated jointing techniques, particularly at the junction of the main posts and roof trusses (the so-called bay divisions), and timber sills raised off the ground on dwarf walls. Climate and patterns of land use and ownership have affected the availability of timber and, together with cultural factors, have influenced the distribution, appearance of distinct traditions in timber framing and the framing of roof

6 Listed timber-framed barns in England. Although listing concentrates on the generally best-preserved sample of surviving buildings, this map broadly shows the extent of present survival. Note the separation – marked by the limestone belt running from Dorset to Yorkshire – of the major concentrations in south-east England and central southern England and western and northern England, where separate traditions of carpentry and framing developed. The map also reveals much about patterns of loss, and particularly rebuilding in stone and brick, over the centuries. There is a sharp boundary, for example, between the claylands of south Norfolk and Suffolk and the lighter soils of Breckland and north Norfolk, where brick had generally replaced timber frame by the 19th century. The absence of timber frame in the North East, where again it is documented, is notable. Such a map presents an obvious invitation to future analysis and research.
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trusses for mass-walled buildings (Smith 1965; Stenning & Andrews 1988; and Figures 3 and 6). The infill between the timber frames would either be wattle and daub (a clay and straw mix), brick (often a later addition) or simply left as a wattle framework. Timber planks, either rebated or slotted like wattle, were also used but now only survive in very rare instances. External walling and render can also disguise evidence of earlier timber framing, including cruck and aisled construction.

3.1.1.4 Timber cladding

In parts of the country – particularly in the South East, East of England and the western part of the West Midlands – timber frames were often clad in horizontally fixed weatherboarding. Hand-sawn hardwood boarding is now rarely found, as machine-sawn softwood was increasingly used from the late 18th century.

Weatherboarding is either applied to a whole building (most commonly in regions in the South East and the southern part of the East of England) or to the upper portions of sidewalls (a common use in the West Midlands). Vertical boarding is mainly found in the South East. This had cover strips to prevent the ingress of rain; surviving examples date from the late 19th century. Hit-and-miss timber boarding, sometimes known as Yorkshire boarding, has been widely in use as cladding since the 1970s, since it provides good ventilation and meets modern animal welfare requirements.

3.1.1.5 Corrugated iron

See 3.1.2.3.

3.1.2 ROOFING

3.1.2.1 Thatch

Thatch was common in large parts of the country, and farmers used a wide range of locally available materials: heather, bracken, reeds, rushes, grass, turf, and straw from oats, barley, wheat and rye. Thatch, predominantly made of wheat straw or water reed, is now mainly confined to southern England and East Anglia (Figure 7). Heather and bracken was, until the 19th century, used in upland areas of moorland and heath, such as Dartmoor; the Pennines, the North York Moors and the Cheviots. Solid thatch, where the whole of the roof space was filled with materials such as heather or gorse with a straw or reed

topcoat, was formerly widespread but is now very rare (Moir & Letts 1999, pp.103–4).

3.1.2.2 Plain clay tiles and stone slates

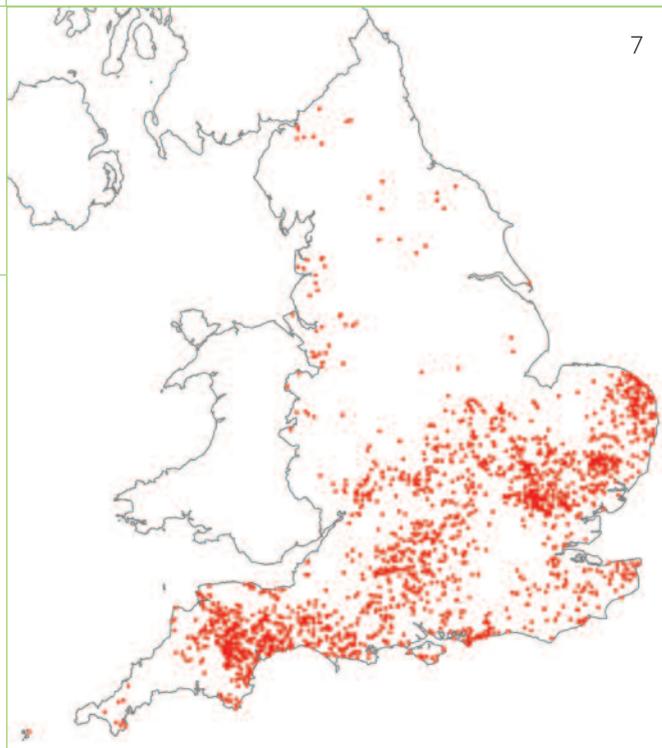
These materials were used at a high social level from the medieval period and are found in many parts of the country. Their use became increasingly widespread after the later 18th century, along with stone and brick walling, supplanting smaller farm buildings built of timber, earth and thatch in many parts of the country. The coastal trade and improved communications also enabled the widespread introduction of pantiles – instantly recognisable with their distinctive curved profile – into parts of the South West and across large areas of the eastern counties from north Essex to Northumberland, and of Welsh slate into many inland areas.

3.1.2.3 Corrugated iron and other prefabricated modern materials

Corrugated iron was used in England from the 1820s, initially for industrial buildings. Although several pioneering firms were producing portable corrugated-iron-clad buildings by the 1850s, it did not come into general use for new farm buildings (particularly on so-called Dutch Barns for protecting harvested hay and corn crops, see 6.4.1) until the farming depression of the 1880s made cheaper materials desirable. By the First World War, corrugated iron was in general use for the repair of roofs on farm buildings, particularly thatch. It was also used for the walling of model farmsteads built to a budget (Wade Martins 2002, p.175) and for smallholders' buildings in areas such as the New Forest.

7 Listed thatched agricultural buildings in England
 Particularly evident is the concentration of surviving thatch in southern England (the majority of which on agricultural buildings is listed) despite its widespread replacement by materials such as corrugated iron from the late 19th century. Rebuilding, and re-roofing in slate and tile, has removed the evidence for its formerly extensive use (in straw, heather and bracken) from much of the Midlands and northern England. Such a map presents an obvious invitation to future analysis and research.
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7



From the 1940s, asbestos cement cladding and a variety of insulating products found their way on to the farmstead. Hit-and-miss vertical boarding (also known as Yorkshire boarding) has been used as cladding since the 1970s.

3.2 BUILDING MATERIALS IN THE SOUTH EAST REGION

3.2.1 WALLING (Figure 8)

3.2.1.1 Stone

Across most of the southern parts of the Region there is a lack of good building stone. The chalk areas of the Hampshire Downs, the North and South Downs and the Chilterns generally provided only flint, which was not widely used for the construction of farm buildings until the 19th century, except in the South Downs where flint from the chalk and cobbles from the coast were commonly used (Nairn & Pevsner 1965, p.16). Chalk block is rarely seen. Moving eastwards from the Hampshire Downs along the South Downs there are differences in the appearance of flint walling. In most of Hampshire the flints used were relatively small and usually laid randomly. Into the South Downs larger flints were often used and flint work was often coursed.

Around the edge of the High Weald lower greensand outcrops provided 'ragstone', which was widely used across Kent and in London from the medieval period. Upper greensand, often called ironstone or heathstone, and golden sandstone from the Hastings beds were also used in buildings across the Weald. Carstone, hard ferruginous sandstone, was used in rubble walling and small pieces were used in galletting across Surrey and Sussex (Brandon 2003, p.32).

In the northern part of the Region building stones of an excellent quality were widely available. In 15th-century Oxfordshire quarrying was second only to wool in terms of economic importance. Across the Cotswolds the grey limestones predominate whilst at the northern edge of the county the Middle Lias, called marlstone, gave up a brown-coloured stone used for most buildings.

3.2.1.2 Earth

Cob, chalk mud mixed with straw, was widely used for houses, cottages, small farm buildings and boundary walls in the chalk areas of Hampshire, particularly on the

western side of the county. Chalk cob was usually rendered or, for working buildings and walls, coated with chalk slurry. Cob was rarely used for building barns, timber framing and, later, brick or brick and flint being preferred. In parts of the New Forest where clay was available this was used for the construction of small farm buildings, the wall surface often being left unrendered. Although chalk was available across the North and South Downs, there is little evidence for the tradition of earth construction in the eastern part of the Region.

Buckinghamshire and Oxfordshire contain a concentration of earth-walled buildings known as 'witchert', meaning 'white earth'. Witchert is found in a belt extending from south-west of Aylesbury through Thame to Dorchester-on-Thames. Non-witchert earth structures are also found in Oxfordshire (McCann 2004, pp.28–9).

3.2.1.3 Timber

Timber framing was the dominant building technique across much of the Region from the medieval period until the early 17th century for housing and the early 19th century for farm buildings. Cruck-framed buildings are found along the western edge of the Region, with a particular concentration in Oxfordshire and west Buckinghamshire. Few, if any, of the cruck-framed buildings of the Region date from later than the 16th century, unlike the West Midlands and Northern Regions where the cruck tradition continued longer. The use of crucks in Hampshire is usually associated with farmers of some wealth and status, and was abandoned in favour of box framing by the 16th century. Few of the Region's cruck buildings are agricultural; only two cruck barns are known in Hampshire (Roberts 2003, pp.20–22). Aisled construction was used for many of the Region's earliest

8 Examples of walling materials in the South East Region

- A Weatherboarding over timber frame. The typical wall covering for timber-framed agricultural buildings across the Region is horizontal weatherboarding. Rarely, evidence for vertical boarding rebated into the frame can be found. (Thames Basin Heaths)
- B Earth. Earth was used for walling in some parts of the region, chalk cob being the predominant form in the South East. In Buckinghamshire a particular form of earth walling is called 'witchert'. In the New Forest clay was widely used and, as with many agricultural buildings and boundary walls, the earth has been left unrendered leaving the 'lifts', the construction layers, visible. In some cases earth walling was given some protection with a chalk slurry and only rarely were agricultural buildings rendered, the typical treatment for domestic earth buildings.
- C Limestone, Cotswolds, Oxfordshire. Limestone was easily worked and built into roughly coursed walling, and even dressed and ashlar work for farm buildings. (Cotswolds)
- D Mixed sandstones. In the High Weald sandstones of different colours, textures and hardness were often combined and give the buildings a

highly distinctive appearance (High Weald)

- E Chalk. Generally, the chalk stone of the Region was rarely used for external masonry but occurs more frequently in farm buildings on the Isle of Wight. In this barn the chalk was laid in deep courses created with irregular, random stonework. (Isle of Wight)
- F Cobbles. Along the South Downs and coastal fringe in West Sussex and East Sussex cobbles, often derived from the beach, were used for the construction of farm buildings. (South Downs)
- G Flint. Across the chalk areas of the Region flint is a characteristic building material. Although used from the medieval period flint was more widely used in the late 18th and 19th centuries, typically combined with brick for corners and dressings to windows and doors. In this example flakes of flint have been pushed into the mortar joints between the flints, a technique called 'galletting'. (South Downs)
- H Brick. Locally made bricks can give a distinctive character to farm buildings as can the use of details such as burnt headers and corbelled brickwork at the eaves. (Thames Basin Heaths)

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barns, with particular concentrations in Kent and in north Hampshire/south Berkshire. Together with the southern part of the East of England Region, this Region contains the majority of timber-framed aisled barns in the country.

For most timber-framed agricultural buildings weatherboarding was the typical wall covering. The boards were typically overlapped and set horizontal but there is evidence in a few late medieval buildings of boarding that was vertical and set into rebates in the framing. In the Weald the framing of the earliest and smallest barns was usually filled with wattle and daub until the late 16th century. Weatherboarding was commonly used from the 18th century. Where barns also housed cattle it is common to find weatherboarding on the lower parts of the building and wattle and daub, which would be damaged easily by a kick from a cow, on the upper parts of the walls (Martin & Martin 1982, p.87). Weatherboarding was also used on houses in the Weald from the 18th century to the mid-19th century where it probably occurs more than in any other part of the country (Newman 1969, p.32). The white-painted horizontal boarding is an important characteristic of the area.

3.2.1.4 Brick and tile

Kent and the Sussex Weald form one of the principal brick areas of the country, the different clays available giving distinctive colours: soft reds to reddish brown from the alluvial clays of the Thames estuary; yellow from the river muds near Sandwich; light yellow provided by the limestone in the gault clays to the south of the North Downs; bright reds created by the iron content of the Wealden clays (Quincey 1993, pp.101–2).

In both north and south Hampshire and in the clay vales of Oxfordshire and Buckinghamshire, clay for brick and tile making was available and exploited from the medieval period, but it was not until the 17th century that bricks began to be more widely used, although usually for relatively high-status buildings. In north-east Hampshire for example, there is an important cluster of high-status brick-built houses, barns and other farm buildings of this period. These areas also produced locally distinctive coloured bricks. In Hampshire, Fareham Reds are probably the best known but in the Beaulieu area of the New Forest a creamy yellow brick was produced. In the clay vale at the foot of the Chilterns, the high lime and low iron content of the clay produced a silver-grey brick.

By the 18th century brick was often being used in preference to timber framing in the clay areas of the Region but it was not until the end of the 18th and into the 19th century that brick, usually combined with flint, became common in the chalk areas. Usually brick and flint were banded horizontally but occasionally the brick was used to create square panels.

In the 17th century the use of tile hanging appears to have been introduced in the Weald (Newman 1969, p.27) and is now a characteristic feature across Kent and Sussex

3.2.2 ROOFING (Figure 9)

3.2.2.1 Thatch

The predominance of arable across the majority of the Region meant that straw for thatching was widely available. By the end of the 18th century tile was often used in place of thatch on houses in the south-east of the Region whilst thatched farm buildings remained commonplace, particularly on small and medium-sized farms (Boys 1805, p.32). During the 18th century there is evidence that the use of thatch was beginning to wane with tiles being used on outshots to thatched barns (Martin & Martin 1982, p.109). On many of these agricultural buildings the thatch has been replaced with plain clay tiles, so that thatch is now rarely encountered (Newman 1969, p.32). The experience of the western, arable, part of the Region is, however, different. It is suggested that during the first half of the 19th century the number of thatched buildings actually increased (Moir & Letts 1999, p.19).

Although long straw thatch was the dominant thatching material, along the north coast of Kent and in Romney Marsh and the Pevensy Levels managed reed beds provided water reed for thatching (Moir & Letts 1999, p.51). On the areas of heath, in Berkshire, Hampshire, Surrey and in the Weald, for example, heather was often used as a base coat for straw. Many examples have now been stripped of the heather, making this roofing material a relative rarity in the Region. There are also a few known surviving examples of the use of gorse, usually in solid-roofed buildings. A number of solid thatch roofs are known (Moir & Letts 1999, pp.44–5).

3.2.2.2 Slate and stone

In relatively small areas of the Region stone suitable for splitting into stone tiles was available. In Sussex, the Wealden sandstone quarried near Horsham was made into stone tiles (Nairn & Pevsner 1965, p.16) whilst in Oxfordshire the limestone of the north of the county also provided roofing material of a similar character to that seen in the Cotswolds to the west. From the 14th century at least records show that stone slates were brought into Hampshire by sea through Southampton (Page 1996; Page 1999). It is probable that Purbeck in Dorset was the source of these slates.

3.2.2.3 Tiles

In the Weald and the clay areas of Hampshire where brick making was important, clay tiles were also made and widely used. The first tile-making activities were often sponsored by monastic institutions and the

9 Examples of roofing materials in the South East Region

- A Thatch. Straw thatch is an important roofing material across the western part of the Region, particularly in Hampshire and west Berkshire. Long straw thatching is recognised as being the traditional thatching style, typically having a flush ridge and sparred eaves. Water reed was not widely used in the Region. (Hampshire Downs)
- B & C Stone capable of being slit into thin sheets for making roofing slates is found in several areas including the Cotswolds (limestone, B) and in the Weald in the area around Horsham (sandstone, C). Each has its own character, both in terms of the colour of stone and the size of the slates produced. (B Cotswolds; C Low Weald)
- D Clay tiles. Clay for brick and tile making was available in many parts of the Region and was exploited from the medieval period. In the Weald of Kent in particular, the availability of clay combined with

predominantly pastoral farming meant that clay tiles largely replaced thatch. (Hampshire Downs)

- E Profiled roofing tiles are not a particularly characteristic feature of the roofs of the South East. Their use increased in the 19th century with improved transportation offered by canals and the railway (Cotswolds).
- F Welsh slate. Across most of the Region the use of Welsh slate increased as the railways made transportation easier and cheaper in the later 19th century. Slate allowed a lower roof pitch to be used, characterising many farm buildings of the period from earlier thatched or tiled buildings. In the heathland parts of the Region estates looking to save on building costs often laid slates 'economically' – leaving a small space between each slate to reduce the number required (Thames Basin Heaths). All © Bob Edwards except B © Jeremy Lake



products used on their buildings, including barns (Quincey 1993, p.107). In Surrey in 1301–2 the Bishop of Winchester used 2,000 tiles plus ridge and hip tiles for the kitchen in the manorial complex at Esher; whilst in Hampshire the tiles required for works to buildings at Highclere were made on the estate (Page 1996, p.339). The plain clay tiles of Kent and Sussex in particular are

an important characteristic of the buildings of the area. Pantiles are rarely encountered in Kent or Sussex and are not widespread in the rest of the Region. However, pantiles and serrated profile tiles are encountered on late 19th-century buildings in the North Hampshire and Berkshire heaths, usually on the farm buildings of larger estates.